



## Appendix I-F: Issue Paper Series

*This appendix includes an overview of the series of issue papers developed for VISION 2040, including a copy of the ten issue papers approved by the Growth Management Policy Board and six additional information papers prepared to inform specific policy areas.*

### Overview

A major task in the initial phase of in creating VISION 2040 was the development the issue papers series. These ten papers (plus two supplementary papers) address topics raised during the scoping process that took place in 2003 and 2004. Each paper considers the treatment of specific issues in the 1995 VISION 2020 document, an examination of opportunities for adding specificity or clarity, and consideration of recommendations addressing possible policies, strategies and monitoring actions. PSRC's Growth Management Policy Board took an "action to proceed" on each of these papers – the dates of these actions are noted in parentheses below.

In addition, six other papers were developed to provide further information on certain topics that arose throughout the initial phase of research and analysis.

All of these papers can be found on the Regional Council's website. Visit the VISION 2020 Update's "Publications" page, which is shown at: <http://www.psrc.org/projects/vision/pubs/index.htm>.

In the development of the Environmental Impact Statement – in which alternatives are developed and impacts are assessed – information and recommendations contained in the issue papers has been utilized. Below is a summary of each of the issue papers.

### Issue Papers

*(note: Click on the titles below to open each paper. The papers are shown in the form in which they were adopted or acted upon by the Growth Management Policy Board.)*

1. **Health**. This paper provides an overview of how health provisions – including active living, safety, and environmental quality – can be better integrated into regional policy and planning. (January 2005)
2. **Subregional Centers**. An examination of locations smaller than the designated regional growth centers and the potential roles these places could play in accommodating significant portions of the population and employment growth anticipated by the year 2040. (March 2005)



3. **[Growth Targets](#)**. A report on the various processes and outcomes of assigning growth targets to counties and their municipalities in the four-county region, and how these processes might be improved. (July 2005)
4. **[Rural Areas](#)**. A study of major issues of importance in the rural districts of the region, looking especially at their long-term viability and protection. (August 2005)
5. **[Environmental Planning](#)**. Assesses the current state of information and resources for environmental planning at the regional level. Considers the human impacts, trends, indicators, and implications for a variety of environmental factors, including water, air, land, and wildlife. Two supplemental papers are related to this topic: one on [Energy](#) and one on [Sewers](#). (August 2005)
6. **[Housing](#)**. An overview of housing issues and trends, with special attention given to projected demographics and potential housing needs in the year 2040. Innovations in providing housing, including strategies related to affordable housing, are addressed. (August 2005)
7. **[Social and Environmental Justice](#)**. Building on work the Regional Council is already performing on environmental justice, this paper examines issues and needs of various population groups in the region, particularly minority and low-income groups. (August 2005) – Note: this issue paper links to the PSRC’s environmental justice website, which contains documents from this and past projects with environmental justice components.
8. **[Demographics and Growth Trends](#)**. This work looks at trends and population issues that are likely to be in play in the year 2040. This information is also being used to describe baseline conditions for the update. (August 2005)
9. **[Economics](#)**. An examination of key employment issues, with attention given to work of the region's *Prosperity Partnership* and efforts to maintain existing jobs and create new ones in strategic economic clusters. (November 2005)
10. **[Transportation](#)**. This paper develops a baseline to provide information about the strengths and weaknesses of the current transportation system in the region. It also addresses a number of transportation issues to help define where transportation improvements are needed to support and implement the VISION 2040 growth strategy and economic development efforts. (January 2006)

## Informational Papers

11. **[At the Microscale: Compact Growth and Adverse Health Impacts](#)**. A study of health-related impacts related to density. (prepared by Gail Sandlin, doctoral student, University of Washington)
12. **[Appropriate Urban Densities](#)**. An examination of current hearings board cases and case law on the issue of urban densities. Advances recommendations for allowing jurisdictions to develop average densities. (prepared by Joe Tovar, Planning Director, City of Shoreline and former member, Central Puget Sound Growth Hearings Board)
13. **[Pre-GMA Rural Vested Development](#)**. A study of vested development in rural areas of the four-county region that pre-dates the adoption of the Growth Management Act. (prepared by Margo Tufts and Christina O'Claire, University of Washington graduate students)
14. **[Cost of Sprawl](#)**. A review of recent literature on issues relating to the provision of services and infrastructure in areas of low density development.
15. **[Current and Future Land Uses in Regional Growth Centers](#)**. Information paper describing current and future land uses in the Central Puget Sound region’s Regional Growth Centers. (Prepared by Parametrix, Inc.)
16. **[A Regional Design Strategy](#)**. Information paper providing design concepts, strategies, and tools to help implement VISION 2040 policies at the local level.



VISION 2020 + 20 Update

Issue Paper on Health:

What's Health Got to Do with Growth Management, Economic Development and Transportation?

Puget Sound Regional Council

December 2, 2004

Growth Management Policy Board adopted *Action to Proceed* January 12, 2005



## WHAT'S HEALTH GOT TO DO WITH GROWTH MANAGEMENT, ECONOMIC DEVELOPMENT AND TRANSPORTATION?

When the health statistics say 1 in 1000 or 1 in a million, that's the other person; when it's 1 in 3 adult Americans have high blood pressure<sup>1</sup> or 2 out of 3 adults in America are overweight,<sup>2</sup> that's you and me. Add to that the rising cost of health care that impacts our personal health, as well as the cost of doing business for employers. And finally, the health of our children is threatened by obesity, respiratory problems and other chronic diseases.

Public health is directly linked with our communities and transportation – that is, to how we live and how we get around. As we plan for our communities and transportation, input from public health should be factored into our decisions and actions.

Regional Council staff worked with representatives from local governments and public health agencies to develop this issue paper. The first part of the paper is designed to introduce the reader to relationship of health to land use and transportation planning. Health issues related to environmental quality, safety, and physical activity are presented. Next, relevant research – conducted both nationally and locally – is briefly summarized that describes linkages the scientific community is beginning to make between community design and well-being. Finally, a set of considerations is laid out that addresses ways in which health issues could be addressed in the update of VISION 2020. These considerations are arranged in three groups: (1) opportunities for addressing health in *updated multicounty policies*, (2) *preliminary actions to implement* health-related programs and strategies, and (3) initial guidance for developing *measurable objectives* for monitoring relevant health issues.

Local and state governments have had a long-standing commitment to heighten public awareness of health issues. The State of Washington has more than 30 local public health agencies – including ones in each of the four counties in the central Puget Sound region. A primary concern of public health is keeping entire communities healthy, safe and livable. These agencies work to prevent the spread of disease, to protect people from unsafe water and air, from hazardous waste, and to help people live healthy lives.<sup>3</sup> In recent years, our county public health agencies, local land use planners and transportation staff have begun to focus increased attention on our built environment and the way we travel, and how that affects our health and well-being.

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<sup>1</sup> Larry E. Fields (August 2004). *Hypertension* in Journal of the American Heart Association.

<sup>2</sup> Brian Vastag (March 2004). *Obesity Is Now on Everyone's Plate* in Journal of the American Medical Association. Volume 291: pages 1186-1188.

<sup>3</sup> Excerpted from statement by the *Washington State Association of Local Public Health Officials* – an affiliate of the *Washington State Association of Counties*. (See "about public health" from Snohomish Health District website at [www.snohd.org/button\\_pages2/aboutph.htm](http://www.snohd.org/button_pages2/aboutph.htm).)

## Overview

The design and location of communities and transportation systems affect levels of physical activity and public health. For example, a higher dependence on driving reduces opportunities for physical activity, as well as increasing air pollutants and subjecting individuals to the safety risks of automobile travel.

Physical inactivity has become a growing health problem in the United States, contributing to obesity, chronic disease, osteoporosis, depression, and premature death. Although much recent attention has been given to the notion of linking health to land use and transportation, this is in fact not a new concept. Even in the late 1800s, planning was advanced as a tool for addressing the unhealthy conditions of substandard housing. By the 1920s, states, counties and municipalities were embracing the benefits of planning and zoning and connections to public health. Orderly development and comprehensive planning were viewed as advancing *health, safety and general welfare* by separating factories from residences. Over time, the dominant planning model continued to separate different land uses – often with a very narrow understanding of any health or safety benefits. Housing, employment and commercial activity became more and more separated, with incomplete street grids and missing sidewalks.

In the 1970s health concerns related to exposure to polluted water, dirty air and excessive noise led to the establishment of new environmental standards at federal, state and local levels and major clean-up efforts.<sup>4</sup> As we enter a new century, researchers are examining the complex relationships between development patterns, the ways we travel, and how these can affect our well-being. For instance, communities that are (1) denser, (2) have a compatible mix of land uses, (3) are connected by pedestrian and bicycle facilities and (4) have good access to transit, rely less on driving, and are more conducive to physical activity. Dense urban environments, when properly designed and built, can result in reducing per capita environmental impacts.

Our built environment affects the natural environment. Uncontrolled and expansive development patterns contribute not only to habitat loss, but also to declining water resources and quality. For example, runoff from impervious surfaces in urban and suburban development has been tied to a rise in chemicals and pollutants in nearby streams and waterways.<sup>5</sup>

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<sup>4</sup> Federal law requires that long-range transportation plans developed by federally-recognized metropolitan planning organizations (MPOs) conform with the federal Clean Air Act and its amendments, and with applicable state implementation plans for regional air quality. The Puget Sound Regional Council is the MPO for the four-county central Puget Sound region and its metropolitan transportation plan, *Destination 2030*, demonstrated conformity with federal and state clean air provisions at the time of its adoption in 2001. See *Destination 2030* (May 2001). Puget Sound Regional Council. page 5.

<sup>5</sup> Especially problematic are *polycyclic aromatic hydrocarbons* (PAHs). Some PAHs come from the incomplete burning of organic fuels or substances, such as coal, oil and gas, or garbage. Others are manufactured and are byproducts of crude oil, plastics or pesticides. See, for example, Allen Deary

Our built environment - and the way we travel - has safety implications. The greater travel distances associated with a more dispersed, lower density development pattern results in the need for more driving to access jobs, schools, shopping, and entertainment. It is a simple matter of fact that more driving unfortunately results in more vehicle-related accidents,<sup>6</sup> with the resultant injuries and fatalities – totaling more than 42,000 annually in the United States.<sup>7</sup> The United States has one of the highest per capita fatality rates of developed countries.<sup>8</sup>

Our built environment also affects our physical and mental well-being. A growing body of research has begun to document correlations between dispersed development patterns and health. Transportation research is also expanding to look not only at conventional health-related issues, such as vehicle accident risks and pollution emissions, but also at impacts resulting from less physical activity. A great deal of attention has recently been given to studies linking the built environment and travel behavior to occurrences of obesity and associated illnesses. Allen Deary, Associate Director of the National Institutes for Health, notes that:

The built environment influences weight management by affecting both food intake and energy expenditure. Communities characterized by less-dense development are associated with more vehicle travel and less walking and biking than are more densely developed communities.<sup>9</sup>

The central Puget Sound area is fortunate to be one of first urban regions in the United States where detailed research examining the linkage between health and the built environment has been conducted. Through a grant from the Federal Transit Administration, King County, along with the cities of Kent and Redmond and other partners – including the Puget Sound Regional Council, engaged in a two-year study of the relationship of *land use, transportation, air quality and health* (or LUTAQH). The summary of this study states that:

low density separated land uses and disconnected street networks are associated with: (1) increased automobile use, per capita air pollution, greenhouse gas emissions, and energy consumption; (2) reduced transit

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(2004). *Impacts of Our Built Environment on Public Health* in Environmental Health Perspectives, Volume 112, Number 11 (August 2004). Page A 600.

<sup>6</sup> Deary (2004), *ibid*.

<sup>7</sup> Source: National Highway Traffic Safety Administration. The fatality count in Washington State in 2003 was 600 deaths. See website at: [www.nhtsa.dot.gov/people/Crash/crashstatistics/](http://www.nhtsa.dot.gov/people/Crash/crashstatistics/). Note: Vehicle crashes are the leading cause of death among Americans under the 37 years of age. (See article by Todd Litman (2002), *The Costs of Automobile Dependency and the Benefits of Balanced Transportation*, at [www.vtpi.org/autodep.pdf](http://www.vtpi.org/autodep.pdf).)

<sup>8</sup> Todd Litman (2004). If Health Matters/Integrating Public Health Objectives in Transportation Planning. Victoria Transport Policy Institute. See also T. Litman (2003). *Integrating Public Health Objectives in Transportation Decision-Making* in American Journal of Health Promotion, Volume 18, Number 1 (September/October 2003). Available at [www.healthpromotionjournal.com](http://www.healthpromotionjournal.com). See also [www.vtpi.org](http://www.vtpi.org).

<sup>9</sup> Deary (2004), *ibid*.

ridership, walking and physical activity; and (3) increased obesity and likelihood of cardiovascular disease, type II diabetes, and colorectal cancer.<sup>10</sup>

A similar study in Atlanta, called SMARTRAQ, made national news with its findings that link community design, time spent driving, and distances people walk, with obesity.<sup>11</sup> When these studies are coupled with other research that addresses the relationship between the built environment and transportation facilities with increased injuries to pedestrians (as well as bicyclists) it speaks to the need to examine how overall development patterns, as well as the design of transportation facilities, can affect our health and safety.<sup>12</sup>

### **What Did We Hear During Scoping?**

In an effort to solicit a broad range of input and opinion on what the update to VISION 2020 should address, the Regional Council conducted an extensive scoping process from October 2003 through March 2004. More than 2000 individual comments were received, touching on two-dozen issues. There were a number of comments related to health and land use. For example, some respondents suggested that the update incorporate the concept of "active living," which involves planning around the notion of increasing physical activity to promote general health and safety. From some sectors of the health community, active living was advanced as a possible organizing principle for addressing the interface of residential, commercial and employment uses,<sup>13</sup> and for addressing opportunities to increase biking, transit and walking to destinations and lessen dependence on heavily polluting forms of energy – especially fuels that dirty the air. At its July 8, 2004 meeting, 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 update.

### **What is the Research Saying?**

As noted above, there is a growing body of research that links transportation and land use to public health outcomes, especially obesity and ailments related to inactivity. One study of counties across the United States revealed that individuals living in more sprawling, lower-density counties tend to walk less, suffer from being overweight, and

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<sup>10</sup> King County (2004). *Executive Summary in A Study of Land Use, Transportation, Air Quality and Health in King County, WA/LUTAQH*. Prepared by Lawrence Frank and Co., Inc.

<sup>11</sup> Georgia Institute of Technology and Georgia Tech Research Institute (2004). *SMARTRAQ*. See website at [www.smartraq.net/](http://www.smartraq.net/)

<sup>12</sup> PlannersWeb (2002). *Sprawl Guide*. See website at [www.plannersweb.com/sprawl/prob\\_health.html](http://www.plannersweb.com/sprawl/prob_health.html)

<sup>13</sup> There are economic ramifications as well. In Michigan, often cited as having one of the nation's highest percentages of obesity, being overweight costs residents \$3 billion a year, threatening personal well-being, business productivity and the economy. A recent study shows that poor health is undercutting Michigan's ability to compete for jobs. At a recent International Monetary Fund Economic Forum, it was reported that healthier individuals do better economically and countries with healthier populations have higher rates of economic growth. Creating more active, healthy communities can also contribute to economic success. Kozlowski, Kim (2004). *Michigan's poor health costs jobs* in [The Detroit News](#) (February 27, 2004).

have a higher likelihood of hypertension.<sup>14</sup> Another study found lower levels of obesity and higher levels of physical activity in more compact, walkable communities.<sup>15</sup>

Dr. Lawrence Frank (University of British Columbia, Vancouver), lead researcher for King County's LUTAQH study, has observed that "(l)ow density, disconnected, single use development patterns" have led to "increased levels of harmful air pollution" due to vehicle emissions, as well as to reduced physical activity because of "increased distances between destinations."<sup>16</sup>

The LUTAQH study was the result of a stakeholder-driven process that included an advisory committee of medical professionals, urban designers, environmentalists, banking and financing professionals, planners, transportation experts, and academicians. Data was collected and analyzed related to travel, physical activity and health. A major finding revealed the importance of mixed-use development. According to the study,

While density itself is needed to sustain commercial use and to make transit viable, providing retail destinations and activities near to where we live and where we work is critical. Where we live, the uses most strongly associated with the choice to walk are the numbers of neighborhood retail uses, restaurants and taverns, nearby employment destinations, parks, grocery stores and civic uses.<sup>17</sup>

In addition to the findings related to physical activity and health, the LUTAQH study revealed that "increasing residential density, intersection density, and land use mix at places of residence and employment was associated with significant reductions in per capita generation of both NOx and VOCs."<sup>18</sup> Mixed land use in the vicinity of the home influenced emissions the most. The production of CO2 also declines with "increases in net residential density, improved street connectivity, and the number of retail uses near the home."<sup>19</sup> This is further supported by the United States Bureau of Transportation Statistics survey of travel and automobile ownership in all U.S. metropolitan areas, which shows that increasing household densities directly correlates to fewer automobiles owned per household.<sup>20</sup>

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<sup>14</sup> Ewing, et al. (2003). *Relationship between urban sprawl and physical activity, obesity and morbidity* in *American Journal of Health Promotion*. (18:47-57).

<sup>15</sup> Salens, et al. (2003). *Neighborhood-based differences in physical activity/ an environment scale evaluation* in *American Journal of Public Health*. (93: 1552-1558)

<sup>16</sup> King County (2004). *A Study of Land Use, Transportation, Air Quality and Health in King County, WA/LUTAQH*. Prepared by Lawrence Frank and Co., Inc.

<sup>17</sup> King County (2004). *A Study of Land Use, Transportation, Air Quality and Health in King County, WA/LUTAQH*. Prepared by Lawrence Frank and Co., Inc.

<sup>18</sup> NOx refers to *nitrogen oxide*; VOC refers to *volatile organic compounds*. King County (2004). *A Study of Land Use, Transportation, Air Quality and Health in King County, WA/LUTAQH*. Prepared by Lawrence Frank and Co., Inc.

<sup>19</sup> CO2 refers to *carbon dioxide*. King County (2004). *A Study of Land Use, Transportation, Air Quality and Health in King County, WA/LUTAQH*. Prepared by Lawrence Frank and Co., Inc.

<sup>20</sup> United States Department of Transportation, Federal Highway Administration (1995). *National Personal Transportation Survey*.

In 1996 the U.S. Surgeon General issued a report titled *Physical Activity and Health*. It voiced the opinion that significant health benefits can be obtained through moderate activity, citing walking and bicycling as two types of physical activity that are the easiest to adopt and adhere to over the long term. Yet a variety of barriers inhibit walking and bicycling, some subjective (time and lack of motivation) while objective ones include safety issues, missing or poorly maintained infrastructure and other negative features of the built environment.<sup>21</sup>

In the 1999 Puget Sound Regional Council Household Survey, 60 percent of the respondents disagreed with the statement, “the region and/or my community is as pedestrian and bicycle–friendly as it should be.” When asked if they agreed with the statement, “*we should have more walkways, bike lanes, trails and amenities,*” twice as many people agreed than disagreed. In 2003, U.S. Department of Transportation released a major survey on attitudes and behaviors related to biking and walking. Respondents were asked to recommend changes to their communities for either bicycling or walking and most persons suggested changes in bicycle and pedestrian facilities. For those recommending changes, 73 percent wanted new bicycle facilities, such as trails, bicycle lanes and traffic signals, and 74 percent wanted pedestrian facilities including sidewalks, lighting and crosswalks. In the fall of 2003, as part of the public scoping process for the VISION 2020 update, the Regional Council directed a survey of citizens across the central Puget Sound region to gauge attitudes and opinions about quality of life, and an indication of the region’s priorities. A total of 66 percent prefer a transportation system that supports many modes of travel.

The public health, land use and transportation connection is a growing interest that has also drawn the attention of national organizations such as the U.S. Centers for Disease Control and Prevention, the National Institutes of Health, and the Robert Wood Johnson Foundation. The Foundation, a national leader in the fight against tobacco and smoking, has identified promoting healthy communities and lifestyles as one of its main goals.<sup>22</sup> Also, locally, the public health departments in the central Puget Sound region are exploring ways to become involved in actions/decisions on development and transportation.

In 2003, the Washington State Department of Health launched a concerted effort to promote environmental and policy changes that encourage healthy eating and physical activity, which are detailed in a document titled the *Washington State Nutrition and Physical Activity Plan*. Among the objectives in the Plan is a commitment to increase more active living in communities by (1) utilizing urban planning approaches, including zoning and land use provisions, that promote physical activity, (2) incorporating

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<sup>21</sup> Surgeon General’s Report on Physical Activity and Health (1996). See website at: [www.cdc.gov/nccdphp/sgr/sgr.htm](http://www.cdc.gov/nccdphp/sgr/sgr.htm).

<sup>22</sup> In 2003, the Robert Wood Johnson Foundation issued 927 grants for health communities programs, totaling more than \$300 million.

transportation policy and infrastructure changes to promote transit use and nonmotorized travel, and (3) enhancing safety for walking and bicycling.<sup>23</sup>

### **Health and the VISION 2020 Update: Opportunities and Challenges**

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 – although that is more coincidental than intentional, since health was not explicitly a consideration when the policies were adopted in 1995. 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. Moreover, public health itself did receive some attention in the 1995 VISION 2020 document. For example, Multicounty Planning Policy RC-2.6 states:

Give high priority to protecting and enhancing the natural environment and public health and safety when providing services and facilities.

Somewhat related, Policy RT-8.13 seeks to reduce automobile dependency with growth focused in centers.<sup>24</sup>

*Destination 2030*, the region's long-range transportation plan, includes provisions that support increased transit use and improved nonmotorized facilities for pedestrians and bicyclists. The strategy 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 ten physical design guidelines.<sup>25</sup> These guidelines advance many of the concepts advocated for creating healthier, more active, communities.

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<sup>23</sup> Washington State Department of Health (2003). *Washington State Nutrition and Physical Activity Plan*. The entire state plan and its executive summary are on-line at: [www.doh.wa.gov/cfh/NutritionPA/wa\\_nutrition\\_pa\\_plan.htm](http://www.doh.wa.gov/cfh/NutritionPA/wa_nutrition_pa_plan.htm)

<sup>24</sup> Not outright addressing health, but the location of health services, Policy RC-2.8 states:  
*Integrate land use and transportation planning to encourage health and human services facilities to locate near transit and other services (such as day care, retail and legal) and to promote service delivery at affordable costs.*

<sup>25</sup> 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.

Priority investments included in *Destination 2030* for transportation projects and programs advance completion of the nonmotorized system by filling gaps in the existing network, creating connections to, and improved circulation within, urban centers and high capacity station areas, and developing intermodal connections. In 2002 the Regional Council's Executive Board approved the *Regional Bicycle and Pedestrian Implementation Strategy*, which provides additional and more detailed direction related to nonmotorized travel.

On September 30, 2004, the National Academy of Sciences released an assessment on childhood obesity. Among its recommendations, the Academy encouraged incorporating active living concepts into local planning and zoning:

Community organizations and state and local governments can make a difference by implementing programs that promote nutrition and regular physical activity and by supporting the establishment or revision of zoning ordinances and comprehensive plans to include or enhance sidewalks, bike paths, parks and playgrounds, and other recreational facilities.<sup>26</sup>

Here in our region, the recently completed LUTAQH study states a need for establishing "development regulations and transportation programming criteria that demonstrate measurable and traceable support for transit and active forms of transportation."<sup>27</sup> To that end, it is recommended that the update of VISION 2020 advance strategies and programs to maximize public health benefits – as well as to improve environmental quality and accessibility.

### **Preliminary Considerations for the VISION 2020 Update**

Preliminary considerations for how to integrate health factors in the VISION 2020 update are arranged below under three headings: (1) guidance for addressing health issues in updated multicounty policies, (2) preliminary implementation actions and strategies related to health and active living, and (3) initial guidance for measurable objectives to monitor health considerations related to land use and transportation.<sup>28</sup>

### ***Guidance for Addressing Health Issues in Updated Multicounty Policies***

*The considerations discussed in this section describe preliminary policy issues that could be addressed in the revised multicounty planning policies that are to be incorporated into an updated VISION 2020 strategy. In some instances, these policy*

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<sup>26</sup> National Academy of Sciences (2004). See website at: [www.nationalacademies.org/topnews/](http://www.nationalacademies.org/topnews/).

<sup>27</sup> King County (2004). *A Study of Land Use, Transportation, Air Quality and Health in King County, WA/LUTAQH*. Prepared by Lawrence Frank and Co., Inc.

<sup>28</sup> Health-related issues and considerations will also be addressed in other issue papers in this series. For example, issues related to water quality, air pollution and soils contamination will be addressed in an environmental issue paper to be developed in early 2005. Issues related to transportation safety and nonmotorized travel will also receive attention in a transportation issue paper, also scheduled for early 2005. Issues related to mobility and accessibility needs of various sectors of the population, including the young, elderly, and transit-dependent, will be discussed in a demographics report and paper scheduled for Spring 2005.

*issues are already detailed and provide specifics on whom the policy would affect and what the expectations would be. In other instances, the issues are more conceptual at this point and should they be advanced for further consideration in the update process, additional detail would need to be developed.*

- A-1 Identify environmental public health as a major benefit for the urban growth and transportation provisions in the revised multicounty policies. Environmental public health should be a theme of the policies as a way to develop and maintain communities that are healthy, safe and livable.

*Discussion: Work with county level health agencies and other groups to identify appropriate regional provisions and strategies addressing land use, transportation, and the environment where health considerations make a difference. (Note: A rationale based on improved air quality already exists in the current VISION 2020 policies and in Destination 2030, the region's long-range transportation strategy.)*

- A-2 Jurisdictions are encouraged to implement programs and strategies that not only to protect water, air and soil at minimum federal or state standards, but enhance water, air and soil quality to ensure that communities are healthy, safe and attractive places in which to live and work.

*Discussion: There can often be significant health benefits for going beyond minimum standards to improve well-being and quality of life.*

- A-3 Multicounty policies addressing nonmotorized travel should be revised to advance the provisions from the *Bicycle/Pedestrian Implementation Strategy* (February 2003) – particularly those provisions that address improved walking and bicycling environments in urban areas – as well as strategic actions to increase pedestrian, transit, and bicycle travel. Walking and bicycling should be advanced both for their health benefits, as well as alternatives to driving alone. Treat nonmotorized travel as a functional transportation use rather than a recreational use.<sup>29</sup>

- A-4 The transportation provisions in the VISION 2020 update should establish goals for increasing bicycle and pedestrian travel.

*Discussion: One of the options to be considered in developing the update should be establishing a mode split of 15 percent for non-single occupant vehicle travel – which would include nonmotorized travel, as well as transit and ridesharing – for the year 2040.*

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<sup>29</sup> The existing multicounty planning policies include provisions that address a transportation planning concept known as "transportation demand management" or TDM. These provisions are designed to promote options to driving alone – both in peak and non-peak travel periods during the day. The Growth Management Act requires all local comprehensive plans to include TDM programs and strategies. Demand management and other transportation issues will be addressed in more detail in a subsequent issue paper to be developed as part of this series.

A-5 Local transportation elements shall include pedestrian, bicycle and transit plans. The provisions in these local plans should be consistent with the provisions of the region's *Bicycle/Pedestrian Implementation Strategy*. During the Regional Council's certification process, these elements will be reviewed to ensure that the *Bicycle/Pedestrian Implementation Strategy* is addressed. The Regional Council will develop guidance identifying specific factors and criteria related to the *Implementation Strategy* that would need to be addressed in local pedestrian, bicycle and transit plans. Such plans should address both planning for new development and retrofitting older, established areas. (Jurisdictions should have such plans in place to compete for federal transportation grants, especially for monies earmarked for bicycle and pedestrian facilities.)

*Discussion: The region's 2003 Bicycle/Pedestrian Implementation Strategy provides guidance for incorporating nonmotorized provisions into local and regional planning. This proposal would make key provisions in the Strategy more directive for local and regional transportation efforts.*

A-6 Multicounty policies addressing safety improvements for transportation should place an emphasis on pedestrian and bicycle safety, in addition to the current focus on driver safety. Safer routes and streets for pedestrians and bicyclists also result in safer streets for transit and motorists.

*Discussion: the World Report on Road Traffic and Injury Prevention states:*

*The perception that road traffic injury is the price to be paid for achieving mobility and economic development needs to be replaced by a more holistic idea that emphasizes prevention through action at all levels of the road traffic system.<sup>30</sup>*

A-7 There should be a multicounty policy directing transit agencies and local governments to work together to make pedestrian and bicycle investments coincident with improved transit service.

A-8 Provisions addressing health and well-being should be incorporated into local comprehensive plans in the four-county region. As an incentive to encourage the development of health provisions in local plans, a "health" criterion should be introduced into regionally-managed transportation funding decision-making and/or regional prioritization processes for transportation projects.

*Discussion: The regional transportation improvement program (TIP) process currently takes into account air-quality impacts and the development of urban centers. However, missing are any criteria for the consequences of transportation infrastructure on physical activity and health. While regionally-managed transportation funds should continue to be directed to projects and*

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<sup>30</sup> *The Fundamentals* (2004) in World Report on Road Traffic Injury Prevention: Summary.

*programs that best advance the primary growth planning objectives for centers, jurisdictions having a health component in their plans should receive priority consideration when competing for transportation funds. Similarly, transportation projects that can demonstrate specific health benefits should be recognized in any process established regionally to prioritize such projects.*

- A-9 There should be a multicounty policy that advocates improved access to health facilities for all sectors of the community.

*Discussion: There is already a general provision in the current VISION 2020 strategy that addresses access to health facilities, particularly in minority and underserved neighborhoods. Local jurisdictions should work with partner organizations, such as the Washington Health Foundation and associations of health providers, to ensure that all residents of the region can access hospitals, clinics, and necessary health care.*

### **Preliminary Implementation Actions & Strategies Related to Health & Active Living**

This section includes possible programs and action that could be advanced through the VISION 2020 update process to help implement any health-related policies and provisions incorporated into a revised regional strategy.

*Note: These potential actions and strategies are only briefly described at this point. Should they be advanced for further consideration in the update process, additional detail would need to be developed. The additional information would discuss responsible parties or agencies, program specifics, budgetary considerations, and schedule.*

- B-1 Develop model provisions for addressing health in local comprehensive planning. This work could include toolkits, a compendium of best practices, a prototype health element, and/or guidance for revising zoning and development regulations. Work with health agencies and other partners to develop these provisions. Identify strategies for linking health with land use actions through the use of regulations, standards and guidelines (maybe through a “model” ordinance process.) Provisions should also be developed to promote pedestrian and bicycle safety. (Such safety issues could include: traffic calming, better education and testing regarding pedestrian presence along transportation facilities.)
- B-2 Encourage local jurisdictions to fund pedestrian and nonmotorized improvements through various financing strategies. For example, jurisdictions should consider an “active transportation” bicycle and pedestrian improvement levy. Similar to the way in which library and park improvements are funded, levies can be developed to finance sidewalks, bikeways, and other facilities that emphasize environmental, mobility and public health benefits of active transportation. Other approaches

could include establishing local improvement districts (LIDs) to cover portions of the costs for sidewalk, bikeway and trail construction.

- B-3 Develop a program for assessing sidewalk connectivity throughout the urbanized portions of the four-county region. Such an assessment should first consider designated regional centers. (Additional considerations should include transit service, school access, other business districts, and higher density residential areas.)

*Discussion: This assessment would consider roadways with and without curbs and sidewalks, as well as other types of walkway connections. (Note: This proposal does not yet identify which agency would provide primary oversight for this program, or the resources for carrying it out.) Such a program could be phased over time, beginning with an assessment of facilities in designated regional growth centers, and then expanding to other areas within the urban growth area.*

- B-4 Work with local governments, as well as transportation and transit agencies, to establish level-of-service or other performance criteria for all modes of transportation, not just roadways.

*Discussion: This proposal does not yet identify which agency would provide primary oversight for establishing such standards or what the process and schedule would be.*

- B-5 To support more strategic investments in certain types of transit infrastructure and service, work with transit agencies to assess capital improvement needs in communities where land-use policies and decisions are supportive of enhancing walking and bicycling, including places committed to:
- Increasing residential and employment density
  - Improving street connectivity

- B-6 Use the Regional Council as a venue for addressing education on the health-land use-transportation linkage to elected officials, local government staff, developers and the general public. Regularly run articles on this relationship in the Regional View and work with local governments and health agencies to sponsor appropriate educational events, such as workshops, symposia, and training sessions.

- B-7 Add a public health sector representative to the Regional Council's Transportation Policy Board.

- B-8 Continue to support research in building further information on the relationship between the built environment, transportation and public health.

- B-9 Advocate that health considerations be incorporated into SEPA/EIS review within the four-county region.

*Discussion: Health impact assessments (HIAs) are tools now used both internationally and in a number of states here in the U.S to calculate health implications in a more methodical manner.*

***Initial Guidance for Measurable Objectives to Monitor Health Considerations Related to Land Use and Transportation***

This section identifies ways in which measurable objectives could be developed to track progress – or lack thereof – in achieving the goals of any health-related policies and provisions incorporated into an updated VISION 2020 strategy.

*Note: These measurable objectives are only briefly described at this point. Should they be advanced for further consideration in the update process, additional detail would need to be developed. The additional information would discuss lead agencies, specifics on monitoring, data development and acquisition, resources, and schedule.*

**C-1 Monitoring Health and Active Living**

Work with health agencies and the academic community in the four-county region and with local jurisdictions to identify measures for assessing environmental and public health related to:

- Land use, including soil contamination, noxious uses, etc.
- Water quality
- Air quality
- Walkability and bikability

**C-2** Work with partner agencies, including the Washington State Department of Transportation/Urban Planning Office and the University of Washington, to develop measures for assessing the walkability and bikability of urban environments. Collect “use” data for nonmotorized trip-making, similar to the information we collect for vehicle traffic and transit ridership. Routinely assess sidewalks and pathways in designated regional growth centers.

VISION 2020 + 20 Update

Issue Paper on Subregional Centers:  
Town Centers, Secondary Centers, Activity Nodes, Redevelopment Corridors

Puget Sound Regional Council

March 3, 2005

Growth Management Policy Board adopted *Action to Proceed* April 14, 2005



**VISION 2020 + *PLUS* 20**  
**ISSUE PAPER: SUBREGIONAL CENTERS**

**Introduction**

The Puget Sound Regional Council is updating VISION 2020, the region's adopted growth management, economic, and transportation strategy. At its heart, the vision is concerned with regional geographies such as urban, rural, and natural resource areas and how they will change over time.

VISION 2020 recognizes that urban areas in particular are composed of a diverse range of geographies with distinct characters and roles. These geographies range from the intensely developed core of downtown Seattle, to suburban downtowns and small neighborhood shopping areas. Typically each of these places provides service to adjacent, less intensely developed urban residential areas. A key goal of the update is to better describe these different urban geographies and the roles that they play in the overall long-range regional vision.

As part of the update, the Regional Council is undertaking two parallel efforts: (1) analysis of a range of regional growth alternatives through an environmental review process, and consideration of the socio-economic, environmental, land use, and transportation effects of different patterns and distributions of regional population and employment growth, and (2) revision of the adopted multicounty planning policies that describe and direct the vision.

This paper is intended to assist these efforts in two ways: (1) by surveying definitions of different types of urban geographies so that they can be better described within the updated vision's broad strategy and multicounty planning policies, and (2) by serving as a reference for Regional Council staff to use while developing the regional growth scenarios and alternatives that will be analyzed in the environmental review process.

The paper concludes with preliminary considerations for the update of the VISION 2020 Multicounty Planning Policies, and recommendations for how different urban geographies should be considered while developing regional growth alternatives for further analysis.

**Background**

Over the past several years, the Puget Sound Regional Council has been working to further understand a key urban geography, regional growth centers, and their contributions to advancing both local and regional planning goals and objectives. As the region moves forward to update VISION 2020, it is important also to look at other geographies beyond regional growth centers – such as town centers and redevelopment corridors. The Regional Council's Growth Management Policy Board has directed staff to explore these geographies as part of the VISION 2020 Update. This paper responds to that direction.

A better understanding of these other urban geographies provides more information about their role in local and regional planning efforts – and suggests some considerations regarding how they should be addressed in the VISION 2020 update. These geographies will be factored into the analysis the Regional Council is undertaking to investigate different alternatives for accommodating an additional 1.6 million people and 1.1 million jobs in the four-county region over the next 35 years. This work also has implications for the policy review taking place as part of the VISION 2020 update to revise the multicounty planning policies adopted under the Growth Management Act.<sup>1</sup>

The 1995 VISION 2020 document described two groupings of centers: (1) regional growth centers, and (2) town centers. The purpose, location, and role of regional growth centers are well documented. Town centers, which have received less attention, are the primary downtown areas and central business districts of suburban and rural cities, as defined in VISION 2020:

*Town Centers are local focal points where people come together for a variety of activities including business, shopping, living and recreation. These centers may include the core of small-to medium-sized cities, and may also be located in unincorporated areas such as Kingston. Often town centers include a strong public presence because they are the location of City Hall, 'Main Street', and other public places....[e]xamples include the central business districts of cities such as Kirkland, Sumner, Mill Creek, and Kingston. (VISION 2020, page 86).*

Through the remainder of the update process, it is recommended that the concept of town centers, and other types of smaller, secondary centers be referred to collectively as *subregional centers*. In this paper, three groupings of subregional centers are examined:

**Town Centers.** The first group includes *town centers*, as described above, in municipalities that do not currently have designated *regional growth centers*. Given the sizeable number of cities in the region having such central places, these cities are further subdivided into four categories: (a) the downtowns of larger suburban cities – that is, locations which could be expected to play a more significant role in the region's transportation framework and in absorbing future regional growth, (b) the downtowns of mid-size to smaller cities within the urban growth area, (c) crossroad locations in the smallest residential suburbs of the region (such as Beaux Arts and Woodway), and (d) the downtowns of freestanding cities outside the contiguous urban growth area (such as Darrington and Eatonville).

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<sup>1</sup> A number of recommendations for regional growth centers were included in a centers report endorsed by the Growth Management Policy Board in late 2002. These recommendations will be advanced directly into the work to update VISION 2020 and are not restated here. See Chapter 5, "Findings, Issues and Recommendations" in *Central Puget Sound Regional Growth Centers 2002/Puget Sound Milestones Report* (December 2002). Puget Sound Regional Council. pages 101-114.

**Secondary Centers.** The second group of subregional centers examined in this paper includes locations that are formally designated in local comprehensive plans as smaller, secondary centers outside of downtowns.

**Activity Nodes.** The third group consists of significant additional concentrations of development outside of downtown areas that exhibit some of the characteristics of centers, but are not designated in local comprehensive plans. These have been identified through mapping concentrations of existing population, housing and employment.

A final geography is also discussed in this paper: *redevelopment corridors*. This term is used in VISION 2020 to describe districts along major routes in urbanized areas that could accommodate additional residential and commercial development that is transit-oriented. Together, these various subregional centers and redevelopment corridors are the focus of the *other geographies* examined in this paper.

*VISION 2020 and the Centers Concept.* The emphasis on the development of *centers* is truly the centerpiece of VISION 2020 and its related regional planning documents, including *Destination 2030* and the Comprehensive Economic Development Strategy (CEDS). Centers are characterized by compact, pedestrian-oriented development, with a mix of uses. They are locations identified to take a greater proportion of future population and employment development in an effort to curb sprawl – by encouraging development in strategic places inside the region's designated urban growth areas.

Centers create environments where accessibility and mobility are improved for walking, biking and transit – and as a result play a key transportation role as well. Centers provide the backbone for the region's transportation network. By developing a high-efficiency transportation system linking major centers, the region can take major steps to reduce the rate of growth in vehicle miles traveled, while accommodating a growing population and an increase in jobs.<sup>2</sup>

In addition to the two types of centers, (1) *regional growth centers* and (2) *town centers*, the 1995 VISION 2020 plan also emphasizes the importance of concentrated development in other geographies as well, especially urban districts referred to as *redevelopment corridors* and *compact communities*.<sup>3</sup>

*What Did We Hear During Scoping?* In an effort to solicit a broad range of input and opinion on what the update to VISION 2020 should address, the Regional Council conducted an extensive scoping process from October 2003 through March 2004. More than 1,200 individual comments were received, addressing two-dozen issues. There were a number of comments related to centers and the development of compact communities. There was a strong emphasis on the importance of supporting the

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<sup>2</sup> See discussion of development patterns in *Destination 2030* (2001), Puget Sound Regional Council, pages 19–21.

<sup>3</sup> Attachments A and B provide overviews of the various centers concepts that have occurred in regional and countywide planning documents since 1990.

development of both regional and local centers. Several respondents called for focusing growth into vibrant, mixed-use centers as a key strategy for maintaining the region's quality of life. Other comments called for re-evaluating current regional growth centers to ensure that places so designated are regionally consistent, equitably distributed, and provide for local choice in land use decisions. The Regional Council was also encouraged to revisit the notion of having a hierarchy of centers, similar to what exists at the countywide level in several of the counties in the Puget Sound region.

In January 2004 – during the scoping process – the Growth Management Policy Board reviewed the section of existing policies and provisions in the 1995 VISION 2020 document that addresses urban growth, including policies related to centers development. An outcome of that review by the Board was guidance that provisions be developed for consideration as part of the update process to address other geographies beyond the existing formally designated *regional growth centers*.

### **Other Urban Geographies**

This section of the paper offers more detailed descriptions of the different types of subregional centers and redevelopment corridors that are proposed for further analysis and review in the VISION 2020 update process.

*Town Centers.* With the exception of a handful of very small suburbs that are exclusively residential enclaves, municipalities in the four-county region typically have some sort of core district characterized by commercial, office and retail uses – perhaps even with some higher density residential units. In many cities, these central places are identified as a “downtown” or “central business district.”

*Recommendation:* Between now and 2040, these locations should play a more significant role in absorbing additional employment and residential development.

While not being as prominent as the larger regional growth centers, these downtowns should also become more walkable, transit-friendly places with good pedestrian and bicycle connections to adjacent neighborhoods. Transit service in these central places should link to nearby regional growth centers and thereby to major employment centers and hubs throughout the region.

Currently, there are 82 cities and towns in the four-county central Puget Sound region. Among these cities, 17 have one or more regional growth centers designated within their city limits.<sup>4</sup> Of the remaining 65 cities, 45 are within the region's contiguous urban growth areas and 20 are stand-alone cities and towns surrounded by rural districts.

It should be recognized that these cities are not uniform places, but differ significantly in size and character. With that in mind, it is recommended that for analysis purposes a

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<sup>4</sup> Note: Several cities have designated regional growth centers in districts other than their downtown area (for example, Kirkland and Tukwila). Factoring in how these cities' downtowns are to be treated in the VISION 2020 +20 Update process will be determined on a case-by-case basis.

distinction be made between the larger, more populated suburban cities and the smaller municipalities in the contiguous urban growth areas.

Map A on page 6 shows *town centers* in the region, divided into four groups. Having looked at various options for grouping cities (for example, based on population, size of commercial districts, and/or location in the region), it was decided to use *activity units* as the primary determiner. Activity units are calculated very simply by adding a jurisdiction's population and employment numbers together. (The Regional Council has used activity units for other evaluation work, for example, an activity unit threshold has been established as one of the criteria for designating new urban growth centers.) Within the contiguous urban growth area, a 22,500 activity unit base was used to distinguish *major town centers* from *other town centers*. There are 14 cities within the growth area with 22,500 or more activity units.<sup>5</sup>

*Recommendation:* The scenario analysis used to develop alternatives for evaluation in the VISION 2020 update should take into account the potential for these 14 major town centers to assume additional population and employment growth in downtown areas.

Of the remaining 31 cities within the contiguous urban growth area, five municipalities within the region are unique in that they are almost entirely residential communities – Beaux Arts Village, Clyde Hill, Hunts Point, Woodway, and Yarrow Point. While these cities are also expected to advance centers-type development where possible, it is recognized that such development in these communities would likely be at a smaller scale than in other suburban cities.

*Secondary Centers.* To get a better understanding of other types of locations that are recognized as centers in local planning efforts, Regional Council staff reviewed the formal use of the term *center* in local comprehensive plans. This review revealed that many jurisdictions designate centers below the regional and downtown level. In most cases, these *secondary centers* are primarily designated for their predominance of some type of commercial, industrial or retail activity and how and at what level they serve the surrounding community. Some jurisdictions go so far as to state criteria for these locations based on transit and pedestrian related access. Very few, however, specify residential activity.

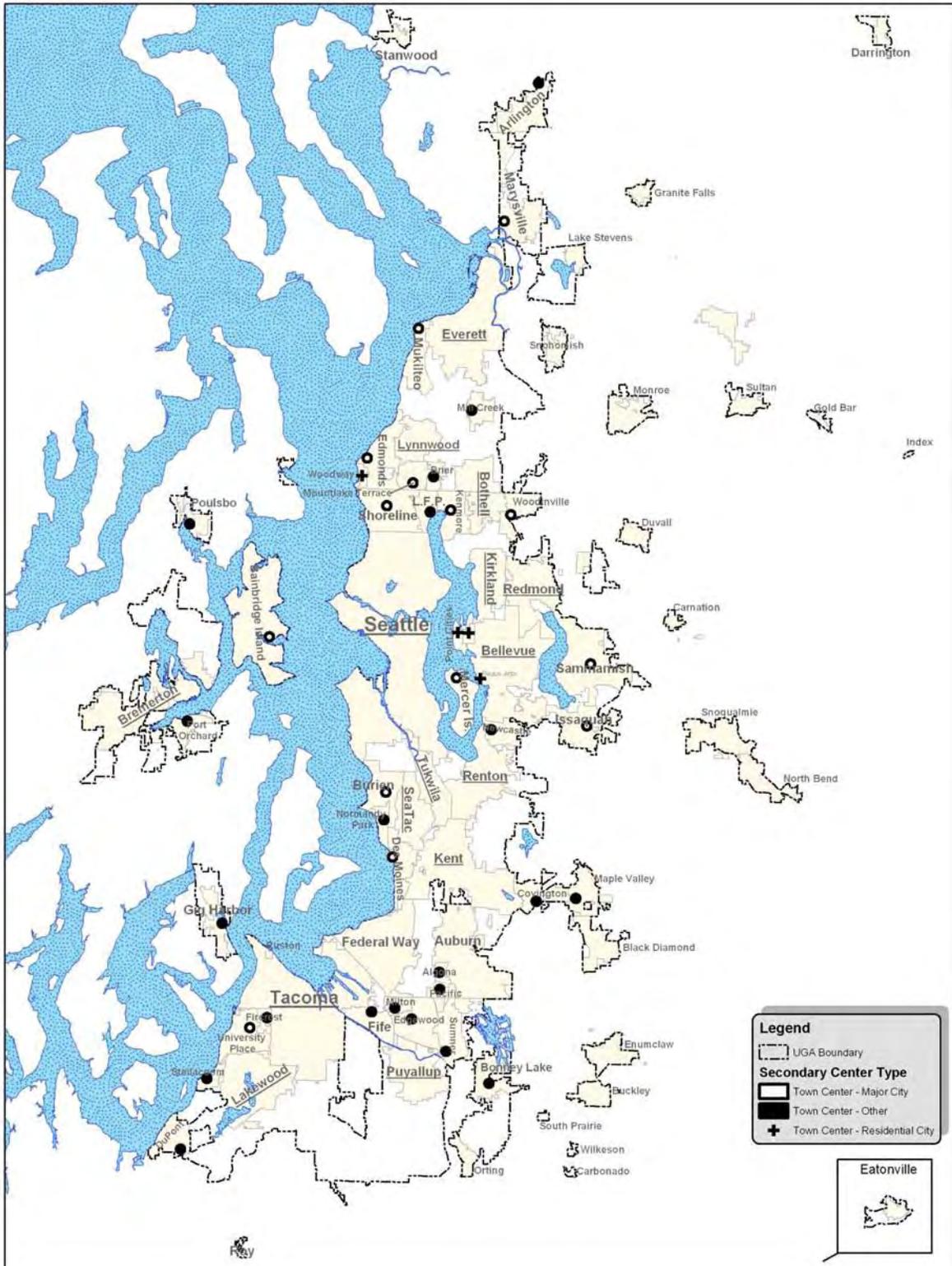
This review focused on all cities with a population of 15,000 or greater, looking specifically for policies or provisions that designated centers in locations beyond the regionally recognized centers. Information was gathered for what these *secondary centers* are called and what criteria are used to designate such areas as centers.<sup>6</sup>

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<sup>5</sup> The 14 cities with 22,500 or more activity units are: Bainbridge Island, Burien, Des Moines, Edmonds, Issaquah, Kenmore, Marysville, Mercer Island, Mountlake Terrace, Mukilteo, Sammamish, Shoreline, University Place, and Woodinville.

<sup>6</sup> As an example, the City of Bothell has outlined criteria for four secondary centers. Each center has specifications relating to either employment, retail activity or professional and personal services. The city's criteria detail at what level these centers should serve the community, whether that be multicounty, citywide, or neighborhood specific. Bothell has chosen to call these places “activity centers” – which occurs fairly regularly as a term among the jurisdictions that were studied.

**MAP A: TOWN CENTERS WITHIN THE CONTIGUOUS URBAN GROWTH AREA**



In general, the *secondary centers* typically have shopping opportunities and services that cater to the surrounding neighborhood, and are characterized by smaller scale development that serves daily needs of the residents.

Attachment C includes a table with information on the review of *secondary centers* identified in local comprehensive plans. It includes information – arranged by jurisdiction – on the comprehensive plan designation of *secondary centers*, whether there is more than one classification of these secondary locations, what criteria are used to designate these centers, and whether specific boundaries are identified in the comprehensive plan.<sup>7</sup>

Of the 27 jurisdictions (23 cities and all four counties) examined, 18 have at least one type of center identified in their comprehensive plans. Twelve cities have more than one type of center designation. These centers are known by a variety of terms in local comprehensive plans. “Activity center” is the most common term found in local plans (8 out of the 18 localities with centers designations). Other terms include “neighborhood center” and “commercial center.” Criteria that are used by local jurisdictions to designate these secondary centers include (a) the presence of mixed-use development, (b) concentrations of employment, and (c) access to shopping. The presence of mixed-use development is the most commonly applied criterion. Map B on page 8 displays the larger *secondary centers* that have been designated locally.

*Recommendation:* It is recommended that the scenario analyses used to develop alternatives for evaluation in the VISION 2020 update should take into account these *secondary center* locations that already have policy support to develop as compact centers through deliberative, local planning processes.

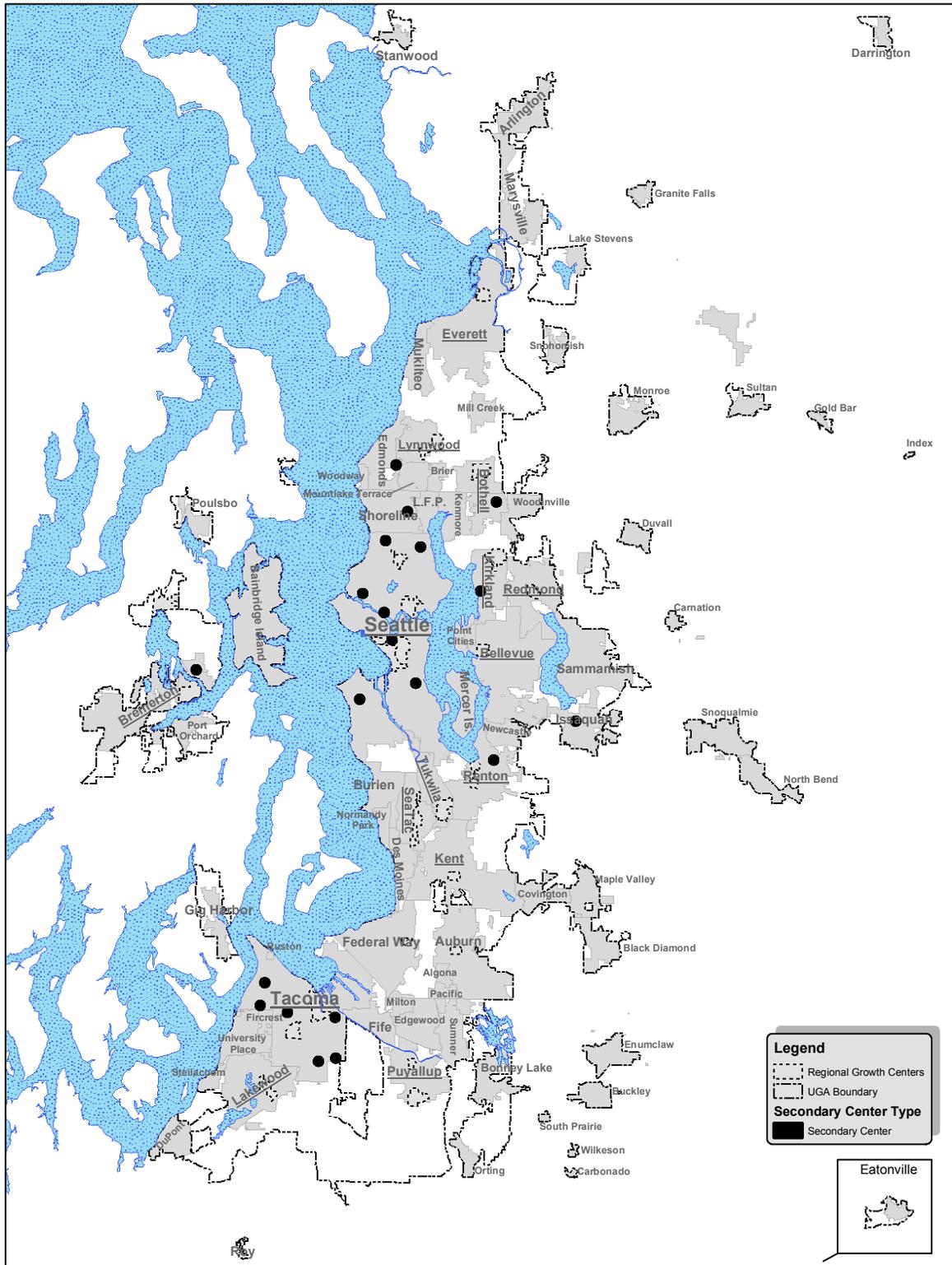
*Activity Nodes:* Previous research conducted by the Regional Council has identified a number of locations throughout the four-county region that already have some of the characteristics of centers– and may or may not have been formally recognized or designated through any formal planning process. These locations may have concentrations of higher-density residential development, some mix of land uses (such as shopping or offices in addition to housing), and the potential to develop a nonmotorized network that makes it easier to walk, bike or use transit.<sup>8</sup> In looking at locations with centers-like characteristics, transit-station areas should also be considered.

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<sup>7</sup> This evaluation of secondary centers in local comprehensive plans was initially completed in Autumn 2004. In 2005, the Regional Council will update this work to reflect more recently updated local plans.

<sup>8</sup> In developing *Destination 2030*, the Regional Council worked with researchers at the University of Washington (UW) to identify such concentrations of activity. That work identified nearly 100 locations, which were dubbed *suburban clusters*. The UW researchers defined suburban clusters as having at least 1400 people within one-half mile districts, usually in close proximity to a commercial or neighborhood retail center. Analysis of these clusters revealed that they frequently lacked many of the basic elements of traditional urban neighborhoods, such as connected sidewalks, or commercial buildings directly fronting sidewalks as opposed to parking lots. Nevertheless, *Destination 2030* stated that these concentrations “*must be considered as part of the regional hierarchy of compact communities.*” See *Destination 2030* (2001). Puget Sound Regional Council. page 22.

**MAP B: SECONDARY CENTERS IN THE CENTRAL PUGET SOUND REGION**



Note: This map only displays the larger secondary centers that have been formally recognized in a local municipal comprehensive plan.

For the analysis of alternative growth patterns based on the centers concept, it could be useful to look at larger concentrations of activity that have some of the characteristics of centers whether or not they are identified through a planning process. (See Map C: *Activity Nodes in the Central Puget Sound Region*, on page 10.)<sup>9</sup>

*Recommendation:* It is recommended that these locations also be identified as part of the scenario analysis work for developing alternatives for the VISION 2020 update based on a review of population density, employment density, and retail uses by census block.

*Redevelopment Corridors.* The term *corridor* can mean different things in different contexts. Federal and state transportation planning efforts often use the term corridor to refer to a specific highway route (for example, the I-5 corridor) or to a facility that moves a specific mode of transportation (for example, a freight corridor). Physical planners can use the term corridor to talk about connected land uses (for example, an open space corridor) or even for non-human movement (for example, a wildlife corridor). The term corridor is used in all sorts of planning documents in the central Puget Sound region – in local plans, regional strategies, transit agency plans, and state plans – with different meanings and purposes.

One of the primary uses of the term corridor in the 1995 VISION 2020 strategy occurs in provisions that address land use along highways – referred to in the plan as *redevelopment corridors*. Specifically, VISION 2020 calls for "*greater land use intensity and mix*" along selected urban transportation corridors.<sup>10</sup> These provisions seek to make "*certain types of corridors*" (1) more transit-compatible, (2) pedestrian-friendly, and (3) reduce the domination of automobile oriented uses. Policy RT-8.19 states:

*Promote transportation improvements that support the redevelopment of lower-density, auto-dominated arterials to become more pedestrian and transit compatible urban transportation corridors.*

While no specific corridors were identified in the 1995 document, the discussion concludes that the greatest redevelopment opportunities are along those corridors that:

- (1) Link and would not detract from centers or compact communities.
- (2) Are located within a short distance of significant concentrations of residences or employment.
- (3) Have the potential to support frequent transit and increased pedestrian activity.<sup>11</sup>

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<sup>9</sup> Note: This map only includes the 20 largest nodes in the 4-county region. The Council intends to undertake additional work in 2005 to further assess and identify activity nodes.

<sup>10</sup> See section titled: *Redevelopment of Selected Urban Transportation Corridors*, 1995 VISION 2020 Update, page 16.

<sup>11</sup> Examples might include corridors such as Aurora Avenue North between N. 75<sup>th</sup> St and N. 100<sup>th</sup> St., Lake City Way NE between N. 110<sup>th</sup> St. and N. 130<sup>th</sup> St (both in Seattle), Pacific Avenue South from S. 72<sup>nd</sup> St. to S. 96<sup>th</sup> St. (in Tacoma), and Evergreen Way from W. 4<sup>th</sup> Avenue to 84<sup>th</sup> Street SE. (in Everett).



The strategy specifically encourages "*the addition of neighborhood retail, offices, housing and community facilities*" along these redevelopment corridors. The strategy supports facility improvements that contribute to transit use, walking, bicycling, and the reduction of surface parking. The strategy acknowledges that appropriate types of development along these corridors depend on the existing circumstances.<sup>12</sup>

No additional policy work or analysis has occurred on identifying selected redevelopment corridors since the adoption of the *1995 VISION 2020 Update*. Nor has there been any technical work to further develop the types of improvements or redevelopment that might be appropriate along such corridors.

***Summary.*** The alternatives selected for further investigation in the VISION 2020 update process must build off the centers concept in the existing VISION 2020 strategy, and should consider *town centers, secondary centers, and activity nodes* when distributing population and employment in alternative growth patterns. These urban geographies take into account policies and provisions in existing adopted local comprehensive plans – including planning efforts to focus growth in local *town centers, secondary centers* and along *redevelopment corridors*. At the same time, the analysis should also consider *activity nodes*, locations that are developing with many of the characteristics of centers, even if they presently lack a formal designation. The Regional Council should consider these other geographies as it evaluates growth scenarios and develops alternatives for public comment and environmental review.

### **Policy Considerations and Provisions in the VISION 2020 Update**

Preliminary recommendations for considering how to integrate subregional centers and redevelopment corridors in the VISION 2020 update are arranged sequentially under three headings (1) possible guidance for updated multicounty policies, (2) preliminary implementation actions to consider, and (3) initial guidance for measurable objectives.

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<sup>12</sup> Policy RG-1.6 summarizes the VISION 2020 strategy for redevelopment corridors:  
*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.*

## **Guidance for Addressing Subregional Centers and Redevelopment Corridors in Updated Multicounty Policies**

*The considerations discussed in this section describe preliminary policy issues that could be addressed in the revised multicounty planning policies that are to be incorporated into an updated VISION 2020 strategy. In some instances, these policy issues are already detailed and provide specifics on whom the policy would affect and what the expectations would be. In other instances, the issues are more conceptual at this point and should they be advanced for further consideration in the update process, additional detail would need to be developed.*

- A-1 The multicounty planning policies should maintain a centers concept that emphasizes regional growth centers, while recognizing the importance of other types of subregional centers and redevelopment corridors.

*Discussion: Subregional centers are important in achieving the overall regional goals of reducing the rate of growth in vehicle miles traveled by developing in a manner that provides more opportunity for accessibility by walking or bicycling.*

- A-2 The multicounty planning policies should address the roles and expectations for the region's municipalities to advance centers development. Each city should identify at least one central place to develop as a *town center*, with denser, mixed-use development in a more walkable, transit-oriented development that is a focus for the community.

*Discussion: Given the prominence of the centers concept in regional and local planning in the central Puget Sound area, each city should work on implementing centers development in at least one town center.*

- A-3 The multicounty planning policies should provide direction to countywide planning policies to ensure that the various types of centers established throughout the four-county region are compatible to regional policies and provisions for centers.

*Discussion: While it is important for the countywide policies to maintain flexibility to recognize unique characteristics at the county level and in subareas, it is also important to ensure a degree of compatibility in the understanding of and application of centers designations throughout the four-county region.*

- A-4 The multicounty planning policies should recognize the role that subregional centers and redevelopment corridors play in achieving local and regional planning objectives. However, the multicounty planning policies should direct regional funding to regional growth centers, given their primary importance in achieving the growth management, economic development, transportation, and health-related objectives in VISION 2020.

- A-5 Countywide, subregional and local investment processes and funding strategies should give priority to centers, including designated regional growth centers and subregional centers.
- A-6 The VISION 2020 update should clearly define the term *redevelopment corridor* as a particular planning geography of regional and local importance to land use planning. A clear distinction needs to be made between the use of the term for certain transportation planning purposes (that is, as a multimodal facility in a dense urban environment) and for growth management planning purposes (that is, as a district ripe for infill and redevelopment).
- A-7 Within the regional strategy, redevelopment corridors should be discussed as a feature of compact communities in local comprehensive plans.

*Discussion:* Redevelopment corridors are primarily districts where redevelopment and infill development that is transit-oriented and pedestrian-friendly can take place along a transit route. Identifying and planning for such redevelopment corridors should be addressed in local comprehensive plans.

### ***Preliminary Implementation Actions to Consider Related to Subregional Centers and Redevelopment Corridors***

This section includes possible programs and action that could be advanced through the VISION 2020 update process to help implement any policies and provisions addressing subregional centers incorporated into a revised regional strategy.

*Note:* These potential actions and strategies are only briefly described at this point. Should they be advanced for further consideration in the update process, additional detail would need to be developed. The additional information would discuss responsible parties or agencies, program specifics, budgetary considerations, and schedule.

- B-1 Local jurisdictions should develop subarea plans for any formally designated subregional centers. These plans should follow similar guidelines to the ones developed for regional growth centers in the Regional Council's Center Plan Checklist (or any subsequent regional guide developed for centers planning). It is particularly important that local jurisdictions formally designate and plan for their primary *town center*.
- B-2 Countywide growth management planning groups should establish review procedures for evaluating subarea plans developed for subregional centers.
- B-3 The Regional Council will work with transit agencies, local governments, and others to develop design guidelines for redevelopment corridors that can be applied locally.

*Discussion: Examples of this kind of work performed by the Regional Council after the adoption of Destination 2030, include the Development Toolkit: Success Stories from the Centers and the Design Guidelines Manual.<sup>13</sup>*

### ***Initial Guidance for Measurable Objectives to Monitor Subregional Centers and Redevelopment Corridors***

This section identifies ways in which measurable objectives could be developed to track progress – or lack thereof – in achieving the goals of any policies and provisions addressing subregional centers incorporated into an updated VISION 2020 strategy.

*Note: These measurable objectives are only briefly described at this point. Should they be advanced for further consideration in the update process, additional detail would need to be developed. The additional information would discuss lead agencies, specifics on monitoring, data development and acquisition, resources, and schedule.*

- C-1 The Regional Council will work with local jurisdictions and other partners, including state agencies and local institutions of higher education, to regularly track growth and development trends in both regional growth centers and subregional centers.
  
- C-2 The Regional Council will work with local governments to routinely monitor the designation of and planning for selected redevelopment corridors. (This monitoring would be reported through the Council's *Puget Sound Milestones* project.)

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<sup>13</sup> The *Development Toolkit: Success Stories from the Centers* is available on-line at [www.psrc.org/projects/growth/toolkit/index.htm](http://www.psrc.org/projects/growth/toolkit/index.htm). The *Design Guidelines Manual* is available on-line at: [www.psrc.org/projects/growth/designmanual.pdf](http://www.psrc.org/projects/growth/designmanual.pdf).

## **Attachment A:      Brief Overview of Centers Concept in Regional Planning Efforts Since 1990**

The initial VISION 2020 strategy, adopted in 1990, advanced the creation of a system of *central places* as a way to contain expansion of the urban area and consume less land. The 1990 strategy included an extensive list of *candidate centers*, arranged according to a six-part hierarchy of central places. These places range from downtown Seattle, as the region's dominant commercial, office and entertainment hub, to small towns that provide services to their surrounding rural districts and farmlands.<sup>14</sup>

The centers concept was utilized extensively by the counties and municipalities in the four-county region as they developed their initial comprehensive plans under the Washington State Growth Management Act (GMA), also adopted in 1990. The centers concept was viewed as a viable way to address GMA goals of protecting resource lands and critical areas, curbing sprawl, and linking land use and transportation planning.

As the initial sets of countywide and multicounty planning policies were developed in the early 1990s, the original VISION 2020 concept of central places was modified and adapted. In response, the 1995 VISION 2020 Update simplified the centers concept. Two sets of centers are described in the 1995 update: The primary set, called Regional Growth Centers, includes: (1) a Regional Center, (2) Metropolitan Centers, and (3) Urban Centers. In addition, there is a set called Town Centers.<sup>15</sup>

At the time the 1995 VISION 2020 Update was adopted, 21 regional growth centers were specifically identified, through designation processes at the countywide level: 12 in King County, 1 in Kitsap County, 5 in Pierce County, and 3 in Snohomish County.<sup>16</sup> No specific town centers or other subregional types of centers are identified in the 1995 update.

Regional growth centers took on additional importance in 2002 when the regional transportation improvement program (TIP) framework that guides the selection process for regional-managed transportation funding was updated to prioritize projects in designated centers and their connecting corridors. For that part of the TIP program overseen by countywide planning groups, projects in subregional centers designated in local comprehensive plans and their connecting corridors are also eligible for regional funding.

Since 2002, the Growth Management Policy Board has been reviewing the progress of development in regional growth centers. A report endorsed by the Board in late 2002

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<sup>14</sup> See Growth Strategy section in *VISION 2020/Growth and Transportation Strategy for the Central Puget Sound Region* (October 1990). Puget Sound Council of Governments. pages 20-27.

<sup>15</sup> See *Appendix A* (page 85) in the *1995 VISION 2020 Update*. Puget Sound Regional Council.

<sup>16</sup> In 2003 and 2004 three additional regional growth centers were designated: two new centers in King County and one in Kitsap County.

includes a series of recommendations related to centers and their designation.<sup>17</sup> In June 2003 the Executive Board approved regional criteria to be used in the designation of future regional growth centers.<sup>18</sup> (These board actions are discussed in more detail below under the section addressing countywide processes.)

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<sup>17</sup> See Chapter 5, "Findings, Issues and Recommendations" in *Central Puget Sound Regional Growth Centers 2002/Puget Sound Milestones Report* (December 2002). Puget Sound Regional Council. pages 101- 114.

<sup>18</sup> *Designation Criteria for Regional Growth and Manufacturing/Industrial Centers* (June 29, 2003). Puget Sound Regional Council Executive Board. The criteria are on-line at: [www.psrc.org/projects/growth/criteria.pdf](http://www.psrc.org/projects/growth/criteria.pdf).

## **Attachment B: Brief Overview of Centers Concept in Countywide Planning Policies**

In February 2002, the Regional Council conducted a workshop on regional growth centers and invited staff from each jurisdiction with a designated center to sit down with elected officials from the Growth Management Policy Board and Transportation Policy Board and discuss the successes and challenges of developing centers as locations of mixed-use, denser, more pedestrian-friendly activity. As part of the background information for that meeting, Regional Council staff prepared a piece that compares the designation process and different subcategories of centers that exist in each of the four counties within the region.<sup>19</sup>

### *A Brief Summary of the Different Countywide Approaches*

#### Snohomish County's Countywide Policies:

- *initially included an attachment with a hierarchy of central places based on the original 1990 VISION 2020 plan – that is, (1) metropolitan center, (2) subregional center, (3) activity cluster, (4) small town, and (5) pedestrian pocket.*

#### Pierce County's Countywide Policies

- *uses a more simplified hierarchy based on the centers framework in Appendix A of the 1995 VISION 2020 Update – that is, (1) regional growth centers, including (a) metropolitan center and (b) urban center, and (2) town center.*

#### Kitsap County's Countywide Policies

- *in 2002 adopted a detailed hierarchy of centers that blends concepts from both the 1990 and 1995 VISION 2020 documents – that is, (1) metropolitan center, (2) urban center, (3) town or city center, (4) activity/employment center.*

#### King County's Countywide Policies

- *opted to use a simplified centers concept that recognizes only one type of urban center, based on a number of criteria that address density and character.*

In the months following the February 2002 workshop, the Growth Management Policy Board devoted much of its work to a further study of the region's designated growth centers – particularly in light of the different approaches used at the countywide level to designate such centers. The report – endorsed by the Board in late 2002 – calls on the Regional Council's Executive Board to adopt a clear position on the Regional Council's role in reviewing and approving the designation of regional centers to ensure some degree of consistency across the four counties in the identification and designation of

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<sup>19</sup> See *Centers Designation Processes* handout comparing countywide processes. Agenda Item 8, Growth Management Policy Board (February 2002), Puget Sound Regional Council.

regional centers. In June 2003, the Executive Board adopted *Designation Criteria for Regional Growth and Manufacturing Industrial Centers*. These criteria call for recognition of new candidate locations through the countywide processes, but then apply regional factors that take into account population and employment density, urban form, and mix of land uses to complete the designation process for regional planning purposes.

**ATTACHMENT C: TABLE OF OTHER CENTER DESIGNATIONS – BEYOND REGIONAL GROWTH CENTERS**

*Note: The information reported here is based on comprehensive plans adopted or amended prior to Autumn 2004. This information will be revised in 2005 to reflect more recent updates to local plans.*

JURISDICTION	COMP PLAN DESIGNATIONS FOR OTHER CENTERS?	IF YES, IS THERE MORE THAN ONE TYPE OR CLASSIFICATION OF OTHER CENTERS?	IF YES, WHAT ARE THESE PLACES CALLED IN THE PLAN? (EXAMPLES: URBAN HUB, ACTIVITY AREA, NEIGHBORHOOD CENTER)	IF THERE IS A HIERARCHY OF CENTERS, ARE THERE CRITERIA IN THE COMP PLAN TO DISTINGUISH TYPES? (LIST PAGE CITATION)	IF YES, ARE THEY IDENTIFIED WITH SPECIFIC BOUNDARIES ON A MAP? (CITATION)
<b>Auburn</b>	No				
<b>Bellevue</b>	Yes	No	Commercial Centers (within the land use section) III-6, designated through the subarea process and zoned for retail uses. (They are referred to as <i>business districts</i> later on in the document, VIII-6)	III-6, serve the different needs of residents and businesses and provide a home for a wide variety of users including manufacturing, office, and retail businesses.	Map was missing; assume there is some sort of designation.
<b>Bothell</b>	Yes	Yes	Page ED-1 1. Regional Office/Light Industrial Activity Centers 2. Community Retail/Services Activity Centers 3. Neighborhood Retail/Services Activity Centers 4. Specialty Retail Activity Center	Pages ED-1-ED-5 (numbers correspond to center number) 1. provide employment opportunities over a multi-county area (North Creek, Canyon Park) 2. provide convenience shopping, personal and professional services, dining and entertainment opportunities on a city-wide scale (Downtown Bothell, Canyon Park, Thrasher's Corner, East Kenmore). 3. provide limited shopping and services opportunities for the immediate surrounding residential area. (Meridian/228 <sup>th</sup> , SR527/240 <sup>th</sup> , Juanita-Woodinville/160 <sup>th</sup> , Juanita-Woodinville/145 <sup>th</sup> ). 4. comprise a concentration of businesses providing a particular type of product or shopping experience, typically for a regional market (Country Village).	Yes, Figure ED1 Between pages ED-4 and ED-5
<b>Bremerton</b>	No				
<b>Burien</b>	No				
<b>Des Moines</b>	No				
<b>Edmonds</b>	Yes	No	Pages 26-29 <i>Activity Centers</i> based on activity clusters described in VISION 2020 1. Downtown/Waterfront Activity Center 2. Medical Highway 99 Activity Center	Pages 26-29 Activity centers are intended to address the following goals: 1. Provide a pedestrian-oriented streetscape... 2. Encourage mixed-use development patterns... 3. Build on historical character and natural relationships... 4. Encourage transit service and access 5. Strategically plan for development and redevelopment.... 6. Coordinate the plans and actions of both the public and private sectors 7. Provide a context for urban design guidelines...	Yes, Maps on Pages 12-13
<b>Everett</b>	Yes	Yes	LU14-15, LU36-40 1. Metropolitan Center 2. Growth Centers 3. Activity Centers 4. Manufacturing/Industrial Center	LU36-40 1. Intended to be the focus of intensive mixed-use development with high-density housing, various types of employment, and cultural activities, served by the regional high capacity transit system. 2. To be located outside of the CBD at stations for high capacity transit system. They shall be compact, with a radius of approx. one-quarter mile from the station, with the emphasis upon ped. access.	First 3 are designated on land-use map. Manufacturing/Industrial Center-Not designated on a map

JURISDICTION	COMP PLAN DESIGNATIONS FOR OTHER CENTERS?	IF YES, IS THERE MORE THAN ONE TYPE OR CLASSIFICATION OF OTHER CENTERS?	IF YES, WHAT ARE THESE PLACES CALLED IN THE PLAN? (EXAMPLES: URBAN HUB, ACTIVITY AREA, NEIGHBORHOOD CENTER)	IF THERE IS A HIERARCHY OF CENTERS, ARE THERE CRITERIA IN THE COMP PLAN TO DISTINGUISH TYPES? (LIST PAGE CITATION)	IF YES, ARE THEY IDENTIFIED WITH SPECIFIC BOUNDARIES ON A MAP? (CITATION)
				3. To be located at local transit stations, encourage to be developed at higher densities than the surrounding neighborhoods, should be compact and connected to the metropolitan and growth centers. 4. Area intended to experience even more intensive development with manufacturing, industrial and other compatible land uses.	
<b>Federal Way</b>	No				
<b>Kent</b>	Yes	Yes	Page 4-16 Mentions the concept of activity centers but nothing had been designated. Page 4-28 Manufacturing Center	Page 4-16 These areas will have an existing base of retail and office uses and typically are surrounded by medium-density residential areas. Page 4-28 An area reserved for manufacturing and warehouse uses, or those uses closely related to industrial development. Office uses related to manufacturing/warehouse uses are permitted, but otherwise limited.	Activity Center-No. Manufacturing Center-Yes.
<b>King County</b>	Yes	Yes	Page 2-11 – 2-13 1. Unincorporated Activity Centers 2. Community Business Centers 3. Neighborhood Business Centers	P2-11 – 2-13 1. Primary locations for commercial and industrial development in urban unincorporated King County 2. Primarily retail developments designed to serve a nearby market area of 15,000 to 40,000 people. 3. Shopping areas offering convenience goods and services to local residents.	Yes, Urban Centers Map
<b>Kirkland</b>	Yes	Yes	Page VI-11 1. Activity Areas 2. Commercial Districts 3. Commercial Corridors 4. Neighborhood Centers 5. Residential Markets	Page VI-11 1. Locations that contain a high concentration of commercial land uses and adjacent and intermingled higher-density residential uses served by a transit center. 2. Smaller activity areas that contain a greater percentage of office development than either major activity areas or neighborhood centers. 3. A series of detached, auto-oriented commercial establishments usually located along a major street, each with its own parking facilities and primary access on the major street. 4. Areas of commercial activity dispensing commodities primarily to the neighborhood. 5. Individual stores or very small, mixed-use buildings/centers focused on local pedestrian traffic.	1. Yes- on Land Use map, VI-3, and Commercial Development Areas map, VI-12 2. Yes, VI-12 3. Yes, VI-12 4. Yes, VI-12 5. Yes, VI-13
<b>Kitsap County</b>	Yes	Yes	Page 39-41 1. Neighborhood Commercial Centers 2. Highway/Tourist Commercial Center 3. Urban Commercial Center 4. Regional Commercial Center	Page 39-41 1. Occur on smaller sites and provide for the daily and/or quick-stop shopping needs of the immediate neighborhood in which they are located 2. Areas that require large acreage sites and high degree of visibility from the highway to serve the traveling public 3. Medium to large sized commercial centers that occur on site ranging in size from 10 to 20 acres. Provide shopping and service needs of large sections of urban Kitsap County. 4. Provide for the shopping and service needs of the entire region.	No.
<b>Lakewood</b>	No				
<b>Lynnwood</b>	Yes	Yes	Page Land Use-7 1. Government/Education activity centers	Page Land Use-8 4. Key activity center designed to accommodate a large amount of the projected population and employment growth in the city.	Yes. Future Land Use Plan – Preferred Alternative

JURISDICTION	COMP PLAN DESIGNATIONS FOR OTHER CENTERS?	IF YES, IS THERE MORE THAN ONE TYPE OR CLASSIFICATION OF OTHER CENTERS?	IF YES, WHAT ARE THESE PLACES CALLED IN THE PLAN? (EXAMPLES: URBAN HUB, ACTIVITY AREA, NEIGHBORHOOD CENTER)	IF THERE IS A HIERARCHY OF CENTERS, ARE THERE CRITERIA IN THE COMP PLAN TO DISTINGUISH TYPES? (LIST PAGE CITATION)	IF YES, ARE THEY IDENTIFIED WITH SPECIFIC BOUNDARIES ON A MAP? (CITATION)
			2. Regional park and recreation activity center 3. Commercial activity centers 4. Subregional center	There is no criteria for the other centers discussed in the document	
<b>Pierce County</b>	Yes	Yes	Page II-6 – II-9 1. Employment Centers 2. High Intensity Employment Centers 3. Moderate Intensity Employment Centers 4. Commercial Centers a. Major Urban Centers b. Community Centers 5. Activity Centers 6. Urban Neighborhood Centers 9. Rural Centers	Page II-6 – II-9 1. A concentration of office parks, manufacturing, other industrial development, or a combination of activities. 2. Provide land area for heavy industrial and manufacturing jobs which are land intensive. 3. Accommodate lighter industrial type uses, warehousing and corporate offices, which are of lower impact on the surrounding uses. 4a. A highly dense concentrations of urban development with a commercial focus. 4b. A significant traffic generator, around which develops a concentration of other commercial and some high density multi-family developments. 5. A recreational, cultural, or educational activity, around which develops a concentration of commercial and office development that serves the daily needs of residents within the immediate neighborhood. 6. Concentrations of shopping, services and employment in rural areas.	Yes. Generalized Proposed Land Use. After Page II-83.
<b>Puyallup</b>	Yes	No	Page III-14 South Hill Commercial Center	Page III-14 A major community and regional shopping node.	No.
<b>Redmond</b>	Yes	Yes	Page 53 1. Overlake Advanced Technology Center 2. City Center (Regional Center)	Page 53 1. Intended to encourage high quality developments that include offices, advanced technology uses, research and development uses, compatible manufacturing uses and other appropriate uses within Overlake.	Yes. Land Use Map.
<b>Renton</b>	Yes	Yes	Page I-15 1. Center Neighborhood 2. Center Suburban 3. Center Village 4. Center Office-Residential 5. Center Institution	Page I-15 1. Suburban scale single story development supporting less intensive land use, primarily serving the surrounding neighborhood. 2. Suburban scale two-story development supporting medium intensity of activity serving multiple neighborhoods. 3. Areas of the City that provide an opportunity for redevelopment as close-in urban mixed use residential and commercial areas, which are pedestrian oriented. 4. Provides large-scale office, retail and/or multi-family projects developed through a master or site plan process incorporating significant site amenities and/or gateway features. 5. Provides clusters of medical or educational uses, which serve the surrounding community.	Yes. Land Use Map.
<b>Sammamish</b>	Yes	No	Community Center (Land Use Element, Pages III-11, III-12)	Community Centers may feature the following types of uses: 1. Civic uses and gathering opportunities 2. Recreational uses 3. Pedestrian and public transit-oriented design and circulation 4. Specialty retail stores 5. Restaurants 6. Professional offices 7. Community services 8. Diverse housing opportunities	Yes. Figure III-2e, PAB Recommended Comprehensive Plan

JURISDICTION	COMP PLAN DESIGNATIONS FOR OTHER CENTERS?	IF YES, IS THERE MORE THAN ONE TYPE OR CLASSIFICATION OF OTHER CENTERS?	IF YES, WHAT ARE THESE PLACES CALLED IN THE PLAN? (EXAMPLES: URBAN HUB, ACTIVITY AREA, NEIGHBORHOOD CENTER)	IF THERE IS A HIERARCHY OF CENTERS, ARE THERE CRITERIA IN THE COMP PLAN TO DISTINGUISH TYPES? (LIST PAGE CITATION)	IF YES, ARE THEY IDENTIFIED WITH SPECIFIC BOUNDARIES ON A MAP? (CITATION)
SeaTac	Yes	No	Page 7-9 Aviation Business Center	Page A1-23 To promote a major center supporting high concentrations of customers, visitors, employees and pedestrian activity to create a quality development area in which people can work, shop and access child care.	Yes. Map 1.3. Existing Zoning
Seattle	Yes	Yes	LU-12 – LU-24 City of Seattle has the designated Regional Urban Centers and Manufacturing Industrial Centers. Besides that they focus more on a <i>village</i> type concept within the centers.		
Shoreline	No				
Snohomish County	No				
Tacoma	Yes	Yes	LU-12 1. Mixed Use Center 2. Community Centers 3. Neighborhood Centers	LU-12 1. Areas where development will be directed, concentrated and connected to multimodal transportation systems. 2. A concentration of commercial and residential development. Provides a focal point for many surrounding neighborhoods, as well as, citywide. 3. A concentrated mix of smaller scale development that serves the daily needs of center residents, those of the immediate neighborhood and for areas beyond.	Yes. Page LU 40. Designated Centers map.
Tukwila	No				
University Place	Yes	No	Town Center	Serves as a focal point for the city and provides a sense of community and civic pride. A base density of 10 dwelling units per acre. Public facilities and services, retail stores, personal services, professional offices, restaurants, some entertainment uses and mixed uses are encouraged to locate in the Town Center.	Yes, figure 1-3 in 2002-2003 draft comp plan amendments



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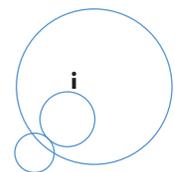
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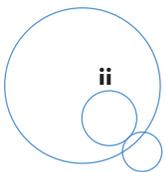
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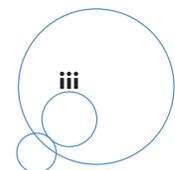
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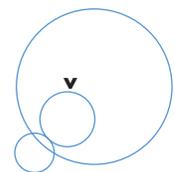
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## Target

Pronunciation: 'tär-gət

### Merriam-Webster's Dictionary

Function: *noun*

Usage: *often attributive*

**1:** a small round shield

**2a:** a mark to shoot at **b:** a target marked by shots fired at it **c:** something or someone fired at or marked for attack **d:** a goal to be achieved

**3a:** an object of ridicule or criticism **b:** something or someone to be affected by an action or development

**4a:** a railroad day signal that is attached to a switch stand and indicates whether the switch is open or closed **b:** a sliding sight on a surveyor's leveling rod

### Merriam-Webster's Thesaurus

Function: *noun*

Text: an object of ridicule, attack, or abuse <made him the chief *target* of political satire>

**Synonyms** butt, mark, sitting duck

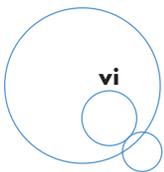
**Related Word** victim; fall guy, scapegoat, whipping boy

**2 Synonyms** AMBITION, aim, goal, mark, objective, quaesitum

**3 Synonyms** USE, duty, function, goal, mark, object, objective, purpose

### Washington State Department of Community, Trade, and Economic Development Definition

A figure in an adopted policy statement indicating the type and amount of growth (e.g., number of persons or households or jobs) a jurisdiction intends to accommodate during the planning period.



# Executive Summary

## INTRODUCTION

The Washington State Growth Management Act (GMA) requires comprehensive, long-range population and employment planning for cities and counties. Growth targets are used to help inform this work. Growth targets — based on the state’s official growth projections — state the minimum number of residents or jobs that a jurisdiction must accommodate and will strive to absorb by some future year.

Growth targets are aspirational, but must be rooted in objective analysis. While they are goals for the future, targets also serve as key benchmarks against which progress can be measured, are an impetus for countywide collaboration regarding future growth, and serve as a guide for local comprehensive plans and their implementing development regulations.

Counties and their cities have recently adopted their second set of GMA growth targets. They are updating their comprehensive plans based on these figures and extending their planning horizons to 2022 or 2025. State law allows each county and its cities to develop their own processes, methodologies, and, to some extent, their desired outcomes.

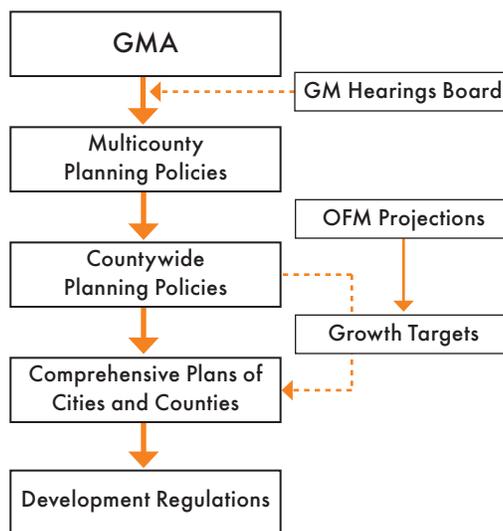
This report, in addition to documenting these processes and results, seeks to compare and contrast the efforts in the four counties, in order to develop some potential best practices and recommendations to be considered in the update of VISION 2020.

## LEGAL AND POLICY FRAMEWORK

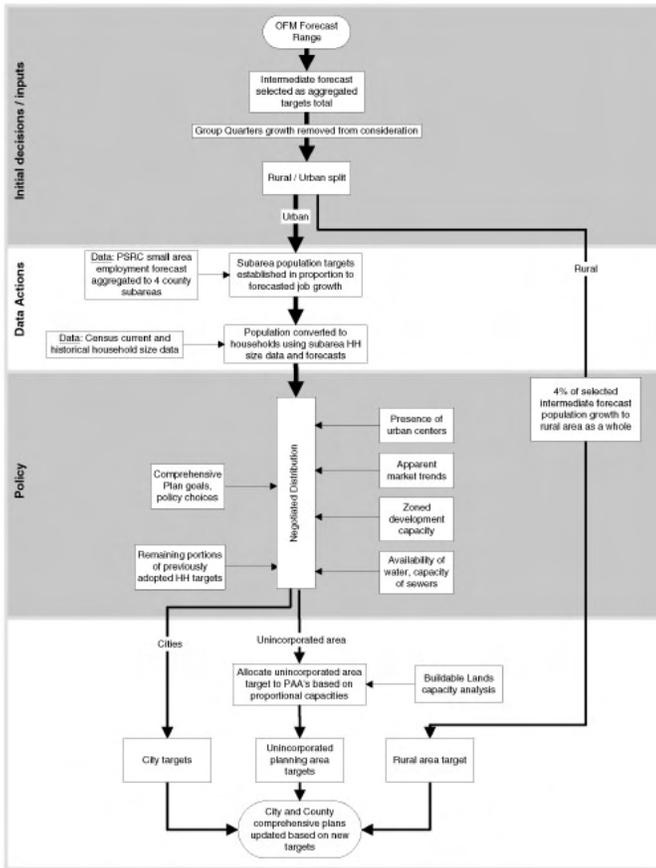
Growth targets exist in the GMA framework and are one tool for implementing the Act’s planning goals. The growth target requirement is implemented through the countywide planning policy (CPP) process. Jurisdictions have a duty to accommodate the targets, but have broad discretion on *how* to accommodate them. (see discussion on page 10)

Because of the implementation through CPPs, growth targets are guided by the planning goals of urban growth areas and the buildable lands program. As such, the results of the growth target process should encourage growth in urban areas. Hearings Board case law takes this focusing

### TARGETS AND GMA RELATIONSHIP



further, indicating growth be targeted to cities within in the urban growth area, to facilitate the provision of urban services by urban service providers (i.e., cities). This is consistent with the regional, multicounty planning policy (MPP) framework. MPPs support focusing growth into cities, but go one step further and envision a significant portion of targets being focused within regionally designated growth centers. (page 11)



## METHODOLOGIES

The four counties have each developed their own methodologies for setting targets. These methodologies vary in a number of ways, but do not seem to be inconsistent with one another.

Each, by law, begins with the State growth projection, and the setting of a “control total” target for the countywide allocation, which is then sub-allocated using a mix of quantitative and qualitative steps. While not required, two counties (King and Snohomish) adopt targets for employment growth in order to better address issues such as jobs-housing balance and its impact on issues such as commuting and capital facilities planning. Two counties have target horizon years of 2022 (King and Pierce), while the others selected 2025 (Kitsap and Snohomish). One county (King) allocates residential targets using households as units, while the other three use population. Last, one county (Kitsap) mandates a 5-year update, one county (Pierce) allows but does not mandate 5-year intervals, and two counties use a ten-year cycle (King and Snohomish).

At the end of each county’s quantitative process, there is room for jurisdictional policy choices. In some counties this is guided by a set of principles or objectives that are codified in the CPPs, in other

cases there are no guiding principles. The impact of the process on adjacent counties is not a documented consideration in any of the methodologies. (page 23)

## DATA AND RESULTS

Similar to understanding targets within a larger policy context, they are also best understood within a larger data context. Comparing the new growth targets to the first set of growth targets, recent development trends, and existing growth conditions provides this context. (page 33)

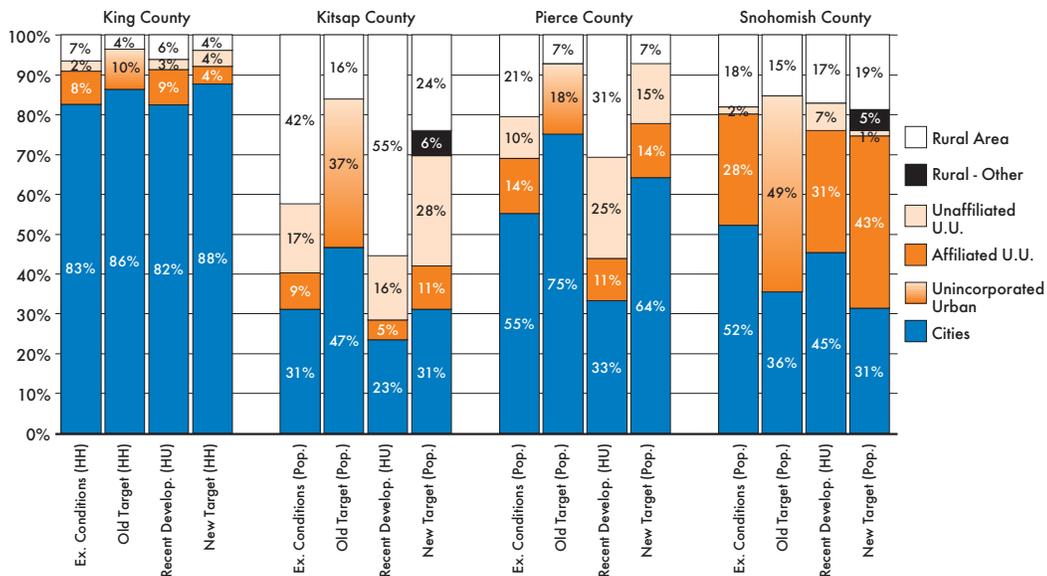
The growth targets are also looked at in a number of ways — first, through a regionwide aggregation, second, through an analysis of distribution to different geographies (cities, unincorporated urban areas, and rural areas), third, through a county-to-county comparison, and last, through a look at each county and its cities individually.

## Residential Targets

The total regional growth target is for about 909,000 new residents by the year 2022/2025 — an increase of about 40,000 residents per year. This is smaller than the previous regional growth target of about 52,000 new residents per year. (page 37)

At the regional level, the majority of new growth (58 percent) is targeted to cities, then to unincorporated urban areas (28 percent), and last to rural areas (13 percent). These figures are on par, at the regional level, with development trends between 1995 and 2002. (page 38)

In comparison to the previous set of targets, however, the new regionwide target is for a smaller proportion of overall growth being targeted to the urban areas (New: 86 percent versus Previous: 92 percent) and cities (58 percent versus 70 percent), and more in the urban unincorporated areas (28 percent versus 22 percent) and rural areas (14 percent versus 8 percent). (page 57)



These changes may reflect a number of factors: better capacity analysis through improved methodologies (i.e., the relatively recent Buildable Lands reports which were not available for the first set of targets), declining fiscal resources to incent growth, or adjustments based on recent development trends (which did not match the previous city/urban area growth targets).

At the county-by-county level, significant variations exist in terms of how the new targets are geographically distributed, and how they compare to recent development trends, and to the previous targets. (page 59)

## Employment Targets

Analysis of the employment targets is simpler; because there are only two sets of targets, a region-wide aggregation and analysis is not done.

Reflecting its current dominance in terms of jobs, King County has a much larger employment target (289,127) than does Snohomish County (124,778), however, in terms of percentage growth, Snohomish County's target reflects a more significant increase in employment. King County's

employment growth (289,127) is almost equal to its residential growth (310,220 population), whereas Snohomish County is planning for less than half as much employment growth (124,778) as residential growth (286,249). (page 91)

Both counties show a distinctly city and urban focus for their employment target, with the vast majority of new jobs targeted to cities (King: 96 percent, Snohomish: 77 percent). The rest of King County's employment growth is targeted to the unincorporated urban area, with no employment target for the rural area. Snohomish County splits the rest of its employment target between its unincorporated urban (two thirds of the remainder) and rural areas (one third of the remainder). (pages 96, 98)

## FINDINGS AND RECOMMENDATIONS

The state of the art of targeting growth has improved significantly since the last set of growth targets were adopted. Counties are beginning to link their targets more closely to their other planning functions, creating a more integrated and holistic planning process. However, opportunities exist for further refining these processes, such that the results are more consistent with the goals of the GMA and VISION 2020.

The recommendations range from simple technical changes (i.e., coordinating the planning horizon years) to more ambitious policy changes (i.e., creating regional guidance for the outcomes of the county processes).

The recommendations are as follows:

- Finding A:** The planning horizons are not consistent.  
**Recommendation:** Standardize the timeframes.
- Finding B:** The methodologies differ, but are not inconsistent.  
**Recommendation:** Develop recommended "best practice" methodologies to create greater consistency and ensure maximum transparency.
- Finding C:** Employment targets to some extent already exist and add value.  
**Recommendation:** Require adoption of employment targets. Working in conjunction with local staff, the Regional Council should staff this effort.
- Finding D:** Targets for regional growth centers are not well integrated into the process.  
**Recommendation:** Ensure that regional growth center target-setting be fully integrated into the city growth target process in a manner that recognizes their important role in the regional growth strategy.
- Finding E:** The connection between the results of the targeting process and GMA and VISION 2020 goals could be clearer.  
**Recommendation:** The VISION 2020 update process should develop clear and measurable regional guidance for the distribution of population and employment. Consider the Regional Council's Executive Board's role in the targets process.
- Finding F:** Targets partially consider the impact on annexation and incorporation.  
**Recommendation:** The VISION 2020 update should support the affiliation of the urban growth area to the most appropriate jurisdiction.

## CHAPTER 1 Introduction

### WHAT ARE GROWTH TARGETS?

A growth target is the minimum number of residents or jobs that a jurisdiction must accommodate and will strive to absorb by some future year. Growth targets reflect aspirational goals, but must be rooted in objective analysis.

As a key component of Washington State's growth management framework, growth targets represent an important step in the planning process. They are both a key benchmark against which progress towards achieving planning goals can be measured, as well as an important impetus for collaboration and conversation about future growth in our region.

The growth targets addressed in this report are associated with the state Growth Management Act and represent officially adopted statements of anticipated growth that is to be accommodated by a city or planning area.

The law requires growth targets. They are developed through countywide processes in order to determine the size and scale of each county's urban growth area. They are a primary input to developing a comprehensive plan, with the target impacting or guiding nearly every plan element, particularly the land use, housing, and transportation elements. This in turn guides the development regulations, as they are required to be consistent and implement the comprehensive plan policies.

The law and related Central Puget Sound Growth Management Hearings Board case law precedents recognize three distinct purposes for growth targets:

- They are an informational tool intended to provide planners, policymakers and others with a consistent estimate of how much growth is coming, and where it is expected and intended to go.
- The process itself of setting targets is intended to be a collaborative, policy-rooted exercise in which important

### Overview of the Milestones Program

Adopted in 1990 and updated in 1995, VISION 2020 is the long-range growth management, economic and transportation strategy for the central Puget Sound region. It provides a framework for achieving the goals of the Growth Management Act that builds upon and supports local, countywide, regional and state planning efforts. Adopted in 2001, *Destination 2030* is the functional transportation element of VISION 2020 and serves as the long-range regional transportation plan.

Key to realizing the vision put forth in these two documents is ensuring that the region is able to measure progress over time, determine whether planned actions are occurring, and assess whether these policies and actions are achieving desired results. Plan implementation and system performance monitoring is the link that connects the policies contained in the plans with real outcomes. The information generated by monitoring efforts helps provide decision makers and the public with the knowledge and tools they need to update and refine the region's plans and programs, and to make critical choices about its future.

Working with local jurisdictions, public agencies, and others, the Regional Council has developed a monitoring program called Puget Sound Milestones. The program is designed to track and regularly report on the region's progress toward implementing the policies and achieving the goals put forth in VISION 2020 and *Destination 2030*.

### Puget Sound Milestones

The program consists of two distinct types of monitoring:

- **System Performance and Trend Monitoring:** This type of monitoring involves measuring, analyzing, and reporting on the characteristics and performance of the transportation system and regional demographic and growth trends.
- **Plan Implementation Monitoring:** This type of monitoring involves tracking and documenting local, regional, and state progress toward implementing the planned projects, programs, and policies outlined in the local and regional plans.

The Regional Council's program conducts both types of monitoring to provide policymakers and the public with answers to questions like: "What are some of the inter-relationships between various growth management policies and programs?" and "Are we seeing tangible changes in development patterns as a result of past policy decisions?"

decisions are made about the location and intensity of population and employment growth for the subsequent twenty-year period.

- The allocation of projected countywide growth to individual jurisdictions serves to ensure that every city is responsible for accommodating their fair share of regionwide growth.

## Terminology

There are two similar terms used in this report: targets and forecasts. These terms have significant differences, both in terms of general usage, and in terms of how courts have used them. The manners in which these two terms are used in this report are described below.

- The terms **growth target** or **growth allocation** imply some form of policy decision or statement of a goal and are meant to be, as noted in case law, “a target that expresses intent and aspiration” while still being based in credible assumptions and grounded in reality.
- The terms **forecast** or **projection** represent objective estimates of the future based on value-neutral analysis that recognizes market forces and overall regional, statewide, and national trends.

Jurisdictions’ plans will of necessity incorporate both targets and forecasts – as targets are based, in part, on objective analysis.

Two additional terms are used throughout the report: **disaggregation** and **suballocation**. Both reference a process by which a regional or countywide number is broken into component pieces and assigned to smaller geographies. Regarding growth targets, this is primarily done to separate the county forecast totals to smaller geographies, such as cities, unincorporated urban areas, and rural areas. These terms both describe a process with a similar outcome, albeit through a different methodology, and are also used interchangeably in this report.

## WHY MONITOR TARGETS NOW?

This report collects and documents adopted population, household, and employment growth targets for the central Puget Sound counties. Between 1992-1995, the region’s counties adopted their original targets, allocating growth through 2012. Since then, the region has grown significantly, the growth management landscape has matured, and our goals and assumptions about the future have adapted. The second round of growth targets have all been recently adopted, extending the planning horizon to 2022 or 2025 (depending on the county), reflecting the State of Washington’s new official population projections, and based on modified and improved methodologies.<sup>1</sup>

While the growth targeting process is governed by a state mandate, each county is allowed to develop an individual process, methodology, and outcome. This report, in addition to documenting these processes and results, seeks to compare and contrast the methodologies of the four counties while developing some potential best practices and recommendations that are to be considered in the update of VISION 2020.

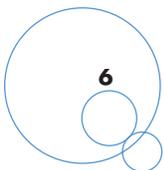
## ORGANIZATION OF THE REPORT

The report contains six chapters, which address the following:

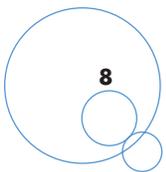
- **Chapter 2** provides an overview of the growth target process, and a description of the policy and legal context. It covers the policy goals and regulatory requirements in the Growth Management Act, legal interpretations promulgated by the Growth Management Hearings Boards, and Multicounty and Countywide Planning Policies and goals. The chapter does not assess or monitor decisions made at the comprehensive plan level, but it does touch on local planning for designated regional growth centers and their respective growth targets. Two related inputs are also discussed — the population projections of the Office of Financial Management and the state mandated Buildable Lands program,<sup>2</sup> which requires analysis of the residential and employment capacity of jurisdictions to accommodate the adopted growth targets. This chapter seeks to answer questions such as: “Why do we set growth targets?” and “What do targets actually mean?”

<sup>1</sup> King, Kitsap, Pierce, and Snohomish Counties have all adopted their respective target amendments within the last three years — King County in July 2002, Kitsap County in November 2004, Pierce County in March 2004, and Snohomish County in February 2004.

<sup>2</sup> The Buildable Lands review and evaluation program (RCW 36.70A.215) was enacted by the State Legislature in 1997. It requires larger counties to evaluate available residential and commercial/industrial land capacity and determine whether actual development is occurring as planned.



- **Chapter 3** describes the methodologies through which counties set growth targets. These include population and household targets for all the counties, and employment targets for King and Snohomish counties. This chapter seeks to answer questions such as: “How are the targets set?” and “What goals are established by each county for setting the targets?”
- **Chapters 4 and 5** describe the results of the processes (i.e., the actual targets). The chapters document the adopted population, household, and employment targets, and analyze these numbers on regional and countywide scales. For context, the chapters present both current and past targets, recent growth trends, and the results of the Buildable Lands program. The chapters seek to answer questions such as: “What areas and types of areas are targeted to receive growth?” and “How does the recent distribution of growth compare to existing conditions and recent growth trends?”
- **Chapter 6** provides a set of findings regarding the growth targets’ policy framework, methodologies, and ultimate results. The chapter also includes a set of recommendations. As appropriate, the recommendations relate to both local and regional issues, and to the upcoming update of VISION 2020. The chapter seeks to answer questions such as: “Does the existing system work well and support growth management goals?” and “Are there ways to improve the process and the results?”



## CHAPTER 2 Policy Context of the Growth Targets Process

The Washington State Growth Management Act (GMA),<sup>3</sup> enacted in response to the uncoordinated and unplanned growth of the 1980s, implemented a new planning regimen for the state and region.<sup>4</sup> It was decided that growth needed to be managed and that this was to be accomplished in part through the development of plans that were coordinated at the local, countywide, and regional level.

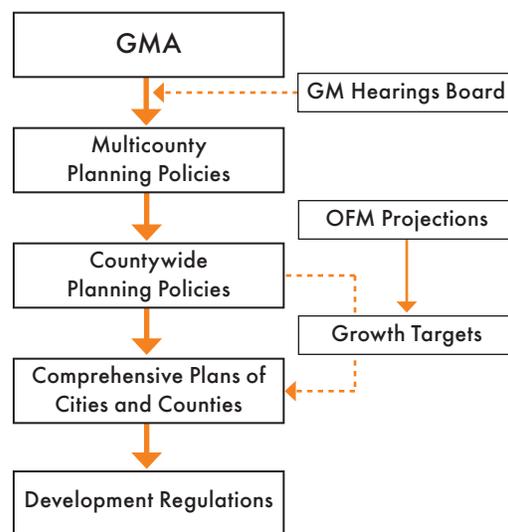
These plans were expected to be consistent vertically with other plans and policies (see Figure 1), and be consistent internally between the multiple components required at each level. The multiple levels of plans and policies are interpreted by the Growth Management Hearings Board to represent a “cascading hierarchy” of directive policy effect.<sup>5</sup>

These plans were to be long-range in scope and respond to projected growth. To achieve this, the GMA established a process by which state-generated countywide population projections would be subsequently translated into locally developed targets.

This process recognized both local autonomy and the need for regional coordination. This is important in the growth targets process because of the case law deference given to countywide planning policies in relation to setting growth targets, and the deference to local decisions on accommodating the growth target.

This chapter explains the regulatory and policy context in which growth targets exist, incorporating state requirements, hearings board interpretations, and decisions made at the multicounty<sup>6</sup> and

**FIGURE 1: TARGETS AND GMA RELATIONSHIP**



<sup>3</sup> The Growth Management Act was enacted in 1990, amended many times since then, and is primarily found in Chapter 36.70A of the Revised Code of Washington (RCW).

<sup>4</sup> Source: Land Use Study Commission Final Report. Prior to 1990, planning in Washington State was done primarily on a voluntary basis. The authority of cities to control property subdivision and enact zoning codes were granted by the state in three separate planning enabling statutes, two of which applied to a particular type of city, and one to counties. Other than these statutes, which granted land use regulation authority, no state-level planning requirements, other than environmental review requirements embodied in the State Environmental Policy Act (SEPA) and the Shoreline Management Act (SMA), existed.

<sup>5</sup> *Aagaard, 4311c*, FDO, at 6. Also, see report section on the GM Hearings Board.

<sup>6</sup> VISION 2020 is the region’s adopted long-range growth management, economic, and transportation strategy. It functions as the region’s Multicounty Planning Policies, which are mandated by RCW 36.70A.210(7).

countywide policy levels. Key inputs that influence target setting, including Office of Financial Management (OFM) projections<sup>7</sup> and county Buildable Lands analyses,<sup>8</sup> are also discussed.

## WHAT DOES THE GMA SAY ABOUT TARGETS?

The GMA says very little explicitly about growth targets. In fact, the term target was not used in the GMA until 1997. Further, the growth targets process, which is in essence the technical and policy process of disaggregating the OFM projection,<sup>9</sup> has been, until recently, only implicitly required — meaning no specific law referenced or called for growth target allocation.

Nonetheless, the requirement to use long-range projections was inherent from the initial adoption of the GMA, which called for knowledge about how much population and/or employment growth to expect in a given area at multiple steps in the planning process.

The section of the GMA related to urban growth areas is most explicit, stating that:

*Based upon the growth management population projection made for the county by the office of financial management, the county and each city within the county shall include areas and densities sufficient to permit the urban growth that is projected to occur in the county or city for the succeeding twenty-year period...*<sup>10</sup>

Growth targets are also impacted by the growth management section regarding Countywide Planning Policies (CPPs),<sup>11</sup> wherein the policies to implement the urban growth areas are required to be addressed. This creates the linkage by which countywide planning organizations are associated with the growth targeting process. This linkage has been weighed upon heavily within the body of hearings board case law. (*see page 12*)

More explicit attention to growth targets came in 1997 with the addition of the Buildable Lands<sup>12</sup> program to GMA. The 1997 Buildable Lands amendment provided a check to ensure that sufficient residential and employment capacity would be made available to accommodate a jurisdiction's adopted target. The program requires cities and counties to:

*Determine whether a county and its cities are achieving urban densities within urban growth areas by comparing growth and development assumptions, targets, and objectives contained in the countywide planning policies and the county and city comprehensive plans with actual growth and development that has occurred in the county and its cities...*<sup>13</sup>

Interestingly, the Buildable Lands program discusses capacity evaluations in relation to both the OFM forecast and the target, and specifically calls for analysis of sufficient capacity for employment targets as well.

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<sup>7</sup> OFM's responsibilities for creating and disseminating Growth Management population projections are spelled out in RCW 43.62.035.

<sup>8</sup> The Buildable Lands program was enacted into the GMA in 1997, and is codified in section RCW 36.70A.215.

<sup>9</sup> RCW 43.62.035. This section requires that OFM provide county population projections prepared for growth management planning. State and county population are provided at five-year intervals between 2000 and 2010, and single year intervals from 2010 through 2025.

<sup>10</sup> RCW 36.70A.110 (2).

<sup>11</sup> RCW 36.70A.210 (3).

<sup>12</sup> The 1997 amendment to GMA which created the Buildable Lands program (Engrossed Senate Bill 6094, 1997 Session, Washington State Legislature) added the term "target" to the GMA lexicon. RCW 36.70A.215. The Buildable Lands analysis requirement applies to Clark, King, Kitsap, Pierce, Snohomish, and Thurston counties. It is optional for other counties.

<sup>13</sup> RCW 36.70A.215 (1)(a).

*Based on the actual density of development... review commercial, industrial, and housing needs by type and density range to determine the amount of land needed for commercial, industrial, and housing for the remaining portion of the twenty-year planning period used in the most recently adopted comprehensive plan.*<sup>14</sup>

An additional purpose of the program is to ensure that development densities are actually achieved in line with the assumptions of comprehensive plans of cities and counties.

In fulfilling this mandate, counties are to analyze residential and employment trends, development trends and available land capacity, and develop a list of “reasonable measures” to increase consistency with CPPs and the GMA if actual development is not consistent with planning assumptions. The intent of the program is to emphasize the importance of accommodating both the OFM projection and the targeted population and employment growth within the current urban growth area.

The four central Puget Sound counties completed the first Buildable Lands evaluation reports in 2002.

An amendment to GMA in 2003 reinforced the growth targets process and its linkage to CPPs. The new section reads:

*Counties and cities ... shall ensure that, taken collectively, adoption of and amendments to their comprehensive plans and/or development regulations provide sufficient capacity of land suitable for development... to accommodate their allocated housing and employment growth, as adopted in the applicable countywide planning policies.*<sup>15</sup>

The intent of the bill was to further emphasize and clarify the requirement that counties and cities maintain sufficient capacity to accommodate their targets. This simply codified a process that was already understood and in practice.

Additional references to long-range projections and allocations exist in several other sections of the GMA;<sup>16</sup> these are consistent in intent to the previous GMA citations.

No direction is given in the GMA as to the methodology for setting growth targets, however it is apparent in the GMA’s policy intent and codified in the planning goals<sup>17</sup> that coordination and consistency in the adopted targets, as well as the processes used to allocate them, is a priority. Additionally, given the nature of growth targets as a quantitative representation of growth management policy, the *outcome* of the targeting process must be consistent with and effectuate the GMA planning goals, including encouraging development in urban areas and reducing sprawl.

There is no language in the GMA that addresses the impact of either exceeding or falling short of meeting the growth target.

### **Buildable Lands, Reasonable Measures, and Bremerton II**

A recent Hearings Board case, (Bremerton v. Kitsap County, 04-3-0009c) further clarified the relationship between the Buildable Lands analysis and growth targets.

This challenge centered on the inconsistency between actual development, the targets adopted in the countywide planning policies and the county’s comprehensive plan.

The Board found that this inconsistency, as well as the county’s failure to identify and implement reasonable measures prior to the expansion of their UGA, meant that the County was erroneous and directed to identify and adopt reasonable measures to correct this inconsistency.

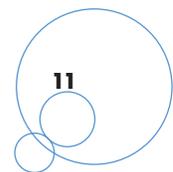
This ruling is significant given that it creates some sort of linkage between what is *targeted* and what is *achieved*, and is the first time that an inconsistency in this linkage would carry consequences.

<sup>14</sup> RCW 36.70A.215(3)(c)

<sup>15</sup> Substitute Senate Bill 5602, 2003 Session, Washington State Legislature. This bill added a new section to GMA [36.70A.115: Comprehensive plans and development regulations must provide sufficient land capacity for development.]

<sup>16</sup> RCW 36.70A.520, 36.70A.070 (1), (2), and by extension (6)

<sup>17</sup> RCW 36.70A.020.



## WHAT DOES THE HEARINGS BOARD SAY ABOUT TARGETS?

The Central Puget Sound Growth Management Hearings Board<sup>18</sup> (Hearings Board) has taken on the issue of growth targets (using various terminology) in a number of cases. It is this body of case law that has, more than anything else, shaped and defined the parameters of the growth targets process.

Statewide, there are three boards, with jurisdiction over eastern Washington, western Washington, and the central Puget Sound region. The Hearings Boards are charged with adjudicating two types of growth management conflicts:

- A petition that a state agency, county, or city planning agency under the GMA is not in compliance with the requirements of the Growth Management Act, Shoreline Management Act, or relevant state requirements for local development regulations.
- A petition that the OFM population projection should be adjusted.

Both responsibilities have a direct relationship with the growth targets process, and a number of cases have been brought to the Hearings Board challenging various aspects of individual county and jurisdiction processes and conclusions.

Shortly after the initial sets of growth targets were established, a substantial number of cases were brought to the Hearings Board challenging the plans of Snohomish, Pierce, and Kitsap counties, and the population projections of OFM.<sup>19</sup> These early cases were instrumental in terms of establishing the framework and rationale for the use and suballocation of OFM's countywide population projections.

These, and later cases, can be broadly categorized as having addressed three themes related to growth targets:

- A. The Authority and Use of OFM Projections
- B. The Nature and Purpose of Growth Targets
- C. The Relationship of Targets to CPPs and Comprehensive Plans

### A. The Authority and Use of OFM Projections

#### i. OFM projections are binding

The Hearings Board has consistently ruled that the OFM projections must be used. This was true when OFM originally provided a single point projection, and remained true when OFM's mandate changed, requiring a projection range that provides more flexibility in planning.<sup>20</sup> They have recognized the discretion of counties to use different methodologies and to adopt geographic and temporal growth distributions as they see fit;<sup>21</sup> however, the end result must remain within the OFM projection range.<sup>22</sup>

<sup>18</sup> RCW 36.70A.250 and .280.

<sup>19</sup> *Edmonds, Lynnwood v. Snohomish County* — Case 93-3-0005; *Tacoma et al v. Pierce County* — Case 94-3-0001; *Rural Residents v. Kitsap County* — Case 93-3-0010; *Kitsap County v. OFM* — 94-3-0014.

<sup>20</sup> Due to concerns by the counties over the accuracy of the OFM population forecasts, at the time produced in the form of a single number, an amendment to the GMA (Engrossed Substitute House Bill 5876) was adopted in 1995 to allow counties discretion within a range of forecasted population growth, still produced by OFM. See the section on OFM (page 21) for more information.

<sup>21</sup> *Bremerton/Alpine, 5339c/8332c*, FDO, at 48.

<sup>22</sup> "OFM's forecast is the exclusive source for the relevant countywide figures — both the floor and the ceiling for population projections. Counties must base their UGAs on only these projections. Counties cannot add their own calculations to nor deduct from OFM's projections." *Rural Residents, 3310*, FDO, at 34.

## B. The Nature and Purpose of Growth Targets

### ii. Targets are aspirational goals, whereas projections are objective best-guesses

The Hearings Board essentially defined the nature of targets, stating that: "... a twenty year population target for a city comprehensive plan is just that — a target that expresses intent and aspiration — but which recognizes that many variables can result in a somewhat higher or somewhat lower actual population."<sup>23</sup>

OFM projections, however, serve a different purpose: "It is not the purpose of planning population projections either to stimulate or depress the rate of growth. Rather, it is their purpose to foretell the likely twenty-year population that will result in each county from external factors such as economic, political and demographic trends, which tend to operate largely at the national, state, or regional level."<sup>24</sup>

### iii. Growth targets are to encourage growth in urban (incorporated) areas

While counties have discretion as to methodology, timing, and distribution, the planning goals of the GMA are to guide the growth targets process. "[Within] the duty to accommodate a county allocation... the Act imposes a duty on cities to encourage urban growth within Urban Growth Areas"<sup>25</sup> and "... the county's selection of the 2012 population target is a discretionary choice of the County's, so long as it... encourages development in urban areas."<sup>26</sup>

There is some tension in the rulings and the Growth Management Act regarding *where* inside the urban growth area the growth should be focused. While the majority of the rulings discuss focusing growth into the UGA, others suggest that it is within incorporated cities, rather than unincorporated UGA, that the growth be targeted. In one often-cited case, the Hearings Board held that "A long-term purpose of the Countywide Planning Policies is to facilitate the transformation of local governance *in* the urban growth area so that cities become the primary providers of urban governmental services and counties become the providers of regional and rural services."<sup>27</sup> (emphasis added). There is a clear linkage between the geographic distribution of targets within the UGA (i.e., whether targeted to incorporated cities or unincorporated UGA) and the actualization of this long-term purpose.

## C. The Relationship of Targets to CPPs and Comprehensive Plans

### iv. Targets are guided by the goals of UGAs and Buildable Lands

In addition to the discussion above, it is clear that the policy goals of GMA, plus those for UGAs (36.70A.110) and Buildable Lands (36.70A.215), are to guide the CPPs (36.70A.210) and the growth targets process. "...CPPs must comply with the requirements of RCW 36.70A.210 and .215. CPPs designed to implement orderly development and urban growth areas must comply with the requirements of RCW 36.70A.110, because implementation of .110 is specifically referenced in .210(3)(a)."<sup>28</sup>

### v. Counties have the authority in the growth targets process

The Hearings Board has consistently indicated that authority in setting regional priorities is vested in counties, as opposed to cities. The Hearings Board found that "Allocating growth (and its constituent parts, population and employment) is a regional policy exercise rather than

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<sup>23</sup> *Aagard*, 4311c, FDO, at 9.

<sup>24</sup> *Kitsap/OFM*, 4314, FDO, at 7.

<sup>25</sup> *Benaroya I*, 5372c, 3/13/91 Order, at 8.

<sup>26</sup> *Bremerton/Alpine*, 5339c/8332c, FDO, at 38.

<sup>27</sup> *Poulsbo*, 2309c, FDO, at 23. A similar citation is found in *Snoqualmie*, 2304c, FDO, at 9.

<sup>28</sup> *CTED*, 03317, FDO, at 13-14.

a local regulatory exercise” and that “The County may allocate population and employment to cities.”<sup>29</sup> At the same time, the Board noted a duty on the part of counties to coordinate with the cities in this process, noting “cities should play a significant role in the ‘interactive and iterative’ growth targeting process.”<sup>30</sup> Once the target is set, “...a city must comply with its county’s population allocation”;<sup>31</sup> however, they have broad discretion on how they wish to comply (e.g., concerning the character and distribution of growth within their borders).

#### vi. However, countywide planning policies seem to direct the county’s processes

A significant amount of case law recognizes that a hierarchy of directive policy exists in the GMA, wherein “... CPPs have a binding and substantive effect on local governments comprehensive plans”<sup>32</sup> which include the plans of both counties and cities. In case findings specifically related to OFM projections and subsequent target setting, the Hearings Board has used language such as “Unless a specific policy in the CPPs prohibit...”<sup>33</sup> and “Notwithstanding the CPPs, the County’s selection of the 2012 population target is a discretionary choice of the County’s...”<sup>34</sup>

In a case finding related to CPPs, but not growth targets, the Hearings Board found that “The County must adhere to the plan amendment process set forth in its CPPs. If the CPPs are not clear, the Board will defer to the County’s reasonable interpretation of its CPPs.”<sup>35</sup> From these findings, it is possible to speculate that Counties have authority in the growth targets process, until and unless CPPs are adopted.<sup>36</sup>

#### Why Do MPPs Matter to Targets?

The purpose of multicounty planning policies is similar to that of countywide planning policies. They reside within the “cascading hierarchy” of GMA, potentially providing both procedural and substantive direction to CPPs.<sup>37</sup>

The Hearings Board has stated, “The GMA requires that comprehensive plans, as a whole, be consistent with CPPs and MPPs. Amendments to a comprehensive plan may not cause the comprehensive plan to be inconsistent with CPPs and MPPs.”<sup>38</sup>

In another case, a Board member addressed the issue most directly, in a concurring opinion: “The fatal flaw in [the city’s] reading of the Act is that it fails to acknowledge and meet this most fundamental and important GMA duty – consistency with regional policies that address regional issues.”<sup>39</sup> In the same case, the Board found that: “ ‘Regional’ in the context of the GMA means either a county or two or more contiguous counties.”<sup>40</sup>

The rulings shed light on the potential role MPPs might have in the growth targets process.

#### WHAT DO THE MPPs SAY ABOUT TARGETS?

In the central Puget Sound region, the GMA requires the adoption of multicounty planning policies (MPPs),<sup>41</sup> stating:

*Multicounty planning policies shall be adopted by two or more counties, each with a population of four hundred fifty thousand or more, with contiguous urban areas and may be adopted by other counties, according to the process established under this section or other processes agreed to among the counties and cities within the affected counties throughout the multicounty region.*

<sup>29</sup> *Edmonds*, 3305c, FDO, at 31.

<sup>30</sup> *Edmonds*, Ibid.

<sup>31</sup> *Benaroya I*, 5372c, FDO, at 17.

<sup>32</sup> *CTED*, 03317, FDO, at 20-22. This finding has been affirmed by the State Supreme Court in *King County v. Central Puget Sound Growth Management Hearings Board*, 1999.

<sup>33</sup> *WSDF I*, 4316, FDO, at 55.

<sup>34</sup> *Bremerton/Alpine*, 5339c/8332c, FDO, at 38.

<sup>35</sup> *Fircrest*, 8302, 3/27/98 Order, at 4 (citing *King County v Friends of the Law*, Wash. App., 1998).

<sup>36</sup> Additional cases support this theory: *Gig Harbor*, 5361c, FDO, at 33. *Bremerton/Port Gamble*, 5339/7324c, 9/8/97 Order, at 17. *Benaroya I*, 5372c, FDO, at 25. *DOC/DSHS*, 0307, FDO, at 12. Of note, the countywide planning policies are not binding until adopted by the county and respective cities. (See *Postema v. Snohomish County*, 922 P.2d 176, Wash.App. Div. 1, 1996. Sept. 9, 1996.)

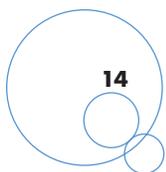
<sup>37</sup> *Des Moines*, 97-3-0014, FDO.

<sup>38</sup> *LMI/Chevron*, 8312, FDO, at 44.

<sup>39</sup> *Des Moines*, Ibid, at 10.

<sup>40</sup> *Des Moines*, Ibid. Finding 11, at 12.

<sup>41</sup> RCW 36.70A.210 (7)



GMA contains no explicit guidance linking the multicounty planning policies to growth targets; however, as with other parts of the GMA process, consistent long-range expectations are fundamental to the development of long-range multicounty planning policies.

The central Puget Sound’s adopted multicounty planning policies are contained in VISION 2020,<sup>42</sup> the region’s long-range growth management, economic and transportation strategy, and address the same topics as those required for CPPs.<sup>43</sup> The policies address issues that cannot be comprehensively addressed within a single jurisdiction, such as the region’s economy, transportation system, housing market, and natural environment. At its heart, the VISION seeks to promote coordinated and consistent planning throughout each county and the region.

VISION 2020 speaks directly to the distribution of growth in the region, partly represented by the outcome of the growth targeting process. The guiding policy in the urban growth areas section states:

*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.*<sup>44</sup>

This is reiterated in the section on contiguous and orderly development, which notes that focusing growth in urban centers can be accomplished through a number of means, including the allocation of projected growth. The relevant policy reads:

*Encourage the location and phasing of growth within urban growth areas in a manner that supports development of urban centers and manufacturing/industrial centers, makes use of existing public facility and service capacity, and is consistent with capital facility planning, while reinforcing cities as primary locations for growth.*<sup>45</sup>

By promoting growth in urban areas and the cities and centers within them, VISION 2020 promotes a diverse region composed of economically and environmentally healthy communities framed by open space and connected by a high-quality, efficient transportation system. It envisions more compact, people-oriented living and working places, and promotes development practices that protect environmentally sensitive areas, create complete communities, and reduce sprawl.

These broad goals and policies mirror the planning goals in the GMA. However, the concept of focusing growth into centers takes the policy framework for accommodating growth targets one step further, moving beyond the jurisdictionwide level to a subarea level within certain jurisdictions. This concept has been incorporated into each set of CPPs, albeit in different fashions.

## WHAT DO THE CPPs SAY ABOUT TARGETS?

The countywide planning policy process provides the bulk of the direction to the growth targeting process and, in some counties, is the document within which the adopted targets reside. While this work is constrained and guided by both the broader policy framework and the OFM projections, this

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<sup>42</sup> See VISION 2020 at <http://psrc.org/projects/vision/vision2020.htm>

<sup>43</sup> Policy areas include: urban growth areas; contiguous and orderly development; provision of urban services; public capital facilities; transportation facilities and strategies; housing, joint planning; and economic development. VISION 2020 also contains policies related to rural areas and to open space, resource protection, and critical areas.

<sup>44</sup> VISION 2020 — 1995 Update. Framework policy on Regional Growth 1 (RG-1). Page 20.

<sup>45</sup> VISION 2020 — 1995 Update. Policy on Regional Contiguous & Orderly Development (RC-2.1). Page 25.

is where the processes are developed and GMA's broad goals become tangible, measurable objectives. Beyond the broad requirements and minimum actions from the policy and regulatory framework, individual counties are afforded considerable latitude in how they implement the planning goals of GMA.

One of the first activities required under the GMA was the adoption of CPPs by July 1992. These are intended to be “a written policy statement or statements used solely for establishing a county-wide framework from which county and city comprehensive plans are developed and adopted pursuant to this chapter.”<sup>46</sup>

These documents address much more than just the growth targets — they also implement the urban growth area requirement and more. They create the framework in which all the comprehensive plans are developed. In an early ruling, the Hearings Board found that “the CPP ‘framework’ is to ensure the consistency (required by [36.70A.]100) of the comprehensive plans of cities and counties that have common borders or related regional issues.”<sup>47</sup> As noted previously, other long-term purposes of the CPPs are to transform urban governance, to focus growth in urban incorporated areas, and to reduce sprawl.

A review of the four counties' policies related to growth targets finds that they are dissimilar, but not necessarily inconsistent. While all four counties mention the growth targets process in their CPPs, some go into deeper detail and adopt formal methodologies; others merely acknowledge the process but defer to other means to determine how the process will be carried out. The policies also provide differing perspectives as to where the growth is to be assigned, albeit each in a manner intended to be consistent with the GMA.

This section documents the intent and function of the countywide policy; the methodology is discussed in Chapter 3, and the results are discussed in Chapter 4.

### Who Prepares the CPPs?

In the central Puget Sound region, each county has created a countywide group who is charged with developing and maintaining the CPPs (RCW 36.70A.210 (2)(a)) and setting growth targets. The membership typically consists of elected officials from the cities and the county.

The groups are as follows:

- King County Growth Management Planning Council.
- Kitsap Regional Coordinating Council.
- Pierce County Regional Council.
- Snohomish County Tomorrow.

Of note, the countywide planning policies are not binding until adopted by the county and ratified by respective cities, usually within the structure of one of these groups (see *Postema v. Snohomish County*).

### A. King County CPPs

The King County CPPs<sup>48</sup> include specific goals, objectives and a methodology for setting growth targets. King County has also elected to allocate employment targets, in a process that uses the Puget Sound Regional Council's employment data and forecasts.

Employment targets are optional; however, they are very useful in that they serve to facilitate coordination and consistency of plans, and help coordinate capital facilities planning. Employment targets and the related provision of land for non-residential uses have a significant bearing on both the demand for residential development and the availability of land for residential use and, therefore, a connection to population targets.

The County's first framework policy (FW-1) sets forth a series of steps to carry out the intent of the CPPs, and identifies the Growth Management Planning Council (*GMPC* — see sidebar) as the body in charge of developing and monitoring targets. The GMPC is directed to “review growth targets and capacity of each jurisdiction to assure that local targets are

<sup>46</sup> RCW 36.70A.210 (1)

<sup>47</sup> *Snoqualmie, 2304c*, FDO, at 8.

<sup>48</sup> Prepared by King County Growth Management Planning Council. Most recent adoption: September 2004.

within the adopted ranges and countywide capacity is sufficient to meet 20-year growth targets.” In the event of a discrepancy, the GMPC is charged with recommending amendments to the CPPs or local plans to “ensure that growth targets can be achieved by planned zoning and infrastructure capacity.”

The most specific policies regarding growth targets exist in the urban areas section of the land use chapter of the CPPs. King County Framework Policy FW-12(a) declares that “all jurisdictions within King County share the responsibility to accommodate the 20-year population projection and job forecast,” and that anticipated growth shall be allocated pursuant to the following objectives:

- To ensure efficient use of land within the UGA by directing growth to urban centers and activity centers.
- To limit development in the rural areas.
- To protect designated resource lands.
- To ensure efficient use of infrastructure.
- To improve the jobs/housing balance on a subarea basis.
- To promote a land use pattern that can be served by public transportation and other alternatives to the single occupancy vehicle.
- To provide sufficient opportunities for growth within the jurisdictions.

Additional components of the framework policy state that the growth targets, as adopted, shall be supported by both regional and local transportation investments. This is meant to underscore both the necessity and importance of accurate targets, given their role in determining the need for and location of future investments in transportation (and other) infrastructure. This also draws attention to the two-way nature of the land use-transportation relationship.

The policy goes on to state that the local responsibility in accommodating growth “shall be met [in part] by local transportation system investments that support the achievement of targets.” In other words, growth targets guide needed regional transportation infrastructure improvements, and local transportation improvements are required to support the achievement of the targets.

King County CPP LU-25a reiterates this responsibility and adds several others. It states that in planning for and accommodating household and employment targets, jurisdictions have an obligation to ensure adequate zoning capacity, plan for and deliver water, sewer, transportation and other infrastructure (in concert with federal and state investments and recognizing special purpose districts where applicable), and accommodate increases in household and employment targets as annexations occur. Policy LU-66 also mandates that jurisdictions “shall adopt regulations to and commit to fund infrastructure sufficient to achieve the target number.”

King County’s CPPs also address designated regional growth centers in the context of targets. Policy LU-25c establishes the methodology for the target allocation process, designating the presence of urban centers as one of the considerations in allocating a household target. Chapter III, section D of the CPPs addresses the criteria and requirements for urban (regional growth) centers and the cities that contain them. Much of the planning that is required of these centers begins with a requirement for a 20-year household and employment target range,<sup>49</sup> which should be consistent with and supportive of the allocated citywide target. KCCPP, page 33, states:

*Jurisdictions’ comprehensive plans for Urban Centers shall demonstrate compliance with the Urban Centers criteria ... [and] shall establish strategies which ... achieve a target housing density and mix of use.*

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<sup>49</sup> King County Countywide Planning Policies — Urban Centers Criteria, page 33.

## B. Kitsap County CPPs

The Kitsap County CPPs<sup>50</sup> give responsibility in setting the process for allocating growth targets to the Kitsap Regional Coordinating Council, an association of elected representatives from Kitsap County cities and the county itself (*see sidebar, page 16*).

The CPPs direct the Kitsap Regional Coordinating Council to adopt a process for allocating the countywide growth projection to individual cities, city-affiliated joint planning areas, and unincorporated urban and rural planning areas.<sup>51</sup> According to the CPPs, the target allocation is to be updated every five years, and consider the following:

- Countywide demographic analysis.
- Land Capacity Analysis (Buildable Lands Report and/or subsequent analyses).
- OFM growth management projections.

Kitsap County is the only county to set a benchmark in its CPPs as to what percent of the countywide target must be for the Urban Growth Area. This proportion has been reduced in the last update from 83 percent to 76 percent to provide flexibility for the target-setting process.

Kitsap County's CPPs also address designated regional growth centers in the context of targets. Element C (*page 17*) of the Kitsap County CPPs discusses the intended nature of designated regional growth centers (currently Bremerton and Silverdale) as having a high priority in decisions relating to population growth and resource allocation supporting growth.

## C. Pierce County CPPs

The Pierce County CPPs<sup>52</sup> give responsibility in setting the process for allocating growth targets to the Pierce County Regional Council, an association of elected representatives from Pierce County cities and the county itself (*see sidebar, page 16*).

The Pierce County CPPs refer to the OFM projection and allocation process in a number of places, particularly in relation to the sizing of the county UGA. Policy 2.1.2 states,

*The County, and each municipality in the County, shall develop and propose objective standards and criteria to disaggregate the State Office of Financial Management's County-wide growth forecasts for the allocation of projected population to the County and municipalities, utilizing as the primary criteria the availability and concurrency of public facilities and services with the impact of development.*

Two policies relate the sizing and location of urban growth areas to the adopted targets. Countywide Planning Policy 2.1.1 (*page 50*) requires that urban growth areas be sized large enough to accommodate no more than the growth projected during the succeeding 20-year planning period. This policy essentially sets a "ceiling" on the size of the UGA.

Language in the GMA section on urban growth areas<sup>53</sup> would indicate that the "growth projected to occur" would be based on the OFM projection range and correspond to the countywide target selection. Pierce County CPP 2.4.3 (*page 53*) states that individual municipal urban growth boundaries shall be determined with consideration for the adopted population and employment projections.

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<sup>50</sup> Prepared by the Kitsap Regional Coordinating Council. Most recent adoption: November 2004.

<sup>51</sup> Kitsap County CPP Element A, section 4 (page 7).

<sup>52</sup> Prepared by the Pierce County Regional Council. Most recent adoption: December 17, 1996.

<sup>53</sup> RCW 36.70A.110.

Other than these policies, Pierce County's CPPs do not establish the goals or methodology, divesting the authority instead to the Pierce County Regional Council (*see sidebar, page 16*). There are other provisions in the planning policies, however, that provide implicit context and direction for growth targets. The chapter on transportation facilities and strategies highlights the compatibility between land use and transportation facilities. Policies 10.1 and 10.2 establish the link between transportation infrastructure improvements and the successful use of growth targets by "requiring new transportation facilities and services in areas in which new growth is appropriate or desirable..." and "restricting the extension of new transportation facilities into areas not planned for growth." These policies are intended to ensure a more useful and successful growth targeting and comprehensive planning process. They also provide the need for targets in the first place to establish a consistent quantitative policy statement about which areas are more 'appropriate or desirable' for growth.

Pierce County's planning policies, similar to those of King County, require that jurisdictions that designate urban centers establish 20-year household and employment growth target ranges for the center. The policy discussion text, *page 48*, states,

*Each jurisdiction which designates an Urban Center shall establish 20-year household and employment growth targets for that Center...The target ranges not only set a policy for the level of growth envisioned for each Center, but also for the timing and funding of infrastructure improvements.*

#### D. Snohomish County CPPs

The Snohomish County CPPs<sup>54</sup> are similar to those for King County, in that they establish a detailed process for disaggregating OFM's projection, and include policies and goals relating to the siting and characteristics of urban growth areas. The CPPs include an overarching policy (UG-3) that guides the outcome of the County's growth target allocation process:

*Ensure the final population allocation for UGAs reverses the pre-GMA trend of an increasing share of the county's new population locating in the rural areas.*

Additional Policies (UG-2a) identify the sources for previous growth targets as:

- The 20 year OFM population projection.
- The Puget Sound Regional Council's small-area population and employment forecasts.
- A further distribution of the above projections to arrive at projections for the appropriate geographies.<sup>55</sup>

The steps to be used in disaggregating and allocating the countywide growth target are spelled out in policy UG-2. These are discussed further in Chapter 3.

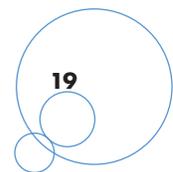
Once adopted, the targets are subject to a long-term monitoring and review program, much like King and Pierce County's targets, that is to be carried out by Snohomish County Tomorrow (*see sidebar, page 16*).

Policy UG-8 also provides some implicit direction to the allocation process. It states:

*Ensure UGAs provide sufficient density, developable land, public facilities and public services to accommodate most of the projected population and employment growth. In addition, the density*

<sup>54</sup> The Snohomish County's Countywide Planning Policies were prepared by Snohomish County Tomorrow. Most recent adoption: April 2004.

<sup>55</sup> The PSRC population and employment projections are produced for Forecast Analysis Zones (FAZ), the boundaries of which are not compatible with city limits or other target geographies. This step in the allocation process distributes the PSRC projections to the appropriate geographies.



*should be adequate, according to recent studies, to support transit services and the efficient utilization of infrastructure.*

This policy establishes the linkage between growth targets and land use and transportation decisions. Like King and Pierce counties' policies, it essentially states that UGAs (likely referring to cities and their associated UGA planning areas) must provide adequate infrastructure and capacity to accommodate the targets, and the targets should be adopted and distributed in a way that supports transit densities and makes efficient utilization of infrastructure.

While Snohomish County's CPPs contain some language referring to regional growth centers, they do not appear to explicitly require a suballocation of citywide growth targets to these centers.

### WHAT DOES OFM SAY ABOUT TARGETS?

Even before the passage of the GMA, the State Office of Financial Management was responsible for regularly projecting population growth trends at a county level. This was done for many purposes, the most important of which was budget forecasting. With the passage of GMA, the OFM projections became an official basis upon which planning would be conducted, and become the control total from which growth targets were to be derived.

OFM is required to determine the population of each county every year as of April 1st and to prepare, at least once every five years or at a time coinciding with a decennial census, twenty-year growth management population projections as required by section 36.70A.110.<sup>56</sup>

The original mandate to OFM was to produce a single, most likely population prediction at five-year intervals for the following twenty years. Several cases in the early 1990s disputed the projections, which influenced the legislature to amend the law<sup>57</sup> and require OFM to prepare a "reasonable range" with a high and low projection, as well as a mid-range "most likely" projection. This change was intended to account for possible inaccuracies. Since that time, OFM has again modified their process, adjusting the intervals of their projections to give a 25-year horizon with one-year intervals for years 10-25 of the projection period to account for local variations in planning horizons.

OFM is required to collaborate with the counties and cities in the preparation of the projections. While counties and cities may provide information to the office, which must be considered, the final determination is left with the state office. The rationale behind this is to ensure that the projections, which carry practical consequences, remain technical, objective, and insulated from political considerations.

Counties have been afforded a method to contest projections that they see as inaccurate with the Hearings Board, but the standard for overturning an adopted projection is fairly high. To date, the Hearings Board's rulings have fairly well solidified OFM's methodology and role in the growth targets process.

<sup>56</sup> RCW 43.62.035.

<sup>57</sup> Senate Bill 5876, passed in the 1995 (54<sup>th</sup>) regular session.

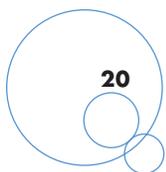
#### OFM Projection Methodology:

The Office of Financial Management uses a top-down "cohort-component" approach to projecting population change in the state.

Top-down refers to the fact that the state total is projected first, then each county, which must be reconciled at the end to the state control total. "Cohort-component" means that the population is broken up into age-gender groups, and moved forward in time using specific assumptions for births, deaths, and migration for each projection interval.

While fertility and mortality rates are expected to remain relatively constant, migration has historically been a significant driver of overall population change in Washington. Migration is forecast using an econometric model that is chiefly driven by changes in the economic climate relative to neighboring states and California.

Source: OFM 2002



## WHAT DO COMPREHENSIVE PLANS SAY ABOUT TARGETS?

The relationship of the adopted growth targets to local comprehensive plans lies at the core of Washington’s approach to growth management. This step, more than any other, represents the real-world application of growth targets, given that targets blend the anticipated and preferred amount of growth with the realities of land use zoning and capital facilities development.

The Hearings Board’s rulings are clear: counties and cities have a duty to accommodate growth targets, however they have broad discretion on *how* to do so. Further, the Hearings Board has found that targets are minimums to be accommodated and that jurisdictions have the discretion to set higher targets in their comprehensive plans, unless directed otherwise by CPPs.<sup>58</sup> Jurisdictions can also suballocate internally, for example setting targets for the proportion of the jurisdictionwide total that is assigned to particular districts, neighborhoods, or activity areas.

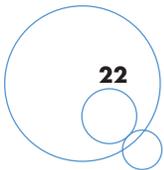
Growth targets are key inputs into comprehensive plans in a number of areas:

- The land use element, which begins with an estimate of future population growth, and from there establishes how the community would like to accommodate it.
- The housing element, which requires an inventory and analysis of existing and projected housing needs necessary to manage projected growth for all economic segments of the population.
- The capital facilities element, which requires a projection of future needs, and at least a six-year plan for financing these needed facilities.
- The transportation element, which requires documentation of the land use assumptions used to project travel demand, projected future impacts to state-owned facilities, identification of facilities and service needs to service the expected future population, and a financing plan to pay for these facilities.

In short, nearly every element of a comprehensive plan, which is by statute a forward-looking document, must begin with the best available knowledge of external factors that will affect the jurisdiction in the future. Population and employment growth is chief among those impacts in the magnitude of its effects upon a community and its importance in the planning process.

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<sup>58</sup> WSDF I, 4316, FDO, at 55.



## CHAPTER 3 Existing Growth Target Methodologies

The preceding chapter detailed the policy context in which growth targets exist. This chapter describes the existing adopted methodology used for both residential and employment targets in this most recent round of target-setting.

The choice of methodology, and consequently, the exact purpose of population allocations, is left to individual countywide planning programs. There are differences in each county's forecast methodology (the objective starting point) that add to differences in the target distribution/allocation phase.

For example: two counties currently adopt targets for employment growth, while the other two do not. Two counties' targets extend to the year 2022, while two others go to 2025 (known as the horizon year). One county allocates residential targets using households as units, while the other three use population (all four use different assumptions to account for changing household sizes and person-per-household conversions). Finally, two counties adopt initial targets as a guide, and then readopt after each jurisdiction has incorporated a target (which may or may not be the same as the initial target) into their individual comprehensive plans.

### KING COUNTY

The methodology spelled out in the King County CPPs and carried out by the King County Growth Management Planning Council (GMPC) is relatively detailed. It includes objective quantitative methods used to determine an initial distribution, as well as policy considerations that are to be taken into account when revising the allocation to its preferred form. King County allocates the OFM countywide population projection to the cities in the form of households, a method that is accepted by the hearings board,<sup>59</sup> and carries out the optional exercise of adopting employment targets.

#### A. Residential (Households)

King County allocates residential growth in terms of households to more effectively manage growth in a form to which development regulations can apply (zoning, for instance only applies to housing units, and cannot control how many people live in a given area).<sup>60</sup> The necessary conversion from

<sup>59</sup> The Growth Management Hearings Board, in a case in which a challenge to the household method was rejected (*Vashon-Maury v. King County*), stated, "In fact, by anticipating expected household sizes, and accounting for sub-county differences in persons per household (PPH) (e.g., Seattle's PPH may be much lower than Redmond's PPH), counties may be capable of more accurately predicting community-specific traits and, as a result, may more effectively carry out their GMA responsibilities to manage growth." Page 21.

<sup>60</sup> This type of calculation also informs the development of a local comprehensive plan, particularly the housing element (36.70A.070A(2)), which requires an "inventory and analysis of existing and projected housing needs that identifies the number of housing units necessary to manage projected growth." For those counties that do not target in units of households, this calculation is done by individual cities at the end of the process, when they incorporate the new target and develop their comprehensive plans.

population to households is done in the second step of the process, after group quarters population growth has been removed from consideration,<sup>61</sup> the countywide population projection has been allocated to the four King County subareas (and 4 percent of the OFM countywide total has been allocated ‘off the top’ to the rural area) in proportion to the anticipated location of the twenty-year projected employment growth.<sup>62</sup>

The process of converting population to households requires accurate estimates of what the average persons-per-household (PPH) value is currently and, importantly, what it will be in the future. Current (2000) data on average household size is collected and reported by the U.S. Census and can be determined down to the census block level of geography. On the other hand, future persons per household figures entails some uncertainty, and even small variations from these predictions can have a substantial impact on the projections and targets, as illustrated in figure 2.

**FIGURE 2: IMPACT OF PERSONS PER HOUSEHOLD CHANGES – KING COUNTY EXAMPLE**

Current Population (2000).....	1,737,000
Current Households (2000).....	711,000
Current Persons Per Household (PPH).....	2.39
Population Growth Forecast.....	355,000
Additional Households Needed to Accommodate Target at 2.39 PPH.....	164,314
Additional Households Needed to Accommodate Target at 2.30 PPH.....	198,565
Difference in Households Needed From .09 PPH Change.....	34,251

The method spelled out in the CPPs for converting population to households uses a projected persons-per-household figure at a subarea level of geography, using the most recent census data and assumptions about future changes.

Once a subarea household allocation has been determined, the process becomes somewhat less mechanical. In this phase, representatives of the cities and the county (under the structure of the GMPC), consider five factors contained in the CPPs as they allocate targeted households to the jurisdictions:

- The availability of water and the capacity of the sewer system.
- The remaining unabsorbed portions of previously adopted household targets.
- The presence of urban centers and activity areas within each jurisdiction.
- The availability of zoned development capacity in each jurisdiction.
- The apparent market trends for housing in the area.

The second of the above factors — the remaining portions of previously adopted household targets — is noteworthy for its role in bridging together the 1992-2012 targeting exercise with the most recent 2002-2022 targets. Through this policy, King County is the only one to do this as opposed to starting each cycle anew. This concept has the benefit of maintaining continuity through planning cycles, and it potentially advances the negotiation process by recalling a previously agreed upon commitment as a starting point. On the other hand, it could result in problems reconciling the results of processes with different methodologies.<sup>63</sup>

<sup>61</sup> Group Quarters population and growth are not considered in the target allocation process because they do not constitute households living in housing units.

<sup>62</sup> This first step is done in order to carry out FW-12(a) objective *e* — to improve the jobs/housing balance on a subarea basis. By targeting population growth in the same subareas as employment growth, a theoretical decrease in commuting distance and needed transportation infrastructure improvements would occur.

<sup>63</sup> Significant improvements in methodology and the applicability of the results occurred between the original growth targeting process and its second iteration ten years later.

After initial adoption, the targets are valid until a new target extension or amendment is formally adopted. The only exception to this is the case of annexation or incorporation, in which the annexing or incorporating jurisdiction would assume responsibility for the appropriate portion of the target formerly attributed to the unincorporated area.

The flowchart represented in figures 3-4 are intended to graphically represent processes and considerations used in allocating population and employment to individual jurisdictions.

## B. Employment

Although not currently mandated, King County has opted to allocate employment targets to cities and unincorporated areas, which must then be planned for and accommodated in individual comprehensive plans.

The employment targeting process begins with a set of three employment-projecting models produced by PSRC. The STEP<sup>64</sup> regional econometric model projects the number of new jobs that will be coming to the region as a whole — analogous to the OFM countywide population projection. Two other models, called DRAM and EMPAL<sup>65</sup> then disaggregate this projection into Forecast Analysis Zones (FAZ).<sup>66</sup>

To provide a starting point for more refined job target allocations, the PSRC small area employment forecasts are estimated for each city and unincorporated urban area (no rural employment targets are set). The CPPs identify three considerations, other than the PSRC forecasts, that are to guide the allocation of the employment targets. These considerations are: the presence of adequate commercial/industrial capacity (as measured by the Buildable Lands analysis), access to transportation facilities, both existing and planned, and the presence of urban centers, manufacturing/industrial centers, and activity areas.

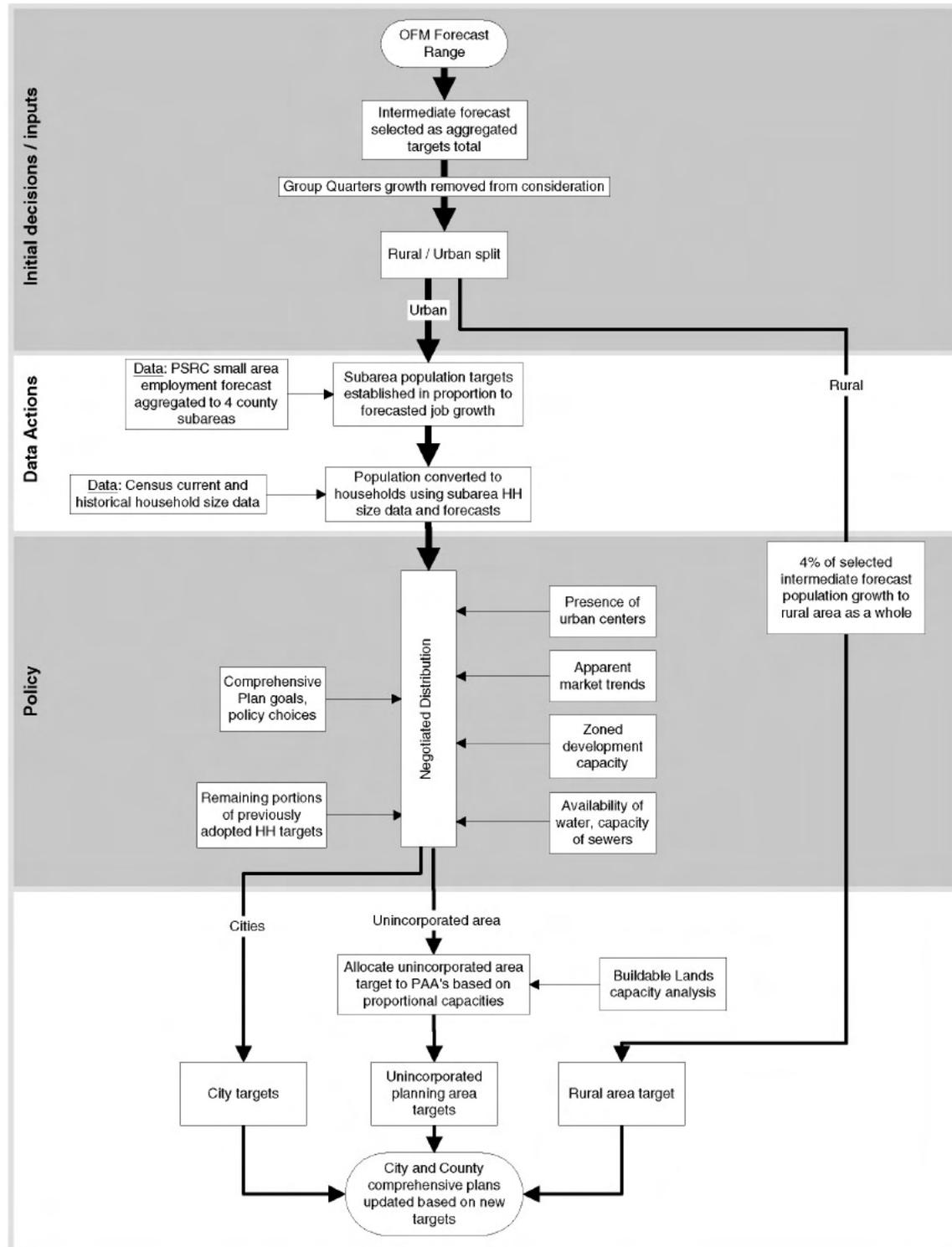
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<sup>64</sup> Synchronized Translator of Economic Projections.

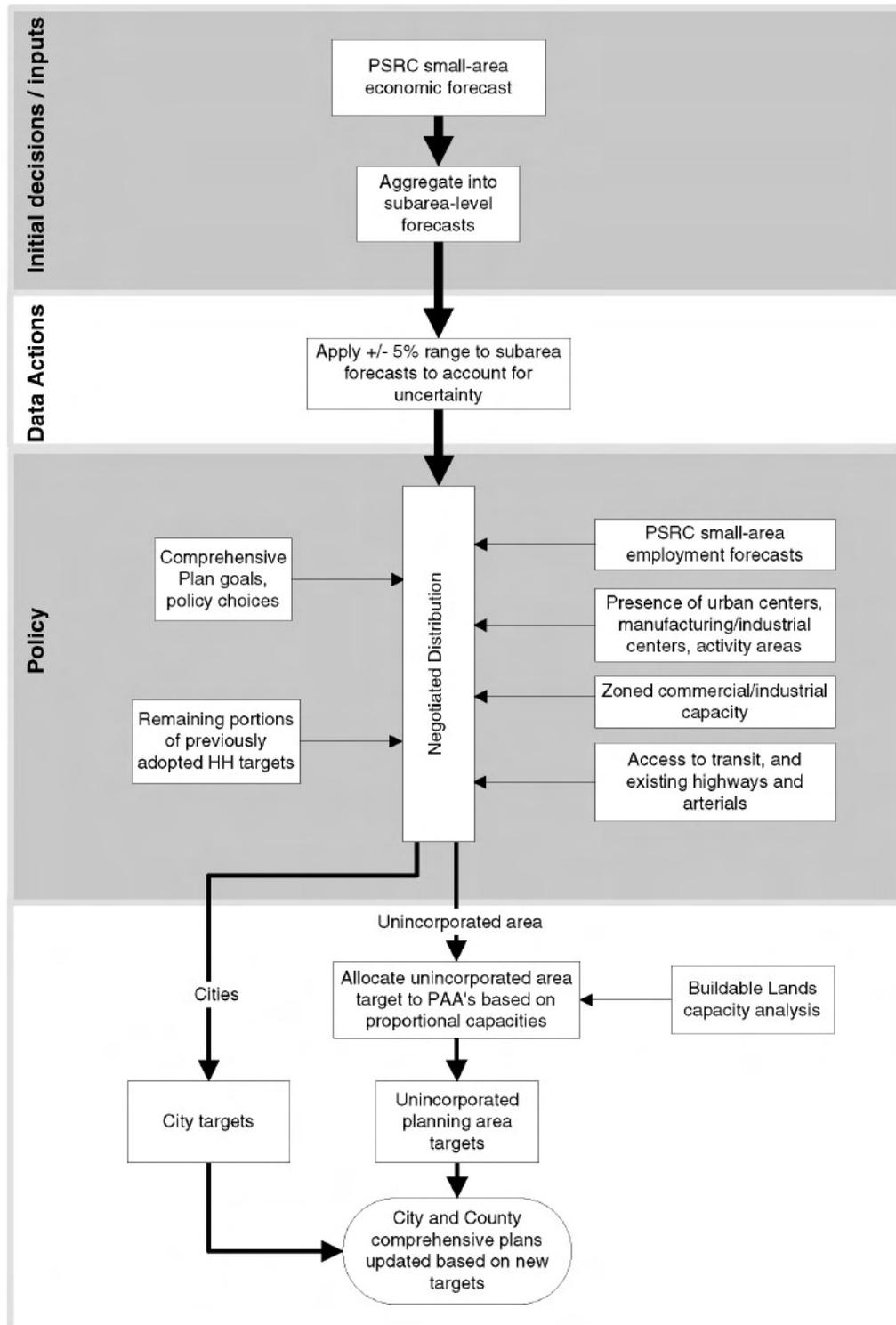
<sup>65</sup> Disaggregate Residential Allocation Model, Employment Allocation Model.

<sup>66</sup> Forecast Analysis Zone — custom defined geography derived from the combination of Census Tracts; there are currently 219 in the PSRC forecast models.

**FIGURE 3: KING COUNTY RESIDENTIAL TARGET METHODOLOGY**



**FIGURE 4: KING COUNTY EMPLOYMENT TARGET METHODOLOGY**



## KITSAP COUNTY

*Note: At the time of publishing, July 2005, Kitsap County had only recently (November 2004) completed the process of disaggregating and allocating their growth targets for the planning period 2000-2025. This late adoption has compelled a less in-depth analysis of the methodology used for this targeting process than the other counties.*

Kitsap County's growth targeting process methodology is defined by the countywide planning policies, and carried out in large part by the Kitsap County Regional Coordinating Committee (KRCC). The Kitsap County Board of Commissioners officially adopted the latest set of targets on November 22, 2004.

The target allocation process, like the other counties, begins with the population forecast from OFM. From there, the process set out by the CPPs calls for each jurisdiction to prepare an estimate of the population that it could accommodate and service during the 20-year planning horizon. These estimates are then used in conjunction with the county's Land Capacity Analysis to develop the growth targets for cities, city UGAs, unaffiliated UGAs, and the rural area. The policies called for a final distribution target of at least 76 percent of countywide growth to the Urban Growth Area.

This distribution, once approved by its members, is then forwarded to the Board of Commissioners for adoption into the CPPs. Once the targets are officially adopted into the CPPs, each city and the county must amend their comprehensive plans to reflect the newly adopted targets. The final step in the process involves a reexamination of the targets adopted by each jurisdiction and the adoption of a revised distribution if changes have been made during the comprehensive planning process.

Kitsap County's CPPs mandate a targeting exercise every five years and specifically call for revisiting the 76%/24% urban-rural split as a part of the next target allocation process.

## PIERCE COUNTY

Pierce County adopted the third iteration of their ongoing growth targeting process on March 20, 2004. Pierce County has updated their targets with new information and improved methodology every five years (inter-decadal updates are not mandated, but are prepared as needed to address changing conditions), a strategy that has the potential to result in more up-to-date and effective targets to guide comprehensive planning.

Pierce County does not currently allocate employment targets, although informal employment allocations were prepared in 2000 for use in the county's Buildable Lands analysis.

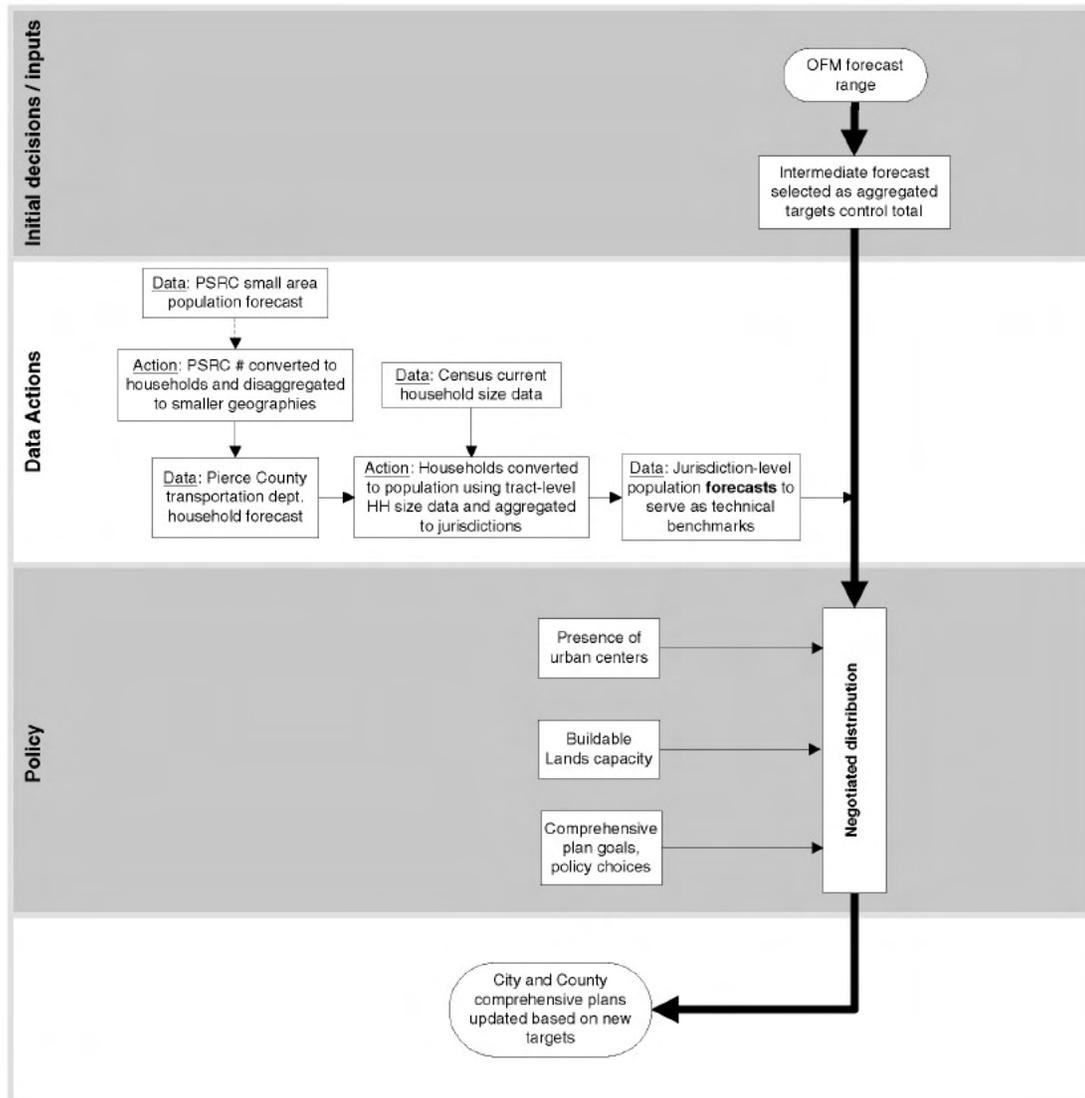
Pierce County has made some structural changes to the process in the most recent update cycle. In 2004 the targets were adopted by County Council Ordinance in order to give them clear legal weight (the previous targets were adopted as resolutions). In addition, instead of allowing the countywide total to fluctuate within the projection range prepared by OFM as in past targeting exercises, the County has found OFM's intermediate projection to be historically accurate and adopted this number as a control total.

The methodology for Pierce County's targeting process follows a broad pattern similar to the other counties. This pattern begins by using quantitative processes to disaggregate — on an objective basis — OFM's countywide projection into geographies consistent with city and planning area boundaries and then adding less mechanical decision-making in order to add a policy component to the final growth targets.

The first step in Pierce County’s target allocation process is to take the TAZ-level household forecasts produced by the Pierce County Department of Transportation (with PSRC small-area forecasts as an input) and convert them to population forecasts using the most recent Census persons per household data. Next, the TAZ forecasts are aggregated into appropriate geographies (cities and unincorporated planning areas) and boundary discrepancies are reconciled using zoning and parcel data, giving an objective city and planning area level forecast for the planning horizon year.

At this point, negotiations take over, and the targets are distributed using the presence of urban centers, available Buildable Lands capacities, and other factors to determine an ideal distribution.

**FIGURE 5: PIERCE COUNTY RESIDENTIAL TARGET METHODOLOGY**



## SNOHOMISH COUNTY

Snohomish County is one of two counties to have a defined target reconciliation process, in which cities are given initial target allocations by Snohomish County Tomorrow (SCT),<sup>67</sup> but are allowed to modify this number during their comprehensive plan update process, with a subsequent process to reconcile differences and set final targets for formal adoption. The purpose of the reconciliation process is to give some leeway to the cities as they incorporate the growth targets into their comprehensive plans. This allows jurisdictions to increase or decrease the target that they had initially agreed to accommodate based on new information that arises from a detailed plan update process.

This reconciliation process is the centerpiece of a very ‘bottom up’ process of setting growth targets. This feature causes Snohomish County to have the longest target allocation process of the four counties. In the latest round, it will last from the release of draft initial population and employment targets in March 2003 until final adoption of the targets, expected in 2005-2006.

### Residential and Employment

The general methodology used by Snohomish County in setting draft employment and population targets are nearly the same. Both use a quantitative process to arrive at initial projections for cities, UGAs and Municipal Urban Growth Areas (MUGAs),<sup>68</sup> and unaffiliated unincorporated urban areas. The jurisdictions then negotiate to set initial targets. These initial employment and population targets are then used to guide comprehensive plan development, and reconciled into final targets after all jurisdictions have adopted their respective plans.

The first step in Snohomish County’s process begins with a technical phase, using the most recently published PSRC small-area population and employment forecasts. In the most recent case, the planning horizon of 2025 lies between two PSRC forecast points, 2020 and 2030, and Snohomish County staff used an interpolation method to arrive at the appropriate forecast year. The next step involves translating these forecasts, which are made at a Forecast Analysis Zone (FAZ) level of geography into more meaningful city and MUGA boundaries. Finally, this forecast, expressed as a single number, is expanded into a range — in the most recent case by adding 23 percent to arrive at a high-range and subtracting 19 percent for the low range. This formula-based forecast range is identified as the “draft initial growth target.”

The draft initial growth target range is theoretically the jurisdictions’ best guess as to where growth will locate in the future, given current trends, policies and regulations. The subsequent phase is less mechanical and is more policy and goal-oriented. The next step is for jurisdictions to select an initial growth target within the draft initial growth target range. These selected targets are compiled and formally adopted by the county council as the “initial growth target.”<sup>69</sup>

In the period following the adoption of the initial growth targets, each city and the county must update their respective comprehensive plans (many of them in 2004 to meet the GMA comprehensive plan update deadline), ideally using the initial targets. Once the Comprehensive Plan updates are complete, the Snohomish County Tomorrow body will meet and undergo a “target reconciliation process” to match any changed targets to the agreed countywide total. This set of targets is then forwarded to the County Council for final adoption and incorporation into the CPPs.

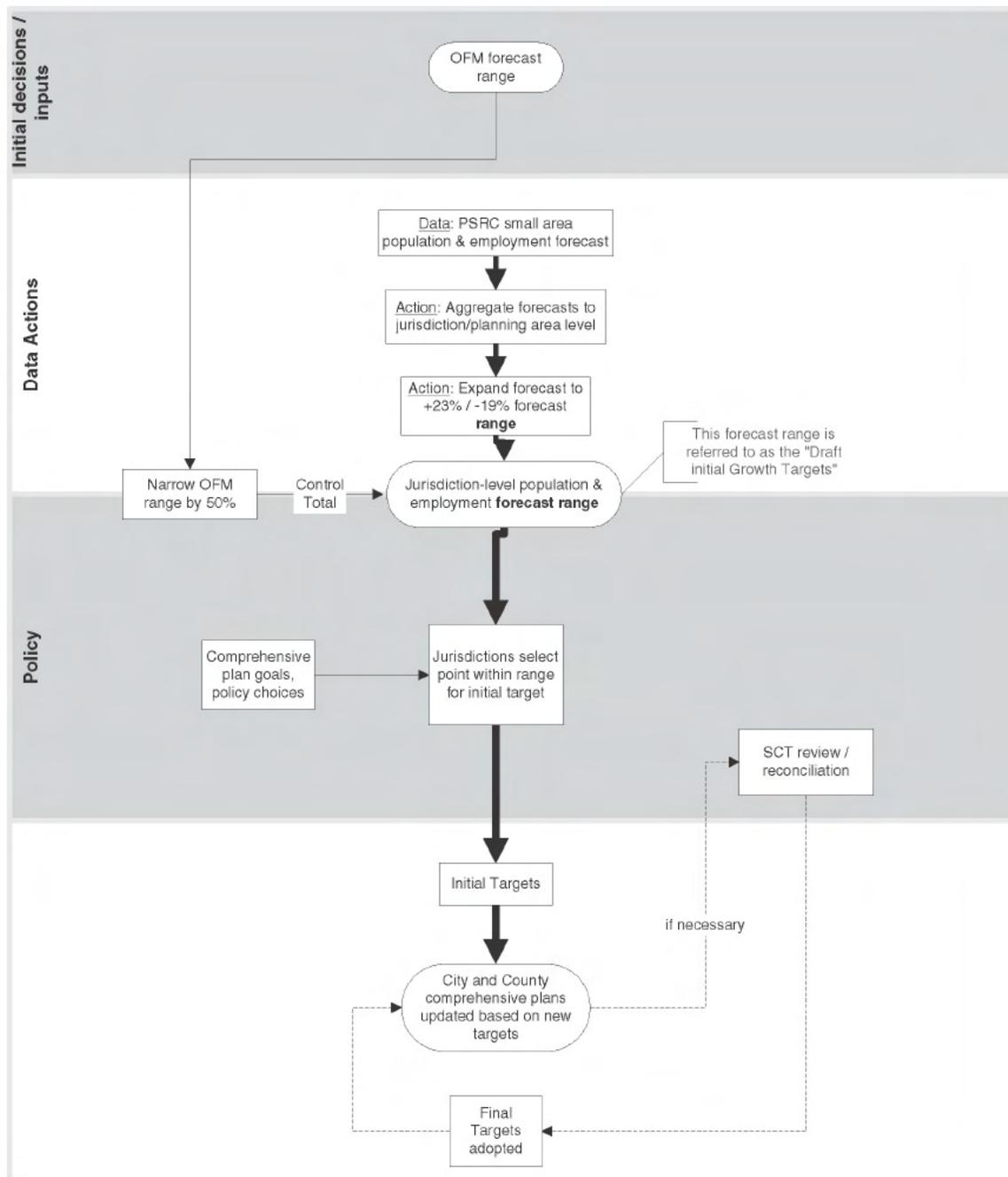
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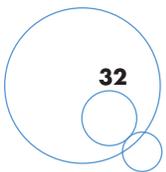
<sup>67</sup> SCT is the association of cities and the county, which is charged with coordinating growth management issues. These initial targets are also formally adopted by the County Council into the CPPs.

<sup>68</sup> The two terms used to characterize unincorporated affiliated areas in Snohomish County. Both *Urban Growth Area (UGA)* and *Municipal Urban Growth Area (MUGA)* refer to the cities and unincorporated lands surrounding them that have been identified as appropriate for annexation by the affiliate city at some point. Municipal Urban Growth Areas specifically refer to those cities in the SW portion of the County that share an agglomerated UGA.

<sup>69</sup> Snohomish County adopted its latest “initial growth target” in February 2004.

**FIGURE 6: SNOHOMISH COUNTY RESIDENTIAL AND EMPLOYMENT TARGET METHODOLOGY**





## CHAPTER 4 Residential Target Data and Results

This chapter presents and analyzes the most recent adopted population and household targets to better understand regional and local patterns and trends. This section attempts to answer questions in two primary areas: what is the geographic distribution of the new targets, and how do they compare to existing conditions and past trends?

Answering these questions requires (a) aggregating the targets across different geographies, (b) comparing these results to a series of other contextual data, and (c) calculating the targets in a manner that allows for direct comparison and aggregation.

### OVERVIEW OF ANALYSIS

#### A. Geographies

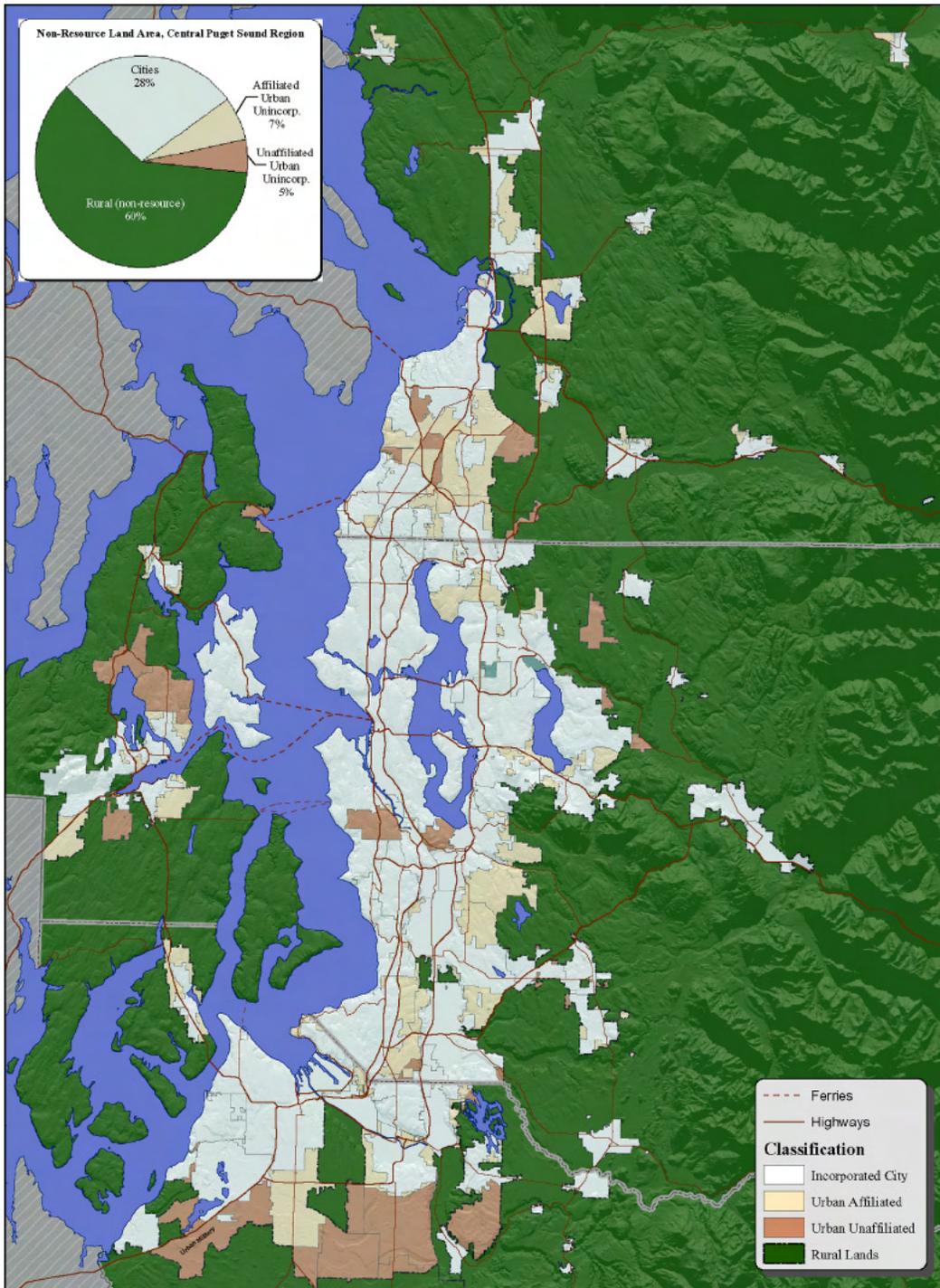
Targets have been distributed to four categories of geography: (i) incorporated cities, (ii) unincorporated areas within the urban growth area that are affiliated with a city for future annexation,<sup>70</sup> (iii) unincorporated areas within the urban growth area that are *not* affiliated with a city, and (iv) the rural area outside of the urban growth area. Figure 7 illustrates these geographies.

The comparative analyses in this chapter have generally been done with jurisdictional boundaries fixed to the target baseline date for each county — April 2000 for King and Kitsap counties, April 2002 for Pierce and Snohomish counties. This consistency allows for direct comparisons between different data sources across different time periods for a fixed geography. However, it is important to note that, in reality, these boundaries are not static over time, and care must be taken to avoid misleading conclusions. For example, while building permits are tracked according to their location at the baseline date, they may have actually been permitted under a different jurisdiction prior to annexation or incorporation, and, in some counties, targets may also remain the same even after a UGA expansion or annexation activity.

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<sup>70</sup> Unincorporated areas are considered affiliated with a city if they are identified in the city's comprehensive plan as a Potential Annexation Area (PAA) in King County, a city Urban Growth Area in Kitsap County, a Municipal Urban Growth Area (MUGA / UGA) in Snohomish County, or an Urban Service Area (USA) in Pierce County. These areas are usually governed by some sort of County-City joint planning agreement and are identified as appropriate for annexation by the affiliate city at some point in the future.

**FIGURE 7: GEOGRAPHIC CLASSIFICATION MAP, 2000/2002**



## B. Contextual Data

The distribution of growth targets to the four geographies is best understood in the context of other data, including: (i) existing conditions (2000 / 2002), (ii) recent permitted development (1995-2002), (iii) Buildable Lands capacity, and (iv) previously adopted growth targets. Small, but important differences in timelines, methodologies, and data availability exist among each county's data. These are addressed and noted on the following pages.

### i. Existing Conditions

A useful way to interpret targets is to compare them to where people or jobs are currently located. A distribution of targets that mirrors that of existing development will serve to increase densities across the board, while maintaining current proportions of residents living in different geographies. Data for existing conditions is provided for each of the counties, using the starting dates for each targeting period.

- The baseline existing conditions figure for King County is the Census 2000 household figure, matching April 2000 jurisdictional boundaries.
- The existing condition figure for Kitsap County is population from Census 2000, using 2000 jurisdictional boundaries.
- The existing condition figure for Pierce County is population from Census 2000, but uses 2002 City and UGA boundaries.
- The existing condition figure for Snohomish County is OFM-estimated population from 2002, corresponding to 2002 jurisdictional boundaries.

### ii. Recent Permitted Development

The amount, location, and rate of recent growth and development provides information on the intensity of recent growth, which provides an impression of how the market has been working in conjunction with the policies and regulations in effect at the time of development and gives an indication of the effects of the previously adopted targets. The comparison of the previous target to recent development trends is done recognizing the fact that the time period corresponds roughly to one third of the previous targets' planning period.

The primary data set for recent development is housing permits issued between 1995 and 2002. This source is used for all of the county-to-county and regional calculations. This data reflects the post-GMA time period, although the vesting (see footnote 78 on pg. 56) of development regulations has contributed to a slow changeover of actual development conditions and corresponds to the middle of the previous target period.

For some of the city and designated regional growth center comparisons, 1990 and 2000 Census data is used, with jurisdictional boundaries set constant to the year 2000 in order to control for annexations. Where this data set is used, it is noted.

### iii. Buildable Lands Capacity

The fundamental requirement of the Buildable Lands program is that sufficient capacity exist to meet that jurisdiction's adopted growth target. This data source is very valuable for understanding the capacity of plans and development regulations in relation to the targets, given current zoning and recent market trends. However, the Buildable Lands capacity analyses addressed target accommodation out to 2012 or 2015 — about the first half of the current planning periods. This means that capacity over the longer targets' time period would be somewhat higher.

As part of the Buildable Lands analysis, household or population capacity numbers have been produced for each city, as well as unincorporated urban areas in King, Pierce, and Snohomish counties. Rural capacities were not analyzed, except for Kitsap County, because they were determined to fall outside of the required scope of the analysis regarding urban growth area sizing. In order to provide useful comparisons between Buildable Lands capacity figures and other countywide data for the purposes of developing this report, a suitable proxy for rural capacity must be used for the three counties that did not calculate rural capacity. In this report, the most recently adopted rural area target is used to represent capacity outside of the Urban Growth Area, while recognizing that actual rural area capacity is much higher.

- King County’s capacity figures are reported in units of households as of January 2001; any projects completed or regulation changes after that date are not reflected in the capacity figures.
- Kitsap County’s Buildable Lands analysis concluded that the county had sufficient capacity to accommodate the existing targets, however, no ultimate capacity figures were calculated that are comparable to other counties’ results, or to other data for Kitsap County.
- Pierce County’s capacity figures are reported both in units of population and households, with a baseline date of January 2001.
- Snohomish County’s capacity figures are reported in units of population, with a baseline date of April 2001.

#### **iv. Previous Growth Targets**

Previous targets provide context, however, significant care must be taken to consider changing methodologies and jurisdictional boundaries. Differences and similarities between growth targets set at different times can potentially illuminate changes in policies and priorities. An increased share of countywide targets going to incorporated cities, or a smaller share of growth targeted to the rural area, could indicate changing priorities, or it could simply result from changing jurisdictional boundaries or methodological differences.

- King and Snohomish Counties both adopted their original growth targets in 1992 for the period 1992-2012.
- Kitsap County’s targets were originally adopted for the period 1992-2012. These were subsequently challenged as violating the GMA planning goals and invalidated by the Growth Management Hearings Board in 1994. A second adopted version of the County’s comprehensive plan — including proposed growth targets — was also challenged, and invalidated in 1996. A third iteration was adopted and approved in 1998, comprising a target period of 1997-2012.
- Pierce County adopted 1997-2017 targets in the interim of the GMA-mandated ten-year interval between the 1992 and 2002 targeting processes. However, to better correspond to other counties’ previous targets, only Pierce County’s 1992-2012 targets are reported.

#### **C. Methods of Comparison**

Comparing the contextual data to the adopted targets is challenging because information is expressed in different units (households vs. population) and different intervals of time (current planning periods of 2000-2022, 2002-2022, 2002-2025 and 2005-2025).

Three methods are used in this report to normalize the data in order for differences in units and minor differences in time periods to become standardized and comparable:

- Charts display information as proportions of the county total. This is the broadest level of standardization, allowing for differences in units, time periods, and methodologies. The actual numbers are all presented in the appendices.

- Conversions to an average annual growth rate are used to normalize growth rates from different time intervals into equivalent statistics, while maintaining other information.
- Caveats and conditions are included along with nominal data, allowing the reader to compare the data in its most basic form.

This section documents and analyzes the most recently adopted household and population growth targets for the central Puget Sound region and uses other statistics for similar geographies for comparison, and to provide context.

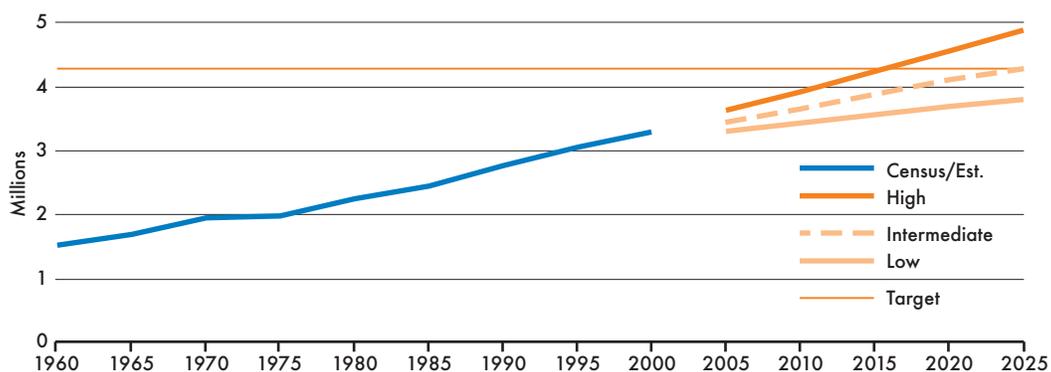
## THE REGIONAL TARGET

### A. What Is the Aggregated Regional Target?

This section aggregates the jurisdictions’ residential targets. The first step in understanding the growth target for the region is the selection of an Office of Financial Management (OFM) projection by each of the counties and their respective cities. Figure 8 charts the regional target selected control total and compares it to the regional OFM range.

Although provided with an average range of over 50 percent on either side of the mid point “most-likely” projection released by OFM, all four counties used a point very near the most likely value (King: even, Kitsap: even, Pierce: even, Snohomish: 4 percent below).

**FIGURE 8: OFM REGIONAL PROJECTION RANGE AND REGIONAL TARGET SELECTION CONTROL TOTAL**



Note: The counties’ target end points (or horizon years) are 2022 and 2025. For the purpose of illustrating the regional aggregation, the chart extends all of the horizon years to 2025. King County’s growth target figure is derived, representing a conversion of the adopted household target to an estimated population target. See Appendix A for supporting data.

The OFM projection is for a “most likely” increase of just over 1,000,000 new residents between 2000 and 2025, leading to a projected 2025 regional population of 4,295,000. This projection is a small reduction in expected growth as compared to the region’s past growth targets (covering the period 1992-2012), which targeted for 1.1 million new residents.

Figure 9 shows the county targets and aggregates them to show the target for the region. The counties’ aggregated regional targeted population is actually 4,207,010. If extended to 2025 (for illustrative purposes) it is slightly lower than the OFM projection and is approximately 4,278,000.

**FIGURE 9: AGGREGATED REGIONAL RESIDENTIAL GROWTH TARGET**

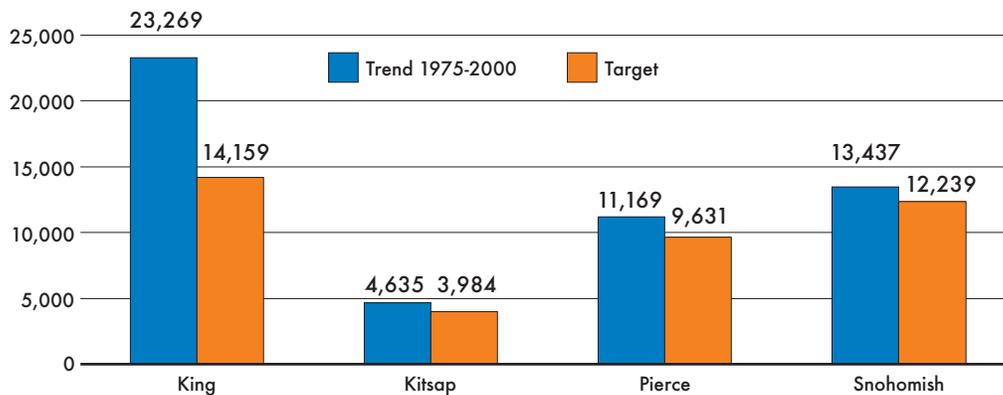
	Current Population*	Growth Target	Estimated Population in 2022/2025**	Share of Regional Target	Annual Growth Amount	Annual Growth Percentage
King	1,737,000	311,500	2,048,500	34.3%	14,159	0.8%
Kitsap	231,969	99,602	331,571	11.0%	3,984	1.4%
Pierce	700,820	211,889	912,700	23.3%	9,631	1.2%
Snohomish	628,000	286,249	914,249	31.5%	12,446	1.6%
<b>Region</b>	<b>3,297,789</b>	<b>909,240</b>	<b>4,207,0020</b>	<b>—</b>	<b>40,220</b>	<b>~1.1%</b>

Notes: \*Current Population: King and Kitsap counties use 2000 jurisdictional boundaries and population figures. Pierce County uses 2002 jurisdictional boundaries for 2000 population figures. Snohomish County uses 2002 jurisdictional boundaries and population figures. These different sources, reflecting multiple dates and boundaries, are used to create this figure’s regional current population total. This ensures that the regional total is consistent with the county-to-county population totals; however, the regional total will not match other regional population figures. \*\*Growth target and estimated population in 2022/2025: King and Pierce counties use 2022 as a horizon year. Kitsap and Snohomish counties use 2025. See Appendices B, D, E, and F for supporting data.

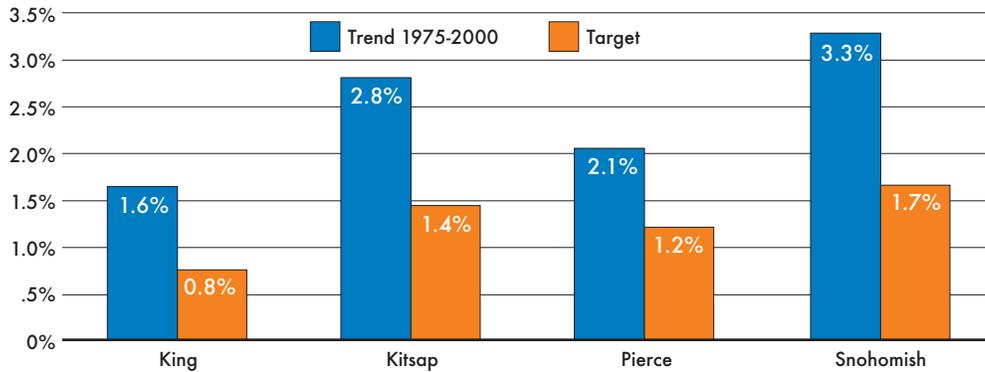
**B. How Does the Aggregated Regional Target Compare to Past Growth Trends?**

The State Office of Financial Management’s 2002 growth management population projections call for a slightly lower rate of growth for the next twenty-five years than was seen in the past twenty-five. This decreasing growth rate is best illustrated in figures 10 and 11 by comparing the annual growth expected between 2000 and 2025 with the growth seen in the past twenty-five years (1975-2000). Figure 10 shows that each county is slowing, but most significantly in King County — from 23,269 additional residents per year between 1975 and 2000 to a target of 14,159 new residents annually. Figure 11 shows growth rates, which allows for understanding the growth in comparison to the underlying population base. The figure shows that even when the absolute number of additional residents remains fairly consistent, such as in Snohomish and Pierce counties, the rate of increase is much slower than past trends. Overall, the average annual growth rate for the region between 1975 and 2000 was 2.1 percent — the new regional target represents a regional average annual growth rate of about 1.1 percent.

**FIGURE 10: ABSOLUTE ANNUAL GROWTH COMPARISON**



**FIGURE 11: AVERAGE ANNUAL GROWTH RATE COMPARISON**



Note: See Appendix A for supporting data.

### C. What Is the Geographic Distribution of the New Aggregated Regional Target?

Figure 12 shows the estimated aggregated regional target for roughly the next twenty years. Nearly 60% of the aggregated target is allocated to cities and almost 30 percent to unincorporated urban areas.

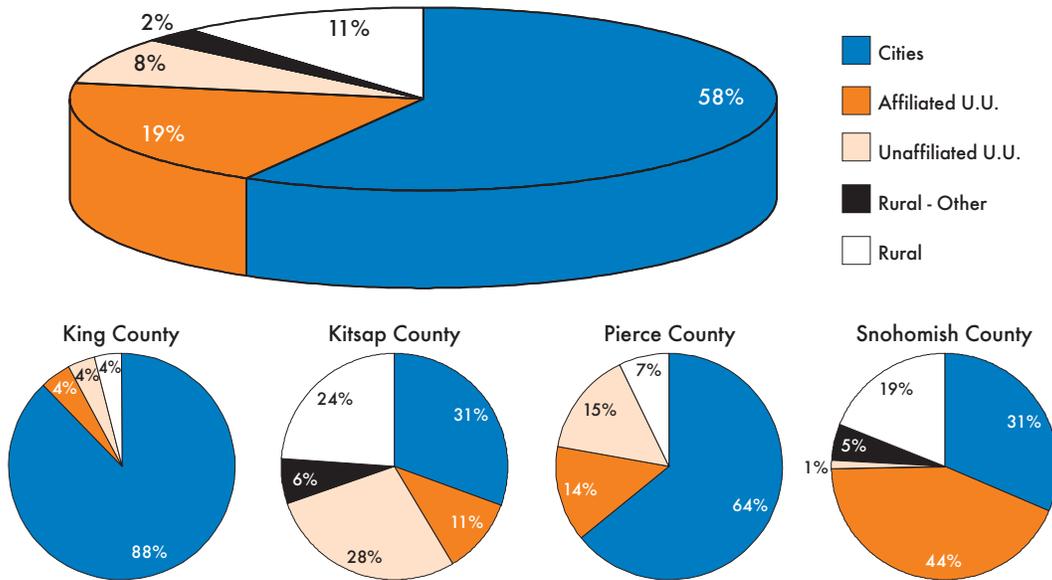
**FIGURE 12: DISTRIBUTION OF AGGREGATED REGIONAL TARGET**

	Existing Conditions (2000/2002)	Share of Regional Current Population	Growth Targets (2000/2002-2022/2025)	Share of Regional Target	Targeted Population (2022/2025)	Annual Growth Amount	Annual Growth Percentage
Cities	2,176,181	66%	533,248	58%	2,709,429	22,648	~1.0%
Affiliated U.U.	459,053	14%	176,508	19%	635,561	7,638	~1.4%
Unaffiliated U.U.	171,623	5%	77,212	8%	248,835	3,265	~1.7%
Rural Area*	490,834	15%	126,272	14%	617,106	5,292	~1.0%
<b>Total</b>	<b>3,297,691</b>	—	<b>913,240</b>	—	<b>4,210,931</b>	<b>38,843</b>	<b>~1.1%</b>

Notes: \*The rural area target includes UGA expansion allocations for Kitsap (6,334 to a UGA expansion study area) and Snohomish (15,000 to a FCC population reserve) counties. If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC or UGA expansion would become part of the urban growth allocation. King County population figures are derived, representing a conversion of the adopted household target to an estimated population target. See Appendices B, C, D, E, and F for supporting data.

Figure 13 gives an impression of how each county’s growth target has been allocated compared to the regional aggregation. In King County, growth is heavily targeted to the cities (and within cities with regional centers). In Kitsap County, growth is targeted fairly equally to the unaffiliated unincorporated urban areas, to the cities, and to the rural area. In Pierce County, growth is targeted primarily to cities and to both the affiliated and unaffiliated unincorporated urban areas. In Snohomish County, growth is targeted to the affiliated unincorporated urban areas and then to cities and the rural area.

**FIGURE 13: COMPARISON OF AGGREGATED REGIONAL TARGET TO COUNTY TARGET DISTRIBUTIONS**



Notes: Percentages in the large pie chart do not add up to 100% due to rounding. King County proportions refer to adopted household growth targets and may differ from other figures. The 'Rural-Other' category refers to UGA Expansion Allocations: in Snohomish County this includes an allocation for 15,000 new people to an "FCC reserve." In Kitsap County this includes an allocation for 6,334 new people to a "Port Orchard UGA Expansion Study Area." If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC or UGA expansion would become part of the urban growth allocation. See Appendices B, D, E, and F for supporting data.

Figure 14 shows the current population distribution and adopted growth targets in terms of dots, with each dark dot representing approximately 100 persons targeted within the next twenty-two years. Dots have been excluded from resource lands in the rural area, as well as larger areas of non-residentially zoned land to better approximate the likely location for housing growth.

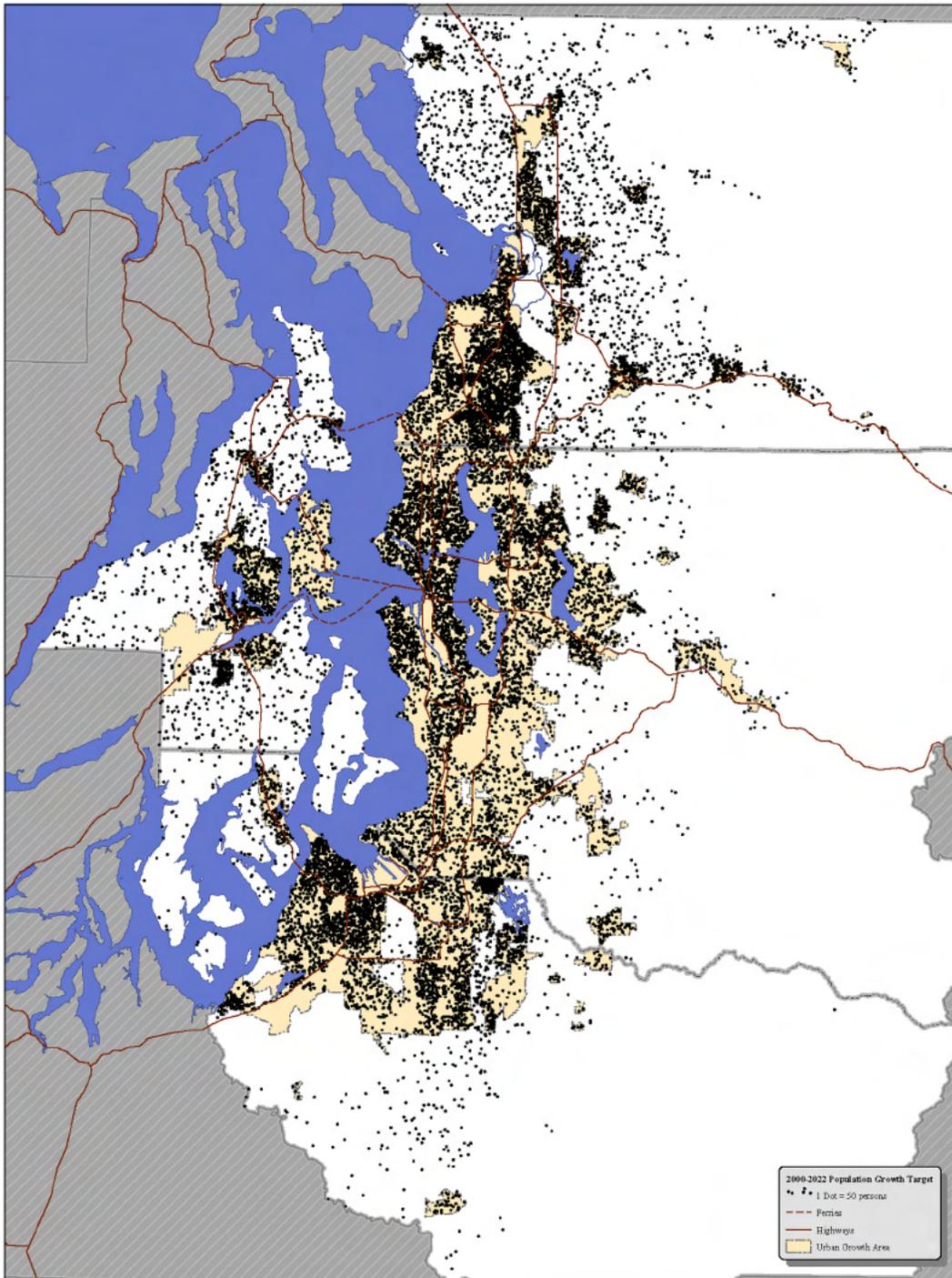
Figure 15 shows the effect of the growth targets on average net residential density across the region.

**i. How Much Was Targeted to Cities?**

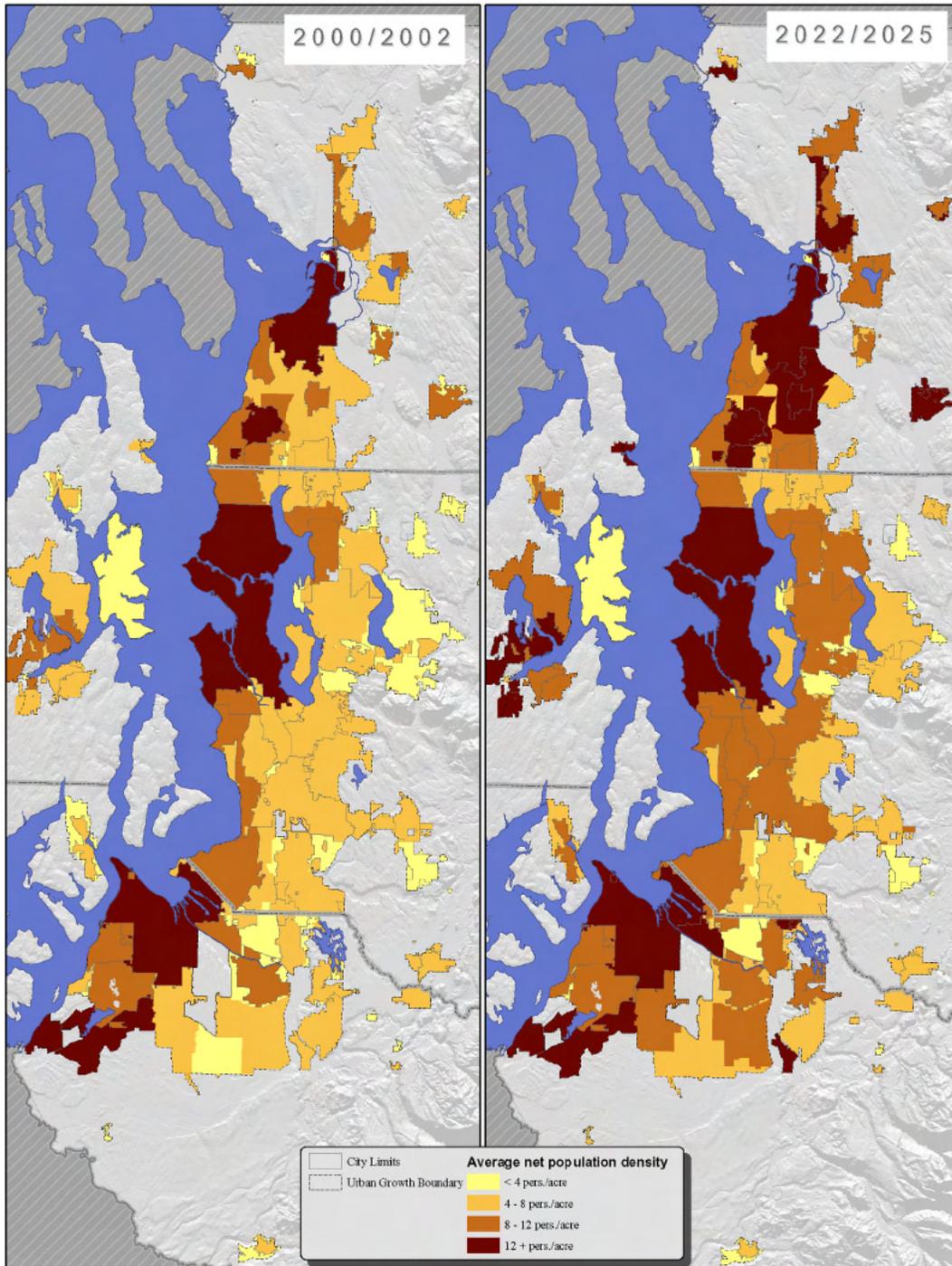
Both the Hearings Board rulings (*see page 12*) and VISION 2020 policies (*see page 14*) support cities as primary locations for future growth. This section discusses adopted growth targets as they relate to cities. It reports trends for all cities, then focuses on the largest cities (those containing regional growth centers) and discusses the correlation of specific targets for regionally designated centers with the citywide target.

The 82 cities and towns in the central Puget Sound region have been allocated about 58 percent of the regionally aggregated growth target. This proportion is very close to that of recent development (58 percent), and also comparable to the proportion of the region's residents who live in cities (66 percent). The cities in King County are targeted to accommodate the majority (54 percent) of the region's incorporated area growth. Seattle alone accounts for nearly 10 percent of the growth targeted to the region's cities.

**FIGURE 14: RESIDENTIAL GROWTH TARGET DOT DISTRIBUTION MAP**



**FIGURE 15: TARGETED CHANGE IN AVERAGE (NET) RESIDENTIAL DENSITY**



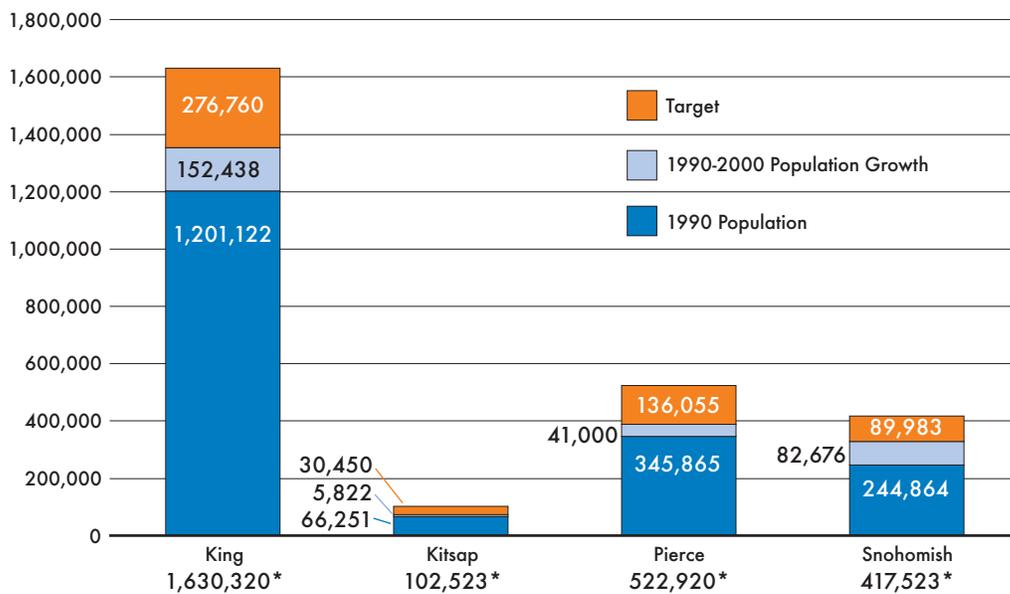
Note: King County’s population target figures are derived, representing a conversion of the adopted household target to an estimated population target. Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 16: CITIES' PROPORTION OF COUNTYWIDE RESIDENTIAL TARGET**

	City Target	Total Countywide Target	Percent of Total Target
King County	276,760	315,500	87.7%
Kitsap County	30,450	99,602	30.6%
Pierce County	136,055	211,889	64.2%
Snohomish County	89,983	286,249	31.4%
<b>Central Puget Sound Region</b>	<b>533,248</b>	<b>913,240</b>	<b>58.4%</b>

Note: King County's population growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. King County's total countywide target differs from the countywide target in Figures 9 and 10 as a result of this conversion process. See Appendices B, D, E, and F for supporting data.

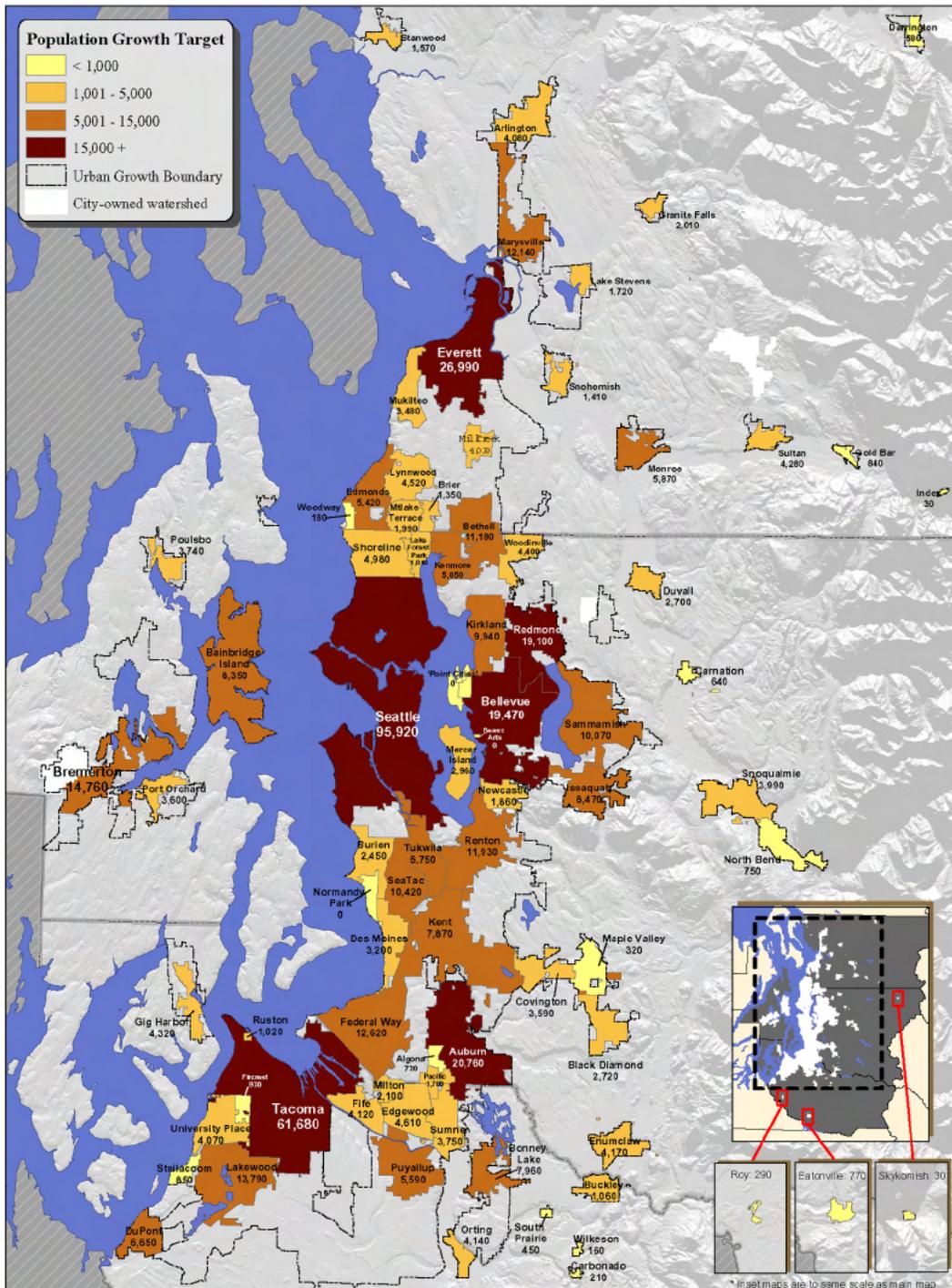
**FIGURE 17: CITIES' CUMULATIVE POPULATION WITH RESIDENTIAL TARGETS**



Note: \*Total refers to population at target horizon. King County's population growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. See Appendices B, D, E, and F for supporting data.

Figure 18 displays the region's city growth targets. The cities with the largest targets are also the largest in terms of area and existing population. Seattle and Tacoma have the largest targets, followed by Everett, Auburn, Redmond, and Bellevue, which are all targeting over 15,000 new residents by the end of their planning horizon.

**FIGURE 18: CITIES' RESIDENTIAL GROWTH TARGETS MAP**



Note: King County's population growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. See Appendix J for supporting data. All figures are rounded.

• *How much to the region's largest cities?*

Focusing growth into the largest cities has the potential to maximize the efficiency of the region's transportation system, particularly the transit and high-capacity transit system. Figure 19 shows the amount of growth targeted to the region's 15 largest cities.

**FIGURE 19: ALLOCATION OF TARGET TO REGION'S 15 LARGEST CITIES**

County	City	Estimated Population in 2000/2002*	Population Growth Target	Targeted Ave. Annual Growth Rate	% Share of County Target	% Share of Regional Target
King	Seattle	563,374	95,920	0.7%	30.4%	10.5%
Pierce	Tacoma	193,564	61,676	1.3%	29.1%	6.8%
King	Bellevue	109,827	19,470	0.7%	6.2%	2.1%
Snohomish	Everett	96,070	26,990	1.1%	9.4%	3.0%
King	Federal Way	83,259	12,620	0.6%	4.0%	1.4%
King	Kent	79,524	7,870	0.4%	2.5%	0.9%
Pierce	Lakewood	58,211	13,789	1.0%	6.5%	1.5%
King	Shoreline	53,025	4,980	0.4%	1.6%	0.5%
King	Renton	50,052	11,930	1.0%	3.8%	1.3%
King	Redmond	45,256	19,100	1.6%	6.1%	2.1%
King	Kirkland	45,054	9,940	0.9%	3.2%	1.1%
King/Pierce	Auburn**	40,465	20,759	1.9%	n/a***	2.3%
Snohomish	Edmonds	39,460	5,420	0.6%	1.9%	0.6%
Kitsap	Bremerton	37,259	14,759	1.3%	14.8%	1.6%
King	Sammamish	34,104	10,070	1.2%	3.2%	1.1%

Note: \*Base year for population figure varies by county: King – 2000, Kitsap – 2000, Pierce – 2000 (2002 City Boundaries), Snohomish – 2002. \*\*The Auburn city limits include portions in both King and Pierce counties; these figures represent an addition of both counties portions. \*\*\*Since Auburn is in two counties, this calculation is not feasible. Auburn's King County portion is targeted with 4.1% of King County's target, Auburn's Pierce County portion is targeted with 3.7% of Pierce County's target. King County's growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. See Appendices B, D, E, and F for supporting data.

• *How do the city targets compare to growth the 1990s?*

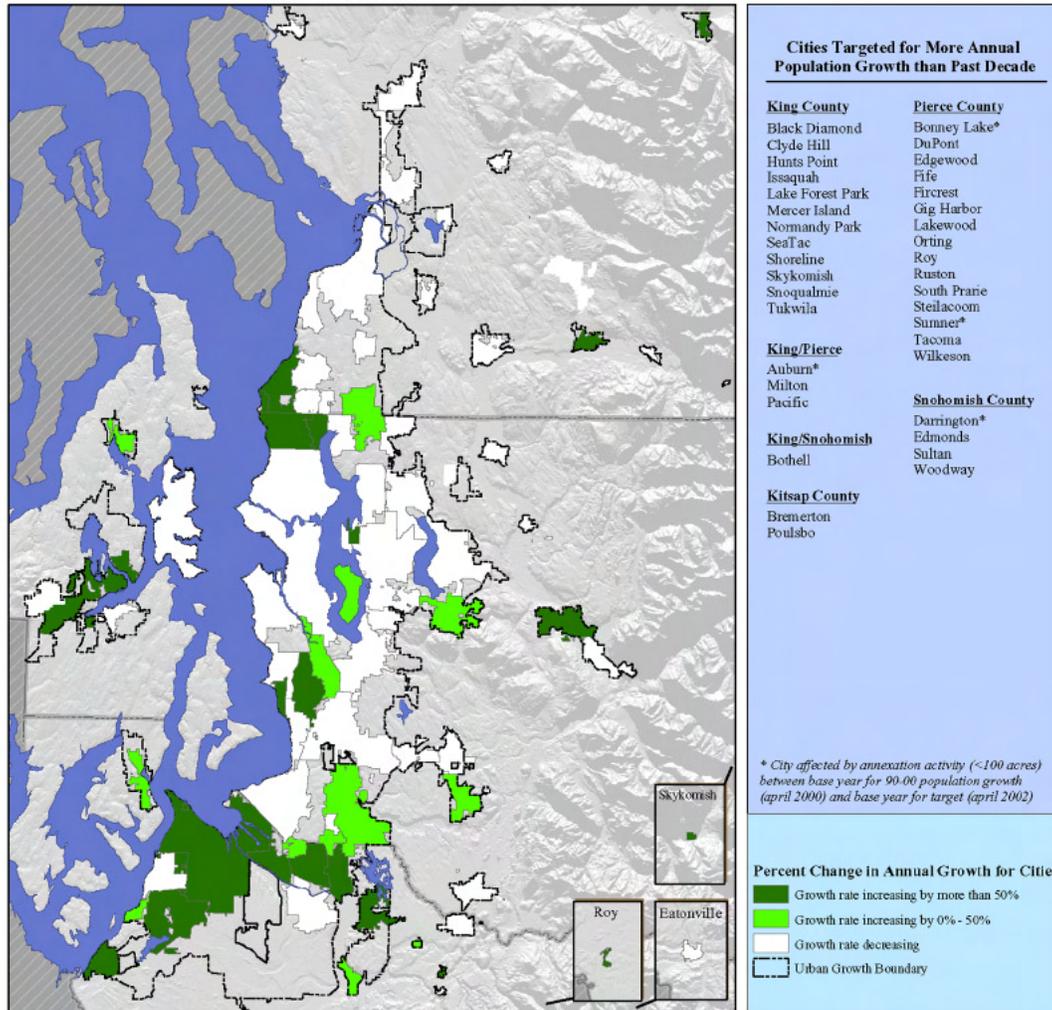
One way to understand growth targets is to compare them with the growth in the 1990s. During this period, the central Puget Sound region as a whole grew by 527,000 people (52,700 per year). The new growth targets reflect a growth rate of 40,000 new residents per year, which is a reduction of nearly 13,000 people per year or 25 percent from the last decade's growth.

The overall targeted growth rate is slower across the region and the region's cities; however, not all the cities will slow — some will attract more growth than they had in the last decade. Of the 82 cities in the region, 45 are targeted to decrease their growth rate, while 37 are targeted to increase their growth rate.<sup>71</sup> To control for annexations, all data relates to 2000 jurisdictional boundaries (except for Snohomish, and Pierce County target figures, which correspond to 2002 boundaries. Seven cities in these counties had annexations over 100 acres that are not accounted for in these calculations).

<sup>71</sup> The method used to determine when a city is targeted to increase, decrease, or maintain its growth rate involves comparing the average annual population growth target to average annual population growth between the 1990 and 2000 Censuses. The difference between these two figures is divided by the 1990 annual growth figure to produce a percent change in growth rates. For example, Bothell grew by 375 people per year in the 1990s, and is targeted to grow by 488 people per year over the next twenty years. The difference is +113, and the percent change is  $113/375 = 30$  percent. Thus, Bothell is targeted to accept 30 percent more new residents per year through the target horizon than it had in the 1990s.

To more easily compare cities across counties, King County’s household targets were converted back into population targets, using current average household sizes for each city and subarea-level assumed future household sizes (see Appendix C).

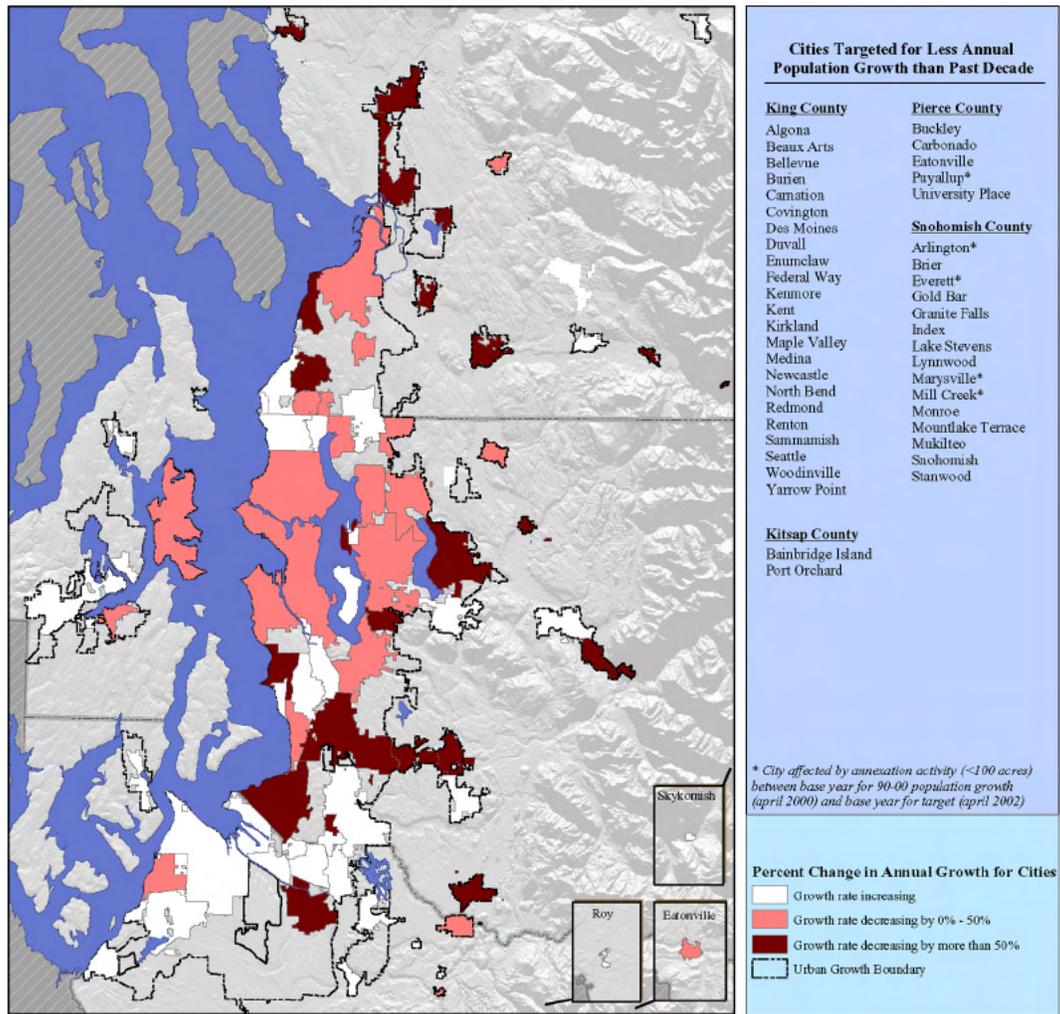
**FIGURE 20: CITIES TARGETED TO GROW FASTER THAN IN THE 1990s (POPULATION)**



Note: King County’s population growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. See Appendix J for supporting data.

Cities such as Bremerton, Normandy Park and Lake Forest Park lost population during the last decade, but are targeted to grow over the planning horizon. Bremerton in particular is targeted for a significant turn-around, from losing 215 residents per year in the 1990s to a targeted influx of 565 new residents per year. Sultan is targeted to maintain an annual growth rate greater than 3 percent — as high as the 1990s — for the remainder of the planning horizon. Issaquah and Bainbridge Island were already growing quickly in the 1990s, and are targeted to modestly increase their rates of growth.

**FIGURE 21: CITIES TARGETED TO GROW SLOWER THAN IN THE 1990s (POPULATION)**



Note: King County's population growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. See Appendix J for supporting data.

Two of the most striking changes seen in figure 21 are the cities of Kent and Monroe. The adopted targets for Kent call for a rate of growth that is lower than that of the 1990s, in which Kent added nearly 2,000 people per year (a 2.8 percent annual growth rate), to a more modest 360 new residents per year over the next two decades, (0.4 percent annual growth rate). Monroe is also targeted to slow its growth from nearly 800 new residents per year during the 1990s (8.9 percent annual growth rate), to 250 per year through 2025 (1.5 percent annual growth rate).

Faster or slower growth rates for counties and their cities are to some extent a reflection of the OFM projection selected control total (i.e., the countywide targets).

- King County's cities, both in number and in magnitude of change, are largely targeted to slow their rates of growth compared to the 1990s. Of the 39 cities completely or partially in King County, only 16 are targeted to grow faster than they did in the past decade, and the extent to which they are targeted to increase (in aggregate, about 1,160 more persons per year targeted than seen in the 1990s) is far overshadowed by the extent that the 23 cities that are targeted to decrease (about 6,300 fewer residents added into these cities per year than occurred in the past decade).
- Kitsap County's four cities are split, with Bremerton targeted to increase its growth rate, Port Orchard and Bainbridge Island targeted to slow their rates of growth, and Poulsbo staying relatively constant.
- Of the 20 cities completely or partially in Snohomish County, only five are targeted to increase their growth rate, compared to 18 out of 23 cities in Pierce County.

• *How much to cities with regional growth centers?*

A central principle of VISION 2020 is the focusing of future population and employment growth into urban growth areas, and to regional growth centers within the urban growth area. Regional growth centers are intended to absorb a significant proportion of the region's future population growth in order to decrease sprawl and to promote the efficient provision of facilities and services.

There are currently 24 designated growth centers in 17 cities and 1 in unincorporated Kitsap County (Silverdale). Cities containing designated centers range from Seattle, the biggest city in the region, which contains five separate growth centers and 563,376 residents in 2000, to the more commercially oriented city of Tukwila, with a 2000 population of 17,181.

Figure 22 highlights the 17 cities and Silverdale with regional growth centers, comparing the city's current (2000) population to the city growth target.

With a combined population of over 1.5 million people, these 17 cities account for nearly half (48 percent) of the region's population. Their combined growth target of 360,500 represents 39 percent of the region's aggregated growth target.

Of the 17 cities containing regional growth centers, about half of them (9) are targeted to add less population each year than they did in the 1990s, two are targeted with a similar rate of growth, and six are planning for a higher rate of annual growth. This is a reflection of an overall decrease in the amount of growth in this round of targets, as compared to the previous round.

**FIGURE 22: CITIES CONTAINING DESIGNATED REGIONAL GROWTH CENTERS – RESIDENTIAL TARGETS**

City	Centers	Population in 2000 (City)	Population Target (City)
Auburn	Auburn	42,901	20,479*
Bellevue	Bellevue	109,827	19,100*
Bothell	Canyon Park	30,150	11,010
Bremerton	Bremerton	37,259	14,759
Everett	Everett	91,488	26,990
Federal Way	Federal Way	83,259	2,620*
Kirkland	Totem Lake	45,054	9,940*
Kent	Kent	79,524	7,870*
Lakewood	Lakewood	58,211	3,789
Lynnwood	Lynnwood	33,847	4,520
Puyallup	Downtown Puyallup South Hill	33,011	5,586
Redmond	Overlake	45,256	19,100*
Renton	Renton	50,052	11,930*
SeaTac	SeaTac	25,496	10,420*
Seattle	Downtown Seattle First Hill/Capitol Hill Northgate University Community Uptown Queen Anne	563,376	95,920*
Silverdale UGA**	Silverdale	15,276	8,059
Tacoma	Downtown Tacoma Tacoma Mall	193,556	61,676
Tukwila	Tukwila	17,181	6,750*

Notes: \*King County’s growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. \*\*Capacities for Puyallup, Lakewood, Tacoma are for the period 2001-2017. \*\*\*The Silverdale regional growth center is located in unincorporated Kitsap County. Population and target figures are for the subarea UGA. See Appendix J for details.

**FIGURE 23:  
PROFILE OF CITIES WITH REGIONAL CENTERS: TOTALS FOR ALL 17 CITIES CONTAINING CENTERS**

2000 Census Population .....	1,536,601
Population Growth 1990-2000 .....	177,918
Growth Target.....	353,339
Annual Growth Rate: 1990-2000 .....	1.2%
Annual Growth Rate: Target.....	0.9%
Annual Population Change: 1990-2000.....	17,792
Annual Population Change: Target .....	15,903
Difference .....	-1,889
Percent Difference .....	-10.6%

Note: These figures do not include Silverdale, which is not in a city. King County’s growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. See Appendix J for supporting data.

When aggregated, these 17 cities are targeted for 1,889 fewer incoming residents per year than occurred in the 1990s, an 11 percent drop. The aggregated annual growth rate is also targeted to

drop from 1.2 percent annual growth in the 1990s, to 0.9 percent through the planning horizon. This decrease in the rate of growth, however, is in part a reflection of the expected decline in regionwide growth rates rather than a decreasing emphasis on these cities.

• *How much to the regional growth centers themselves?*

NOTE: In many cases, residential targets have not yet been set for the designated regional growth centers. Information regarding the previous targets is provided for context purposes.

While both King and Pierce County CPPs require that growth targets be set for designated regional centers, it is unclear to what extent this has been done. Figure 24 compares the previous center growth targets, where available, to the most applicable previous citywide growth target available. This information was gathered from a survey to jurisdictions in 2002 as part of a PSRC report on Regional Growth Centers,<sup>72</sup> and the targets reported are not necessarily recognized as comparable to the adopted citywide targets.

Silverdale and Auburn were designated as urban centers in 2004 and therefore have not yet adopted specific center targets, nor did they have an previous set of targets. Though designated as regional growth centers in 1995, Puyallup and Tukwila also had not yet adopted center targets in their comprehensive plans when the data was collected.

**FIGURE 24:**  
**COMPARISON OF PREVIOUS CITY TO PREVIOUS DESIGNATED REGIONAL CENTER RESIDENTIAL TARGETS**

	Base Year Center Population	Additional Center Residents	Center Growth Target	Percent of City Target	Planning Period for Center Targets	Planning Period for City Targets
Auburn						
Bellevue	2,230	8,370	10,600	83%	2000-2020	1992-2012
Bothell	2,315	-565	1,750	∞	1990-2012	1992-2012
Bremerton	9,454	4,587	14,041	86%	2000-2012	1997-2012
Everett	4,522	4,909	9,431	24%	1990-2012	1992-2012
Federal Way	301	2,834	3,135	19%	1990-2012	1992-2012
Kirkland						
Kent	276	2,224	2,500	25%	1990-2010	1992-2012
Lakewood	3,118	14,382	17,500	80%	2000-2017	2000-2017
Lynnwood	3,048	765	3,813	19%	1990-2012	1992-2012
Puyallup	3,189	n/a	n/a	n/a	n/a	n/a
Redmond	608	2,581	3,189	26%	1990-2012	1992-2012
Renton	900	3,600	4,500	40%	1990-2012	1992-2012
SeaTac	4,605	3,124	7,729	57%	1990-2012	1992-2012
Seattle	40,596	40,074	80,670	74%	1990-2014	1992-2012
Silverdale						
Tacoma	9,319	24,181	33,500	11%	1990-2012	1992-2012
Tukwila	–	n/a	n/a	n/a	n/a	n/a

Note: Source of data is from responses to a survey done as part of the 2002 Regional Growth Centers Report (PSRC). See Appendix J for supporting data.

The relationship of center targets to citywide targets varies considerably between cities, depending on the size of the city, the size of the designated center, the character of existing development, and many

<sup>72</sup> View “Puget Sound Milestones: Central Puget Sound Regional Growth Centers, 2002” at <http://www.psrc.org/projects/monitoring/rgc.htm>.

other factors. Bellevue, Bremerton and Lakewood appear<sup>73</sup> to have targeted the largest proportions of their citywide targets to their respective centers, while Tacoma, Federal Way, and Lynnwood direct the smallest proportions of their citywide targets to their centers.

## ii. How Much Was Targeted to Unincorporated Urban Areas?

Land within the four counties that lies within the urban growth boundary, but outside of any city, is labeled as urban unincorporated. Across the four counties, growth of over 250,000 people (28% of the total target) is targeted to locate in these areas.

The urban unincorporated area of the region can be broken up into two categories of land.

- Unaffiliated urban land is within the urban growth area, but is **not** affiliated with a particular city. These areas are urban, under county jurisdiction, comprise just over 2 percent of the unincorporated area's total land area (with 59 percent of this land category in Pierce County), and are targeted to receive 20 percent of the unincorporated area target.
- Affiliated urban land is within the urban growth area, and is designated as appropriate for annexation by an affiliated city *at some point in the future*. These areas are often governed by a joint city-county planning agreement (this is required by the CPPs in all four counties), which ensures that development under county jurisdiction will be compatible with the standards of the affiliate city in anticipation of future annexation. The growth target allocation and comprehensive planning processes also typically involve both the county and the affiliate city.

<sup>74</sup> These areas comprise about 3 percent of the unincorporated area's land and are targeted to receive 46 percent of the unincorporated area target.

### • How much to *unaffiliated* urban unincorporated areas?

Across the four counties, approximately 8.3 percent of the region's target (and 20 percent of the unincorporated area target) is assigned to the unaffiliated urban unincorporated areas (UUUs). This category represents urban lands that are under the jurisdiction of the county that contains them and are not designated for annexation.

Some of these areas, principally in Pierce and Kitsap County, are in the urban growth area but not near any city. Examples include the Central Kitsap UGA in Kitsap County and the South Hill, Fredrickson, and Graham UGAs in Pierce County. In some cases there are strong and established community groups, potentially seeking incorporation (such as the Kingston and Silverdale UGAs). Other areas that fall under this category include those claimed by more than one city as being within their UGA, such as West Hill, North Highline, and the Mukilteo/Lynnwood overlap area.

Redmond Ridge in East King County is a Fully Contained Community authorized by RCW 36.70A.350, meaning that it was added to the urban growth area under the condition that it be separate from the main UGA and contain jobs, housing, and its own infrastructure.

The final type of area that falls into the unaffiliated unincorporated urban category is the "urban military" designation in Pierce County (this area appears to also fall within the City of Lakewood's Urban Service Area, but is under federal jurisdiction).

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<sup>73</sup> Care must be taken when analyzing these figures because of differing planning periods for the center and citywide targets, potentially outdated information, and differing methodology for some center targets.

<sup>74</sup> These affiliated areas are called Potential Annexation Areas (PAAs) in King County, urban growth areas, or simply UGAs in Kitsap, Pierce, and Snohomish counties (sometimes referred to as Urban Service Areas in Pierce County and Municipal Urban Growth Areas [MUGAs] for southwest Snohomish County).

Figure 25 illustrates the relative distributions of the targets to the unaffiliated unincorporated urban areas of each of the counties.

**FIGURE 25:**  
**UNAFFILIATED URBAN UNINCORPORATED AREAS PROPORTION OF COUNTYWIDE RESIDENTIAL TARGET**

	Unaffiliated Urban Unincorporated Target	Total Countywide Target	Percent of Total Target
King County	13,750	315,500	4.4%
Kitsap County	28,024	99,602	28.1%
Pierce County	31,723	211,889	15.0%
Snohomish County	3,715	286,249	1.3%
<b>Central Puget Sound Region</b>	<b>77,212</b>	<b>913,240</b>	<b>8.5%</b>

Notes: King County's growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. King County's total countywide target differs from the countywide target in Figures 9 and 10 as a result of this conversion process. See Appendices B, D, E, and F for supporting data.

Figure 27 on the following page, shows the locations of the unaffiliated urban unincorporated areas.

The areas targeted for the fastest growth include the Redmond Ridge Fully Contained Community, which is targeted to grow from only 200 households in 2000 (490 persons) to 4,299 households by 2022 (10,230 persons), and the South Kitsap UGA (which is targeted to grow from 1,241 residents in 2000 to 9,265 residents in 2025). The unaffiliated area with the highest overall target is the South Hill UGA in Pierce County, which is targeted to grow by over 20,000 people to nearly 55,000 total residents by 2022.

• *How much to affiliated unincorporated urban areas?*

Across the four counties, approximately 19 percent of the region's target (and 47 percent of the unincorporated area target) is assigned to the affiliated unincorporated urban areas (AUUs). These areas have different titles in different counties, but all share similar characteristics: chiefly, a collaborative decision-making process between the county and the affiliate city. There are 49 cities that have AUUs. When these 49 affiliated cities annex these affiliated areas, the portion of the unincorporated target will transfer to the receiving city.

The majority of targets in affiliated unincorporated urban areas were in Snohomish County. Everett and Mill Creek were allocated the region's largest growth targets for affiliated areas, with targets of 27,227 and 24,445 new residents, respectively.

Figure 26 illustrates the relative distributions of the targets to the affiliated unincorporated urban areas of each of the counties.

**FIGURE 26:**  
**AFFILIATED URBAN UNINCORPORATED AREAS PROPORTION OF COUNTYWIDE RESIDENTIAL TARGET**

	Unaffiliated Urban Unincorporated Target	Total Countywide Target	Percent of Total Target
King County	13,070	315,500	4.1%
Kitsap County	10,889	99,602	10.9%
Pierce County	28,793	211,889	13.6%
Snohomish County	123,756	286,249	43.2%
<b>Central Puget Sound Region</b>	<b>176,508</b>	<b>913,240</b>	<b>19.3%</b>

Notes: King County's growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. King County's total countywide target differs from the countywide target in Figures 9 and 10 as a result of this conversion process. See Appendices B, D, E, and F for supporting data.

**FIGURE 27: UNAFFILIATED UNINCORPORATED URBAN AREAS MAP**

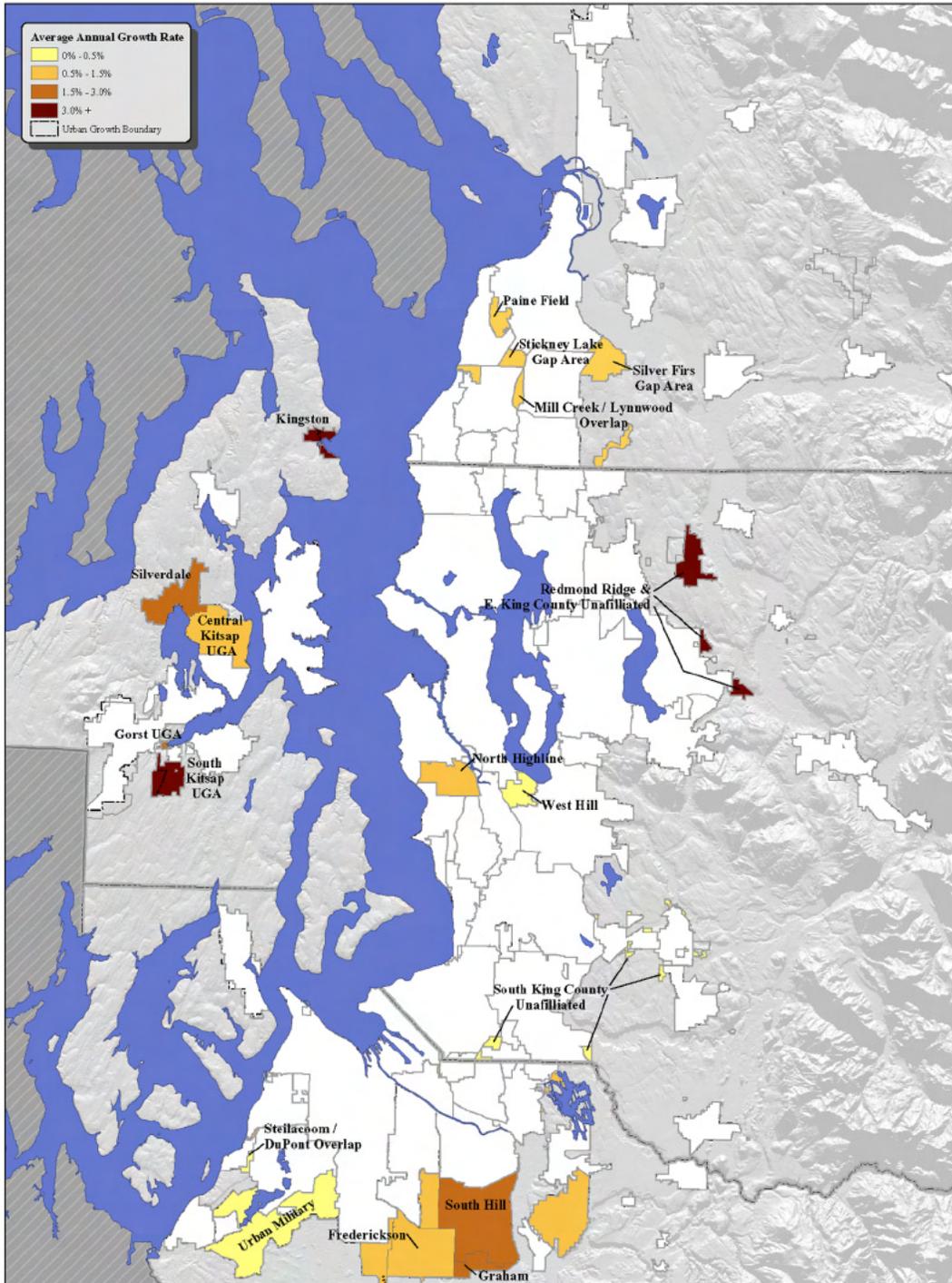
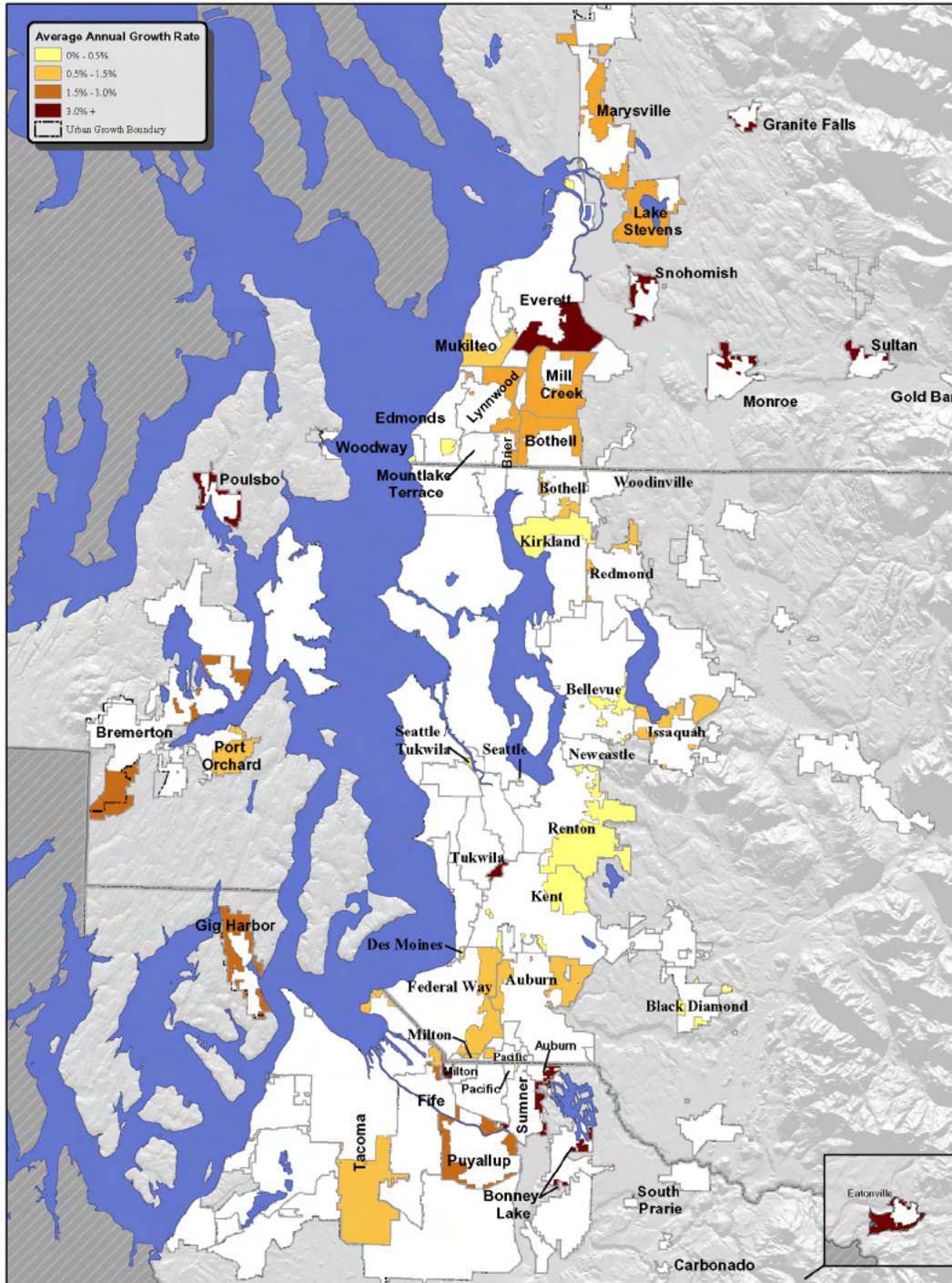


Figure 28 on the following page identifies the 49 cities, the location of their affiliated areas, and their targeted growth rates. The annexation areas around rural subarea cities — North Bend, Snoqualmie,

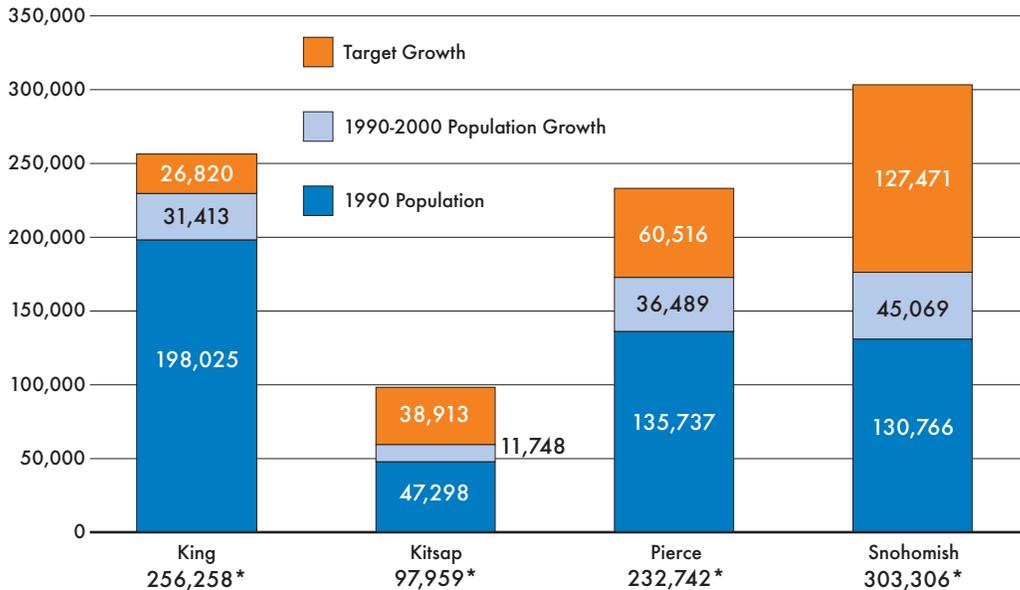
Enumclaw, Duvall, and Carnation — did not receive separate targets. Targets for the rural cities represent growth for incorporated and unincorporated areas combined.

**FIGURE 28: AFFILIATED UNINCORPORATED URBAN AREAS MAP**



In the aggregate (both affiliated and unaffiliated), the unincorporated urban areas target is for just over 250,000 new residents, about 28% of the region's growth target. The cumulative population is shown below.

**FIGURE 29: UNINCORPORATED URBAN AREAS  
(AFFILIATED AND UNAFFILIATED) CUMULATIVE POPULATION WITH TARGET**



Notes: \*Total refers to population at target horizon. King County's growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. See Appendices B, D, E, and F for supporting data.

### iii. How Much to Rural Areas?

Across the four counties, approximately 14 percent of the region's target (and 33 percent of the unincorporated area target) is assigned to rural areas.<sup>75</sup> The target allocations for the rural areas recognize that development activity will occur, but convey the policy intent of limiting growth in the rural area.

The rural area of the region can be broken up into two categories of land.

- Resource lands are designated agricultural reserve, forest and open space (including state and federally protected lands such as State Parks, National Parks and National Forests), and mineral resource lands held in reserve for resource extraction activities. This category comprises the majority (67%) of the region's unincorporated land area. These areas have no growth target.
- Rural non-resource lands are those areas outside of the urban growth area that are not included in the first category. This category comprises about 27 percent of the unincorporated area's total land area and are targeted to receive 33 percent of the unincorporated area target.

<sup>75</sup> These figures include UGA expansion allocations including: Snohomish County's allocation for 15,000 new people in the area designated as the "FCC reserve" and Kitsap County's allocation for 6,300 new people in the area designated as the "Port Orchard UGA Expansion Study Area." If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC or UGA expansion would become part of the urban growth allocation (see note on Page 35).

Figures 30 and 31 illustrate the relative distributions of the targets to the rural areas of each of the counties and the cumulative population in the geography at the horizon year.

**FIGURE 30: RURAL AREAS’ PROPORTION OF COUNTYWIDE RESIDENTIAL TARGET**

	Rural Target	Urban Expansion Allocation	Total Countywide Target	Percent of Total Target (Combined)
King County	11,920	–	315,500	3.8%
Kitsap County	24,239	6,000	99,602	30.4%
Pierce County	15,318	–	211,889	7.2%
Snohomish County	53,795	15,000	286,249	24.0%
<b>Central Puget Sound Region</b>	<b>105,272</b>	<b>21,000</b>	<b>913,240</b>	<b>13.8%</b>

Note: King County’s population growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. King County’s total countywide target differs from the countywide target in Figures 9 and 10 as a result of this conversion process. The UGA Expansion Allocation includes: in Snohomish County, an allocation for 15,000 people to an “FCC reserve,” in Kitsap County, an allocation for 6,300 people to a “Port Orchard UGA Expansion Study Area.” If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC or UGA expansion would become part of the urban growth allocation. See Appendices B, D, E, and F for supporting data.

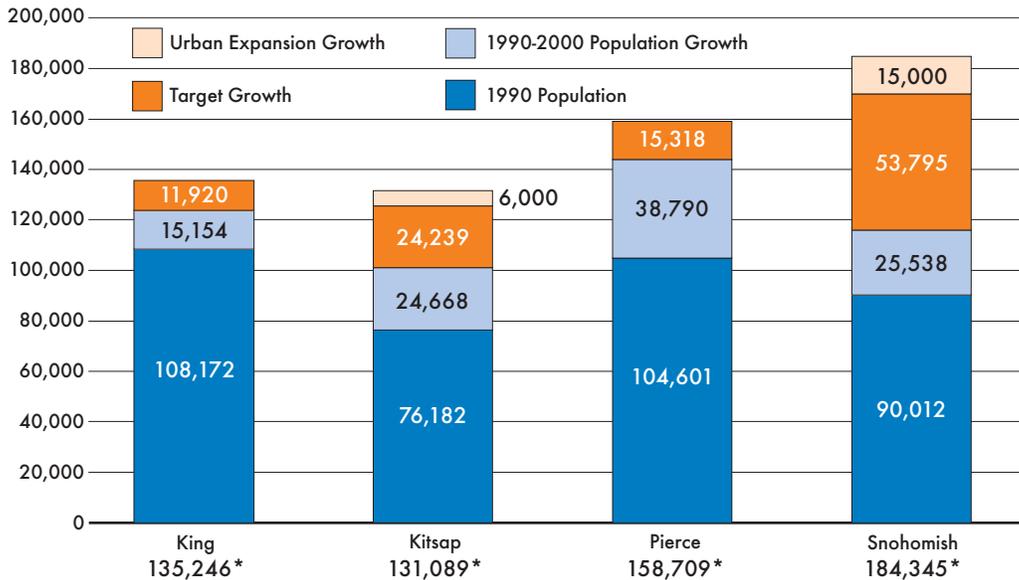
- King County has allocated the lowest proportion of its overall target to the rural area, 4 percent.<sup>76</sup> This is very consistent with past trends and with the past target.
- Kitsap County has allocated 30 percent of the countywide target to its rural area.<sup>77</sup> This is optimistic in comparison to recent trends, wherein 55 percent of building permits issued between 1995 and 2002 were located in the rural area (see Figure 46).
- Pierce County is also seeking to focus growth inside the urban areas and has allotted only 7 percent of the countywide target to the rural area.
- Snohomish County’s proportion of the countywide target (24 percent) allocated to the rural area<sup>78</sup> is higher than recent development (17 percent). With the inclusion of the FCC reserve, the rural area target represents a projected slight increase in the rate of growth over that of the 1990s; with the FCC reserve removed, the rural area target represents a slight decrease.

<sup>76</sup> The county’s rural area derived population percentage is higher than its official household percentage because of the lower assumed reduction in future average household size in the rural area, as compared to other geographies.

<sup>77</sup> Included in Kitsap County’s rural area target is an allocation of 6,300 persons to a “Port Orchard UGA Expansion Study Area,” which would, if approved, eventually become a part of the urban area target. Subtracting this UGA Expansion Allocation gives a proportion of 24% of the county’s target to the rural area.

<sup>78</sup> Included in Snohomish County’s rural area target is an allocation of 15,000 persons to a “Fully Contained Community Reserve”, which would, as approved on a case-by-case basis, eventually become a part of the urban area target.

**FIGURE 31: RURAL AREAS' CUMULATIVE POPULATION WITH RESIDENTIAL TARGETS**

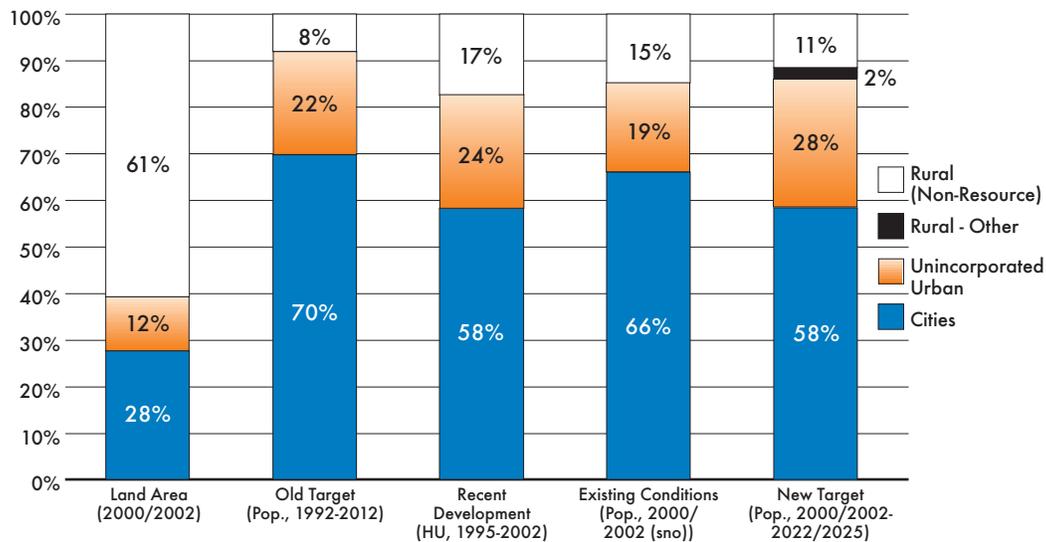


Note: \*Total refers to population at target horizon. King County's population growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. The UGA Expansion Allocation includes: in Snohomish County, an allocation for 15,000 people to an "FCC reserve," in Kitsap County, an allocation for 6,300 people to a "Port Orchard UGA Expansion Study Area." If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC or UGA expansion would become part of the urban growth allocation. See Appendices B, D, E, and F for supporting data.

#### D. How Does the New Aggregated Regional Target Compare to the Context Data?

Figure 32 compares the aggregated regional target across the four primary geographies to the contextual data sets, as well as to land area. The chart shows that population, development, and targets are all concentrated heavily in cities and in the unincorporated urban area.

**FIGURE 32: COMPARISON OF AGGREGATED REGIONAL TARGET TO CONTEXT DATA**



Note: King County's growth target figure is derived, representing a conversion of the adopted household target to an estimated population target. The 'Rural-Other' category refers to UGA Expansion Allocations: in Snohomish County this includes an allocation for 15,000 people to an "FCC reserve," in Kitsap County, this includes an allocation for 6,300 people to a "Port Orchard UGA Expansion Study Area." If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC or UGA expansion would become part of the urban growth allocation. Note different jurisdictional boundaries between previous and new targets. See Appendices B, I, H for supporting data.

The new targets show a similar proportion to the previous targets, albeit with a lesser focus on the UGA and on the cities within the UGA. Comparing calculated recent development (permitted housing units) to the previous target gives us a general sense of how well growth in the middle of the targeting period tracked against the policy intent of the previous targets. They appear fairly similar, although about 9 percent more of the region's growth went to the rural area than was targeted. This may be a function of pre-GMA vesting.<sup>79</sup>

An important consideration when comparing the previous and new targets is the effect of changing jurisdictional boundaries. In 1992, when the original targets were adopted, significantly less land area in the counties was incorporated (the amount of land in cities increased by roughly 35 percent between 1992 and 2000). There was also less land in the urban growth area, meaning there was more rural land. Thus, even if the proportion of the new targets going to cities appears nearly identical, it has actually decreased substantially when controlled for land area.

## COMPARISON OF THE COUNTY TARGETS

The regional aggregation of targets gives an impression of how the region as a whole is impacted by the new targets. This section asks some of the same questions regarding the rate and distribution of the targets, but at a county-by-county level.

### How Do the Counties Compare to One Another?

Comparing counties' growth targets to one another is a complicated endeavor, given their different methodologies, land use characteristics, and political realities. However, it is critical to understanding how the GMA growth target requirement is being carried out.

Figure 33 compares the geographic distributions of the new targets to current population, the previous target, and to recent development.

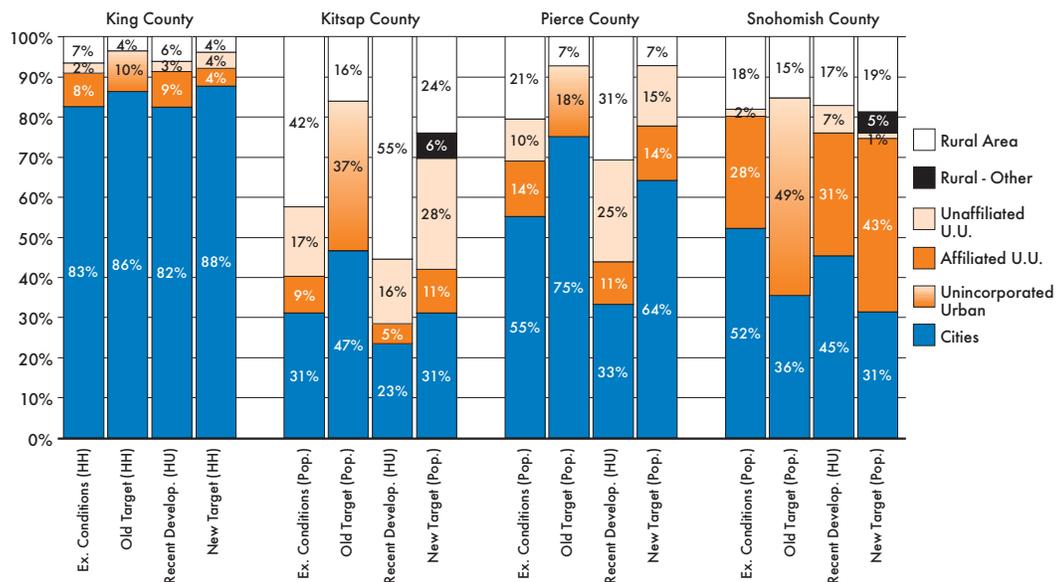
- In King County, the previous target allocated 86 percent of the growth to the cities. The development between 1995 and 2002, the middle seven years of the previous target planning period, very closely matched this. The new target calls for an even greater percentage of new growth to be focused in cities. This is clearly the most aggressive focusing of growth into incorporated and urban land of the four counties, and certainly meets the intent of GMA.
- In Kitsap County, the previous target allocated the majority of the growth, 84 percent, to the urban growth area; however, only 47 percent, less than a majority, was targeted to cities. The development between 1995 and 2002, the middle seven years of the previous target planning period, fell far short of these goals, with the majority of new growth permitted in the rural area, and the remainder of the growth split almost evenly between the cities and the unaffiliated unincorporated areas. The new target aims to shift a lot of the rural growth into the urban area; however, within the UGA, it remains allocated primarily to the unaffiliated unincorporated urban area. One explanation for this emphasis on unaffiliated unincorporated areas are the existence in unincorporated Kitsap County of populous areas such as Silverdale and Kingston, which are classified as unaffiliated because they are not tied to an existing city, but are nevertheless considered candidates for eventual incorporation. The cities' targets reflect a significant decline in focusing from the past target, although it would represent an increase in growth focusing as compared to recent developments. If the affiliated unincorporated urban areas were considered as part of the city target, then the county would essentially be where they were with

<sup>79</sup> The term 'vesting' refers to the provision of Washington state law that fixes the regulatory conditions in effect at the time of a permit application. The relevant implication of this law is the exemption from GMA regulations of all lots upon which a permit had been applied for prior to 1990, creating a time lag between the adoption of GMA-compliant regulations and actual changes in development conditions.

their previous target. These numbers are similar to Snohomish County and reflect the least aggressive attempt at focusing growth in incorporated and urban areas.

- In Pierce County, the previous target allocated the majority of new growth, 83 percent, to the urban growth area. However, only half of this, 42 percent, was targeted to cities, with the balance being allocated to the unincorporated urban area. The development between 1995 and 2002, the middle seven years of the previous target planning period, fell short of these goals, with the rural area receiving almost double the proportion of permits than was targeted. This level of rural development is reflected in the diminished unincorporated area growth, in particular in those areas affiliated with a jurisdiction and the cities themselves, who received much less growth than they had been allocated. The new targets are significantly more aggressive than either the previous targets or recent development. If recent trends are turned around and the targets are realized, this will represent a significant change in focus, and would much more closely relate to GMA goals.
- In Snohomish County, the previous target allocated the majority of new growth, 85 percent, to the urban growth area. However, only 36 percent was targeted to cities, and almost half of the total new growth, 49 percent, was targeted to the unincorporated area. This is the only county where development between 1995 and 2002, the middle seven years of the previous target planning period, was more focused in cities than targeted, with almost as many permits issued in cities as in all of the unincorporated area. Further, the majority of new development in the unincorporated area occurred in areas that are now affiliated with a jurisdiction. Building on these affiliations, the largest share of new growth is targeted to the affiliated unincorporated urban areas, 44 percent. At the same time, the targets for cities are smaller than the previous target and recent development and the targets for the rural area are larger. The county's efforts to facilitate annexation or incorporations through affiliating the unincorporated urban areas has the potential to support the transformation of governance suggested by the Hearings Board and envisioned by the GMA.

**FIGURE 33: COUNTY-BY-COUNTY COMPARISON OF RESIDENTIAL TARGETS AND CONTEXT DATA**



Note: The Previous Target's distribution to unincorporated areas was not disaggregated into affiliated and unaffiliated areas. King County's growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. The "Rural-other" category refers to UGA Expansion Allocations: in Snohomish County, this includes an allocation for 15,000 people to an "FCC reserve", in Kitsap County, this includes an allocation for 6,300 people to a "Port Orchard UGA Expansion Study Area." If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC or UGA expansion would become part of the urban growth allocation. See Appendices I, H for supporting data.

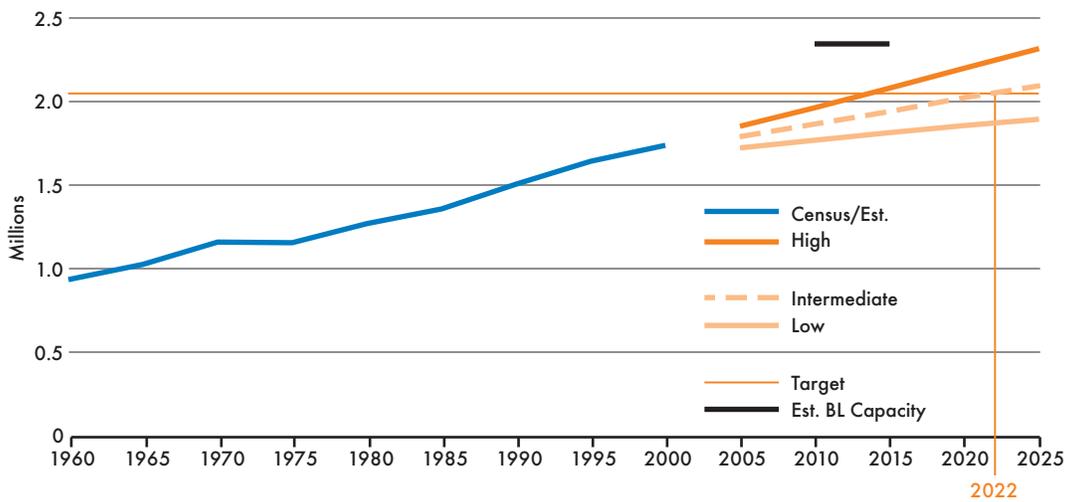
## INDIVIDUAL COUNTY TARGETS

### What Are the King County Household and Population Targets?

The King County selected OFM target was for 311,500 new residents between 2000 and 2022. This was converted into a household growth target of 157,932. The population projection total of 2,048,500 represents an average annual growth rate of 0.75 percent over the planning horizon.

This projected average annual growth rate is the lowest of the four counties, due in part to a relatively large base population. It also represents a significant slowing of growth over the past 25 years, which had averaged a 1.64 percent annual growth rate.

**FIGURE 34: KING COUNTY RESIDENTIAL TARGET SELECTION AND OFM PROJECTION RANGE**



The horizontal line signifying the estimated buildable land capacity in 2002 is a reflection of the reported housing unit capacity (converted to population using 2000 person per household values) for the urban growth area, plus the 2000-2022 rural area target. This theoretical capacity is taken from the 2002 King County Buildable Lands analysis, and is intended as a snapshot of capacity (in relation to previous targets) under policies and regulations in effect in January 2001. This value, which for King County is 2,382,000, does not represent an ultimate capacity, since zoning regulations and development policy change continuously, more often than not serving to increase capacity. However, it is a useful reference point for the approximate carrying capacity provided by zoning regulations and development history at the time, and shows sufficient capacity already in place in 2001 to meet the growth targeted for 2022.

**FIGURE 35: KING COUNTY RESIDENTIAL GROWTH TARGET STATISTICS**

**OFM Projection Range**

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High .....	2,246,922
Medium.....	2,049,502
Low .....	1,872,165
2022 Targeted Population.....	2,048,500
Household Target.....	157,932
Population Target.....	311,500
Annual Population Growth.....	14,159
Average Targeted Annual Growth Rate.....	0.75 %
Est. Buildable Lands Capacity .....	2,382,000

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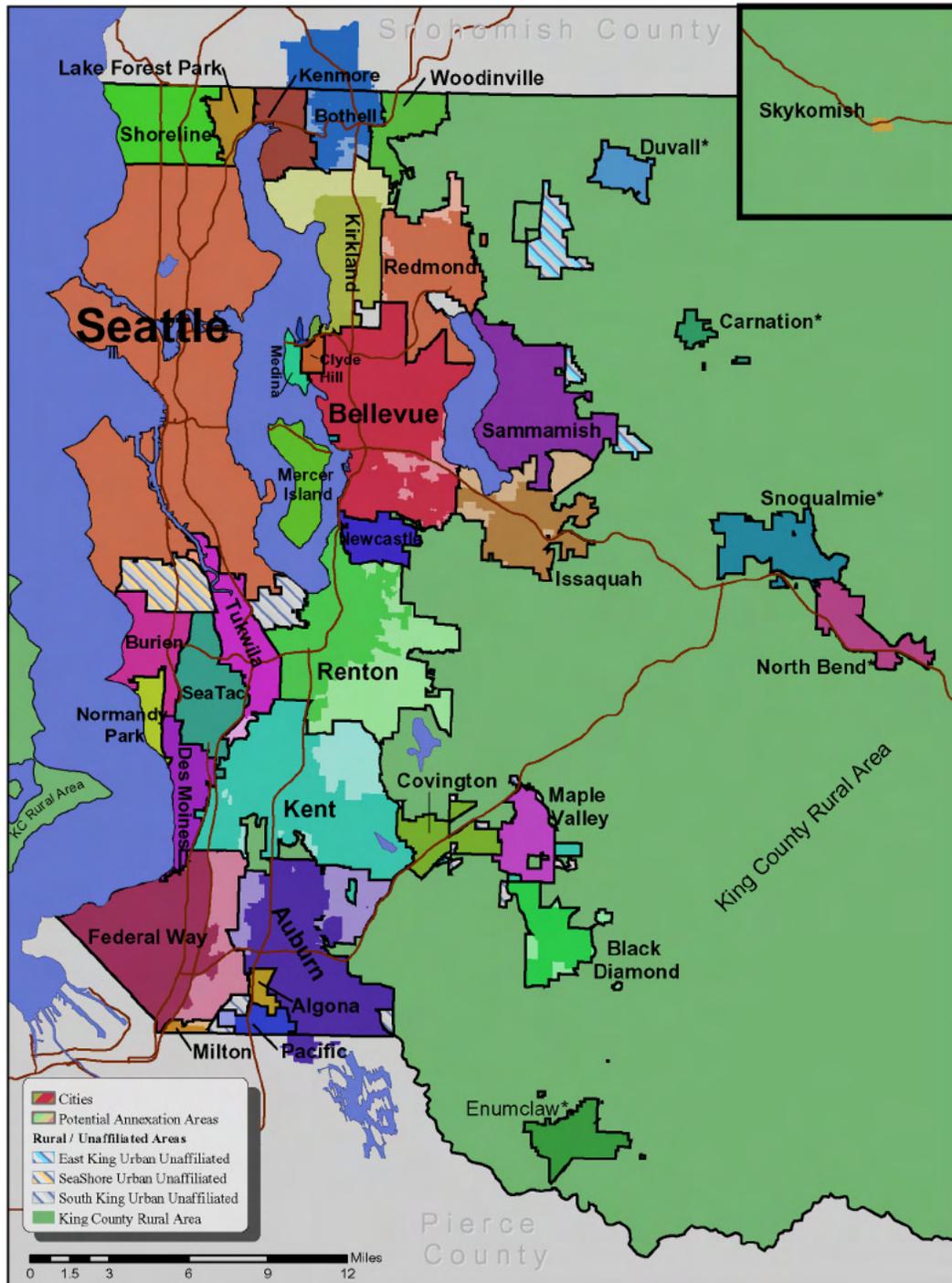
It is important to note the difference between this targeted 0.75 percent annual growth rate in *population* and the annual growth rate calculated from the adopted *household* targets. Due to assumptions about average persons per household values for the future (necessary to convert population projections into household targets) and group quarters growth, the targeted annual *household* growth rate is actually 0.92 percent.

This difference also manifests itself in the derived population targets reported for each city. There are two principal assumptions that drive this discrepancy: first, group quarters growth, which is not accounted for in the household targets, is considered in the derived population targets; second, assumed reductions in persons-per-household values have a much greater impact on cities that already have a sizeable base of population (see figure 2).

For example, some cities with nearly identical household targets, such as SeaTac and Kent, have very different population targets (SeaTac: 4,478 household target and 10,420 population target. Kent: 4,284 household target and 7,870 population target).

Figure 36 illustrates the location of each of the areas that received targets.

**FIGURE 36: KING COUNTY AREAS THAT HAVE A TARGET**



Note: The dark colors represent cities, the light colors represent the unincorporated areas. King County rural cities are targeted along with their annexation areas.

Figure 37 identifies the household targets adopted by King County into the CPPs, and the targeted growth rate for each area. Figure 38 identifies the population targets that are calculated from the household targets and other data. See Appendix C for details and calculations.

**FIGURE 37: KING COUNTY HOUSEHOLD TARGETS**

	Estimated Households in 2000		Household Growth Target 2000-2022 and Average Annual Growth Rate		Targeted Households in 2022	
	City	PAA	City	PAA	City	PAA
Algona	845	–	298 (1.4%)	– (–)	1,143	–
Auburn	16,108	3,640	6,003 (1.5%)	815 (0.9%)	22,111	4,455
Beaux Arts	121	–	3 (0.1%)	– (–)	124	–
Bellevue	45,836	1,710	10,117 (0.9%)	178 (0.5%)	55,953	1,888
Black Diamond	1,456	40	1,099 (2.6%)	0 (–)	2,555	40
Bothell	6,401	1,700	1,751 (1.1%)	584 (1.4%)	8,152	2,284
Burien	13,399	–	1,552 (0.5%)	– (–)	14,951	–
Carnation	676	–	246 (1.4%)	– (–)	922	–
Clyde Hill	1,054	–	21 (0.1%)	– (–)	1,075	–
Covington	4,398	–	1,373 (1.2%)	– (–)	5,771	–
Des Moines	11,337	160	1,576 (0.6%)	2 (0.1%)	12,913	162
Duvall	1,646	–	1,037 (2.2%)	– (–)	2,683	–
Enumclaw	4,667	–	1,927 (1.6%)	– (–)	6,594	–
Federal Way	31,437	7,130	6,188 (0.8%)	1,161 (0.7%)	37,625	8,291
Hunts Point	165	–	1 (0.0%)	– (–)	166	–
Issaquah	4,840	6,120	3,993 (2.8%)	802 (0.6%)	8,833	6,922
Kenmore	7,307	–	2,325 (1.3%)	– (–)	9,632	–
Kent	31,113	8,055	4,284 (0.6%)	546 (0.3%)	35,397	8,601
Kirkland	20,736	11,485	5,480 (1.1%)	747 (0.3%)	26,216	12,232
Lake Forest Park	5,029	–	538 (0.5%)	– (–)	5,567	–
Maple Valley	4,809	–	300 (0.3%)	– (–)	5,109	–
Medina	1,111	–	31 (0.1%)	– (–)	1,142	–
Mercer Island	8,437	–	1,437 (0.7%)	– (–)	9,874	–
Milton	339	250	50 (0.6%)	33 (0.6%)	389	283
Newcastle	3,028	3	863 (1.1%)	1 (1.3%)	3,891	4
Normandy Park	2,609	–	100 (0.2%)	– (–)	2,709	–
North Bend	3,071	–	636 (0.9%)	– (–)	3,707	–
Pacific	1,992	330	721 (1.4%)	39 (0.5%)	2,713	369
Redmond	19,102	1,120	9,083 (1.8%)	390 (1.4%)	28,185	1,510
Renton	21,708	18,390	6,198 (1.1%)	1,739 (0.4%)	27,906	20,129
Sammamish	11,131	–	3,842 (1.4%)	– (–)	14,973	–
SeaTac	9,708	5	4,478 (1.7%)	0 (0.0%)	14,186	5
Seattle	258,499	20	51,510 (0.8%)	– (0.0%)	310,009	20
Shoreline	20,716	–	2,651 (0.5%)	– (–)	23,367	–
Skykomish	104	–	20 (0.8%)	– (–)	124	–
Snoqualmie	922	–	1,697 (4.9%)	– (–)	2,619	–
Tukwila	7,186	5	3,200 (1.7%)	8 (4.4%)	10,386	13
Woodinville	3,512	0	1,869 (2.0%)	0 (0.0%)	5,381	0
Yarrow Point	379	–	28 (0.3%)	– (–)	407	–
Unaffiliated East King	–	200	– (–)	4,099 **	–	4,299
Unaffiliated Sea–Shore	–	11,930	– (–)	1,670 (0.6%)	–	13,600
Unaffiliated South King	–	5,930	– (–)	592 (0.4%)	–	6,522
<b>Subtotals</b>						
City	586,781	–	138,526 (1.0%)	– (–)	725,307	–
Urban Unincorp. Affiliated	59,558	–	7,045 (0.5%)	– (–)	66,603	–
Urban Unincorp. Unaffil.	17,700	–	6,361 (1.4%)	– (–)	24,061	–
Urban Area	664,039	–	151,932 (0.9%)	– (–)	815,971	–
Rural Area	46,900	–	6,000 (0.5%)	– (–)	52,900	–
<b>County Total</b>	<b>710,916*</b>	–	<b>157,932 (0.9%)</b>	– (–)	<b>868,848*</b>	–

Notes: \*County total may not equal the sum of the above numbers due to rounding and estimation. \*\*Target of 4,099 is for a Fully Contained Community as spelled out in RCW 36.70A.350. Since there were no preexisting urban land or households, a percent growth rate would not be appropriate.

**FIGURE 38: KING COUNTY POPULATION TARGETS (DERIVED FROM ADOPTED HOUSEHOLD TARGETS)**

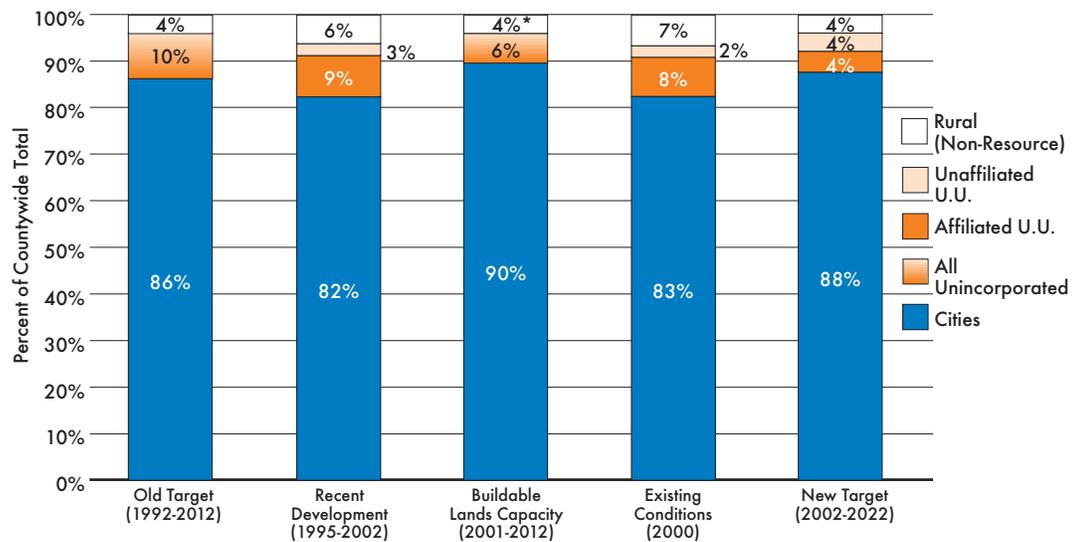
	Estimated Population in 2000		Population Growth Target 2000-2022 and Average Annual Growth Rate		Targeted Population in 2022	
	City	PAA	City	PAA	City	PAA
Auburn	40,314	10,773	12,960 (1.3%)	2,020 (0.8%)	53,274	12,793
Beaux Arts	307	–	0 (0.0%)	– (–)	307	–
Bellevue	109,827	4,612	19,470 (0.7%)	330 (0.3%)	129,297	4,942
Black Diamond	3,970	90	2,720 (2.4%)	0 (–)	6,690	90
Bothell	16,185	4,270	3,730 (0.9%)	1,360 (1.3%)	19,915	5,630
Burien	31,881	–	2,450 (0.3%)	– (–)	34,331	–
Carnation	2,003	–	640 (1.2%)	– (–)	2,623	–
Clyde Hill	2,890	–	0 (0.0%)	– (–)	2,890	–
Covington	13,783	–	3,590 (1.1%)	– (–)	17,373	–
Des Moines	29,267	420	3,200 (0.5%)	0 (0.0%)	32,467	420
Duvall	4,746	–	2,700 (2.0%)	– (–)	7,396	–
Enumclaw	12,006	–	4,170 (1.3%)	– (–)	16,116	–
Federal Way	83,259	20,460	12,620 (0.6%)	2,420 (0.5%)	95,879	22,880
Hunts Point	443	–	0 (0.0%)	– (–)	443	–
Issaquah	11,212	16,280	8,470 (2.6%)	1,530 (0.4%)	19,682	17,810
Kenmore	18,678	–	5,050 (1.1%)	– (–)	23,728	–
Kent	79,524	23,720	7,870 (0.4%)	700 (0.1%)	87,394	24,420
Kirkland	45,054	31,566	9,940 (0.9%)	870 (0.1%)	54,994	32,436
Lake Forest Park	13,142	–	1,010 (0.3%)	– (–)	14,152	–
Maple Valley	14,209	–	320 (0.1%)	– (–)	14,529	–
Medina	3,011	–	0 (0.0%)	– (–)	3,011	–
Mercer Island	22,036	–	2,960 (0.6%)	– (–)	24,996	–
Milton	814	640	80 (0.4%)	80 (0.5%)	894	720
Newcastle	7,737	0	1,860 (1.0%)	0 (0.0%)	9,597	–
Normandy Park	6,392	–	0 (0.0%)	– (–)	6,392	–
North Bend	7,906	–	750 (0.4%)	– (–)	8,626	–
Pacific	5,373	800	1,850 (1.4%)	70 (0.4%)	7,223	870
Redmond	45,256	3,210	19,100 (1.6%)	1,050 (1.3%)	64,356	4,260
Renton	50,052	48,891	11,930 (1.0%)	2,650 (0.2%)	61,982	51,541
Sammamish	34,104	–	10,070 (1.2%)	– (–)	44,174	–
SeaTac	25,496	0	10,420 (1.6%)	0 (0.0%)	35,916	–
Seattle	563,374	0	95,920 (0.7%)	0 (0.0%)	659,294	–
Shoreline	53,025	–	4,980 (0.4%)	– (–)	58,005	–
Skykomish	214	–	30 (0.6%)	– (–)	244	–
Snoqualmie	2,371	–	3,990 (4.6%)	– (–)	6,331	–
Tukwila	17,181	20	6,750 (1.5%)	10 (1.9%)	23,931	30
Woodinville	9,194	0	4,400 (1.8%)	0 (0.0%)	13,594	–
Yarrow Point	1,008	–	30 (0.1%)	– (–)	1,038	–
Unaffiliated East King	–	490	– (–)	9,740**	–	10,230
Unaffiliated Sea–Shore	–	32,017	– (–)	3,140 (0.4%)	–	35,157
Unaffiliated South King	–	13,948	– (–)	870 (0.3%)	–	14,818
<b>Subtotals</b>						
City	1,389,704	–	276,760 (0.8%)	– (–)	1,666,464	–
Urban Unincorp. Affiliated	165,752	–	13,070 (0.3%)	– (–)	178,822	–
Urban Unincorp. Unaffil.	46,455	–	13,750 (1.2%)	– (–)	60,205	–
Urban Area	1,601,911	–	303,580 (0.8%)	– (–)	1,905,491	–
Rural Area	135,000	–	11,920 (0.4%)	– (–)	146,920	–
<b>County Total</b>	<b>1,736,911*</b>	–	<b>315,500 (0.8%)</b>	– (–)	<b>2,052,411*</b>	–

Notes: \*County total may not equal other figures exactly due to rounding and estimation. \*\*Target of 9,700 is for a Fully Contained Community as spelled out in RCW 36.70A.350. Since there were no preexisting urban land or households, a percent growth rate would not be appropriate. King County targets are adopted in units of households; see Appendix C for conversion calculations.

Some of the largest growth targets, both in terms of percent and absolute growth, are associated with large planned developments in areas that were previously less developed. Some examples include Snoqualmie Ridge in the City of Snoqualmie, which is driving that city’s target of 1,697 households in the next 20 years (a 184 percent total increase, 4.9 percent annually), and the Redmond Ridge Fully Contained Community, which is responsible for targeted growth of 4,099 households in an area that was previously only sparsely populated. Other jurisdictions with relatively high targets (either in terms of percent or absolute growth) include Black Diamond, which is targeted to grow at 2.6 percent annually, nearly doubling its population in the next 20 years, and Seattle, which is targeted to grow by over 50,000 households (nearly a third of the county’s total growth, but only a modest 0.8 percent annual growth rate due to Seattle’s already sizeable base population). Overall, the growth targets as adopted represent fairly stable and evenly distributed growth.

Figure 39 illustrates how much of the total countywide target goes to cities, unincorporated urban areas, and the rural area, and compares this to the contextual data.

**FIGURE 39: KING COUNTY HOUSEHOLD TARGETS – CONTEXT DATA COMPARISON (HH)**



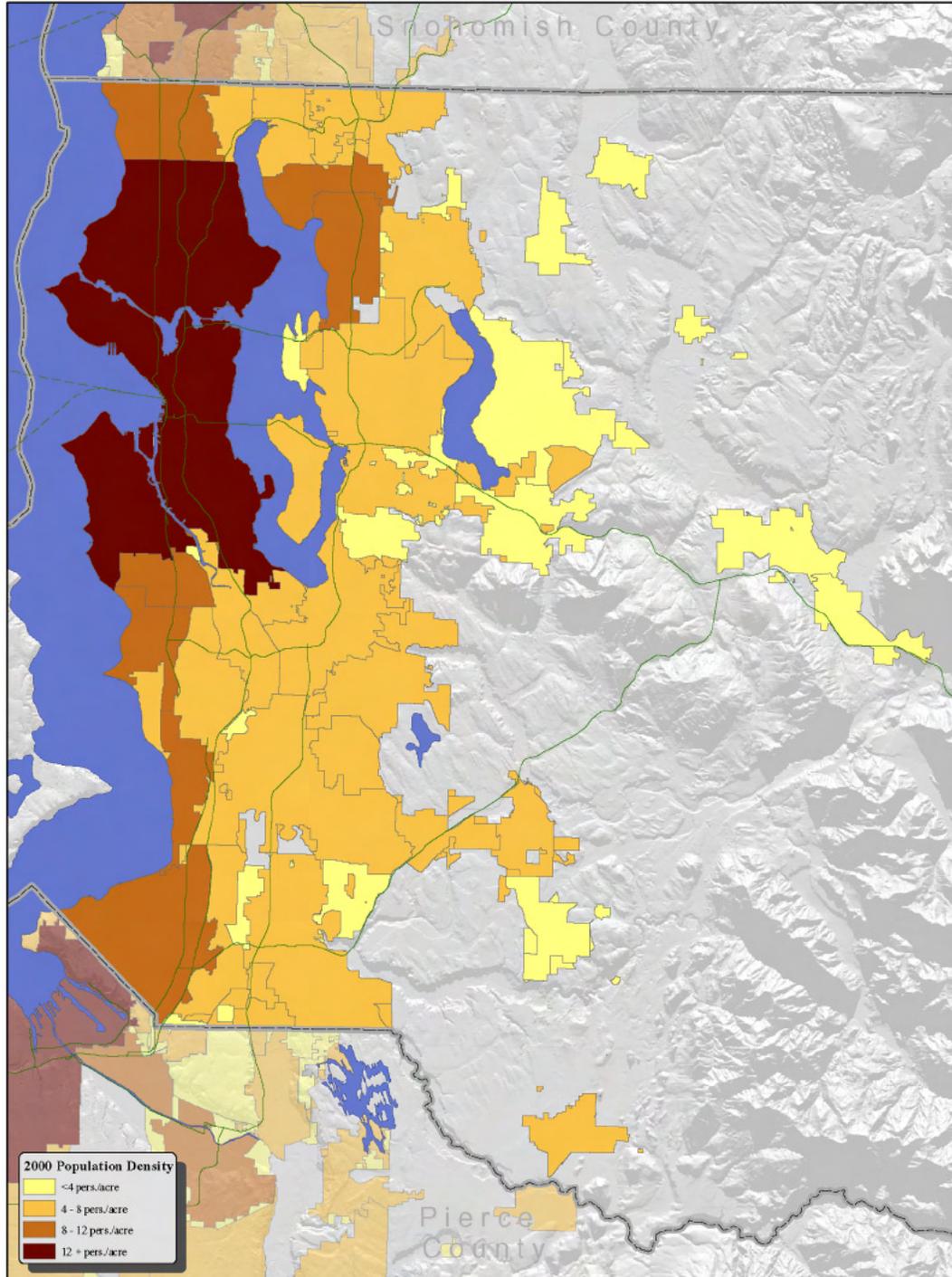
Notes: \*The counties did not analyze capacity in the rural area in their Buildable Lands work. For the purpose of this report, the ‘New Target’ for the rural area is used as a proxy for rural capacity. \*\*Rural (Non-Resource) land uses include rural residential, commercial, industrial, mixed-use, public, civic or quasi-public, and tribal lands. ‘New Target’ proportions may differ from Figure 34 because this figure analyzes the target in units of households instead of population. This occurs because of variations in persons-per-household factors and group quarters growth. Note different jurisdictional boundaries between previous and new targets. See Appendices G, H for supporting data.

The major concentrations of targets, capacity, current population, and recent development are all within incorporated cities. The only difference between King County’s original target and the current one is an increase in the share of growth targeted to cities and a decrease in targets to unincorporated urban areas. However, a significant amount of land (within an Urban Growth Area held constant) was either annexed or incorporated between 1992 and 2002, which more than accounts for the increase in the proportion of the county’s target going to cities.

Recent development, which corresponds to eight of the twenty years of the original planning period, largely followed the distribution intended by the originally adopted targets. Differences include: a slightly larger share of countywide growth went to both the rural area and the urban unincorporated area than targeted, with less growth occurring in cities than the targets intended. More than anything else, recent development followed the existing pattern of development.

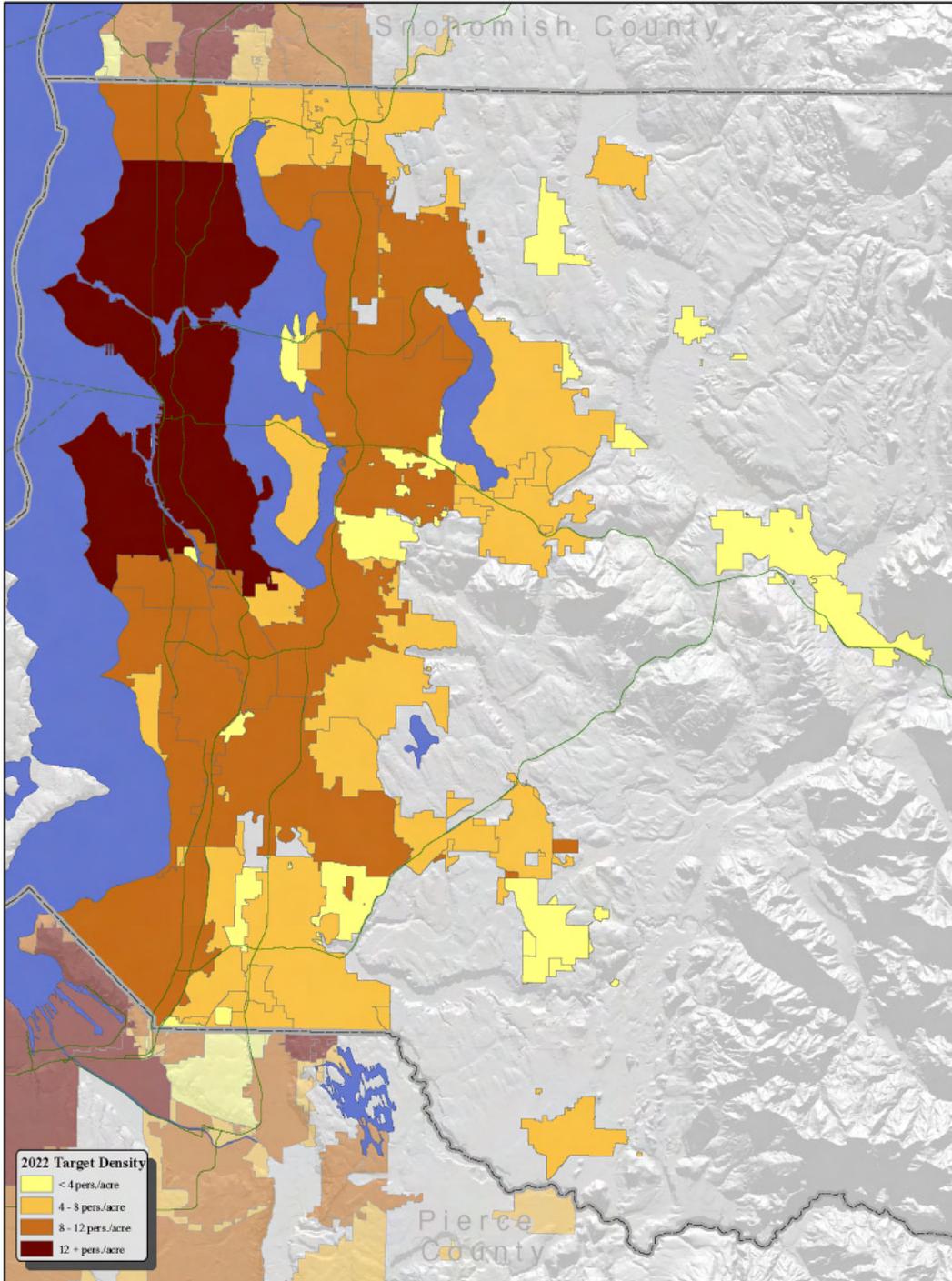
Figures 40, 41 and 42 illustrate the effect of the targets on average net density in King County cities and planning areas. The first map shows approximate existing net residential density and the second map shows the average net densities that would exist in 2022 if the targets were realized. The third map shows the change in net density that would result from the new targets.

**FIGURE 40: KING COUNTY – 2000 AVERAGE (NET) RESIDENTIAL DENSITY**



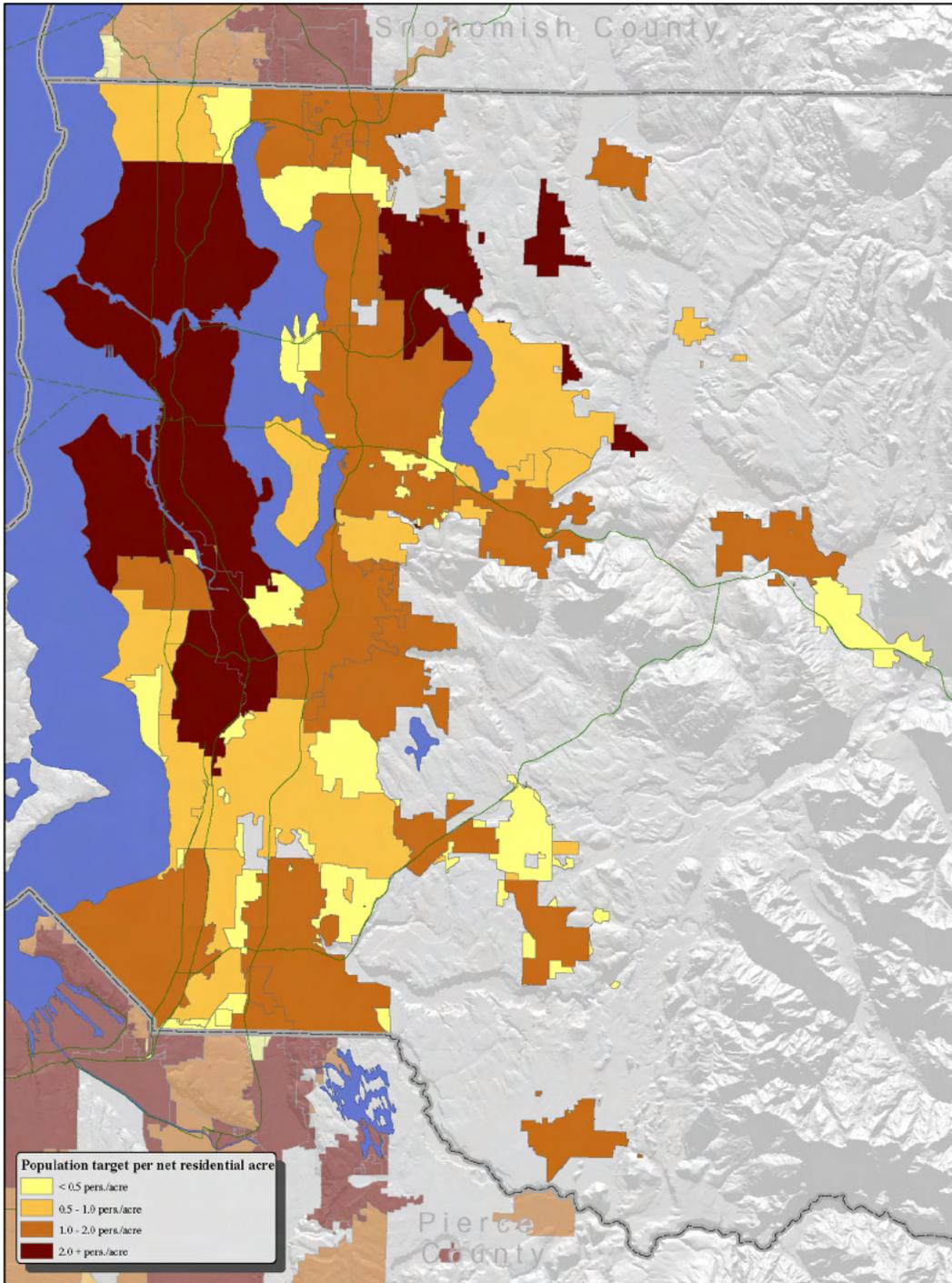
Note: King County's population target figures are derived, representing a conversion of the adopted household target to an estimated population target. Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 41: KING COUNTY – 2022 AVERAGE (NET) RESIDENTIAL DENSITY**



Note: King County's population target figures are derived, representing a conversion of the adopted household target to an estimated population target. Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 42: KING COUNTY – INCREASE IN DENSITY RESULTING FROM TARGET**

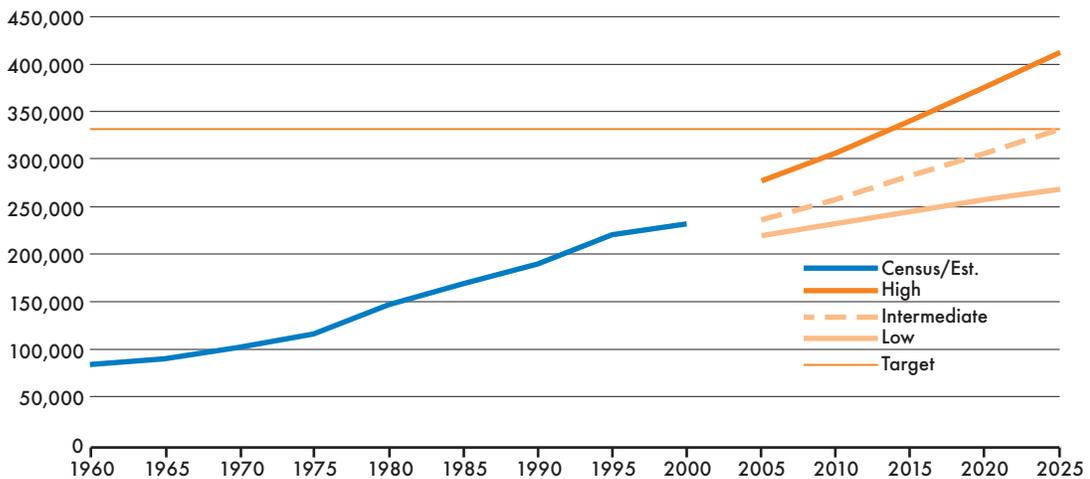


Note: King County's population target figures are derived, representing a conversion of the adopted household target to an estimated population target. Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

### What Are the Kitsap County Population Targets?

The Kitsap County selected OFM target was for 99,602 new residents between 2000 and 2025. This point is even with OFM’s ‘most likely’ projection. Due to several factors, including a smaller base population, more variability in historical growth, a sizeable but less predictable military population, and previous requests by the county for more latitude in the projections, Kitsap County was given the largest projection range in the region (from 81 percent above the middle growth projection to 63 percent below). The population projection total of 331,571 represents an average annual growth rate of 1.44 percent over the planning horizon.

**FIGURE 43: KITSAP COUNTY RESIDENTIAL TARGET SELECTION AND OFM PROJECTION RANGE**



As mentioned in the introduction to this chapter, the methodology used by Kitsap County to carry out their Buildable Lands analysis does not provide a single capacity figure. However, a new capacity analysis is currently under way, with results expected in 2005.

**FIGURE 44: KITSAP COUNTY RESIDENTIAL GROWTH TARGET STATISTICS**

OFM Projection Range	
High .....	412,391
Medium.....	331,571
Low .....	268,573
2025 Targeted Population.....	331,571
Growth Target .....	99,602
Annual Population Growth.....	3,984
Average Targeted Annual Growth Rate.....	1.44 %
Buildable Lands Capacity.....	n/a

The targets approved by the Kitsap Regional Coordinating Council on July 6, 2004 and adopted by the Kitsap County Board of Commissioners on November 22, 2004 accommodate a countywide population growth target through 2025 of 99,602. The 2004 adoption date is four years into the planning horizon, which affected the suballocation process.

Since the majority of growth in those four years occurred in the rural area (between the start of Kitsap County’s planning period [2000] and the adoption of the growth targets in late 2004), the original requirement embodied in the Kitsap County CPPs that 5/6 (86 percent) of total growth be targeted to

the urban area was deemed to be infeasible.<sup>80</sup> Because of this, the CPPs were amended concurrently with target adoption to lower the required proportion to 75 percent, with a five-year revisiting clause. Kitsap County has also allocated a target of 6,300 to a Silverdale UGA expansion study area, which was included as an urban allocation for the purposes of calculating this proportion.

Figure 45 illustrates the location of each of the areas that received targets.

Figure 46 identifies the targets adopted by Kitsap County into the CPPs, and the targeted growth rate for each area.

**FIGURE 46: KITSAP COUNTY POPULATION TARGETS**

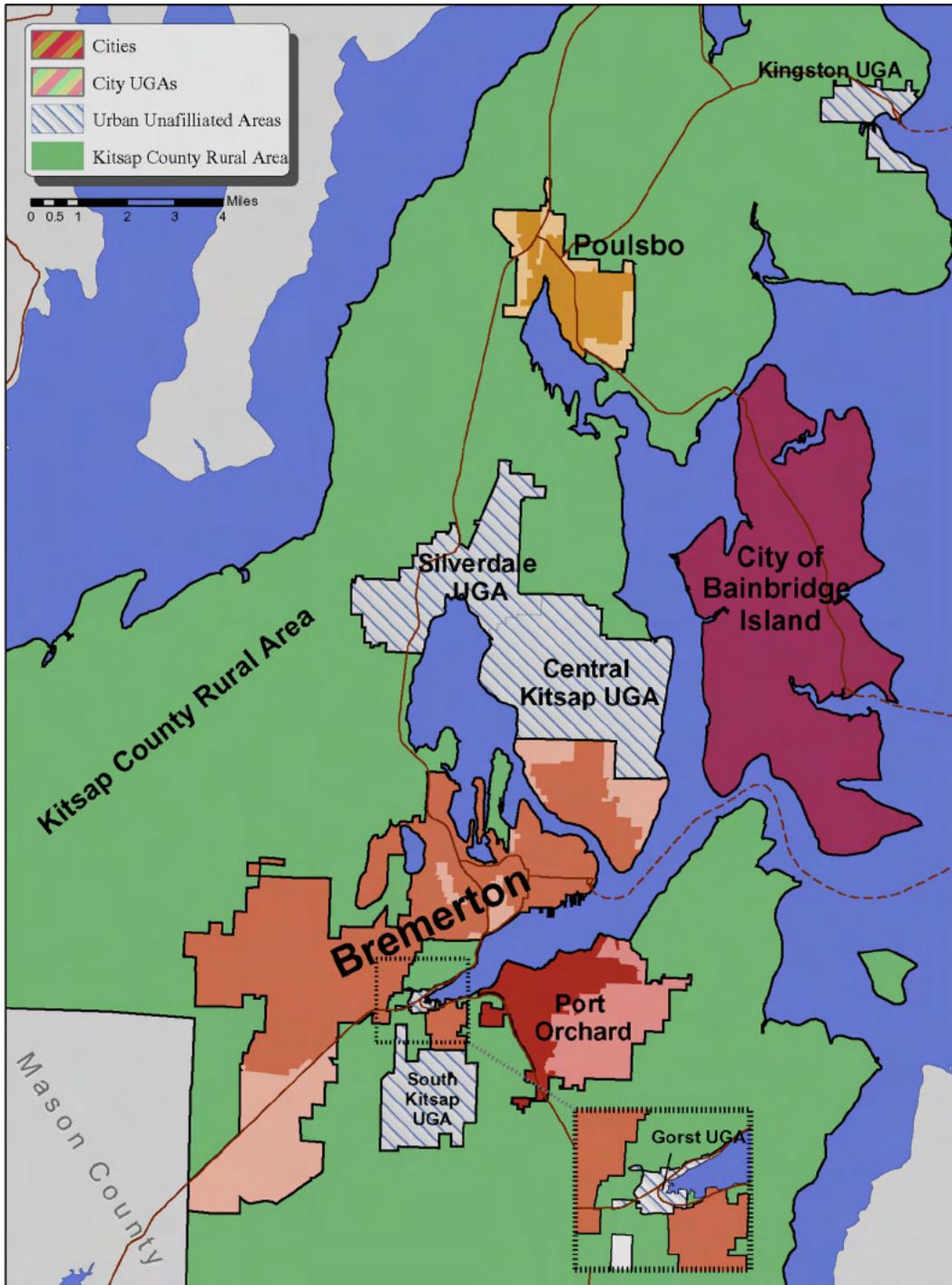
	Estimated Households in 2000		Population Growth Target 2000–2025 and Average Annual Growth Rate		Targeted Population in 2025	
	City	UGA	City	UGA	City	UGA
Bremerton	37,258	8,709	14,759 (1.3%)	4,159 (1.6%)	52,017	12,868
Bainbridge Island	20,308	–	8,352 (1.4%)	– (–)	28,660	–
Poulsbo	6,813	901	3,739 (1.8%)	3,355 (6.4%)	10,552	4,256
Port Orchard	7,693	11,570	3,600 (1.5%)	3,375 (1.0%)	11,293	14,945
Central Kitsap UGA	–	21,743	– (–)	8,733 (1.4%)	–	30,476
South Kitsap UGA	–	1,241	– (–)	8,024 (8.4%)	–	9,265
Gorst UGA	–	154	– (–)	73 (1.6%)	–	227
Kingston UGA	–	1,871	– (–)	3,135 (4.0%)	–	5,006
Silverdale UGA	–	15,276	– (–)	8,059 (1.7%)	–	23,335
<b>Subtotals</b>						
City	72,072		30,450 (1.4%)		102,522	
Urban Unincorp. Affiliated	21,180		10,909 (1.7%)		32,089	
Urban Unincorp. Unaffil.	40,285		28,024 (2.1%)		68,309	
Urban Area	133,537		69,383 (1.7%)		202,920	
UGA Expansion Allocation*	–		6,334 (–)		6,334	
Rural Area	98,432		23,905 (0.9%)		122,337	
<b>County Total</b>	<b>231,969</b>		<b>99,602 (1.4%)</b>		<b>331,571</b>	

Note: \*This allocation represents a 'Port Orchard UGA Expansion Study Area.'

As seen in the figure, most areas are targeted to grow at a rate similar to that of the county as a whole, with some notable exceptions: the South Kitsap UGA, the Poulsbo UGA, and the Kingston UGA. These three areas all have growth targets that exceed their current population, with the South Kitsap UGA in particular facing an average targeted annual growth rate of 8.4 percent, leading to over a six fold increase in population through the projection period. The unincorporated urban area surrounding Poulsbo is also targeted to more than triple in population, while the currently more heavily populated unincorporated Kingston UGA is targeted to nearly double in population.

<sup>80</sup> In order for the county to reach the 5/6 percentage, new growth from 2004-2025 would have had to be focused at a proportion greater than 83% urban to make up for the rural growth that had already occurred.

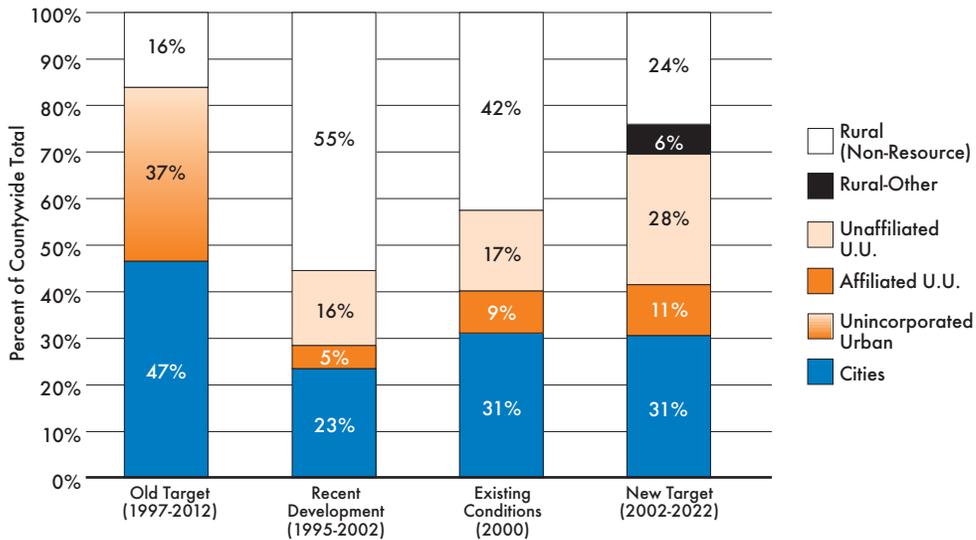
**FIGURE 45: KITSAP COUNTY AREAS THAT HAVE A TARGET**



Note: The dark colors represent cities; the light colors represent the unincorporated areas.

Figure 47 illustrates how much of the total countywide target goes to cities, unincorporated urban areas, and the rural area, and compares this to the contextual data.

**FIGURE 47: KITSAP COUNTY POPULATION TARGETS – CONTEXT DATA COMPARISON**

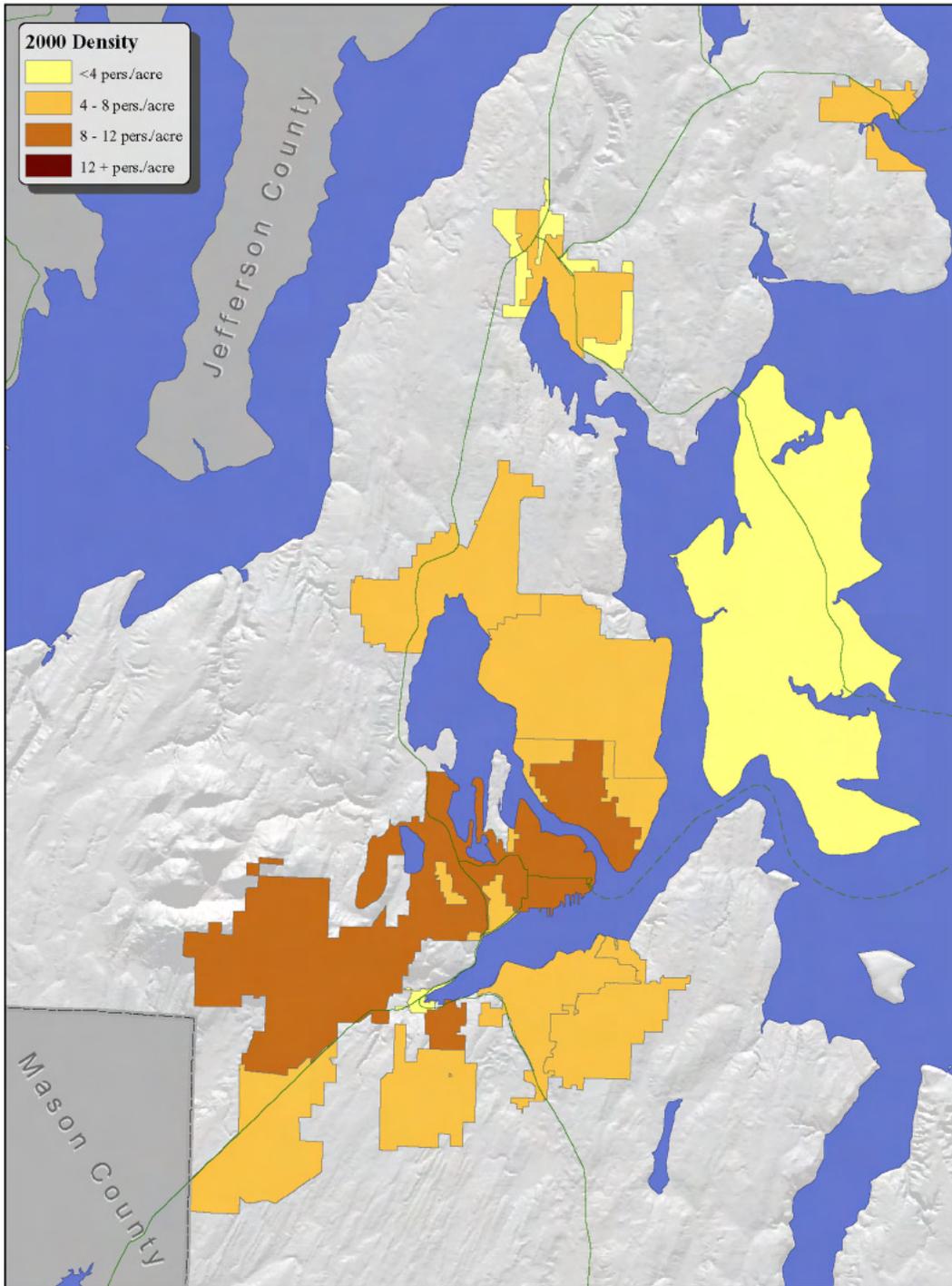


Notes: \*Rural (Non-Resource) land uses include rural residential, commercial, industrial, mixed-use, public, civic or quasi-public, and tribal lands. The 'Rural-Other' category represents a target of 6,300 for a 'Port Orchard UGA Expansion Study Area'. If approved, the portion of the population reserve associated with the study area becomes part of the urban growth allocation. Note different jurisdictional boundaries between previous and new targets. See Appendices D, H for supporting data.

Kitsap County is a largely rural and semi-rural county, containing only four cities, which represent about 15 percent of the land area and contain less than a third of the county's population. Recently issued building permits show that the majority of development continues to locate in the rural area, in contrast to the previously targeted distribution. The new targets, while less aggressive than the previous, particularly for the cities, still reflect a significant change from recent development. Achieving the targets will require a change in jurisdictional activity, particularly in the rural area.

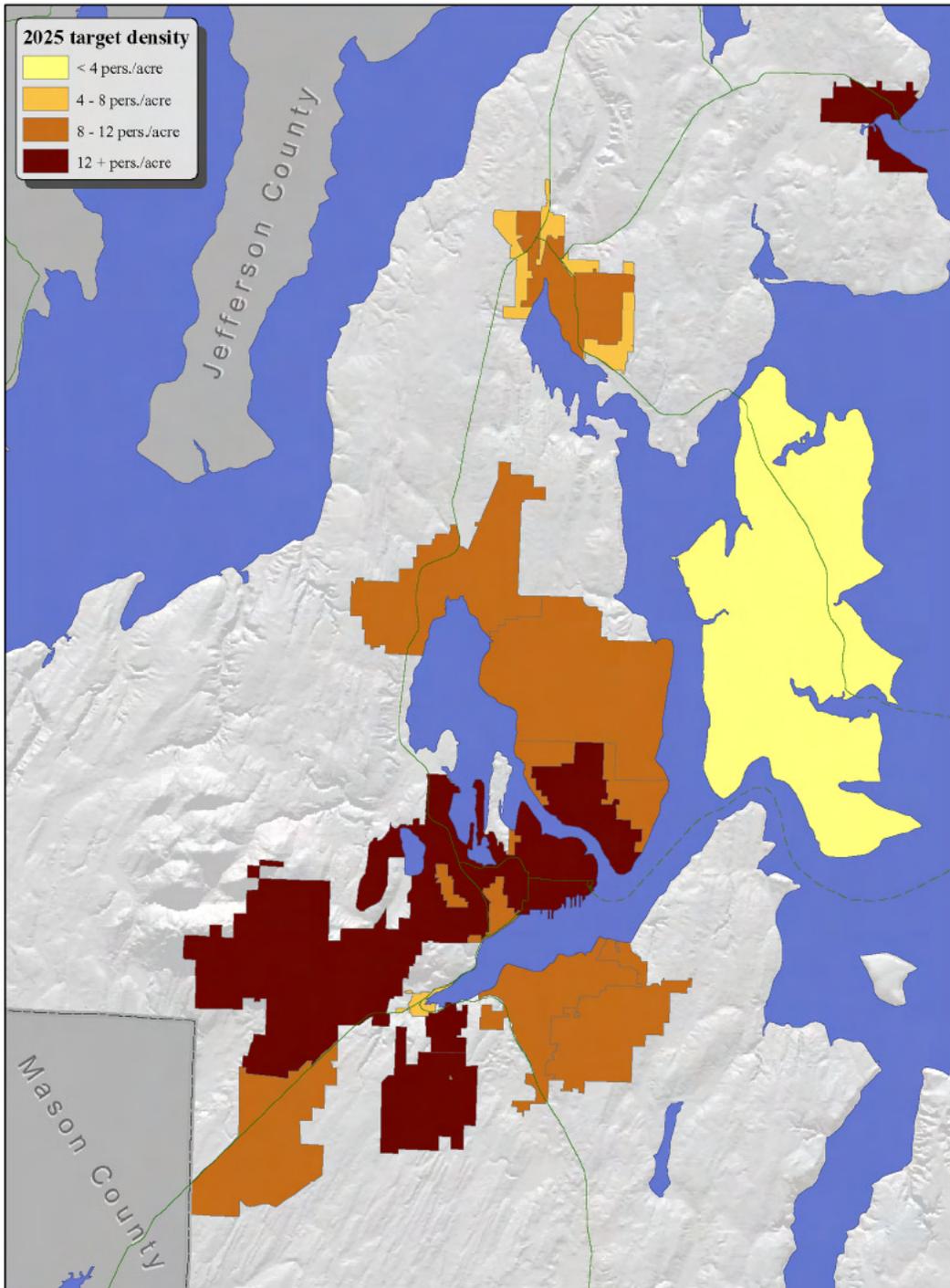
Figures 48, 49 and 50 illustrate the effect of the targets on average net density in Kitsap County cities and planning areas. The first map shows approximate existing net residential density and the second map shows the average net densities that would exist in 2025 if the targets were realized. The third map shows the change in net density that would result from the new targets.

**FIGURE 48: KITSAP COUNTY – 2000 AVERAGE (NET) RESIDENTIAL DENSITY**



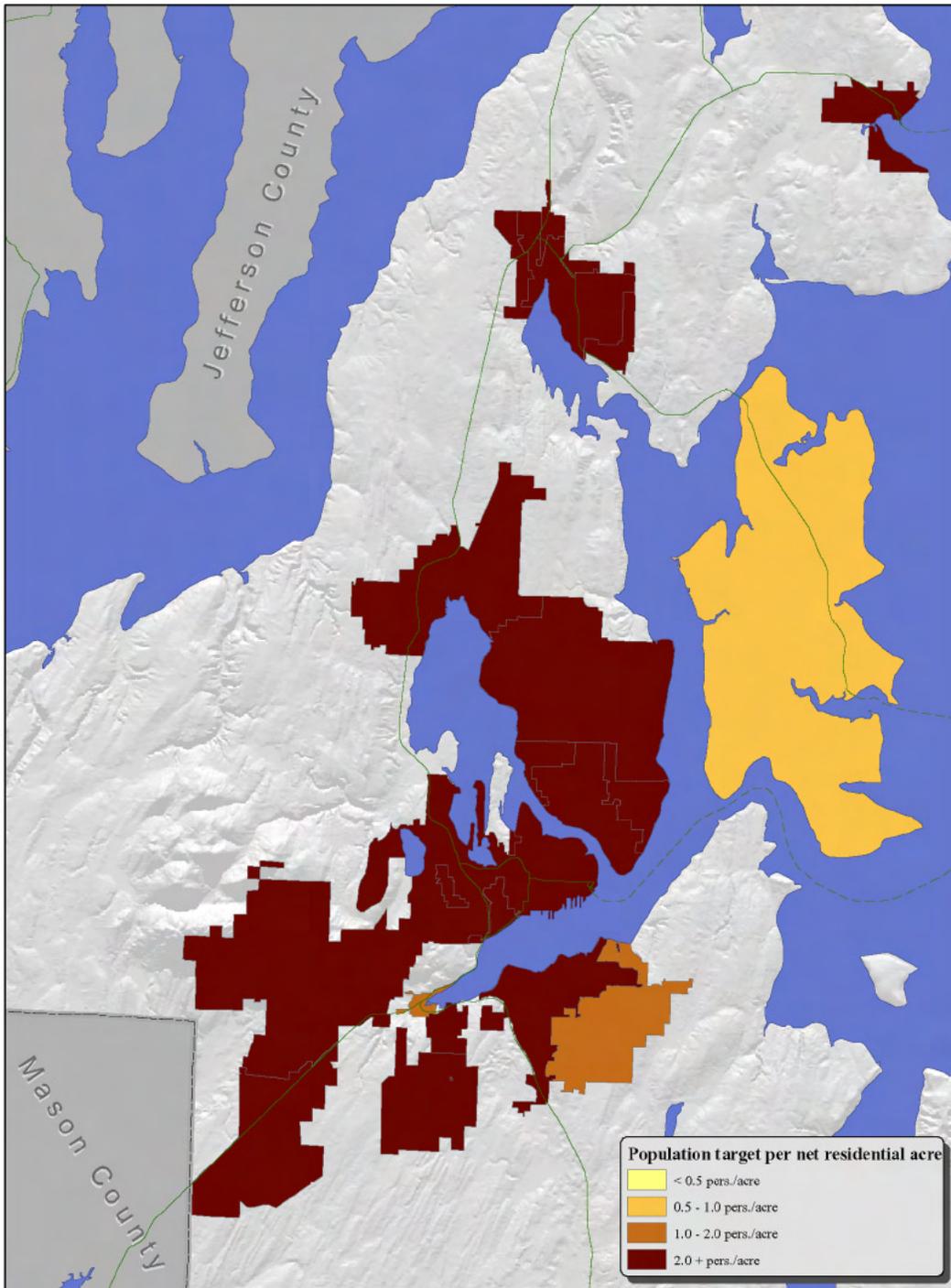
Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 49: KITSAP COUNTY – 2025 AVERAGE (NET) RESIDENTIAL DENSITY**



Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 50: KITSAP COUNTY – INCREASE IN DENSITY RESULTING FROM TARGET**

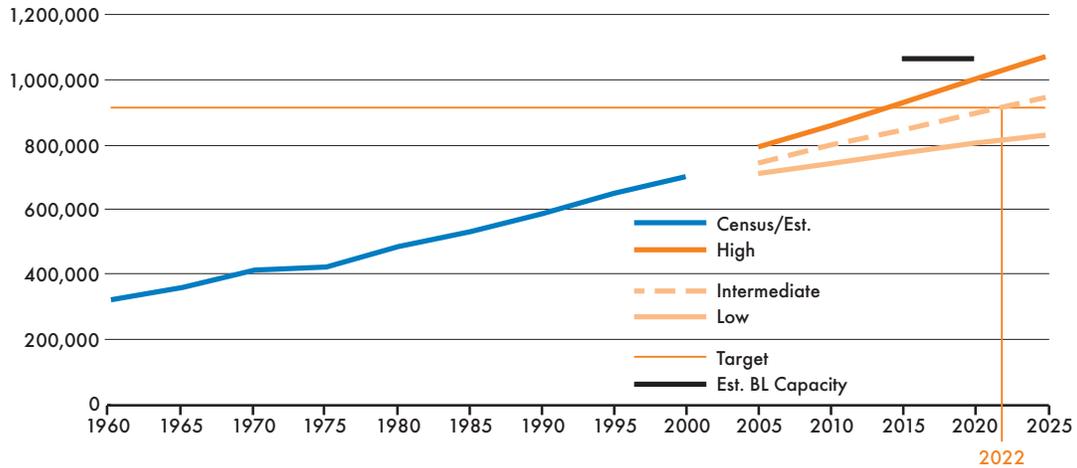


Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

## What Are the Pierce County Population Targets?

The Pierce County selected OFM target was for 211,889 new residents between 2000 and 2022. Pierce County was given a projection range of about 12 percent above on the high side, and 11 percent below on the low side for their planning horizon of 2022. The population projection total of 912,700 represents an average annual growth rate of 1.21 percent over the planning horizon.

**FIGURE 51: PIERCE COUNTY RESIDENTIAL TARGET SELECTION AND OFM PROJECTION RANGE**



Notes: \*Est. capacity is a derived number stemming from Pierce County’s Buildable Lands Capacity analysis. The reported household capacity of the urban area was added to a proxy for rural capacity (the new rural target) and factored by the 2000 Census persons-per-household value.

Given that Pierce County had adopted ‘interim’ targets for the period 1997-2017, the Buildable Lands capacity figure is intended to represent capacity to about 2017, later than the other three counties. This county’s target population of 912,700 by 2022 is less than the estimated Buildable Lands capacity figure 1,063,935, which shows sufficient capacity already in place by 2017 to meet the growth for 2022.

**FIGURE 52: PIERCE COUNTY RESIDENTIAL GROWTH TARGET STATISTICS**

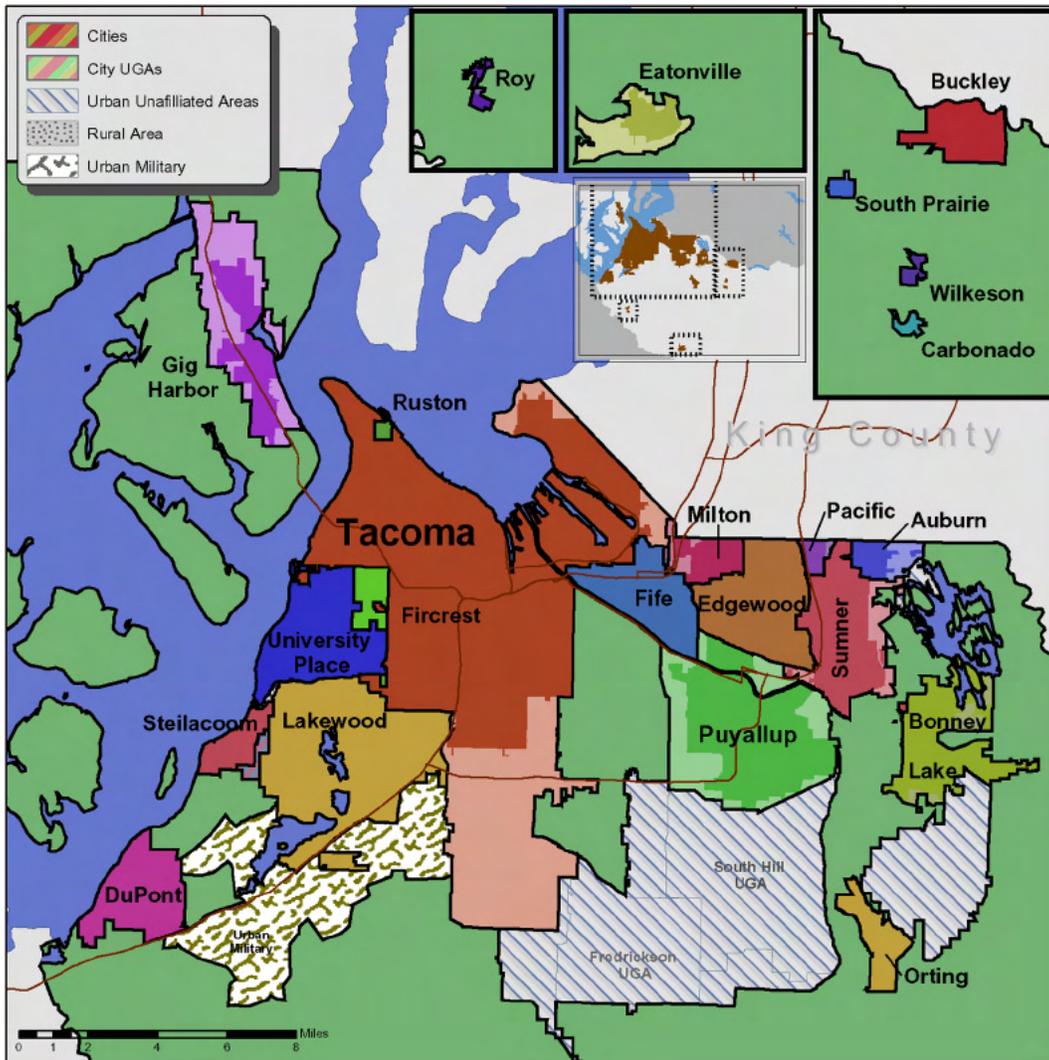
**OFM Projection Range**

High .....	1,027,718
Medium.....	912,711
Low .....	813,466
2022 Targeted Population.....	912,700
Growth Target .....	211,889
Annual Population Growth.....	9,631
Average Targeted Annual Growth Rate.....	1.21 %
Est. Buildable Lands Capacity .....	1,063,935

After coordination between Pierce County and its cities through the work of the Growth Management Coordinating Committee (GMCC), a countywide target of 211,889 new residents between 2000 and 2022 was selected.

Figure 53 illustrates the location of each of the areas that received targets.

**FIGURE 53: PIERCE COUNTY AREAS THAT HAVE A TARGET**



Note: The dark colors represent cities; the light colors represent the unincorporated areas.

Figure 54 identifies the targets adopted by Pierce County and the targeted growth rate for each area.

**FIGURE 54: PIERCE COUNTY POPULATION TARGETS**

	Estimated Population in 2000		Population Growth Target 2000–2022 and Average Annual Growth Rate		Targeted Population in 2022	
	City	UGA	City	UGA	City	UGA
Auburn	151	221	7,799 (19.7%)	3,329 (13.5%)	7,950	3,550
Bonney Lake	10,874	860	7,956 (2.5%)	2,320 (6.1%)	18,830	3,180
Buckley	4,145	–	1,055 (1.0%)	– (–)	5,200	–
Carbonado	621	22	209 (1.3%)	28 (3.8%)	830	50
DuPont	2,452	–	6,648 (6.1%)	– (–)	9,100	–
Eatonville	2,012	358	768 (1.5%)	982 (6.2%)	2,780	1,340
Edgewood	9,089	–	4,611 (1.9%)	– (–)	13,700	–
Fife	4,784	445	4,116 (2.9%)	235 (1.9%)	8,900	680
Fircrest	5,868	37	932 (0.7%)	3 (0.4%)	6,800	40
Gig Harbor	6,477	6,239	4,323 (2.4%)	3,711 (2.1%)	10,800	9,950
Lakewood	58,211	23,473	13,789 (1.0%)	1,427 (0.3%)	72,000	24,900
Milton	4,981	131	2,019 (1.6%)	539 (7.7%)	7,000	670
Orting	3,760	–	4,140 (3.4%)	– (–)	7,900	–
Pacific	154	14	–154 (–100%)	–4 (–100%)	–	10
Puyallup	33,014	7,082	5,586 (0.7%)	4,418 (2.2%)	38,600	11,500
Roy	707	3	293 (1.6%)	17 (9.0%)	1,000	20
Ruston	738	–	1,022 (4.0%)	– (–)	1,760	–
South Prairie	382	6	448 (3.6%)	44 (10.1%)	830	50
Steilacoom	6,049	–	851 (0.6%)	– (–)	6,900	–
Sumner	8,504	818	3,746 (1.7%)	1,282 (4.4%)	12,250	2,100
Tacoma	193,564	56,638	61,676 (1.3%)	10,462 (0.8%)	255,240	67,100
University Place	29,933	–	4,067 (0.6%)	– (–)	34,000	–
Wilkeson	395	–	155 (1.5%)	– (–)	550	–
Unaffiliated/Contested	–	73,517	– (–)	31,723 (1.6%)	–	105,240
<b>Subtotals</b>						
City	386,865		136,055 (1.4%)		522,920	
Urban Unincorp. Affiliated	96,347		28,793 (1.2%)		125,140	
Urban Unincorp. Unaffil.	73,517		31,723 (1.6%)		105,240	
Urban Area	556,729		196,571 (1.4%)		753,300	
Rural Area	144,082		15,318 (0.5%)		159,400	
<b>County Total</b>	<b>700,811</b>		<b>211,889 (1.2%)</b>		<b>912,700</b>	

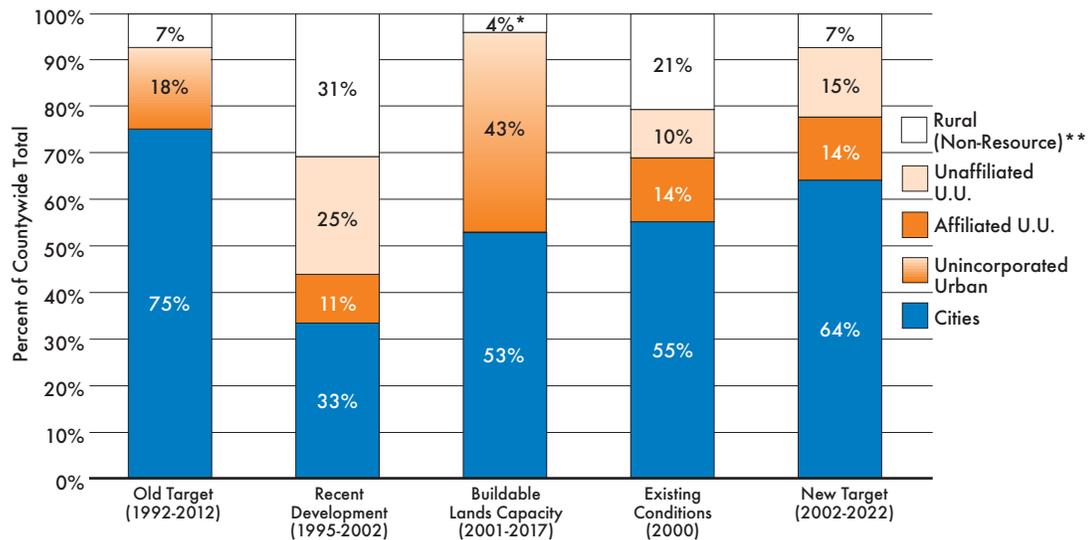
The county as a whole is targeted to grow roughly 1.2 percent per year through the planning period. About 30 percent of this growth target has been allocated to the City of Tacoma, 34 percent to other cities, 29 percent to the urban unincorporated area, and the 7 percent balance to the rural area.

By far the largest growth rate targeted in the county is the Pierce County portion of the city of Auburn and its associated Urban Growth Area. Both of these relatively small areas, resulting largely from the planned *Lakeland Hills* development, are targeted to grow from a combined 372 residents in 2000 to 11,500 by 2022. Other areas in Pierce County targeted to experience strong growth include Dupont, which is targeted to add an additional 6,600 residents to its existing population of 2,452, as well as Orting, Gig Harbor, Fife, Bonney Lake, and their respective UGAs, which all are targeted to grow at over 2 percent annually.

With a targeted annual growth rate of 1.6 percent per year, Pierce County’s County Urban Growth Area is targeted to add nearly 32,000 new residents during the twenty-year planning period. This gives Pierce County the highest number of residents targeted to an unaffiliated unincorporated urban area (Kitsap is close behind with 26,000 people). This target includes allocations for master-planned developments that are already underway, including Cascadia (5,000 acres in the area south of Bonney Lake), Sunrise, and Silver Creek.

Figure 55 illustrates how much of the total countywide target goes to cities, unincorporated urban areas, and the rural area, and compares this to the contextual data.

**FIGURE 55: PIERCE COUNTY POPULATION TARGETS – CONTEXT DATA COMPARISON**

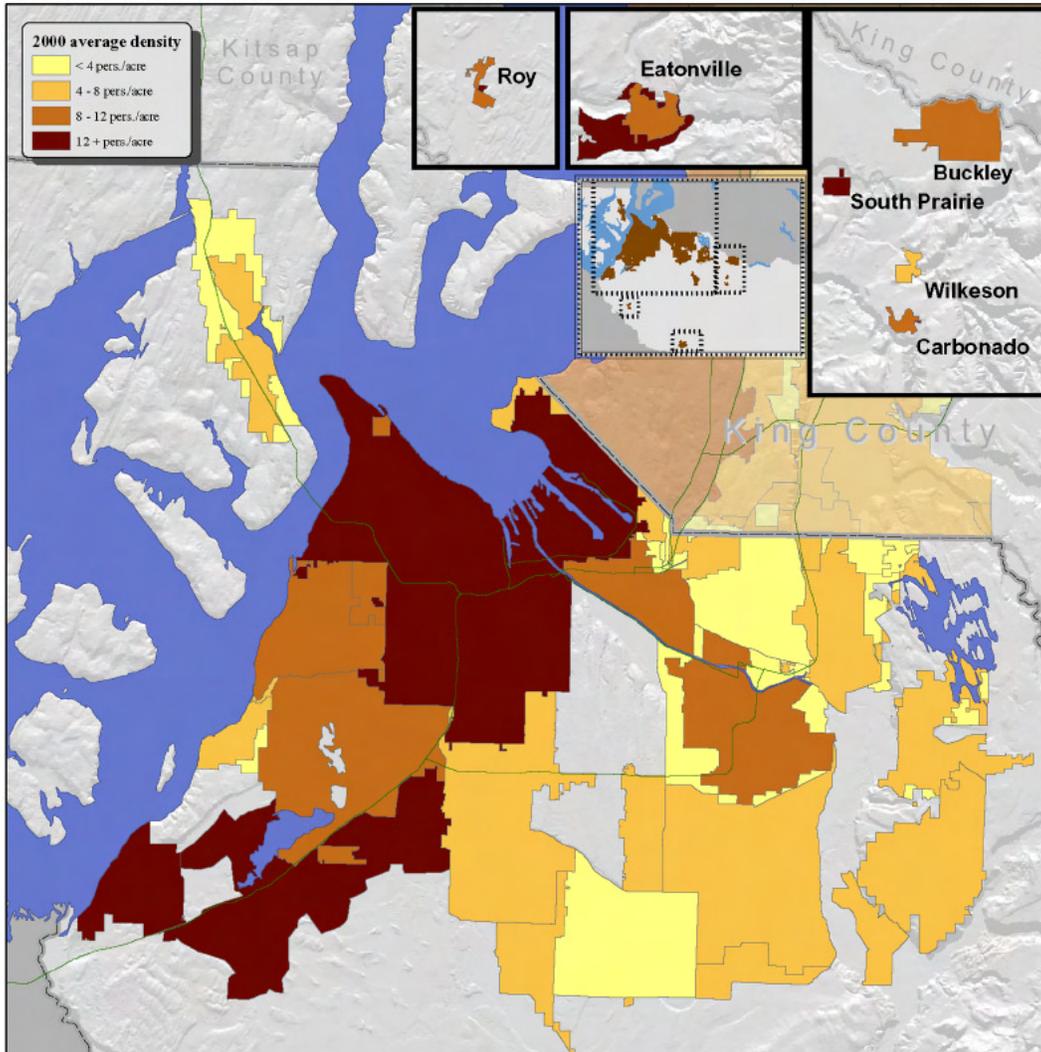


Notes: \*The counties did not analyze capacity in the rural area in their Buildable Lands work. For the purpose of this report, the ‘New Target’ for the rural area is used as a proxy for rural capacity. \*\*Rural (Non-Resource) land uses include rural residential, commercial, industrial, mixed-use, public, civic or quasi-public, and tribal lands. Note different jurisdictional boundaries between previous and new targets. See Appendices E, G, H for supporting data.

Analysis of the distribution of the 2000-2022 growth targets for Pierce County shows a higher proportion of the countywide target going to incorporated cities than the existing distribution and almost twice the proportion as recent development trends. This indicates that a lot of progress must be made to counteract a trend of nearly one-third of countywide residential growth occurring in the rural area in order to achieve the targeted proportion of 7 percent rural growth.

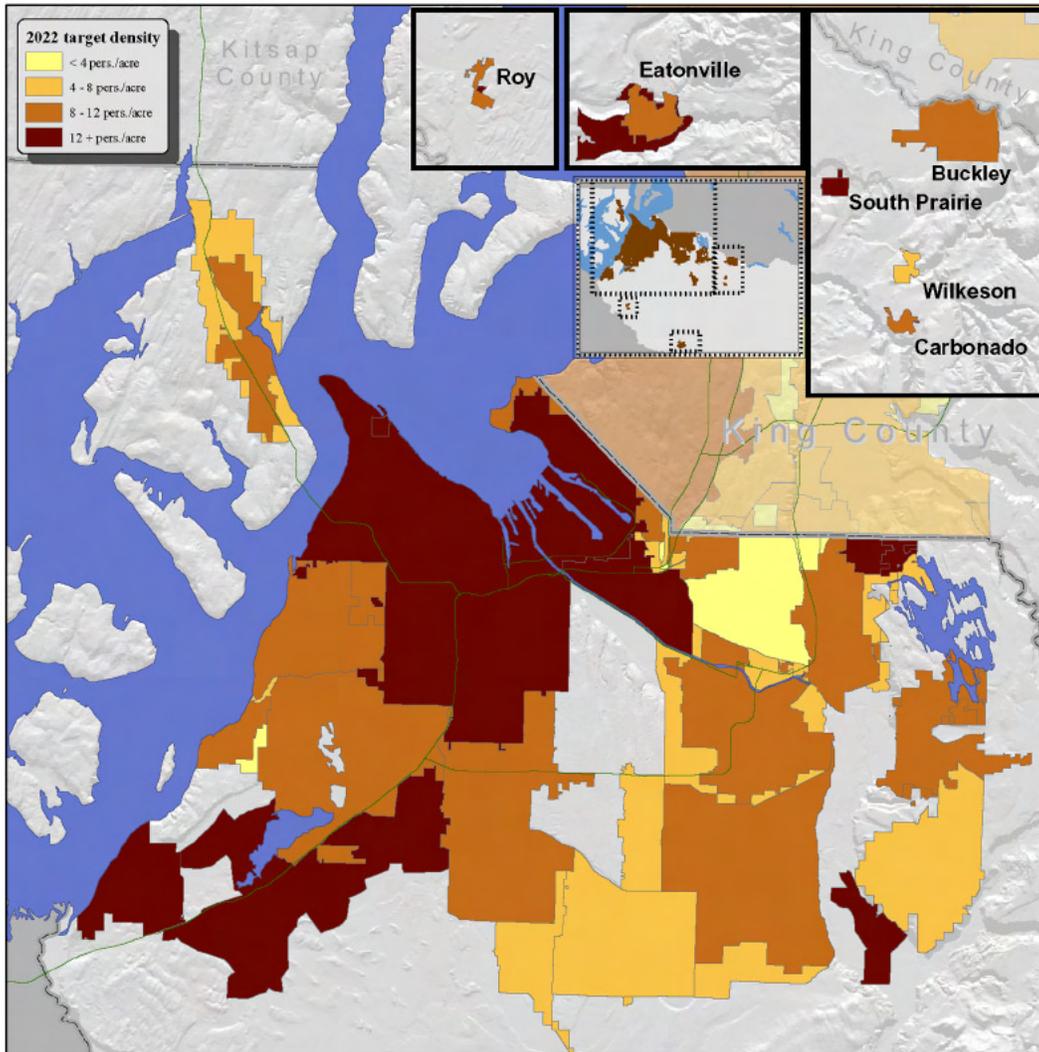
Figures 56, 57 and 58 illustrate the effect of the targets on average net density in Pierce County cities and planning areas. The first map shows approximate existing net residential density and the second map shows the average net densities that would exist in 2022 if the targets were realized. The third map shows the change in net density that would result from the new targets.

**FIGURE 56: PIERCE COUNTY – 2000 AVERAGE (NET) RESIDENTIAL DENSITY**



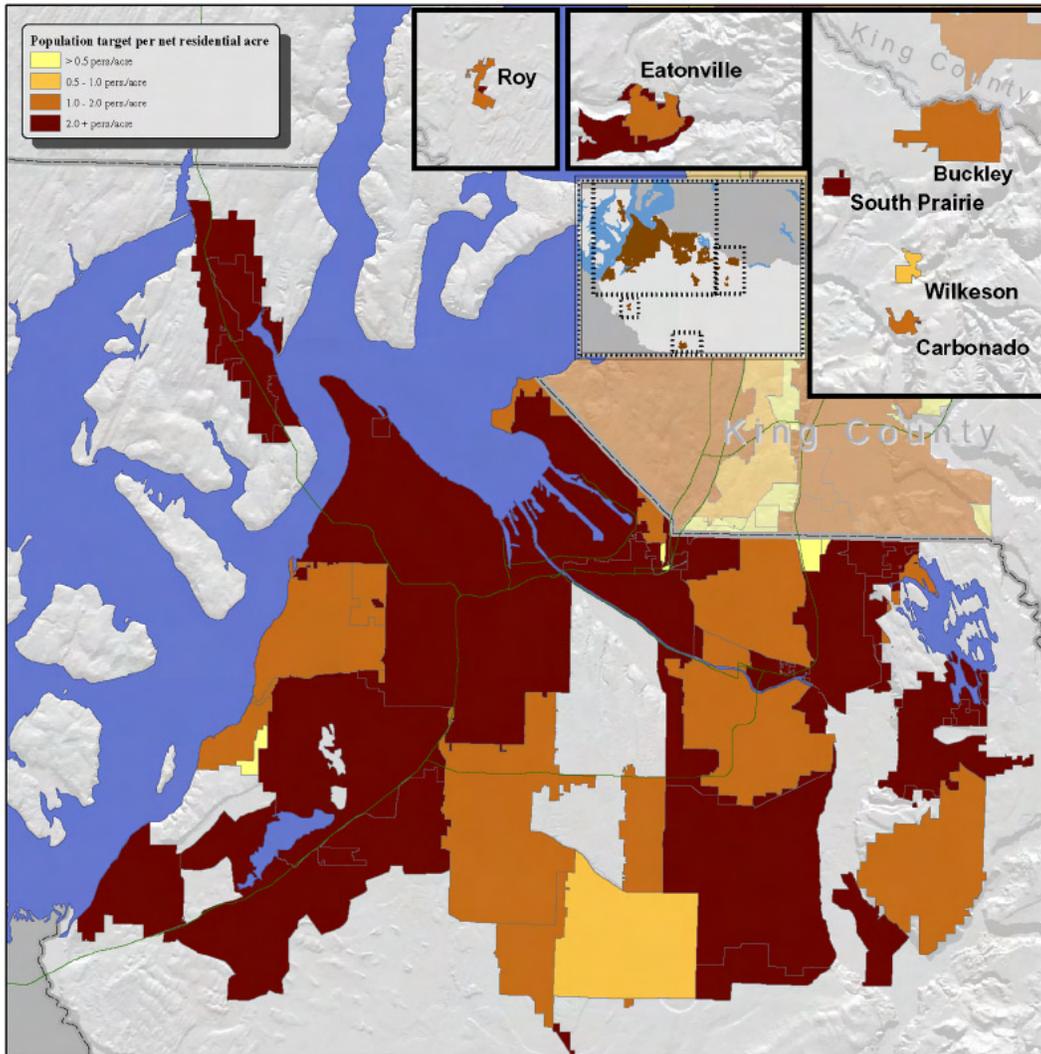
Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 57: PIERCE COUNTY – 2022 AVERAGE (NET) RESIDENTIAL DENSITY**



Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 58: PIERCE COUNTY – INCREASE IN DENSITY RESULTING FROM TARGET**

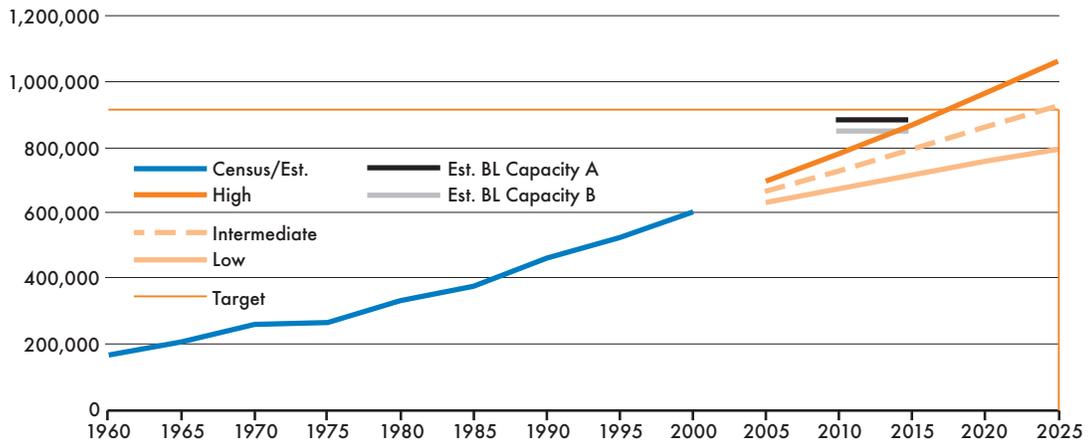


Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

## What Are the Snohomish County Population Targets?

The Snohomish County selected OFM target was for 286,239 new residents between 2002 and 2025. This target is only 5 percent below the OFM mid-range projection, and well within the OFM range of +/- 45 percent. The population projection total of 914,239 represents an average annual growth rate of 1.65 percent over the planning horizon — the highest in the region. Snohomish County also averaged the highest annual growth rate (3.29 percent) in the region for the past 25 years, a likely factor in the high countywide target.

**FIGURE 59: SNOHOMISH COUNTY RESIDENTIAL TARGET SELECTION AND OFM PROJECTION RANGE**



Snohomish County conducted its Buildable Lands analysis using two different sets of assumptions in its methodology, leading to two reported capacities, referred to as “A” and “B”. Both of these values (849,500 and 882,500 respectively) represent sufficient capacity until the year 2012. Under the assumptions of both Buildable Lands analyses, there is likely to be a need to increase capacity in the latter half of the planning period. This potential capacity shortfall is planned to be reevaluated in 2007 with the next round of Buildable Lands analyses.

**FIGURE 60: SNOHOMISH COUNTY RESIDENTIAL GROWTH TARGET STATISTICS**

**OFM Projection Range**

High .....	1,062,903
Medium.....	929,314
Low .....	795,725 2025
Targeted Population.....	914,239
Growth Target .....	286,239
Annual Population Growth.....	12,445
Average Targeted Annual Growth Rate.....	1.65%
Buildable Lands Population Capacity.....	849,500 / 882,500

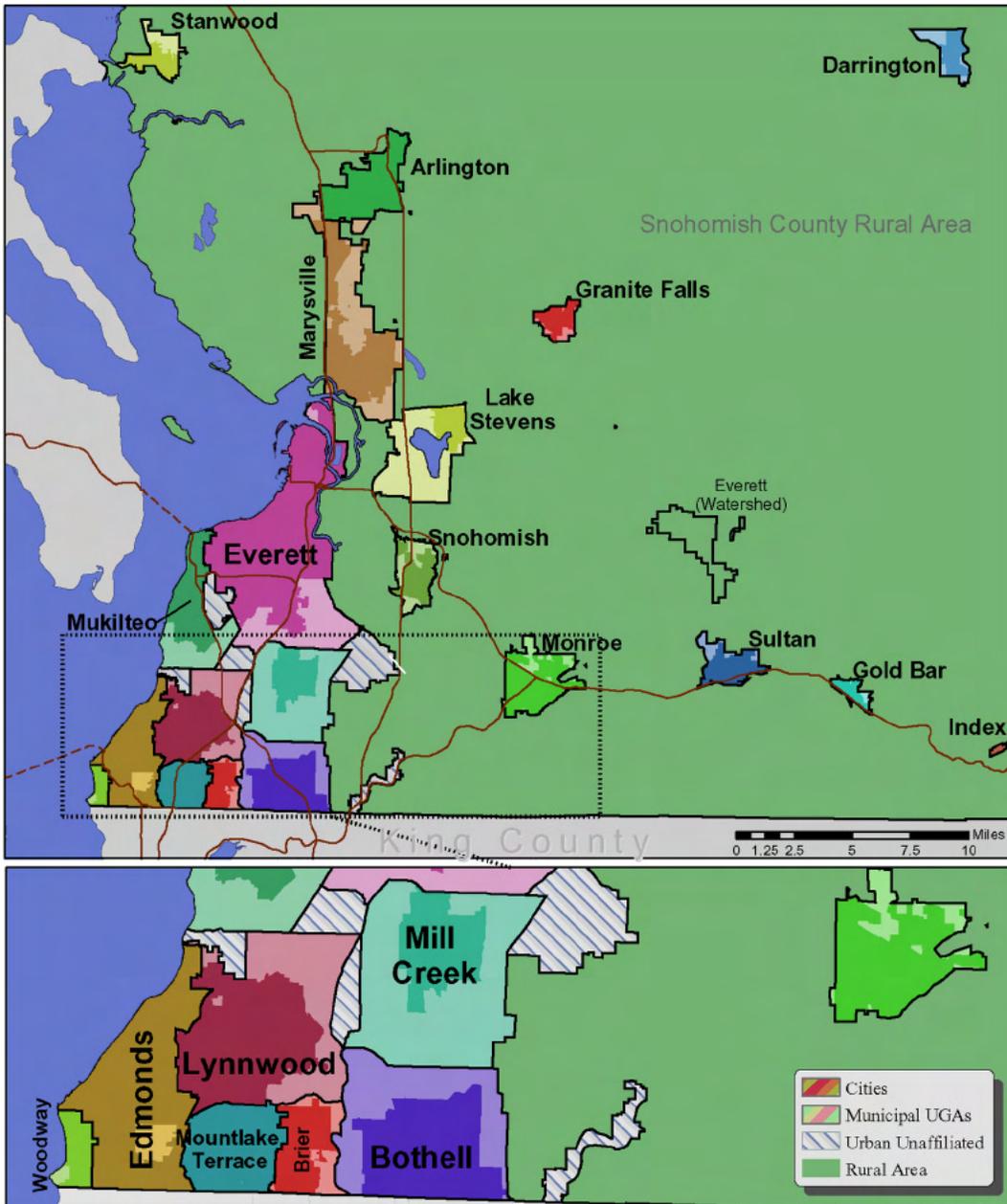
The initial targets that were agreed upon by the cities and the county after the preliminary phase of Snohomish County’s target allocation process resulted in a targeted population of 914,239 by 2025, representing an increase of 286,239 residents from 2002. As described in Chapter 2, Snohomish County’s targets will not become official until adopted into each jurisdiction’s comprehensive plan, which is anticipated by 2005.

Of the countywide target, 15,000, or about 5% of the total, has been reserved for a potential Fully Contained Community, which would locate somewhere outside of the current Urban Growth Area.

Fully Contained Communities (FCC) are authorized in the GMA under RCW 36.70A.350 and allow master planned urban developments in the rural area if certain specific conditions are met. One of these is a requirement that a portion of the twenty-year population projection be reserved and the UGA be offset accordingly.

Figure 61 illustrates the location of each of the areas that received targets.

**FIGURE 61: SNOHOMISH COUNTY AREAS THAT HAVE A TARGET**



Note: The dark colors represent cities; the light colors represent the unincorporated areas.

Figure 59 identifies the targets adopted by Snohomish County into the CPPs, and the targeted growth rate for each area. About 61 percent of Snohomish County's current population lives within the SW UGA, which represents the cities and contiguous urban area from Everett south to the King County line. This area has been targeted to receive half of the County's total growth over the planning period, which will result in its proportion dropping to 57 percent of the countywide total by 2025.

**FIGURE 62: SNOHOMISH COUNTY POPULATION TARGETS**

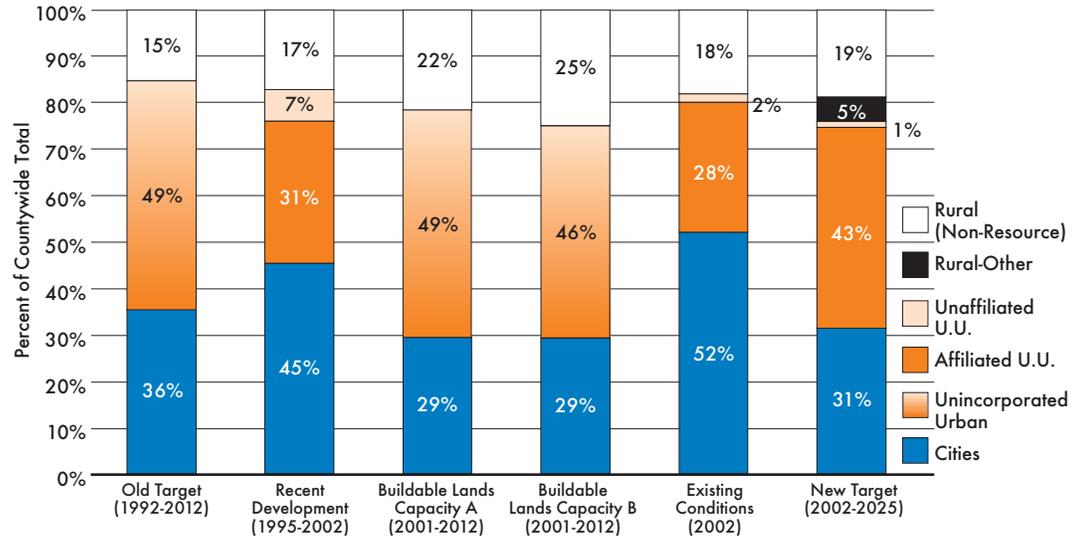
	Estimated Population in 2002		Population Target 2002–2025 and Average Annual Growth Rate		Targeted Population in 2025	
	City	MUGA/PAA	City	MUGA/PAA	City	MUGA/PAA
Arlington	13,280	640	4,080 (1.2%)	2,720 (7.5%)	17,360	3,360
Darrington	1,335	133	575 (1.6%)	82 (2.1%)	1,910	215
Gold Bar	2,055	762	842 (1.5%)	341 (1.6%)	2,897	1,103
Granite Falls	2,760	149	2,010 (2.4%)	2,051 (12.4%)	4,770	2,200
Index	160	–	30 (0.7%)	– (–)	190	–
Lake Stevens	6,640	20,188	1,720 (1.0%)	11,577 (2.0%)	8,360	31,765
Marysville	27,580	23,248	12,140 (1.6%)	10,152 (1.6%)	39,720	33,400
Monroe	14,670	1,570	5,870 (1.5%)	4,480 (6.0%)	20,540	6,050
Snohomish	8,575	1,619	1,406 (0.7%)	2,935 (4.6%)	9,981	4,554
Stanwood	4,085	394	1,565 (1.4%)	2,796 (9.5%)	5,650	3,190
Sultan	3,910	348	4,280 (3.3%)	2,581 (9.7%)	8,190	2,929
Total non–SW UGA	85,050	49,051	34,518 (1.5%)	39,715 (2.6%)	119,568	88,766
Bothell (part)	14,490	16,613	7,510 (1.8%)	11,772 (2.4%)	22,000	28,385
Brier	6,445	2,209	1,345 (0.8%)	1,086 (1.8%)	7,790	3,295
Edmonds	39,460	3,551	5,420 (0.6%)	414 (0.5%)	44,880	3,965
Everett	96,070	38,804	26,990 (1.1%)	27,227 (2.3%)	123,060	66,031
Lynnwood	33,990	22,884	4,520 (0.5%)	15,471 (2.3%)	38,510	38,355
Mill Creek	12,055	31,772	4,034 (1.3%)	24,445 (2.5%)	16,089	56,217
Mountlake Terrace	20,470	84	1,986 (0.4%)	21 (1.0%)	22,456	105
Mukilteo	18,520	10,806	3,480 (0.8%)	3,605 (1.3%)	22,000	14,411
Woodway	990	–	180 (0.7%)	– (n/a)	1,170	–
Unaffiliated	–	11,366	– (–)	3,715 (1.2%)	–	15,081
Total SW UGA	242,490	138,089	55,465 (0.9%)	87,756 (2.2%)	297,955	225,845
<b>Subtotals</b>						
City	327,540		89,983 (1.1%)		417,523	
Urban Unincorp. Affiliated	175,774		123,756 (2.3%)		299,530	
Urban Unincorp. Unaffil.	11,366		3,715 (1.2%)		15,081	
Urban Area	514,680		217,454 (1.5%)		732,134	
UGA Expansion Allocation*	0		15,000 (–)		15,000	
Rural Area	113,320		53,795 (1.7%)		167,115	
<b>County Total</b>	<b>628,000</b>		<b>286,249 (1.6%)</b>		<b>899,249</b>	

Notes: \*This allocation represents an "FCC population reserve." Unincorporated SW UGA area 2002 populations have been derived from 2000 population estimates and building permit data for 2000-2002.

Leading the trend of increasing growth outside of the Southwest UGA are the two cities targeted to grow the fastest in the county over the planning period, Sultan and Granite Falls. With targeted growth rates of 3.3 percent and 2.4 percent respectively, these are the only cities with a targeted growth rate over 2 percent. The Snohomish County portion of the City of Bothell is the only other city that is targeted to grow faster than the county as a whole. If the targets prove accurate, the fastest growth will occur in unincorporated urban areas, with the most growth in absolute terms in the Southwest UGA. The rural area is also targeted to grow by 60 percent between 2002 and 2025, which represents an average annual growth rate of 2.1 percent.

Figure 63 illustrates how much of the total countywide target goes to cities, unincorporated urban areas, and the rural area, and compares this to the contextual data.

**FIGURE 63: SNOHOMISH COUNTY POPULATION TARGETS – CONTEXT DATA COMPARISON**

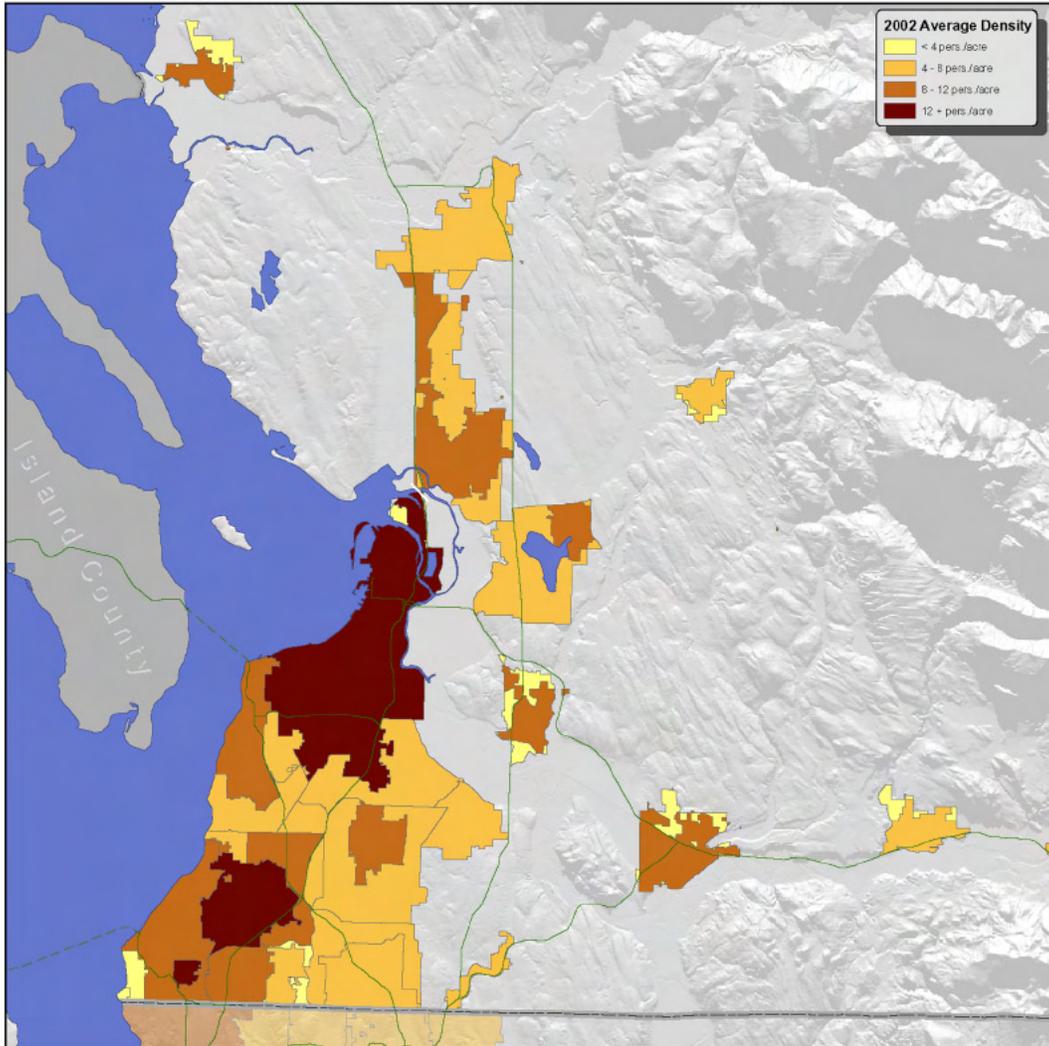


Notes: The counties did not analyze capacity in the rural area in their Buildable Lands work. For the purpose of this report and to facilitate comparison, the rural area percentage for the new target is subtracted from the Buildable Lands Capacity total percentage. Rural (Non-Resource) land uses include rural residential, commercial, industrial, mixed-use, public, civic or quasi-public, and tribal lands. ‘Rural-Other’ represents a target for 15,000 classified as ‘FCC reserve.’ If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC becomes part of the urban growth allocation. Note different jurisdictional boundaries between previous and new targets. See Appendices F, G, H for supporting data.

The majority (52 percent) of current residents of Snohomish County live within incorporated cities. If the initial growth targets prove accurate (and absent annexations), the proportion of residents living in cities will decrease to 46 percent, and the majority will live in the unincorporated areas of the county. Snohomish County is the only one in the region to have targeted a smaller proportion of their growth to cities than currently exists.

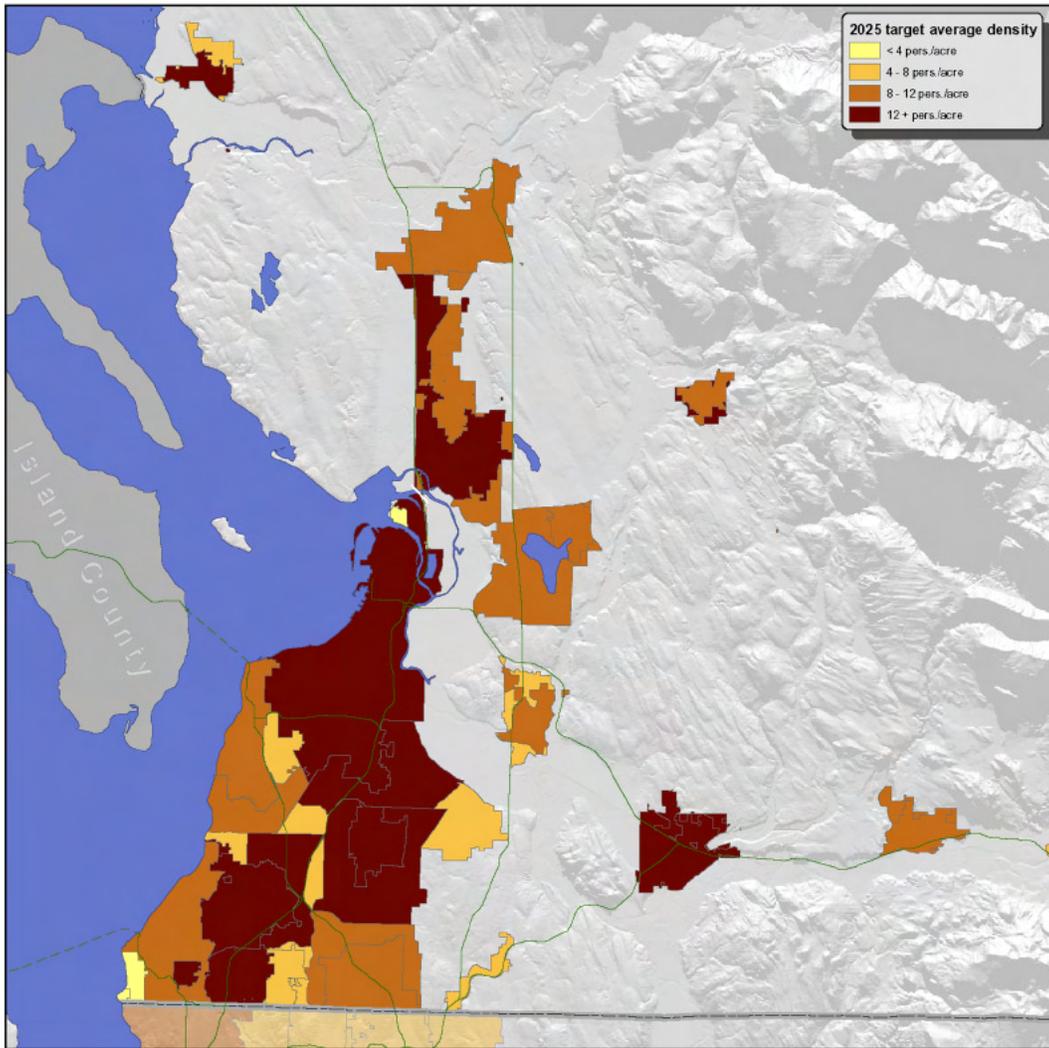
Figures 64, 65 and 66 illustrate the effect of the targets on average net density in Snohomish County cities and planning areas. The first map shows approximate existing net residential density and the second map shows the average net densities that would exist in 2025 if the targets were realized. The third map shows the change in net density that would result from the new targets.

**FIGURE 64: SNOHOMISH COUNTY – 2002 AVERAGE (NET) RESIDENTIAL DENSITY**



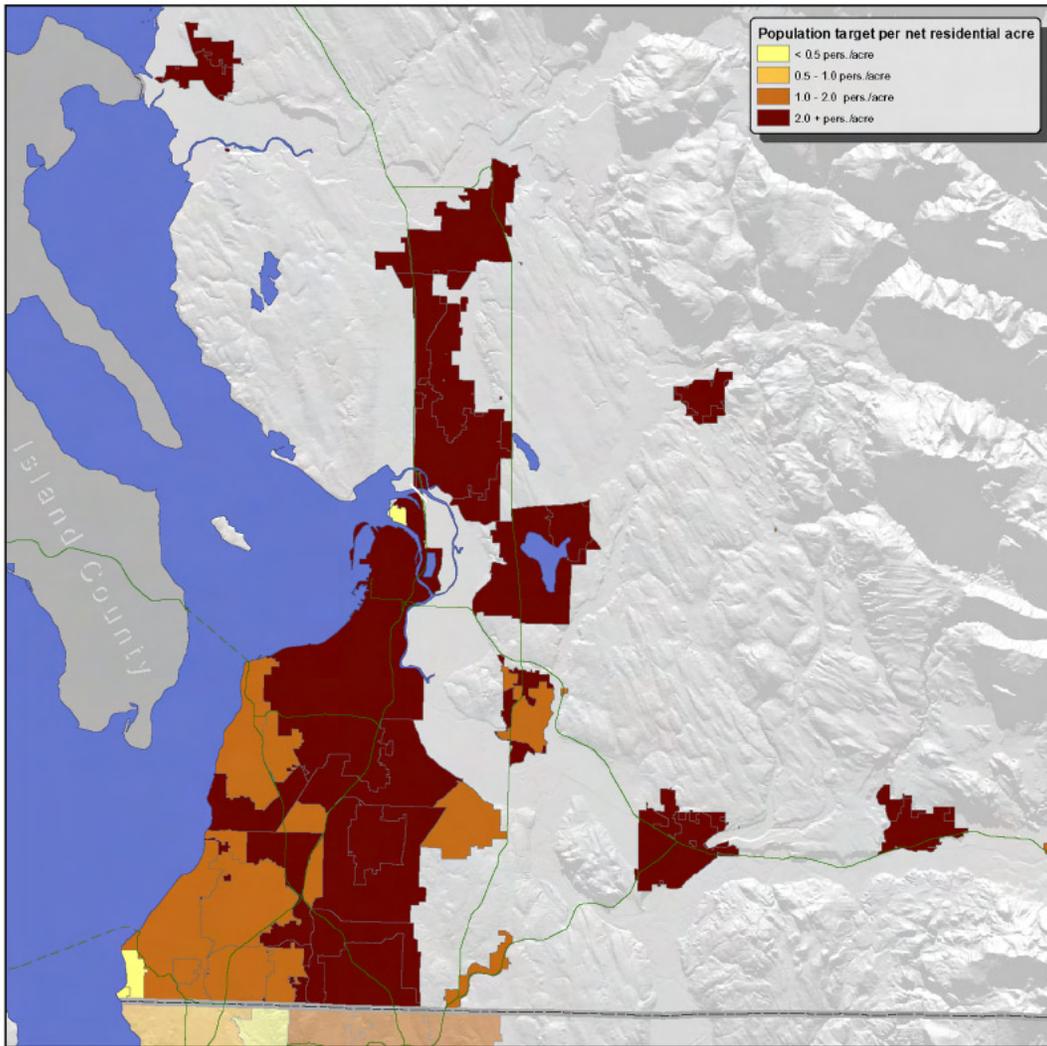
Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 65: SNOHOMISH COUNTY – 2025 AVERAGE (NET) RESIDENTIAL DENSITY**

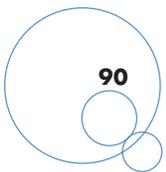


Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.

**FIGURE 66: SNOHOMISH COUNTY – INCREASE IN DENSITY RESULTING FROM TARGET**



Note: Average net residential density is calculated by dividing the population in a planning area by its approximate total residential land area. Residential land area data is approximate. Map is for illustrative purposes only.



## CHAPTER 5 **Employment Target Data and Results**

This chapter presents and analyzes the most recent adopted employment targets to better understand regional and local patterns and trends. Similar to the chapter on residential data, the analysis attempts to answer questions in two primary areas related to geographic distribution and comparison to existing conditions and past trends (*see pages 33-38 for an overview*).

In addition to the population and household targets, both King and Snohomish counties have elected to adopt employment targets for the same geographies as their residential targets. Pierce County had in the past used employment targets to compare against Buildable Lands capacities, but did not allocate employment growth during this targeting cycle.

While not specifically required by multicounty planning policies or the GMA, employment targets serve a function of helping to coordinate between population and employment growth. They also help coordinate between jurisdictions, so that an attempt can be made at creating a jobs-housing balance. Employment targets and capacities are somewhat harder to calculate, given the less concrete relationship between land-use decisions and the location of job growth.<sup>81</sup>

The first step for both King and Snohomish counties is to begin with the regional employment forecasts from the PSRC. These forecasts are produced by the STEP<sup>82</sup> econometric model, which projects employment figures at the regional level. These figures are then disaggregated by the DRAM/EMPAL<sup>83</sup> models into sub-county forecast analysis zones (FAZ).

### **AGGREGATED 2-COUNTY TARGETS**

#### **How Are the Employment Targets Geographically Distributed?**

The two counties approached employment targeting in a more comparable fashion than they did residential targeting. Consistent with past trends and available forecasts, King County's targets envision relatively balanced employment and residential growth, while Snohomish County is targeting substantially more residential growth than job growth (compare Figures 9 and 67).

<sup>81</sup> In residential development, land use regulations typically operate using limits on density in terms of units per acre (R-4 = maximum four units per acre). Since the average household size in the region rarely fluctuates beyond 2.0-3.0 persons per household, it is relatively simple to calculate densities (which are not likely to change significantly without new regulatory action) for a given area in terms of households or population. Commercial land use regulations, however, typically operate only on the size, height, or bulk of a building (as well as general use). This leaves a lot of room for variability in terms of employees per acre for a given zoning category. Furthermore, once built out, a given area is still likely to fluctuate significantly in total employment as hiring trends and business practices change over time.

<sup>82</sup> Synchronized Translator of Economic Projections.

<sup>83</sup> Disaggregate Residential Allocation Model/Employment Allocation Model.

**FIGURE 67: AGGREGATED REGIONAL EMPLOYMENT TARGET**

	Current Employment 2000/2002	Employment Growth Target	Estimated Jobs in 2022/2025	Percent of 2-County Total	Annual Job Growth Amount	Annual Job Growth Percentage
King	1,152,022	289,127	1,424,194	69.9%	13,142	1.0%
Snohomish	217,411	124,778	342,189	30.1%	5,425	2.0%
<b>Subregion</b>	<b>1,369,433</b>	<b>413,905</b>	<b>1,766,383</b>	<b>—</b>	<b>18,567</b>	<b>~1.1%</b>

See Appendices B,F for supporting data.

In terms of geographic distribution, both assigned the largest share of the employment targets to the cities (see figures 72 and 75). In King, it was similar in focus; in Snohomish, it showed a significantly different focus, with almost twice the proportion of employment growth assigned to cities than the residential targets.

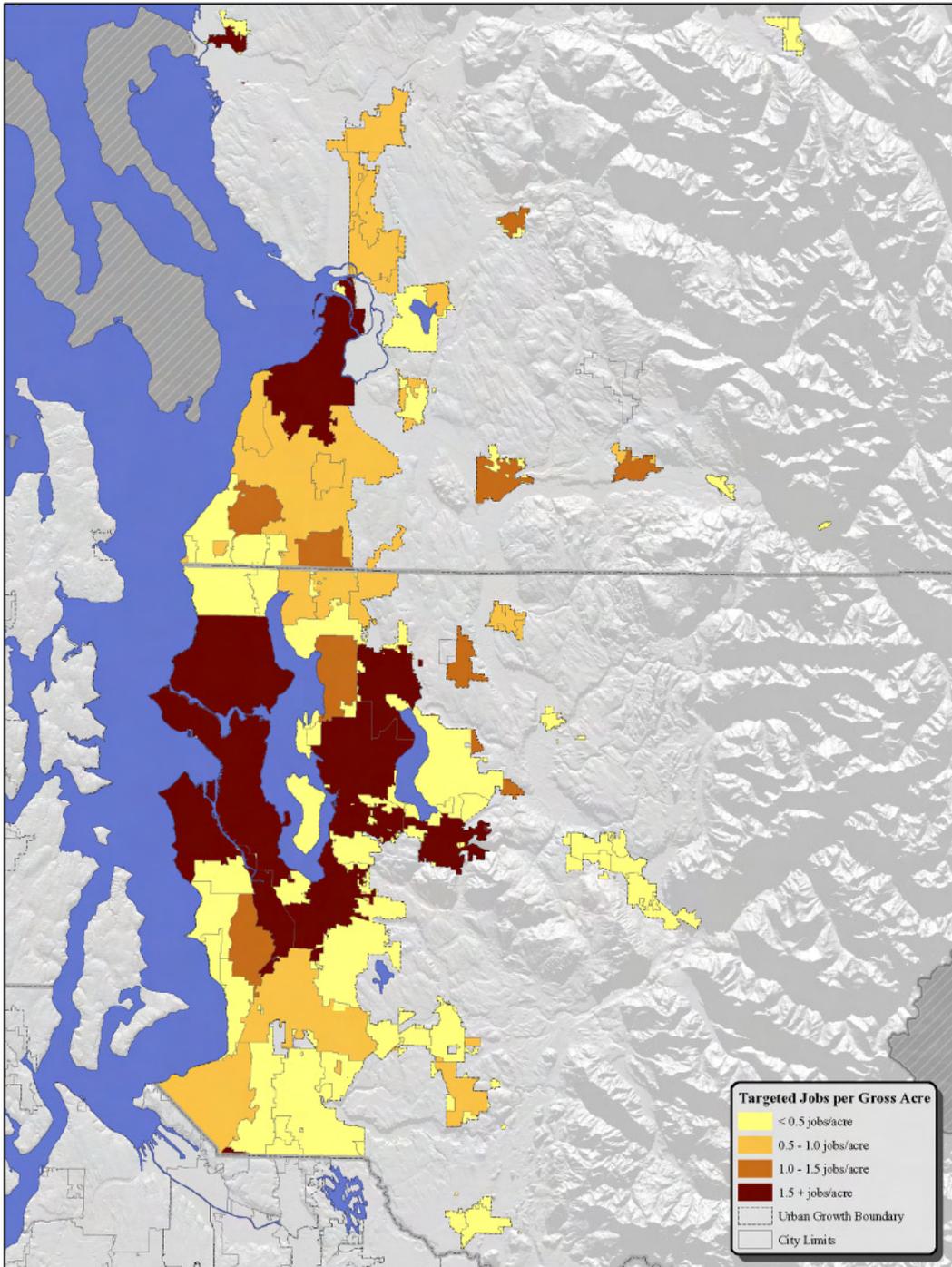
### *How much was targeted to cities?*

**FIGURE 68: ALLOCATION OF EMPLOYMENT TARGET TO REGION'S LARGEST CITIES**

County	City	Estimated Employment in 2000	Employment Growth Target	Percent Share of County Target
King	Seattle	512,226	92,083	31.8%
King	Bellevue	118,690	40,000	13.8%
Pierce	Tacoma	101,402	n/a*	n/a*
King	Redmond	72,919	21,760	7.5%
Snohomish	Everett	72,637	49,223	39.4%
King	Kent	59,905	11,500	4.0%
King	Renton	54,184	27,597	9.5%
King	Tukwila	47,181	16,000	5.5%
King**	Auburn (KC only)	38,490	6,084	2.1%
King	Kirkland	34,003	8,800	3.0%

Notes: \*Tacoma does not currently have an adopted employment growth target. \*\*While Auburn is partially located in Pierce County, the Pierce County portion had no covered employment in 2000 and no adopted employment growth target. See Appendices B,E,F for supporting data.

**FIGURE 69: TARGETED CHANGE IN AVERAGE (GROSS) EMPLOYMENT DENSITY**



• How much is targeted to cities with regional centers?

In 2000, approximately 1.25 million jobs were located in cities with regional growth centers, and another 350,000 new jobs were targeted to be added within the next 20 years. According to Buildable Lands analyses, these cities had capacity for an additional 665,000 jobs, more than double what is needed to accommodate 20 years of targeted employment growth.

**FIGURE 70: CITIES CONTAINING REGIONAL GROWTH CENTERS – EMPLOYMENT TARGETS**

City	Centers	Employment in 2000 (City)	Most Recent Employment Growth Target* (City)
Auburn	Auburn	38,490	6,134
Bellevue	Bellevue	118,690	40,000
Bothell	Canyon Park	20,456	7,690
Bremerton	Bremerton	37,259	n/a
Everett	Everett	72,637	49,223
Federal Way	Federal Way	29,042	7,481
Kirkland	Totem Lake	34,003	8,800
Kent	Kent	59,905	11,500
Lakewood	Lakewood	23,916	n/a
Lynnwood	Lynnwood	23,143	6,857
Puyallup	Downtown Puyallup South Hill	18,425	5,909
Redmond	Overlake	72,919	21,760
Renton	Renton	54,184	27,597
SeaTac	SeaTac	31,396	9,288
Seattle	Downtown Seattle First Hill/Capitol Hill Northgate University Community Uptown Queen Anne	512,226	92,083
Silverdale UGA**	Silverdale	n/a	n/a
Tacoma	Downtown Tacoma Tacoma Mall	101,402	47,560
Tukwila	Tukwila	47,181	16,000
<b>Total for Cities With Centers***</b>		<b>1,258,015</b>	<b>357,882</b>

Notes: \*Pierce County employment targets were not officially adopted and exist primarily for the purpose of an input to the Buildable Lands analysis. \*\*The Silverdale regional growth center is located in unincorporated Kitsap County, employment and target figures are not readily available. \*\*\*Totals do not include Silverdale or Bremerton, for which data is incomplete. See Appendices B, D, E, and F for supporting data.

• How much to the regional growth centers themselves?

NOTE: Employment targets have not yet been set for the designated regional growth centers. Information regarding the previous targets is provided for context purposes.

Similar to residential targets for centers (see Figure 24), employment targets for centers have different dates from those for their respective cities. And, the focusing of growth into the center varies widely, from only 9 percent in Renton, to over 100 percent in Bellevue (a result of differing planning periods).

**FIGURE 71: COMPARISON OF PREVIOUS CITY  
TO PREVIOUS DESIGNATED REGIONAL CENTER EMPLOYMENT TARGETS**

	Base Year Center Employment	Center Growth Target	Future Condition	Percent of City Target *	Planning Period for Center Targets	Planning Period for City Targets
Auburn						
Bellevue	31,725	47,275	79,000	155%	2000-2020	1992-2012
Bothell	6,532	1,968	8,500	68%	1990-2012	1992-2012
Bremerton	15,855	44,640	60,495	n/a	2000-2012	1997-2012
Everett	10,709	9,291	20,000	n/a	1990-2012	1992-2012
Federal Way	4,241	6,209	10,450	40%	1990-2012	1992-2012
Kirkland						
Kent	3,014	8,486	11,500	69%	1990-2010	1992-2012
Lakewood	5,325	6,950	12,275	n/a	2000-2017	2000-2017
Lynnwood	12,118	4,822	16,940	n/a	1990-2012	1992-2012
Puyallup (2)	8,002	n/a	n/a	n/a	n/a	n/a
Redmond	5,797	4,510	10,307	15%	1990-2012	1992-2012
Renton	17,184	2,016	19,200	9%	1990-2012	1992-2012
SeaTac	9,533	14,921	24,454	94%	1990-2014	1992-2012
Seattle (5)	273,064	82,721	355,78	62%	1990-2014	1992-2012
Silverdale						
Tacoma (2)	33,018	27,682	60,700	n/a	1990-2012	1992-2012
Tukwila	22,749	n/a	n/a	n/a	n/a	n/a

Notes: \*This column is calculated on data – the city target – that is not contained in this table. Source of data is from 2002 Regional Growth Centers Report (PSRC). Bremerton is listed as n/a because Kitsap does not set employment targets for their cities. Everett and Lynnwood are listed as n/a because the previous target was for a subarea, and not broken out by individual cities. Lakewood is listed as n/a because it incorporated after the last round of targets were set. The other Pierce County cities, Puyallup and Tacoma, are listed as n/a because Pierce does not set employment targets for their cities. Auburn, Kirkland, and Silverdale are newly designated centers, and therefore do not yet have targets.

### How Do the Employment Targets Compare to the Residential Targets?

Issues such as jobs-housing balance are considered by countywide planning groups as they develop their CPPs and by jurisdictions as they develop their comprehensive plans. The jobs-housing balance concept is interwoven into a number of the growth target-related statutes and Hearings Board rulings. For example, Buildable Lands requires the review of commercial, industrial, and housing needs, and the Hearings Board has ruled that “Because urban growth consists of people and jobs, the county is therefore charged with authority to undertake a task that is essentially an allocation of population and employment.”<sup>84</sup> In setting growth targets, however, the counties and cities do not formally consider this issue in a comprehensive manner.

The following figure compares the employment and residential targets for both King and Snohomish Counties, as broken out by geographic areas.

<sup>84</sup> *Edmonds v. Snohomish County*. 93-3-0005c.

**FIGURE 72: COMPARISON OF EMPLOYMENT AND RESIDENTIAL TARGETS**

	2000/02 Estimate		Growth Target		2022/25 Targeted		Analysis of Pop. per Empl. Ratio		
	Pop.	Empl.	Pop.*	Empl.	Pop.	2000/02 Current Pop. per Empl.	Target Pop. per Empl.	2002/25 Future Pop. per Empl.	Empl.
<b>King County:</b>									
City	1,389,704	978,559	276,760	281,214	1,666,464	1,259,773	1.42 to 1	0.98 to 1	1.32 to 1
Affil. Unincorp. Urban	165,752	17,967	13,070	2,568	178,822	20,535	9.23 to 1	5.09 to 1	8.71 to 1
Unaffil. Unincorp. Urban	46,455	6,015	13,750	5,345	60,205	11,360	7.72 to 1	2.57 to 1	5.30 to 1
Rural Area	135,000	16,226	11,920	0	146,920	16,226	8.32 to 1	n/a	9.05 to 1
County Total	1,736,911	1,018,767	315,500	289,127	2,052,41	1,307,894	1.70 to 1	1.09 to 1	1.57 to 1
<b>Snohomish County:</b>									
City	327,540	178,148	89,983	89,953	417,523	268,101	1.84 to 1	1.00 to 1	1.56 to 1
Affil. Unincorp. Urban	175,744		123,756		299,500				
Unaffil. Unincorp. Urban	11,366	32,135	3,715	23,803	15,081	55,938	5.82 to 1	5.36 to 1	5.62 to 1
Rural Area**	113,320	7,128	68,795	11,022	182,115	18,150	15.90 to 1	6.24 to 1	10.03 to 1
County Total	627,970	217,411	286,249	124,778	914,219	342,189	2.89 to 1	2.29 to 1	2.67 to 1
<b>Subregional (2 County) Total</b>									
	2,364,881	1,236,178	601,749	413,905	2,966,630	1,650,083	1.91 to 1	1.45 to 1	1.80 to 1

Notes: \*King County’s population growth target figures are derived, representing a conversion of the adopted household target to an estimated population target. \*\*Snohomish County’s rural area population target includes a UGA Expansion Allocation for 15,000 people to an “FCC reserve.” If approved on a project-by-project basis, the portion of the population reserve associated with the approved FCC would become part of the urban growth allocation. See Appendices C, H for supporting data.

As noted in the final column, both counties in each geographic area (except the rural area in King County) are targeting to increase the number of jobs per resident.

**INDIVIDUAL COUNTY TARGETS**

**A. What Are King County’s Employment Targets?**

The employment targets adopted by King County represent an increase of about 290,000 jobs between 2000 and 2022, a 25 percent total increase. Of these additional jobs, about a third (32 percent) are targeted to the City of Seattle and nearly half (45 percent) to the remaining seven cities with designated urban centers. The balance of the countywide employment target (22 percent) is split between other cities and unincorporated urban areas. The rural area does not have a target.

**FIGURE 73: KING COUNTY EMPLOYMENT TARGET DISTRIBUTION**

	Existing Conditions (Current Empl. 2000/2002)	Percent of Current Employment	Growth Targets (2000/2002-2022/2025)	Future Condition (2022/2025)	Percent of Total Target	Annual Growth Amount	Annual Growth Percentage
Cities	978,559	96.0%	281,214	1,259,773	96.0%	12,782	1.2%
Affiliated U.U.	17,967	1.8%	2,568	20,535	1.6%	117	0.6%
Unaffiliated U.U.	6,015	0.6%	5,345	11,360	0.9%	243	2.9%
Rural Area	16,226	1.6%	n/a	n/a	n/a	n/a	n/a
<b>Total Employment</b>	<b>1,018,767</b>	<b>—</b>	<b>289,127</b>	<b>1,307,894</b>	<b>—</b>	<b>13,142</b>	<b>1.1%</b>

See Appendix H for supporting data.

Figure 74 identifies the targets adopted by King County and the targeted growth rate for each area.

**FIGURE 74: KING COUNTY EMPLOYMENT TARGETS**

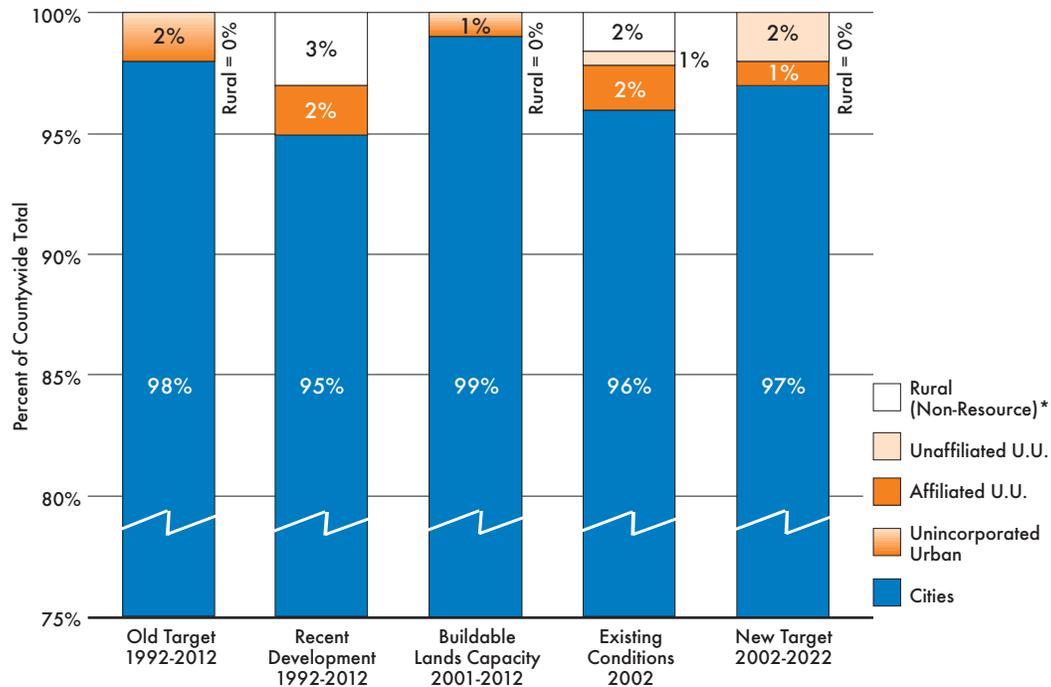
	Estimated Covered Jobs in 2000		Employment Growth Target 2000-2022 and Average Annual Growth Rate		Targeted Jobs in 2022	
	City	PAA	City	PAA	City	PAA
Algona	1,849	–	108 (0.3%)	– (–)	1,957	–
Auburn	38,393	1,658	6,079 (0.7%)	252 (0.6%)	44,472	1,910
Beaux Arts	17	–	0 (0.0%)	– (–)	17	–
Bellevue	120,170	466	40,000 (1.3%)	27 (0.3%)	160,170	493
Black Diamond	427	–	2,525 (9.2%)	– (–)	2,952	–
Bothell	10,320	697	2,000 (0.8%)	174 (1.0%)	12,320	871
Burien	12,149	–	1,712 (0.6%)	– (–)	13,861	–
Carnation	717	–	75 (0.5%)	– (–)	792	–
Clyde Hill	424	–	– (0.0%)	– (–)	424	–
Covington	2,467	–	900 (1.4%)	– (–)	3,367	–
Des Moines	5,846	–	1,695 (1.2%)	– (–)	7,541	–
Duvall	914	–	1,125 (3.7%)	– (–)	2,039	–
Enumclaw	4,420	–	1,125 (1.0%)	– (–)	5,545	–
Federal Way	29,258	1,387	7,481 (1.0%)	134 (0.4%)	36,739	1,521
Hunts Point	35	–	0 (0.0%)	– (–)	35	–
Issaquah	14,610	2,420	14,000 (3.1%)	1 (0.0%)	28,610	2,421
Kenmore	4,396	–	2,800 (2.3%)	– (–)	7,196	–
Kent	59,920	1,602	11,500 (0.8%)	44 (0.1%)	71,420	1,646
Kirkland	38,827	4,545	8,800 (0.9%)	221 (0.2%)	47,627	4,766
Lake Forest Park	1,348	–	455 (1.3%)	– (–)	1,803	–
Maple Valley	2,741	–	804 (1.2%)	– (–)	3,545	–
Medina	357	–	0 (0.0%)	– (–)	357	–
Mercer Island	6,679	–	800 (0.5%)	– (–)	7,479	–
Milton	3	11	1,054 (***)	0 (0%)	1,057	11
Newcastle	1,019	–	500 (1.8%)	– (–)	1,519	–
Normandy Park	568	–	67 (0.5%)	– (–)	635	–
North Bend	2,280	–	1,125 (1.8%)	– (–)	3,405	–
Pacific	885	50	108 (0.5%)	0 (0%)	993	50
Redmond	67,707	292	21,760 (1.3%)	21 (0.3%)	89,467	313
Renton	55,094	5,620	27,597 (1.9%)	458 (0.4%)	82,691	6,078
Sammamish	4,757	n/a	1,230 (1.1%)	n/a	5,987	n/a
SeaTac	31,160	526	9,288 (1.2%)	496 (3.1%)	40,448	1,022
Seattle	510,221	n/a	92,083 (0.8%)	n/a	602,304	n/a
Shoreline	14,793	n/a	2,618 (0.7%)	n/a	17,411	n/a
Skykomish	106	–	0 (0.0%)	106	–	–
Snoqualmie	1,408	–	1,800 (3.8%)	– (–)	3,208	–
Tukwila	47,824	526	16,000 (1.3%)	497 (3.1%)	63,824	1,023
Woodinville	13,457	–	2,000 (0.6%)	– (–)	15,457	–
Yarrow Point	49	–	0 (0.0%)	– (–)	49	–
Unaffiliated East King	n/a	0	– (–)	4,193 (**)	–	4,193
Unaffiliated Sea-Shore	n/a	6,162	– (–)	694 (0.5%)	–	6,856
Unaffiliated South King	n/a	1,490	– (–)	701 (1.8%)	–	2,191
<b>UGA Total*</b>	<b>1,135,067</b>		<b>289,127 (1.0%)</b>		<b>1,424,194</b>	

Notes: \*Employment targets are only for the urban growth area. \*\*Target of 4,193 is for a Fully Contained Community as spelled out in RCW 36.70A.350. Since there were no preexisting urban land or employment, a percent growth rate would not be appropriate. \*\*\*As target for Milton is for previously undeveloped land, a percent growth rate would not be appropriate.

Some notable individual targets include Issaquah, which is targeted to double its employment base with 14,000 new jobs. Seattle, as the region's current employment center, is taking the largest target of 92,083 new jobs. The City of Snoqualmie is targeted to more than double (128 percent increase) its current employment as a result of the new Snoqualmie Ridge mixed-use development.

Figure 75 illustrates the extent to which employment in King County is concentrated and targeted to cities.

**FIGURE 75: KING COUNTY EMPLOYMENT TARGETS – CONTEXT DATA COMPARISON**



Notes: \*Rural (Non-Resource) land uses include rural residential, commercial, industrial, mixed use, public, civic or quasi-public, and tribal lands. See Appendices B,H for supporting data.

In 2002, 96 percent of jobs were located within incorporated cities, with 2 percent each in the unincorporated urban area and the rural area. Recent job growth has also been heavily concentrated into cities, with 95 percent of the jobs added between 1995 and 2002 located in cities, 2 percent in the unincorporated urban area, and 3 percent in the rural area. The new growth targets maintain these distributions, with 97 percent of employment growth slated for cities, 3 percent for the unincorporated urban area, and no growth for the rural area.

### B. What Are Snohomish County's Employment Targets?

The employment targets adopted by Snohomish County represent an increase of about 120,000 jobs between 2000 and 2025, a 57 percent total increase. Of these additional jobs, 39 percent of them are targeted to the City of Everett, 10 percent to the remaining two cities with designated urban centers, 9 percent to the rural area, and the balance (42 percent) is split between other cities and the unincorporated urban area.

**FIGURE 76: SNOHOMISH COUNTY EMPLOYMENT TARGET DISTRIBUTION**

	Existing Conditions (Current Empl. 2000)	Percent of Current Employment	Growth Targets (2000-2025)	Future Condition (2025)	Percent of Total Target	Annual Growth Amount	Annual Growth Percentage
Cities	178,148	82.0%	89,953	268,101	72.0%	3,598	1.6%
Affiliated U.U.	32,135	14.8%	23,803	55,938	19.0%	952	2.2%
Unaffiliated U.U.							
Rural Area	7,128	3.3%	11,022	18,150	9.0%	441	3.8%
<b>Total Employment</b>	<b>217,411</b>	<b>—</b>	<b>124,778</b>	<b>342,189</b>	<b>—</b>	<b>4,991</b>	<b>1.8%</b>

See Appendix F for supporting data.

Figure 77 identifies the targets adopted by Snohomish County and the targeted growth rate for each area.

**FIGURE 77: SNOHOMISH COUNTY EMPLOYMENT TARGETS**

	Employment in 2000		Employment Target 2000-2025 and Average Annual Growth Rate		Targeted Employment in 2022	
	City	MUGA/UGA	City	MUGA/UGA	City	MUGA/UGA
Arlington	9,208	220	5,142 (1.8%)	160 (2.2%)	14,350	380
Darrington	475	135	(60) (-0.5%)	(20) (-0.6%)	415	115
Gold Bar	149	—	61 (1.4%)	— (-)	210	—
Granite Falls	771	34	1,338 (4.1%)	57 (4.0%)	2,109	91
Index	49	—	21 (1.4%)	— (-)	70	—
Lake Stevens	999	2,626	806 (2.4%)	2,119 (2.4%)	1,805	4,745
Marysville	8,583	1,956	3,677 (1.4%)	3,014 (3.8%)	12,260	4,970
Monroe	7,225	405	4,575 (2.0%)	185 (1.5%)	11,800	590
Snohomish	4,132	741	768 (0.7%)	769 (2.9%)	4,900	1,510
Stanwood	2,567	406	2,223 (2.5%)	354 (2.5%)	4,790	760
Sultan	799	113	2,320 (5.6%)	329 (5.6%)	3,119	442
Unaffiliated	n/a	1,677	n/a	2,068 (3.3%)	n/a	3,745
<b>Total Non-SW UGA</b>	<b>34,957</b>	<b>8,313</b>	<b>20,871 (1.9%)</b>	<b>9,035 (3.0%)</b>	<b>55,828</b>	<b>17,348</b>
Bothell (part)	10,150		5,690 (1.8%)		5,840	
Brier	326		104 (1.1%)		430	
Edmonds	10,322		1,868 (0.7%)		12,190	
Everett	81,117		49,223 (1.9%)		130,340	
Lynnwood	24,493		6,857 (1.0%)		31,350	
Mill Creek	2,808		1,736 (1.9%)		4,544	
Mountlake Terrace	7,127		912 (0.5%)		8,039	
Mukilteo	6,779		2,671 (1.3%)		9,450	
Woodway	69		21 (1.1%)		90	
Unaffiliated	—		— (-)		—	
<b>Total SW UGA</b>	<b>143,191</b>	<b>23,822</b>	<b>69,082 (1.6%)</b>	<b>14,768 (1.9%)</b>	<b>212,273</b>	<b>38,590</b>
Rural Area	7,128		11,022 (3.8%)		18,150	
<b>County Total</b>	<b>217,411</b>		<b>124,778 (1.8%)</b>		<b>342,189</b>	

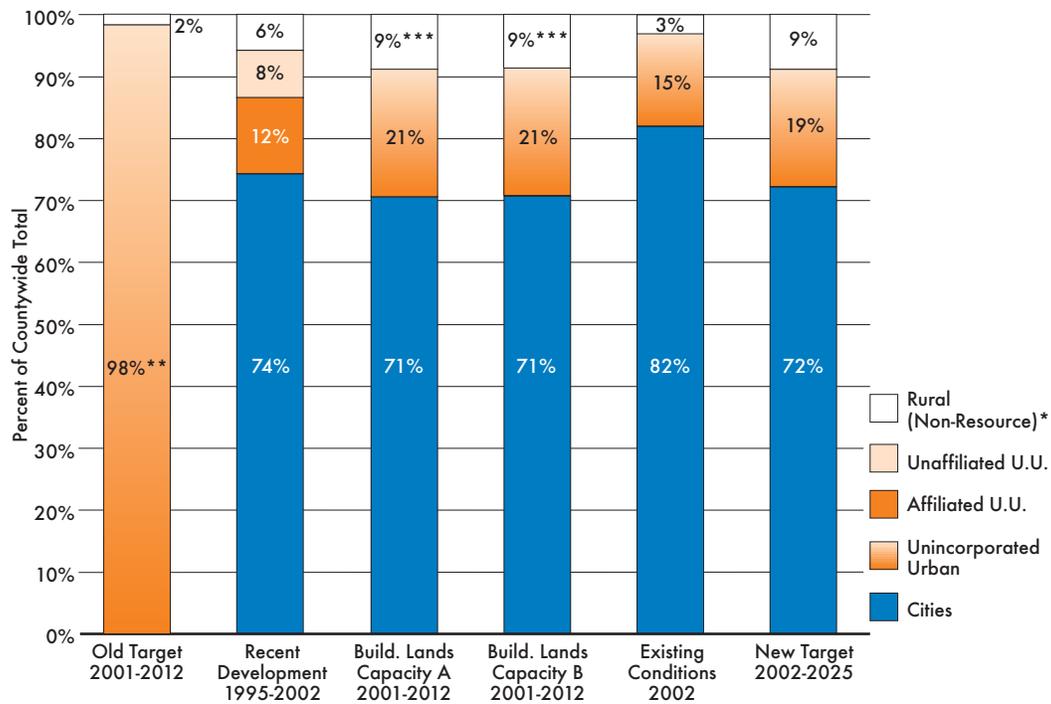
Notes: \*Unincorporated SW UGA area 2002 populations have been derived from 2000 population estimates and building permit data for 2000-2002. \*\*Non-SW County UGA totals and countywide totals are different than those published due to published error (Maltby omitted from totals).

Some individual notable targets include 49,223 new jobs to the city of Everett (the largest overall employment target in the county), as well as relatively large targets to the urban growth areas affiliated with Marysville (representing a 154 percent total increase in employment) and Lake Stevens (representing an 80 percent total increase).

The rural area is also targeted to grow quickly, averaging 3.8 percent annual employment growth, totaling a 154 percent increase over 25 years. A significant portion (approximately 85 percent) of this rural growth is projected to occur on the Tulalip tribal land, which is not subject to GMA requirements.

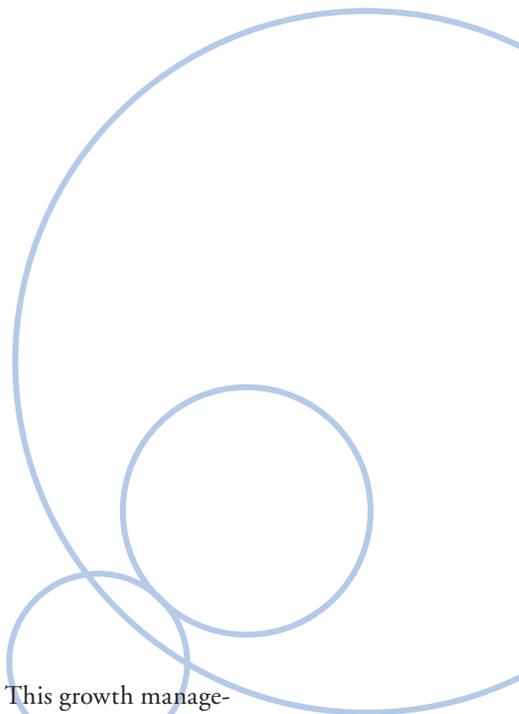
Figure 78 illustrates the extent to which Snohomish County’s distribution of its countywide employment target is more heavily concentrated in cities than its population growth target.

**FIGURE 78: SNOHOMISH COUNTY EMPLOYMENT TARGETS – CONTEXT DATA COMPARISON**



Notes: \*Rural (Non-Resource) land uses include rural residential, commercial, industrial, mixed-use, public, civic or quasi-public, and tribal lands. \*\*Snohomish County’s previous target was for entire UGA. \*\*\*The counties did not analyze capacity in the rural area in their Buildable Lands work. For the purpose of this report, and to facilitate comparison, the rural area percentage for the new target is subtracted from the Buildable Lands Capacity total percentage.

Eighty percent of current jobs are located in incorporated cities, a proportion that has declined recently, with 74 percent of job growth between 1995 and 2002 locating in cities. Nine percent of Snohomish County’s employment target has been allocated to the rural area, more than the previous target (2 percent), and also more than the current distribution (5 percent) and recent job growth (3 percent).



**CHAPTER 6** Findings and Recommendations  
Regarding Growth Targets

The process of setting growth targets is a mix of technical and policy actions. This growth management mandate provides significant value for long-range planning. In the region, the state of the art has matured, and counties and their cities have improved their methodologies. The jurisdictions' targets reflect solid technical attempts to analyze and incorporate multiple sources of information to reach defensible decisions. Further, the jurisdictions are all putting in place policies and processes that seek to connect their targets to other activities, such as planning for urban centers, proactively thinking about annexations, and to some extent making capital facilities decisions.

However, the need for improvements becomes evident when comparing the results of the four counties and their respective cities' targets to one another and to the Growth Management Act and VISION 2020.

The following chapter summarizes the key findings of this report and makes recommendations for actions that the Regional Council and others could take to help ensure that this fundamental GMA requirement is better coordinated, supports the goals of GMA, and helps implement VISION 2020. The recommendations range from simple technical changes (e.g., coordinating the planning horizon years) to more ambitious policy changes (e.g., creating regional goals to guide the county processes). The impact on both local and regional staff resources is addressed in the following discussion.

## FINDINGS AND RECOMMENDATIONS

### A. The Planning Horizons Are Not Consistent

**Finding:** The planning horizons of county and city growth targets are not consistent throughout the region; this hinders the counties and cross-county cities from coordinating their targets. Some of the targets start, for example, in 2000 and others in 2002. Some extend to the year 2022 and others to 2025. These differences are small, but make direct comparison and coordination more difficult. Some of these planning horizons will overlap with the required comprehensive plan updates and urban growth area reviews and some will not.

**Recommendation:** Working with the lead county staff, use the multicounty planning policies or some other method to ensure that the timeframes are standardized in a manner agreeable to each of the counties, such that the start and end dates are the same in each county. This should occur by the time the next round of growth targets are considered and adopted. This effort should ensure that target dates relate closely to other GMA deadlines, such as comprehensive plan updates and urban growth area reviews.

## B. The Methodologies Differ, But Are Not Inconsistent

**Finding:** The adopted methodologies differ from county to county, but are not inconsistent. They use many of the same inputs, such as Buildable Lands capacity, the presence of regional centers, and Regional Council small area forecasts. Other important inputs, such as availability of sewer and water, are not necessarily used. Some of the counties have documented their methodologies and considerations in their CPPs; others have few adopted principles to guide the process and rely primarily on negotiation. While the methodologies do not seem to be incompatible, there is value in seeking a best-practice methodology that allows for greater consistency, such that each jurisdictional target can be understood in comparison to another.

**Recommendation:** Working with the lead county staff, use the PSRC Regional Staff Committee or some other regional technical body to develop recommended “best practices” for growth targets methodology by the time the next round of growth targets are considered and adopted. The goal of this work should be to create greater consistency in the methodology. This effort should ensure that targets are adopted based on available data (or an agreement to develop a common data source) and should seek to ensure maximum transparency in the target setting process. It should also seek to create a common understanding of the purpose of residential targets and address issues such as absorption versus accommodation, ceilings versus floors, impact on zoning development regulations, jobs-housing balance, and monitoring and adapting based on growth trends.

## C. Employment Targets to Some Extent Already Exist and Add Value

**Finding:** Employment targets are not set in Kitsap and Pierce counties, and the methodologies for setting employment targets vary between King and Snohomish counties. The review of the countywide planning policies shows that setting employment targets helps to ensure that issues such as jobs-housing balance can be understood and addressed.

Much of the analytical work needed to set employment targets is already done by the jurisdictions because of the Buildable Lands program, which requires a “review [of] commercial, industrial, and housing needs by type and density range to determine the amount of land needed for commercial, industrial, and housing for the remaining portion of the twenty-year planning period used in the most recently adopted comprehensive plan.”<sup>85</sup>

The Hearings Board has commented, but not ruled directly, on this issue as well, stating, “Because urban growth consists of people and jobs, the county is therefore charged with authority to undertake a task that is essentially an allocation of population and employment.”<sup>86</sup> This should be considered a best practice, and each county should be required to set employment targets.

**Recommendation:** Use the multicounty planning policies or some other method to ensure that each county adopts a methodology to set employment targets. Given the complexity and potential burden of this proposed new mandate, the Regional Council should support this effort at the staff level, working in conjunction with the county staff (through the PSRC Regional Technical Forum or some other technical body), to develop recommended methodologies for setting employment targets by the time the next round of growth targets are considered and adopted. Given the lack of regulatory guidance, the work should seek to create a common understanding of the purpose of employment targets, in relation to the purpose of residential targets, addressing issues such as absorption versus accommodation, ceilings versus floors, impact on zoning and development regulations, jobs-housing balance, and monitoring and adapting based on growth trends.

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<sup>85</sup> RCW 36.70A.215(3)(c).

<sup>86</sup> *Edmonds v. Snohomish County*. 93-3-0005c.

## D. Targets For Regional Growth Centers Are Not Well Integrated Into the City Targets Process

**Finding:** The regional growth strategy is premised on focusing a meaningful amount of future growth into regional growth centers. While new targets have yet to be set for the regional growth centers, a review of the previous growth center targets and the review of the new targets for cities that contain regional growth centers finds little integration of this important VISION 2020 concept into the jurisdictional target setting process.

The planning horizons for the city and the growth center targets have often not been in alignment. For example, Seattle's previous city target went from 1992 to 2012, whereas the previous center target went from 1990 to 2014 — in almost every case, the center target used a slightly differing time period than the city target. For example, the different dates for the city of Bellevue has led to an employment target for the regional center that is 150 percent of the city's employment target — this adds confusion to the planning process. While this is an extreme example and the differences are usually small, they do make direct comparison and coordination more difficult.

Last, a review of countywide planning policies finds that some counties require that cities with regional growth centers set a target for the regional growth center. Despite this, in many cases, such as Puyallup (which has two regional centers) and Tukwila, regional growth center targets have not yet been adopted by the city.

**Recommendation:** The multicounty planning policies should be used to ensure that all the counties adopt a policy in their countywide planning policies requiring regional growth center target allocations be fully integrated into the growth targets process. The MPPs and CPPs should ensure that the timeframes are consistent and that the growth center target be clearly presented and used in local comprehensive plans. This recommendation would build on existing methodologies and be reflected in any new methodologies that are developed. The policies should also ensure that regional growth center targets reflect the regional policy that these growth centers be targeted for a significant amount of future residential and employment growth.

## E. The Connection Between the Results of the Targeting Process and GMA and VISION 2020 Goals Could Be Clearer

**Finding:** Most of the growth targets case law relates to the process of target allocation — its role in urban growth area sizing, its implementation through the CPPs, the use of the OFM range, and the relative authorities of the jurisdictions. However, the Hearings Board has also ruled on the most important aspect — the results.

The Hearings Board has stated that for both cities and counties, the GMA imposes a duty to encourage urban growth within the urban growth area,<sup>87</sup> to reduce sprawl, and through these actions, to facilitate the transformation of governance<sup>88</sup> and service delivery so that cities become the primary provider of urban services (e.g., through focusing UGA growth into incorporated areas).

More can be done to ensure that, in some of the counties, the results of the new growth targeting processes better meet GMA and VISION 2020 goals — specifically goals of encouraging development in urban areas and in the cities and centers within them, curbing sprawl, efficiently providing governmental services, protecting the environment, and increasing citizen participation and involvement in government.

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<sup>87</sup> *Benaroya I*, 5372c, 3/13/91 Order, at 8.

<sup>88</sup> *Poulsbo*, 2309c, FDO, at 23. A similar citation is found in *Snoqualmie*, 2304c, FDO, at 9.

- At the regional level, a smaller proportion of overall growth is being targeted to urban areas (86 percent to 92 percent) and to cities (58 percent versus 70 percent) than in past rounds of target-setting and more to the urban unincorporated (28 percent versus 22 percent) and rural areas (13 percent versus 8 percent). When the effects of annexations and incorporation are considered, there is even less growth targeted to cities because the proportion of the region's land that is in cities has increased substantially.
- King County's growth targets focus the vast majority of its growth in cities (88 percent), with most of the remainder targeted to the unincorporated urban areas (8 percent). The new targets are more aggressive in focusing growth in cities and urban areas than recent development.
- Kitsap County's growth targets focus the vast majority of its growth outside of cities (69 percent), with the largest portion of this growth targeted to the unaffiliated unincorporated urban area (28 percent). The new targets are less aggressive in focusing growth in cities than the previous targets, but are much more aggressive than recent development.
- Pierce County's growth targets focus the majority of its growth to cities (64 percent), with the remainder mostly targeted for the unincorporated urban areas (30 percent). The new targets are more aggressive in focusing growth in cities than the previous targets and significantly more aggressive than recent development.
- Snohomish County's growth targets focus the vast majority of its growth outside of cities (69 percent) with the largest portion of this growth targeted to the affiliated unincorporated urban areas (43 percent). The new targets are less aggressive than the previous targets and are also less aggressive than recent development.

Also questionable is how jurisdictions are using growth targets, given the significant departure of recent development<sup>89</sup> from the previous targets. As noted in the section on the Hearings Board, preliminary understanding of the recent case related to Buildable Lands<sup>90</sup> makes the issue of consistency between targets and actual development more important to consider.

- From the aggregated regional view, there is a high level of consistency between the previous targets and recent development, with the same proportion of overall growth located in the cities (58 percent) and slightly more growth in the rural area (17 percent versus 14 percent) than targeted. Looking at the counties individually provides a different and clearer perspective.
- King County almost met their target exactly in each geographic class.
- Kitsap County's recent development was very inconsistent with their previous target, with more than triple the proportion of targeted growth in the rural area (55 percent actual versus 16 percent target), and less than half the proportion of growth in its cities (23 percent actual versus 47 percent target).
- Pierce County's recent development was also somewhat inconsistent, with almost double the proportion of growth in the rural area than was targeted (31 percent actual versus 17 percent target) and about a quarter less in cities than targeted (33 percent actual versus 42 percent target).
- Snohomish County's recent development was the second most urban and incorporated in nature and exceeded their targets for cities (45 percent actual versus 36 percent target).

<sup>89</sup> See "Overview of Analysis — Recent permitted development" on page 37, which discusses the strengths and limitations of this comparative analysis data source.

<sup>90</sup> *Bremerton II*, No. 04-3-0009c. August 2004.

**Recommendation:** The lack of clear regional guidance makes this issue difficult to assess and address, therefore the VISION 2020 update process should establish regional policies that provide guidance to the distribution of targets. The preferred growth alternative adopted as part of the VISION 2020 update should be used to provide this regional guidance. If benchmarks are adopted regionally, it may be appropriate for the Regional Council’s Executive Board to have some involvement in commenting on the target setting process and results.

#### F. Targets Partially Consider the Impact on Annexation and Incorporation

**Finding:** Each of the counties has begun to consider the issue of annexations when setting growth targets, and each county’s CPPs require interlocal agreements as part of an annexation process. Regarding targets, King has assigned very little growth to unincorporated areas, making this a minor issue for that county. Snohomish, on the other hand, has assigned almost half of its target, 45 percent, to the urban unincorporated area. Within this, however, almost all has been targeted to affiliated unincorporated urban areas. Somewhere in the middle, Kitsap and Pierce have targeted significant amounts to the unincorporated urban areas and have assigned only a minority portion of this to the affiliated unincorporated urban areas.

Large unincorporated area targets are not a best practice in light of Hearings Board rulings, however, focusing the bulk of the unincorporated area targets into the affiliated unincorporated urban areas may be. By targeting to affiliated unincorporated urban areas (and by requiring interlocal agreements for these areas), the process has potential to create a venue for both parties, the county and the cities, to have a say in the future of the area — this is especially important when a large number of new residents is planned. This joint planning will likely improve the process and help to ensure both the “transformation of governance” and the appropriate provision of “urban levels of service by urban service providers.” This fits with what the GMA envisioned.

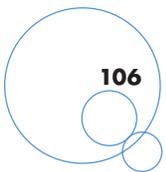
A recent report on annexation<sup>91</sup> identified the value of joint planning to facilitate annexations. The report included the following recommendation:

*Consider requiring counties, cities, and special districts to work together to identify potential annexation areas in the countywide planning policies that are assigned to a specific city to make it clear which city is expected to annex an area. Countywide planning policies should also recognize that some unincorporated UGAs may be too big to annex, and will need to be designated for incorporation.*

**Recommendation:** The topics of annexation and incorporation are complex and are beyond the scope of this report. However, targets should be set in a manner that supports the future “transformation of governance.” The VISION 2020 update should speak to the issues of annexation and incorporation in a manner that supports the affiliation of the urban growth area to the appropriate jurisdiction. For those areas not found appropriate for either annexation or incorporation, the Update should address possible re-designation from urban.

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<sup>91</sup> “Annexation Under the Growth Management Act: Barriers and Potential Solutions.” Washington State Department of Community, Trade, and Economic Development. December 2004.



## CHAPTER 7 Conclusion

Growth targets are a key implementation requirement of the Growth Management Act. Growth targets are the minimum number of residents or jobs that a jurisdiction must accommodate and will strive to absorb by some future year. Growth targets reflect aspirational goals, but must be rooted in objective analysis. Cities and counties have a duty to accommodate the targets, but are provided broad discretion on how they do so.

Growth targets are both a key benchmark for measuring progress towards achieving planning goals, as well as an important impetus for collaboration and conversation about future growth in our region.

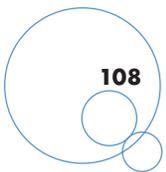
Growth targets are guided by the Growth Management Act's (GMA) planning goals and, as such, should encourage growth in urban areas. Case law from the Central Puget Sound Growth Management Hearings Board suggests that growth should be targeted largely to cities within the urban growth area, to allow for the efficient provision of governmental services. This is consistent with the region's multicounty planning policies, which support focusing growth into cities and into their designated regional growth centers.

Jurisdictions in the region have recently adopted a new set of growth targets, which extend the planning horizons to 2022 or 2025. The state of the art of setting growth targets has improved significantly since the last set of growth targets were adopted in the early 1990s. Counties are beginning to link their targets more closely to their other planning functions, creating a more integrated planning process.

However, opportunities exist for further refining these processes, so that the results are more consistent with the goals of the GMA and VISION 2020. The recommendations in this report are intended to improve the process and the outcomes when the next set of growth targets are adopted.

The recommendations envision more consistent processes across the region's counties. They envision a more holistic process, where employment growth is considered at the same time as residential growth and where the region's designated centers are considered integral to accommodating the region's future growth. And, they envision a fuller interjurisdictional conversation regarding where and how the region's future population and employees will be accommodated.

Working together, the region has the potential to make this required process more transparent, more coordinated, more connected to our planning goals, and ultimately, more beneficial to residents and businesses in this region.



## Appendices

The following appendices are available through the PSRC's Web site ([psrc.org](http://psrc.org) — search on “Growth Targets”):

**Appendix A: COUNTY LEVEL SOURCE DATA**

**Appendix B: KING COUNTY SOURCE DATA**

**Appendix C: KING COUNTY HOUSEHOLD TO POPULATION CONVERSION  
(DATA AND FORMULAS)**

**Appendix D: KITSAP COUNTY SOURCE DATA**

**Appendix E: PIERCE COUNTY SOURCE DATA**

**Appendix F: SNOHOMISH COUNTY SOURCE DATA**

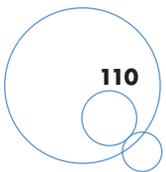
**Appendix G: KING, PIERCE, AND SNOHOMISH COUNTY PREVIOUS TARGET SOURCE DATA**

**Appendix H: GEOGRAPHIC CLASSIFICATION AREAS — AGGREGATED DATA (2000/2002)**

**Appendix I: GEOGRAPHIC CLASSIFICATION AREAS — AGGREGATED DATA (1992/1993)**

**Appendix J: CITY LEVEL SOURCE DATA**

**Appendix K: BEST PRACTICE CONCEPTS**



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**Appendix J: CITY LEVEL SOURCE DATA**

**Appendix K: BEST PRACTICE CONCEPTS**



**Appendix A: County-Level Source Data**

Place	Population Data				OFM Forecasts		Covered Employment Estimates		Buildable Lands Data	
	1975 Population Estimate	1990 Census Population	2000 Census Population	2002 Population Estimate	2020 Population	2025 Population	2000 Employment	2002 Employment	Additional Population Capacity 200X-2012	Additional HH Capacity 200X-2012
King County	1,155,300	1,507,305 (1)	1,737,046	1,774,312	2,018,824	2,092,390	1,151,225	1,094,413	n/a	268,950 (2)
Kitsap County	116,090	189,731	231,969	234,700	307,113	331,571	71,244	74,375	n/a (3)	n/a (3)
Pierce County	421,600	586,203	700,818	724,998	892,454	942,157	235,258	234,208	n/a	155,621 (2)(4)
Snohomish County	270,100	465,628 (1)	606,024	628,000	862,599	929,314	208,695	203,347	263,807 / 231,054 (2)	n/a
<b>Regional Total</b>	<b>1,963,090</b>	<b>2,748,867</b>	<b>3,275,857</b>	<b>3,362,010</b>	<b>4,080,990</b>	<b>4,295,432</b>	<b>1,666,422</b>	<b>1,606,343</b>	<b>n/a</b>	<b>n/a</b>

Sources: Washington State Office of Financial Management (population estimates and projections), PSRC (employment estimates)

Notes:

(1) Indicates correction to original census figure

(2) Official capacity analysis is only applicable to the urban area of the county, the rural target is used here as a proxy for rural capacity in order to arrive at a useable countywide capacity estimate

(3) Kitsap County's Buildable Lands report concluded that the County had sufficient capacity to accommodate targets, however no ultimate capacity figures were calculated that are comparable to other county's results

(4) Pierce County additional capacity figure is for the period 2001-2017

Appendix B: King County Target Source Data

Place <sup>(1)</sup>	Geographic Classification	Household Data				Employment Data			Buildable Lands Data		Population Data			
		2000 Estimated Households	2000-2022 Household Target	2022 Targeted Households	Targeted Average Annual Household Growth Rate	2000 Employment Estimate	2000-2022 Employment Target	2022 Targeted Employment	Additional Household Capacity	Additional Employment Capacity	2000 Census Population	2000-2022 Calculated <sup>(5)</sup> Population Target	2022 Targeted Population	Targeted Average Annual Population Growth Rate
Algona	City	845	298	1,143	1.38%	1,849	108	1,957	326	980	2,460	730	3,190	1.19%
Auburn (KC portion)	City	16,108	5,928	22,036	1.43%	38,393	6,084	44,477	6,276	12,187	40,314	12,960	53,274	1.28%
Beaux Arts	City	121	3	124	0.11%	17	0	17	6	0	307	0	307	0.00%
Bellevue	City	45,836	10,117	55,953	0.91%	120,170	40,000	160,170	15,753	75,024	109,827	19,470	129,297	0.74%
Black Diamond	City	1,456	1,099	2,555	2.59%	427	2,525	2,952	2,970	3,948	3,970	2,720	6,690	2.40%
Bothell (KC portion)	City	6,401	1,751	8,152	1.11%	10,320	2,000	12,320	2,280	2,201	16,185	3,730	19,915	0.95%
Burien	City	13,399	1,552	14,951	0.50%	12,149	1,712	13,861	2,067	2,963	31,881	2,450	34,331	0.34%
Carnation <sup>(2)</sup>	City	674	246	920	1.42%	717	75	792	209	759	2,003	640	2,643	1.27%
Clyde Hill	City	1,054	21	1,075	0.09%	424	0	424	23	0	2,890	0	2,890	0.00%
Covington	City	4,398	1,173	5,571	1.08%	2,467	900	3,367	3,403	1,245	13,783	3,590	17,373	1.06%
Des Moines	City	11,337	1,576	12,913	0.59%	5,846	1,695	7,541	2,013	1,931	29,267	3,200	32,467	0.47%
Duvall <sup>(2)</sup>	City	1,643	1,037	2,680	2.25%	914	1,125	2,039	1,638	1,882	4,746	2,700	7,446	2.07%
Enumclaw <sup>(2)</sup>	City	4,637	1,927	6,564	1.59%	4,420	1,125	5,545	2,361	1,610	12,006	4,170	16,176	1.36%
Federal Way	City	31,437	6,188	37,625	0.82%	29,258	7,481	36,739	5,538	16,194	83,259	12,620	95,879	0.64%
Hunts Point	City	165	1	166	0.03%	35	0	35	2	0	443	0	443	0.00%
Issaquah	City	4,840	3,993	8,833	2.77%	14,610	14,000	28,610	8,877	19,233	11,212	8,470	19,682	2.59%
Kenmore	City	7,307	2,325	9,632	1.26%	4,396	2,800	7,196	4,637	4,503	18,678	5,050	23,728	1.09%
Kent	City	31,113	4,284	35,397	0.59%	59,920	11,500	71,420	6,814	14,448	79,524	7,870	87,394	0.43%
Kirkland	City	20,736	5,480	26,216	1.07%	38,827	8,800	47,627	4,102	5,018	45,054	9,940	54,994	0.91%
Lake Forest Park	City	5,029	538	5,567	0.46%	1,348	455	1,803	536	81	13,142	1,010	14,152	0.34%
Maple Valley	City	4,809	300	5,109	0.28%	2,741	804	3,545	353	3,128	14,209	320	14,529	0.10%
Medina	City	1,111	31	1,142	0.13%	357	0	357	40	0	3,011	0	3,011	0.00%
Mercer Island	City	8,437	1,437	9,874	0.72%	6,679	800	7,479	2,271	1,248	22,036	2,960	24,996	0.57%
Milton (KC portion)	City	339	50	389	0.63%	3	1,054	1,057	2,771	4,623	814	80	894	0.43%
Newcastle	City	3,028	863	3,891	1.15%	1,019	500	1,519	2,572	893	7,737	1,860	9,597	0.98%
Normandy Park	City	2,609	100	2,709	0.17%	568	67	635	170	380	6,392	0	6,392	0.00%
North Bend <sup>(2)</sup>	City	2,980	636	3,616	0.88%	2,280	1,125	3,405	2,717	4,578	7,906	750	8,656	0.41%
Pacific (KC portion)	City	1,992	996	2,988	1.86%	885	103	988	985	572	5,373	1,850	7,223	1.35%
Redmond	City	19,102	9,083	28,185	1.78%	67,707	21,760	89,467	9,664	21,766	45,256	19,100	64,356	1.61%
Renton	City	21,708	6,198	27,906	1.15%	55,094	27,597	82,691	10,620	32,205	50,052	11,930	61,982	0.98%
Sammamish	City	11,131	3,842	14,973	1.36%	4,757	1,230	5,987	4,161	0	34,104	10,070	44,174	1.18%
SeaTac	City	9,708	4,478	14,186	1.74%	31,160	9,288	40,448	4,386	17,262	25,496	10,420	35,916	1.57%
Seattle	City	258,499	51,510	310,009	0.83%	510,221	92,083	602,304	118,221	326,265	563,374	95,920	659,294	0.72%
Shoreline	City	20,716	2,651	23,367	0.55%	14,793	2,618	17,411	2,307	2,235	53,025	4,980	58,005	0.41%
Skykomish <sup>(2)</sup>	City	104	20	124	0.80%	106	0	106	39	0	214	30	244	0.60%
Snoqualmie <sup>(2)</sup>	City	895	1,697	2,592	4.95%	1,408	1,800	3,208	2,214	2,371	2,371	3,990	6,361	4.59%
Tukwila	City	7,186	3,200	10,386	1.69%	47,824	16,000	63,824	3,016	10,100	17,181	6,750	23,931	1.52%
Woodinville	City	3,512	1,869	5,381	1.96%	13,457	2,000	15,457	1,947	2,466	9,194	4,400	13,594	1.79%
Yarrow Point	City	379	28	407	0.32%	49	0	49	34	0	1,008	30	1,038	0.13%
Auburn PAA (KC portion)	Affiliated U.U.	3,576	815	4,391	0.94%	1,658	252	1,910	2,635	252	10,773	2,020	12,793	0.78%
Bellevue PAA	Affiliated U.U.	1,710	178	1,888	0.45%	466	27	493	184	27	4,612	330	4,942	0.31%
Black Diamond PAA	Affiliated U.U.	38	0	38	0.00%	0	0	0	0	0	90	0	90	0.00%
Bothell PAA (KC portion)	Affiliated U.U.	1,582	584	2,166	1.44%	697	174	871	603	174	4,270	1,360	5,630	1.26%
Des Moines PAA	Affiliated U.U.	141	2	143	0.06%	0	0	0	5	0	420	0	420	0.00%
Federal Way PAA	Affiliated U.U.	7,130	1,161	8,291	0.69%	1,387	134	1,521	3,754	134	20,460	2,420	22,880	0.51%
Issaquah PAA	Affiliated U.U.	5,961	802	6,763	0.58%	2,420	1	2,421	827	1	16,280	1,530	17,810	0.41%
Kent PAA	Affiliated U.U.	8,038	546	8,584	0.30%	1,602	287	1,889	1,763	287	23,720	700	24,420	0.13%
Kirkland PAA	Affiliated U.U.	11,485	747	12,232	0.29%	4,545	221	4,766	770	221	31,566	870	32,436	0.12%
Milton PAA (KC portion)	Affiliated U.U.	226	33	259	0.62%	11	0	11	106	0	640	60	700	0.41%
Newcastle PAA	Affiliated U.U.	3	1	4	1.32%	0	0	0	1	0	0	2	2	0.00%
Pacific PAA (KC portion)	Affiliated U.U.	301	39	340	0.56%	50	0	50	127	0	800	70	870	0.38%
Redmond PAA	Affiliated U.U.	1,035	390	1,425	1.46%	292	21	313	402	21	3,210	1,050	4,260	1.29%
Renton PAA	Affiliated U.U.	18,303	1,739	20,042	0.41%	5,620	458	6,078	5,622	458	48,891	2,650	51,541	0.24%
Seattle PAA	Affiliated U.U.	20	0	20	0.00%	0	0	0	0	0	0	0	0	0.00%
Tukwila PAA	Affiliated U.U.	9	10	19	3.45%	1,052	993	2,045	27	993	20	10	30	1.86%
E. King U.U.U. (Bear Creek)	Unaffiliated U.U.	200	4,099	4,299	14.96%	0	4,193	4,193	4,222	4,193	490	9,740	10,230	14.81%
SeaShore U.U.U. (N. Highline)	Unaffiliated U.U.	11,930	1,670	13,600	0.60%	6,162	694	6,856	1,670	1,544	32,017	3,140	35,157	0.43%
S. King U.U.U. (W. Hill)	Unaffiliated U.U.	5,570	592	6,162	0.46%	1,490	458	1,948	1,913	458	13,948	870	14,818	0.28%
King County Rural Area	Rural area	46,900	6,000	52,900	0.55%	16,955	0	16,955	n/a <sup>(3)</sup>	n/a <sup>(3)</sup>	135,000	11,920	146,920	0.39%
Subtotals	City	586,781	138,526	725,307	0.97%	1,107,615	281,214	1,388,829	238,319	594,299	1,389,704	276,760	1,666,464	0.83%
	Urban Unincorporated Affiliated	59,558	7,047	66,605	0.51%	19,800	2,568	22,368	16,826	2,568	165,752	13,072	178,824	0.35%
	Urban Unincorporated Unaffiliated	17,700	6,361	24,061	1.41%	7,652	5,345	12,997	7,805	6,195	46,455	13,750	60,205	1.19%
	Urban Area	664,039	151,934	815,973	0.94%	1,135,067	289,127	1,424,194	262,950	603,062	1,601,911	303,582	1,905,493	0.79%
Rural Area	46,900	6,000	52,900	0.55%	16,955	0	16,955	n/a	n/a	135,000	11,920	146,920	0.39%	
<b>King County Total <sup>(4)</sup></b>		<b>710,939</b>	<b>157,934</b>	<b>868,873</b>	<b>0.92%</b>	<b>1,152,022</b>	<b>289,127</b>	<b>1,441,149</b>	<b>n/a</b>	<b>n/a</b>	<b>1,736,911</b>	<b>315,502</b>	<b>2,052,413</b>	<b>0.76%</b>

Sources: King County CPPs (household, employment data), 2002 King County Buildable Lands Report (Buildable Lands data), PSRC analysis (population data)

Notes:

<sup>(1)</sup> Jurisdictional boundaries are as of April 1, 2000

<sup>(2)</sup> King County 'rural cities' are considered with their associated PAA for purposes of targeting, as well as other data shown here

<sup>(3)</sup> King County's rural area employment and household capacities were not analyzed as part of the Buildable Lands program

<sup>(4)</sup> County totals may not match other figures exactly due to rounding, estimation

<sup>(5)</sup> See appendix C for calculations used to derive this figure

**Appendix C: King County Household to Population Conversion (Data, Formulas)**

Place <sup>(1)</sup>	Geographic Classification	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		2000 Average Household Size (no GQ)	2000 Households	Household Target	2022 Targeted Households	2000 Subarea Average Household Size	2020 Subarea Average Household Size	Subarea Persons-per-Household Reduction Factor	2020 Average Household Size	2000 Total Population	2000 Group Quarters Population	2000 Population in Households	2022 Population in Households	Household Population Target	Group Quarters Population Growth	Total Population Target	2022 Total Population	Remainder of City Target (in other county)
Algona	City	2.91	845	298	1,143	2.59	2.49	0.961	2.79	2,460	4	2,456	3,189	730	2	730	3,190	n/a
Auburn (KC portion)	City	2.47	16,108	6,003	22,111	2.59	2.49	0.961	2.37	40,314	593	39,721	52,403	12,680	281	12,960	53,274	7,799
Beaux Arts	City	2.54	121	3	124	2.47	2.38	0.964	2.44	307	0	307	303	0	0	0	307	n/a
Bellevue	City	2.37	45,836	10,117	55,953	2.47	2.38	0.964	2.29	109,827	791	109,036	128,132	19,100	374	19,470	129,297	n/a
Black Diamond	City	2.73	1,456	1,099	2,555	2.59	2.49	0.961	2.62	3,970	0	3,970	6,694	2,720	0	2,720	6,690	n/a
Bothell (KC portion)	City	2.51	6,401	1,751	8,152	2.47	2.38	0.964	2.42	16,185	124	16,061	19,728	3,670	59	3,730	19,915	7,510
Burien	City	2.36	13,399	1,552	14,951	2.59	2.49	0.961	2.27	31,881	267	31,614	33,939	2,320	126	2,450	34,331	n/a
Carnation <sup>(2)</sup>	City	2.98	674	246	920	2.61	2.51	0.962	2.87	2,003	0	2,003	2,640	640	0	640	2,643	n/a
Clyde Hill	City	2.74	1,054	21	1,075	2.47	2.38	0.964	2.64	2,890	0	2,890	2,838	0	0	0	2,890	n/a
Covington	City	3.13	4,398	1,373	5,771	2.59	2.49	0.961	3.01	13,783	0	13,783	17,371	3,590	0	3,590	17,373	n/a
Des Moines	City	2.47	11,337	1,576	12,913	2.59	2.49	0.961	2.37	29,267	1,262	28,005	30,604	2,600	597	3,200	32,467	n/a
Duvall <sup>(2)</sup>	City	2.88	1,643	1,037	2,680	2.61	2.51	0.962	2.77	4,756	25	4,731	7,424	2,690	12	2,700	7,456	n/a
Enumclaw <sup>(2)</sup>	City	2.52	4,637	1,927	6,564	2.61	2.51	0.962	2.42	12,086	255	11,831	15,885	4,050	121	4,170	16,256	n/a
Federal Way	City	2.63	31,437	6,188	37,625	2.59	2.49	0.961	2.53	83,259	472	82,787	95,191	12,400	223	12,620	95,879	n/a
Hunts Point	City	2.69	165	1	166	2.47	2.38	0.964	2.59	443	0	443	430	0	0	0	443	n/a
Issaquah	City	2.27	4,840	3,993	8,833	2.47	2.38	0.964	2.19	11,212	227	10,985	19,344	8,360	107	8,470	19,682	n/a
Kenmore	City	2.54	7,307	2,325	9,632	2.47	2.38	0.964	2.45	18,678	87	18,591	23,598	5,010	41	5,050	23,728	n/a
Kent	City	2.53	31,113	4,284	35,397	2.59	2.49	0.961	2.44	79,524	698	78,826	86,369	7,540	330	7,870	87,394	n/a
Kirkland	City	2.13	20,736	5,480	26,216	2.47	2.38	0.964	2.05	45,054	848	44,206	53,743	9,540	401	9,940	54,994	n/a
Lake Forest Park	City	2.55	5,029	538	5,567	2.14	2.06	0.963	2.46	13,142	307	12,835	13,695	860	145	1,010	14,152	n/a
Maple Valley	City	2.95	4,809	300	5,109	2.59	2.49	0.961	2.84	14,209	12	14,197	14,510	310	6	320	14,529	n/a
Medina	City	2.71	1,111	31	1,142	2.47	2.38	0.964	2.61	3,011	0	3,011	2,981	0	0	0	3,011	n/a
Mercer Island	City	2.58	8,437	1,437	9,874	2.47	2.38	0.964	2.49	22,036	279	21,757	24,586	2,830	132	2,960	24,996	n/a
Milton (KC portion)	City	2.39	339	50	389	2.59	2.49	0.961	2.30	814	0	814	895	80	0	80	894	2,019
Newcastle	City	2.55	3,028	863	3,891	2.47	2.38	0.964	2.46	7,737	15	7,722	9,572	1,850	7	1,860	9,597	n/a
Normandy Park	City	2.45	2,609	100	2,709	2.59	2.49	0.961	2.36	6,392	0	6,392	6,393	0	0	0	6,392	n/a
North Bend <sup>(2)</sup>	City	2.53	2,980	636	3,616	2.61	2.51	0.962	2.43	8,166	92	8,074	8,787	710	44	750	8,916	n/a
Pacific (KC portion)	City	2.77	1,992	721	2,713	2.59	2.49	0.961	2.66	5,373	8	5,365	7,217	1,850	4	1,850	7,223	-154
Redmond	City	2.33	19,102	9,083	28,185	2.47	2.38	0.964	2.24	45,256	833	44,423	63,134	18,710	394	19,100	64,356	n/a
Renton	City	2.29	21,708	6,198	27,906	2.59	2.49	0.961	2.20	50,052	401	49,651	61,393	11,740	190	11,930	61,982	n/a
Sammamish	City	3.06	11,131	3,842	14,973	2.47	2.38	0.964	2.95	34,104	0	34,104	44,170	10,070	0	10,070	44,174	n/a
SeaTac	City	2.54	9,708	4,478	14,186	2.59	2.49	0.961	2.44	25,496	887	24,609	34,614	10,000	420	10,420	35,916	n/a
Seattle	City	2.08	258,499	51,510	310,009	2.14	2.06	0.963	2.00	563,374	26,655	536,719	620,018	83,300	12,618	95,920	659,294	n/a
Shoreline	City	2.50	20,716	2,651	23,367	2.14	2.06	0.963	2.40	53,025	1,302	51,723	56,081	4,360	616	4,980	58,005	n/a
Skykomish <sup>(2)</sup>	City	2.06	104	20	124	2.61	2.51	0.962	1.98	214	0	214	246	30	0	30	244	n/a
Snoqualmie <sup>(2)</sup>	City	2.58	895	1,697	2,592	2.61	2.51	0.962	2.48	2,441	0	2,441	6,428	3,990	0	3,990	6,431	n/a
Tukwila	City	2.38	7,186	3,200	10,386	2.59	2.49	0.961	2.29	17,181	97	17,084	23,784	6,700	46	6,750	23,931	n/a
Woodinville	City	2.61	3,512	1,869	5,381	2.47	2.38	0.964	2.52	9,194	23	9,171	13,560	4,390	11	4,400	13,594	n/a
Yarrow Point	City	2.66	379	28	407	2.47	2.38	0.964	2.56	1,008	0	1,008	1,042	30	0	30	1,038	n/a
Auburn PAA (KC portion)	Affiliated U.U.	2.96	3,576	815	4,391	2.59	2.49	0.961	2.85	10,773	193	10,580	12,514	1,930	91	2,020	12,793	n/a
Bellevue PAA	Affiliated U.U.	2.63	1,710	178	1,888	2.47	2.38	0.964	2.53	4,612	112	4,500	4,777	280	53	330	4,942	n/a
Black Diamond PAA	Affiliated U.U.	2.33	38	-	38	2.59	2.49	0.961	2.24	90	0	90	85	0	0	0	90	n/a
Bothell PAA (KC portion)	Affiliated U.U.	2.70	1,582	584	2,166	2.47	2.38	0.964	2.60	4,270	0	4,270	5,632	1,360	0	1,360	5,630	n/a
Des Moines PAA	Affiliated U.U.	2.95	141	2	143	2.59	2.49	0.961	2.84	420	0	420	406	0	0	0	420	n/a
Federal Way PAA	Affiliated U.U.	2.87	7,130	1,161	8,291	2.59	2.49	0.961	2.76	20,460	0	20,460	22,883	2,420	0	2,420	22,880	n/a
Issaquah PAA	Affiliated U.U.	2.73	5,961	802	6,763	2.47	2.38	0.964	2.63	16,280	10	16,270	17,787	1,520	5	1,530	17,810	n/a
Kent PAA	Affiliated U.U.	2.94	8,038	546	8,584	2.59	2.49	0.961	2.83	23,720	90	23,630	24,293	660	43	700	24,420	n/a
Kirkland PAA	Affiliated U.U.	2.74	11,485	747	12,232	2.47	2.38	0.964	2.64	31,566	96	31,470	32,292	820	45	870	32,436	n/a
Milton PAA (KC portion)	Affiliated U.U.	2.81	226	33	259	2.59	2.49	0.961	2.70	640	0	640	699	60	0	60	700	n/a
Pacific PAA (KC portion)	Affiliated U.U.	2.65	301	39	340	2.59	2.49	0.961	2.55	800	0	800	867	70	0	70	870	n/a
Redmond PAA	Affiliated U.U.	3.10	1,035	390	1,425	2.47	2.38	0.964	2.99	3,210	0	3,210	4,261	1,050	0	1,050	4,260	n/a
Renton PAA	Affiliated U.U.	2.67	18,303	1,739	20,042	2.59	2.49	0.961	2.57	48,891	21	48,870	51,508	2,640	10	2,650	51,541	n/a
Tukwila PAA	Affiliated U.U.	1.84	9	8	17	2.59	2.49	0.961	1.77	20	0	20	30	10	0	10	30	n/a
S. King U.U.U. (W. Hill)	Unaffiliated U.U.	2.50	5,570	592	6,162	2.59	2.49	0.962	2.40	13,948	18	13,930	14,789	860	9	870	14,818	n/a
E. King U.U.U. (Bear Creek)	Unaffiliated U.U.	2.47	200	4,099	4,299	2.47	2.38	0.964	2.38	490	0	490	10,232	9,740	0	9,740	10,230	n/a
SeaShore U.U.U. (N. Highline)	Unaffiliated U.U.	2.68	11,930	1,670	13,600	2.14	2.06	0.963	2.58	32,017	47	31,970	35,088	3,120	22	3,140	35,157	n/a
Rural area	Rural area		46,900	6,000	52,900					135,000	469	134,531	146,231	11,700	222	11,920	146,920	n/a
<b>County Total <sup>(3)</sup></b>	<b>County</b>	<b>n/a</b>	<b>710,916</b>	<b>157,931</b>	<b>868,847</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>1,737,331</b>	<b>37,620</b>	<b>1,699,711</b>	<b>1,997,303</b>	<b>297,690</b>	<b>17,807</b>	<b>315,500</b>	<b>2,052,831</b>	<b>n/a</b>

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Sources/Calculations:	Census	Census (City) / Est. (PAA)	KC CPPs	D+E	KCCPP apdx 'd'	KCCPP apdx 'd'	(H/G)	C*I	Census (city) / C*D (PAA)	Census	K-L	F*J	N-M	K*0.47	O+P	Q+K	Pierce ord. / SNO CPP

Notes:

<sup>(1)</sup> Jurisdictional boundaries are as of April 1, 2000

<sup>(2)</sup> King County 'rural cities' are considered with their associated PAA for purposes of targeting, as well as other data shown here

<sup>(3)</sup> County total may not match other figures due to rounding, estimation

**Appendix D: Kitsap County Target Source Data**

Place <sup>(1)</sup>	Geographic Classification	1997-2012 Population Target <sup>(2)</sup>	Population Data			
			2000 Population	2000-2025 Population Target	2025 Targeted Population	Average Annual Population Growth Rate
Bainbridge Island	City	5,360	20,308	8,352	28,660	1.58%
Bremerton	City	19,152	37,258	14,759	52,017	1.53%
Port Orchard	City	610	7,693	3,600	11,293	1.76%
Poulsbo	City	4,136	6,813	3,739	10,552	2.01%
Bremerton UGA	Affiliated U.U.	23,495	8,709	4,159	12,868	1.79%
Port Orchard UGA	Affiliated U.U.		11,570	3,375	14,945	1.17%
Poulsbo UGA	Affiliated U.U.		901	3,355	4,256	7.31%
Central Kitsap UGA	Unaffiliated U.U.		21,743	8,733	30,476	1.55%
Gorst UGA	Unaffiliated U.U.		154	73	227	1.78%
Kingston UGA	Unaffiliated U.U.		1,871	3,135	5,006	4.58%
Silverdale UGA	Unaffiliated U.U.		15,276	8,059	23,335	1.94%
South Kitsap UGA	Unaffiliated U.U.	1,241	8,024	9,265	9.57%	
UGA Expansion Study Area Allocation	Rural-other	0	0	6,334	6,334	≠
Kitsap County Rural Area	Rural area	10,070	98,432	23,905	122,337	0.99%
Subtotals	City	29,258	72,072	30,450	102,522	1.61%
	Urban Unincorporated Affiliated	23,495	21,180	10,889	32,069	1.90%
	Urban Unincorporated Unaffiliated		40,285	28,024	68,309	2.43%
	Urban Area	52,753	133,537	69,363	202,900	1.92%
	Rural Area	10,070	98,432	23,905	122,337	0.99%
<b>Kitsap County Total</b>		<b>62,823</b>	<b>231,969</b>	<b>99,602</b>	<b>331,571</b>	<b>1.64%</b>

Sources: Kitsap County Board of Commissioners Ord. #311-2003 (1997-2012 population targets), Kitsap County Board of Commissioners Ord. #327-2004 (population data)

Notes:

<sup>(1)</sup> Jurisdictional boundaries are as of April 1, 2000

<sup>(2)</sup> The source for Kitsap County's 1997-2012 targets is the Kitsap County comprehensive plan (May 7, 1998), time period for jurisdictional boundaries unknown

**Appendix E: Pierce County Target Source Data**

Place <sup>(1)</sup>	Geographic Classification	Population Data				Buildable Lands
		2000 Census Population	2000-2022 Population Target	2022 Targeted Population	Average Annual Population Growth Rate	Additional Household Capacity <sup>(2)</sup>
Auburn (PC portion)	City	151	7,799	7,950	19.74%	1,067
Bonney Lake	City	10,874	7,956	18,830	2.53%	2,961
Buckley	City	4,145	1,055	5,200	1.04%	501
Carbonado	City	621	209	830	1.33%	261
DuPont	City	2,452	6,648	9,100	6.14%	3,647
Eatonville	City	2,012	768	2,780	1.48%	330
Edgewood	City	9,089	4,611	13,700	1.88%	1,829
Fife	City	4,784	4,116	8,900	2.86%	3,393
Fircrest	City	5,868	932	6,800	0.67%	645
Gig Harbor	City	6,477	4,323	10,800	2.35%	1,528
Lakewood	City	58,211	13,789	72,000	0.97%	8,261
Milton (PC portion)	City	4,981	2,019	7,000	1.56%	929
Orting	City	3,760	4,140	7,900	3.43%	2,534
Pacific (PC portion)	City	154	-154	0	-100%	0
Puyallup	City	33,014	5,586	38,600	0.71%	3,797
Roy	City	707	293	1,000	1.59%	89
Ruston	City	738	1,022	1,760	4.03%	353
South Prarie	City	382	448	830	3.59%	72
Steilacoom	City	6,049	851	6,900	0.60%	995
Sumner	City	8,504	3,746	12,250	1.67%	1,832
Tacoma	City	193,564	61,676	255,240	1.27%	39,507
University Place	City	29,933	4,067	34,000	0.58%	2,610
Wilkeson	City	395	155	550	1.52%	48
Auburn UGA	Affiliated U.U.	221	3,329	3,550	13.45%	
Bonney Lake	Affiliated U.U.	860	2,320	3,180	6.12%	
Carbonado	Affiliated U.U.	22	28	50	3.80%	
Eatonville	Affiliated U.U.	358	982	1,340	6.18%	
Fife	Affiliated U.U.	445	235	680	1.95%	
Fircrest	Affiliated U.U.	37	3	40	0.35%	
Gig Harbor	Affiliated U.U.	6,239	3,711	9,950	2.14%	
Lakewood	Affiliated U.U.	23,473	1,427	24,900	0.27%	
Milton	Affiliated U.U.	131	539	670	7.70%	
Pacific	Affiliated U.U.	14	-4	10	-1.52%	
Puyallup	Affiliated U.U.	7,082	4,418	11,500	2.23%	
Roy	Affiliated U.U.	3	17	20	9.01%	
South Prarie	Affiliated U.U.	6	44	50	10.12%	
Sumner	Affiliated U.U.	818	1,282	2,100	4.38%	
Tacoma	Affiliated U.U.	56,638	10,462	67,100	0.77%	
Fife/Milton Overlap	Unaffiliated U.U.	119	81	200	2.39%	
Lakewood/Steilacoom Overlap	Unaffiliated U.U.	2,529	71	2,600	0.13%	
Pierce County Unaffiliated UGA	Unaffiliated U.U.	70,869	31,571	102,440	1.69%	
Pierce County Rural Area	Rural area	144,082	15,318	159,400	0.46%	n/a
<b>Subtotals</b>	<b>City</b>	<b>386,865</b>	<b>136,055</b>	<b>522,920</b>	<b>1.38%</b>	<b>77,189</b>
	<i>Urban Unincorporated Affiliated</i>	96,347	28,793	125,140	1.20%	
	<i>Urban Unincorporated Unaffiliated</i>	73,517	31,723	105,240	1.64%	63,114
	<b>Urban Area</b>	<b>556,729</b>	<b>196,571</b>	<b>753,300</b>	<b>1.38%</b>	<b>140,303</b>
	<i>Rural Area</i>	144,082	15,318	159,400	0.46%	n/a
<b>Pierce County Total</b>		<b>700,811</b>	<b>211,889</b>	<b>912,700</b>	<b>1.21%</b>	<b>n/a</b>

63,114

Source: Pierce County Council Ord. 2003-104s (population data), Pierce County 2002 Buildable Lands Report (Buildable Lands)

Notes:

<sup>(1)</sup> Jurisdictional boundaries are as of April 1, 2002

<sup>(2)</sup> Pierce County's Buildable Lands analysis uses April, 2000 jurisdictional boundaries

**Appendix F: Snohomish County Target Source Data**

Place <sup>(1)</sup>	Geographic classification	Population Data				Employment Data			Buildable Lands	
		2002 Population	2002-2025 Population Target	2025 Population	Average Annual Population Growth Rate	2000 Covered Employment	2000-2025 Employment Target	2025 Covered Employment	Additional Population Capacity	Additional Employment Capacity
Arlington	City	13,280	4,080	17,360	1.17%	9,208	5,142	14,350	4,590 / 4,218	10,737 / 8,452
Darrington	City	1,335	575	1,910	1.57%	475	-60	415	900 / 713	2,719 / 2,133
Gold Bar	City	2,055	842	2,897	1.50%	149	61	210	529 / 456	458 / 362
Granite Falls	City	2,760	2,010	4,770	2.41%	771	1,338	2,109	1,412 / 1,210	1,687 / 1,329
Index	City	160	30	190	0.75%	49	21	70	54 / 42	0 / 0
Lake Stevens	City	6,640	1,720	8,360	1.01%	999	806	1,805	1,859 / 1,598	1,601 / 1,266
Marysville	City	27,580	12,140	39,720	1.60%	8,583	3,677	12,260	9,971 / 8,588	8,381 / 6,606
Monroe	City	14,670	5,870	20,540	1.47%	7,225	4,575	11,800	4,878 / 4,339	3,548 / 2,795
Snohomish	City	8,575	1,406	9,981	0.66%	4,132	768	4,900	1,416 / 1,127	517 / 410
Stanwood	City	4,085	1,565	5,650	1.42%	2,567	2,223	4,790	1,747 / 1,503	855 / 675
Sultan	City	3,910	4,280	8,190	3.27%	799	2,320	3,119	4,632 / 3,806	1,451 / 1,146
Bothell (SC part)	City	14,490	7,510	22,000	1.83%	10,150	5,690	15,840	5,317 / 4,402	4,185 / 3,292
Brier	City	6,445	1,345	7,790	0.83%	326	104	430	1,148 / 977	10 / 8
Edmonds	City	39,460	5,420	44,880	0.56%	10,322	1,868	12,190	5,747 / 5,019	1,719 / 1,371
Everett	City	96,070	26,990	123,060	1.08%	81,117	49,223	130,340	15,883 / 13,236	39,582 / 31,466
Lynnwood	City	33,990	4,520	38,510	0.54%	24,493	6,857	31,350	4,487 / 3,819	6,857 / 5,424
Mill Creek	City	12,055	4,034	16,089	1.26%	2,808	1,736	4,544	4,119 / 4,008	2,192 / 1,736
Mountlake Terrace	City	20,470	1,986	22,456	0.40%	7,127	912	8,039	1,037 / 917	861 / 682
Mukilteo	City	18,520	3,480	22,000	0.75%	6,779	2,671	9,450	3,123 / 2,828	4,136 / 3,248
Woodway	City	990	180	1,170	0.73%	69	21	90	398 / 366	0 / 0
Arlington UGA	Affiliated U.U.	640	2,720	3,360	7.48%	220	160	380	1,185 / 1,015	2,386 / 1,908
Darrington UGA	Affiliated U.U.	133	82	215	2.11%	135	-20	115	494 / 389	980 / 767
Gold Bar UGA	Affiliated U.U.	762	341	1,103	1.62%	0	0	0	196 / 157	0 / 0
Granite Falls UGA	Affiliated U.U.	149	2,051	2,200	12.42%	34	57	91	1,080 / 827	165 / 129
Lake Stevens UGA	Affiliated U.U.	20,188	11,577	31,765	1.99%	2,626	2,119	4,745	19,153 / 14,696	2,005 / 1,482
Marysville UGA	Affiliated U.U.	23,248	10,152	33,400	1.59%	1,956	3,014	4,970	13,212 / 10,565	1,351 / 1,074
Monroe UGA	Affiliated U.U.	1,570	4,480	6,050	6.04%	405	185	590	2,144 / 1,710	291 / 227
Snohomish UGA	Affiliated U.U.	1,619	2,935	4,554	4.60%	741	769	1,510	2,095 / 1,623	1,777 / 1,428
Stanwood UGA	Affiliated U.U.	394	2,796	3,190	9.52%	406	354	760	3,273 / 2,645	751 / 588
Sultan UGA	Affiliated U.U.	348	2,581	2,929	9.70%	113	329	442	2,241 / 1,775	0 / 0
Bothell MUGA (SC part)	Affiliated U.U.	16,613	11,772	28,385	2.36%				10,007 / 8,429	
Brier MUGA	Affiliated U.U.	2,209	1,086	3,295	1.75%				2,019 / 1,680	
Edmonds MUGA	Affiliated U.U.	3,551	414	3,965	0.48%				1,618 / 1,311	
Everett MUGA	Affiliated U.U.	38,804	27,227	66,031	2.34%				20,884 / 17,744	
Lynnwood MUGA	Affiliated U.U.	22,884	15,471	38,355	2.27%	25,499	16,836	42,335	13,615 / 11,692	968 / 13,416
Mill Creek MUGA	Affiliated U.U.	31,772	24,445	56,217	2.51%				21,980 / 19,095	
Mountlake Terrace MUGA	Affiliated U.U.	84	21	105	0.97%				345 / 273	
Mukilteo MUGA	Affiliated U.U.	10,806	3,605	14,411	1.26%				5,614 / 4,539	
Woodway MUGA	Affiliated U.U.	0	0	0	0.00%				605 / 491	
Snohomish County Unaffiliated UGA <sup>(3)</sup>	Unaffiliated U.U.	11,366	3,715	15,081	1.24%				3,918 / 3,672	
FCC Population Reserve Allocation	Rural-other	0	15,000	15,000	∞	0	0	0	n/a <sup>(2)</sup>	n/a <sup>(2)</sup>
Snohomish County Rural Area	Rural area	113,320	53,795	182,115	2.08%	7,128	11,022	18,150	n/a <sup>(2)</sup>	n/a <sup>(2)</sup>
Subtotals	City	327,540	89,983	417,523	1.06%	178,148	89,953	268,101	73,247 / 63,172	91,496 / 72,401
	Urban Unincorporated Affiliated	175,774	123,756	299,530	2.34%				121,760 / 100,656	
	Urban Unincorporated Unaffiliated	11,366	3,715	15,081	1.24%	25,499	16,836	42,335	3,918 / 3,672	968 / 13,416
	Urban Area	514,680	217,454	732,134	1.54%	203,647	106,789	310,436	198,925 / 167,500	92,464 / 85,817
Rural Area	113,320	53,795	182,115	2.08%	7,128	11,022	18,150	n/a <sup>(2)</sup>	n/a <sup>(2)</sup>	
<b>Snohomish County Total</b>		<b>628,000</b>	<b>286,249</b>	<b>929,249</b>	<b>1.72%</b>	<b>217,411</b>	<b>124,778</b>	<b>342,189</b>	<b>n/a</b>	<b>n/a</b>

Sources: Snohomish County Council Ordinance 04-006 appendix B (population data, employment data), Snohomish County 2002 Buildable Lands Report (Buildable Lands)

Notes:

<sup>(1)</sup> Jurisdictional boundaries are as of April 1, 2002

<sup>(2)</sup> Snohomish County's rural area employment and household capacities were not analyzed as part of the Buildable Lands program

<sup>(3)</sup> Snohomish County's Unaffiliated UGA includes Maltby, Silver Firs, and Paine Field

**Appendix G: King, Pierce, Snohomish County Previous Target Source Data**

Place <sup>(1)</sup>	Geographic Classification	Household Target 1992-2012	Employment Target 1992-2012
Algona	City	404	350
Auburn (KC portion)	City	8,089	11,100
Beaux Arts	City	0	0
Bellevue	City	8,733	30,533
Black Diamond	City	1,624	1,200
Bothell (KC portion)	City	1,955	2,900
Burien	City	1,867	450
Carnation <sup>(2)</sup>	City	404	0
Clyde Hill	City	12	0
Covington	City	1,493	1,066
Des Moines	City	2,192	2,555
Duvall <sup>(2)</sup>	City	1,661	1,700
Enumclaw <sup>(2)</sup>	City	2,425	1,000
Federal Way	City	15,284	15,420
Hunts Point	City	4	0
City of Issaquah	City	3,391	5,318
Kenmore	City	1,082	2,377
Kent	City	9,075	12,229
Kirkland	City	5,837	8,600
Lake Forest Park	City	469	215
Maple Valley	City	1,539	1,233
Medina	City	17	0
Mercer Island	City	1,122	1,700
Milton (King)	City	40	0
Newcastle	City	836	502
Normandy Park	City	135	0
North Bend <sup>(2)</sup>	City	1,527	2,050
Pacific (KC portion)	City	1,212	100
Redmond	City	9,878	29,509
Renton	City	9,020	23,000
Sammamish	City	5,466	3,283
SeaTac	City	5,525	15,800
Seattle	City	53,877	132,700
Shoreline	City	2,559	848
Skykomish <sup>(2)</sup>	City	27	0
Snoqualmie <sup>(2)</sup>	City	2,784	4,500
Tukwila	City	5,388	22,250
Woodinville	City	1,797	1,950
Yarrow Point	City	18	0
King County Urban Unincorporated area	U.U.	19,700	7,169
King County Rural Area	Rural area	7,000	0
<b>King County Total</b>		<b>195,468</b>	<b>343,607</b>

Sources: King County 2002 Buildable Lands Report

Notes:

<sup>(1)</sup> Jurisdictional boundaries are as of 1992

<sup>(2)</sup> King County 'rural cities' are considered with their associated PAA for purposes of targeting, as well as other data shown here

Place <sup>(1)</sup>	Geographic Classification	1992-2012 Population Target <sup>(2)</sup>
Bonney Lake	City	3,926
Buckley	City	2,630
Carbonado	City	67
DuPont	City	7,586
Eatonville	City	1,535
Fife	City	3,628
Fircrest	City	1,810
Gig Harbor	City	2,074
Milton (PC portion)	City	1,507
Orting	City	2,093
Puyallup	City	9,409
Roy	City	293
Ruston	City	98
South Prarie	City	457
Steilacoom	City	904
Sumner	City	4,925
Tacoma	City	34,353
Wilkeson	City	174
Pierce County urban unincorporated area	U.U.	77,800
Pierce County Rural area	Rural area	32,000
<b>Pierce County Total</b>		<b>187,269</b>

Source: Pierce County Council Resolution R94-153

Notes:

<sup>(1)</sup> Jurisdictional boundaries are as of April 1, 2002

<sup>(2)</sup> Population targets for cities adjusted since adoption due to revised 1992 population estimates

Place <sup>(1)</sup>	Geographic Classification	Population Data				Employment Data		
		1992 Population	1992-2012 Population Target	2012 Targeted Population (revised)	Average Annual Population Growth Rate	1990 Employment	1990-2012 Employment Target	2012 Targeted Employment
Arlington	City	4,555	3,345	7,900	2.42%			
Darrington	City	1,075	100	1,175	0.39%			
Gold Bar	City	1,140	435	1,575	1.42%			
Granite Falls	City	1,284	1,551	2,835	3.50%			
Index	City	140	50	190	1.34%			
Lake Stevens	City	4,240	4,531	8,771	3.21%			
Marysville	City	14,122	8,478	22,600	2.07%			
Monroe	City	5,095	2,905	8,000	1.98%			
Snohomish	City	6,870	930	7,800	0.55%			
Stanwood	City	2,155	1,223	3,378	1.97%			
Sultan	City	2,315	1,355	3,670	2.02%			
Bothell (SC part)	City	11,312	8,418	19,730	2.45%			
Brier	City	5,760	1,440	7,200	0.97%			
Edmonds	City	30,895	6,035	36,930	0.78%			
Everett	City	75,846	20,154	96,000	1.03%			
Lynnwood	City	29,113	3,977	33,090	0.56%			
Mill Creek	City	8,309	4,421	12,730	1.87%			
Mountlake Terrace	City	19,833	2,272	22,105	0.47%			
Mukilteo	City	13,420	6,491	19,911	1.73%			
Woodway	City	915	95	1,010	0.43%			
Arlington UGA	Affiliated U.U.	2,513	3,195	5,708	3.63%	155,895	104,853	260,748
Darrington UGA	Affiliated U.U.	48	9	57	0.75%			
Gold Bar UGA	Affiliated U.U.	464	685	1,149	4.02%			
Granite Falls UGA	Affiliated U.U.	55	1,033	1,088	13.86%			
Lake Stevens UGA	Affiliated U.U.	11,343	7,275	18,618	2.18%			
Marysville UGA	Affiliated U.U.	19,532	13,186	32,718	2.27%			
Monroe UGA	Affiliated U.U.	3,580	2,132	5,712	2.05%			
Snohomish UGA	Affiliated U.U.	1,539	2,614	4,153	4.41%			
Stanwood UGA	Affiliated U.U.	422	2,061	2,483	8.01%			
Sultan UGA	Affiliated U.U.	368	1,110	1,478	6.23%			
Bothell (SC part) MUGA	Affiliated U.U.							
Brier MUGA	Affiliated U.U.							
Edmonds MUGA	Affiliated U.U.							
Everett MUGA	Affiliated U.U.							
Lynnwood MUGA	Affiliated U.U.							
Mill Creek MUGA	Affiliated U.U.	120,256	74,778	195,034	2.12%			
Mountlake Terrace MUGA	Affiliated U.U.							
Mukilteo MUGA	Affiliated U.U.							
Woodway MUGA	Affiliated U.U.							
Snohomish County Unaffiliated UGA <sup>(2)</sup>	Unaffiliated U.U.							
Snohomish County Rural Area	Rural area	95,786	33,659	129,445	1.32%	6,582	1,765	8,347
<b>Snohomish County Total</b>		<b>494,300</b>	<b>219,943</b>	<b>714,243</b>	<b>1.61%</b>	<b>162,477</b>	<b>106,618</b>	<b>269,095</b>

Sources: Snohomish County Tomorrow 2001 Growth Monitoring Report (population, employment data)

Notes:

<sup>(1)</sup> Jurisdictional boundaries are as of February 28, 1993

<sup>(2)</sup> Snohomish County's Unaffiliated UGA includes Maltby, Silver Firs, and Paine Field

**Appendix H: Geographic Classification Areas - Aggregated Data (2000\02)**

Place <sup>(1)</sup>	Land Area (sq. mi.)	1995-2002 Housing Permits	1995-2002 Employment Growth	Household Data				Population Data				Employment Data			Buildable Lands Data	
				Current <sup>(1)</sup> Households	Household Target	Targeted Future Households	Targeted Average Annual Household Growth Rate	Current <sup>(1)</sup> Population	Population Target	Targeted Future Population	Average Annual Population Growth Rate	Current <sup>(1)</sup> Employment	2000-2022 Employment Target	Targeted Future Employment	Additional Residential Capacity	Additional Employment Capacity
<b>King County</b>	<b>802</b> <sup>(3)</sup>	<b>91,123</b>	<b>131,216</b>	<b>710,939</b>	<b>157,932</b>	<b>868,871</b>	<b>0.92%</b>	<b>1,736,911</b>	<b>315,500</b>	<b>2,052,411</b>	<b>0.76%</b>	<b>1,152,022</b>	<b>289,127</b>	<b>1,441,149</b>	<b>n/a</b>	<b>n/a</b>
Cities	387	75,091	124,576	586,781	138,526	725,307	0.97%	1,389,704	276,760	1,666,464	0.83%	1,107,615	281,214	1,388,829	238,319	594,299
Affiliated U.U.	58	8,130	2,511	59,558	7,045	66,603	0.51%	165,752	13,070	178,822	0.35%	19,800	2,568	22,368	16,826	2,568
Unaffiliated U.U.	18	2,363	74	17,700	6,361	24,061	1.41%	46,455	13,750	60,205	1.19%	7,652	5,345	12,997	7,805	6,195
Rural area	340 <sup>(2)</sup>	5,539	4,055	46,900	6,000	52,900	0.55%	135,000	11,920	146,920	0.39%	16,955	0	16,955	n/a <sup>(4)</sup>	n/a <sup>(4)</sup>
<b>Kitsap County</b>	<b>379</b> <sup>(3)</sup>	<b>11,515</b>	<b>7,014</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>231,969</b>	<b>99,599</b>	<b>331,568</b>	<b>1.64%</b>	<b>73,388</b>	<b>n/a</b> <sup>(5)</sup>	<b>n/a</b> <sup>(5)</sup>	<b>n/a</b> <sup>(6)</sup>	<b>n/a</b> <sup>(6)</sup>
Cities	58	2,702	1,637	n/a	n/a	n/a	n/a	72,072	30,450	102,522	1.61%	43,134	n/a	n/a	n/a	n/a
Affiliated U.U.	15	574	1,032	n/a	n/a	n/a	n/a	21,180	10,889	32,069	1.90%	3,904	n/a	n/a	n/a	n/a
Unaffiliated U.U.	23	1,858	3,505	n/a	n/a	n/a	n/a	40,285	28,024	68,309	2.43%	14,290	n/a	n/a	n/a	n/a
Rural-other	0	0	0	n/a	n/a	n/a	n/a	0	6,331	6,331	#	0	n/a	n/a	n/a	n/a
Rural area	284 <sup>(2)</sup>	6,381	840	n/a	n/a	n/a	n/a	98,432	23,905	122,337	0.99%	12,060	n/a	n/a	n/a	n/a
<b>Pierce County</b>	<b>784</b> <sup>(3)</sup>	<b>45,740</b>	<b>24,897</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>700,811</b>	<b>211,889</b>	<b>912,700</b>	<b>1.21%</b>	<b>229,366</b>	<b>n/a</b> <sup>(5)</sup>	<b>n/a</b> <sup>(5)</sup>	<b>n/a</b>	<b>n/a</b>
Cities	144	15,236	17,467	n/a	n/a	n/a	n/a	386,865	136,055	522,920	1.38%	179,261	n/a	n/a	77,189	159,700
Affiliated U.U.	37	4,811	3,026	n/a	n/a	n/a	n/a	96,347	28,793	125,140	1.20%	15,823	n/a	n/a	63,114	100,265
Unaffiliated U.U.	75	11,619	1,607	n/a	n/a	n/a	n/a	73,517	31,723	105,240	1.64%	17,128	n/a	n/a	n/a	n/a
Rural area	529 <sup>(2)</sup>	14,074	2,797	n/a	n/a	n/a	n/a	144,082	15,318	159,400	0.46%	17,154	n/a	n/a	n/a <sup>(4)</sup>	n/a <sup>(4)</sup>
<b>Snohomish County</b>	<b>578</b> <sup>(3)</sup>	<b>50,831</b>	<b>27,456</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>628,000</b>	<b>286,249</b>	<b>914,249</b>	<b>1.72%</b>	<b>217,411</b>	<b>124,778</b>	<b>342,189</b>	<b>n/a</b>	<b>n/a</b>
Cities	114	23,079	20,392	n/a	n/a	n/a	n/a	327,540	89,983	417,523	1.11%	178,148	89,953	268,101	73,247 / 63,172	91,496 / 72,401
Affiliated U.U.	60	15,568	3,374	n/a	n/a	n/a	n/a	175,774	123,756	299,530	2.45%	32,135	23,803	55,938	121,765 / 99,087	26,674 / 21,019
Unaffiliated U.U.	11	3,437	2,106	n/a	n/a	n/a	n/a	11,366	3,715	15,081	1.29%	0	0	0	n/a <sup>(4)</sup>	n/a <sup>(4)</sup>
Rural-other	0	0	0	n/a	n/a	n/a	n/a	0	15,000	15,000	#	0	0	0	n/a <sup>(4)</sup>	n/a <sup>(4)</sup>
Rural area	393 <sup>(2)</sup>	8,747	1,584	n/a	n/a	n/a	n/a	113,320	53,795	167,115	1.78%	7,128	11,022	18,150	n/a <sup>(4)</sup>	n/a <sup>(4)</sup>
<b>Regional Total</b>	<b>2,544</b> <sup>(3)</sup>	<b>199,209</b>	<b>190,583</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>3,297,691</b>	<b>913,237</b>	<b>4,210,928</b>	<b>1.12%</b>	<b>1,672,187</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

Sources: PSRC (land area, 1995-2002 housing permits & employment growth), King County CPPs (King County household, employment data), PSRC analysis (King County population data), Kitsap County Board of Commissioners Ord. #327-2004 (population data), Pierce County Council Resolution 2003-104s (Pierce County population data), Snohomish County Council Ord. 04-006 (Snohomish County population, employment data), PSRC - ESD (current employment data) King, Kitsap, Pierce, Snohomish County 2002 Buildable Lands reports (Buildable Lands data)

Notes:

- <sup>(1)</sup> The jurisdictional boundaries for these figures differ by county: King - April, 2000; Kitsap - April 2000; Pierce - April 2002; Snohomish - April 2002
- <sup>(2)</sup> Rural area land area figures refer only to non-resource (mineral, forest, or agricultural) land
- <sup>(3)</sup> Land area totals do not include resource (mineral, forest, or agricultural) lands
- <sup>(4)</sup> Rural capacities were not analyzed as part of the Buildable Lands program
- <sup>(5)</sup> Kitsap and Pierce counties did not set employment targets
- <sup>(6)</sup> Kitsap County's Buildable Lands analysis determined that enough capacity existed within the UGA, but did not produce an ultimate capacity figure comparable to the other counties

**Appendix I: Geographic Classification Areas - Aggregated Data (1992/93)**

Place <sup>(1)</sup>	1992-2012 Population Target	1992-2012 Household Target	1992-2012 Employment Target
<b>King County</b>	<b>462,164</b> <sup>(2)</sup>	<b>195,468</b>	<b>343,607</b>
Cities	388,166 <sup>(2)</sup>	168,768	336,438
Affiliated U.U.			
Unaffiliated U.U.	53,978 <sup>(2)</sup>	19,700	7,169
Rural area	20,020 <sup>(2)</sup>	7,000	0
<b>Kitsap County</b>	<b>62,823</b>	<b>n/a</b>	<b>n/a</b> <sup>(3)</sup>
Cities	29,258	n/a	n/a <sup>(3)</sup>
Affiliated U.U.			
Unaffiliated U.U.	23,495	n/a	n/a <sup>(3)</sup>
Rural area	10,070	n/a	n/a <sup>(3)</sup>
<b>Pierce County</b>	<b>187,269</b>	<b>n/a</b>	<b>n/a</b> <sup>(3)</sup>
Cities	77,469 <sup>(4)</sup>	n/a	n/a <sup>(3)</sup>
Affiliated U.U.			
Unaffiliated U.U.	77,800	n/a	n/a <sup>(3)</sup>
Rural area	32,000	n/a	n/a <sup>(3)</sup>
<b>Snohomish County</b>	<b>219,944</b>	<b>n/a</b>	<b>106,618</b>
Cities	78,206	n/a	
Affiliated U.U.			104,853
Unaffiliated U.U.	108,079	n/a	
Rural area	33,659	n/a	1,765
<b>Regional Total</b>	<b>932,200</b>	<b>n/a</b>	<b>n/a</b>

Sources: King County 2002 Buildable Lands Report (King County population, household, employment targets),  
Kitsap County Board of Commissioners Ord. #311-2003 (Kitsap County population targets),  
Pierce County Council Resolution R94-153 (Pierce County population targets),  
Snohomish County Tomorrow 2001 Growth Monitoring Report (Snohomish County population, employment targets)

Notes:

- <sup>(1)</sup> The jurisdictional boundaries for these figures differ by county: King - 1992; Kitsap - 1992; Pierce - 1997; Snohomish - 1993
- <sup>(2)</sup> King County population target figures are derived, representing a conversion from adopted household targets based on 2000 census av. HH size values
- <sup>(3)</sup> Kitsap and Pierce counties did not set employment targets
- <sup>(4)</sup> Population targets for cities adjusted since adoption due to revised 1992 population estimates

**Appendix J: City Level Source Data**

County Name	Place <sup>(1)</sup>	1990 Population Estimate	2000 Census Population	1990-2000 Population Growth	Population Target <sup>(4)</sup>	1990-2000 Average Annual Population Growth Rate	Targeted Average Annual Population Growth Rate	Historical Annual Population Growth	Targeted Annual Population Growth	Difference in Historical vs. Targeted Annual Population Growth	% Difference in Historical vs. Targeted Annual Population Growth	Trend*
King	Algona	1,694	2,460	766	730	3.8%	1.2%	77	33	-44	-57%	▼
King	Beaux Arts	303	307	4	0	0.1%	0.0%	0	0	-0	-100%	▼
King	Bellevue	98,490	109,569	11,079	19,470	1.1%	0.7%	1,108	885	-223	-20%	▽
King	Black Diamond	2,891	3,970	1,079	2,720	3.2%	2.4%	108	124	16	14.9%	△
King	Burien	29,010	31,881	2,871	2,450	0.9%	0.3%	287	111	-176	-61%	▼
King	Carnation <sup>(3)</sup>	1,323	1,969	646	640	4.1%	1.3%	65	29	-36	-55%	▼
King	Clyde Hill	2,973	2,890	-83	0	-0.3%	0.0%	-8	0	8	∞	▲
King	Covington	9,801	13,783	3,982	3,590	3.5%	1.1%	398	163	-235	-59%	▼
King	Des Moines	27,395	29,267	1,872	3,200	0.7%	0.5%	187	145	-42	-23%	▽
King	Duvall <sup>(3)</sup>	2,823	4,616	1,793	2,700	5.0%	2.1%	179	123	-56	-31%	▽
King	Enumclaw <sup>(3)</sup>	8,441	12,290	3,849	4,170	3.8%	1.3%	385	190	-195	-51%	▼
King	Federal Way	67,869	83,259	15,390	12,620	2.1%	0.6%	1,539	574	-965	-63%	▼
King	Hunts Point	513	443	-70	0	-1.5%	0.0%	-7	0	7	∞	▲
King	Issaquah	8,216	11,212	2,996	8,470	3.2%	2.6%	300	385	85	29%	△
King	Kenmore	15,359	18,678	3,319	5,050	2.0%	1.1%	332	230	-102	-31%	▽
King	Kent	60,266	79,524	19,258	7,870	2.8%	0.4%	1,926	358	-1,568	-81%	▼
King	Kirkland	40,039	45,054	5,015	9,940	1.2%	0.9%	502	452	-50	-10%	▽
King	Lake Forest Park	13,424	13,142	-282	1,010	-0.2%	0.3%	-28	46	74	∞	▲
King	Maple Valley	5,341	14,209	8,868	320	10.3%	0.1%	887	15	-872	-98%	▼
King	Medina	2,981	3,011	30	0	0.1%	0.0%	3	0	-3	-100%	▼
King	Mercer Island	20,816	22,036	1,220	2,960	0.6%	0.6%	122	135	13	11%	△
King	Newcastle	4,793	7,737	2,944	1,860	4.9%	1.0%	294	85	-209	-71%	▼
King	Normandy Park	6,745	6,392	-353	0	-0.5%	0.0%	-35	0	35	∞	▲
King	North Bend <sup>(3)</sup>	5,719	8,234	2,515	750	3.7%	0.4%	252	34	-218	-86%	▼
King	Redmond	36,482	45,256	8,774	19,100	2.2%	1.6%	877	868	-9	-1%	▽
King	Renton	42,649	50,052	7,403	11,930	1.6%	1.0%	740	542	-198	-27%	▽
King	Sammamish	22,568	34,104	11,536	10,070	4.2%	1.2%	1,154	458	-696	-60%	▼
King	SeaTac	22,875	25,496	2,621	10,420	1.1%	1.6%	262	474	212	81%	▲
King	Seattle	516,280	563,374	47,094	95,920	0.9%	0.7%	4,709	4,360	-349	-7%	▽
King	Shoreline	51,721	53,025	1,304	4,980	0.2%	0.4%	130	226	96	73%	▲
King	Skykomish	275	214	-61	30	-2.5%	0.6%	-6	1	7	∞	▲
King	Snoqualmie <sup>(3)</sup>	2,300	2,871	571	3,990	2.2%	4.0%	57	181	124	217%	▲
King	Tukwila	14,540	17,181	2,641	6,750	1.7%	1.5%	264	307	43	16.2%	△
King	Woodinville	6,614	9,194	2,580	4,400	3.3%	1.8%	258	200	-58	-22%	▽
King	Yarrow Point	974	1,008	34	30	0.3%	0.1%	3	1	-2	-71%	▼
King	Unincorporated Total	306,197	352,764	46,567	38,740	1.4%	0.5%	4,657	1,761	-2,896	-62%	▼
King	Unincorporated Rural	108,172	123,326	15,154	11,920	1.3%	0.4%	1,515	542	-973	-64%	▽
King	Unincorporated Urban	198,025	229,438	31,413	26,820	1.5%	0.5%	3,141	1,219	-1,922	-61%	▼
King/Prc	Auburn <sup>(2)</sup>	33,835	40,314	6,479	20,479	1.8%	1.3% 19.7%	648	931	283	44%	△
King/Prc	Milton <sup>(2)</sup>	5,152	5,795	643	2,099	1.2%	0.4% 1.6%	64	95	31	48%	△
King/Prc	Pacific	4,903	5,527	624	1,696	1.2%	1.4% -	62	77	15	23%	△
King/Sno	Bothell <sup>(2)</sup>	26,396	30,150	3,754	11,180	1.3%	0.9% 1.8%	375	488	113	29.99%	△

Sources: 1990 census (adjusted to 2000 jurisdictional boundaries), 2000 census, county target information (see appendices B,D,E,F)

Notes:

\* The 'Trend' column identifies cities with a % difference in annual population growth of +50% or more (▲), +0-50% (△), -0-50% (▽), -50% or more (▼)

<sup>(1)</sup> Jurisdictional boundaries are as of April, 2000, except where noted

<sup>(2)</sup> Pierce and Snohomish County cities are targeted using 2002 boundaries, historical growth is for 2000 city limits, these cities have annexation activity between the two years

<sup>(3)</sup> King County rural cities are targeted with their PAA's, historical growth is for city limits only

<sup>(4)</sup> King County population targets are derived, representing a conversion of the adopted household targets. See appendix C for details

**Appendix J: City Level Source Data**

County Name	Place <sup>(1)</sup>	1990 Population Estimate	2000 Census Population	1990-2000 Population Growth	Population Target <sup>(4)</sup>	1990-2000 Average Annual Population Growth Rate	Targeted Average Annual Population Growth Rate	Historical Annual Population Growth	Targeted Annual Population Growth	Difference in Historical vs. Targeted Annual Population Growth	% Difference in Historical vs. Targeted Annual Population Growth	Trend*
Kitsap	Bainbridge Island	15,846	20,308	4,462	8,352	2.5%	1.4%	446	334	-112	-25%	▽
Kitsap	Bremerton	39,409	37,259	-2,150	14,759	-0.6%	1.3%	-215	590	805	∞	▲
Kitsap	Port Orchard	5,668	7,693	2,025	3,600	3.1%	1.5%	203	144	-59	-29%	▽
Kitsap	Poulsbo	5,328	6,813	1,485	3,739	2.5%	1.8%	149	150	2	1%	△
Kitsap	Unincorporated Total	123,480	159,896	36,416	65,602	2.6%	1.4%	3,642	2,624	-1,018	-28%	▽
Kitsap	Unincorporated Rural	76,182	100,850	24,668	28,858	2.8%	1.0%	2,467	1,154	-1,313	-53%	▼
Kitsap	Unincorporated Urban	47,298	59,046	11,748	36,744	2.2%	2.0%	1,175	1,470	295	25%	△
Pierce	Bonney Lake <sup>(2)</sup>	8,283	9,687	1,404	7,956	1.6%	2.5%	140	362	222	158%	▲
Pierce	Buckley	3,516	4,145	629	1,055	1.7%	1.0%	63	48	-15	-24%	▽
Pierce	Carbonado	495	621	126	209	2.3%	1.3%	13	10	-3	-21%	▽
Pierce	DuPont	592	2,452	1,860	6,648	15.3%	6.1%	186	302	116	62%	▲
Pierce	Eatonville	1,422	2,012	590	768	3.5%	1.5%	59	35	-24	-41%	▽
Pierce	Edgewood	8,702	9,089	387	4,611	0.4%	1.9%	39	210	171	443%	▲
Pierce	Fife	4,666	4,784	118	4,116	0.3%	2.9%	12	187	175	1485%	▲
Pierce	Fircrest	5,793	5,868	75	932	0.1%	0.7%	8	42	35	460%	▲
Pierce	Gig Harbor <sup>(2)</sup>	4,573	6,465	1,892	4,323	3.5%	2.4%	189	197	8	4%	△
Pierce	Lakewood	56,433	58,211	1,778	13,789	0.3%	1.0%	178	627	449	253%	▲
Pierce	Orting	2,154	3,760	1,606	4,140	5.7%	3.4%	161	188	27	17%	△
Pierce	Puyallup <sup>(2)</sup>	25,590	33,011	7,421	5,586	2.6%	0.7%	742	254	-488	-66%	▼
Pierce	Roy <sup>(2)</sup>	264	260	-4	293	-0.2%	1.6%	-0	13	13	∞	▲
Pierce	Ruston	693	738	45	1,022	0.6%	4.0%	5	46	42	922%	▲
Pierce	South Prairie	218	382	164	448	5.8%	3.6%	16	20	4	22%	△
Pierce	Steilacoom	5,728	6,049	321	851	0.5%	0.6%	32	39	7	21%	△
Pierce	Sumner <sup>(2)</sup>	7,690	8,504	814	3,746	1.0%	1.7%	81	170	89	109%	▲
Pierce	Tacoma	176,698	193,556	16,858	61,676	0.9%	1.3%	1,686	2,803	1,117	66%	▲
Pierce	University Place	27,285	29,933	2,648	4,007	0.9%	0.6%	265	182	-83	-31%	▽
Pierce	Wilkeson	366	395	29	155	0.8%	1.5%	3	7	4	141%	▲
Pierce	Unincorporated Total	240,338	315,617	75,279	75,834	2.8%	101.5%	7,528	3,447	-4,081	-54%	▼
Pierce	Unincorporated Rural	104,601	143,391	38,790	15,318	3.2%	0.5%	3,879	696	-3,183	-82%	▼
Pierce	Unincorporated Urban	135,737	172,226	36,489	60,516	2.4%	1.4%	3,649	2,751	-898	-24.6%	▽

Sources: 1990 census (adjusted to 2000 jurisdictional boundaries), 2000 census, county target information (see appendices B,D,E,F)

Notes:

\* The 'Trend' column identifies cities with a % difference in annual population growth of +50% or more (▲), +0-50% (△), -0-50% (▽), -50% or more (▼)

<sup>(1)</sup> Jurisdictional boundaries are as of April, 2000, except where noted

<sup>(2)</sup> Pierce and Snohomish County cities are targeted using 2002 boundaries, historical growth is for 2000 city limits, these cities have annexation activity between the two years

<sup>(3)</sup> King County rural cities are targeted with their PAA's, historical growth is for city limits only

<sup>(4)</sup> King County population targets are derived, representing a conversion of the adopted household targets. See appendix C for details

**Appendix J: City Level Source Data**

County Name	Place <sup>(1)</sup>	1990 Population Estimate	2000 Census Population	1990-2000 Population Growth	Population Target <sup>(4)</sup>	1990-2000 Average Annual Population Growth Rate	Targeted Average Annual Population Growth Rate	Historical Annual Population Growth	Targeted Annual Population Growth	Difference in Historical vs. Targeted Annual Population Growth	% Difference in Historical vs. Targeted Annual Population Growth	Trend*
Snohomish	Arlington <sup>(2)</sup>	6,067	11,713	5,646	4,080	6.8%	1.2%	565	177	-388	-69%	▼
Snohomish	Brier	5,797	6,383	586	1,345	1.0%	0.8%	59	58	-1	-1%	▽
Snohomish	Darrington <sup>(2)</sup>	1,042	1,136	94	575	0.9%	1.6%	9	25	16	166%	▲
Snohomish	Edmonds	38,922	39,515	593	5,420	0.2%	0.6%	59	236	177	298%	▲
Snohomish	Everett <sup>(2)</sup>	70,964	91,488	20,524	26,990	2.6%	1.1%	2,052	1,173	-879	-43%	▽
Snohomish	Gold Bar <sup>(2)</sup>	1,232	2,014	782	842	5.0%	1.5%	78	37	-41	-53%	▼
Snohomish	Granite Falls <sup>(2)</sup>	1,207	2,347	1,140	2,010	6.9%	2.4%	114	87	-27	-24%	▽
Snohomish	Index	139	157	18	30	1.2%	0.7%	2	1	-1	-44%	▽
Snohomish	Lake Stevens	3,630	6,361	2,731	1,720	5.8%	1.0%	273	75	-198	-73%	▼
Snohomish	Lynnwood <sup>(2)</sup>	29,868	33,847	3,979	4,520	1.3%	0.5%	398	197	-201	-50.5%	▼
Snohomish	Marysville <sup>(2)</sup>	14,342	25,315	10,973	12,140	5.8%	1.6%	1,097	528	-569	-52%	▼
Snohomish	Mill Creek <sup>(2)</sup>	8,325	11,525	3,200	4,034		1.3%	320	175	-145	-45%	▽
Snohomish	Monroe <sup>(2)</sup>	5,904	13,795	7,891	5,870	8.9%	1.5%	789	255	-534	-68%	▼
Snohomish	Mountlake Terrace <sup>(2)</sup>	19,357	20,362	1,005	1,986	0.5%	0.4%	101	86	-15	-14%	▽
Snohomish	Mukilteo	12,067	18,019	5,952	3,480	4.1%	0.8%	595	151	-444	-75%	▼
Snohomish	Snohomish <sup>(2)</sup>	6,839	8,494	1,655	1,406	2.2%	0.7%	166	61	-105	-63%	▼
Snohomish	Stanwood	2,037	3,923	1,886	1,565	6.8%	1.4%	189	68	-121	-64%	▼
Snohomish	Sultan <sup>(2)</sup>	2,303	3,344	1,041	4,280	3.8%	3.3%	104	186	82	79%	▲
Snohomish	Woodway	914	936	22	180	0.2%	0.7%	2	8	6	264%	▲
Snohomish	Unincorporated Total	220,778	291,385	70,607	196,266	2.8%	100.7%	7,061	8,533	1,472	21%	△
Snohomish	Unincorporated Rural	90,012	115,550	25,538	68,795	2.5%	2.1%	2,554	2,991	437	17%	△
Snohomish	Unincorporated Urban	130,766	175,835	45,069	127,471	3.0%	2.3%	4,507	5,542	1,035	23%	△
<b>Regional Total</b>		<b>2,753,950</b>	<b>3,281,825</b>	<b>527,875</b>	<b>909,290</b>	<b>1.8%</b>	<b>2.3%</b>	<b>52,788</b>	<b>40,235</b>	<b>-12,553</b>	<b>-24%</b>	▽

Sources: 1990 census (adjusted to 2000 jurisdictional boundaries), 2000 census, county target information (see appendices B,D,E,F)

Notes:

\* The 'Trend' column identifies cities with a % difference in annual population growth of +50% or more (▲), +0-50% (△), -0-50% (▽), -50% or more (▼)

<sup>(1)</sup> Jurisdictional boundaries are as of April, 2000, except where noted

<sup>(2)</sup> Pierce and Snohomish County cities are targeted using 2002 boundaries, historical growth is for 2000 city limits, these cities have annexation activity between the two years

<sup>(3)</sup> King County rural cities are targeted with their PAA's, historical growth is for city limits only

<sup>(4)</sup> King County population targets are derived, representing a conversion of the adopted household targets. See appendix C for details

## Appendix K: Preliminary Best Practice Concepts

This appendix identifies a **preliminary** list of best practice concepts that were identified during the process of developing the Growth Targets report. As of the printing date, these concepts are purely illustrative and have received no official endorsement. Rather, the appendix should be considered a list of ideas that were "brainstormed" during the project.

To increase the usefulness of the appendix, the concepts are cross-referenced using the following factors:

1. *Stage* - whether the concept is implemented before, during, or after the next round of Growth Targets are adopted.
  - Before: the 2-3 year time period before the next round of targets are adopted (approximately 2008-2010). Actions in this period relate primarily to data collection analysis, and policy development.
  - During: the approximately 1 year period after the OFM population projection range is provided, the countywide control total is set, the policies and methodologies are implemented, and the Growth Targets are allocated (approximately 2011-2012). Actions in this period relate primarily to methodology.
  - After: the 3-6 year period after the targets have been adopted and ratified (approximately 2012-2018). Actions in this period relate primarily to actions to implement the Growth Targets - incentives and rezoning, adopting new policies, data collection and monitoring, and policy and methodology reviews and adjustments.
2. *Type* - whether the concept is related to residential targets, employment targets, or both.
3. *Category* - whether the concept is primarily about policy, methodology, or both.

As the VISION 2020+20 update continues, and the multicounty planning policies are developed, these concepts may be revisited, revised, and refined.

STAGE Before, During, After, or All	TYPE Employment or Residential	CATEGORY Policy or Methodology	- TOPIC   DISCUSSION   BEST PRACTICE -
All	Both	Policy	<p><b>Topic: Adopt Countywide Policies to Guide Process</b></p> <p><b>Discussion:</b> Some of the counties have policies written into their countywide planning policies that guide the Growth Targets process, and some go so far as to describe specifically the methodology to be used. Other counties do not have these policies. While negotiation should always be part of this type of exercise, development of policies to guide the process is a critical element to ensure that the outcomes of the process support countywide goals. Also, establishing clear policies helps balance the authority in the Growth Targets process between cities and counties (see <i>discussion of the authority of cities, counties, and CPPs on pages 13-14</i>).</p> <p><b>Best Practice #1:</b> Each of the four countywide planning groups should develop policies to guide the next Growth Targets process. Some of the topics to be considered for policy development should include the setting of the countywide control total, the inclusion of regional perspectives, and the suballocated proportion of the target across (and within) the different geographies. Guidance for some of these topics may come from the VISION 2020+20 update.</p> <p>Importantly, the policies should be explicit about how the Growth Targets are to be used in comprehensive plans. These policies should also be explicit about the role of designated regional growth centers as locations that are targeted to accommodate an appropriate share of the region's targeted growth.</p> <p>Also, the CPPs should discuss and perhaps guide how target setting (and therefore planning) for the affiliated urban UGAs (AUUs) (i.e., joint planning areas) is to be done - this may address topics such as proactively seeking to affiliate the entire UGA, formalizing boundaries, revenue sharing, provision of infrastructure, and interlocal agreements to help formalize joint planning for these areas. As annexations and incorporations occur, growth targets adjustment decisions should be part of that process.</p> <p>Last, and perhaps most important, is the need to adopt policies to guide actions that help to implement the Growth Targets - this includes rezoning (see <i>Best Practice #13</i>), infrastructure provision, incentive programs, change in local plan policies, and so on.</p>
All	Both	Both	<p><b>Topic: Make Targets Process More Transparent</b></p> <p><b>Discussion:</b> The setting of Growth Targets is an important GMA action. The importance of the process means that it must be transparent and understandable to the larger public and interested stakeholders.</p> <p><b>Best Practice #2:</b> Work to develop methods to communicate the meaning of the process, and consider potential methods to include a larger set of stakeholders into the process as it occurs. This could take the form of public open houses, newspaper inserts, or advertisements on jurisdiction websites.</p> <p>Some of the important steps in making the Growth Targets process and results more transparent are adopting policies (<i>BP #1</i>), adopting residential targets as housing units rather than as population (<i>BP #6</i>), and creating consistent timeframes (<i>BP #4</i>) and methodologies (<i>BP #7</i>). Another step would be to start to use more consistent terminology across the region.</p> <p>After the process is complete, each jurisdiction's comprehensive plan should clearly identify the Growth Target. If the land use element uses a different number for planning purposes, both numbers should be presented and their roles described.</p>

STAGE Before, During, After, or All	TYPE Employment or Residential	CATEGORY Policy or Methodology	- TOPIC   DISCUSSION   BEST PRACTICE -
Before	Both	Policy	<p><b>Topic: Agree on Purpose of Rural Area Targets</b></p> <p><b>Discussion:</b> Both the GMA and most county comprehensive plans envision a limitation of both residential and employment growth in the rural areas. Growth Targets are aspirational goals but must be rooted in objective analysis. Targets for the region's rural areas, therefore, should likely reflect the aspiration to limit growth, while still recognizing that some market dynamics will create some level of growth in the rural areas.</p> <p><b>Best Practice #3:</b> When adopting policies to guide the Growth Targets process (<i>BP #1</i>), the policies should consider defining and setting a target that reflects the maximum amount of growth that the rural area will accommodate (i.e., a ceiling, rather than a floor).</p>
Before	Both	Methodology	<p><b>Topic: Develop Preferred Planning Horizon Dates</b></p> <p><b>Discussion:</b> The existing planning horizon dates have a lot of history behind them, and are to some extent entrenched. Changing them so that they are consistent will be no small feat, and will take leadership.</p> <p><b>Best Practice #4:</b> Use the substantive authority of the multicounty and countywide planning policies to require that all of the county's planning horizons start and end on the same date.</p>
Before	Employment	Methodology	<p><b>Topic: Develop Employment Target Long-Range Forecasts</b></p> <p><b>Discussion:</b> Being able to set employment targets together with residential targets requires a long-range employment forecast to comparable to OFM population forecast range. Two counties in the region have developed and used this type of methodology.</p> <p><b>Best Practice #5:</b> Assess and consider using the existing methodologies from the two counties that currently adopt employment targets. It is possible that PSRC's long-range econometric model forecasts and the "small area forecasts" may be useful in this process.</p>
Before	Residential	Methodology	<p><b>Topic: Develop Preferred Unit for Residential Targets</b></p> <p><b>Discussion:</b> Three of the four counties adopt population targets, and one adopts household targets. While the OFM range is given in terms of population, counties and cities are also required to convert the targets to housing units to meet the requirements for the housing elements of local comprehensive plans. Further, since land use regulations operate solely on housing units and not population, the conversion makes the targets more meaningful if adopted as housing units. Also, housing units are a more understandable and transparent unit for both the public and the development community to understand and work with. Finally, using housing units supports a better analysis of jobs-housing balance (<i>BP #9</i>) when Targets are adopted.</p> <p><b>Best Practice #6:</b> Counties and cities should adopt residential Growth Targets in terms of housing units, rather than population. Once the OFM population projection range is provided, the conversion to housing units should be one of the first steps in the methodological process. This will require agreement on such things as a methodology to estimate current and future household sizes.</p>

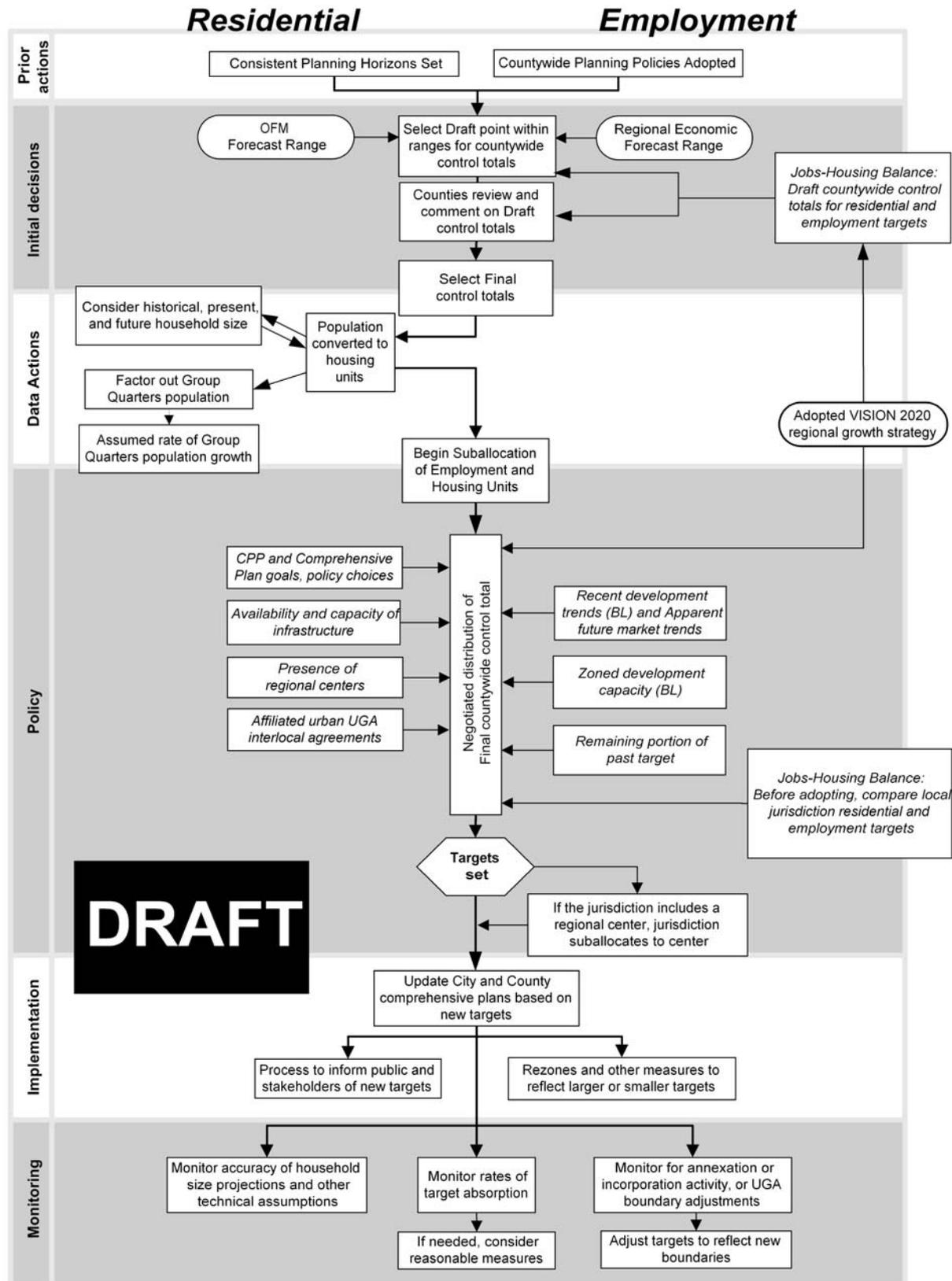
STAGE Before, During, After, or All	TYPE Employment or Residential	CATEGORY Policy or Methodology	- TOPIC   DISCUSSION   BEST PRACTICE -
Before and During	Both	Methodology	<p><b>Topic: Develop and Use a Preferred Methodology</b></p> <p><b>Discussion:</b> One finding of the Growth Targets project was that the each county's Growth Targets methodology is somewhat different from the others. These differences have the potential to hinder coordination and public involvement and awareness.</p> <p><b>Best Practice #7:</b> A flowchart is provided at the end of this appendix that diagrams an example of a best practice methodology. Before the next process starts, policies and procedures should be adopted (<i>BP #1-6</i>). Under the proposed methodology, the first step is the selection of a draft control total for population and employment - derived from OFM's official forecast range for residential targets and within the regional employment forecast range for employment targets (<i>BP #5</i>). Following this, a new step would be to allow other counties to comment on the draft control totals (<i>BP #8</i>). After this, counties would select their final control total, and the suballocation process would begin.</p> <p>Some data actions would then occur to translate the population control total into a preferred unit for residential targets (<i>BPs #6 and #11</i>), resulting in a clear statement of how many new households and jobs will be required countywide to accommodate forecasted growth.</p> <p>The next step blends technical with policy considerations. The review of existing methods found many factors considered - the following list describes some key factors that should be considered:</p> <ul style="list-style-type: none"> <li>• The newly adopted regional VISION</li> <li>• Existing countywide planning policies</li> <li>• Existing county and city comprehensive plan goals and policies</li> <li>• Recent development trends as reported through the buildable lands program or other studies</li> <li>• Zoned development capacity as reported through the buildable lands program or other studies</li> <li>• Apparent future market trends, as available</li> <li>• Presence of regional growth centers</li> <li>• Presence and status of Affiliated Urban UGAs and any related interlocal agreements</li> <li>• Availability and capacity of infrastructure</li> <li>• Jobs-Housing Balance (<i>BP #9</i>)</li> </ul> <p>How these factors are considered, as well as the priority assigned to each one is subject to each county's prerogative, but decisions need to be transparent and well documented.</p> <p>Following adoption, a series of implementation and monitoring processes are recommended. This includes an immediate next step - jurisdictions with designated regional growth centers should then set a target for their center (<i>BP #1</i>).</p>
During	Both	Policy	<p><b>Topic: Allow Regional Perspectives on Countywide Control Total</b></p> <p><b>Discussion:</b> Currently, counties and cities set the countywide control total and then suballocate. In this round of targets, all the counties used a number very close to OFM's "most likely forecast." However, jurisdictions from other counties have no official opportunity to weigh in on the choices being made in other counties, even though these choices have impacts on them (such as jobs-housing balance and its affect on cross-county commuting).</p> <p><b>Best Practice #8:</b> Allow for a regional perspective in the countywide process, by allowing other counties to comment on the countywide control total before the suballocation process begins. Counties would have authority to use the other county's comments as they see fit.</p>

STAGE Before, During, After, or All	TYPE Employment or Residential	CATEGORY Policy or Methodology	- TOPIC   DISCUSSION   BEST PRACTICE -
During	Both	Both	<p><b>Topic: Consider Jobs Housing Balance</b></p> <p><b>Discussion:</b> Balancing the supply of jobs and the supply of housing remains an important concept, and with the recommendation to adopt employment targets (<i>Recommendation C, page 102</i>), the Growth Targets process could become a key vehicle through which the issue is addressed.</p> <p><b>Best Practice #9:</b> Consider jobs-housing balance when setting Growth Targets, probably at three points in the process: (1) when setting the countywide control total and letting other counties comment in order to bring a regional perspective into the aggregate county target numbers (<i>BP #8</i>), (2) as counties begin to suballocate the final control total, they can aggregate the suballocations to subareas to seek to create an appropriate balance in the subareas, and (3) when cities agree on their individual targets, they can consider and negotiate for an appropriately balanced residential and employment target.</p>
During	Both	Methodology	<p><b>Topic: Review Allocations to Different Geographies &amp; Compare to VISION</b></p> <p><b>Discussion:</b> A key finding in the Growth Targets report was the interpretation of the GMA by the GM Hearings Board as saying growth should be targeted to cities. A second finding was the difference in geographic distribution between recent development patterns and the first set of Growth Targets.</p> <p><b>Best Practice #10:</b> When it is updated, VISION 2020's preferred growth strategy should provide guidance when setting Growth Targets. This would happen at a number of different stages.</p> <p>During each county's suballocation process, a step should be included in the methodology wherein the suballocated numbers are aggregated and compared to the updated regional VISION. If too much or too little growth (likely, as a percentage of the total growth) is identified, the counties and cities should discuss revising the suballocations to bring them more in-line with the regional VISION. This will likely mean targeting growth first to cities, then AUUs, then UUs, and last to rural areas.</p>
During	Residential	Methodology	<p><b>Topic: Remove Group Quarters From Calculations</b></p> <p><b>Discussion:</b> Group quarters are a subset of the number of housing units that are to be targeted, however, they are not typical households - they include college dormitories, homes for incarcerated persons, and so on. Including this subset, which represents between 1.5 to 3.0% of each county's population, inflates the number of housing units that are needed.</p> <p><b>Best Practice #11:</b> Once the countywide control total is set, group quarters populations should be removed from further consideration in the target setting process and should be dealt with through other, separate processes.</p>
Before & After	Both	Methodology	<p><b>Topic: Adjust Data Collection &amp; Analysis Methods</b></p> <p><b>Discussion:</b> Growth Targets are grounded in technical and data analysis. One difficulty in the process has been the agreement on what data to collect, and at what levels. One of the most relevant data exercises is the Buildable Lands analysis, however, it uses a 10-year forecast horizon, whereas targets are on a 20 year forecast horizon.</p> <p><b>Best Practice #12:</b> During the next Buildable Lands analysis cycle, the countywide planning groups should seek to ensure that data is collected in a manner that supports the next round of target setting based on any best practices that are adopted, and consider using a 20-year horizon.</p>

STAGE Before, During, After, or All	TYPE Employment or Residential	CATEGORY Policy or Methodology	- TOPIC   DISCUSSION   BEST PRACTICE -
After	Both	Policy	<p><b>Topic: Adjust Zoning and Development Regulations to Implement the Target</b></p> <p><b>Discussion:</b> The primary requirement of the Growth Targets process is to ensure that there is sufficient zoned capacity to accommodate the residential target. This goes beyond just zoning, however, with the GM Hearings Board stating that growth accommodation is a paramount GMA duty for cities, including meeting the population and (if any) employment allocations provided to them by their counties. Thus, cities must assure that they can continue to meet this important growth accommodation duty even in the face of capacity-reducing restrictions such as concurrency and critical areas regulations.<sup>1</sup></p> <p><b>Best Practice #13:</b> With the recommendation to adopt employment targets (<i>Recommendation C, page 102</i>), a critical first step for jurisdictions will be to evaluate their current zoning to ensure that there is both sufficient capacity and an appropriate balance of capacity for both residential and employment growth. This implies both upzones and possibly downzones in areas where a new target is smaller than the old target. It also implies looking at the set of implementing regulations - such as CAOs and concurrency - and ensuring that they allow the jurisdiction to accommodate its target as well.</p>
After	Both	Methodology	<p><b>Topic: Monitor the Results</b></p> <p><b>Discussion:</b> The growth targeting process is a long-range planning exercise that involves assumptions and predictions looking forward as long as several decades. A monitoring program should be implemented that tracks the validity of technical assumptions made, monitors the rate of residential and employment growth absorption, and tracks changing geographies as a result of annexation and incorporation activity, urban growth boundary adjustments, and urban center designations.</p> <p><b>Best Practice #14:</b> Once the final targets are adopted, the monitoring and implementation phase would begin. Each county should designate a body responsible for monitoring.</p> <p>Important areas in need of monitoring include:</p> <ul style="list-style-type: none"> <li>o Rates of target absorption and other market trends should be monitored to evaluate whether reasonable measures should be implemented to help better achieve targets. This should be done recognizing that targets are intended to represent long-term growth and year-to-year discrepancies do not necessarily imply a problem.</li> <li>o Household size projections and other technical assumptions should be monitored, and the information used as the targets are updated. Information gained from monitoring these assumptions will also help direct and inform any reasonable measures efforts that may be needed.</li> </ul>

<sup>1</sup> Hensley and McVitte v. Snohomish County. Consolidated Case No. 01-3-0004c. Order Finding Compliance (Hensley IV) and Final Decision and Order (Hensley V). June 17, 2002

# Flowchart for Best Practice #7: Develop and Use a Preferred Methodology

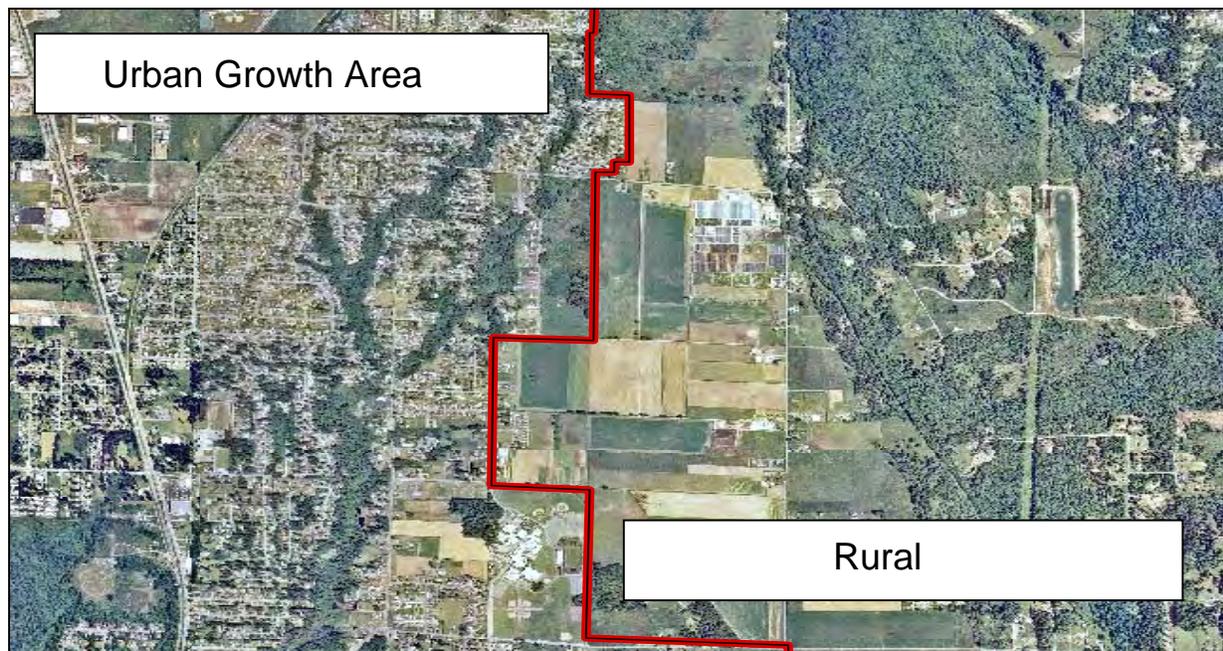


VISION 2020 + 20 Update  
Issue Paper on Rural Areas

Puget Sound Regional Council

August 25, 2005

Growth Management Policy Board adopted *Action to Proceed* August 25, 2005



***“Rural issues need to be addressed in a comprehensive manner, with clear criteria for identification, development, and use of these lands.”***

*(Livable Washington: APA’s Action Agenda for Growth Management, Washington Chapter of the American Planning Association, November 2002)*

***“Rural services, such as sanitary septic systems, wells and roads, have become over-used, contributing to environmental pollution, health, and safety problems. In some locations, traffic congestion has increased significantly due to growth in traffic volumes... If growth continues, rural lands will be threatened, and rural character... lost.”***

*(1995 VISION 2020 Update, page 33)*

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## Preamble

As this paper was developed, a great deal of discussion and comment on rural issues was generated. The Growth Management Policy Board invested significant time during five meetings to review the paper and provide direction to Regional Council staff. In addition, the issues in the paper generated considerable discussion and written comments at the VISION 2020 + 20 workshop held on May 20, 2005 at the Seattle Center. Based on the issues raised, the Growth Management Policy Board instructed staff to add this preamble to the rural issue paper. The preamble addresses four subject areas: (1) role of the Puget Sound Regional Council, (2) the opportunity presented by the VISION update, (3) the importance of citizen involvement, and (4) the difficulty of balancing individual rights with the larger needs and values of society as a whole.

**Role of the Puget Sound Regional Council.** The Puget Sound Regional Council is the regional growth management, economic, and transportation planning agency for the central Puget Sound area (King, Kitsap, Pierce, and Snohomish counties). The Regional Council serves as a forum for cities, counties, ports, transit agencies, tribes, and the state to address important regional issues. The primary responsibilities of the Regional Council are to (1) adopt and maintain an overall vision for growth management, transportation, and the economic prosperity of the region, (2) adopt and maintain a long-range plan and improvement program for transportation, (3) Provide regional data and forecasts.

The Regional Council's authority and mandates are spelled out in an interlocal agreement with its members. The Council operates under provisions in numerous federal and state laws, including: the federal Transportation Equity Act of the 21st Century, federal and state Clean Air Acts, state Growth Management Act, and federal Public Works and Economic Development Act.

The Puget Sound Regional Council is governed by a General Assembly and an Executive Board. The General Assembly is composed of all local elected officials from member jurisdictions and representatives of other member agencies. It meets at least annually to review and vote on the annual budget, elect officers and adopt new or updated plans. The 30-member Executive Board is chaired by the Regional Council's president and meets monthly to govern the organization. The Transportation Policy Board and the Growth Management Policy Board (also comprised of locally-elected officials) make recommendations on key transportation and growth management issues to the Executive Board.

The Puget Sound Regional Council is a planning agency. It does not enact or enforce land use regulations. Locally elected governments at the county and city level develop individual comprehensive plans and appropriate zoning ordinances and developments to guide development and land use within their jurisdictions. The Regional Council has authority to adopt Multicounty Planning Policies that provide guidance to Countywide Planning Policies and local comprehensive plans.

**Opportunity Presented By The VISION Update.** The Growth Management Policy Board sees the VISION 2020 + 20 process as an opportunity. It is an opportunity to look ahead, beyond current local comprehensive plans, at how to accommodate the needs of an additional 1.6 million new people by 2040 while protecting the environment and improving the overall quality of life in the region. The project is an opportunity for the region to work together to accomplish tasks that are difficult to accomplish within a single jurisdiction. It is an opportunity that last presented itself more than 15 years ago when the original VISION was developed between 1987 and 1990.

**Importance Of Citizen Involvement.** Public participation is very important to all members of the Regional Council. We are in a large and diverse region and must seek the broadest range of public involvement possible. This, of course, does not mean that every interest group and individual can be totally successful in imposing their particular views on regional policies. But it does mean we have an opportunity to learn from each other and come together on how this region can best accomplish common objectives and shared values.

At every stage of the update we have and will continue to seek public participation and comment. The project started in the fall of 2003 with an eight-month period of listening to the public. Following that was a yearlong work agenda aimed at investigating issues was undertaken. The next steps include a rigorous evaluation and environmental review of alternatives, which will be detailed in a draft environmental impact statement (DEIS). The DEIS will include an appendix containing information and analysis of the impact of developing the rural designated lands in the region with a low density, sprawling development pattern.

Based on public comment and reaction to the draft, the Regional Council will develop a preferred growth alternative and a supplemental environmental impact statement in September 2006. That will be followed by another official public comment period. Final action on the updated VISION is scheduled to take place at the March 2007 General Assembly meeting of the Regional Council. The schedule is designed to allow time for thoughtful discussion and input from all interested parties. We welcome public comment at any time throughout this work.

**Balancing Individual Right With The Larger Needs And Values Of Society.** A primary purpose of the rural issue paper has been to stimulate discussion about how to address rural areas in VISION 2020 + 20. The discussion is taking place within the context of existing state and federal law, adopted public policy embodied in VISION 2020, countywide planning policies, and local comprehensive plans.

The public policy framework articulated in the regional growth strategy creates a large regional “tent” that accommodates a wide range of life styles—from urban to rural. The objective is to focus growth and investments in urban areas and to preserve the ecological, recreational, economic function, and character of rural areas.

Individual households within the region make decisions regarding where they live and how they move around to meet their employment, service, and recreational needs. These decisions often result in trade-offs—more or less living space, taxes, privacy, congestion and proximity to amenities, entertainment, schools, jobs, and shopping.

We all carry some of the benefits and burdens of balancing individual rights and the values and needs of the greater society. Both urban and rural property owners enjoy the benefits of increased property values when government actions increase access to their property or take other actions that increase its marketability. On the other hand, government actions define and limit the use of all private property to insure public health, safety and the common good. The appropriate balance between individual rights and the overarching needs of society is established by our laws and governing institutions.

**Flexibility In Applying The Concepts In The Rural Paper.** Currently notable differences in the character and approach to public policy that guide the use of rural lands exist among the four counties within the central Puget Sound region. One of the purposes of this paper is to seek overall regional agreement on a clearer vision and strategy for rural lands. However, given the differences, a “one size fits all” approach to all rural issues may not be possible or even desirable.

Flexibility has been built into the rural paper. For example, one of the recommendations is to recognize three types of rural areas based on area character like prevailing parcel size and ecological function. The idea is to treat different parts of the rural area differently – one size does not fit all.

The paper recognizes that additional flexibility may be needed as we move forward with these discussions. Some of the concepts in the rural paper may need to be addressed differently in the four counties. Some parts of the rural paper may not apply in all counties.

The discussion of the concepts outlined in this paper and the other papers in the issue paper series, will continue in the environmental review phase of work on the VISION 2020 + 20 project. Over the next year the Growth Management Policy Board will play a lead role in shaping the ideas in the paper (and new ones that will be introduced by participants in the VISION update process) into policies and strategies that will be offered for additional public review.

## PURPOSE AND BACKGROUND

The purpose of this paper is to examine the status of rural designated lands within the central Puget Sound region and to begin to investigate ways that the VISION 2020 + 20 and the new Multicounty Planning Policies (MPPs) can be used to seek regional agreement on a clearer vision and strategy for rural lands.\* This paper addresses lands designated as rural in county comprehensive plans developed under the Growth Management Act. Agricultural land and other resource lands are not addressed.

Decision-makers in the central Puget Sound region have determined that the most efficient, cost-effective, and environmentally-friendly way to accommodate population and employment growth is by implementing a centers-oriented regional growth strategy. While much attention is given to urban growth issues, the rural portion of that overall strategy also plays a critical role. The rural area provides an opportunity for a pastoral life style and makes a distinct contribution to the region's economy and ecology. At the same time, it helps to contain the urban area and keeps lands with rural character from being lost to future generations.

The MPPs provide guidance to countywide planning policies and local comprehensive plans. They offer an opportunity for the region to address selected issues in a consistent manner, while leaving others to local discretion. The MPPs guide broad decisions and are less prescriptive than local government development regulations that control specific land uses, such as setbacks, building intensity, and allowed uses.

The paper is organized into the following issue areas:

1. Clarification of the Character, Intended Function, and Use of Rural Lands.
2. Rural Population and Employment Growth.
3. Rural Exception Areas.

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\* Portions of this issue paper draw from a report presented to the Growth Management Policy Board in October 2003 titled *The Rural Policy Project*. That report examined current trends and patterns of development in rural areas of the four-county region, as well as the effectiveness of current rural policies—at the regional, countywide, and local levels. Among the findings in the report was the assessment that "VISION 2020 can be improved to more fully execute GMA objectives and address community needs in the region's rural areas." (see *The Rural Policy Project*, page 4.)

In its discussion of the report, the Growth Management Policy Board provided the following guidance for considering rural issues in the update of VISION 2020.

- *Identify and develop specific provisions and policy guidance for distinct subareas within rural designated areas.*
- *Address economic development in rural areas.*
- *Provide clear definitions for "rural character" and other terms often associated with rural development.*
- *Address development that proposes to "jump" urban growth boundaries—particularly due to vesting.*
- *Address service expectations for infrastructure in rural areas.*
- *Incorporate findings and recommendations from the Rural Town Centers & Corridors Project.*
- *Encourage collaboration and consistent planning with special purpose districts, tribes, and military facilities—for example, the siting of school facilities.*
- *Provide guidance for making regulations and rules—in both the urban growth areas and rural areas—clearer and more understandable for both citizens and developers.*
- *In the Update process, work with recommendations by the Washington Chapter of the American Planning Association, the "Livable Washington" agenda, and the Governor's Task Force on Sustainability.*

4. Rural Service and Infrastructure Provisions.
5. Special Purpose Districts (and Institutional Uses) in Rural Areas.
6. Rural Economic Development.
7. Rural Development Standards.

Each of the issue areas contains a brief expression of the **question** that is being addressed, a discussion of the issues associated with the question, a comment on what the Growth Management Act says, what VISION 2020 currently says, and recommended actions that could be taken to address the issue in the VISION 2020 update. Included among the recommendations are initial considerations for ways to monitor policy objectives and outcomes. (Note: Monitoring recommendations are general at this point. Any recommendations that go forward in the VISION 2020 + 20 update process will ultimately need to identify responsible agencies or parties for overseeing the monitoring, along with more specific details concerning information and resources.)

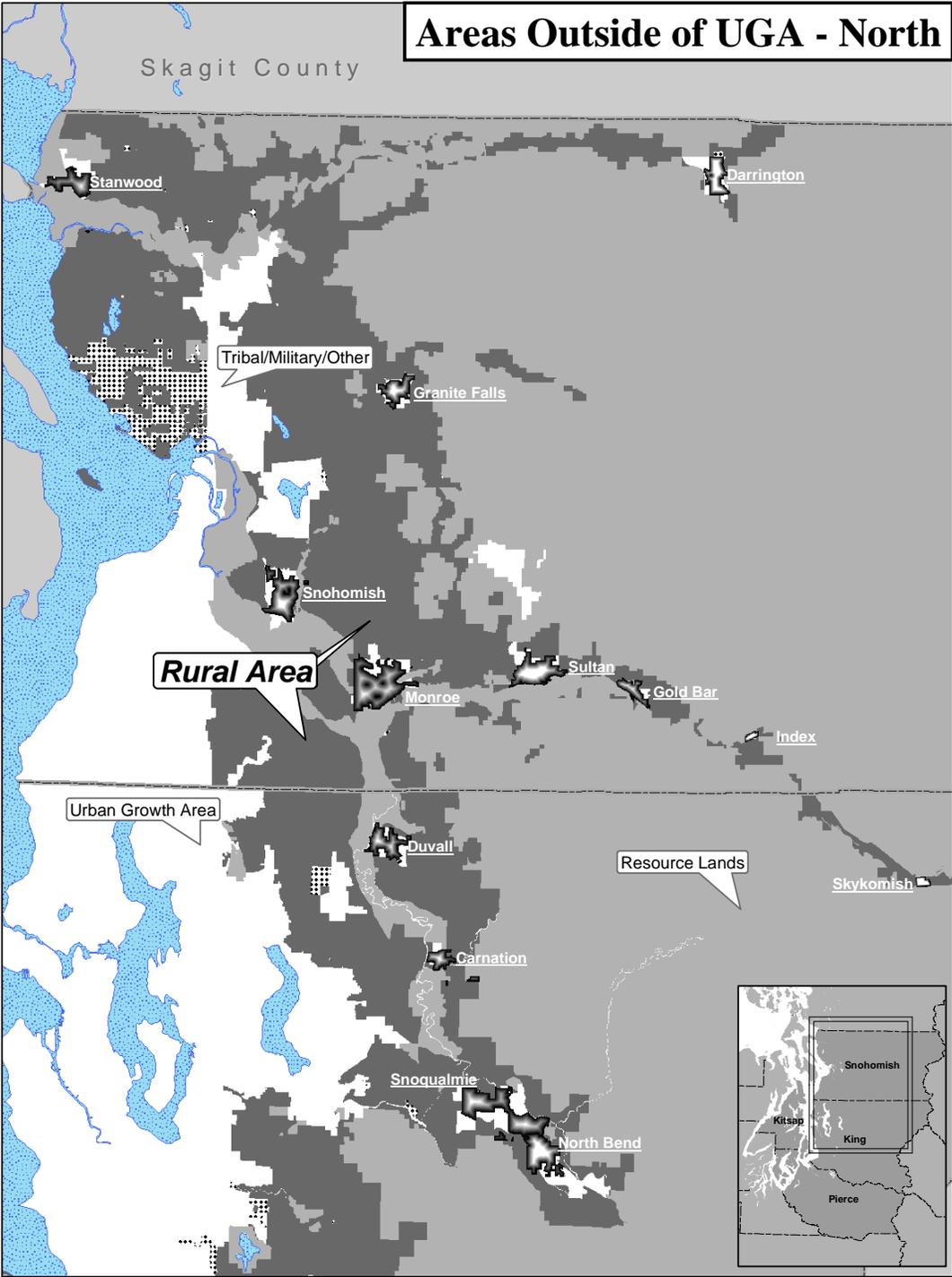
## **ISSUE AREA # 1: Clarification of the Character, Intended Function, and Use of Rural Lands**

The rural lands discussed in this paper are defined by their *rural* designation under the Growth Management Act. The three maps below show rural-designated land within the four counties of the central Puget Sound region. Note the distinction between rural lands and other types of land outside of the Urban Growth Area—agricultural lands and resource lands. Also, note the freestanding urban cities creating urban islands within the rural area.

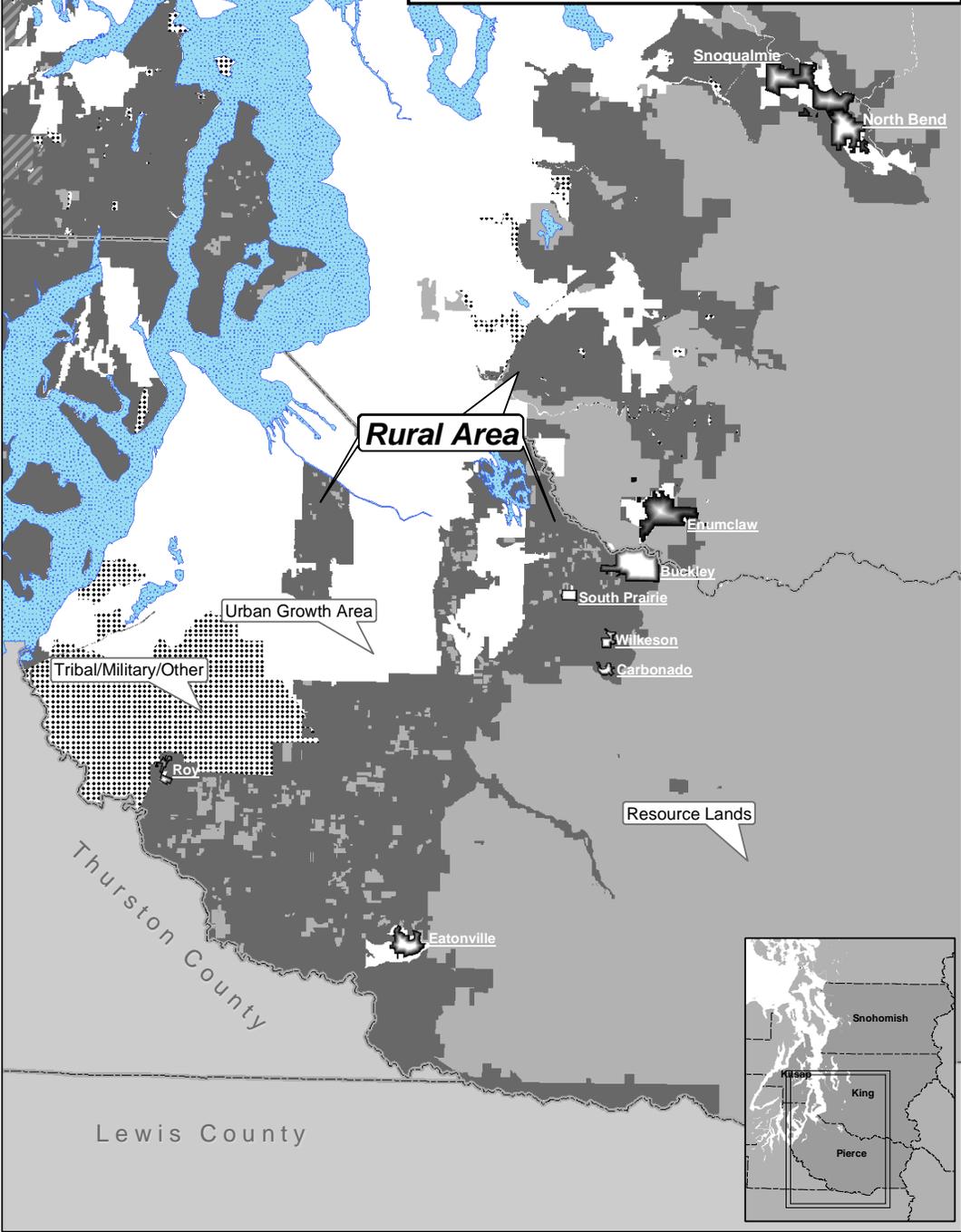
The purpose of this section of the paper is to discuss ways that the character, intended function, and use of rural lands could be clarified in VISION 2020 + 20.

Question: Should rural lands be defined as permanent (that is, not as a type of holding area that will urbanize)? In other words, is the rural function and character important enough to protect on a permanent basis? Should regional criteria be developed that will guide decisions regarding circumstances in which certain rural designated lands may be considered for converting to urban uses?

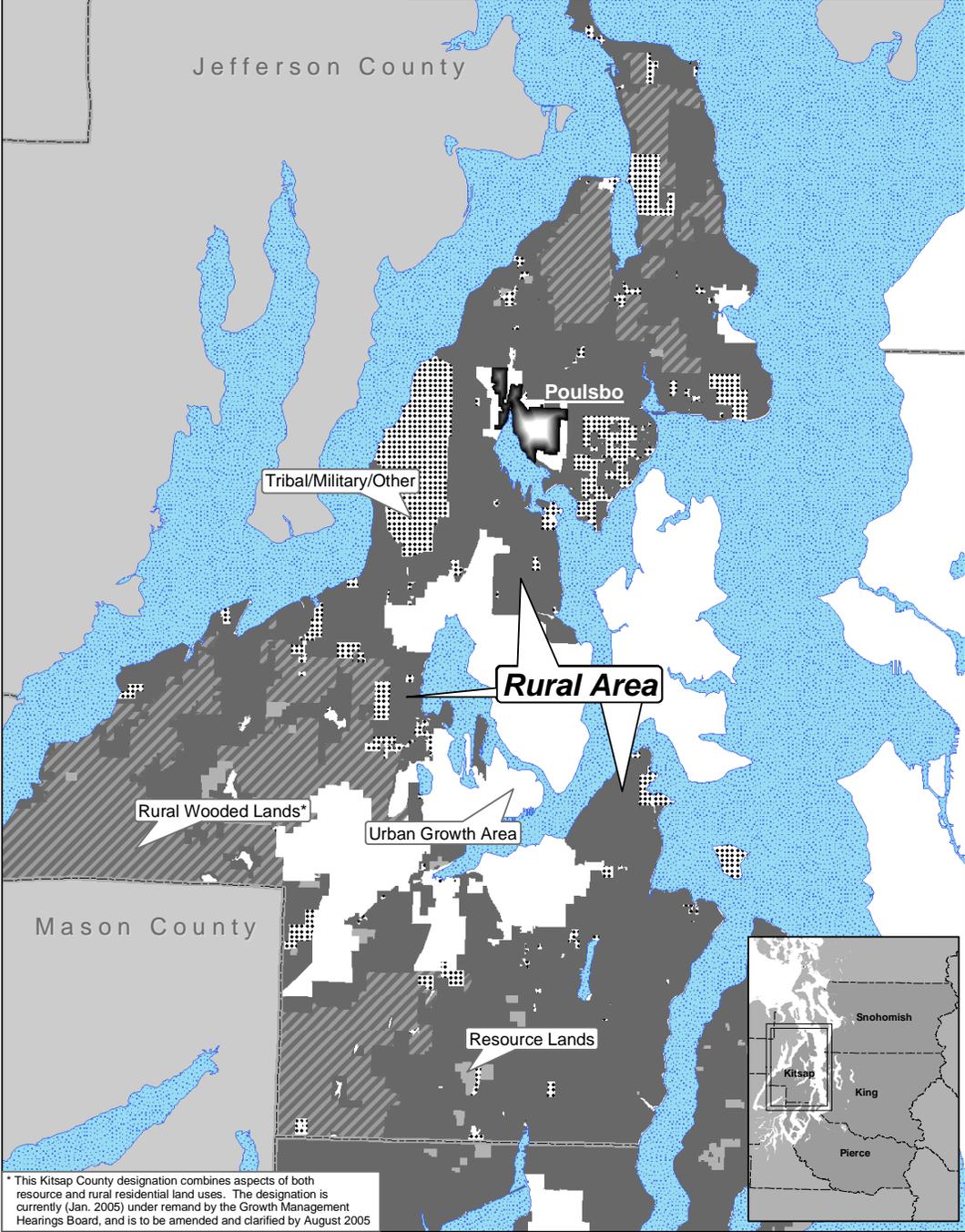
# Areas Outside of UGA - North



# Areas Outside of UGA - South



# Areas Outside of UGA - West



\* This Kitsap County designation combines aspects of both resource and rural residential land uses. The designation is currently (Jan. 2005) under remand by the Growth Management Hearings Board, and is to be amended and clarified by August 2005

## Discussion

### What the Growth Management Act Says

- Rural character is defined as patterns of land use that (RCW 36.70A.030):
  - Provide open space, with the natural landscape and vegetation predominating over the built environment.
  - Foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas.
  - Provide visual landscapes that are traditionally found in rural areas and communities.
  - Are compatible with the use of the land by wildlife and for the habitat they require.
  - Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
  - Do not require the extension of urban governmental services.
  - Are consistent with the protection of natural surface water flows and ground water and surface water recharge and discharge areas.
- Rural land must exclude designated agricultural, forest and mineral resource lands (RCW 36.70A.070 (5) [Also see *Bremerton*, 5339c, FDO, at 73].
- An urban land use pattern of 1 or 2.5 acre parcels constitute sprawl; such a development pattern within the rural area would also constitute sprawl [*Bremerton*, 5339c, FDO, at 49].
- “A new land use pattern that consists of between 5 and 10 acre lots is an appropriate rural use... [*Sky Valley*, 5368c, FDO, at 46]

### What VISION 2020 Currently Says

VISION 2020 calls for the preservation of rural character, open space, recreation, non-designated resource lands, scenic and historic areas, and small-scale farming, forestry, and cottage industries. The following definition is provided:

*Rural lands primarily contain a mix of low-density residential development, agriculture, forests, open space and natural areas, as well as recreation uses. Counties, small towns, cities and activity areas provide limited public services to rural residents . . . . They buffer large resource areas and accommodate small-scale farming, forestry, and cottage industries as well as other natural-resource based activities. (1995 VISION 2020 Update, page 33)*

In October 2003, the Growth Management Policy Board discussed the existing rural provisions in VISION 2020. The Board recognized that there are distinct subareas in rural designated areas that are currently not addressed in VISION 2020. The Board provided guidance to identify specific rural subareas and develop provisions and policies that address their unique situation.

## Recommendation

The VISION 2020 + 20 should:

- 1-1. Clearly articulate a vision for the rural area and define “rural character.” The VISION 2020 update should articulate a clear vision for rural areas that includes a determination that the region expects to preserve these lands over the long term. It should include policies that discourage incremental long-term development that might erode the rural character of the lands with inappropriate residential growth.

Amendments to the Growth Management Act and decisions by the Hearings Boards have clarified the definition of rural character since VISION 2020 was updated in 1995. The VISION 2020 update should incorporate these revisions and include a discussion of the importance of recognizing and maintaining the historic character of the rural area.

- 1-2. Recognize Sub-Categories Within the Rural Area. The update to VISION 2020 should identify sub-categories within the rural area. This should be done to more fully recognize and provide flexibility in addressing differences that exist within and among land designated as rural in each county. These subareas should have specific provisions and policy guidance to address their unique situations. The subareas should be identified based on the parcel size, ecological value, and related factors that characterize the subarea.\* The following breakdown of subareas by parcel size should be considered in the update:

- *Areas comprised of parcels 20 acres and larger.* Areas characterized by small farms, recreational uses, open space, and woodlots.
- *Areas comprised of parcels between 5 and 20 acres.* Areas of less intense uses, including large lot residential, agriculture, open space, and woodlots.
- *Areas comprised of parcels of less than 5 acres.* Areas where rural residential on relatively small lots predominates.
- *Rural unincorporated towns and activity centers.*

- 1-3. Establish Regional Criteria for UGA Expansion. Establish regional criteria and processes that allow the Regional Council to play a formal role in providing regional guidance in decisions of countywide planning organizations regarding movement of the urban growth area. (In a multicounty region, what one county does with its UGA expansion may affect other counties.)

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\* For the purposes of this paper, it is assumed that distinguishing various subareas by "size" also serves as a surrogate for considering "uses" of lands and/or "ecological value." The Regional Council will continue to work with the local agencies, conservation groups, and others to better understand the specific landscape and ecological functions of rural lands in the central Puget Sound region.

## **Initial Guidance for Monitoring**

- 1-a. Monitor UGA adjustments throughout the four-county region.
- 1-b. Monitor growth in rural areas by sub-categories.

## ISSUE AREA # 2: Rural Population And Employment Growth

Question: Is the region doing enough to address population and employment growth in the rural area?

### Discussion

#### What the Growth Management Act Says

The Act requires that counties work with their cities to establish population growth targets that fit within a countywide control total range provided by the Washington State Office of Financial Management. The Department of Community, Trade and Economic Development is charged with providing guidance that outlines acceptable methodologies and best practices. The Growth Management Act does not address specific goals or benchmarks for growth in rural areas.

#### What VISION 2020 Currently Says

Growth allocations and targets are not addressed in the existing VISION 2020 strategy.

#### Recent Growth in Rural Areas

Between 1990 and 2000, rural areas in this region absorbed 16 percent of the area's population growth. Rural employment (1995-2001) grew by 3 percent region-wide. Employment growth was less than 8 percent in all counties except Kitsap, which grew by 32 percent.

RURAL POPULATION AND EMPLOYMENT GROWTH BY COUNTY					
	King	Kitsap	Pierce	Snohomish	TOTAL
Employment (1995-2001)	3,520 (2%)	2,418 (32%)	2,351 (8%)	800 (3%)	9,089 (3%)
Population (1990-2000)	14,466 (6%)	17,047 (40%)	30,876 (27%)	20,927 (15%)	83,316 (16%)

Rural Growth Allocations Established in Countywide Growth Target Process.\* Overall, rural lands within the region are currently identified to absorb a slightly smaller percentage of population growth between 2000 and 2025 (14 percent) than they accommodated between 1990 and 2000 (16 percent). All counties except Snohomish

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\* In early 2005, the Regional Council completed a report titled *Growth Management By the Numbers: Population, Household, and Employment Growth Targets in the Central Puget Sound Region*. This report surveys the work performed in the four-county region to establish targets for population and employment growth. Among the findings in the report is the recognition of differences from county-to-county in methodologies used to establish targets, as well as variations in their treatment of growth in rural areas. A recommendation in the report is to consider regional guidance through updated multicounty planning policies to ensure greater compatibility and consistency in targets work throughout the four counties in the central Puget Sound region.

have targeted a lower percentage of growth to their rural area than the actual growth experienced between 1990 and 2000.\*

Only Snohomish County developed employment allocations for its rural areas. The county is identifying a larger percentage of employment growth to rural areas between 2000 and 2025 (9 percent) than it experienced between 1995 and 2000 (3 percent).

RURAL POPULATION, HOUSING, AND EMPLOYMENT ALLOCATIONS* (2022 OR 2025)			
Jurisdiction	Population	Housing	Employment
King	17,510 (6%)	6,000 (4%)	(na)
Kitsap	28,858 (30%)	(na)	(na)
Pierce	15,318 (7%)	(na)	(na)
Snohomish**	68,795 (24%) <i>includes 15,000 for fully contained communities (16%)</i>	(na)	11,022 (9%) <i>(includes a large allocation to the Tulalip tribe)</i>
REGION	130,481 (14%)	(na)	(na)

Note: \*The allocations presented in this table were developed in the countywide growth targets process in each county.

\*\*If a fully contained community is approved, it would have to be designated urban and the county's urban growth area adjusted accordingly.

Note: Growth targets to Tulalip tribal lands are factored into Snohomish County's rural allocation.

## Recommendation

- 2-1. Growth allocations for rural areas. The multicounty planning policies should identify regional population and employment goals for rural areas that represent regional population and employment ceilings for the year 2040.
- 2-2. Allocating rural growth. The multicounty planning policies should provide regional guidance regarding how growth should be allocated within the rural subareas. For example, The MPPs could establish a regional expectation that areas containing larger parcels not be subdivided and that rural growth be primarily absorbed in existing activity areas and unincorporated towns.
- 2-3. Review and comment on rural allocations established in their countywide growth target setting process. VISION 2020 should establish processes for regional review and comment on rural allocations for population and employment established by countywide planning organizations.

## Initial Guidance for Monitoring

- 2-a. Monitor a sample of rural land subdivisions to determine the character of the developments.

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\* Snohomish County is exploring the formation of one or more fully contained communities. To accommodate such a development, land that has been rural would be re-designated urban.

## ISSUE AREA # 3: Rural Exception Areas

Question: How should any of the types of *exception areas* (see below) that allow urban-type development in rural areas be addressed in VISION 2020 update?

### Discussion

#### What the Growth Management Act Says

State law currently contains several provisions that (under specifically defined circumstances) allow urban-type development in rural areas. These exception areas have created a somewhat mixed message regarding the desired development pattern in rural areas.

- Exception areas identified in the Growth Management Act include:
  - Limited areas of more intense rural development (LAMIRDS)
  - Major industrial developments
  - Master planned resorts
  - Fully contained communities
  
- Additional types of exception areas
  - Vested lots

#### What VISION 2020 Currently Says:

The existing VISION does not address these types of development because the vision was adopted before the exceptions were amended into the Growth Management Act.



## Discussion of Each Type of Exception Area

- ***Limited Areas of More Intense Rural Development***

### Purpose/Description in the Law

The Central Puget Sound Hearings Board defined LAMIRDs as neither urban growth, nor are they to be the predominant pattern of future rural development. (That is, LAMIRDs are not quite urban, but not quite rural). LAMIRDs are settlements that ***existed on July 1, 1990*** (emphasis added) in some land use pattern or form more intensive than what might typically be found in a rural area. LAMIRDs are characterized as shoreline developments, villages, hamlets, rural activity centers, or crossroads developments. In essence, they are compact forms of rural development [Burrow, 9318, FDO, at 18]. The extent of existing infrastructure and services area can be used to set the logical outer boundary that minimizes and contains the LAMIRD [Burrow, 9318, FDO, at 23]. The Growth Management Act [RCW 36.70A.070(5)d)(vi)] requires LAMIRDs to ***be minimized and contained*** (emphasis added).

*Current status:* Kitsap County has designated the following four areas as LAMIRDs: Manchester, Suquamish, Port Gamble, and Georges Corner. Pierce County has designated Clearview as a LAMIRD.

Question: Should the update to VISION 2020 provide regional guidance regarding the use of LAMIRDs in the central Puget Sound region?

In parts of the state that are predominantly rural, the designation of LAMIRDs can be a positive tool for focusing limited resources and clustering development and facilities. However, in an urban area, like the central Puget Sound region, the LAMIRD concept has the potential to open up rural areas to inappropriate or unintended urban growth.

- ***Major Industrial Developments in Rural Areas***

### Purpose/Description in the Law

The Growth Management Act [RCW 36.70A.365] defines major industrial development as a master planned location suitable for manufacturing or industrial businesses that, (1) requires a parcel of land so large that no suitable parcels are available within the urban growth area, and (2) is a natural resource-based industry requiring a location near agricultural land, forest land, or mineral resource land upon which it is dependent. The major industrial development may not be for the purposes of retail, commercial development, or multi-tenant office parks. Also, major industrial developments may not be approved outside the urban growth area unless criteria are met regarding impact fees, transportation management, buffers,

environmental protection, development regulations, mitigation, and demonstration that a site is unavailable within the UGA.

*Current status:* No new major industrial developments are being proposed for rural areas in the central Puget Sound region.

Question: Should the update to VISION 2020 provide regional guidance regarding the use of Major Industrial Developments in rural areas in the central Puget Sound region?

- ***Master Planned Resorts***

Purpose/Description in the Law

RCW 36.70A.360 permits master planned resorts outside Urban Growth Areas. A master planned resort means a self-contained and fully integrated planned unit development, in a setting of significant natural amenities, with primary focus on destination resort facilities. These facilities allow short-term visitor accommodations to support a range of development, such as on-site indoor or outdoor recreational facilities. Capital facilities, utilities, and services, including those related to sewer, water, storm water, security, fire suppression, and emergency medical, provided on-site, shall be limited to meeting the needs of the master planned resort.

*Current Status:* Rainier Resort, in Pierce County, is a Master Planned Resort.

Question: Should the update of VISION 2020 provide regional guidance regarding the use of Master Planned Resorts in the central Puget Sound region?

- ***Fully Contained Communities***

Purpose/Description in the Law

The Growth Management Act [RCW 36.70A.350] allows for fully contained communities to be approved if they meet the following criteria:

- New infrastructure is provided for and impact fees are established.
- Transit-oriented site planning and traffic demand management programs are implemented.
- Buffers are provided between the new fully contained communities and adjacent urban development.
- A mix of uses is provided to offer jobs, housing, and services to the residents of the new community.
- Affordable housing is provided within the new community for a broad range of income levels.
- Environmental protection has been addressed and provided for.
- Development regulations are established to ensure urban growth will not occur in adjacent nonurban areas.

- Provision is made to mitigate impacts on designated agricultural lands, forest lands, and mineral resource lands.
- The plan for the new fully contained community is consistent with the development regulations established for the protection of critical areas.

*Current status:* Several master planned communities exist in the central Puget Sound region. However, no new fully contained community projects have been developed in the region under section 36.70A.350 of the Growth Management Act. King County Policy U-105 states, "*no new fully contained communities shall be approved in King County*" (2004 King County Comprehensive Plan, page 2-3). The Cascadia development in Pierce County is planned as a fully contained community. The potential for establishing new fully contained communities is being discussed in Snohomish County.

Question: Should the update to VISION 2020 provide regional guidance regarding the use of fully contained communities in the central Puget Sound region?

- **Vested Lots**

Purpose/Description in the law

State law provided in RCW 19.27.095 and expanded by RCW 58.17.033, provides that developers of land are entitled to have their land development proposals processed under the regulations in effect at the time a fully completed building permit or land division application is submitted, regardless of subsequent changes in zoning or other land use regulations. Therefore, land development decisions that were based on planning and zoning documents in place prior to changes caused by the Growth Management Act are considered vested and are authorized to develop under the standards that were in place at the time of issuance of the permit. It is anecdotally understood in the planning community that these vested permits are often not developed in a manner consistent with Growth Management Act goals.

*Current status:* All four counties contain lots vested prior to the adoption of the Growth Management Act (or to local plans adopted under the Act)—vested to out-of-date regulations that are now 15 years old or older. The Regional Council is currently conducting a study to more fully understand the location and development potential on vested lots.

Question: Should the update to VISION 2020 provide regional guidance regarding the disposition of vested lots in the central Puget Sound region?

## Recommendation

The VISION 2020 update project should establish regional guidelines on the use of the *exception areas* in the central Puget Sound region. Specifically, the update to VISION 2020 should address the following:

- 3-1. Develop guidelines for rural exception areas. During the VISION 2020 +20 update process, the Regional Council, counties, municipalities, and others should work to develop guidelines for the use of:

(1) Limited Areas of More Intense Rural Development. VISION 2020 + 20 includes language that makes it clear that: (a) Urban type growth should be absorbed by cities, (b) whether designed as a LAMIRD or not, existing activity areas are appropriate areas to accommodate planned growth in the rural area.

(2) Major Industrial Developments in Rural Areas. VISION 2020 + 20 should include language that recognizes that, although the provisions for major industrial development in rural areas may be useful in rural counties in the state they run counter to efforts in metropolitan areas to focus manufacturing and industrial development inside urban growth areas.

(3) Master Planned Resorts. VISION 2020 + 20 should include language that recognizes and supports existing recreational facilities in the region. If new Master Planned Resorts are proposed in the future, they need to be evaluated within the context of the existing resorts, the ability of cities to absorb resorts related growth, and the overall vision for the use of rural lands.

(4) Fully Contained Communities. VISION 2020 + 20 should contain language that supports the strict application of the GMA criteria for approving and permitting full contained communities. The language should recognize that a number of master planned communities were built in our region and elsewhere in the nation over the past several decades. On the one hand, these communities can have advantages over low density, single use, sprawling development patterns. On the other hand, if they are improperly sited or not needed to absorb growth, these developments can unnecessarily siphon development away from existing cities and exhibit many of the negative attributes of sprawl.

- 3-2. Develop information and policies for vested lots. Develop data and information on development that occurs on conforming lots verses the amount occurring on lots that were vested based on regulations adopted prior to the Growth Management Act. Develop policies to encourage jurisdictions to develop mechanisms to address these lots in a manner that supports the goals and intent of the Growth Management Act.

- 3-3. Consider innovative approaches to addressing development in the rural area.\* VISION 2020 + 20 should contain language that explores the potential for vastly broadening the use of transfer of development rights programs in the region. The purpose of the program (and/or related activities) is to (1) preserve rural lands by compensating land owners for their development rights and (2) allow for increased development potential in cities.

### **Initial Guidance for Monitoring**

- 3-a. Monitor a sample of development that is taking place under the “exception” provisions provided by the Growth Management Act.
- 3-b. Monitor building permits to determine the amount and character of development occurring on lots vested to regulations that were in place prior to the adoption of the Growth Management Act versus development occurring on lots governed by planning and zoning documents developed in response to the Growth Management Act.

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\* One such innovative program is King County's “4-to-1” program. King County developed its “4-to-1” program as part of the 1994 Comprehensive Plan. The program allows urban housing densities to cross into the rural area if the development occurs adjacent to the urban-rural line and provides four acres of permanent open space for every acre that is developed.

The Cascade Land Conservancy is also advancing innovative approaches, such as transfer of development rights (TDR), to permanently conserve key natural features in rural areas of the central Puget Sound region. The organization is working to conserve lands with unique ecological features, as well as to maintain connectivity of rural lands around human settlements.

## ISSUE AREA # 4: Rural Service and Infrastructure Provisions

Question: What public service and infrastructure standards should apply to rural areas? Should the VISION 2020 update address this issue?

### Discussion

#### What the Growth Management Act Says

The Growth Management Act [RCW 36.70A.030] defines *rural governmental services* as those public services and public facilities historically and typically delivered at an intensity usually found in rural areas. They may include domestic water systems, fire and police protection services, transportation and public transit services, and other public utilities associated with rural development and normally not associated with urban areas. Rural services do not include storm or sanitary sewers, except as otherwise authorized by RCW 36.70A.110(4) (which states that extension of sewer into the rural area is inappropriate except when a sewer extension is necessary to protect the public health, safety or environment, and the sewer extension is financially supportable at rural densities and will not permit urban growth).

#### What VISION 2020 Currently Says

Three VISION 2020 policies address the provisions of services and infrastructure in the rural area.

Policy RF-3.4 states:

*Regional capital facilities proposed to be located in rural areas must either demonstrate that a non-urban site is the only appropriate location for the facility or demonstrate that no urban sites are feasible as determined by a siting process. If rural siting is necessary, measures should be taken to mitigate adverse impacts and prohibit development incompatible with rural character. (1995 VISION 2020 Update, page 29)*

Policy RR-5.4 states:

*Rural level-of-service standards should address sewage disposal, water, transportation and other appropriate services, be consistent with rural development patterns and densities, and support long-term preservation of rural areas. (1995 VISION 2020 Update, page 36)*

Transportation Policy RT–8.7 states:

*Where increased roadway capacity is warranted to support safe and efficient travel through rural areas, appropriate rural zoning and strong commitment to access management should be in place prior to authorizing such capacity expansions in order to prevent unplanned growth in rural areas (1995 VISION 2020 Update, page 57).*\*

## **Recommendation**

The VISION 2020 update project should address standards for service and infrastructure in rural areas. The update should make it clear that rural services should address the basic needs of rural-type development patterns. The services should not be provided in a manner that attracts urban-type development. The update should reinforce the concept that a rural lifestyle choice must be accompanied by the recognition that urban levels of service will not be provided. The update should be used to communicate the differences between urban and rural levels of service.

The following considerations address topics that could be further addressed in multicounty policies, as well as possible actions or strategies to be further explored.

### *Overall*

- 4-1. Facility design in rural areas. Major infrastructure facilities in rural areas should be designed according to rural standards that neither negatively impact rural character nor provide new opportunities for increased urban development.
- 4-2. Level-of-service standards for rural facilities. Expand the current multicounty policies addressing level-of-service standards for sewage disposal, water, and transportation in rural areas—to provide detail regarding consistency with rural development patterns and densities, as well as appropriate facility design.

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\* This issue is also addressed in *Destination 2030—the* long-range transportation plan based on VISION 2020. The implementation section of *Destination 2030* states that:

*It is particularly important that capacity expansion projects on roadways outside of the urban growth area be both consistent with local comprehensive plan policies that address the protection of open space and rural areas, and consistent with Multicounty Framework Policy RR-5. (Destination 2030, adopted May 2001, page 42).*

(Note: Policy RR-5 appears in its entirety in Appendix Three of this paper.)

- 4-3. Septic systems and wells. Encourage healthier, safer, and more environmentally beneficial septic systems and wells—including ameliorating existing systems. Protect wells and re-charge areas from pollutants.

#### *Rural Transportation\**

- 4-4. Transit service. Provide safe, dependable transit service that primarily connects rural activity areas, unincorporated towns, and free-standing cities located in the rural area.
- 4-5. Provide non-motorized trails and paths. Promote safe bicycle and pedestrian pathways along or adjacent to rural roadways to support recreation and tourist activity.
- 4-6. Establish design guidelines and/or standards for transportation facilities in rural areas. Provide effective options for rural highway access management and design standards.
- 4-7. Gateways. Encourage town entry improvements along with speed transition zones, gateways, and medians.
- 4-8. Provide safety improvements. Examples are centerline rumble strips and improved shoulders for school buses, pedestrians, and bicycles.

#### *Role of Unincorporated Rural Towns and Cities in the Rural Area in Providing Services*

- 4-9. Existing unincorporated rural activity areas. Should serve as locations for service needs such as convenience shopping, community services, and small-scale cottage industries.
- 4-10. Cities (urban islands) within the rural area. Should play an important role in meeting the needs of shopping, services, and jobs in the rural area.

#### **Initial Guidance on Monitoring**

- 4-a. Monitor level-of-service standards for significant rural facilities.

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\* Make maximum use of the Regional Council's *Rural Town Centers and Corridors Program*. The objective of this program is to provide transportation funding and technical assistance to freestanding cities within the rural area (urban islands), unincorporated rural towns, and rural areas that roadways pass through. The program is designed to encourage and support innovative approaches to transportation planning and implementation.

## ISSUE AREA # 5: Special Purpose Districts (and Institutional Uses) in Rural Areas

Question: Should VISION 2020 + 20 provide regional guidance and/or provisions regarding the use of rural land by special purpose districts, including schools and other institutions?

### Discussion

Special Purpose District planning is disconnected from the Growth Management Act. In the past, certain types of special purpose districts (for example, schools) have expanded into rural areas, taking advantage of relatively low land values and large tracts of land. These facilities are often designed to serve a larger service area that extends well beyond the rural lands. Hence, the *look* and *feel* of these facilities and their function can be inconsistent with the rural character. Rural facilities can also experience strain when they end up having to support a larger service area that extends into the urban area. For example, siting a school building in a rural area serving both rural and urban students can create a strain on rural transportation facilities.

### What the Growth Management Act Says

Special Purpose District planning is not directly addressed in the Growth Management Act.\*

### What VISION 2020 Currently Says

Special purpose districts are not addressed in the rural policies of VISION 2020 – nor are institutional uses, such as churches.

### Recommendation

- 5-1. Siting facilities in rural areas. VISION 2020 + 20 should establish policies that provide regional guidance on siting special purpose districts facilities within rural areas. The policies should also provide guidance on facility design to ensure that the size of the facilities are appropriate to the scale and character of rural lands.
- 5-2. Legislative Change. VISION 2020 + 20 should discuss ways in which special districts could be included within the requirements of the Growth Management Act.

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\* Former Governor Booth Gardner signed the Growth Management Act into law, but he vetoed a section of the original 1990 Act that addressed special purpose districts (Section 18). Although that section of the law would have made special purpose districts accountable to GMA legislation and local plans, it also contained language that would have made ports exempt from the law. Under state law, to veto the exemption the governor had to veto the entire section. (Letter to the House of Representatives of the State of Washington, from Governor Booth Gardner, dated April 24, 1990.)

- 5-3. Siting schools and other institutions in the region. VISION 2020 + 20 should also establish policies that encourage jurisdictions to work with developers to ensure land is set aside for schools and other institutions. In *Hensley VI*, 03309c, FDO, at 22, the Central Puget Sound Hearings Board stated that:

*The County has an obligation to work with school districts in the siting of schools, it also has an obligation to facilitate the siting of schools within urban areas while discouraging them outside of UGAs.*



### **Initial Guidance for Monitoring**

- 5-a. Monitor the siting of major special district and other institutional facilities developed in rural areas.

## ISSUE AREA # 6: Rural Economic Development

Question: How can the rural economy be sustained while protecting and enhancing the rural character?

### Discussion

One of the best ways to preserve rural lands and the rural lifestyle is to insure that these lands maintain their economic viability by taking advantage of less invasive rural-orientated economic activities. The Growth Management Policy Board (October 2003) recognized the value of appropriate rural economic activities, such as, small-scale commercial and resource based enterprises that are dependant on the long-term sustainability of the rural area for the products and services they provide.

### What the Growth Management Act Says

The Growth Management Act [RCW 36.70A.070(7)] identifies economic development as one of the required elements of local comprehensive plans. However, this section does not include provisions for planning for the unique character of the rural economy. Also, sub-section (9) of this section makes it clear that the economic element is not required unless the state provides funding for local governments to include it in the planning process. Section (9) states:

*Requirements to incorporate any such new or amended elements [such as the economic element] shall be null and void until funds sufficient to cover applicable local government cost are appropriated. . . .*

### What VISION 2020 Currently Says

The economy is not addressed in the rural section of VISION 2020. However, the economic section offers the following policy guidance:

*Support viable economic growth and development opportunities in cities and towns in rural areas that recognize their distinct character and economic potential. (1995 VISION 2020 Update, Policy RE-7.10, page 49).*

### Recommendation

VISION 2020 + 20 should develop policies to address rural economic development that:

- 6-1. Rural employment. Help preserve rural-based economies and lifestyles and assist small-scale, rural-based employment, self-employment, and work from home activities.
- 6-2. Promote rural-based agriculture. Support long-term solutions for the sustainability of small scale, intensive agriculture within rural areas. Such

solutions could include agricultural processing, and value-added activities, such as you-pick farms, farm-to-cafeteria programs, greenhouse/nurseries, as well as introducing new crops and products.

- 6-3. Support recreation and tourist-based businesses. Attract enterprises that will not compromise the unique ecological function of rural areas.
- 6-4. Rural character and business promotion. Encourage efforts to maintain rural character while promoting locally-owned small businesses and their unique products.
- 6-5. Cities in the rural areas as employment locations. Recognize freestanding cities (urban islands) in the rural area as the primary locations for the provision of jobs and services in the rural area. As such, these communities should be the focal points of rural-based industries, commerce, and services. Schools and other institutions servicing rural populations should be sited in these communities.

#### **Initial Guidance for Monitoring**

- 6-a. Monitor number, types and locations of jobs in rural areas, as well as in cities located in the rural area.

## ISSUE AREA # 7: Rural Development Standards

Question: Should the VISION 2020 update project provide regional guidance on development standards for rural areas?

### Discussion

Fragmented land patterns are appearing in and beginning to characterize some portions of the rural landscape in the central Puget Sound region. Urban-type subdivisions, frequently with wide streets and fencing, are fragmenting rural land.

Each county has development regulations for the rural land within their jurisdiction. King County has a number of requirements, including the siting of development and minimum widths for wildlife corridors. Kitsap County has multiple rural designations with specific development standards and a greenway plan that addresses design issues. Pierce and Snohomish counties also have multiple designations with specified provisions for each. For example, Pierce County has seven different Rural Center zoning classifications and eight rural residential classifications.

### What the Growth Management Act Says

The Growth Management Act does not address specific development standards for rural areas.

### What VISION 2020 Currently Says

Development standards are not addressed in the rural policies of VISION 2020.

### Recommendation

- 7.1. VISION 2020 + 20 should provide guidance on achieving low-impact development in the rural area. This guidance could be in the form of best practices, model standards, or other examples. The guidance should address:
- a. *Fencing issues* that limit wildlife migration. Development that is compatible with fish & wildlife habitat.
  - b. General guidance for *setback, lot coverage, building height, and lot dimension* considerations. Provisions that encourage “green development.”
  - c. *Open space preservation*. Conserve unique ecological lands and features, as well as maintain connectivity of lands serving important ecological and habitat functions.
  - d. *Stormwater practices*. Limitations and innovations for impervious surfaces.
  - e. Issues associated with *private covenants* that exclude, for example, livestock and horses from rural zones.

- e. *Signage*. Oversized signs and bright lighting can conflict with certain rural surroundings.
- 7.2. Pilot projects. The update process should encourage the use of pilot projects that are designed to advance innovative approaches to balancing conservation with low-impact development practices.

### **Initial Guidance for Monitoring**

- 7-a. Monitor a sample of rural development projects to provide information regarding practices and outcomes as they relate to rural development standards.

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## **Conclusion**

The purpose of this paper is to continue the discussion of rural lands within the context of the Regional Council's work on VISION 2020 + 20. The paper examines a large number of issues associated with rural character and function, rural growth, rural exception areas, the provision of services and infrastructure, special purpose districts in rural areas, rural economic development, and rural development standards. Over the next year the Growth Management Policy Board will play a lead role in shaping the ideas in the paper (and new ones that will be introduced by participants in the VISION update process) into policies and strategies that will be offered for additional public review.

## APPENDIX ONE – Rural Population, Housing, and Employment Data, by County

JURISDICTION	POPULATION (1990-2000)	HOUSING (1991-2001)	EMPLOYMENT (1995-2001)
King County	<ul style="list-style-type: none"> <li>• 14,466 rural residents</li> <li>• 6% of county's growth</li> </ul>	<ul style="list-style-type: none"> <li>• 9,355 units permitted</li> <li>• 8% of county's growth</li> <li>• Capacity of 10,000 lots (2009-14)</li> </ul>	<ul style="list-style-type: none"> <li>• 3,520 jobs</li> <li>• 2% of county's growth</li> </ul>
Kitsap County	<ul style="list-style-type: none"> <li>• 17,047 rural residents</li> <li>• 40% of county's growth</li> <li>• Capacity of 10,113 persons</li> </ul>	<ul style="list-style-type: none"> <li>• 10,648 units permitted</li> <li>• 49% of county's growth</li> <li>• Capacity of 4,044 units</li> <li>• 0.8 dwelling units/acre (1995-99)</li> </ul>	<ul style="list-style-type: none"> <li>• 2,418 jobs</li> <li>• 32% of county's growth</li> </ul>
Pierce County	<ul style="list-style-type: none"> <li>• 30,876 rural residents</li> <li>• 27% of county's growth</li> </ul>	<ul style="list-style-type: none"> <li>• 22,910 units permitted</li> <li>• 35% of county's growth</li> </ul>	<ul style="list-style-type: none"> <li>• 2,351 jobs</li> <li>• 8% of County's growth</li> </ul>
Snohomish County	<ul style="list-style-type: none"> <li>• 20,927 rural residents</li> <li>• 15% of county's growth</li> </ul>	<ul style="list-style-type: none"> <li>• 11,983 units permitted</li> <li>• 18% of county's growth</li> </ul>	<ul style="list-style-type: none"> <li>• 800 jobs</li> <li>• 3% of county's growth</li> </ul>
REGION	<ul style="list-style-type: none"> <li>• 83,316 rural residents</li> <li>• 16% of region's growth</li> <li>• 364,900 rural residents (2000)</li> </ul>	<ul style="list-style-type: none"> <li>• 54,899 units permitted</li> <li>• 21% of region's growth</li> <li>• 25% of SF homes</li> <li>• 58% of region's MH homes</li> <li>• 5% of region's MF homes</li> </ul>	<ul style="list-style-type: none"> <li>• 9,089 jobs, 3% of region's growth</li> <li>• 1,193 resource jobs, 40.4% of growth</li> <li>• 2,667 construction jobs, 10% of growth</li> <li>• 2,662 services jobs, 2% of growth</li> <li>• 1,100 G&amp;E jobs, 4.7% of growth</li> <li>• 788 retail jobs, 1.9% of growth</li> <li>• 312 trade jobs, 5.8% of growth</li> <li>• 268 jobs in transport &amp; utilities, 1.4% of growth</li> <li>• 109 manufacture jobs, 2.6% of growth</li> <li>• -10 FIRES jobs, <i>only decline</i></li> </ul>

## APPENDIX TWO - Growth Targets

### Population Targets

NEW RESIDENTIAL TARGET(S)	COUNTYWIDE <i>TOTAL</i>	CITIES	URBAN UNINCORPORATED <i>TOTAL</i>	MUGA / PAAS	UNAFFILIATED	RURAL
King County (by household)	157,932	138,526	13,406	7,045	6,361	6,000
%		88%	8%	4%	4%	4%
King County (by population)	310,320	267,460	25,350	11,990	13,360	17,510
%		86%	8%	4%	4%	6%
Snohomish County	286,239	89,983	127,461	123,756	3,715	68,795
%		31%	45%	43%	1%	24%
Pierce County	211,889	136,055	60,516	28,793	31,723	15,318
%		64%	29%	14%	15%	7%
Kitsap County	95,240	29,638	36,744	10,383	26,361	28,858
%		31%	39%	11%	28%	30%
REGION (by population)	903,698	523,136	250,081	174,922	75,159	130,481
		58%	28%	19%	8%	14%

#### KING COUNTY NOTES

Units: Households / Population

Source: King County Countywide Planning Policies, Table 1 / King County Household/Population Conversion Table

Time period: 2000-2022

Notes: - Rural cities are considered with their annexation areas.

#### SNOHOMISH COUNTY NOTES

Units: Population

Source:

Time period: 2002-2025

Notes: - Rural area target includes a 15,000-person target for *fully contained community reserve*, if approved on a case-by-case basis, this target would revert to the urban area

#### PIERCE COUNTY NOTES

Units: Population

Source: Pierce County Ordinance 2003-104s, Exhibit 'A'

Time period: 2000-2022 (2002 municipal boundaries)

Notes: - 'Unaffiliated' includes overlaps

#### KITSAP COUNTY NOTES

Units: Population

Source: Kitsap Regional Coordinating Council draft, distribution: 07-06-04

Time period: 2000-2025

Notes: - Rural area target includes a 6,000-person target for *Port Orchard UGA expansion study*, if UGA expansion goes forward, this target would revert to urban.

## Employment Targets

NEW EMPLOYMENT TARGET(S)	COUNTYWIDE <i>TOTAL</i>	CITIES	URBAN UNINCORPORATED <i>TOTAL</i>	MUGA / PAAS	UNAFFILIATED	RURAL
King County *	289,127	281,214	7,913	2,568	5,345	0
%		97%	3%	1%	2%	0%
Snohomish County **	124,778	89,953	23,803	23,803		11,022
%		72%	19%	19%		9%
Pierce County	No targets set for employment.					
Kitsap County						

\*

Units: Jobs

Source: King County Countywide Planning Policies

Time period: 2001-2022

Notes: Cities located in the rural area are counted along with their respective potential annexation areas

\*\*

Units: Jobs

Source: Snohomish County Tomorrow

Time period: 2002-2025

## **APPENDIX THREE - Current Rural Policies in VISION 2020**

The primary goal of the Rural Areas section in the existing VISION 2020 document is to conserve rural lands and protect their unique qualities by limiting growth in rural areas and conserving open space and resource lands. Four primary issues are addressed in the plan's rural strategy: (1) land uses in rural areas, (2) densities compatible with rural character, (3) appropriate level-of-service standards (for utilities and roads), and (4) interjurisdictional coordination.

The policies in the rural section are divided into three sections: (1) Preserve Rural Land Uses and Development Patterns, (2) Establish and Maintain Rural Levels of Service, and (3) Conserve Small Scale Natural Resource Uses in Rural Areas.

### **Framework**

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 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.

### **Preserve Rural Land Uses and Development Patterns**

RR-5.1 Rural lands should be identified on a long-term basis and should support rural uses such as farming, forestry, mining, recreation, and other rural activities. They should permit a variety of low-density residential uses which preserve rural character and can be sustained by rural service levels.

RR-5.2 Promote clustering residential development and other techniques which protect and enhance significant open spaces, natural resources, and critical areas, and contribute to more efficient use of land. Clustering should not increase residential housing units in the overall area designated as rural and should be consistent with desired rural densities. Development clusters should contain rural levels of service that meet health, safety, and environmental standards and should be designed, scaled and sited in a manner consistent with rural character.

RR-5.3 Support cities and towns in rural areas as locations of employment, urban services, a mix of housing types, and cultural activities for rural areas. Unincorporated rural activity areas should primarily function as locations for service needs such as grocery stores, shopping, and community services, and small-scale cottage industries for the surrounding rural area.

## **Establish and Maintain Rural Levels of Service**

RR-5.4 Rural level-of-service standards should address sewage disposal, water, transportation and other appropriate services, be consistent with rural development patterns and densities, and support long-term preservation of rural areas. When services need to be extended to solve isolated health and sanitation problems, they should be designed for limited access so as not to increase the development potential of the surrounding rural area.

RR-5.5 When major infrastructure facilities that pass through rural areas are constructed or improved to increase their carrying capacity, they should be designed to neither negatively impact rural character, nor provide new opportunities for increased development in rural areas.

## **Conserve Small-Scale Natural Resource Uses in Rural Areas**

RR-5.6 Promote the conservation of non-designated natural resource lands in rural areas and accommodate small-scale farming, forestry, and resource-based cottage industries.

RR-5.7 Rural areas should contain low-density buffers adjacent to designated natural resource lands.

VISION 2020 + 20 Update  
Issue Paper on Housing

Puget Sound Regional Council

August 25, 2005

Growth Management Policy Board adopted *Action to Proceed* August 25, 2005



## PURPOSE

Between now and the year 2040, the central Puget Sound region is expected to grow by an additional 1.6 million residents. A critical issue will be providing adequate housing for all segments of the region's population. Besides addressing the housing needs of various economic and population groups in the region, attention must also be given to managing growth and new development in ways that minimize impacts on the natural and built environment.

The purpose of this paper is to examine the current housing situation in the central Puget Sound region and future housing needs as we look to update the overall growth, economic and transportation strategy in VISION 2020. The update process can be used to develop regional agreement on housing issues and to craft strategies, policies, and actions to ensure that region's housing needs are met as effectively as possible.

The paper is organized into the following areas:

- I. Background  
*A review of current housing law and policies, along with a summary of comments and guidance received during the VISION 2020 + 20 update scoping process.*
- II. Trends and Analysis – Puget Sound and Nationally  
*An overview of key demographic shifts, housing characteristics and market trends, and other related information.*
- III. Identifying Challenges and Opportunities  
*Best practices and innovations.*
- IV. Considerations for the VISION 2020 + 20 Update  
*Preliminary policy recommendations, implementation actions, and monitoring provisions.*

## I. BACKGROUND

### **Housing in the Growth Management Act (GMA)**

Now in its 15<sup>th</sup> year, the Washington Growth Management Act's (GMA) overarching planning goal for housing (Goal 4) is to "[e]ncourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock."<sup>1</sup>

The Act requires that countywide planning policies (CPPs) and multicounty planning policies (MPPs), which establish the policy framework for local comprehensive plans, at a minimum include "policies that consider the need for affordable housing, such as housing for all economic segments of the population and parameters for its distribution."<sup>2</sup>

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<sup>1</sup> Revised Code of Washington (RCW) 36.70A.020 (4)

<sup>2</sup> RCW 36.70A.210

Finally, the Act requires that local jurisdictions develop comprehensive plans that include “a housing element ensuring the vitality and character of established residential neighborhoods that: (a) Includes an inventory and analysis of existing and projected housing needs that identifies the number of housing units necessary to manage projected growth; (b) includes a statement of goals, policies, objectives, and mandatory provisions for the preservation, improvement, and development of housing, including single-family residences; (c) identifies sufficient land for housing, including, but not limited to, government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, and group homes and foster care facilities; and (d) makes adequate provisions for existing and projected needs of all economic segments of the community.”<sup>3</sup>

### **Housing in Growth Management Hearings Board Case Law**

The Growth Management Act’s housing requirements have been further clarified through a series of Central Puget Sound Growth Management Hearings Board cases.

At the heart of the housing challenge for localities is the need to balance the three components of the Act’s housing goal: affordability, diversity, and preservation. In a key decision, *West Seattle Defense Fund v. City of Seattle (WSDF I, 1995)*, the Hearings Board directed jurisdictions to not “reconcile these ... requirements by totally focusing on one requirement ... to the exclusion of other requirements ... Instead, jurisdictions must reconcile ... the requirements by applying and necessarily balancing them.”<sup>4</sup>

Local governments should also strive to balance the Act’s housing goal and policies with the other goals and policies of the GMA. Two cases provide clarification on the appropriate balance between the Act’s goals for housing and urban densities. In *Benaroya et al., v. City of Redmond (Benaroya I, 1996)*, the Hearings Board held that “[t]he requirement to ‘ensure neighborhood vitality and character’ is neither a mandate, nor an excuse, to freeze neighborhood densities at their pre-GMA levels.”<sup>5</sup> Rather the goal is to encourage infill development and increased residential densities in appropriate areas, while accommodating growth in a way that respects, maintains, or even improves existing neighborhoods. In *Master Builders Association of Pierce County, Terry L. Brink, Edward Zenker, Associated General Contractors and Tacoma Pierce County Chamber of Commerce – South County Division v. Pierce County (MBA/Brink, 2003)*, the Hearings Board declared that “any opportunity to perpetuate an ‘historic low density residential’ development pattern [ends when an area is designated as part of the UGA] ... existing housing stock and neighborhoods may be maintained and preserved, however existing low density patterns of development cannot be perpetuated.”<sup>6</sup>

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<sup>3</sup> RCW 36.70A.070

<sup>4</sup> *West Seattle Defense Fund v. City of Seattle (WSDF I)*, CPSGMHB Case No. 94-3-0016 (4316), Final Decision and Order (Apr. 4, 1995), at 30

<sup>5</sup> *Benaroya et al., v. City of Redmond [SKCAR and BIAW – Intervenors] (Benaroya I)*, CPSGMHB Case No. 95-3-0072c (5372c), Final Decision and Order (Mar. 25, 1996), at 21

<sup>6</sup> *Master Builders Association of Pierce County, Terry L. Brink, Edward Zenker, Associated General Contractors and Tacoma Pierce County Chamber of Commerce – South County Division v. Pierce*

In *The Children's Alliance and Low Income Housing Institute v. City of Bellevue (Children's I, 1995)*, the Hearings Board reinforced the Act's goal of promoting housing diversity to serve all population segments by declaring that the law set forth "a legislatively preferred residential landscape that ... is less homogeneous, more diverse, more compact and better furnished with facilities and services to support the needs of the changing residential population ... Because the characteristics of our population have changed with regard to age, ethnicity, culture, economic, physical and mental circumstances, household size and makeup, the GMA requires that housing policies and residential land use regulations must follow suit."<sup>7</sup>

The Hearings Board has also upheld the responsibility of local jurisdictions to promote housing affordability for all economic segments of their population. In *Low Income Housing Institute, Fair Housing Center of South Puget Sound, V.L. Kershaw, Starlit Rothe and Beverly Edwards v. City of Lakewood (LIHI II, 2002)*, the Board found that the City of Lakewood's housing incentive program, though well intentioned, was ambiguously written and not sufficiently tailored to adequately provide housing affordable to the City's very low- and extremely low-income population. As such, the Board concluded that Lakewood's program, as originally written and designed, did not implement the city's comprehensive plan and did not comply with the requirements of Goal 4 of the Growth Management Act.<sup>8</sup>

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County (MBA/Brink), CPSGMHB Case No. 02-3-0010 (02310), Final Decision and Order (Feb. 4, 2003), at 14-15

<sup>7</sup> *The Children's Alliance and Low Income Housing Institute v. City of Bellevue (Children's I)*, CPSGMHB Case No. 95-3-0011 (5311), Final Decision and Order (Jul. 25, 1995), at 5,9

<sup>8</sup> As originally written, Lakewood's Housing Incentive Program (HIP) was designed to encourage the provision of housing affordable to the city's low-income residents, defined as earning 80 percent or less of its county's area median income (AMI). The Petitioner (LIHI, et al) demonstrated that, based on the city's own analysis, over two-thirds of the city's low-income population qualify as very low-income and 20 percent as extremely low-income. The Hearings Board concluded that "[w]hile those with the greatest need fall within the city's low-income definition, the bar is high enough to dilute the potential impact of the HIP program in providing affordable housing to the poorest of Lakewood's poor..." Additionally, the Board concluded that the language in the HIP suggests that housing units to serve non low-income seniors and disabled persons are also eligible for density bonuses, which "further dilutes the potential effectiveness of the HIP in providing affordable housing to low-income persons." Finally, the Board stated that it was unclear whether the fee reductions offered in the HIP were available only for housing units that serve low-income persons. The HIP was remanded back to the City with direction to take appropriate legislative action to achieve compliance with the Act. This could be achieved by revising the HIP to remove existing ambiguities and otherwise modifying the HIP so the housing incentives would have the effect intended in its purpose statement and thus implement the city's comprehensive plan. [Low Income Housing Institute Fair Housing Center of South Puget Sound, V.L. Kershaw, Starlit Rothe and Beverly Edwards v. City of Lakewood (LIHI II), CPSGMHB Case No. 01-3-0023 (1323), Final Decision and Order (Apr. 15, 2002), at 10-11 and 14] In October 2002, Lakewood adopted Ordinance No. 284 which amended the HIP as follows: (1) only housing built for tenants at or below 50 percent AMI qualify for the HIP, (2) density bonuses were increased, (3) fee reductions were increased, (4) parking incentives were increased, and (5) compliance measures were strengthened. [LIHI II, CPSGMHB Case No. 01-3-0023 (1323), Finding of Compliance (Oct. 24, 2002), at 2]

The Hearings Board's rulings in these and several other cases underscore that the Act does not prescribe the manner in which a jurisdiction plans and implements housing policies at the neighborhood or subarea level.<sup>9</sup> Rather, the case law has preserved local authority over such decisions, so long as a jurisdiction's overall housing provisions and associated development regulations and implementation measures meet the policy goals and guidance of the Act. Thus, the Board has affirmed the duty of local governments to foster adequate housing supply for all economic segments of their populations, while allowing flexibility and discretion regarding how this is done.

### **Additional Housing Policy in State Law**

The Growth Management Act is accompanied in state law by the Washington Housing Policy Act (RCW 43.185B) which says that "[i]t is the goal of the state of Washington to coordinate, encourage, and direct, when necessary, the efforts of the public and private sectors of the state and to cooperate and participate, when necessary, in the attainment of a decent home in a healthy, safe environment for every resident of the state."<sup>10</sup>

The Washington Housing Policy Act articulates nine objectives and explicitly calls for coordinating state housing efforts with the GMA's housing provisions. The objectives are: (1) develop an adequate and affordable supply of housing for all economic segments of the population; (2) assist very low-income and special needs households who cannot obtain affordable, safe, and adequate housing in the private market; (3) encourage and maintain home ownership opportunities; (4) reduce life-cycle housing costs while preserving public health and safety; (5) preserve the supply of existing affordable housing; (6) provide housing for special needs populations; (7) ensure fair and equal access to the housing market; (8) increase the availability of mortgage credit at low interest rates; and (9) coordinate and be consistent with the goals, objectives, and required housing element of the comprehensive plan in the state's growth management act in RCW 36.70A.070.<sup>11</sup>

### **Housing in the 1995 VISION 2020 Strategy**

There are six existing multicounty housing policies in VISION 2020:<sup>12</sup>

*RH-4 – Provide a variety of choices in housing to meet the needs of all segments of the population. Achieve and sustain an adequate supply of*

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<sup>9</sup> Aaron, Faith, David and Becky Litowitz; Bill, Eldrid, Tony and Patricia Segale; Rajinder and Kulwinder Johal v. City of Federal Way (Litowitz), CPSGMHB Case No. 96-3-0005 (6305), Final Decision and Order (Jul. 22, 1996), at 19,29; Buckles, et al., v. King County (Buckles), CPSGMHB Case No. 95-3-0022c (6322c), Final Decision and Order (Nov. 12, 1996), at 20-21; Lawrence Michael Investments, Chevron U.S.A. and Chevron Land and Development Company v. Town of Woodway (LMI/Chevron), CPSGMHB Case No. 98-3-0012 (8312), Final Decision and Order (Jan. 8, 1999), at 29; MBA/Brink (02310), Final Decision and Order (Feb. 4, 2003), at 14-15

<sup>10</sup> RCW 43.185B.007

<sup>11</sup> RCW 43.185B.009

<sup>12</sup> Puget Sound Regional Council, *1995 VISION 2020 Update*, May 1995.

*low-income, moderate-income, and special needs housing located throughout the region.*

*RH-4.1 – Promote fair and equal access to housing for all persons regardless of race, color, religion, gender, sexual orientation, age, national origin, family status, source of income or disability.*

*RH-4.2 – Achieve and sustain a fair, equitable and rational distribution of low-income, moderate-income and special needs housing throughout the region consistent with land use policies and the location and type of jobs. Transportation facilities and other services should be provided to support a balance of jobs and housing. Provide a diversity of housing types to meet the housing needs of all segments of the population.*

*RH-4.3 – Promote interjurisdictional cooperative efforts, including land use incentives and funding commitments, to ensure that an adequate supply of housing is available to all segments of the population.*

*RH-4.4 – Preserve existing low-income, moderate-income and special needs housing and where appropriate serve it with transit. Promote development of institutional and financial mechanisms to provide for affordable housing, particularly housing located in and near urban centers and transportation corridors.*

*RH-4.5 – Consider the economic implications of private and public regulations and practices so that the broader public benefit they serve is achieved with the least additional cost to housing.*

### **What Did We Hear During Scoping?**

In April 2004, during the scoping process, the Growth Management Policy Board reviewed and discussed the housing policies and provisions of the 1995 VISION 2020 document. In that discussion it was noted that the current multicounty policies for housing are very general. They call for promoting fair and equal access to housing for all persons and interjurisdictional cooperation efforts to ensure adequate housing to all segments of the population. However, no specifics are provided to guide how these objectives are to be met. The existing VISION 2020 plan includes a policy to achieve a fair, equitable and rational distribution of housing in the region, with a link to providing transportation facilities and services to support a balance of jobs and housing. But, there is no detail on how to define this objective in understandable and measurable terms, nor what sorts of strategies or programs would be needed.

Among the public scoping comments, there was a strong emphasis on the importance of addressing affordable housing more fully and more concretely. Several respondents called for establishing affordable housing targets throughout the region. Other comments called for providing housing in closer proximity to jobs and services. One

respondent suggested that more incentives, such as permit streamlining and improved development regulations, be implemented to foster a greater variety of housing. The Regional Council was also encouraged to address density in a way that maintained the character of neighborhoods. One comment noted that the market for single-family housing in the future should be considered.

The Board then considered the following ways to improve the multicounty policies for housing:

- A revised treatment of housing issues in the update of VISION 2020 would benefit from new data available based on the 2000 Census, including information on housing characteristics, market trends, and demographics. This information will help us better understand the range of housing needs expected in the period leading up to 2040.
- The update should also address issues related to the challenges of getting certain types of housing built, looking at both private and public sector considerations.
- Innovative housing programs from communities throughout the region, as well as in other parts of the country, should be showcased as best practices. More discussion is needed on different types of housing, including housing for both homeowners and renters.
- A clearer connection between growth targets and the housing and land use elements in local comprehensive plans should be established. The relationship of housing to achieving center development goals and mobility objectives should also be examined. Multicounty policies should be used to address affordable housing targets.
- The multicounty policies should provide more direction to localities on expectations related to housing issues and offer guidance to the Regional Council in its review of housing elements in comprehensive plans.

The Board also offered the following guidance:

- Rethink the regional role concerning housing – and the linkage of land use and transportation. Develop links with local governments and transit authorities.
- Standardize the multicounty housing policies with a goal of creating a model set of core consistent policies, but keeping in mind unique characteristics of local communities and providing choices.
- Focus on incentives and other positive approaches before developing prescriptive requirements.
- There is a need to market, educate and communicate to the public on housing issues and policies.

- Encourage corporations to work with their employees to promote living closer to work. Educate employers, communities about the policies.
- Link housing, transportation, economic, funding, legislation, and other infrastructure.

## **II. TRENDS AND ANALYSIS – PUGET SOUND AND NATIONALLY**

### **Demographic Trends**

The central Puget Sound region is expected to grow by an additional 1.6 million people by 2040. As we strive to effectively plan for housing the region's projected growth, several key demographic shifts and trends should be considered.

#### **Declining Average Household Size**

Trends in average household size are an important consideration when translating forecasts of population growth into estimates of future housing needs. Smaller households mean that more housing units will be needed to accommodate the region's population.

The average U.S. and regionwide household size dropped significantly during the 1970s and 1980s, primarily as more women entered the labor force and childbirth was delayed. This decline slowed during the 1990s, as female labor force participation and fertility rates stabilized. Based on national trends, the regional average household size will likely continue to decrease slowly, with downward pressure coming from an expanding senior population, offset by some upward pressure from growth in Latino/Hispanic and immigrant populations with larger than average family sizes.<sup>13</sup>

Household sizes and trends can vary significantly within the region by subarea. In 2000, household sizes in the region's cities ranged from 2.08 in Seattle to 3.13 in Covington. Between 1990 and 2000, household sizes remained relatively stable in places like Seattle, Everett and Tacoma, while they increased noticeably in south King County, Marysville and Monroe, and fell in east King County, Edmonds and Puyallup. In planning for long range housing needs, jurisdictions will want to consider local characteristics as well as larger trends in setting goals and targets for housing development.

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<sup>13</sup> U.S. Census Bureau, "National Households and Families Projections: 1995 to 2010, Series 1, 2, and 3," May 1996.

## Demographics and Housing Demand

Survey research of Washington state home buyers has identified neighborhood quality as the single most important factor in home purchasing decisions, followed by proximity to jobs and schools, and proximity to family and friends. Research has also shown that housing preferences and buying patterns continually evolve over the course of a life cycle. Younger individuals and households with lower incomes are more likely to purchase starter homes that are affordable and often smaller. Families with children are more likely to desire larger homes with proximity to quality schools and neighborhood amenities like parks and recreation centers. The median size of homes purchased by seniors tends to show downsizing, as the need for space diminishes.<sup>14</sup>

Several demographic trends are currently converging within our region that are likely to heighten future market demand for alternatives to the conventional large lot single-family home, both in terms of design and affordability. These trends include: the aging of the baby boomers, the entry of baby boomlets into the housing market, and migration patterns that bring a net gain of young, starter households to the region.

### *The Baby Boomers*

Our region's baby boomers are quickly approaching retirement age. The front end of the boomer generation begins turning 65 in 2010, and will continue to swell the ranks of seniors for several years after. Seniors, who comprised 10 percent of the region's population in 2000, are expected to more than double in number over the next thirty years to account for 17 percent of our total population by 2030.

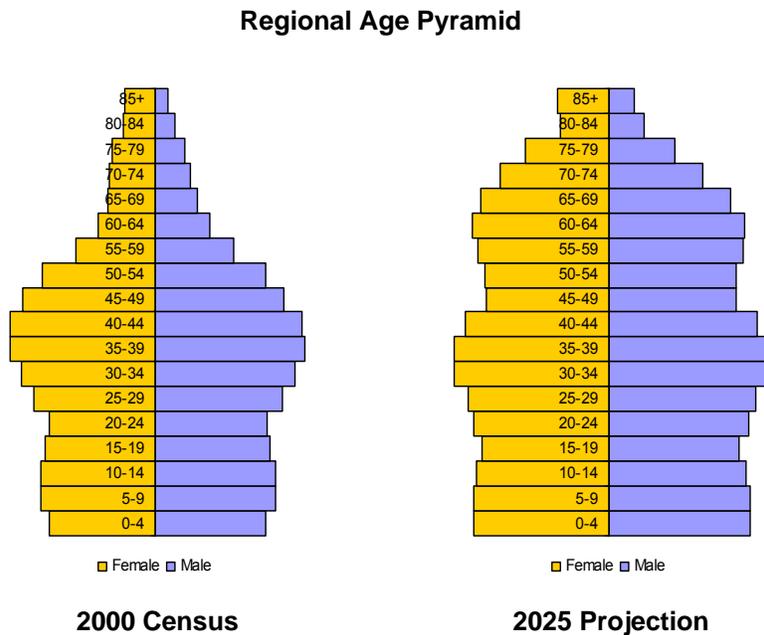
In light of this oncoming demographic shift, the region should consider ways to facilitate the provision of a range of housing options to meet the varied needs and preferences of seniors. Many seniors are likely to downsize, trading larger homes for smaller alternatives with fewer maintenance requirements. Neighborhoods with good access to transit, health care, and other services and amenities, as well as single story living spaces, are likely to be considered particularly attractive. Some seniors may decide to join their children's households, an arrangement that can be facilitated with zoning allowances for accessory dwelling units. Still others may prefer to age in place. Finally, given the expected need for expanded assisted living facility and nursing home options for seniors, local jurisdictions should ensure that their codes and regulations are accommodating of such developments.

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<sup>14</sup> National Association of Realtors, *The 2004 Washington Profile of Buyers' Home Feature Preferences*, 2004.

## The Baby Boomlets

The front end of the boomlet generation – the children of the baby boomers – is just now beginning to enter college and the labor force. They embody a latent demand for affordable rental housing and starter homes, which is likely to come into play in a few more years as they progress into their 20s and 30s.



## Migration Trends

The central Puget Sound region and its economy provide a strong draw for in-migration, with net migration responsible for 58 percent of the region’s population growth over the last thirty years. Incoming households, relative to the average household in the region, tend to be younger, smaller (e.g. more 1- and 2- person households), and – as a function of these characteristics – have lower incomes. A continued net gain of such households to the region is likely to reinforce ongoing market demand for affordable rental housing and starter homes.

## Housing Characteristics and Market Trends

With these demographic considerations in mind, we now turn to a discussion of Census and other data on housing characteristics and market trends.

The Growth Management Act and VISION 2020 call for providing a variety of housing types and densities, and Census data provides evidence that our region is making some progress in diversifying its housing stock. The traditional detached single-family home continues to be a vital component of the housing stock. But non-traditional single-family housing, townhomes, and other multifamily housing options, which offer greater affordability and promote the efficient use of urban land, comprised nearly half (45 percent) of the new units built in the region between 1990 and 2000. Additionally, more jurisdictions are passing ordinances and zoning changes to allow for innovative infill, small lot single-family, multifamily, and mixed-use developments.

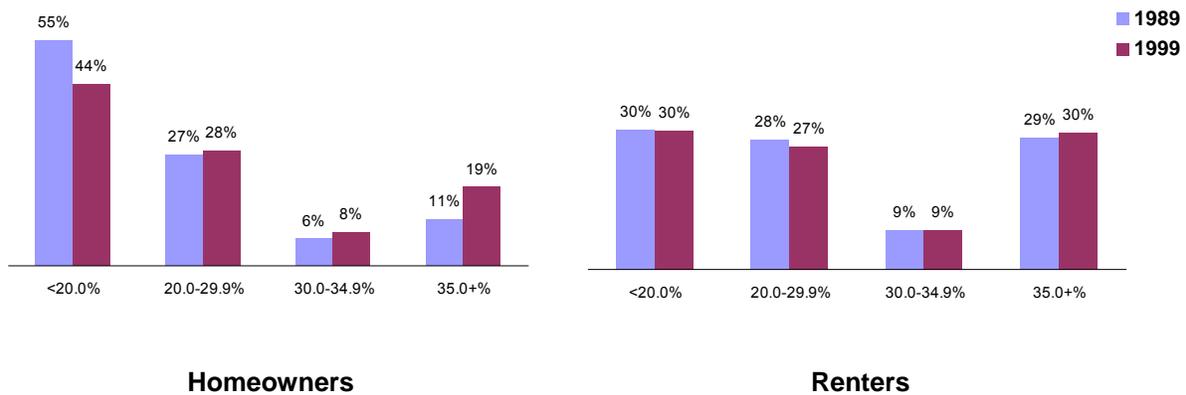
Despite these positive trends, our region continues to face a number of housing challenges, particularly in terms of affordability. Housing represents the largest basic monthly cost borne by most households, and is generally defined as being unaffordable

when costs exceed anywhere from 25 to 33 percent, most commonly 30 percent, of a household's gross monthly income.

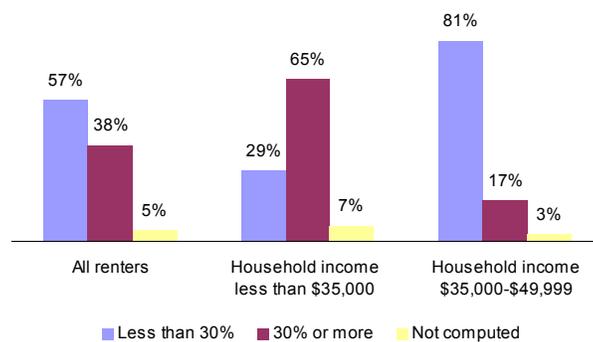
Census data shows that our region's households have to dedicate more of their income to cover housing costs, leaving less for other basic needs and amenities. In 1999, over one in four households (27 percent) who owned a home spent 30 percent or more of their gross monthly income on housing costs, with nearly one in five (19 percent) spending 35 percent or more. This represents a substantial upward shift in housing cost burdens from a decade earlier, when the majority of owner households (55 percent) spent less than 20 percent of their income on housing, and only 18 percent spent 30 percent or more, with 11 percent spending 35 percent or more.

Housing cost burdens did not shift noticeably for renters over the same decade. But nearly four in ten renter households (38 percent) must pay 30 percent or more of their gross monthly income on rent, with three in ten (30 percent) paying 35 percent or more. For renter households that earned less than \$35,000 in 1999, this ratio rises to 6½ in ten households (65 percent) that dedicated 30 percent or more of their income to cover rent.

**Housing Costs As a Percentage of Household Income, Central Puget Sound: 1989 and 1999**



**Gross Rent As a Percentage of Household Income, Central Puget Sound: 1999**



During the late 1990s, the region experienced two divergent sets of trends with respect to housing prices and affordability. On the one hand, a surge in demand for housing due to population growth and increases in wealth collided with a relatively tight supply in the region's housing market to produce rapid annual increases in housing prices. For many, the increase in home prices and rents exceeded income gains, raising the housing cost burden, particularly for lower-income households. On the other hand, falling interest rates translated into historically low mortgage and refinancing rates, bolstering consumer purchasing power for housing.

#### Housing Market Data: 1995-2004<sup>15</sup>

	1995	2000	2001	2002	2003	2004
Median Sales Price (existing single family homes)						
King	\$166,500	\$249,900	\$262,000	\$278,500	\$292,400	\$322,000
Kitsap	\$124,600	\$149,400	\$155,000	\$165,900	\$184,000	\$204,000
Pierce	\$121,400	\$151,800	\$159,000	\$170,000	\$178,500	\$195,500
Snohomish	\$149,600	\$196,400	\$210,000	\$220,000	\$231,000	\$248,000
WA State	\$136,600	\$176,300	\$179,900	\$188,500	\$203,800	\$223,700
Western region	\$148,300	\$183,000	\$194,500	\$215,400	\$234,200	\$265,800
U.S.	\$113,100	\$139,000	\$147,800	\$158,100	\$170,000	\$184,100
Housing Affordability Index (all buyers)						
King	110.4	92.5	103.2	104.6	121.3	105.1
Kitsap	121.6	130.9	140.3	145.9	155.5	136.7
Pierce	117.7	119.5	133.8	135.8	153.1	137.8
Snohomish	114.5	110.3	116.2	119.7	133.2	123.1
WA State	114.8	106.4	118.6	119.8	135.0	123.0
U.S.	-	-	135.7	133.9	138.4	132.6
Housing Affordability Index (first time buyers)						
King	62.1	53.1	58.7	59.2	68.2	58.4
Kitsap	74.7	80.9	85.6	88.1	92.8	81.5
Pierce	72.3	73.6	81.1	81.1	90.1	80.5
Snohomish	71.3	68.7	71.9	73.8	81.5	74.6
WA State	67.0	65.1	72.9	69.8	78.6	71.5
U.S.	-	-	79.6	78.7	80.9	77.1
Average Rent						
King	\$650	\$790	\$840	\$870	\$850	\$840
Kitsap	\$580	\$610	\$640	\$660	\$690	\$730
Pierce	\$510	\$590	\$600	\$630	\$670	\$670
Snohomish	\$620	\$730	\$780	\$790	\$770	\$750
WA State	-	\$690	\$740	\$760	\$750	\$750

Source: National Association of Realtors, Washington Center for Real Estate Research, Dupre+Scott Apartment Advisors

<sup>15</sup> Median sales prices are annual. Average rents are for March. Figures are not adjusted for inflation. National housing affordability indices are annual; state and county housing affordability indices are for the second quarter. A value of 100 indicates balance between the typical buyer's income and the cost of housing. The index should be read as "The buyer earns 'X' percent of the necessary income to qualify for a conventional mortgage loan." For example, an index of 120.0 means the buyer earns 120% of the necessary income to qualify. The All Buyers Housing Affordability Index measures the ability of a household earning 100% of the area median *family* income to qualify for a conventional mortgage loan on a median price home; the calculation assumes a 20% down payment and 25% qualifying ratio. The First Time Buyers Index assumes the purchaser earns 70% of the area median *household* income, and the home costs 85% of the median price home; the calculation assumes a 10% down payment and 25% qualifying ratio. All loans are assumed to be for 30 years.

Rents rose rapidly during the late 1990s, although they have stabilized in recent years as a result of the 2001 recession. Home prices and property values continued to climb despite the onset of the recession, as demand was bolstered by buyers seeking to take advantage of low mortgage and refinancing rates and investors turning to real estate as an alternative to the stock markets. With the exception of King County, regional home prices did not rise as quickly as they did for the U.S. western region as a whole.

The housing affordability index for all buyers shows that declining mortgage rates did boost housing affordability for the typical homebuyer between 1995 and 2003/04, although the indices begin to show a decline in affordability from 2003 to 2004. First-time and low-income homebuyers also benefited, though not to the same degree as the average buyer. But first-time homebuyers indices still remain well below 100, the point that represents balance between available income and the cost of housing, indicating that each of the region’s counties suffers from a shortage of housing affordable to lower- and moderate-income households.

Homeownership represents a primary vehicle for many households to build equity and wealth. Federal policies and programs encouraging homeownership, in combination with declining mortgage rates, produced a noticeable rise in homeownership rates across the nation as well as our region from 1990 to 2000.

Yet, homeownership rates in King and Pierce counties lag the national average. Moreover, while homeownership rates for non-White minorities showed significant improvement from 1990 to 2000, they still remain well below the average rates for all households. And, in a troubling trend, Hispanic/Latino homeownership rates declined in all counties except for Kitsap, perhaps reflecting the tenure characteristics of recent immigrants.

**Homeownership Rates: 1990 and 2000**

	1990	2000
<b>King</b>		
All households	58.8	59.8
Non-White householder	44.2	44.7
Hispanic/Latino householder	45.8	32.7
<b>Kitsap</b>		
All households	64.3	67.4
Non-White householder	47.5	51.8
Hispanic/Latino householder	44.7	47.4
<b>Pierce</b>		
All households	60.3	63.5
Non-White householder	38.2	44.6
Hispanic/Latino householder	42.4	39.6
<b>Snohomish</b>		
All households	66.3	67.8
Non-White householder	54.2	53.6
Hispanic/Latino householder	52.5	39.7
<b>Region</b>		
All households	60.6	62.5
Non-White householder	43.7	46.0
Hispanic/Latino householder	45.8	36.0
<b>U.S.</b>		
All households	64.2	66.2
Non-White householder	43.8	46.6
Hispanic/Latino householder	45.1	45.7

Source: U.S. Census Bureau

In summary, Census and other data suggest that the region is showing progress in meeting one key component of the regional housing policy by increasing the diversity of available housing types and densities. But the region continues to struggle with the goal of providing an adequate supply of housing for all economic segments of the population. A significant share of renter households, low-income renters in particular, must dedicate more than 30 percent of their income toward rent. There has been a

substantial upward shift over the last decade in how much owner households are paying monthly toward housing costs. And it remains extremely difficult for low- and even moderate-income starter households to purchase their first homes.

### III. IDENTIFYING CHALLENGES AND OPPORTUNITIES

In this section, major barriers and challenges to housing development and preservation, with special attention to housing affordability, are reviewed. This is followed by an overview of selected national and local best housing practices that are offered as models and opportunities for addressing the difficulties faced by local jurisdictions and developers in meeting projected housing needs.

#### **Barriers and Challenges to Housing Development**

##### Regulatory

The Washington State Affordable Housing Advisory Board (AHAB), in its 2005-2010 Draft Housing Advisory Plan, acknowledged regulatory barriers as having a detrimental impact on the production of affordable housing.<sup>16</sup> The U.S. Department of Housing and Urban Development (HUD) has documented over 1,500 regulatory barriers faced in the creation and maintenance of housing.<sup>17</sup> A great many of these, including building codes, zoning and land use regulations, and permitting requirements, may prove unnecessarily cumbersome due to administrative redundancy and lack of flexibility.

These challenges may be addressed through local government efforts to simplify and streamline permitting and development codes and regulations, as well as periodically reassess the benefits and costs of fees, dedications, and other restrictions on development. This is particularly important for smaller developers who may be less able to finance projects through long permitting periods.

A growing body of research indicates that land and housing prices increase more as the result of market pressures than from growth management regulations.<sup>18</sup> When effectively implemented, growth management planning will provide for adequate land capacity, and can reduce development costs by establishing predictability and efficiency in the development landscape through comprehensive planning, regulatory streamlining, and other efforts. Also, by encouraging density, growth management has the potential to hold down the price of new housing by reducing associated land costs per unit.

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<sup>16</sup> Washington State Affordable Housing Advisory Board, *Housing Advisory Plan [Draft September 29, 2004]*

<sup>17</sup> U.S. HUD, Regulatory Barriers Clearinghouse, <http://www.huduser.org/rbc/search/number.asp>, accessed Nov 2004.

<sup>18</sup> Pollokowski, H. O. and S. M. Wachter, "The Effects of Land-Use Constraints on Housing Prices," *Land Economics*, 66 3 315-24, 1990; Nelson, Arthur C., Rolf Pendall, Casey J. Dawkins, Gerrit J. Knaap, *The Link Between Growth Management and Housing Affordability: The Academic Evidence*, The Brookings Institution, Feb 2002.

## Environmental

Restricting or otherwise regulating development because of environmental factors is a key feature for protecting critical areas while accommodating growth under Washington's Growth Management Act. However, environmental considerations represent a subset of regulatory barriers that can restrict the amount of land available for development and can raise significant challenges for individual projects. It is important that, where possible, permitting and regulatory processes are streamlined to minimize the unnecessary impacts on supplying housing while continuing to provide necessary protection for environmentally sensitive and critical areas.

## Fiscal/Infrastructure

Local governments across Washington have been struggling with significant reductions in state monies and local property tax revenues that have served as the primary sources of funding for local infrastructure maintenance and construction projects. Revenues raised from impact fees and other sources in and of themselves are typically not sufficient for meeting the infrastructure needs for accommodating growth and new development.

## Market-Based

Market-based dynamics are some of the most difficult barriers to overcome when it comes to affordable housing production and preservation. Upward pressures on housing prices, rents, land prices and development costs in heated housing markets result in an inevitable squeeze on households, most especially for lower income households. Lower income residents of fast-changing neighborhoods may find themselves displaced by rising rents, and potential first time home buyers earning below median wages and salaries – including teachers, nurses, police officers and firefighters – may find themselves priced out of the communities and cities in which they work.

Public sector programs and policies to assist low- and moderate- income households and facilitate private sector efforts to develop affordable housing, as well as the non-profit housing sector, continue to play key roles in addressing the challenges posed by market-based housing pressures.

## Liability Insurance

In recent years, litigation surrounding condominium construction and the subsequent retreat of many insurers from the general contractor liability insurance market, has had a severe dampening effect on multifamily housing development. This issue will need to be addressed in order to restore an adequate supply of affordable condominium housing opportunities to lower income and first time home buyers in the region.

## Community Opposition

Community resistance and NIMBY (Not-In-My-Back-Yard) objections to infill development, increased density, and low-income housing projects can pose a potent challenge to development efforts.

Public education, community outreach, and the use of design guidelines can provide effective means to address public concerns and ensure that new developments are in keeping with the character of existing neighborhoods.

## Jobs/Housing Balance

Jobs/housing balance is a planning concept that gained attention in the 1980s as a way to address increasing traffic congestion and the rate of growth in vehicle miles traveled. The premise is simple – if housing were to be provided in closer proximity to where people worked, they would have shorter commutes and could use transit or nonmotorized travel. While there are clear benefits to having housing and employment in close proximity to one another, in reality, a number of variables go into people's choices for selecting a home. Proximity to work may be just one of many factors, other important considerations being affordability, neighborhood quality, and school quality. Moreover, people are not always likely to relocate when they take a new job – so even if they were in close proximity to one job, they may have an entirely different type of commute for the next job. And with two-plus worker households becoming more common, proximity to work is a difficult goal to attain for all household members.

When the original VISION 2020 was first adopted in 1990, it advocated jobs/housing balance as a land use strategy for reducing travel and demand on the transportation system. By 1995, as VISION 2020 was updated, it continued to advocate for increasing the mix of land uses – residential, employment, commercial, retail, and entertainment uses – but evolved the understanding of jobs/housing balance to be more of a mobility and accessibility issue. The key here is the focus on centers as major concentrations of jobs and housing that can be easily accessed from nearby neighborhoods and communities and are linked by a highly-efficient, high-capacity transportation network. If individuals could access the region's overall transportation network in a manner that allowed easy, convenient, and efficient travel to jobs – whether the employment is close-by or not – that serves as a way of balancing jobs and housing.

If we create an environment and transportation system whereby a person can live in or near one center and easily travel to a job in another center or nearby, then we have achieved the objective of balancing jobs and housing. To that end, housing – and affordable housing – in and near centers is important, because it improves access to the transportation system in a way that can allow for more efficient travel – whether to employment sites or other destinations and attractions.

For growth management planning purposes, it is also critical to ensure that, at the regional level, planning and capacity for new housing development is commensurate with projections of future job growth and the resulting population growth.

## **Review of National and Local Best Practices**

This section offers a summary overview of best housing practices organized into five categories: (a) planning practices, (b) design strategies, (c) regulatory approaches, (d) financial incentives and tools, and (e) private sector initiatives.<sup>19</sup> Appendix B presents a fuller documentation of the practices that are introduced in this section. It also identifies selected national examples that hold particular promise for the Puget Sound region, as well as successful local implementation of effective housing practices.

### **Planning**

Planning practices that help to promote effective housing policy include comprehensive planning, buildable lands analyses, performance monitoring, and fair share housing programs. Such practices work to establish institutionalized avenues for the careful and ongoing consideration, analysis and tracking of housing issues and needs, and are all the more effective when implemented consistently across a metropolitan region. The Puget Sound area has been nationally recognized for its growth management planning practices, such as interjurisdictional coordination and regular assessment of buildable lands. King and Snohomish counties have further reinforced their analysis efforts with annual performance monitoring programs to track how effectively their growth and housing policies are being implemented.

*A Regional Approach to Affordable Housing.* Fair share is a mechanism by which each locality within a given area commits to the development of a particular number or percentage of units affordable to low- and moderate-income households. The principal goal is to distribute responsibility for producing affordable housing among all localities within a region, as well as provide lower-income households with a greater range of housing choices located near employment, transit and services.

Portland's regional fair share housing allocation formula utilizes a relatively simple methodology that is a nationally recognized best practice. Their voluntary fair share housing program has shown success at setting clear and reasonable affordable housing development goals, with attainable targets phased in at increments over five-year periods. In King and Snohomish counties, local jurisdictions have worked together to incorporate a fair share housing component into their local and countywide planning processes.

A voluntary regionwide fair share program may be warranted given the housing affordability issues being faced by our region. Such a program can be incorporated into

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<sup>19</sup> Municipal Research and Services Center of Washington, "Affordable Housing Techniques: A Primer for Local Government Officials," March 1992 - Report No. 22, <http://www.mrsc.org/Publications/textaht.aspx>, accessed March 2005.

existing growth target allocation processes and be tailored to include a defined role for regional and/or subregional growth centers.

## Design

With the rise of the smart growth movement, a number of innovative development techniques and approaches have emerged that provide localities with a range of design-based strategies for promoting a diversity of housing types, affordable housing, and increased residential densities. Moreover, design guidelines that are developed with public input and reinforced through administrative design review boards, can promote the production of housing that residents find attractive and desirable, helping to allay NIMBY resistance to new development and increased densities. Effective design guidelines should be clear, outcomes-oriented, and help to facilitate the development process.

*Single-family housing design techniques and innovations* include *small lot single-family development*, *zero lot line development*, and *reduced (or maximum) setback requirements* to help keep housing affordable, increase density, and meet market demands for single-family homes, while keeping land costs down for the developer. More localities are also passing *accessory dwelling unit* ordinances and experimenting with *cottage housing* as strategies for promoting infill and density on existing urban single-family parcels. *Manufactured housing* is also gaining wider acceptance as an affordable single-family housing alternative.

*Mixed-use design approaches* have been successful in bringing together multifamily housing with detached single-family units, commercial services and retail, and transit stations. *Live-work housing*, including artist housing, also offers a creative approach to promoting affordability by integrating home- and work-based activities and costs. Providing for *mixed incomes and mixed tenures* within such developments can further promote socio-economic diversity and renter-to-owner transition opportunities.

*Planned unit development (PUD) strategies* can be used to facilitate mixed-use developments by providing developers with more flexibility in allowable land uses and project design. *Cluster subdivision* approaches similarly provide greater flexibility in developing both urban and rural lots, while simultaneously creating dedicated open spaces.

*Energy efficient and other environmentally friendly design approaches* are increasingly being incorporated into modern housing for both ecological and cost-saving reasons.

## Regulatory

*Local codes and regulations* governing the development process can be effective vehicles for promoting desired housing types and directing them to targeted areas. *Zoning changes* are commonly used as a strategy for increasing residential densities and allowing for a greater mix of land uses. *Minimum density ordinances* can further

ensure that developable land is used efficiently. And as discussed above, regulations allowing for innovative design and development approaches can help facilitate a wide range of attractive and affordable housing types as well as more efficient use of available land.

*Performance zoning, or flexible zoning*, represents a regulatory approach whereby proposed development projects are assessed on a case-by-case basis according to a set of performance criteria and measures; for example, neighborhood compatibility, compliance with density standards, utilities needs and existing capacity, traffic generation, noise levels, and so on. Unlike traditional zoning methods, performance zoning theoretically allows for any land use in any district, giving developers greater flexibility in designing projects, so long as the proposed project meets the established performance criteria and negative impacts are properly mitigated. While few localities in the U.S. have adopted jurisdiction-wide performance zoning systems, many have effectively applied performance zoning concepts to selected districts and/or projects.

*Inclusionary zoning ordinances* can be an effective strategy for boosting affordable housing production. Voluntary inclusionary zoning programs work by utilizing incentives, like density bonuses or multifamily tax credits, to encourage developers to produce a certain number or percentage of affordable units alongside market rate units for projects occurring within a designated area. Some ordinances further utilize control periods or perpetual resale restrictions to retain the affordable units on the market.

*Regulatory review and streamlining.* Multiple layers of uncoordinated local, state, and federal regulatory requirements can pose a significant barrier to efficient and cost effective development, with negative impacts on final housing cost. The most common regulatory barriers identified are inefficient permitting processes, excessive permitting requirements, and excessive or inflexible development regulations.

Periodic audits and refinement of development regulations and permitting processes by local governments can translate into worthwhile reductions in overall project timelines and costs. Permit streamlining strategies can include locating permitting activities within one department, pre-application checklists, pre-permitting meetings, established timelines for permit review, and a stratified permit review process that expedites smaller projects.

## Financial

Local governments may utilize an array of *financial incentive-based approaches* to stimulate private sector involvement in housing market sectors where bolstering is needed. Strategies include relatively simple incentives such as *fee exemptions, density bonuses, and tax credits and abatements*, as well as more sophisticated arrangements like *tax increment financing*.

*Transfer of development rights (TDR)* can be used as an incentive strategy for the preservation of affordable housing, as well as historic landmarks, agricultural and other

resource lands, and open space. The strategy works by creating a market for development rights in which they are sold by the property owner of the site targeted for preservation (sending site), and purchased in turn by developers who want to utilize the rights as density bonuses at an approved location (receiving site). Public proceeds from TDR sales, moreover, can further provide revenues for efforts to preserve, rehabilitate, and construct affordable housing.

*Housing tax levies* requiring voter-approval may be a viable tool in certain localities and circumstances. Where public support exists, housing levies offer a powerful financial mechanism for generating significant dedicated revenues for affordable housing.

*Public land donations* to non-profit housing developers and community land trusts to reduce or eliminate land costs from affordable housing production are always a welcomed financial contribution. Land banking programs can further help to facilitate the acquisition of land for affordable housing development by identifying surplus public lands and abandoned and foreclosed private properties.

*Non-traditional homeownership arrangements* receive mention here as a mechanism for promoting affordable homeownership opportunities. Such arrangements, which include *mutual- or co-housing*, *limited equity cooperatives*, and *community land trust housing*, are increasingly establishing a foothold in our region.

Local governments may also leverage an array of *state funding sources* for grants to support their housing programs, including the Washington State Housing Trust Fund and other programs available via the Washington State Housing Division (Department of Community, Trade and Economic Development) and Washington State Housing Finance Commission.

### Private Sector

A number of creative housing practices and initiatives have emerged from the private sector in recent years. Across the nation, private sector employers are increasingly participating in, or establishing their own, programs to develop affordable *workforce housing* for employees and their families. Private developers are turning to *partnerships with non-profit developers* to own and manage the affordable housing components of larger market-rate developments. Finally, some financial institutions have established *location-efficient mortgage programs*, predicated on the principle that workers who live closer to their jobs can afford larger mortgages due to transportation cost savings.

## **IV. CONSIDERATIONS FOR THE VISION 2020 + 20 UPDATE**

A summary of key housing issues is presented in this section, along with preliminary recommendations for how these concerns may be addressed through the VISION 2020 + 20 Update process. The recommendations are arranged sequentially under three headings: (1) preliminary guidance for addressing housing in updated multicounty policies, (2) implementation actions to consider related to housing, and (3) monitoring

provisions to consider related to housing. Appendix A provides a one-page summary of the recommendations using a matrix format that links suggested policy updates with related implementation actions and monitoring provisions.

## **Key Housing Issues**

***Regional guidance on housing:*** The current multicounty housing policies lack meaningful and specific direction to localities for how GMA and regional housing policies are to be implemented and housing goals and objectives are to be met. The VISION 2020 + 20 Update process can be used to address major regional housing issues that cannot be adequately addressed by individual localities. Regional guidance should strive to provide a constructive framework for improving consistency and facilitating coordination between local jurisdictions' housing efforts.

A balanced approach should encourage progress toward attainment of regionally agreed upon goals and objectives to better equip local jurisdictions in addressing the complexities of the regional housing market. At the same time, a balanced approach needs to recognize the unique nature of housing submarkets in the four-county area and provide flexibility for localities to determine what implementation actions and strategies are best suited to their individual jurisdictions.

The framework for addressing housing in the updated multicounty policies may include the following components:

- Promotion of best housing practices and provision of technical assistance to jurisdictions to support implementation of GMA and regional housing objectives
- Guidelines for addressing regional housing issues in local comprehensive plans
- Regional review of local housing provisions to provide feedback on how GMA and regional expectations are being addressed
- A monitoring program to track regional and local progress toward measurable housing goals and objectives

***Connecting growth targets – housing – land use:*** GMA-mandated requirements for local comprehensive plans (RCW 36.70A.070) specify that:

- The housing element must include “an inventory and analysis of existing and projected housing needs that identifies the number of housing units necessary to manage projected growth.”
- The land use element must include “population densities, building intensities, and estimates of future population growth.”
- And all elements shall be “internally consistent” as well as “consistent with the future land use map.”

However, GMA-established population targets are not always converted into explicit housing targets. Conversion – particularly when coordinated among jurisdictions within a county – would promote greater consistency between and within local plans, allowing for an “apples-to-apples” relationship between county and local growth targets, projected housing demand, and local zoning and other land use actions taken to

accommodate projected growth.<sup>20</sup> Locally adopted housing targets can also provide a measurable goal against which annual progress in housing production can be tracked. Regional guidance in this area can help direct the incorporation of a population-to-housing unit conversion and adopted housing target into local comprehensive planning practices.

***Housing affordability:*** The adequate provision of housing affordable to low- and moderate- income households, with a fair and rational distribution throughout the region, remains a significant challenge, especially given escalating regional and national home prices. Strategies and programs for promoting housing affordability must necessarily be tailored and adapted to the realities of local housing markets. Yet, regional guidance can be useful for promoting coordination between localities within sub-regional markets, and for developing a more coherent regional framework for addressing housing affordability.

Regionally consistent definitions of “affordable housing” as well as “low” and “moderate” household income thresholds would assist the implementation of a regionwide monitoring program to track affordable housing measures. They would also serve to facilitate housing affordability discussions between jurisdictions and within the region in general.

Regional guidance can also be developed to promote the adoption of affordable housing targets by each locality – to serve not as a quota, but as an aspirational target – as well as goal – to guide the development, implementation, and monitoring of local affordable housing strategies and programs. The affordable housing target, moreover, can be utilized as a mechanism for acknowledging local contributions toward the region’s existing stock of affordable housing – such as public housing, preservation, and renovation efforts. The local target-setting strategy could be coupled with the adoption of a region-wide estimate of projected demand for affordable housing – to function not as a fair share target for allocation, but as an objective estimate of future housing needs and an independent measure against which the sum of local measures can be gauged to track progress over time.

***Housing development in regional growth centers:*** The goal of focusing the region’s projected population and employment growth into designated urban growth centers represents a core element of the region’s overall growth strategy. However, the regional growth centers have experienced only measured success at developing new housing.

Regional guidance can be developed to establish housing targets specific to the regional growth centers. Additionally, PSRC funding for centers projects can be redirected in a manner that more strongly emphasizes housing development in the regional growth centers.

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<sup>20</sup> The countywide targeting process in King County does convert population targets into housing targets. Another issue paper in this series that examines growth targets includes a recommendation that all four countywide efforts move to the use of housing targets in subsequent allocation processes.

## **Preliminary Guidance for Addressing Housing in Updated Multicounty Policies**

The considerations discussed in this section describe preliminary policy recommendations that could be addressed in the revised multicounty planning policies that are to be incorporated into an updated VISION 2020 strategy.

*Note: In some instances, these policy issues are already detailed and provide specifics on whom the policy would affect and what the expectations would be. In other instances, the issues are more conceptual at this point and should they be advanced for further consideration in the update process, additional detail would need to be developed.*

- A. *Overall Strategy:* In the VISION 2020 + 20 Update, advance a regional housing strategy that provides constructive and specific guidance to localities for how to meet GMA and regional housing provisions for the preservation, improvement, and development of a diversity of housing types to meet the existing and projected needs of all economic segments of the region's population. The guidance should be designed to encourage progress toward attainment of regionally agreed upon housing goals and objectives, yet provide choice and flexibility to jurisdictions in addressing the unique circumstances of local housing markets, and work to advance best housing practices and innovations. The regional housing strategy should be coordinated and consistent with other regional programs, including the regional growth strategy, improving mobility and accessibility, economic development, and environmental protection.
- A-1. *Recommendation:* Through the multicounty policies, establish a common framework for improving the connections between the growth target, housing provisions, and land use elements of local comprehensive plans. Localities would be asked to:
- Coordinate with other jurisdictions within their county in converting population growth targets into housing units.
  - Adopt local housing targets.
  - Establish direct linkages between the housing target and other housing and land use actions and provisions.
- A-2. *Recommendation:* Through the multicounty policies, establish housing development in regional growth centers as a policy priority. Develop guidance for setting centers housing targets. Refocus PSRC funding for centers in a manner that support projects and programs that advance centers housing development.
- A-3. *Recommendation:* Through the multicounty policies, establish a process for advancing and monitoring affordable housing targets. Through the process, localities would be asked to identify a local affordable housing target. A model framework would be developed for localities within a regional subarea to coordinate their affordable housing efforts. The local target-setting would be

coupled with a regionwide estimate of projected demand for low- and moderate-income housing. Regular regional reports would be issued that addressed progress and gaps.

- A-4. *Recommendation:* The Update should include guidance to better enable the housing provisions of local comprehensive plans to more fully address regional housing objectives and Growth Management Act goals.<sup>21</sup> The guidance would address areas including, but not limited to:
- Improving consistency between the growth target, housing provisions, and land use elements of local comprehensive plans.
  - Advancing housing development in designated regional growth centers.
  - Addressing a coordinated local and regional affordable housing target process.
- A-5. *Recommendation:* Through the multicounty policies, establish a regional process for reviewing and commenting on the housing provisions in local plans. Jurisdictions would be asked to develop "more transparent" housing elements in the future that:
- Identify specific actions and strategies designed to meet GMA and regional housing goals and objectives.
  - Document assumptions involved in estimation work – including past and recent housing development history and a discussion of regional and subregional market trends addressing both demand and supply.
  - Describe implementation and monitoring strategies.

### **Implementation Actions to Consider Related to Housing**

This section includes possible programs and action that could be advanced through the VISION 2020 update process to help implement any policies and provisions addressing housing incorporated into a revised regional strategy.

*Note: These potential actions and strategies are only briefly described at this point. Should they be advanced for further consideration in the update process, additional detail would need to be developed. The additional information would discuss responsible parties or agencies, program specifics, budgetary considerations, and schedule.*

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<sup>21</sup> The Growth Management Act mandates the following requirements for the housing element in local comprehensive plans (RCW 36.70A.070(2)):

- a) Inventory and analysis of existing and projected housing needs.
- b) Statement of goals, policies, objectives and mandatory provisions for the preservation, improvement, and development of housing.
- c) Identification of sufficient land for housing – including government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, and group quarter facilities.
- d) Adequate provisions for the existing and projected needs of all economic segments of the community.

- B-1. *Recommendation:* Establish regionally consistent definitions of housing affordability to be applied in multicounty and countywide growth management planning efforts, as well as in local planning:
- “Affordable housing” shall be defined as housing that does not exceed 30% of gross income for a household.
  - “Household income thresholds” for the following categories shall be defined as the following percentages of county median household income:
    - a) Moderate income – 80-120%
    - b) Low-income – below 80%
    - c) Very low-income – below 50%
    - d) Extremely low income – below 30%
- B-2. *Recommendation:* Amend the project selection criteria for PSRC funding as needed to emphasize housing development in regional growth centers. Explore ways to encourage the submission of more housing-related centers projects, including the identification of specific funding-eligible components of centers projects that would support housing development, and the expansion/reorganization of the county project selection committees to include representatives from local planning departments.
- B-3. *Recommendation:* To assist jurisdictions in meeting the expectations developed under Recommendation A-4 (above), create a set of technical assistance tools to guide local governments in crafting and enacting local housing strategies and programs to address GMA and regional requirements. This could include:
- A regional clearinghouse of model housing provisions, ordinances, and best practices.
  - A “menu of options” – or range of possible implementation actions – tied to specific regional policies and requirements.
- B-4. *Recommendation:* Establish a work program item for the regional review of local housing provisions under the existing program for regional review of local transportation provisions. To assist jurisdictions in meeting the expectations developed under this work program, develop programmatic guidelines for jurisdictions to reference in updating their local housing provisions.

### **Monitoring Provisions to Consider Related to Housing**

This section identifies ways in which measurable objectives could be developed to track progress – or lack thereof – in achieving the goals of any policies and provisions addressing housing incorporated into an updated VISION 2020 strategy.

*Note: These measurable objectives are only briefly described at this point. Should they be advanced for further consideration in the update process, additional detail would need to be developed. The additional information would discuss lead agencies, specifics on monitoring, data development and acquisition, resources, and schedule.*

- C-1. *Recommendation:* Establish a regional monitoring program and methodologies for tracking measurable housing goals and objectives consistently at the regional, county, and local levels. Expand regional monitoring capabilities, where possible, to include new information useful for assessing housing issues and trends. Monitoring program elements can include:
- Housing demand (households) and supply (housing units) by income category.
  - Housing supply by structure type (single-family, multifamily, etc.)
  - Other housing and demographic characteristics.
  - Housing production, or annual permitted housing units.
  - Housing market trends (rents, home prices, affordability indices, etc.).



## **APPENDICES**

- A. Preliminary Recommendations for Updating Multicounty Housing Policies and Provisions
- B. Best Housing Practices



**APPENDIX A: PRELIMINARY RECOMMENDATIONS FOR UPDATING MULTICOUNTY HOUSING POLICIES AND PROVISIONS**

<b>(A) Policy Updates</b>	<b>(B) Implementation Actions</b>	<b>(C) Monitoring Provisions</b>
<p><b>A. Overall Strategy.</b> Advance a regional housing strategy that provides constructive and specific guidance to localities for how to meet GMA goals and regional objectives – for preservation, improvement and development of a diversity of housing types. Encourage development of regionally agreed upon housing principles, yet provide choice and flexibility to jurisdictions. Coordinate with other regional programs, including the regional growth strategy, economic development, improving mobility and accessibility, and environmental protection.</p>		<p>Establish regional monitoring program to track measurable housing goals and objectives at regional, county, and local levels, including but not limited to:</p> <ul style="list-style-type: none"> <li>• Housing demand and supply</li> <li>• Housing production and retention</li> <li>• Housing market trends</li> </ul>
<p><b>A-1. Connect growth targets – housing – land use.</b> In multicounty policies, establish framework for improving linkages between growth target-setting, housing provisions, and land use elements in comprehensive plans.</p>	<p>Establish regional guidelines for improving linkages in local plans, including but not limited to:</p> <ul style="list-style-type: none"> <li>• Recommended best practice for converting countywide population growth targets into local housing units</li> <li>• Adoption of local housing targets</li> </ul>	<p>Review local housing provisions on an ongoing basis</p>
<p><b>A-2. Centers housing development.</b> In multicounty policies, establish framework for advancing housing development in regional growth centers – by setting housing targets for centers and leveraging PSRC funding..</p>	<p>Establish regional guidelines for development and adoption of centers housing targets.</p> <p>Amend PSRC project selection criteria as needed to enact this new policy priority.</p> <p>Encourage submittal of centers projects –</p> <ul style="list-style-type: none"> <li>• Identify specific project elements eligible for PSRC funding that would serve to advance centers housing development</li> <li>• Explore how local planning department representatives may be brought into project selection committees.</li> </ul>	<p>Monitor annual permitted housing development in regional growth centers.</p>
<p><b>A-3. Affordable housing targets.</b> In multicounty policies, establish process for coordinated regional-local assessment of affordable housing targets.</p>	<p>Establish regionally consistent definitions of affordable housing &amp; household income categories</p> <p>Conduct regular regionwide assessments of projected demand for affordable housing</p> <p>Establish guidance for development and adoption of local affordable housing targets.</p>	<p>Monitor:</p> <ul style="list-style-type: none"> <li>• Affordable housing demand and supply</li> <li>• Affordable housing production and retention</li> <li>• Trends in housing affordability</li> </ul>
<p><b>A-4. Regional guidance on housing.</b> In multicounty policies, establish guidance for what common features ought to be included in local housing elements.</p>	<p>Develop technical assistance, including but not limited to:</p> <ul style="list-style-type: none"> <li>• “clearinghouse” of model housing provisions, ordinances, and best practices</li> <li>• “menu of options” – i.e., range of possible implementation actions and strategies</li> </ul>	
<p><b>A-5. Regional review of local housing provisions.</b> In multicounty policies, establish process for regional review of local housing provisions.</p>	<p>Establish work program item for regional review of local housing provisions.</p> <p>Develop guidance for “showing your work,” including but not limited to:</p> <ul style="list-style-type: none"> <li>• Specific actions and strategies designed to meet housing goals and objectives</li> <li>• Implementation timelines</li> <li>• Assumptions used in estimation work</li> </ul>	



## Appendix B: Best Housing Practices

This Appendix summarizes a number of innovations and best practices currently used or advocated for providing housing in urban settings. For convenience, the practices are grouped into five categories:

- A. Planning practices
- B. Design innovations
- C. Regulatory mechanisms
- D. Financial tools and incentives
- E. Private sector initiatives

Where possible, examples or model provisions from communities – both from across the U.S. and here in the central Puget Sound region – are noted. Additional examples of local implementation of best practices are welcomed, and can be added into this document on a continual basis.

### A. Planning Practices

*Effective planning is defined by the economical, ecological, and equitable spatial arrangements for complimentary land-uses that attend urbanization and the resulting societal changes. An effective plan involves the participation of a wide-range of stakeholders and interests, and significantly affects the future decisions and actions of local governments.*

**A-1. Comprehensive planning:** A comprehensive plan is a land use document that provides the framework and policy direction for land use decisions. Comprehensive planning in Washington is guided by mandatory provisions of the Growth Management Act, (Chapter 36.70A, Revised Code of Washington). These policies must include provisions establishing housing as a required planning element, accurate inventory of existing stock, targeted production to meet expected needs, and assignment of measurable goals based on land available for housing development. In addition, the comprehensive plan must set forth a rational regulatory framework which links housing to other comprehensive elements such as economic development and transportation objectives.

The Act is specific in its requirements for comprehensive plan housing elements. According to RCW 36.70A.070 (2), a comprehensive plan must include "... (c) sufficient land for housing, including, but not limited to, government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, and group homes and foster care facilities; and (d) makes adequate provisions for existing and projected needs of all economic segments of the community"

**A-2. Buildable lands inventory:** Managing urban growth requires the continuous monitoring of land available for future development. Land inventories in turn require accurate information about how much land is vacant and/or underdeveloped, where it is

located, and whether it has development potential. An inventory of “buildable lands” can project the need for land by estimating population growth and the demand for housing, commercial and industrial development, and public facilities. The inventory compares the projected demand for land with the supply of suitable land. The connection between an accurate buildable lands inventory and successful planning for housing is an integral part of successful growth management. Goals for infill and higher densities within urban growth areas are easier to achieve when land availability is known, and priorities can be set.

In 1997, the Washington State legislature adopted the “buildable lands” amendment to the Growth Management Act, (RCW 36.70A.215). The amendment requires six counties in the state and their cities – including all four counties in the central Puget Sound region – to determine the amount of land suitable for urban development, and evaluate its capacity for growth, based upon measurement of five years of actual development activity.

- Local Example:
  - Washington State Department of Community, Trade and Economic Development (CTED) “State Buildable Lands Program Guidelines”
- National Examples:
  - Portland Metro “Buildable Lands Inventory,” Portland, OR
  - “Buildable Lands Inventory,” Ashland, OR

**A-3. Performance monitoring:** Performance monitoring measures actual results against the desired outcomes, which helps develop and maintain an accountability framework for initiatives and goals as outlined in comprehensive plans. Through the monitoring process, policy and planning effectiveness and needed improvements can be identified.

- Local Examples:
  - “King County Benchmarks and Annual Growth Reports,” King County, WA
  - “Snohomish County Growth Monitoring Report,” Snohomish County, WA
- National Example:
  - Los Angeles Housing Department, Los Angeles, CA

**A-4. Fair share housing allocation:** “Fair share” generally refers to an equitable distribution of a range of affordable housing throughout a region. This is achieved through a determination of each local jurisdiction’s present and prospective “fair share” of low- and moderate-income housing and the capacity to accommodate such housing. National, state and local fair share housing policies are based on mandates created in federal law under the Fair Housing Act of 1968, 42 USC 3600. In Washington, statutory provisions of RCW 49.60 are equivalent to the protections available under federal legislation, and are even more expansive in defining rights to housing and prohibiting discrimination.

- Local Example:
  - “Snohomish County Tomorrow,” Snohomish County, WA
- National Examples:
  - “New Jersey Fair Housing Act” (Stat. §\_52:27D-310)
  - Portland Metro “Regional Affordable Housing Strategy June 2000,” Portland, OR
  - American Planning Association (APA) “Policy Guide on Housing,” 1999
  - U.S. Department of Justice “Fair Housing Act as Amended (Title 8)”

## **B. Design Innovations**

*Design affects both the spatial arrangement and the visual character of development. Design is often the primary topic for area residents concerned with ensuring that new development is compatible with the existing community. A coordinated design strategy that incorporates housing, transportation, public spaces, access to services and employment, and maximizes existing infrastructure, encourages growth in a pattern consistent with regional goals.*

**B-1. Design guidelines and review boards:** Design Review Boards review applications for development, building designs, landscaping and site plans for compliance with municipal codes and ordinances, and/or to protect and preserve historic sites. These boards are typically comprised of architects, urban designers, community members, landscape architects, planners, and/or historic preservation professionals. By reviewing plans and negotiating with developers, design review boards help ensure the housing values and goals outlined in comprehensive plans are achieved. Design review processes are also used to provide flexibility from what can be often rigid development codes. Projects that meet desired design objectives may be eligible for exceptions from code requirements. Such boards should be set up in a manner that facilitates development review and does not overly burden the review process.

- Local Examples:
  - “City of Seattle Design Review Program,” Seattle, WA
  - “Design Review Board,” Enumclaw, WA
  - “Historic Preservation Committee,” Port Townsend, WA
- National Examples:
  - “Historic Design Review Board,” Santa Fe, NM
  - “HDLC Design Review Board,” New Orleans, LA
  - “Design Review Board,” Oakland, CA

**B-2. Small lot single family:** Single-family homes on large lots can be cost prohibitive for many prospective homeowners. Small lot, single-family homes are one technique to keep housing affordable, increase density, and meet market demands for single-family

homes while keeping costs down for the developer. Sizes of small lot developments can range from 2,000 square feet to 4,000 square feet. Variations in siting buildings on such lots can also contribute to producing attractive housing options – including zero-lot-line development (see discussion below under B-3) or allowing units to have common walls, such as townhomes.

- Local Examples:
  - “Small Lot Single Family Dwelling Zoning Code,” Everett, WA
  - “Residential Small Lot District,” Seattle, WA

**B-3. Reduced/maximum setback requirements; zero lot line development:** Small lot single-family homes often are facilitated through reduced set-back requirements, or zero lot-line development strategies. By reducing the set-back, or allowing zero set-back, the overall lot usage is maximized by either increasing the density of the development, or by increasing usable open space.

- National Examples:
  - “Creekside,” City of Calabasas, CA
  - “The Pinehills,” Plymouth, MA

**B-4. Planned unit development:** Planned Unit Development regulations encourage and allow less design restrictions of land developments than possible under traditional zoning regulations. This flexibility often accrues in the form of relief from compliance with conventional zoning ordinance site and design requirements. As a whole the planned unit development must still conform to the objectives of the Comprehensive Plan, but within the site zoning variations are allowed. For example, a community may require the same overall density within the residential portion of a planned unit development as that of the surrounding area. The community may allow structures within such a development to be clustered so that the individual lots are smaller but more open space is preserved than would occur under traditional zoning. The planned unit development concept can also be applied to encourage creative mixes of land uses, by mixing different single and multi-family residences in the development.

- Local Examples:
  - “Poulsbo Place,” Poulsbo, WA
- National Examples:
  - “Lake Shore East Planned Development,” Chicago, IL
  - “Stapleton Redevelopment,” Denver, CO

**B-5. Cluster subdivision:** Cluster development increases the density of housing on a particular development site, while maximizing open space. Generally, the number of units on a particular site is not increased beyond what would normally be allowed, but the proximity of housing units is increased.

- Local Examples:
  - Municipal Code, Bellingham, WA
  - Land Use Code, Bellevue, WA
  - Municipal Code, Puyallup, WA

**B-6. Infill housing:** Infill development occurs on land within built-out urban areas that has remained vacant or underdeveloped. Infill development may also occur from demolition and redevelopment of industrial, commercial, and other underutilized sites. Interest in infill development stems from a desire to channel development into areas that are already served by public facilities, including police, fire, utilities, schools, and transit, to make more efficient use of existing land and public facilities. Infill development can range from construction of single-family housing on one or two adjacent lots, to an entire city block containing mixed residential and commercial uses. Infill sites are often already served by utilities and other public services, can reduce a developer’s up-front costs, and, in turn, may help in reducing the costs of completed housing units. This type of development, in certain circumstances, can provide opportunities for the construction of affordable housing.

- Local Examples:
  - “Cascade Court Apartments,” Summit Avenue, Seattle, WA
  - “Matsusaka Townhomes,” South 13th Street, Tacoma, WA
- National Examples:
  - “Capen Green,” Dorchester, MA
  - “Charleston Infill Housing,” Charleston, SC
  - “Hismen Hin-nu Terrace,” Oakland, CA
  - “Field Street,” Detroit, MI

**B-7. Accessory dwelling units:** Accessory dwelling units (ADU) can be either detached structures built to accompany an exiting single-family home, or apartments remodeled into the existing homes’ envelope. An ADU provides a separate sleeping quarter, kitchen, and bath, and in the case of apartments created within an existing home, often there is a private entrance. Accessory units can accommodate family members in need of proximity to family or partial assistance while maintaining a somewhat private lifestyle. An ADU may also provide an affordable rental unit, with relatively little outlay compared to most new construction.

- Local Examples:
  - King County ADU Program, King County, WA

**B-8. Cottage housing:** Cottage housing refers to the development of multiple small, detached dwelling units on a single lot within an existing neighborhood. These units provide opportunities for creative, diverse and high quality infill development. Cottage housing helps fulfill the demand for quality, detached housing in single family neighborhoods, by providing alternatives and enhancing affordability.

- Local Examples:
  - “Greenwood Ave Cottages,” Shoreline, WA
  - “Cottage Housing Development Ordinance,” Port Townsend, WA
  - “Third Street Cottages,” Langley, WA
  - “Danielson Grove,” Kirkland, WA
- National Examples:
  - “HUD: Elder Cottage Housing Opportunity (ECHO)”
    - New Jersey - NORWESCAP, Inc.
    - Iowa - South Central Development Corporation (“Home-in-stead”)

**B-9. Mixed-use development:** A mixed-use development contains more than one type of land use occurring within a single zone, and typically includes residential, retail, office, entertainment, and/or civic uses. Scarce land for development has necessitated the intensification of the use of available land to accommodate future needs. Mixed-use development has become an attractive approach, especially in city or town centers where services and transportation are most available. In addition, varying land uses can help provide an environment that is more sustainable and more easily adapted for reuse than a single-use zone.

- Local Examples:
  - “Lincoln Square,” Bellevue, WA
  - “Uwajimaya Village,” Seattle, WA
  - “Welch Plaza,” Seattle, WA
- National Examples:
  - “Mission Bay,” San Francisco, CA
  - “Belmont Dairy,” Portland, OR
  - “Centennial Park East,” Atlanta, GA
  - “University Park,” Cambridge, MA

**B-10. Transit oriented development:** Transit Oriented Development (TOD) focuses a mix of land-uses, such as residential, retail, office, entertainment, and/or civic uses within walking distance from a transit station (typically within ½ mile, or 15 minutes walking time). This type of development helps form a neighborhood that is compact in size, pedestrian-friendly in design, and can be customized to offer a wide variety of housing options, with convenient access to services, jobs, and transit options. TOD attempts to reduce the use of single-occupant vehicles by increasing the number of times people walk, bicycle, carpool, vanpool, or take a bus, streetcar, or rail. It brings potential riders closer to transit facilities rather than building homes away from services and retail. In addition, TOD helps transit investments work more efficiently by putting more riders on existing or proposed transit infrastructure.

- Local Examples:
  - “Renton Metropolitan Place,” Renton, WA
  - “Kent Station,” Kent, WA
- National Examples:
  - “Sunset Transit Center,” Portland, OR
  - “Del Mar Station,” Pasadena, CA
  - “Rosslyn-Ballston Corridor,” Arlington, VA
  - “Mockingbird Station,” Dallas, TX
  - “West Side TOD: Lake and Pulaski,” Chicago, IL

**B-11. Live/work housing:** Live/work housing provides for residential living and work accommodations in a single unit. This types of housing is typically used by artists who often prefer open, loft-style spaces instead of more conventional and restrictive floor plans and designs. In recent years, live/work housing has become increasingly more appealing for home-based small business owners. As typical residential zoning codes prohibit the use of residential units for business purposes, business owners must maintain residential and working spaces. For both artists and business owners the expense of maintaining multiple locations is often prohibitive, thus live/work spaces provide an opportunity for both affordable housing and work opportunities within established urban neighborhoods.

- Local Examples:
  - “Tashiro Kaplan,” Seattle, WA
  - “Harbor Lofts,” Seattle, WA
  - “Good Shepherd Center,” Seattle, WA
  - “The Cooper School,” Seattle, WA
- National Examples:
  - “Arkansas Lofts,” San Francisco, CA
  - “Clocktower Lofts,” San Francisco, CA

**B-12. Mixed income, mixed tenure housing:** A “mixed income” or “mixed tenure” community or development includes affordable and/or public housing units alongside market-rate homes. This mix of people, incomes, lifestyles and values helps to foster an inclusive community that greater resembles the mix that occurs in society as a whole. The goal of mixed income and mixed tenure housing is to offer a balanced community and to reduce social exclusion of housing opportunities. To achieve the goal of mixed income, mixed tenure communities, the various types of housing units are dispersed throughout the community, rather than segregated in distinct areas.

- Local Examples:
  - “Rainier Vista,” Seattle, WA
  - “New Holly,” Seattle, WA
  - “Former Coast Guard Property Redevelopment,” Redmond, WA

- National Examples:
  - “Near North, Cabrini-Green Homes,” Chicago, IL
  - “Chicago Housing Authority (CHA): Plan for Transformation,” Chicago, IL
  - “Avalon Chrystie Place,” New York City, NY
  - “Orlando Housing Authority (OHA): Carver Court,” Orlando, FL

**B-13. Manufactured housing:** “Manufactured” or “Modular” homes are a viable housing option to help fulfill the need for affordable new homes. According to the Fannie Mae Foundation, “two out of every ten new home starts are manufactured housing, and new owners represent all age groups and every economic status and lifestyle.”<sup>22</sup> In recent years technological improvements in the manufactured housing industry are assisting in providing higher quality manufactured homes at affordable prices.

The Washington State Legislature RCW 43.63B.010 defines a manufactured home as “a single family dwelling unit built in accordance with the Department of Housing and Urban Development (HUD) Manufactured Home Construction Safety Standards Act, which is a national, pre-emptive code.”<sup>23</sup> The 2004 Washington State legislature changed local land use regulations of manufactured homes by the passage of SB 6593 (Chapter 256, Laws of 2004), which became effective on July 1, 2005. This law requires that, to protect consumers' choices in housing, “cities and counties must regulate manufactured homes built to federal manufactured housing construction standards no differently than they regulate other types of homes.”

- Local Examples:
  - “Issaquah Village,” Issaquah, WA
  - “Mountain View,” Orting, WA
  - “Belmor Mobile Home Park,” Federal Way, WA
- National Examples:
  - HUD: “Federal Manufactured Housing Program”
  - HUD: “Community Guide to Factory-Built Housing”

**B-14. Energy efficient, ecological design:** Development with higher energy efficiency and ecological design standards creates homes which, compared to standard homes, are more cost-effective to own and operate, healthier, safer, and better protect the environment. (Also referred to sometimes as low-impact development.) Benefits include using less energy to heat and cool homes, using natural resources in a more

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<sup>22</sup> Julia O. Beamish & Rosemary C. Goss, “Not a Trailer Anymore: Perceptions of Manufactured Housing” *Housing Policy Debate*, Volume 12, Issue 2, Fannie Mae Foundation (2001): 373.

<sup>23</sup> RCW 35A.63.145(2) defines a “designated manufactured home” as one that:

- a) is comprised of at least two fully enclosed parallel sections each of not less than 12 feet wide by 36 feet long;
- b) was originally constructed with and now has a composition or wood shake or shingle, coated metal, or similar roof of not less than 3:12 pitch; and
- c) has exterior siding similar in appearance to siding materials commonly used on site-built single family homes built according to the Uniform Building Code.

efficient manner, and improving the quality of the indoor air. This type of design includes various established ecological design standards such as lot orientation, internal room zoning, shading of windows and walls, efficient insulation, thermal mass to retain energy, using energy efficient appliances, using natural lighting, and efficient landscape design. In addition, the reduction in energy costs helps promote housing affordability by lessening the expenses of residents.

- Local Examples:
  - “Denny Park,” Seattle, WA
  - “Traugott Terrace,” Seattle, WA
  - “BuiltGreen” - Master Builders Association of King and Snohomish Counties,” WA
- National Examples:
  - “Design Coalition: Affordable Green Housing Report,” Madison, WI
  - “Consortium for Advanced Residential Buildings (CARB),” Norwalk, CT
  - “Green Building Program,” City of Austin, TX
  - “Nevada Energy Efficient Housing Connection,” Nevada

### **C. Regulatory Mechanisms**

*Regulatory practices combine with market forces to either enhance or detract from the development potential and the livability of an area. Regulatory practices should be reviewed cumulatively as a statement by the jurisdiction and changes made to policy and ordinance to provide a consistent framework in which the market can operate. Municipalities regulate under the authority granted them by the state legislature and the benefit to the community and the greater good should be evaluated against the costs of regulatory practices.*

**C-1. Zoning changes:** Existing zoning is often altered to allow for a change in the land-use pattern such as greater residential density and/or an increase in commercial activity. Allowing zoning changes to developers in exchange for greater densities may help facilitate affordable housing development.

**C-2. Minimum density ordinance:** Localities may choose to enact a minimum density ordinance that can be paired with existing zoning regulations to establish minimum density expectations for new development. For example, if the existing zoning code allows a maximum density of twelve dwelling units per acre, a locally adopted minimum density requirement of eight dwelling units per acre can be established to ensure that land is not underutilized.

- Local Example:
  - “Redmond Community Development Code,” Redmond, WA

**C-3. Performance zoning:** Traditional land use zoning works by specifying what types of land uses and densities are allowable in designated areas. Performance zoning

techniques, in contrast, start by defining the desired end result or development outcome in the designated area, and allow for a greater variety of land uses so long as a development proposal is consistent with the desired outcome, meets a set of performance criteria, and mitigates negative impacts. Performance zoning is attractive to builders as it helps to streamline the development process by making variances, appeals and re-zonings unnecessary. When zoning is more flexible, developers of housing are better able to provide a range of housing densities and types to the consumer, and meet the need for affordability for all income ranges.

- National Examples:
  - “Performance-Based Zoning Ordinance (1990),” Havana, FL
  - “Performance Zoning Model Ordinance,” Bucks County, PA
  - “Paseo del Oro,” San Marcos, CA
  - “Comprehensive Zoning Ordinance,” New Orleans, LA

**C-4. Incentive-based inclusionary zoning:** Inclusionary zoning works to promote the development of affordable housing alongside market rate units in housing projects. Voluntary inclusionary zoning programs work by encouraging developers to produce a certain number or percentage of affordable units in a development in exchange for density bonuses or other incentives. Some ordinances further utilize control periods or perpetual resale restrictions to retain the affordable units on the market.

- Local Examples:
  - Redmond, WA
  - Bainbridge Island, WA
  - Gig Harbor, WA
- National Examples:
  - Boston, MA

**C-5. Regulatory review:** Regulatory review is the process in which jurisdictions audit their policies and ordinances for clarity and consistency. This review attempts to identify and address incomplete or inconsistent regulations, as unclear and inconsistent processes may deter development. Common regulatory barriers include lengthy permitting processes; excessive permitting requirements, and excessive or inflexible development regulations e.g. conditional-use permits or outright restrictions, bulk restrictions, right-of way requirements, incomplete or inconsistent regulations. Solutions to zoning related barriers at work in the region include streamlined code amendment processes, increased numbers and types of permitted uses, and reduced or omitted conditional-uses.

**C-6. Permit streamlining:** Reducing permit processing barriers helps to facilitate user-friendly systems that operate in a timely and efficient manner. Inefficient permit processing may deter development. Some solutions that are being utilized in the region include locating permitting activities within one department, pre-application checklists, encouraging pre-permitting meetings, a stratified permit review process that expedites

smaller projects, and establishing timelines for permit review. The reduction of process barriers makes the locality more appealing to development by reducing costs associated with permitting; savings that can be passed along to the consumer.

**C-7. Building code revisions:** Review and revision of building codes helps jurisdictions remain consistent with nationally recognized building code standards and up to date with changing technologies and trends. Building code revisions helps ensure that the jurisdiction is not restrictive to development through out-dated building codes or requirements. Washington State adopted the International Building Code (IBC), the International Fire Code (IFC), International Mechanical Code (IMC), and the International Residential Code (IRC) in July of 2004. The IRC is primarily a prescriptive standard for one- and two-family dwellings and multiple single-family dwellings (such as town homes). The IBC is both a prescriptive and a performance (engineering) standard for building. The International Codes are developed through a consensus process and are primarily concerned with life/safety issues, although affordability is taken into account.

#### **D. Financial Tools and Incentives:**

*Financial or incentive-based approaches attempt to stimulate private-sector involvement in market sectors where bolstering is needed. For housing providers, these incentives often take the form of density bonuses allowing more units for sale or rent, reduced or waived permitting or impact fees for development of a certain type, as well as longer term tax-incentives.*

**D-1. Fee exemptions:** Fee exemptions lower the cost of housing production and are the most basic of the public/private partnerships. Absorbing the cost of processing a development instills trust in the development as an in-kind contribution. Fee exemption policies may include a formula for fee reduction based on the number or percentage of affordable units.

**D-2. Density bonuses:** Density bonuses are a system of exchange, allowing zoning requirements to vary in exchange for provision of certain amenities or housing that benefits the community. This technique allows an economy of scale by increasing the number of units without increasing the land or infrastructure cost.

- Local Examples:
  - “Affordable Housing Incentives: Density Bonus,” Kirkland, WA
  - “Density Bonus Provision in City Center,” Federal Way, WA
  - “Washington Mutual Tower,” Seattle, WA

**D-3. Tax credits and abatements:** Tax abatement programs help support affordable housing by forgiving the property tax payments for a period of time. Depending on the jurisdiction, the credits or abatements can be applied to various housing types such as, single family, multi-family, co-operatives, public housing, new construction, residential

rehabilitation, conversions or In particular locations where new housing development is a high priority, such as a designated urban center.

- Local Examples:
  - “Tax Abatement Program,” Seattle, WA & Tacoma, WA
- National Examples:
  - “Limited Tax Abatement Programs,” Portland Development Commission (PDC), Portland, OR
  - “Tax Abatement & Exemption Programs,” New York City, NY

**D-4. Tax increment financing (TIF):** Tax-increment financing “captures” the additional property taxes generated by private development projects to finance the up-front public development costs. These funds could provide the necessary amenities to help promote development in targeted locations.

- National Examples:
  - “Near North TIF Redevelopment Plan,” Chicago, IL
  - “Affordable Housing Tax Increment Financing Program,” Maine State Housing Authority, Augusta, ME

**D-5. Transfer of development rights (TDR):** Transfer of development rights programs allow owners of land or buildings identified for protection – including agricultural land, potential open space land, or historic structures – to sell their development rights to landowners at other locations – inside urban areas. TDRs help promote the development in centers and other compact communities, while preserving open space and structures with historic value.

**D-6. Housing levies:** Property taxes are considered the most reliable method to fund a community’s commitment to affordable housing. Revenue from taxes levied can fund a variety of mechanisms including General Obligation Bonds, Housing Trust Funds, and Public/private partnerships that have proven the effectiveness of leveraging these funds successfully. An affordable housing levy instills confidence that no one economic sector will be overcharged for the public good, and tax levies are able to fund a variety of programming specialties.

- Local Examples:
  - “Seattle Housing Levy,” Seattle, WA

**D-7. Land donations/land banking:** Public land-donations are made after the identification of surplus buildable lands with in-perpetuity resale restrictions and/or significant periods set-asides for a given purpose. Land donations as a financial tool for municipalities to facilitate housing can be constructed around a community-land trust to whom the municipality donates surplus properties for reasons of affordability

## D-8. Non-traditional homeownership:

- **Limited equity housing cooperatives (LEHCs)** – In the United States, more than 1.5 million families of all income levels live in homes owned and operated through cooperative associations. LEHCs are business corporations in which residents share ownership of a building. These cooperatives offer ownership opportunities to lower income households while limiting the return from resale that they can receive from the housing. It contrasts with market rate cooperatives, where memberships can be transferred at market value.
- **Mutual housing / Co-housing** – The combination of autonomous, private houses forming a small-scale community around shared common facilities - (in particular a common house). Co-housing combines the autonomy of single family housing with the advantages of cooperative living. Such projects can reduce the land costs per individual unit.
  - Local Examples:
    - “Bellingham Municipal Code: Co-Housing Regulations,” Bellingham, WA
- **Community land trusts (CLTs)** – Community land trusts typically acquire and hold land, but sell off any residential buildings that are on the land. This process results in the land costs minimized or eliminated making the housing more affordable. The land leases are long-term (typically 99 years) and are renewable. Most land trusts have in place "limited equity" policies and formulas that restrict the resale price of the housing in order to maintain its long-term affordability. These features of the community land trust model provide homeownership opportunities to people who might otherwise be left out of the market.
  - Local Examples:
    - “Lopez Community Land Trust,” Lopez Island, WA
    - “OPAL (Of People And Land) Community Land Trust,” Orcas Island, WA
    - “Homestead Community Land Trust,” Seattle, WA

## **E. Private Sector Initiatives**

*Private sector initiatives for housing generally attempt to stimulate an increase in low-income or market-rate housing stock for the local workforce and their families. Financial institutions have established loan programs predicated on both geographic and income-based criteria and for-profit developers have established affordable housing arms to work in conjunction with market-rate divisions to negotiate the complex funding mechanisms that facilitate affordable housing. Non-profit developers continue to build partnerships within the market-rate developer community, to own and manage portions of market-rate developments.*

**E-1. Workforce housing:** The term “workforce housing” is used to refer to the range of housing – both single-family and multi-family, for rent and ownership – that is needed to affordably house workers of all wage levels and their families within a given community, municipality, or region. Employers have recognized that when housing prices in the local housing market become severely out of reach for their low- and moderate- wage workers, it hinders their ability to recruit and retain such employees. In response, some employers have established a variety of creative workforce housing programs to assist their employees in obtaining affordable housing.

- National Examples:
  - Mayo Clinic “Workforce Housing Initiative,” Rochester, MN

**E-2. Private / non-profit partnerships:** Partnerships between non-profit housing agencies and the private sector can help communities develop affordable housing by bringing additional resources and skills to the development process. Much affordable housing is developed by nonprofits through partnerships with local government, other nonprofit developers, housing authorities, private financial institutions and, occasionally, private developers.

- Local Examples:
  - “Downtown Action to Save Housing (DASH),” Bellevue, WA
  - “HomeSight,” Seattle, WA
- National Examples:
  - “Massachusetts Housing Partnership (MHP),” Boston, MA
  - “National Housing Conference (NHC),” Washington, DC

**E-3. Location-efficient mortgages:** The Location Efficient Mortgage (LEM) is a mortgage that helps people become homeowners in “location efficient” communities. Such a mortgage increases the amount of money homebuyers are able to borrow by taking into account the money they save by living in neighborhoods where they can access nearby stores and use public transit, rather than driving. The LEM program was designed to encourage the development of efficient, environmentally progressive communities and to reduce urban sprawl and dependence on cars for trip-making. LEM mortgages are currently available in four metropolitan areas:

- Local:
  - Seattle, WA
  
- National:
  - Chicago, IL
  - San Francisco, CA
  - Los Angeles, CA

VISION 2020+20 Update  
Issue Paper on Environmental Planning

Puget Sound Regional Council

August 25, 2005

Growth Management Policy Board adopted *Action to Proceed* August 25, 2005



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# Introduction

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## Background and Purpose

Puget Sound Regional Council (PSRC) is updating its *VISION 2020 Growth Management Economic and Transportation Strategy for the Central Puget Sound Region*. During an initial scoping comment period, PSRC received over 1,200 comments covering a wide range of broad themes and specific topics. Somewhat a departure from PSRC's traditional transportation and land use focus, many comments emphasized a desire for PSRC to develop an environmental framework for addressing land use, employment, and mobility. The vision and strategy should be long-range and be the driving force that:

- Unifies comprehensive plans and countywide planning policies into a regional environmental framework.
- Develops a regional environmental vision that maintains and restores ecological connectivity, decreases fragmentation of natural systems, and protects critical areas and resources.
- Supports the preservation of habitat for endangered and threatened species.
- Supports the maintenance and improvement of the quality of our air, soils, water, and natural systems and explores the idea of developing minimal regional critical area standards so that jurisdictions throughout the region have more consistent regulations.

By providing an environmental framework, PSRC hopes to enhance the environmental analysis of the various VISION 2020+20 alternative growth scenarios and incorporate appropriate environmental provisions into multicounty policy recommendations. In addition, the work is intended to assist current environmental management efforts and paint a conceptual picture of environmental conditions in a baseline report for decision makers and the general public.

This paper is only the first step in incorporating environmental planning into VISION 2020+20. The purposes of the paper are to:

- Describe ongoing and potential efforts to engage environmental research and management organizations in participating in the upcoming formulation of the VISION 2020+20 Plan and environmental analysis.
- Work toward identification of a shared understanding in the environmental science/management community by describing current and emerging environmental issues, problems, trends, and management efforts.
- Describe existing sources of relevant baseline data and information for incorporation into the plan development and analysis. This baseline information will also be used to evaluate the potential benefits of compact or low-impact development.
- Begin to enumerate the key regional environmental quality questions facing the VISION 2020+20 planning team.
- Suggest next steps for incorporating environmental management into PSRC's regional planning activities.

Since the first VISION 2020 plan was adopted in 1990, our knowledge of the region's ecology has grown substantially. Environmental protection and restoration efforts—spurred by the listing of salmon species, damage to actual areas, human health objectives, loss of forest lands, and other concerns—have also intensified. Today there are literally dozens of resource management agencies, local governments, research institutions, advocacy groups, tribal organizations, and other non-governmental organizations working to improve our environment.

A unifying vision of the ways those efforts interconnect at the regional level would be a valuable contribution to environmental management activities. Such a perspective is a useful goal for the VISION 2020+20 process, possibly leading to a regional environmental planning role for PSRC. This paper takes an initial step toward that inclusive regional vision by summarizing the concerns and activities of some of the most relevant leaders in the field.

## Organization of the Paper

Following this **Introduction**, the next section of the paper, titled **Regional Environmental Priorities**, summarizes regional environmental priorities as defined by existing entities working on environmental issues in the Puget Sound region. This effort provides an initial picture of the region's priority environmental concerns. This section also includes issues that are just emerging in research but are not currently being addressed through governmental management efforts.

The third section, **Implications for Regional Planning**, is a discussion of implications for the VISION 2020+20 update. It includes recommendations for developing alternative growth scenarios, environmental analysis, and further regional environmental planning activities.

The implications presented in the third section also describe policy issues that could be addressed in the revised multicounty policies that would be incorporated into the updated VISION 2020 strategy. In most instances, these issues and related implementation actions are only briefly described in this paper. Should they be advanced for further consideration in the update process, additional detail would need to be developed. The additional information would discuss responsible parties or agencies, program specifics, budgetary considerations, and schedule.

**Appendix A** provides a more detailed description of the environmental priorities of each entity in support of the summary contained in the section on Regional Environmental Priorities.

## Process

The primary purpose of this study is to identify the understanding of current regional environmental issues shared by environmental scientists, planners, and resource managers working in the field. Thus, the general method was to contact representatives from these fields and summarize the information and insights they provided. This process included five basic steps:

1. The consultants individually contacted selected environmental scientists, planners and resource managers from applicable agencies, governments, and organizations to seek their opinion regarding key environmental issues and indicators and to ask for their participation in the project.
2. In early January, the consultants conducted a half-day work session to discuss the key issues, relevant information, and project methodology. This meeting helped to focus the scope and direction of subsequent work.
3. Based on the results of that work session, the consultants conducted follow-up interviews and a literature search to describe the issues, identify the key indicators and trends, and acquire and compile the available information. The team prepared a partial draft of the document for presentation to the PSRC Growth Management Policy Board and distributed it to work session participants.
4. The consultants convened a second work session with environmental scientists, planners, and resource managers to take comments on the draft. Based on those comments, the team prepared a second draft that more specifically described the concerns and management activities of individual agencies, governments and organizations addressing environmental issues in the Puget Sound. Each agency, government, and organization was sent their specific section and given an opportunity to comment on and/or update the information. At this time, the team also explored the implications of the environmental issues for the VISION 2020+20 process and began to consider the ways that upcoming regional planning might address them.
5. A second draft was distributed to all participating parties and comments incorporated into the final issue paper draft. When requested, team members met with the entity representatives to address more substantive issues.

# Special Considerations for Regional Environmental Planning

## An Integrated System

Ecological processes operate in a complex system of integrated functions. Therefore, it is problematic to examine environmental problems as isolated issues. When exploring alternatives for the VISION 2020+20 update, PSRC should work with an integrated environmental framework, such as the one illustrated below, which illustrates the relationship between four human-created conditions (in the four corners) and in-stream or nearshore habitat quality.

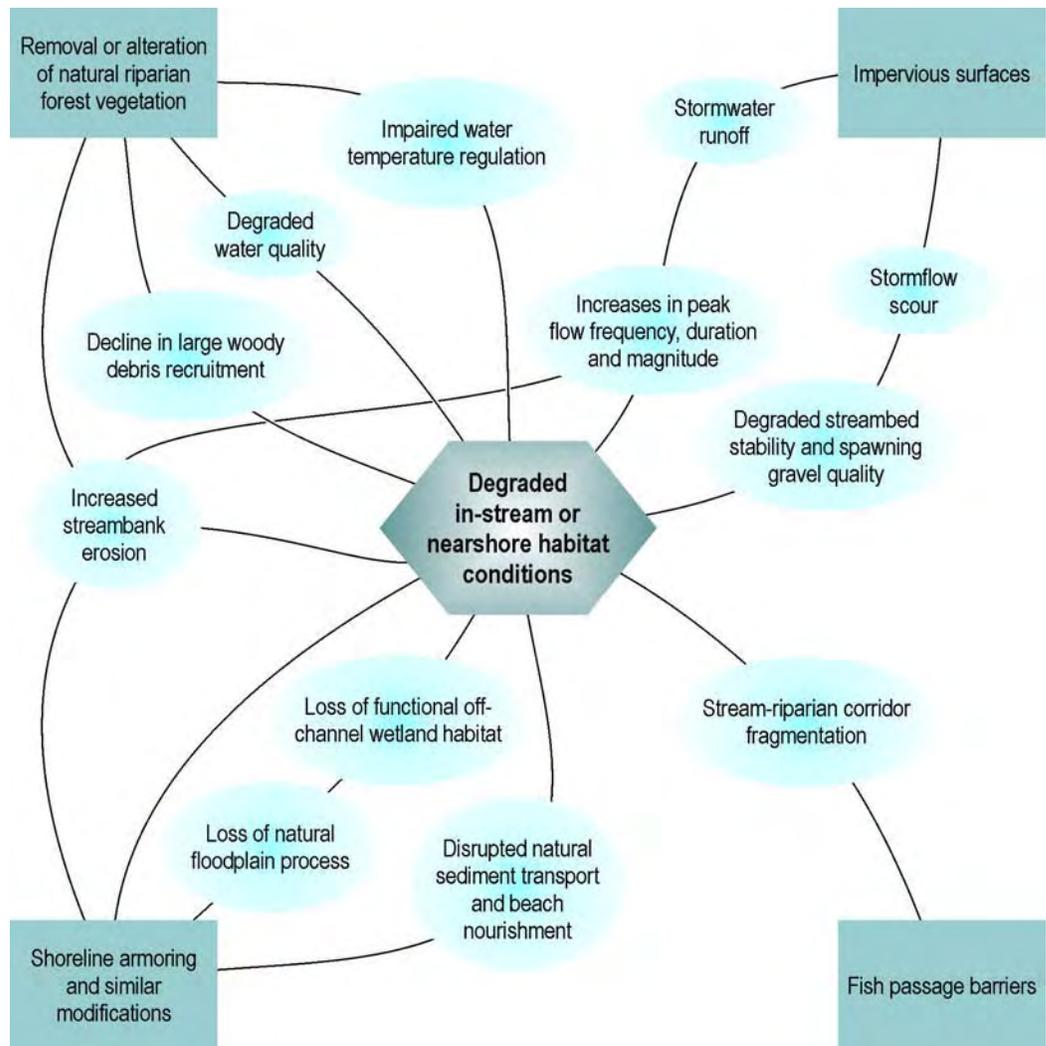


Figure 1. Example of an integrated environmental framework. (Adapted from the 2003 Landscape Assessment and Conservation Prioritization of Freshwater and Nearshore Salmonid Habitat in Kitsap County)

## Management at a Continuum of Scales

Achieving consistent and coordinated environmental management at all scales—from the regional policy level to the local site development permit—is a special challenge in regional environmental planning. Local development regulations and standards must be based on regionally based objectives and analysis. For example, the effectiveness of local shoreline development standards and restoration measures depends on their contribution to the larger watershed ecosystem.

Conversely, comprehensive regional strategies must recognize the challenges of implementation at the local level on a permit-by-permit and project-by-project basis. For example, the Watershed Resource Inventory Area habitat conservation plans depend on the cooperative actions by state, county, and city governments. And the new Department of Ecology Shoreline Management guidelines (Chapter 173-26 WAC) emphasize basing local regulations on a comprehensive ecological characterization rather than a site-by-site analysis that does not account for larger ecological systems.

The challenge for any regional environmental planning effort will be to retain a broad, comprehensive perspective at which policy must be formulated while also understanding the policy's implications at the local implementation level.

## An Interdisciplinary Approach

As noted earlier, ecological systems involve a variety of interconnected physical and biological interactions. Analyzing these systems requires a variety of scientific disciplines and techniques. There are a number of resource agencies and research institutions and organizations working on specific areas within the field. In many cases, the agencies administer laws related to a specific objective or issue, such as clear air, flood protection, or wildlife protection. Because these issues are so intertwined by ecological relationships, there is the obvious need for an interdisciplinary approach that incorporates the scientific understanding of the various issues and integrates the efforts of the separate organizations. Given the workload and defined mission of the various organizations, this integration is also a substantial challenge.

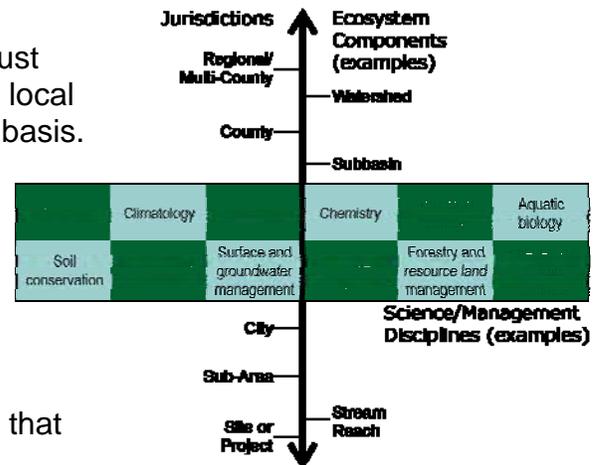


Figure 2. Regional environmental planning should consider the full range of scales, from regional policies to site development standards, and should integrate the various scientific disciplines and resource management efforts.

# Regional Environmental Priorities

---

There are numerous agencies, governments, and organizations addressing environmental concerns in the Puget Sound region. Each of these entities has its own view of what the priority environmental concerns are within its jurisdiction.

The matrix on the following page summarizes the current priority environmental issues identified by the contacted entities. The matrix focuses on environmental issues that are either caused or impacted by human development and are thus relevant to PSRC's *VISION 2020+20* update.

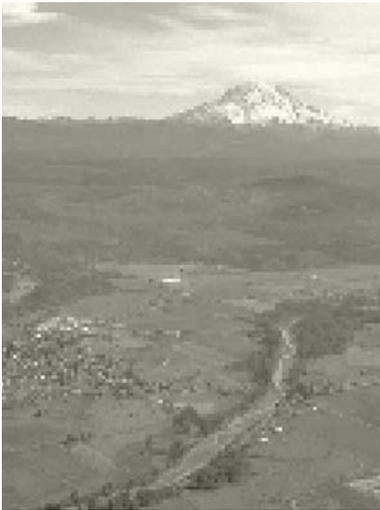
**Table 1. Summary of Priority Environmental Issues Identified by Select Entities**

	Agencies				Counties				NGOs			Others					
	WA Dept. of Ecology	WA Dept. of Fish & Wildlife	WA Dept. of Natural Resources	EPA	Puget Sound Clean Air Agency	King County	Kitsap County	Pierce County	Snohomish County	Cascade Land Conservancy	The Nature Conservancy	Northwest Environment Watch	Northwest Indian Fisheries Council	Puget Sound Action Team	Transboundary Working Group	WRIAs & other salmon recovery efforts	Emerging Issues & Research
<b>Air Quality</b>																	
Airborne pollutants	●			●	●	●					●				●		
Traffic congestion hot spots																	●
<b>Terrestrial Habitats and Species</b>																	
Fragmentation of forest habitat		●	●							●	●						
Invasive Species		●	●	●													●
Loss of forest and resource lands		●	●	●		●	●	●	●	●	●				●	●	
Loss of prairies and oak savannahs		●	●				●				●						●
Loss of prime agricultural land		●		●			●										●
Quality of forest habitat		●	●	●			●				●	●				●	
Quality of urban ecosystems				●													●
Terrestrial species sustainability		●	●	●			●			●					●		
<b>Water Quality and Aquatic Habitat</b>																	
Aggregation of impervious surface		●															●
Aquatic species sustainability	●	●	●	●		●	●					●	●	●	●		
Contaminated submerged sediments	●	●	●	●		●						●	●		●		
Impervious surface coverage	●	●		●		●	●		●		●	●	●		●		
Loss of riparian vegetation	●	●					●					●					
Modified shorelines	●	●	●				●	●		●		●	●	●	●		
Nutrients and pathogens		●		●								●	●		●		
<b>Landscape-Scale Ecological Processes</b>																	
Effect of landscape transformation on ecological processes	●	●		●		●				●	●		●			●	●
Ecological connectivity		●	●	●													●
<b>Global Issues</b>																	
Climate change					●												●

## Priority Issues

The following is a brief discussion of the environmental problems identified by participants, along with examples of current management efforts addressing those problems and general implications for the VISION 2020+20 process. Issues have been divided into four categories—(1) air quality, (2) terrestrial habitats and species, (3) water quality and aquatic habitat, and (4) landscape-scale ecological processes.

### Air Quality



#### Identified Issues, Problems, and Trends

Air quality is primarily a public health concern, although air quality can also affect plant and animal life and visibility. Particulate matter, a main component of air pollution, is tiny enough to be deeply inhaled and can contribute to various respiratory and cardiovascular ailments. The interplay of various **airborne pollutants** and their combined effect on human health may be more complex than previously thought, and thus it is appropriate to consider air quality in terms of a suite of pollutants, including particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), carbon monoxide (CO), nitrous oxides (NO<sub>x</sub>), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), and air toxics, such as toluene, xylene, benzene, and formaldehyde. Over the last 30 years, the air pollutants of concern have changed. Historically, ground-level ozone, carbon monoxide, and fugitive dust have been the pollutants of concern. Currently and for the future, the pollutants of concern are fine particles, toxic emissions, and ground-level ozone. Adding climate change and visibility to these pollutants produces the list of current air quality concerns. Air quality experts are becoming increasingly concerned that a broad range of air toxics may contribute to cancer and cardiovascular disease.

Urbanization affects air quality by changing the physical environment, such as replacing vegetation with paved surfaces and buildings, by concentrating uses and activities in areas, and by moving people and goods between areas.

These factors cause or contribute to a variety of air quality problems. Conversion of natural areas to paved areas and buildings removes vegetation, changes the

local ambient temperature, and results in more CO<sub>2</sub> in the atmosphere, which are factors contributing to climate change. Concentrating uses and activities in an area, such as homes with woodstoves or wood-burning fireplaces in a valley or densely populated areas, can exacerbate the health problems caused by the fine particles and toxic emissions in wood smoke.

Concentrating uses in an area can involve constructing residential uses next to agricultural uses, which can produce complaints about odors and emissions from the farm. Similarly, converting existing urban areas to new uses, such as industrial waterfronts to mixed-use residential, commercial, and industrial areas, can result in existing industrial uses that generate polluting emissions being surrounded by uses and users that could be harmed by the exposure.

While a number of human activities, including indoor and outdoor burning, construction dust, and lawn care, can lower air quality, motor vehicles are by far the largest source of air pollution, responsible in King County for about 55 percent of all pollutants.<sup>1</sup> Between 1985 and 2002, vehicle miles traveled in King County increased by 90 percent.<sup>2</sup> Over approximately the same time period, since 1990, levels of airborne pollutants have generally decreased, though conditions vary by year and location.<sup>3</sup>

An increase in vehicle miles traveled with a corresponding decrease in airborne pollutants can be attributed to improved vehicle fuel technology. While improved technology has been mitigating the effects of increased vehicle miles traveled, it is uncertain that this counterbalancing effect can be sustained with current technology, particularly with regard to toxics and CO<sub>2</sub>. Air pollution from ships may become an increasing concern as both container and cruise ship traffic in Puget Sound increases.

Current and potential management efforts for addressing mobile-source air pollution involve a coordinated, collaborative strategy with three distinct, but related, components:

- Cleaner vehicles and fuels.
- Alternatives to single-occupant automobile travel.
- Growth management-related strategies.

The cleaner vehicles and fuels component is a technologically based strategy. It involves standards/requirements for cleaner cars and cleaner fuels. Today's cars are 90 percent cleaner than cars built in the late 1960s. New diesel vehicles are approximately more than 90 percent cleaner than those built in the early 1970s. This year, the state legislature passed laws requiring new cars sold in the state to meet the even cleaner California emissions standards. By mid-2006, all of the on-road diesel fuel sold in the country will be ultra-low-sulfur diesel, which reduces particulate emissions by 5 percent to 10 percent and allows new and existing diesel engines to be fitted with devices that reduce those emissions by over 90 percent. The Clean Air Agency's Diesel Solutions is a voluntary public/private partnership that is promoting cleaner fuels and retrofitting existing diesel-powered vehicles and vessels with emission-reduction equipment, such as diesel oxidation catalysts and diesel particulate filters. All of the transit agencies in the region are in the process of retrofitting their diesel vehicles. Through the State School Bus Retrofit program, all of the school districts in the four-county region will be installing retrofit devices on their buses to reduce emissions by 90 percent, or more in some cases.

While air quality trends for the traditionally monitored pollutants, such as CO and particulate matter, have shown improving conditions, there is increasing concern that small amounts of air toxics, including volatile organic compounds such as toluene, xylene, benzene, and formaldehyde, can be carcinogenic.

In addition, elevated levels of CO<sub>2</sub> are an increasing concern because of its effects on climate change, as briefly discussed in the section on energy issues and research.

### **Examples of Current Management Efforts**

The Puget Sound Clean Air Agency is currently implementing a collaborative air quality strategy with three components:

- Cleaner vehicles and fuels.
- Alternatives to single-occupant automobile travel.
- Growth management-related strategies.

The agency's Diesel Solutions Program is a voluntary partnership promoting cleaner fuels and retrofitting diesel vehicles. Through the State School Bus Retrofit Program, all of the school buses in the four-county area will install devices to reduce emissions by 90 percent or more in some cases. The agency also provides technical assistance for programs such as the Commuter Trip Reduction Program. Participation in growth management activities is an emerging focus for the agency, which involves working with PSRC and local governments to implement growth management strategies that reduce vehicle miles traveled and other air quality strategies.

Regulatory measures to reduce pollution from outdoor and indoor fires, dry cleaners, and gas stations, for example, also significantly benefit air quality.

King County is currently engaged in a number of efforts aimed at reducing vehicle miles traveled and/or encouraging the use of cleaner, more efficient vehicles. For example, the county hopes to reduce vehicle miles traveled by promoting transit ridership and by creating bicycle lanes and pedestrian-friendly urban environments. The county is also encouraging the close proximity of houses and jobs in an effort to reduce vehicle miles traveled.

In conjunction with its transportation planning, PSRC reviews proposed transportation projects for their potential impacts to air quality.



Figure 3. Particulate matter less than 2.5 micrometers in size at 30 micrograms per cubic meter (left) and at 5 micrograms per cubic meter (right).

## Implications for VISION 2020+20

1. Since a significant percentage of air pollution is caused by vehicle emissions, reducing the number of vehicle miles traveled could substantially improve air quality. Therefore, comparing the relative vehicle mile projections of the various alternatives is important for air quality as well as other considerations. Strategies to reduce vehicle miles traveled should address both commute and non-commute trips, since commute trips represent only a fraction (approximately 20 percent) of total vehicle trip miles in the region. For example, these strategies might address the functionality within each center through pedestrian connections, mixed-use, etc.
2. Policies to convert public and transit vehicles to cleaner diesel fuel and equipment and other fuel technologies will contribute to emission reductions and reduce a variety of pollutants, including air toxics.
3. Emerging research suggests that areas near 500 feet of congested freeways experience elevated levels of pollution. The various alternatives should evaluate the feasibility of siting dense residential developments, hospitals, and schools within urban environments but away from congested freeways and busy arterials. Given such sitings, however, cleaner vehicles and fuel will be an important mitigating factor. (See also *VISION 2020+20 Update/Issue Paper on Health*, December 2004. This paper discusses three facets of health that should be considered in the VISION 2020 Update: 1) safety, 2) environmental health, and 3) personal well-being.)
4. Puget Sound Clean Air Agency's emphasis on growth management planning as a means of improving air quality presents an opportunity to reinforce PSRC's VISION 2020+20 effort. Better understanding of the links between growth patterns, air quality, and human health would reinforce both agencies' work. Additionally, alternatives to single-occupant vehicles and a wider range of transit options are important air quality improvement measures, and the extent of their effect warrants further study.

## Terrestrial Habitats and Species

### Identified Issues, Problems, and Trends

Loss and degradation of terrestrial habitat threatens indigenous wildlife and biodiversity. The construction of new homes and roads can result in the **loss of forest and resource lands**. Water quality and aquatic habitat are also negatively impacted by the loss of forest lands, since forest cover is directly related to the proper functioning of aquatic systems.<sup>4</sup> Over the past thirty years, the central Cascades have lost 1.7 million acres of forest, 28 percent of the area's forest land.<sup>5</sup> Most recently, during the 1990s, the Puget Sound area lost 10 acres of land a day to development.<sup>6</sup>

**Fragmentation of forest habitat** is also a major threat to biodiversity and species sustainability. As patches of suitable habitat become smaller, fragmented, and isolated, the likelihood of long-term species survival diminishes due to a loss of gene flow between populations.<sup>7</sup> The likelihood that chance events, such as fires and floods, will be detrimental also increases.

The **quality of forest habitat** can be affected by many human activities. Clear-cutting of forests has a significant negative impact since "virgin forest... is far richer in native biodiversity [than second or third growth forest]."<sup>8</sup> Additionally, "excessive grazing, incompatible timber management activities, outdoor recreational activities and many other land-use activities" can negatively affect the quality of forest habitat by contributing to "compacted soils, changes in hydrologic processes and increased invasion of non-native weeds."<sup>9</sup> Forest health in non-urban areas has been monitored by the Washington Department of Natural Resources for the past fifty years with an annual aerial detection survey that records recently killed and defoliated groups of trees, which is then checked by ground surveys.



*"As citizens of Washington state, we have been blessed with an incredible diversity of natural resources: ocean waters, conifer-covered slopes, volcanic peaks, shrub-steppe and grasslands, deep coulees, and more. As stewards of this rich natural heritage, it is our responsibility to retain it for future generations, so that they, too, can learn from it and enjoy it... Natural areas are an important part of providing healthy ecosystems, working landscapes and benefits for all the people of Washington – goals which we believe are overlapping and work together to complement the many activities that occur on private and public lands."*

– Washington Department of Natural Resources

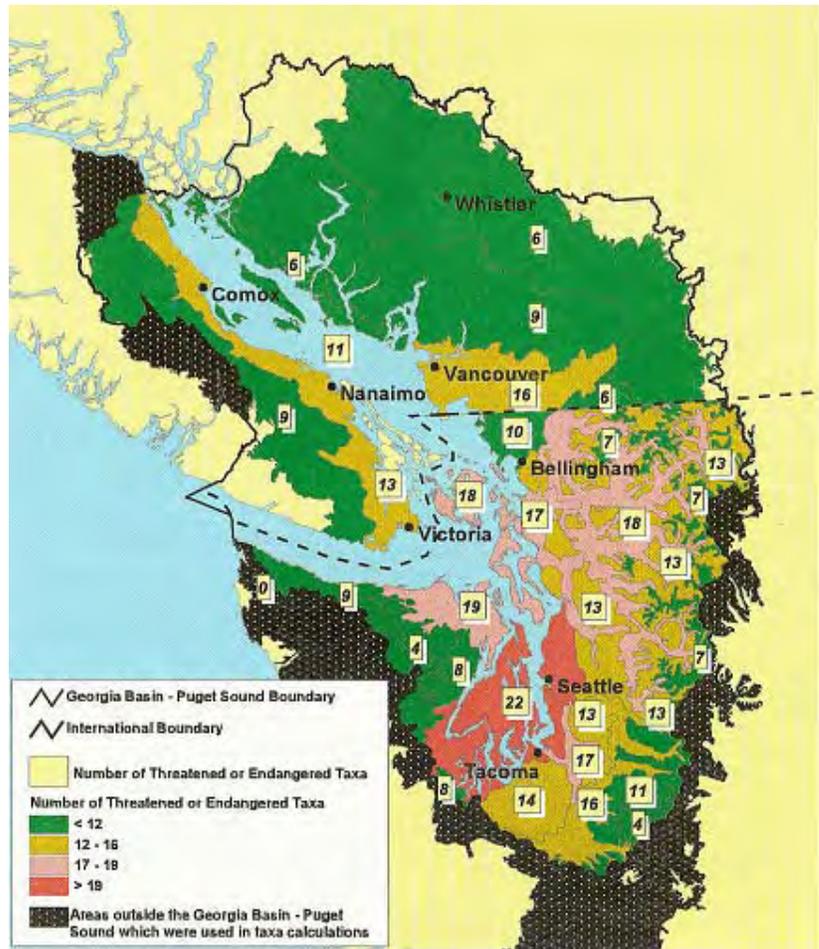


Figure 4. Species at risk in the Georgia Basin-Puget Sound ecosystem. (Source: Georgia Basin-Puget Sound Indicators Report, Spring 2002)

The **sustainability of terrestrial species** depends on several important habitats, including coastal lowlands and lowland forests. The lowland forests of the major river valleys have both high species abundance and correspondingly high numbers of species at risk.<sup>10</sup> In the Puget Sound ecosystem, 25 percent of native breeding reptiles are at risk, as are 12 percent of birds and 12 percent of mammals.<sup>11</sup> Species at risk are determined by examining the number of species that have been categorized as being vulnerable to extinction.<sup>12</sup>

### Examples of Current Management Efforts

One major management effort directed at improving terrestrial habitats and species in the Puget Sound region is the Willamette Valley-Puget Trough-Georgia Basin Ecoregional Assessment. The Washington Department of Fish and Wildlife, the Washington Department of Natural Resources and The Nature Conservancy worked together to develop this document that identifies priority

locations for biodiversity protection based on biological values and conservation suitability. This assessment, along with those developed for other ecoregions of the state, will be used by the Washington Department of Fish and Wildlife to guide habitat acquisition, assist counties in land use planning, direct funding for grant programs, and coordinate conservation efforts with other organizations.

The Washington Department of Natural Resources also offers terrestrial habitats and species within its jurisdiction two types of designations that provide a degree of protection. Natural Resource Conservation Areas protect native habitats of endangered, threatened, and sensitive plants and animals while also offering educational and low-impact public use. Natural Area Preserves provide the highest level of protection to especially rare plant and animal communities.

The Cascade Land Conservancy's *Cascade Agenda* is a strategic plan that is intended to guide regional actions to conserve and care for our environment for the next century. The *Agenda* articulates a vision for the next one hundred years, sets forth a strategy for achieving that vision, and establishes benchmarks for measuring progress toward that vision. The *Agenda* calls for the conservation of approximately 1.3 million acres of land through the use of market-based tools to meet the goals of ecological connectivity and maintenance of high-value ecological functions.

*“Populations of native plants and animals are an important part of a healthy ecosystem, our legacy, and are key elements to long-term economic and social well-being. Without adequate conservation strategies and practices, significant numbers of bird, mammal, amphibian, fish, and plant species will continue to be vulnerable to extinction.”*

– The Transboundary Georgia Basin-Puget Sound Environmental Indicators Working Group

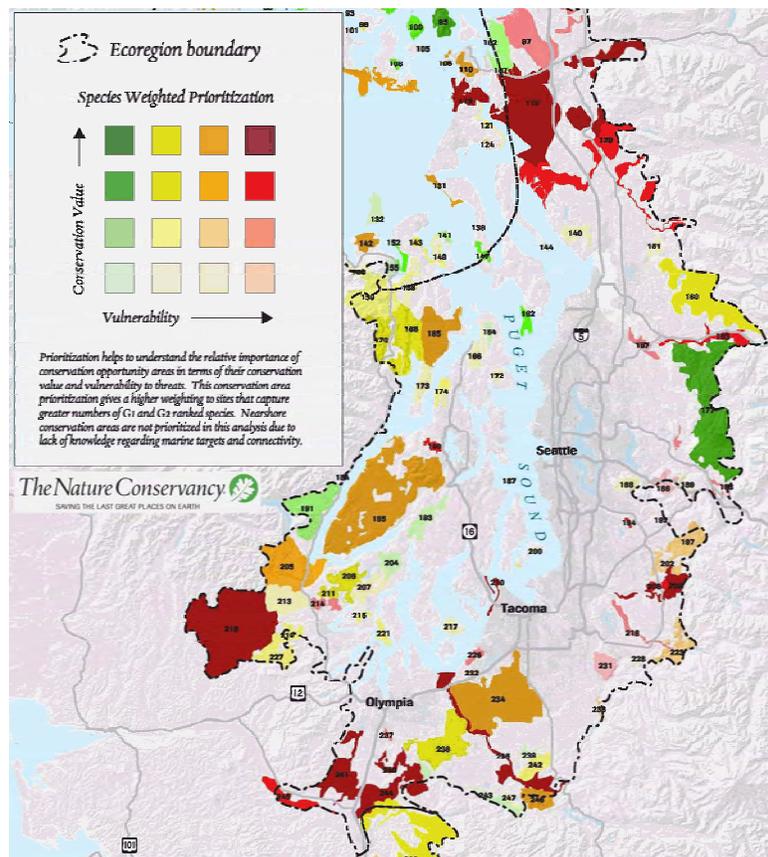


Figure 5. The Nature Conservancy/Washington Department of Fish and Wildlife prioritization scheme for last remaining large blocks of habitat in the Puget Trough Ecoregion.

## **Implications for VISION 2020+20**

There are a number of conservancy efforts in the four-county region that PSRC should continue to actively track. Some of these efforts, such as the Cascade Land Conservancy's, The Nature Conservancy's, and the Shared Strategy for Puget Sound's work, are developing valuable data and analysis. However, PSRC should also be aware of the full spectrum of analysis on conservation and not just focus on certain individual efforts as it moves forward with regional environmental planning.

1. The Nature Conservancy/Washington Department of Fish and Wildlife ecoregional assessments identify areas that are especially important to the conservation of regional biodiversity. Its findings should be incorporated into the alternatives analysis to determine the relative impacts to these areas.
2. The Cascade Land Conservancy's Cascade Dialogues is proposing a comprehensive strategy to preserve and enhance targeted forest lands. The PSRC team should continue to coordinate with the Cascade Land Conservancy and other interest groups and organizations to ensure that conservation lands are incorporated into the alternatives analysis and also explore incorporating relevant management strategies with the VISION 2020+20 analysis.
3. While resource agencies focus primarily on relatively undisturbed lands outside the urban growth area, measures to improve vegetation and habitat within urban areas may also be an appropriate strategy, especially in areas associated with shorelines and aquatic environments. Preservation and restoration measures for urban habitats—such as smart buffers, wildlife corridor enhancements, landscaping with native plant materials, mitigation banking, and identification of special opportunities—merit increased attention.
4. Increased coordination between efforts to enhance terrestrial habitats and those addressing aquatic systems is especially important. While these connections are being made between groups such as the Watershed Resource Inventory Area teams and the Cascade Land Conservancy, regional environmental planning could lead to a more integrated approach within the urban/rural/wilderness continuum and be an important “story line” in the baseline report.

5. Connectivity of habitats is becoming an increasingly important consideration as new development continues to fragment undisturbed areas. This suggests an increased emphasis on establishing wildlife corridors and larger undeveloped tracts, especially in Puget Sound lowlands. Such a strategy may be useful in rural areas and within special areas within the urban growth area.
6. It may be useful to conduct an analysis to identify gaps in current regulations and restoration activities. Such an analysis could build on current The Nature Conservancy/Washington Department of Fish and Wildlife work and deal with urbanizing areas on the edge of the urban growth area. Resources and responsibilities for conducting such an analysis would have to be identified.



The legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization, protection, restoration, and preservation. In addition it finds that ever increasing pressures of additional uses are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state.

- The Washington State Shoreline Management Act of 1971, RCW 90.58.020

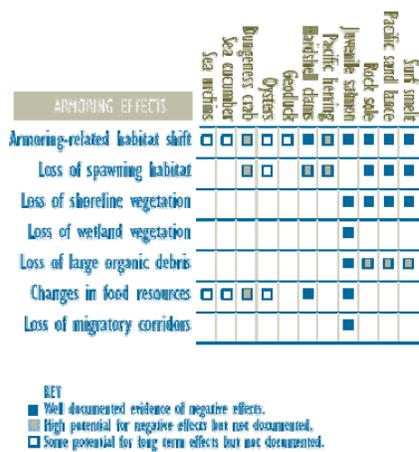


Figure 6. Armoring effects on aquatic habitat and species.<sup>18</sup>

## Water Quality and Aquatic Habitats

### Identified Issues, Problems, and Trends

Of the four major categories of environmental concerns, water quality and aquatic habitats is receiving the most attention by the scientists and resource managers contacted in this study. Moreover, aquatic environmental issues are not confined to water bodies, as some of the most damaging human impacts to water quality and aquatic habitat occur away from the shoreline. For example, an increase in **impervious surface coverage** within a watershed, especially beyond 10 to 15 percent, can degrade the health of aquatic ecosystems.<sup>13</sup>

Similarly, channeled surface runoff tends to be of a volume and velocity that easily overwhelms streams and can cause undercutting and erosion of stream banks, depositing excessive sediment, and altering in-stream fish and wildlife habitat.<sup>14</sup> The location of the impervious surface within the watershed can make a significant difference in its impact. The type of soil being covered, groundwater characteristics, and topography all can affect the impact of impervious surface coverage. Between 1994 and 2001, 1.1 percent of King County's total land area, or 5.3 percent of the County's urban area, was converted to impervious surface.<sup>15</sup>

**Modified shorelines** can also lead to several negative impacts, including beach starvation, habitat degradation, sediment impoundment, exacerbation of erosion, and restriction of channel movement. One-third of Puget Sound's shorelines have been modified,<sup>16</sup> though the pace of shoreline modifications has slowed in recent years due to shoreline management, critical area, hydraulic permit and storm water management regulations, as well as requirements related to salmon recovery.<sup>17</sup>

In addition to manmade structures, another form of shoreline modification is **loss of riparian vegetation**, which can degrade the health of a watershed by causing bank instability, fluctuating water temperatures, absence of large woody debris, unregulated micro-climates, lack of nearshore terrestrial habitat, and absence of food, such as insects from trees.

**Contaminated sediments** pose a risk to human and animal health because the toxins, which bind to sediments at concentrations far above natural conditions, tend to accumulate in the tissues of living organisms and move up the food web. As of 2003, there were more than 5,700 contaminated sites in Washington State. Most contaminated underwater sites occur in Puget Sound's major urban bays, including Commencement, Elliott, and Bellingham, while upland contaminated sites are widely scattered. In general, although some present day activities continue to release toxic chemicals, current pollution control practices are far better than practices before existing environmental laws came into force.<sup>19</sup>

Aging or poorly maintained on-site sewage treatment systems can contaminate ground and surface waters with **nutrients and pathogens**, which directly affects shellfish, which filter large amounts of water as they feed. Contaminated shellfish, thus, are an indicator of poor water quality. In the Puget Sound, the number of shellfish growing areas placed on the threatened list has doubled since 1997.<sup>20</sup>

**Toxics** largely associated with municipal waste water and storm water runoff, including PBDEs (or flame retardants), PCBs, heavy metals, pharmaceuticals, and personal care products, are also showing up in biota such as marine birds, seals, and orcas.

Ballast water from ships is also a concern, as it is a major source of aquatic nuisance species.

All of these issues, which affect the quality of aquatic habitat, can negatively impact **aquatic species sustainability**, including salmon. Habitat degradation, barriers to fish migration, and harvesting have all contributed to variations in salmon return that are lower than would be expected with natural fluctuations.<sup>21</sup> In fact, despite record salmon runs in 2001, salmon abundance has fallen far below historical averages, with 18 percent of the state's evaluated wild salmon stocks extinct and another 38 percent at risk.<sup>22</sup>

**Examples of Current Management Efforts**

Recognizing the complexity of factors affecting water quality and aquatic habitats, the state legislature in 1998 passed "The Watershed Planning Act," which set a

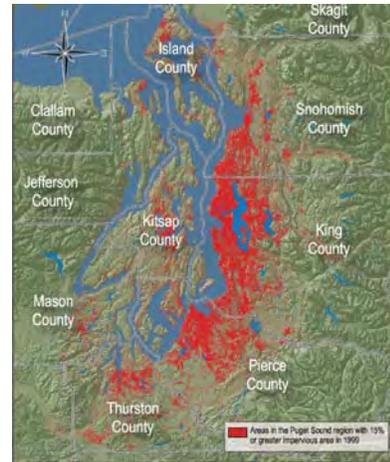


Figure 7. Areas in the Puget Sound region with 15 percent or greater impervious cover in 1999. (Source?)

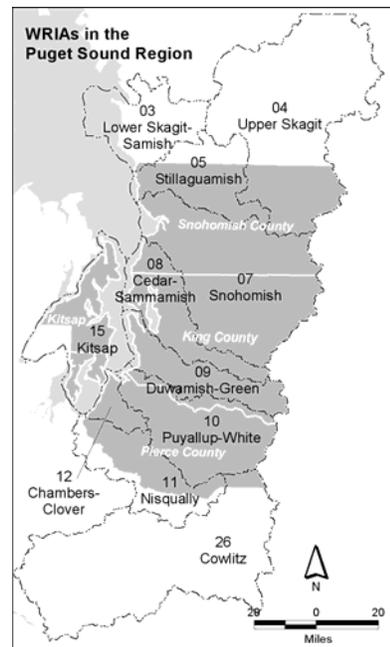


Figure 8. Watershed Resource Inventory Areas in the Puget Sound region.

framework for developing local solutions to watershed issues on a watershed basis. The purpose of the Act is to develop a more thorough and cooperative method of determining what the current water resource situation is in each Watershed Resource Inventory Area of the state and to provide local citizens with the maximum possible input concerning their goals and objectives for water resource management and development. The Washington Department of Fish and Wildlife administers grants to Watershed Resource Inventory Areas, and also provides technical assistance and scientific expertise.

The Puget Sound Action Team is an interagency, intergovernmental body that defines, coordinates, and puts into action the state's environmental and sustainability agenda for Puget Sound. Though not charged with regulatory authority, the Puget Sound Action Team conducts research and makes recommendations on key issues affecting the health of Puget Sound, including cleaning up contaminated sites and sediments; reducing continuing toxic contamination and preventing future contamination; reducing the harm from storm water runoff; preventing nutrient and pathogen pollution caused by human and animal wastes; protecting shorelines and other critical areas that provide important ecological functions; restoring degraded nearshore and freshwater habitats; and, conserving and recovering orca, salmon, forage fish and groundfish populations.

The four counties in the central Puget Sound region are each engaging in management efforts directed at improving water quality and aquatic habitat. King County is instituting broader stream buffers and limiting new development, particularly in the rural areas where habitat conditions are still relatively high quality and can be conserved. Watershed Resource Inventory Areas 7, 8, 9, and 10 are completing their science-based salmon recovery plans in 2005 and are currently exploring ways to coordinate efforts through a Puget Sound Recovery Plan with a shared strategy. The first ten years of implementation will begin in 2006.

The Shared Strategy for Puget Sound, a nonprofit organization for the recovery of Endangered Species Act-listed salmon, is compiling the results of the Watershed Resource Inventory Areas plans into a single compre-

hensive plan by early July 2005. This has special utility for regional environmental planning because it will be a point source for information and coordination with the individual Watershed Resource Inventory Area efforts.

The Department of Ecology administers the Washington State Shoreline Management Act. Local governments prepare shoreline master programs containing policies and regulations to protect and restore the shoreline environment, provide public access, and give priority to uses that are dependent or benefit from a shoreline location.

In 2003 the Department of Ecology adopted new shoreline management guidelines that call for significantly improved environmental protection and enhancement practices. Now, when local governments amend their shoreline master programs, they must conduct a comprehensive environmental characterization of their shorelines and identify measures to protect and restore shoreline ecological processes. This new measure can be an important vehicle for translating watershed objectives and analysis into implementable local regulations because local governments must now show that there will be “no net loss” of ecological functions on a comprehensive basis.

The Department of Ecology and the Environmental Protection Agency have scheduled remediation in 2,874 of the 5,700 contaminated acres in about 110 sites because they exceed cleanup triggers. The remaining contaminated acreage may naturally recover without remediation if the sources of contamination are controlled.

The Washington Department of Natural Resources works to ensure the sustainability of aquatic habitat within its jurisdiction by administering a number of programs, including sediment quality management, invasive species control, conservation leasing, aquatic reserves management, and numerous research efforts.

## Implications for VISION 2020+20

1. Assess the relative amount of impervious surface produced by each alternative in the environmental analysis phase. The King County Benchmark 2004 report advises that “keeping any change to impervious surface to a strict minimum in the rural areas is essential for protecting habitat, preventing flooding, and maintaining the “air cleaning” qualities of forest cover (e.g., creating “carbon sinks” which offset the negative effects of the CO<sub>2</sub> emissions which drive climate change.)”<sup>23</sup>
2. Coordinate with Watershed Resource Inventory Area and “Shared Strategies” activities. The currently emerging Shared Strategy for Puget Sound may provide an excellent opportunity for integration into PSRC’s VISION 2020+20 update because of their emphasis on focusing growth, protecting key areas within the watersheds, and improving development practices. As improved development models and tools to achieve shoreline management goals are being developed in the region, a regional analysis of processes and functions that identifies the highest priority restoration and protection areas could be useful. These high priority areas could serve as “mitigation banks” that would allow for some loss of ecological function at lower priority sites. Resources and responsibilities for conducting such an analysis would have to be identified.
3. Explore opportunities for landscape-scale restoration efforts in the alternative growth scenarios and/or when considering mitigating measures in the environmental analysis. Restoration projects identified by the Watershed Resource Inventory Areas or The Cascade Dialogues strategy for restoring a targeted amount of riparian areas might be organized into a watershed wide or regional restoration strategy (e.g., prioritized according to established criteria) and their impacts on land use identified. Resources and responsibilities for conducting such an analysis would have to be identified.
4. Consider an ambitious estuary restoration option in one or more of the analysis alternatives. This could include measures to restrict new development along shorelines or to ensure that new development does

not impact shoreline processes. While emerging critical areas ordinances and shoreline master programs will reduce the susceptibility of shorelines to impacting development, it may be useful to consider strategies to remove harmful development from sensitive shoreline areas such as industrialized estuaries. Sediment contamination is also a significant issue, and the growth scenarios should examine opportunities for contaminant cleanup and the potential for polluting discharges.

5. Evaluate the effectiveness of current storm water management regulations and practices. Given the importance of maintaining the natural hydrological surface and groundwater flows, the environmental analysis should analyze the current regulations' effectiveness and the implications for treating and mitigating new development. For example, redevelopment of an existing site—such as the proposed renovation of Seattle's Northgate Shopping Center, which includes storm water treatment improvements to the Thornton Creek watershed—can improve existing water quality and flow characteristics. The individual and cumulative effects of such improvements merit further research. Resources and responsibilities for conducting such an analysis would have to be identified.
6. Encourage regionwide applications of low-impact development standards and practices. Low impact development is a comprehensive land planning and engineering design approach with a primary goal of maintaining and enhancing the pre-development hydrologic system of urban and other altered watersheds.

## Landscape-Scale Ecological Processes

### Identified Issues, Problems, and Trends

WAC 173-26-201(2)(c) states that managing shorelines for protection of their natural resources depends on sustaining ecosystem-wide processes, which includes processes “associated with the flow and movement of water, sediment and organic materials; the presence and movement of fish and wildlife and the maintenance of water quality.” For example, land use activities can significantly alter the hydrology of streams and rivers which in turn affects the type of habitat present in these aquatic systems. Clearing forests and paving the land in the uplands can dramatically change the rate of water run-off, alter the watershed’s hydrological response, and simplify instream habitats and exacerbate flooding. Filling wetlands impacts the processes/functions of surface water flow (flood water storage) and removal of toxins (removing metals & toxic organics) that wetlands typically perform.

Environmental scientists are becoming increasingly aware of the **effect of landscape transformation on ecological processes** and of the importance of maintaining ecosystem processes in order to achieve shoreline management goals, including flood protection, habitat conservation, water quality and erosion control. The preface of a paper by Stephen Stanley, Jerry Brown, and Susan Grigsby, *Protecting Aquatic Resources Using Landscape Characterization: A Guide for Puget Sound Planners* (Review Draft, May 2005), states the problem succinctly:

*To sustain aquatic ecosystems we must take a holistic, comprehensive approach. This means consideration of environmental factors outside of the currently accepted “human defined” boundaries of aquatic systems. These boundaries (i.e., based on scientific classification schemes) have boxed aquatic systems into convenient categories such as bogs, lakes, streams, marshes, rivers, salt marshes, and marine shorelines. As a result of these defined boundaries, our laws have evolved primarily to protect each of these categories in isolation from the whole. In implementing these laws we have found that many of our efforts to protect and manage aquatic resources have been unsuccessful.*

*Continuing scientific research has revealed that these aquatic systems represent a “continuum” across the landscape. It has become clear that they are all driven and*

*controlled by similar environmental factors. These environmental factors exist, to a large degree, outside of the boundaries of our defined aquatic resources. We now understand that our unsuccessful protection/management efforts are in large part due to a lack of consideration of these environmental factors.*

### **Examples of Current Management Efforts**

Washington State Department of Ecology's guidance document, referenced above, is intended to assist local governments in managing aquatic resources through a process-based planning analysis. The paper describes and provides examples for landscape characterization (Figure 10) within a landscape-scale environmental planning framework (Figure 9). This "adaptive management" planning framework, summarized by the diagram below, includes characterizing aquatic resources, prescribing solutions, taking action, and monitoring. The initial characterization step requires identifying, mapping the geographic location of, and analyzing the key landscape processes important to aquatic resources and the degree of "risk" that human activities pose to these processes and resources. The second step identifies what steps are necessary to protect and restore the altered processes (i.e., reduce the level of risk) and frames a comprehensive strategy based on the ecological needs of the whole area, rather than looking only at its isolated parts, as has been typical of previous management efforts. Implementing the strategy through regulations, incentives, physical improvements, and other measures is Step 3, and Step 4 establishes a monitoring and adaptive management program to evaluate progress and modify actions as necessary to meet goals.

This planning framework has promise as an invaluable tool in making environmental planning and management activities more efficient by:

- Coordinating efforts across a range of geographic scales and locations (e.g., identifying what actions are necessary throughout the watershed to protect and restore estuarial habitats).
- Integrating research and management programs between various governments, resource agencies, institutions, and organizations (e.g., shoreline management, salmon recovery, storm water management, and critical area protection).

Figure 9. A general framework for planning at the landscape scale. This represents a suggested framework that local governments could use in protecting and managing aquatic resources through land use planning.

(From *Wetlands in Washington State Vol 2*, Ecology Pub. 05-06-008)

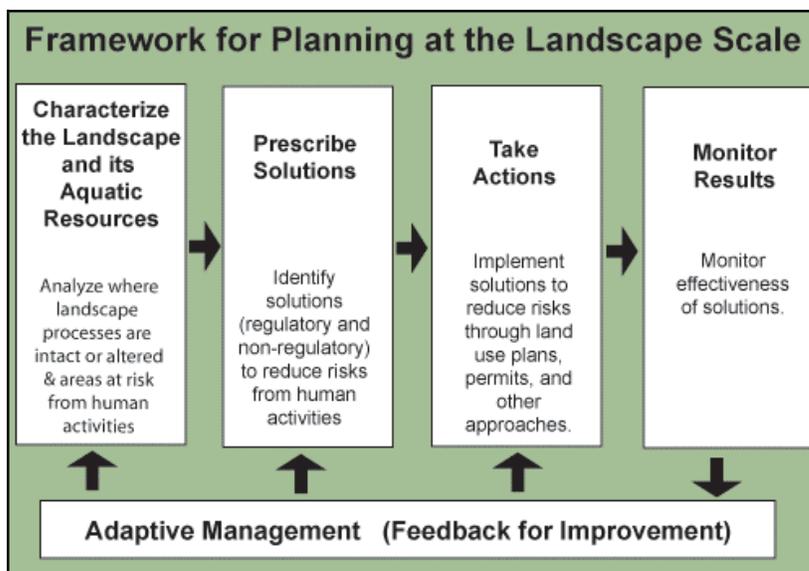
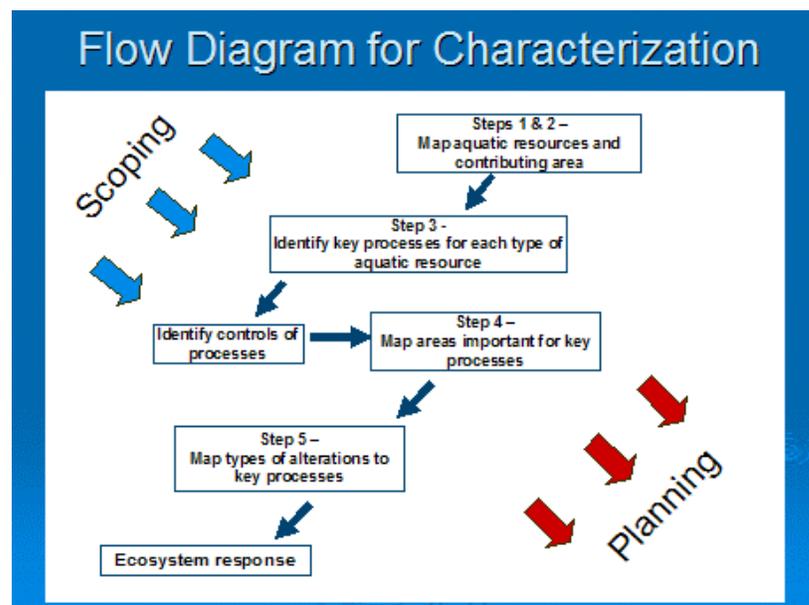


Figure 10. Detail of steps required for landscape characterization.

(From *Protecting Aquatic Resources Using Landscape Characterization: A Guide for Puget Sound Planners* DOE pub. 05-06-013)



### Implications for VISION 2020+20

Because this landscape-scale approach requires regional environmental planning and interagency/governmental cooperation, it is congruent with the PSRC VISION 2020+20 effort. Furthermore, it suggests a framework by which the programs and proposals, such as the Watershed Resource Inventory Area salmon recovery, Cascade Dialogues, shoreline management, and cleanup of urban estuaries, might be coordinated.

The VISION 2020+20 process should coordinate closely with those entities addressing landscape-scale processes—most notably the Department of Ecology, King County, Watershed Resource Inventory Area teams, and the Puget Sound Action Team—during the ongoing analysis to identify information that may be useful in shaping the alternatives. If sufficient information is available, the importance of these landscape-scale processes could be a key element in the baseline report.

## Emerging Issues and Research

There are several emerging issues that are not currently being directly addressed by the entities contacted during this effort. Some of the issues listed, such as invasive species and loss of agricultural land, have been recognized for at least a decade. They are described here because either they are receiving greater scrutiny or new technologies are emerging to address them. The following identified emerging issues are listed in alphabetical order:

### ■ **Aggregation of Impervious Surfaces**

While science recognizes the impact of impervious surface on water quality, emerging research suggests that the aggregation of paved surfaces is more important to ecosystem function at the catchment scale than is total impervious surface coverage.<sup>24</sup>

### ■ **Climate Change**

Climate change has the potential to impact almost every other issue identified in this paper. Evidence suggests that human-induced climate change, largely the result of increases in greenhouse gas emissions since the Industrial Revolution, has caused a 1.1 degree Fahrenheit increase in the global average surface temperature, an approximately 40 percent decline in Arctic sea ice thickness during late summer and early fall, and a four- to eight-inch rise in global average sea level.<sup>25</sup>

In the Pacific Northwest, the average temperature has increased 1.5 degrees Fahrenheit over the past 80 years in both urban and rural areas. Spring snowmelt is occurring earlier in the year, snowpack levels are declining, and glaciers in the region have lost approximately 30 percent of their girth.<sup>26</sup>

Climate change is an important and overarching problem that is currently not being addressed by many entities. Though it is a global issue, local governments can play an important role in a solution. The Puget Sound Clean Air Agency recommends adopting policies to maximize energy efficiency and increase renewable energy; reduce greenhouse gas emissions of new vehicles; reduce motor vehicle miles traveled; protect natural landscape and forest biomass; increase recycling and composting rates

and reduce waste; and promote public education and citizen/corporate/government action.<sup>27</sup>

■ **Ecological Connectivity**

Ecological connectivity is a broad concept that includes the connections and interactions between land and water. For example, ecological connectivity is impaired when a stream is channelized and separated from its flood plain; when shoreline structures or bank armoring block sediment flows and coastal/shoreline enrichment processes; when dams are built or culvert installation blocks fish passage; when impervious surface prevents ground water aquifer recharge; when alterations to aquatic habitat interfere with riverine hyporheic zones; when roadcuts into hill slopes disturb seepage areas, springs, and subsurface drainage; or, when removal of native vegetation and forest cover diminish the ability to capture, retain, store, and infiltrate precipitation.

■ **Invasive Species**

Invasive species are becoming an increasingly difficult problem. In some cases, invasive species proliferate in disturbed areas and prevent the natural plant succession and regeneration of the area. The regional Environmental Protection Agency office has identified invasive species as a priority problem through an executive order and has assigned a local staff person to the issue.

■ **Loss of Prairies and Oak Savannahs**

The loss of terrestrial habitat tends to focus on forest lands. Prairies and oak savannahs are an equally important habitat type, and it is estimated that only two percent of historic quantities remain in the Puget Sound region, mostly in Pierce County. This issue has also been identified by the Environmental Protection Agency.

■ **Loss of Prime Regional Agricultural Land**

The loss of agricultural land to urban development in the Puget Sound region has implications for air quality, water quality and quantity, and our region's self-sufficiency. The agricultural land in this region tends to be the most arable farmland in the state. When the region loses this resource, its populace must rely on food from other, more distant locations,

which often require irrigation. Air and water quality are impacted by the increased distance food must be transported, which may lead to more vehicle emissions and surface runoff pollutants. In addition, food produced on less arable farmland requires a greater quantity of water. The Cascade Dialogues proposes a strategy to retain existing agricultural land. County governments are addressing resource land preservation through Growth Management Act-consistent comprehensive planning.

However, retaining agricultural lands remains a challenge. For example, SR 167 construction between the Port of Tacoma and Puyallup will remove significant amounts of prime arable land.

#### ■ **Quality of Urban Ecosystems**

Much attention is given to preserving natural habitat, yet it is important to address the quality of the region's urban ecosystems. The quality of urban ecosystems could be improved by adhering to low-impact development standards that include minimizing clearing of native vegetation, minimizing building footprints and impervious cover, and using native plants. Green building and sustainable design practices that minimize impervious surface and energy consumption will also improve the quality of the urban ecosystem.

Nevertheless, there are a number of urban environmental management questions and issues that merit attention. These include, for example:

- Appropriate shoreline setback and buffer widths.
- Restoration/redevelopment techniques for urbanized estuaries.
- Incentives for urban stream restoration.
- Effectiveness of urban storm water management measures. (For example, does redevelopment of brownfields mean that water quality improves, and does it improve sufficiently to reasonably improve ecological processes?)

One action might be to monitor the activities of local cities and counties working on specific projects to learn what practices are effective. For example, Seattle is undertaking comprehensive water quality improvements on Thornton Creek, which might, with

sufficient monitoring, provide lessons applicable to other urban situations. Resources and responsibilities for developing and maintaining such a monitoring program would have to be identified.

■ **Air Quality in Traffic Congestion Hot Spots**

Concentrations of motor vehicle pollutants can occur around areas of traffic congestion.<sup>28</sup> Topography and wind patterns undoubtedly play a role in these variations. While these effects require more study, proximity to concentrations of traffic congestion should be considered in evaluating the alternative growth distribution scenarios.

Air quality proponents, such as Diesel Solutions, address many of the concerns of concentrating populations in urban centers. Therefore, coordination and collaboration among agencies will be valuable.

# Implications for Regional Planning

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The following is a list of general observations arising from this project's research. Several of these observations are then translated into recommendations for Next Steps.

**1. There is a wide range of environmental research and management efforts under way in the Puget Sound region.**

The over twenty research and management entities contacted for this study represent only a sampling of the environmental organizations and efforts addressing a broad spectrum of environmental quality issues. Some of these efforts are issue- and area-specific, while others, such as in the Department of Ecology and the U.S. Environmental Protection Agency, address a variety of region-wide concerns. Many efforts are under way locally, regionally, and statewide to identify key indicators on which to focus management and monitoring activities.

**2. There is not a single organized entity or forum to coordinate the diverse efforts.**

While a number of coalitions, partnerships, and "shared strategies" are emerging, this interaction has occurred from the bottom up, in that it has generally resulted from individual organizations finding a common cause and collaborating with one or more other organizations. For example, The Nature Conservancy and the Washington State Department of Fish and Wildlife have developed an ecoregional assessment, and Watershed Resource Inventory Areas 7, 8, 9, and 10 are working on a shared strategy to coordinate the individual watershed conservation programs.

However, there is no comprehensive or coordinating entity working at the regional level. Such an entity might, for example:

- Serve as a clearinghouse or repository for environmental information.
- Identify gaps and needs in regional-scale environmental planning information, scientific research, and management activities.
- Coordinate environmental management activities with regional land use, transportation, and economic development planning.
- Communicate between different organizations, alerting individual entities to the work being done by others.
- Communicate a coordinated message to the public and local governments.
- Provide assistance in securing funds for research and management projects.
- Provide a unifying regional planning framework supporting more issues and geographic-specific efforts.

**3. New scientific information is being developed at a rapid pace.**

At the time of the preparation of this document, several studies were being completed. For example, years of watershed inventory work is currently being translated into a coordinated management strategy, and the Department of Ecology has prepared a paper promoting new techniques in landscape-scale characterization that is being peer-reviewed. At the same time, new concerns and issues, such as a greater emphasis on the health implications of air toxics and the potential effects of climate change, are emerging.

**4. New research is identifying problems and trends that are not being adequately addressed.**

In some cases, new issues differ from the problems that the agency currently monitors because the laws establishing management programs, environmental standards, and monitoring protocols were developed before the current state of scientific knowledge. Any regional environmental planning program will need to respond to new information and address emerging issues as they arise.

**5. There are differences in environmental data and scientific information resources across organizations.**

Much of the inventory information regarding environmental conditions is at varying levels of accuracy and scale, and much of the information does not extend to the whole region. For example, the King County Benchmarks Program has been tracking several environmental indicators for over eight years and has developed useful data sets. However, the information does not extend beyond King County. The Benchmarks Program, however, does serve as a useful model for a potential regional monitoring program, and its experience in such an effort would prove useful.

Likewise, there are some significant gaps in our understanding of key issues. For example, the problems associated with impervious land coverage are becoming increasingly recognized, but the extent to which current surface water management regulations are effective and the desirability of other efforts is less clear. Similarly, the causes of the substantial population drop in some aquatic species are not clearly understood. This again points to the fact that any regional environmental planning program must be sufficiently flexible to address the uncertainty inherent in environmental management efforts and to respond to new conditions and information.

**6. A broad picture of landscape-scale ecological processes is emerging.**

Despite the lack of comprehensive understanding of Puget Sound ecosystems, researchers have begun to establish the importance of landscape-scale ecological processes to maintaining these ecosystems. This has allowed initial development of a broad picture of the relationship of landscape processes to aquatic ecosystems. These processes include the delivery and movement of water, sediment, large woody debris, nutrients, and pollutants. Since these processes are controlled by physical and biological characteristics of the landscape, including geology, soils, topography and land cover, improperly sited and designed development can significantly alter these processes and, in turn, impact aquatic resources relatively

distant from a development envelope. For example, paving recharge areas in the upper portion of a watershed may increase the risk of reducing groundwater discharge to streams and wetlands located lower down in the watershed. This may, in turn, affect water temperature and low flows that are critical to fish and invertebrate populations. In this way, the landscape-scale processes affect almost all of the other environmental issues noted in this paper. Finally, because these processes occur at the large scale, they are especially relevant to regional planning.

For these reasons, the VISION 2020+20 process should coordinate closely with those entities addressing landscape-scale processes—most notably the Department of Ecology, King County, Watershed Resource Inventory Area teams, the Puget Sound Action Team, and the University of Washington—during the ongoing analysis to identify if this new information can be useful in shaping the alternatives. If sufficient information can be developed, the importance of these landscape-scale processes appears to be a key “story line” in the baseline report.

**7. There are several cooperative Environmental Management Initiatives that should be considered and potentially incorporated into the VISION 2020+20 plan.**

The Cascade Land Conservancy’s “Cascade Dialogues,” the Watershed Resource Inventory Areas 7, 8, 9, and 10 “Shared Strategy” conservation planning, and The Nature Conservancy/Washington Department of Fish and Wildlife ecoregional assessment have completed substantive analysis and are undertaking ground-breaking regional environmental management efforts that directly relate to land use, development, and growth management practices being considered in VISION 2020+20. These programs might provide insights regarding areas where new development should be avoided, potential mitigation measures, priority restoration actions, and other environmental management issues. Therefore, PSRC should look for opportunities to coordinate with these entities in the development and analysis of growth alternatives.

A further observation is that it appears that the most useful environmental information identified during this study is analyzed data that agencies are using for specific environmental management purposes. This suggests that the most effective strategy for regional environmental planning may be to incorporate substantive work by environmental management entities rather than to undertake new analysis.

**8. Environmental planning and management is important in urban and rural areas, as well as within resource lands.**

Aquatic systems and species, for example, span the urban/rural/resource lands continuum, and measures to reduce habitat fragmentation are particularly important in urbanizing areas. Urban environmental management questions and issues deserve significantly more attention. New techniques, such as low-impact development, smart buffers, mitigation banking, green building practices and green street programs, may be applicable in a variety of settings, while specific measures to improve environmental quality in dense urban settings are also needed. Urban estuaries, in particular, merit special consideration for joint cleanup/ restoration/ redevelopment efforts. The majority of issues identified in this report emphasize preventing urban development from encroaching into rural and resource lands. Since most planning and regulatory activities address urban development, it is essential that urban issues be taken fully into account.

**9. Because regional environmental planning actions must be made on the basis of incomplete information, any such program should incorporate “adaptive management” principles.**

Given the current gaps in scientific information, the rapid pace of emerging knowledge, and the need to incorporate environmental planning considerations into the VISION 2020+20 process, it will be necessary to base planning recommendations without the benefit of undisputed scientific knowledge. In this situation, environmental planning actions (for example, recommending a set of policies directed toward management of aquatic systems in urban environments) should be seen as experiments in

which the effect of these actions is clearly monitored and management measures modified if the desired objectives are not met. In this way, actions can be taken without complete certainty and scientific knowledge advanced in the process.

## Policy Implications

In its initial review of the environmental provisions in the 1995 VISION 2020 document, the Growth Management Policy Board concluded that the updated VISION should be developed within an "environmental framework." The guidance provided by the Policy Board was that, rather than have a stand-alone chapter on environmental issues, "the *environment* – natural and built – should be an organizing principle" for the VISION 2020+20 Update. (See discussion from the September and October 2003 meetings of the Growth Management Policy Board.)

The regional environmental priorities discussed in the previous chapter – (1) air quality, (2) terrestrial habitats and species, (3) water quality and aquatic habitats, and (4) landscape-scale ecological processes – should continue to be advanced in the VISION 2020+20 process and would provide a meaningful organizing structure for addressing the range of environmental planning issues in the updated regional plan. Multicounty planning policies should be developed for each of these specific priority areas to begin to provide a common regional policy framework for addressing development opportunities and preservation goals in our common bioregion.

# Suggestions for Next Steps

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The following section suggests actions for PSRC to consider in developing a regional environmental planning effort during three different timeframes.

- When evaluating land use alternatives as part of the planning and State Environmental Protection Act analysis supporting the VISION 2020+20 process. *(Within the next six months)*
- During subsequent steps in the VISION 2020+20 process. *(2006 and 2007)*
- As part of a long-term effort to incorporate environmental planning into PSRC's efforts. *(Beginning with this VISION 2020+20 analysis and continuing over time, as appropriate)*

## Alternative Analysis and State Environmental Protection Act Evaluation Process

During the alternative analysis and State Environmental Protection Act evaluation process, the following steps should be taken:

1. Coordinate with those entities addressing landscape-scale processes—most notably the Department of Ecology, the Washington Department of Fish and Wildlife, King County, Watershed Resource Inventory Area teams, the University of Washington, and Shared Strategy for Puget Sound—during the ongoing analysis to identify if this new information can be useful in analyzing the alternatives. Because these processes occur at the landscape or regional scale, there may be opportunities to further both efforts, at least in the area of public awareness and coordination of land use planning and environmental management.

2. Consider telling the story of the importance and interconnectedness of the landscape-scale ecological processes in the baseline report.

A. First generally describe (for example):

- Why these processes are also necessary to the productivity of our resource lands, the viability of our economy, and the quality of our living conditions.
- Processes within the landscape, including movement of water (surface and groundwater), sediment, wood, nutrients, toxins, and pathogens.
- How controls within the landscape, such as geology, soils, topography, and land cover, determine how these processes operate.
- How these processes interact with and help sustain aquatic resources such as those listed at the right.

B. Next describe how human development affects these processes and can threaten the sustainability of the region's fundamental ecological systems.

C. Then describe the current management efforts underway to protect and restore the landscape-scale processes and the current challenges they face.

3. Consider the following environmental management efforts when developing the land use alternatives.

- **The Cascade Land Conservancy's Cascade Dialogues.** The *Cascade Agenda* arising from this effort contains an ambitious and quantified strategy for protecting resource lands and restoring ecological systems. This strategy might be incorporated into one of the alternatives.
- **The Nature Conservancy/Washington Department of Fish and Wildlife.** Ecoregional Assessments prioritize places for the conservation of biodiversity. Their analysis may prove very useful in identifying impacts to key areas and in establishing a regionally based strategy for their conservation.

### Ecological Processes

Following are some examples of ecological processes and their role in sustaining the resources we value

- **Depressional/slope wetland resources.** Use examples of the role of certain depressional wetlands in "controlling" the size, velocity, timing, and duration of downstream surface flows in streams and rivers.
- **Riverine resources.** Use examples of movement of large woody debris and its role in forming in-stream habitat for invertebrate and fish species and the role of salmon in the movement of nutrients.
- **Estuarine resources.** How the up-stream processes ultimately determine the health of estuaries and nearshore habitats.

- Coordinated Watershed Resource Inventory Area Habitat Conservation Planning and the Shared Strategy for Puget Sound.** The Watershed Resource Inventory Areas have largely completed their inventory and analysis work and are combining efforts toward a shared salmon recovery/habitat conservation strategy. Their work has identified priority “tiers,” or sub-basins, for habitat protection and identifies a number of specific protection and restoration actions within the watersheds. This information may be useful in generating alternatives and in evaluating the relative impacts of the different alternatives. The Shared Strategy for Puget Sound is compiling individual Watershed Resource Inventory Area plans into a single comprehensive plan and would be a good contact point.

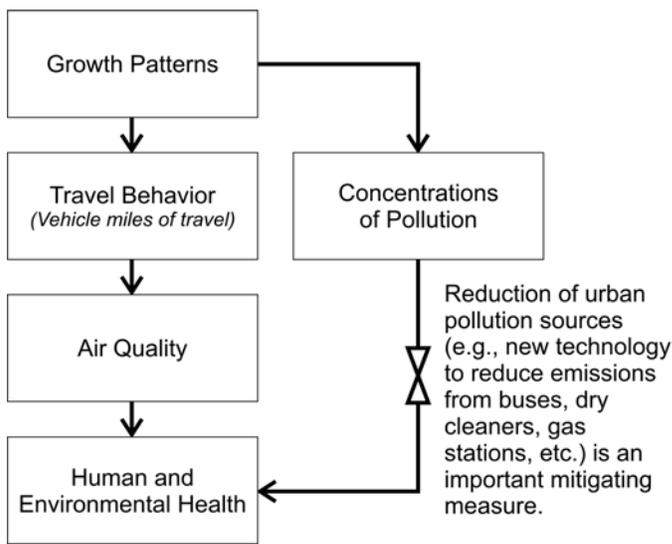


Figure 11. Environmental scientists are investigating the degree to which centralized growth reduces vehicle trip miles and polluting emissions. Medical scientists are continuing to learn more about the effects of air pollution on human health. At the same time, the effect of centralizing populations and pollution sources is a topic of research, and agencies are working to reduce emissions from diesel-powered vehicles and other typical urban sources. These studies should clarify the connection between growth patterns and human health and provide a more substantive basis for policy and implementing actions.

- Coordinate closely with the Puget Sound Clean Air Agency in its work linking land use planning to air quality and, ultimately, to human health. Documenting the causal links between growth patterns, vehicle emissions, air quality, and human health would be useful in supporting growth management efforts.
- In the State Environmental Protection Act analysis, identify where additional consistent baseline environmental information would be useful in regional environmental planning work and what questions should have the highest priority for future work—in other words, document information gaps where new data would facilitate more effective decisions. In instances where evaluations are made at the conceptual level, the team should also document the assumptions used and cite the research on which the assumptions were made.

## Subsequent Steps in the VISION 2020+20 Process

When the preferred alternative land use/transportation plan and multicounty policies are developed during subsequent steps in the VISION 2020+20 process, take the following actions:

6. Continue to pursue the creation of a broader environmental planning framework that interacts with local environmental research and management efforts, establishes a more scientifically consistent methodological basis, and links planning activities more closely with current scientific understanding of environmental problems, issues, and trends. As a first step, incorporate tested information and management activities of existing efforts rather than undertaking new research or management efforts.
7. The VISION 2020+20 update should be organized around an environmental framework that provides a context for planning, development, and environmental management in our ecoregion. Ensure that the planning supporting the VISION 2020+20 process considers measures that encompass the full continuum of urban/rural/resource land areas. Also, consider how environmental planning and resource management measures can be coordinated at a range of scales, from the local to county, regional, and statewide jurisdictions.
8. In the updated multicounty planning policies, establish a procedure to incorporate "adaptive management" principles into regional planning and decision-making efforts. Such an adaptive management approach would seek to monitor conditions arising from current policies and practices and modify or "adapt" those policies as new conditions and scientific information arises.

9. The VISION 2020+20 Update should establish an appropriate role for the Puget Sound Regional Council to play in advancing environmental planning and management strategies. Such strategies should:
  - Address the full spectrum of the urban/rural/resource lands continuum.
  - Integrate efforts at a variety of scales, from regional to county, city, and site-specific activities.
  - Include a multi-disciplinary effort incorporating knowledge and recommendations from the full spectrum of environmental sciences.
  - Recognize emerging issues and trends that may not be currently addressed by resource agencies.
10. Describe how appropriate provisions in updated multicounty policies would likely be addressed in countywide policies and local plans. This relationship of policies will be very important for local-level planning, which would be responsible for some of the more detailed implementation of such provisions.

## Considering PSRC's Long-Term Environmental Planning Role

In considering PSRC's long-term environmental planning activities and role within the field, it will be important to take the steps listed below: (Some of these steps may require resources beyond what is currently available.)

11. Evaluate the possibility of PSRC taking an active coordinating role at the regional level to:
  - Continue to facilitate a discussion among environmental scientists, planners, and resource managers regarding key issues, trends, and problems and coordinated measures to address them.
  - Serve as a clearinghouse or repository for environmental information. In this function, develop an inventory of best practices, including low-impact development, green building practices, and green street programs.
  - Identify gaps and needs in regional-scale environmental planning information, scientific research, and management activities.
  - Coordinate environmental management activities with regional land use, transportation, and economic development planning.

- Facilitate ongoing discussions between different organizations, alerting individual entities to the work being done by others.
- Communicate a coordinated message to the public and local governments.
- Provide assistance in securing funds for research and management projects.
- Provide a unifying regional planning framework supporting more issues and geography-specific efforts.

12. Periodically (perhaps every three years) produce a “State of the Environment” report that assesses local and agency past performance in meeting critical areas ordinance, Growth Management Act, Shoreline Management Act, and multicounty objectives and statutory requirements. This effort should be pursued with member jurisdictions, environmental agencies, and other interests to produce a truly regional assessment of key environmental issues and to not duplicate other benchmark reports done by local governments and agencies, but to perhaps coordinate their findings and fill in the gaps. The King County Benchmarks Program might provide a useful model.

The report should also anticipate or gaze into the future to see how the recent updates to these local plans and regulations are likely to impact the environment. Also, this might provide the basis for a stronger regional position on the need to improve the state statutes and rules to meet the collective vision. Finally, such a program should be ongoing as part of the monitoring that has been discussed.

13. Undertake a program to communicate a consistent, comprehensive message regarding environmental issues, current trends, current management activities, and where additional action is necessary to protect resources. Such a message might increase support for local governments in allocating more of their resources toward research, analysis, “best available science,” intergovernmental coordination, etc., and also in moving beyond the regulatory role into more creative and longer-term roles of environmental stewardship.

For example, this could be where PSRC could initiate a process for regional open space planning that would wed the environmental science side with the vision side to produce a design for corridors, networks, and ecosystems that serve to bring people into contact with the natural environment and leverage public investments in open space acquisition, parks and trail improvements, shoreline and wetlands enhancements, etc. Such a plan could become the matrix for seeking federal and state funding for local uses, justified on a much larger regional basis.



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<sup>28</sup> The East Bay Children's Respiratory Health Study, *Traffic-Related Air Pollution Near Busy Roads*, found that very high levels of carbon monoxide (CO) occur next to freeways in Los Angeles, but that they drop to background levels within 150 meters of the freeways.<sup>28</sup> For example, in 2003, concentrations of CO in the University District were twice those recorded on Beacon Hill. While CO is not a pollutant of concern in this region, the findings may suggest that concentrations of pollutants may occur.

VISION 2020 + 20 Update  
Issue Paper on Energy Consumption and Infrastructure Capacities

Puget Sound Regional Council

July 7, 2005

Growth Management Policy Board adopted *Action to Proceed* August 25, 2005



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# 1. Summary

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This report examines energy consumption patterns, trends, and capacity for electric power and natural gas in the Puget Sound region. For the most significant utilities, it was possible to characterize baseline existing system capacities and forecasts from information that is publicly available. Some of the studies obtained for this report extrapolate scenarios for years beyond available planning horizons. However, in most cases the uncertainties occur well within the nominal 20-year planning horizons used by most of the utilities. In some cases, significant resource decisions are needed within the next five years. The major utilities created a range of planning scenarios to develop recommendations for future resource and conservation options. When all of the utilities have completed their planning efforts, it will be possible to develop and compare qualitative rankings of cost and environmental impacts of resource scenarios.

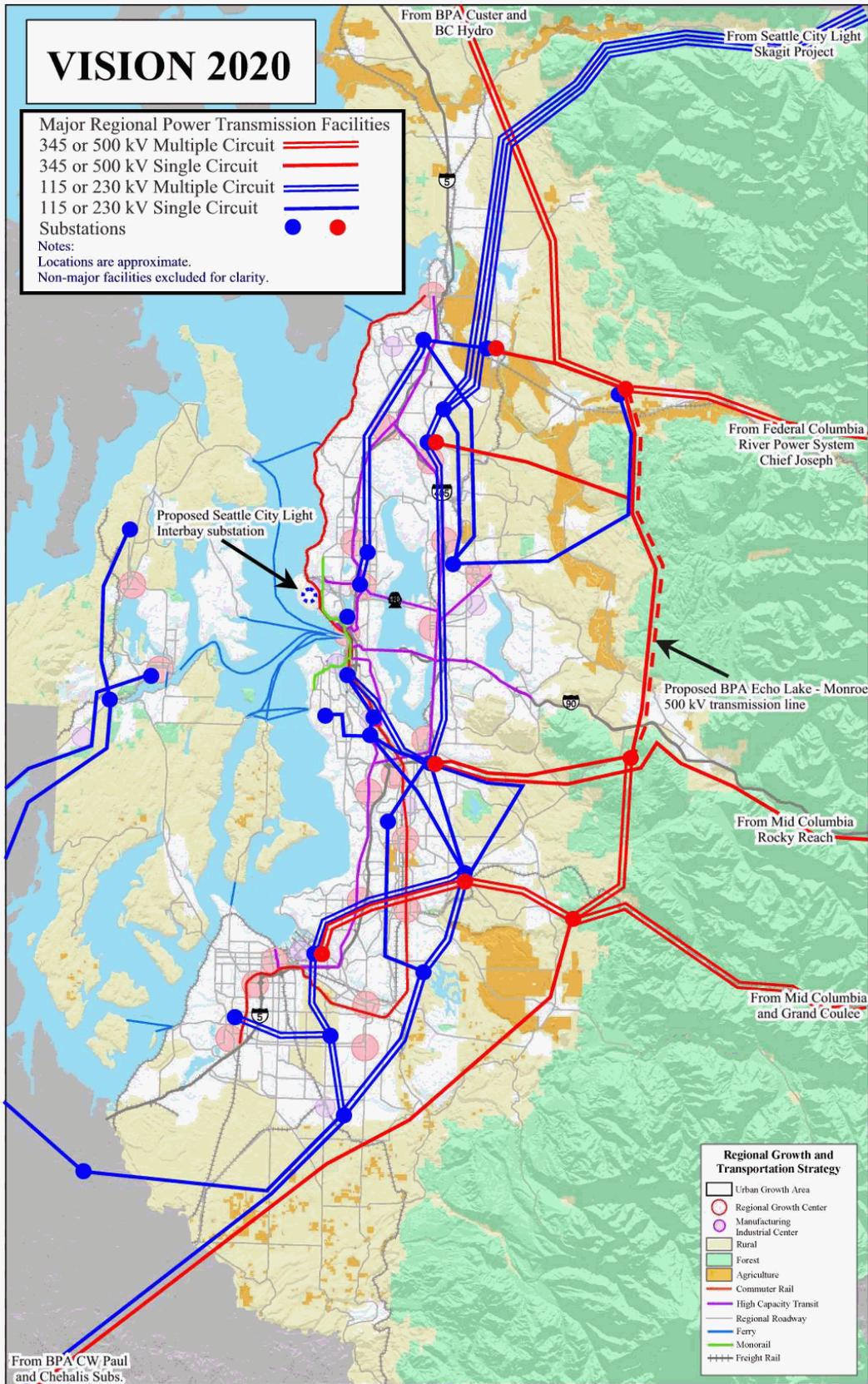


Figure 1. Major Puget Sound Power Transmission Facilities

## 2. Physical Characteristics

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The characteristics of the electricity and natural gas energy suppliers in the region vary considerably in regional scope, corporate structure, capitalization and function. The area is served by both large and small, for-profit and not-for-profit utilities. The Federal Government, through the Bonneville Power Administration, Army Corps of Engineers and Bureau of Reclamation, owns significant power generation and transmission resources that the region depends upon. Both the electric power and natural gas infrastructures are multi-state and international creating significant cross-border interdependencies for both reliability and economy. The systems are highly interconnected networks covering vast regions of the western United States, Canada and portions of Mexico.

### 2.1 Electric Utilities

Six electric utilities provide electric power in the Puget Sound region: Puget Sound Energy, Seattle City Light, Snohomish Public Utilities District, Tacoma Power, Peninsula Power, and Bonneville Power Administration. With the exception of a few Direct Service Industrial customers, the Bonneville Power Administration does not directly serve retail loads in the region, but delivers substantial quantities of wholesale power to the other utilities listed through its transmission network. The major electric power delivery infrastructure for the Puget Sound region is shown in Figure 1 on the opposite page. The facilities in this region include very few power generating plants. For the most part, power is generated outside the region and transmitted over high-voltage transmission lines to the Puget Sound region.

Demand for electric power generally peaks in the winter months, however, some of the dense, urban centers (e.g., Seattle and Bellevue) now reach their peak demands in the summer due to increased cooling loads. The winter peaking characteristic of Puget Sound utilities is illustrated by the chart below from Puget Sound Energy's 2005 least cost plan.

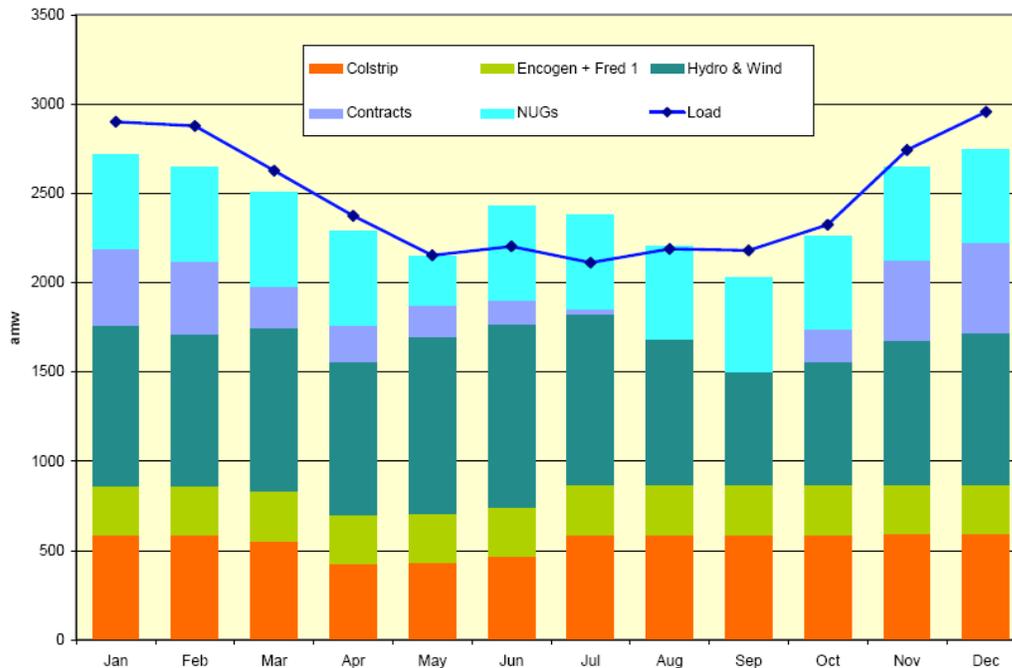


Figure 2. Exhibit II-2: 2006 Monthly Load Resource Balance

## 2.2 Natural Gas Utilities

Three natural gas operating entities provide most of the region's requirements: Puget Sound Energy, Cascade Natural Gas, and Williams. Like the Bonneville Power Administration's electric transmission function, the Williams Northwest Pipeline delivers wholesale gas to the other companies which distribute the product to retail consumers in the region. Unlike the high-voltage power transmission network, there is only a single main bidirectional pipeline serving the Puget Sound region with lateral feeders. A map showing the regional natural gas pipeline infrastructure is provided in Figure 3.

## 2.3 Corporate Planning Profiles: Service Areas and Resource Mixes

The utilities studied in the Puget Sound region have completed varying degrees of load forecasting and resource planning applicable to this review. Puget Sound Energy, Seattle City Light, Snohomish Public Utilities District and Tacoma Power (Tacoma) all periodically prepare a document called an integrated resource plan. An integrated resource plan "is used to determine a utility's long-term strategy for the portfolio of electric resources – including conservation and power supplies – it intends to use to serve its retail customers' future needs."<sup>1</sup> Puget Sound Energy's integrated resource plan is called a least cost plan and it covers both its electric and gas utilities.

<sup>1</sup> Charles J. Black Energy Economics. Recent Integrated Resource Plans by Western Electric Utilities: Review of Scope, Issues and Processes. Prepared for Seattle City Light, December 8, 2004.



**5-Year HP Supply  
Construction Plan  
2005 - 2009**

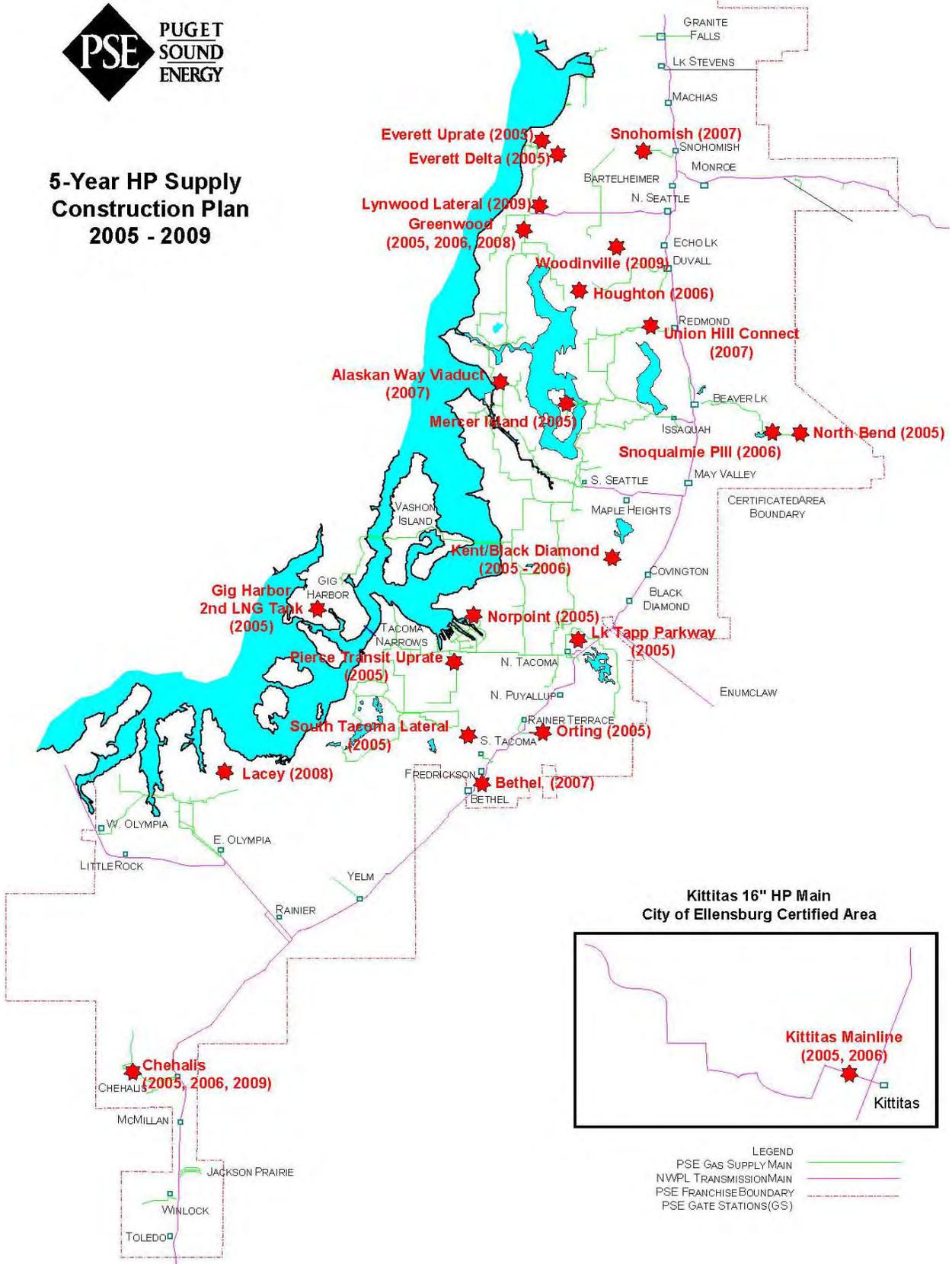


Figure 3. Five-Year HP Supply Construction Plan, 2005-2009

### 2.3.1 Puget Sound Energy

As shown in the map below, Puget Sound Energy provides electricity and natural gas to portions of all four counties in the Regional Council.



- Combined electric and natural gas service
- Electric service
- Natural gas service

Puget Sound Energy is Washington state's largest energy utility, providing electric and natural gas service to more than 1.2 million customers, primarily in Washington state's Puget Sound region.

Puget Sound Energy's service territories:

**Electric Service:** Island, Jefferson, parts of King (not Seattle), Kitsap, Kittitas, Pierce (not Tacoma), Thurston, Skagit and Whatcom counties. (Public utility districts also serve parts of some counties.)

**Natural Gas Service:** King, Lewis, Pierce, Snohomish, Thurston and parts of Kittitas counties.



Figure 4. Puget Sound Energy Service Territory

Of all utilities researched, Puget Sound Energy provided the most comprehensive planning documents to support its plan.<sup>2</sup> By statute, Puget Sound Energy is required to revise the plan every two years. Note that the illustrations in this section are identified by the exhibit numbers appearing in the least cost plan.

### 2.3.1.1 Puget Sound Energy Electric Power Analysis

#### 2.3.1.1.1 Current Resource Mix

Puget Sound Energy uses a diversified resource mix to serve its customers. Electricity is produced or purchased by Puget Sound Energy from generators using the following mix of prime mover equipment.

Prime Mover Type	Percent of Power Supplied
Hydroelectric	42.4%
Coal	34.4%
Natural Gas Cogeneration	17.0%
Natural Gas	4.3%
Nuclear	0.9%
Waste	0.6%
Biomass	0.2%
Landfill Gas	0.1%
Petroleum	0.1%

To meet the objectives of its least cost plan, Puget Sound Energy is currently acquiring wind and other power generating resources to further expand and diversify its portfolio. The near-term projected portfolio is shown in the pie chart below.

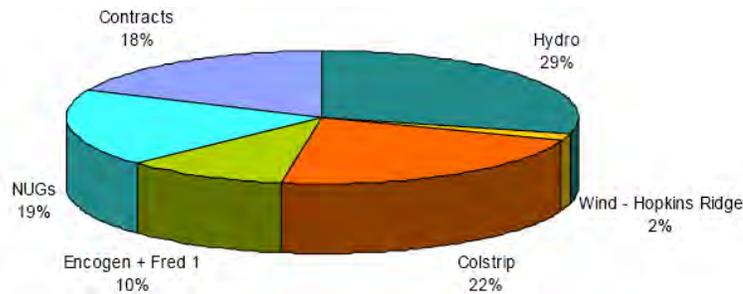


Figure 5. Exhibit II-3: December 2006 Supply Resource Mix

NUGs, or non-utility generators, in the Puget Sound Energy service area use natural gas to produce power and sell that power under contract to Puget Sound Energy. Contractually, Puget Sound Energy also relies on significant amounts of hydroelectric power generated by non-federal projects on the Columbia River. These contracts begin to expire in 2011.

<sup>2</sup> Puget Sound Energy. Least Cost Plan: April 2005. 783 pages. Available for download at <http://www.pse.com/about/supply/resourceplanning.html>.

### 2.3.1.1.2 Load/Resource Balance

The chart below illustrates the extent to which Puget Sound Energy will own insufficient capacity resources to meet peak load in both the near and long-term without acquiring additional production capability. This situation does not imply that blackouts are likely however. The electrical interconnection as a whole, has substantial surplus generating capacity. The uncertainty lies in whether such capacity can be delivered to Puget Sound Energy at a reasonable price.

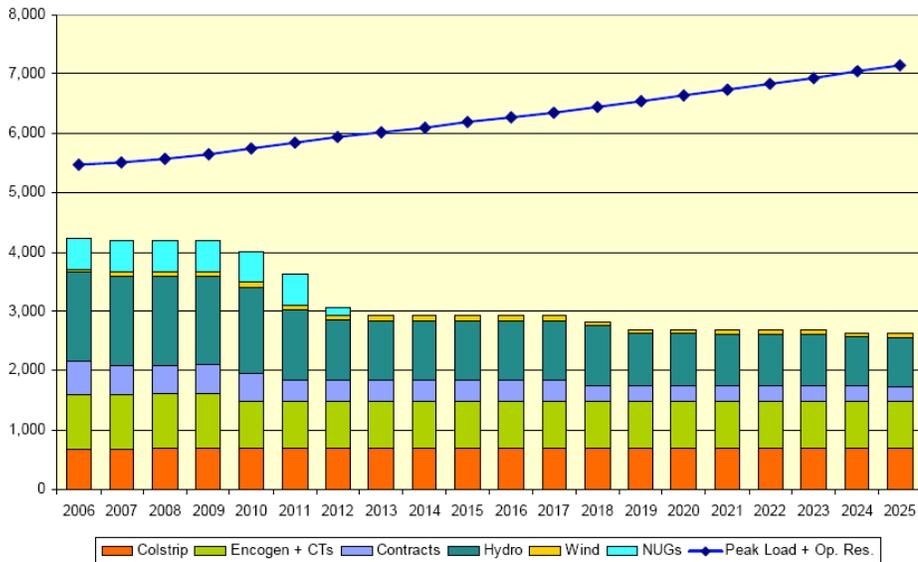


Figure 6. Exhibit II-4: Peak: 2006-2025 Load-Resource Balance

Similarly, the energy producing resources owned or under contract to Puget Sound Energy will be increasingly insufficient to meet future load requirements as shown in the chart below.

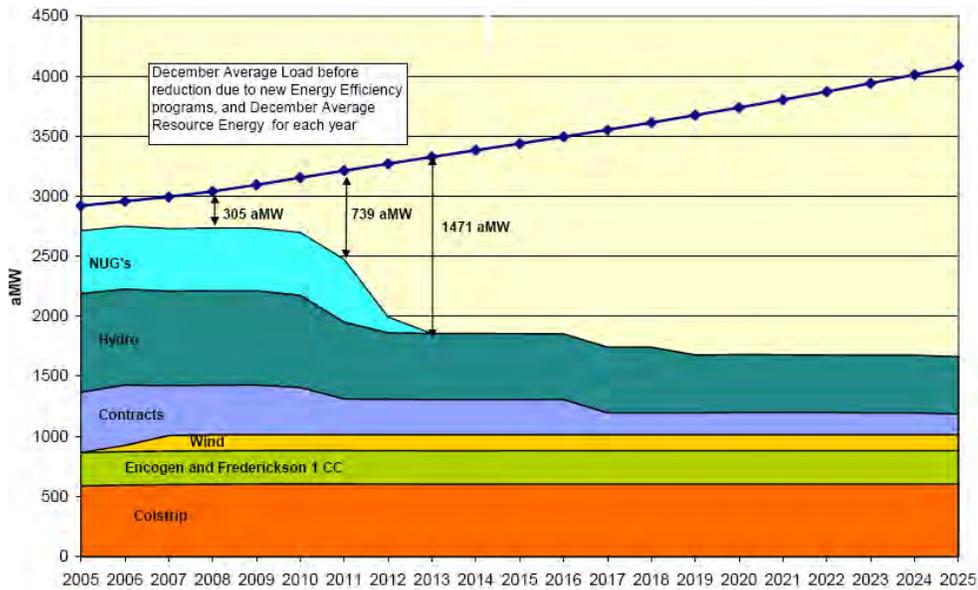


Figure 7. Exhibit II-1: Energy: 2006-2025 Load-Resource Balance

### 2.3.1.1.3 Long-term Resource Strategies and Costs

The least cost plan report concludes that “Overall, considering both cost and risk, the analysis supports the selection of a portfolio including accelerated energy efficiency, early fuel conversion, 10 percent renewable generation, and 50/50 gas and coal. This portfolio performs well across all the scenarios.” Such a scenario is illustrated below.

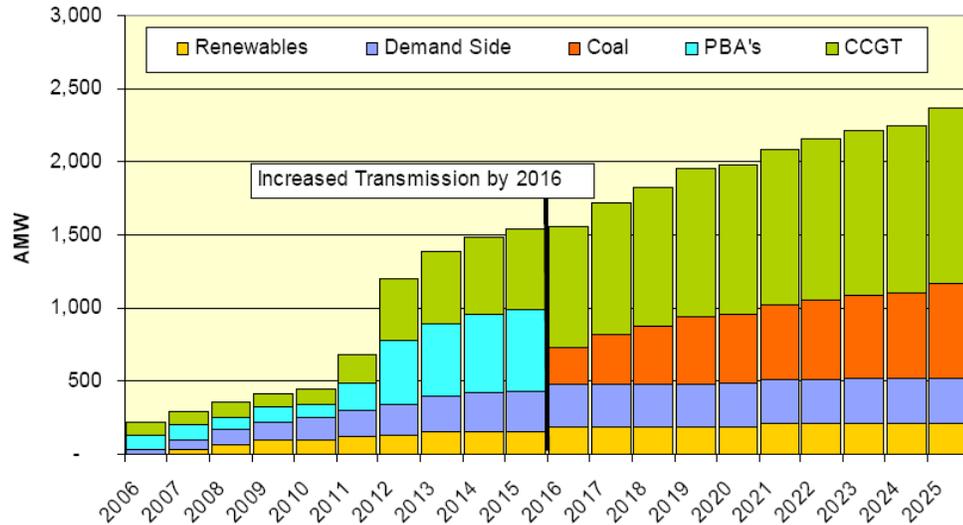


Figure 8. Exhibit II-9: 2006-2025 Resource Strategy, Accelerated Conservation and Fuel Conversion

Puget Sound Energy’s forecasts show a significant need for additional resources in both the near and long-term. Section IV.E. of the least cost plan analyzes the imputed debt that will result from existing low-cost power supply contracts that will expire between 2011 and 2019. One result of this deficit position is significant forward price risk in wholesale power markets. Transmission constraints can further exacerbate these risks by concentrating market power within the Puget Sound region. The inevitable need for additional capacity, combined with increases in credit and price risk will result in upward pressure on future electricity rates. Puget Sound Energy provides the following forecast of retail electric and gas rates.

Table 1. Exhibit VI-4: Retail Rate Forecasts

(nominal)	2004	2005	2010	2015	2020	2024	aarg
<b>Residential</b>							
Electric, cent/kwh	6.30	6.95	8.95	10.18	11.60	12.78	3.6%
Natural Gas, \$/therm	0.90	1.10	0.93	1.17	1.34	1.41	2.3%
<b>Commercial</b>							
Electric, cent/kwh	7.04	7.40	8.07	9.27	10.90	12.46	2.9%
Natural Gas, \$/therm	0.80	0.98	0.80	1.04	1.20	1.27	2.4%
<b>Industrial</b>							
Electric, cent/kwh	6.67	7.03	7.67	8.82	10.36	11.85	2.9%
Natural Gas, \$/therm	0.73	0.92	0.73	0.97	1.14	1.20	2.5%

aarg: average annual rate of growth

### 2.3.1.2 Natural Gas Analysis

Puget Sound Energy's natural gas resources are illustrated in the diagram below. Again, the Puget Sound Energy's retail gas distribution system is served by a single, interstate, wholesale pipeline corridor owned and operated by Williams (Williams Northwest Pipeline or NWP).<sup>3</sup> Puget Sound Energy's storage facility at Jackson Prairie provides greater operating flexibility and spot market hedging capability.

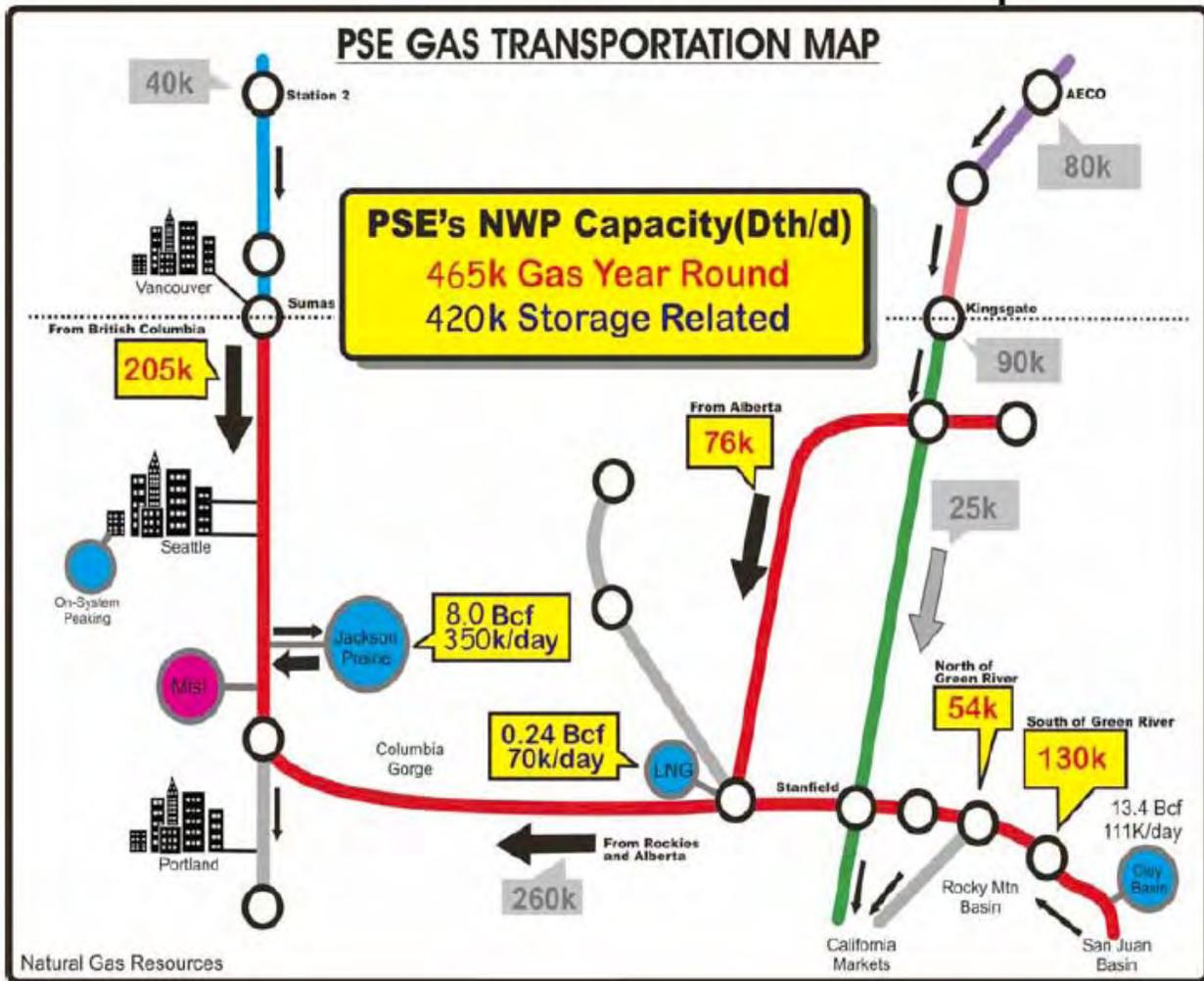


Figure 9. Exhibit II-11: Puget Sound Energy's Gas Sales Portfolio Resource Map

Most people are keenly aware that natural gas prices have tripled over the last ten years. While interstate and retail pipeline rates are regulated, wholesale prices for gas products are only partially regulated. Scarce supply in the face of increasing demands, particularly for electric power generation, have driven wholesale gas prices to record levels in recent years. Inland production of gas will need to be augmented by economic delivery of liquefied natural gas to further discipline gas prices. Puget Sound Energy provides a price forecast that, other than a brief decline between now and 2008 (based

<sup>3</sup> See <http://www.williams.com/williamsinwashington/northwest.asp> for information about these facilities.

on actual market quotes), gas prices are expected to rise steadily under most forecast scenarios.

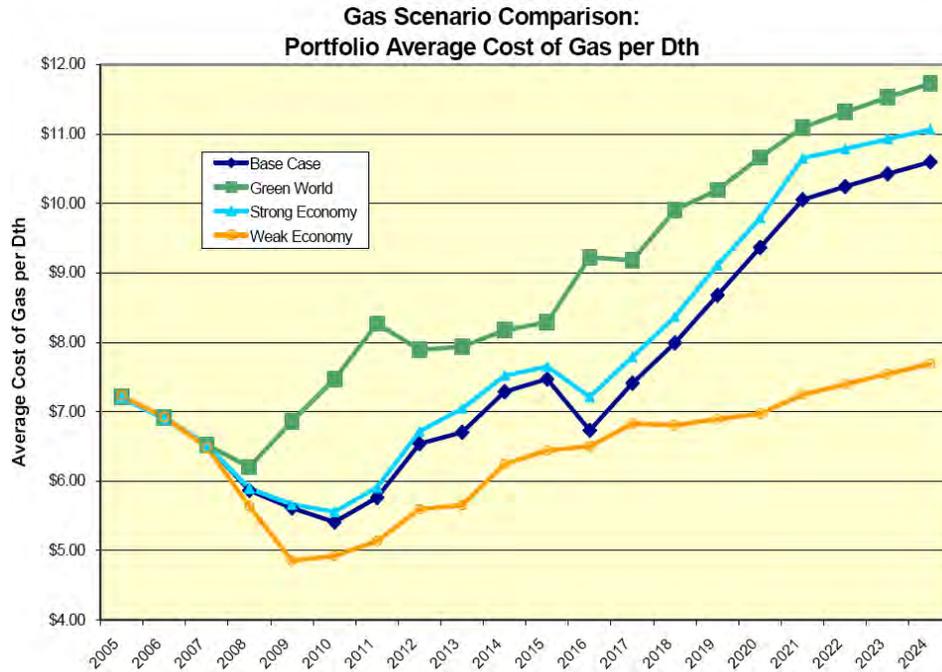


Figure 10. Exhibit II-15: Range of Costs-Optimal Portfolios Across Scenarios

### 2.3.1.2.1 Natural Gas Load/Resource Balance

The Base Case load/resource balance for Puget Sound Energy’s natural gas supply infrastructure shown below illustrates the significant near-term shortfalls in system capacity by the 2007/2008 winter heating season if no additional resources are developed or acquired.<sup>4</sup> To meet increasing system peak requirements, a combination of gas resources from producers, pipeline capacity, and storage facilities can be considered. To moderate the increases in peak demand, energy efficiency and conservation measures can reduce energy consumption while maintaining comfort and productivity. While natural gas resources in North America are considered adequate, development of new gas resources and liquefied natural gas facilities will exert upward pressure on gas prices over the long-term.

<sup>4</sup> Puget Sound Energy. Least Cost Plan: April 2005. Executive Summary, Section C, Natural Gas Least Cost Plan.

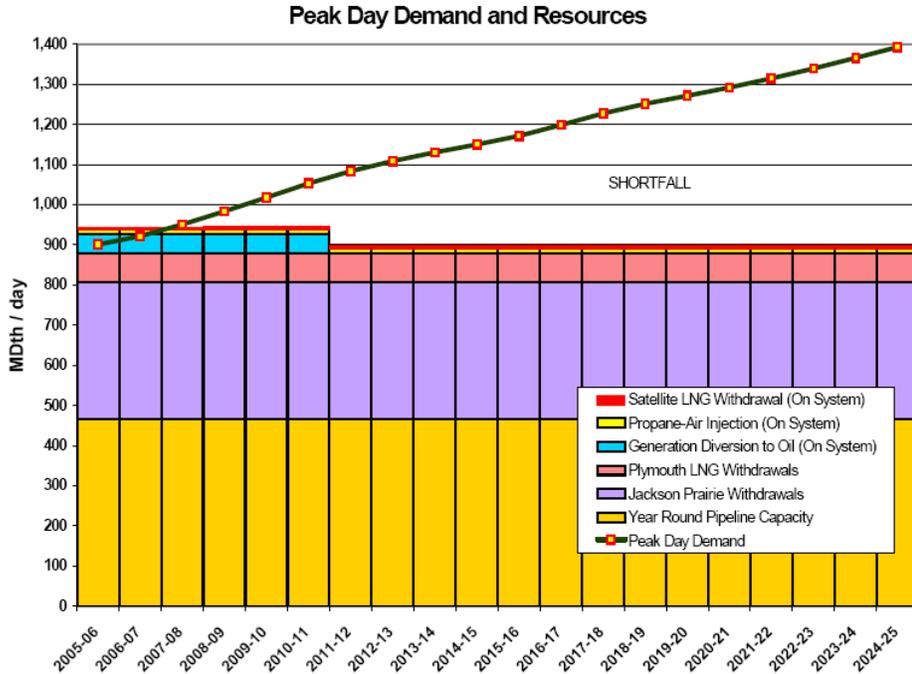


Figure 11. Exhibit II-13: Natural Gas Load/Resource Balance—Base Case

Puget Sound Energy is proposing a portfolio of energy efficiency (demand side) and supply side additions to its system to balance resources and demand over the planning horizon. These portfolio additions are illustrated in the chart below (Figure 12). As with electric system capacity additions, projects must be built in discrete, economically sized increments. This leads to a “lumpiness” in resource additions which causes short-term over-capacity which is present until demands grow to consume the surplus.

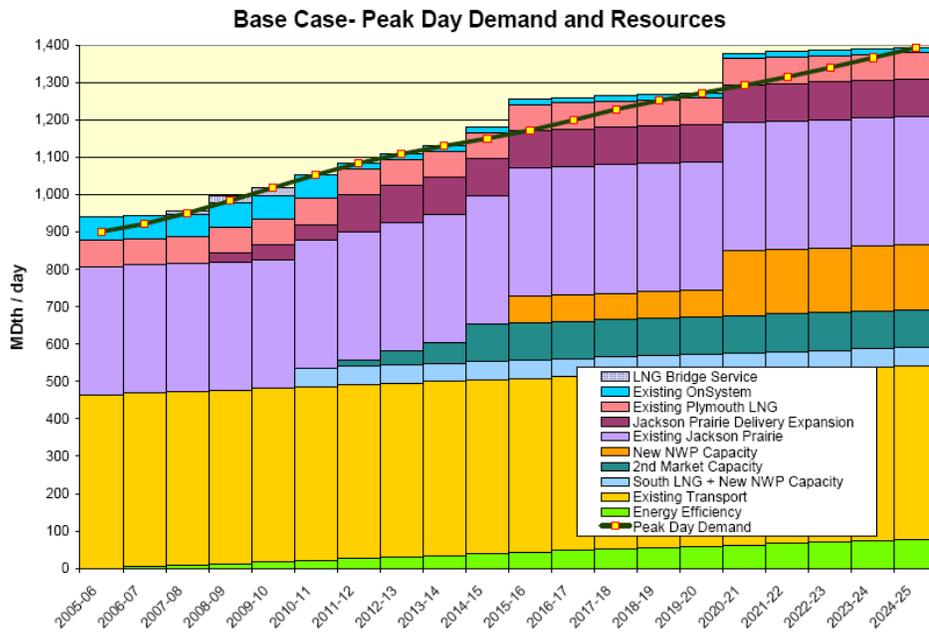


Figure 12. Exhibit II-14: Optimized Portfolio—Base Case

### 2.3.2 Seattle City Light

Seattle City Light supplies electricity to approximately 365,000 customers. Seattle City Light is in the process of preparing an integrated resource plan, but currently has few documents that shed light on its long-term load/resource balance. The following table was taken from the 2003 Annual Report and shows how Seattle City Light’s current resource portfolio lacks the diversification found in Puget Sound Energy’s portfolio.

Generation Type	Percentage
Hydro	89.29%
Natural Gas	5.00%
Nuclear	2.99%
Wind	1.78%
Coal	0.74%
Waste Incineration	0.11%
Biomass	0.09%

During normal and high water years, the Seattle City Light portfolio produces surplus energy that can be sold in wholesale markets to offset the cost of power delivered to consumers. However, during drought years the Seattle City Light portfolio exposes the utility and its customers to power supply risks. From the information posted at [www.seattle.gov/light/ctracks.html](http://www.seattle.gov/light/ctracks.html), the 2004-2005 water year appears to be approaching drought conditions of similar proportions to those occurring in 2000-2001.

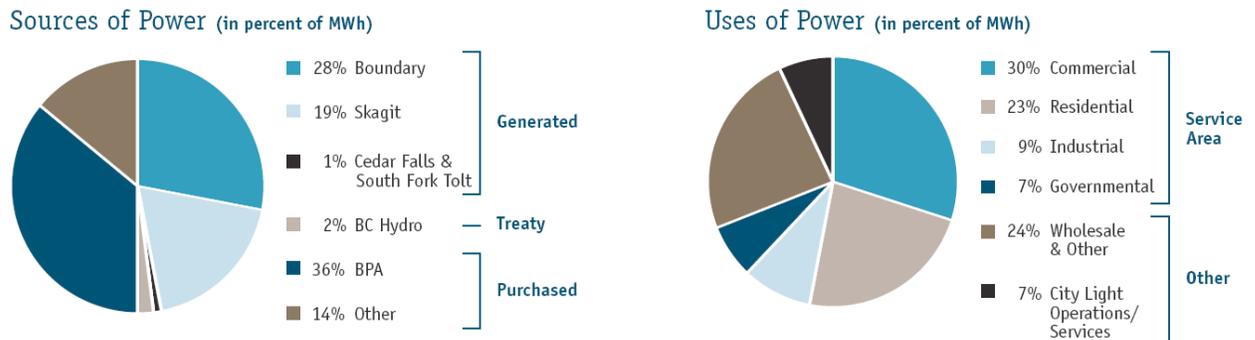


Figure 13. Seattle City Light Sources and Uses of Power

In the long-term, Seattle City Light will need to apply for a new license for its Boundary hydroelectric facility in Eastern Washington in 2009. Conditions that may apply to the new license are not known at this time.

### 2.3.3 Snohomish Public Utilities District

Snohomish Public Utilities District is currently in the process of reviewing its integrated resource plan documents and has recently (4/28/05) posted a draft integrated resource plan at [www.snopud.com/AboutthePUD/CommissionMeetingInformation/irp.ashx?p=2326](http://www.snopud.com/AboutthePUD/CommissionMeetingInformation/irp.ashx?p=2326). The following was noted from the review draft:

- The plan covers the period from 2009-2028. The Public Utilities District is committed to developing and updating its integrated resource plan every two years.
- New generating resources are not expected to be required until sometime between 2013 and 2017 depending on the effectiveness of conservation measures.
- The amount and cost of power obtained from the Bonneville Power Administration after 2011 greatly affects the Snohomish Public Utilities District's resource strategy. Bonneville Power Administration power purchases currently make up about 80 percent of the District's portfolio.

### 2.3.4 Tacoma Power

Tacoma Power serves approximately 150,000 customers in the city of Tacoma and portions of Pierce County.

Tacoma owns four hydroelectric projects with a total nameplate capacity of 713 MW, and the Cowlitz Project (the largest at 462 MW), is in need of refurbishment. Over half of Tacoma's retail load is served by power purchased from the Bonneville Power Administration. Additional purchased power comes from the Grant County Public Utilities District Priest Rapids hydroelectric, Columbia Basin Irrigation Districts, and wholesale contracts.

In July 2004, Tacoma Power completed its 2004 Integrated Resource Plan.

- The integrated resource plan covers a ten-year period from 2004-2013.
- Nine load/resource balance scenarios were analyzed.
- On an annual average basis, output from Tacoma's firm power resources will exceed the forecast loads.
- Surplus conditions during certain months (spring and summer) can be used to cover deficits in other months or sold in wholesale energy markets to optimize Tacoma's power supply portfolio.
- Resource acquisition is not required or recommended at this time.
- Tacoma continues to promote a variety of energy conservation programs.

As discussed in the section below on the Bonneville Power Administration's Regional Dialogue, Tacoma's primary supply uncertainty occurs as it negotiates its share of Bonneville Power Administration power for the years after 2011.

### 2.3.5 Peninsula Light Company

Peninsula Light Company serves over 26,000 member homes and businesses, covering 112 square miles in Western Pierce County, Washington. Its territory extends roughly from the Tacoma Narrows (on the south) to the Kitsap County line (to the north). Peninsula Light Company is the second largest cooperative in the state of Washington. No planning documents for Peninsula Light were obtained.

Information about the utility is found at <http://www.penlight.org/>.

### 2.3.6 Williams Northwest Pipeline

First completed in 1957, the Northwest pipeline now transports 85 percent of all natural gas consumed in Washington. It delivers wholesale gas distributed by Puget Sound Energy and Cascade Natural Gas. Northwest developed its Capacity Replacement Project in response to an amended corrective action order issued by the Office of Pipeline Safety which, requires Northwest to permanently abandon its 26-inch pipeline in the Sumas-Washougal corridor, and install replacement facilities as necessary to meet future capacity requirements. Northwest states that the estimated total cost of the proposed Capacity Replacement Project is approximately \$333.1 million. Work on the Capacity Replacement Project is expected to be completed by the end of 2006. The project affects substantial portions of the pipeline in Snohomish, King and Pierce counties as shown on the map included with this report, retirement\_map\_public.pdf. The integration of this interstate pipeline facility with the gas distribution system of Puget Sound Energy are illustrated in Figure 3.

### 2.3.7 Cascade Natural Gas

Distributes natural gas to consumers in Bangor, Belfair, Bremerton, Chico, Gorst, Keyport, Manchester, Port Orchard, Poulsbo, Silverdale, Sunnyslope. No long-term planning documents were obtained.

Information about Cascade Natural Gas can be found at <http://www.cngc.com/company/servicemap.asp>.

## 2.4 Regional Organizations

The activities of a number of regional entities have substantial impacts on the energy infrastructure serving the Puget Sound Region. A few of the key organizations are described below.

### 2.4.1 Bonneville Power Administration and other Federal Entities

The Federal Government, through the Bonneville Power Administration, Army Corps of Engineers and Bureau of Reclamation, owns significant power generation and transmission resources that the region depends upon. Federal hydroelectric facilities as far east as Montana are used to meet the demand of customers in the Puget Sound region. An excellent overview of the Bonneville Power Administration's role and the

projects that it manages for the Federal government can be found at [http://www.bpa.gov/corporate/About\\_BPA/](http://www.bpa.gov/corporate/About_BPA/).

The Bonneville Power Administration is currently divided into two main business lines—power and transmission—under a single administrator. The Power Business Line operates the power plants in the Federal Columbia River Power System—23,000 megawatts of installed generating capacity at 29 federal dams and 7 nonfederal power plants, including a major nuclear project. Similarly, the Transmission Business Line operates the transmission system that is a major part of the Western Interconnection in the Northwest Region.<sup>5</sup>

In spite of being perceived as major power supplier for the region, the Bonneville Power Administration has adopted an integrated resource planning approach that considers both supply-side and demand-side options for meeting future requirements. And given the effects of large hydroelectric facilities on fish and wildlife in the Columbia Basin, the Bonneville Power Administration devotes considerable resources to environmental efforts. The Northwest Power and Conservation Council (see next section) frequently makes planning recommendations to the Bonneville Power Administration. The Bonneville Power Administration is required to conduct extensive public processes for planning and policy development. It is currently working on policies for system adequacy, business practices for transmission services, and a regional dialog on

#### 2.4.2 Northwest Power and Conservation Council

Originally called the Northwest Power Planning Council (Council), the Northwest Power and Conservation Council was created by Congress to give the citizens of Idaho, Montana, Oregon and Washington a stronger voice in determining the future of key resources common to all four states — namely, the electricity generated at and fish and wildlife affected by the Columbia River Basin hydropower dams. Additional background information about the Council can be found at [www.nwcouncil.org](http://www.nwcouncil.org).

The Council released its Fifth Power Plan on May 13, 2005. In the current plan, the Council identifies a range of uncertainties that exist and describes flexible resource strategies that address these uncertainties. The Council also addresses policy issues including: standards for resource adequacy; planning, funding, and operation of transmission; the interaction of fish and wildlife and power; and the future role of the Bonneville Power Administration in power supply.

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<sup>5</sup> The Western Interconnection includes all major electric transmission facilities from British Columbia, south through the Pacific coast and Rock Mountain states and into portions of Mexico. The eastern edge of the Western Interconnection passes through Alberta, Montana, South Dakota, Nebraska, Colorado and New Mexico. See [http://www.wecc.biz/documents/constant/nerc\\_int.pdf](http://www.wecc.biz/documents/constant/nerc_int.pdf) for a map of the North American Interconnections.

The plan contains the following recommendations:

- **Conservation.** Increase and sustain efforts to secure cost-effective conservation immediately.
- **Demand Response.** Develop demand-response programs - agreements between utilities and customers to reduce demand for power during periods of high prices and limited supply.
- **Wind Power.** The plan includes more than 1,100 MW of wind generating capacity between 2005 and 2014. During the next five years the region should gain experience and gather more information about the performance of these projects.
- **Preparation for New Power Plants.** The region should secure options for construction of new power plants. If additional generating capacity is needed, the region should have planning, siting and permitting issues associated with both the generating facilities and transmission needs well in advance of construction.

The plan is not meant to replace utility integrated resource plan efforts, but provides a resource for considering future supply and demand-side options, evaluation of risks, and approaches to key policy issues.

### 2.4.3 Grid West

Grid West is a proposal to create a new, independent, non-profit corporation designed by regional grid owners and users to manage use of the transmission grid and plan for its future. Grid West basic features include:

- Transmission system management practices that more accurately align commercial commitments with physical power flows,
- Control area consolidation to improve reliability and efficiency,
- Transmission planning and capacity expansion services, and
- Regional market monitoring and dispute resolution.

The proposal is a product of work by a comprehensive cross-section of the region's transmission stakeholders, including transmission providers, power producers, end users, public power, environmental and other public interest organizations, and state, provincial, and tribal officials from across Idaho, Oregon, Washington, Montana, Utah, Wyoming, Nevada, British Columbia, and Alberta.

The Grid West proposal would not replace existing bilateral, wholesale power markets in the Northwest. However, the Grid West proposal would better manage the transmission capacity needed by those markets. Grid West would also facilitate voluntary control area consolidation, which would include voluntary markets for ancillary services (reserves and imbalance energy).

Under the proposed Grid West approach, existing long-term transmission contracts would be preserved. Transmission users would also be able to request and obtain long-term transmission contracts to deliver new generating or contract resources to load. In

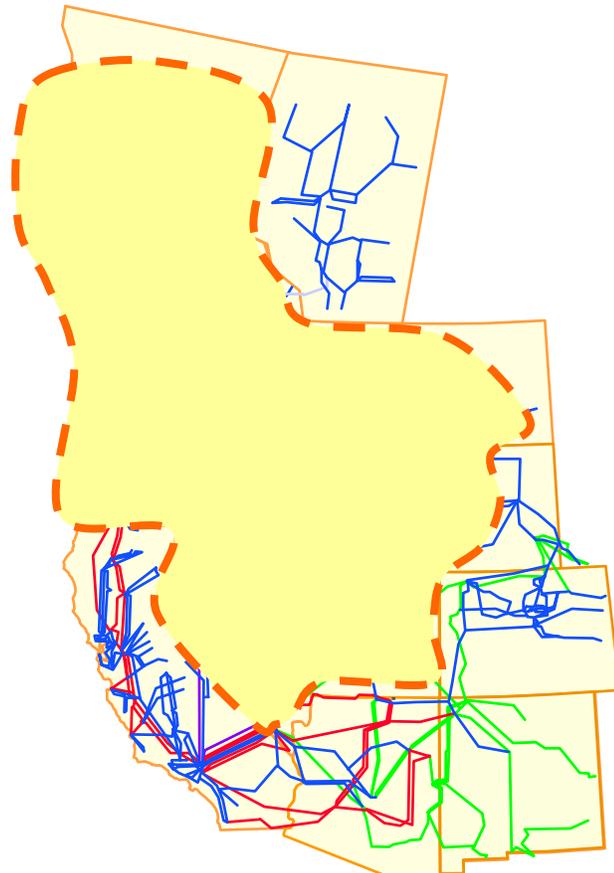
addition, processes would be provided to allow parties with unused transmission rights to release them for purchase by other users, thereby making better use of existing transmission capacity.

Utilities considering formation of Grid West own over 62,000 circuit miles of transmission lines that are operated at or above 46 kV, with a net plant investment value of almost \$7.5 billion. The Grid West “footprint” includes most transmission facilities shown in the region below that are owned by the following companies:

- Avista Corporation
- Bonneville Power Administration
- BC Hydro
- Idaho Power Corporation
- Nevada Power
- NorthWestern Energy
- PacifiCorp
- Portland General Electric
- Puget Sound Energy
- Sierra Pacific

In addition to including U.S. entities, Grid West has been designed to accommodate participation by Canadian transmission owners and operators. B.C. Hydro (and more recently B.C. Transmission Corporation) has supported Grid West development as a filing utility. There have also been discussions with representatives from Alberta concerning the potential for Alberta to participate.

Information about Grid West can be found at [www.gridwest.org](http://www.gridwest.org).



#### 2.4.4 Western Electricity Coordinating Council

Originally formed as the Western Systems Coordinating Council, the Western Electricity Coordinating Council is the regional reliability organization for the Western Interconnection.

#### 2.4.5 Northwest Gas Association

The Northwest Gas Association is a trade association that represents the natural gas industry in the Northwest. A map of the major natural gas facilities in the region can be found at [http://www.nwga.org/about\\_nwga.php](http://www.nwga.org/about_nwga.php).

## 3. Electric Power Issues

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In the wake of the 2000-2001 crisis that left electric utilities reeling from power shortages and soaring prices, planning efforts of these utilities are framed by the need to hedge uncertainty and risk. Construction of new power resources requires investment—and rates to support these investments—that is substantially more costly per unit of capacity than the resources embedded in current power portfolios. The Northwest Power and Conservation Council continues to estimate that conservation can be the most cost effective approach to future power plans.<sup>6</sup> At the same time, existing generating resources will be retired and new customers will take service during the planning period. There is substantial planning activity in the region to establish future resource portfolios that include: conservation, power supply contracts, and generating resource development.

### 3.1 Expiration of Bonneville Power Administration Power Supply Contracts—Regional Dialogue

The current Bonneville Power Administration “Regional Dialogue” is setting the stage for renegotiating a substantial number of power supply contracts with its customers that will expire in 2011.<sup>7</sup> Beginning in 2006, the Bonneville Power Administration will offer new contracts to these customers who must then choose whether to continue to take service under tiered rates from the Bonneville Power Administration, seek competitive power supply contracts, or some combination of these approaches. The strategic direction that the Bonneville Power Administration has taken with respect to its future role in marketing power in the region was driven by the 2000-2001 crisis when the Bonneville Power Administration was forced into high priced wholesale power markets to cover customer demands.<sup>8</sup> The Bonneville Power Administration describes significant challenges that will be addressed between now and October 2008 when the new long-term contracts and rates have been established. This policy will affect customers of all utilities in the Puget Sound Region.

### 3.2 Regional Electric Transmission Issues

For utilities in the Puget Sound Region, most of the electrical power consumed is generated at powerplants that are many miles from consumers. All of the planning documents described various regional transmission challenges. For those seeking new renewable energy and other distant power supply resources, transmission bottlenecks

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<sup>6</sup> NWPCC. *Fifth Power Plan*. Table OV-2: Resource Supply Curve 2025. Page 26.

<sup>7</sup> BPA posts information about the Regional Dialogue on its website at [www.bpa.gov/power/pl/regionaldialogue/announcements.shtml](http://www.bpa.gov/power/pl/regionaldialogue/announcements.shtml).

<sup>8</sup> BPA. *Bonneville Power Administration’s Policy for Power Supply Role for Fiscal Years 2007–2011*. Notice of Final Policy. February 14, 2005. Federal Register / Vol. 70, No. 29 at 7489.

severely constrain the amount of capacity that can be delivered to the Puget Sound Region. As described in the recent Bonneville Power Administration publication, Keeping Current, “problems facing the transmission grid today go beyond the borders of any one utility.” Two initiatives, Grid West and the Transmission Improvements Group, are in the process of developing proposals to address a raft of regional problems and opportunities identified by the Grid West Regional Representatives Group in September 2003.<sup>9</sup>

### 3.3 Effects of Drought

The amount of water available for power generation in the Northwest varies substantially from wet to dry years. For example, a 50-year sample of streamflow data for Northwest watersheds such as the Columbia River basin, the lowest water year will typically provide only one-third of the water discharged in the wettest year. In the Bonneville Power Administration’s 2003 White Book the projected energy surpluses and deficits are illustrated in Figure 14 below as a function of potential variations in water conditions.

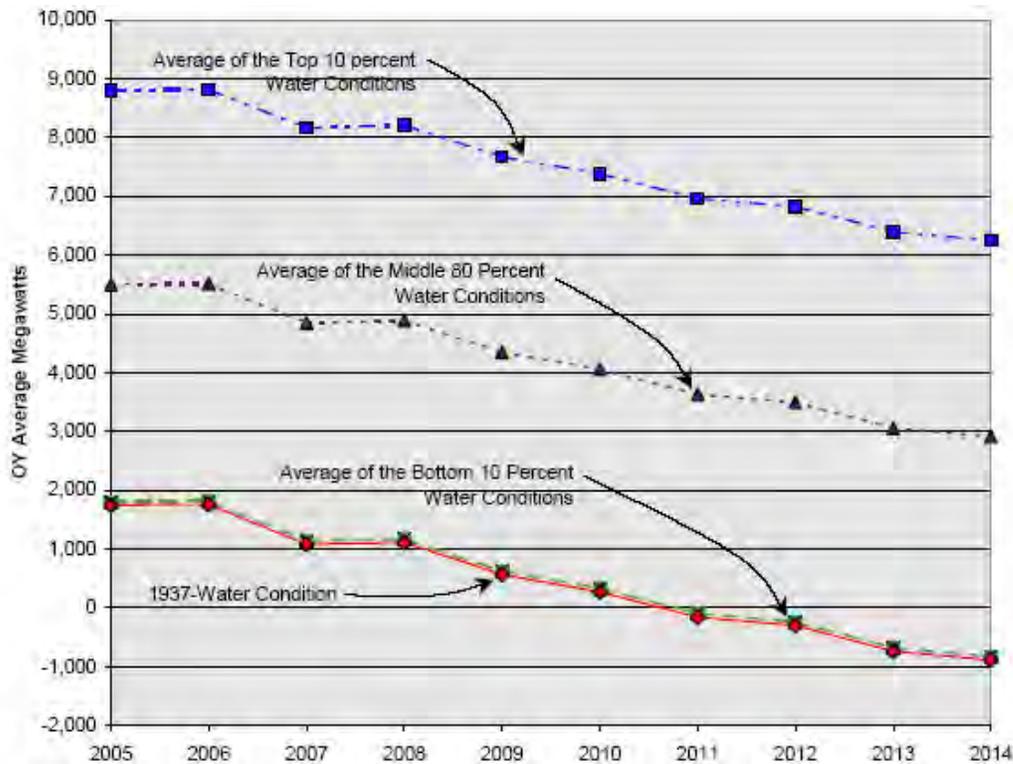


Figure 14. Variability of Regional Annual Energy Surplus/Deficit Utilizing Differing Water Conditions for OY 2005 through 2014

<sup>9</sup> [www.gridwest.com/Doc/Reference\\_Document\\_Sept52003.pdf](http://www.gridwest.com/Doc/Reference_Document_Sept52003.pdf).

Because Puget Sound regional electric utilities depend heavily on hydroelectric generation, this variability creates considerable uncertainty for power supply planners. The Pacific Northwest Coordination Agreement establishes water storage and power transfer rights and obligations that help prevent floods during high flow years and mitigate shortages during low flow years.

Between the summer of 2000 and summer 2001, a drought resulted in substantial underproduction of hydroelectric energy. This event combined with wholesale power market manipulation in the west, resulted in extremely volatile electric power prices that were found unjust and unreasonable by the Federal Energy Regulatory Commission.<sup>10</sup> Seattle City Light alone spent more than \$480 million in excess of its budgeted purchased power expenses during that period. Today the resulting external debt is virtually paid off and additional resources have been purchased to reduce the risk of near-term resource deficiencies.

The 2004-2005 water year in the Northwest again shows drought characteristics. While it is expected that the interconnected electric system will have sufficient capacity to meet peak demands this year, energy production will shift from hydroelectric resources to fossil fueled powerplants possibly resulting in substantial short-term market purchases by utilities dependent on hydroelectric resources during the winter when hydroelectric production is at a minimum.

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<sup>10</sup> See FERC Docket No. PA02-02 Final Report at <http://www.ferc.gov/industries/electric/indus-act/wec/chron/2003.asp>. March 26, 2003.

## 4. Natural Gas Issues

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The primary issue for consumers with respect to natural gas is price. The chart below appears in the Northwest Power and Conservation Council Fifth Power Plan and shows the quantum jump in wholesale gas prices beginning in 2000. Current gas prices range from \$5.50 to \$6.00 per MMBtu in the region.

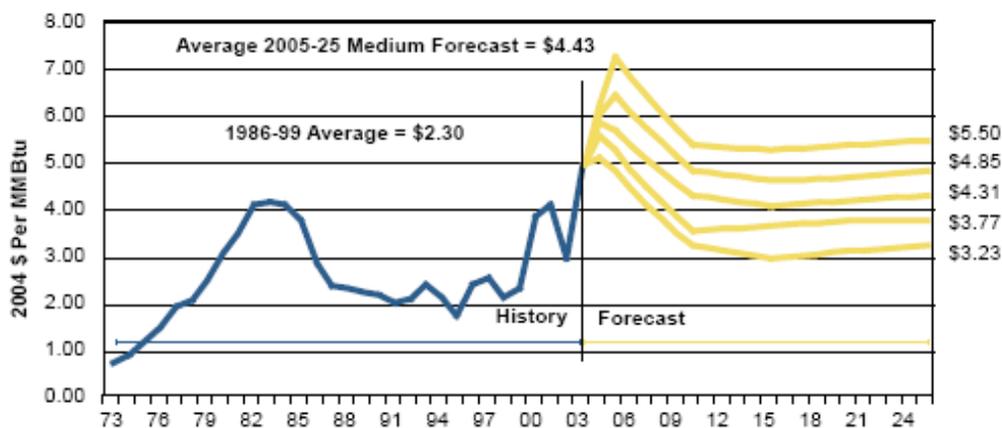


Figure 15. Historical and Forecast Natural Gas Prices

Part of the reason for gas price increases is the desirability of gas as a fuel for electric power generation. While fuel efficiency has tended to reduce per capita demand in the residential and commercial sectors, consumption for power production has increased. The U.S. is a net importer of natural gas and with domestic production nearly constant, liquefied natural gas imports will increase over the long-term to meet expected increases in consumption. There are currently proposals to locate large liquefied natural gas terminal facilities on the Columbia River to increase supply in the long-term.

## 5. Conclusion and Recommendations

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Recent planning studies by most of the principle electric and gas utilities serving the Puget Sound region indicate significant potential for generating and natural gas resource shortfalls in the near future. These utilities are actively soliciting offers for additional economic resources as part of their integrated resource planning efforts. Nevertheless, new resources will result in upward pressure on energy rates that may affect economic activity in the region.

Between now and 2040, we will likely see additional advancements in energy conservation and the further development of alternative energy sources - particularly in the areas of solar, wind power, tidal and perhaps even geothermal energy-all of which are currently being implemented on some scale. While it was beyond the purview of this paper to speculate on how significant a contribution such alternative forms may be playing 35 years from now, nevertheless there is value today to consider the opportunities and challenges that may be at hand for our children and subsequent generations.

It is recommended that the Council convene a roundtable discussion including all of the principle energy providers in the region to discuss the status of their planning and resource acquisition efforts. To the extent that potential energy price impacts can be estimated, as has been done by Puget Sound Energy, the impacts on economic activity in the region should be analyzed.

VISION 2020 + 20 Update  
Issue Paper on Sewer Utility Status

Puget Sound Regional Council

July 7, 2005

Growth Management Policy Board adopted *Action to Proceed* August 25, 2005



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# Issue Paper Purpose

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This issue paper broadly outlines sewer conditions in the Puget Sound region and identifies where sewer capacity could affect growth.

## Introduction

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The Washington State Growth Management Act requires comprehensive planning for cities and counties in the central Puget Sound region and other highly populated or fast-growing areas of the state. As part of the comprehensive plan there are mandatory elements that must be addressed. One of these is the capital facilities element, as outlined in RCW 36.70A.070:

*(3) A capital facilities plan element consisting of: (a) An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities; (b) a forecast of the future needs for such capital facilities; (c) the proposed locations and capacities of expanded or new capital facilities; (d) at least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and (e) a requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent.*

This element provides the foundation for how urban services are addressed that are so critical to citizens in our region. These services are defined under 36.70A.030.19 in part as (1) storm and sanitary sewer systems, (2) domestic water systems, (3) street cleaning services, (4) fire and police protection services, (5) public transit services, and (6) other public utilities associated with urban areas which are not normally associated with rural areas. Our focus in this paper is on sanitary sewer systems.

The Growth Management Act distinguishes between rural and urban levels-of-service. Several of the defined “urban services” are allowed in the urban and rural area. For example, domestic water systems are allowed in both rural and urban areas. However, sanitary sewer service, with very few exceptions, is only allowed in the urban area. These sewer service exceptions generally are provided only for schools or for specific health, safety or environmental concerns. There are rural locations in Pierce County that receive sewer service due to a binding sewer agreement that predates the Growth Management Act.

As outlined by the Growth Management Act, sanitary sewer service is an urban service that provides for growth and treatment to levels that comply with water quality standards. There are a few barriers for sanitary sewer service delivery; however most of these are localized and not global to the area. These challenges are discussed herein.

In the Puget Sound region, sewer service is provided by cities, counties, special purpose districts and tribal nations. The utility provider for each of these jurisdictions is required to prepare a sewer comprehensive plan (Plan), which documents the current status and analyzes the future needs of the sanitary sewer system. The utilities use the Plan as a tool to anticipate and plan for maintaining and improving the sanitary sewer system for the next 20 years. Many utilities also analyze the needs of their system at ultimate capacity or build-out. Each of these plans must meet state, county and local requirements. The Plan must comply with requirements of the Department of Ecology, as set forth in the Washington Administrative Code (WAC) 173-240 and the Revised Code of Washington (RCW) 90.48.110.

The Plan is “required of any governmental agency before providing sewer service” WAC 173-240-050. Any governmental agency includes but is not limited to cities, towns, counties and special purpose districts. All Plans must be submitted to and approved by the Department of Ecology as outlined in WAC 173-240-050. Further local government jurisdictions, such as counties, generally have additional planning requirements. Sewer Districts have additional requirements. Districts must also submit to and have approval from the legislative authority of every county and city within whose boundaries all or a portion of the utility lies. Further the Plan “shall not provide for the extension or location of facilities that are inconsistent with the requirements of RCW 36.70A.110.” In essence, districts are not allowed to plan for or provide sewer services outside the urban growth area with extraordinarily limited exceptions. It is the responsibility of the approval agencies to review the Plan and ensure compliance of these planning requirements and limitations.

The Plan as outlined in WAC 17-240-050 and RCW 57.16.010 shall include the following information:

- The purpose and need for the proposed plan.
- A discussion of who will own, operate, and maintain the systems.
- The existing and proposed services boundaries.
- Layout map with boundaries; existing and proposed sewers, pump stations, force mains; topography and elevations; streams, lakes and other bodies of water; and water systems.
- The population trend as indicated by available records, and estimated future populations for the stated design period.
- Any existing domestic or industrial wastewater facilities within twenty miles of the general plan area and within the same topographical drainage basin containing the general plan area.
- A discussion of any infiltration and inflow problems and a discussion of actions that will alleviate these problems in the future.

- A statement regarding provision for treatment and discussion of the adequacy of the treatment.
- List of all establishments producing industrial wastewater, the quantity of wastewater and periods of production, and the character of the industrial wastewater insofar as it may affect the sewer system or treatment plant. Consideration must be given to future industrial expansion.
- Discussion of the location of all existing and public wells or other sources of water supply, and destruction structures as they are related to both existing and proposed domestic wastewater treatment facilities.
- Discussion of the various alternatives evaluated, and a determination of alternative chosen, if applicable.
- A discussion, including a table, that shows the cost per service in terms of both debt service and operation and maintenance costs, of all facilities (existing and proposed) during the planning period.
- A statement regarding compliance with any adopted water quality management plan under the Federal Water Pollution Control Act as amended.
- A statement regarding compliance with the State Environmental Policy Act and the National Environmental Policy Act, if applicable.

The local government may require additional information. In King County, Title 13.24.010 of the King County Code, requires additional discussion regarding:

- Existing and planned flows, both average and peak;
- Existing and planned flows of any basin discharging into King County's sewage conveyance and treatment system;
- Amounts of inflow and infiltration to the system, comparison of those amounts with King County's one-thousand-one-hundred-gallons-per-acre-per-day-standard, and steps being taken to reduce the inflow and infiltration; and
- Areas of concern with respect to corrosion and odor control and steps being taken to reduce their occurrence.

Each of these requirements generally allows the jurisdiction to document the condition of the existing systems, determine how much growth is coming, and outline methods to meet existing and future needs. The alternatives may include a new treatment plant, rehabilitation or upsizing of old pipes, or expansion to new developments. Most of these alternatives cause the need to look at existing sewer rates and connection charges. Each of these elements is outlined in varying detail within each sewer Plan.

## Background – Sanitary Sewer System 101

The purpose of a sanitary sewer system is to convey wastewater from its source to a point of treatment. The preferred method for conveying wastewater is a gravity sewer system. A gravity sewer system is made up of collector sewers, which as their name implies, collects the wastewater from individual basins, carries the wastewater to interceptor sewers, and onto the point of treatment.

Another major sanitary sewer system component is a sewage pump station. A pump or lift station is needed when the sanitary sewer system must overcome topographic restrictions within a basin that make it impossible, or financially unfeasible, to construct gravity sewers. Pump or lift stations can be temporary, used until a gravity sewer system can intercept it, and then be abandoned once gravity service is extended.

The final stage of the sewer system includes treatment and discharge. There are various types of treatment within the four county region. Generally the sewer treatment plants are secondary treatment plants. However, treatment plants in a number of communities are being upgraded and tertiary treatment is being considered. Tertiary treatment provides a higher quality of effluent discharge as compared to secondary treatment.

It is important to note that many urbanized areas still have properties served by on-site septic systems. There are many factors for the continued use of septic systems including; soil properties and characteristics, age and type of system, the size of the property and structure being served, and cost of conversion from septic to sewer. These all contribute to the on-going use of septic systems. The use of septic systems typically do not allow for urban levels of density.

## Planning Considerations

Each jurisdiction, whether a city, town, county or special purpose district, must define a sewer service area. Generally, this is an area where the jurisdiction is already providing service and seeks to extend sanitary sewer infrastructure to serve homes, business, local governments, and schools. The sewer service area determination also takes into consideration; adjacent sewer service providers, topographical limitations, and proximity of sewer lines that make it practical for the jurisdiction to serve. Jurisdictions also consider cost-effective ways to provide service to these areas.

There are many unincorporated urban areas in the four-county region. Some of these areas are served by on-site septics however there is also sewer service in the more dense urban unincorporated areas. The sewer service is provided by special purpose districts, cities, towns or counties. When a city annexes unincorporated area or is newly incorporated, the city coordinates with the local sewer service provider if it someone other than itself. In some instances, the local sewer service provision is assumed by the city. However, since the sewer service is optimized when following topographic boundaries and many local sewer service providers extend beyond the annexation or incorporation areas, the provision of sewer service has not changed following annexation or incorporation.

Sizing of the sanitary sewer mains and timing for sewer capital improvement are generally based upon zoning data, future growth projections from the Puget Sound Regional Council, and historic sewer use patterns for established sewer service areas. The zoning information comes from the local planning jurisdiction.

Soil properties may impact the design and location of sewer facilities. A detailed soil testing is often performed early in the design of proposed facilities to identify design parameters and to minimize construction costs.

Topography of an area is one of the principal factors in the design of sewage facilities. Every effort should be made to utilize the natural drainage basins in the design to take maximum advantage of gravity flow and minimize the need for constructing sewer lift stations. Typically, when the urban growth area does not conform to natural drainage basins, it may be necessary for a facility to pass partially through the rural area. Facilities passing through the rural area are not allowed to provide direct service to rural property owners unless permitted by local regulations.

It is noted by many sewer utilities that not all development within a sewer service area are connected to a sewer system. Septic systems exist in many areas. Some utilities anticipate that all septic systems will be converted to a sewer system within the planning horizon, while others consider a significant portion but not 100 percent.

Many considerations are taken into account when planning for ultimate sewer service capacity. Each jurisdiction considers;

- Adjacent sewer service providers,
- Cost-effectiveness,
- Zoning,
- Existing soil conditions,
- Topographical limitations, and
- Septic conversions.

# Sewerage System Analysis

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The purpose of a sanitary sewer system is to convey wastewater from its source to a point of treatment. The preferred method for conveying wastewater is a gravity sewer system. A gravity sewer system is made up of collector sewers, which as their name implies, collect the wastewater from individual basins. The basin collector sewer carries the wastewater to interceptor sewers and onto the point of treatment.

Another major sanitary sewer system component is a sewage pump or lift station. A pump or lift station is needed when the sanitary sewer system must overcome topographic restrictions within a basin that make it impossible, or financially unfeasible, to construct gravity sewers. Pump or lift stations can be temporary, used until a gravity sewer system can intercept it, and then be abandoned once gravity service is extended.

The technical criteria utilized by sewer utilities for the design and construction of sanitary sewer infrastructure are based on the Department of Ecology publication, "Criteria for Sewage Works Design" and WSDOT/APWA Standard Specifications. These standards are, in general, used throughout the state and have been modified and supplemented by most jurisdictions with standards to suit the specific requirements and preferences of each utility.

Many of the sewers extensions are built by developers for the sewer utilities. Therefore, allowing growth to pay for growth.

## Capital Facility Planning

Sewer utilities outline improvements necessary to meet future sewer system needs during their comprehensive sewer planning. The improvements are based on the evaluation of existing system facilities, reports from operations staff, and the analysis done in preparing the Plan. Recommended improvements generally are identified through a six-year period for a capital facility plan and to the end of the planning horizon. This planning horizon looks out 20 years and in many cases 50 years. Although recommended improvements are identified through the end of the planning period, it should be noted that the specific needs of the utility are evaluated on an ongoing basis. Growth rates and land use patterns likely vary from neighborhood to neighborhood.

Significant thought is given to the analysis of improvements in order to select the most cost-effective plan of actions to meet future sewer needs. However, in most instances, the proposed sewer lines are development driven.

The sizes of the new sewer facilities are generally derived from the estimated ultimate peak flow of the tributary area within each basin served. The Plans also predict the location of the facilities based on possible future sewage flow paths. Actual development may cause both the size and location of recommended facilities to be modified. It is also difficult to predict the timing of development for specific areas over the planning period.

Land that is in use at substantially less than allowable density, in other words, parcels with enough vacant space to subdivide into additional lots, are more likely to develop. Easy access to existing facilities will tend to promote this activity in the more near term future. A major consideration regarding the subject of development rate is the current state policy of limiting the growth of the sewer systems to the urban growth area.

An integral part of the comprehensive planning process is a thorough hydraulic analysis of the sewage system facilities. The purpose of the hydraulic is to evaluate the ability of the existing system to effectively transportation wastewater through the local sewer utility to adjacent jurisdictions' sewer systems. The results of this analysis are then used to identify deficiencies. The analysis generally includes current conditions as well as conditions anticipated in the planning period and for ultimate development. The hydraulic analysis is used to identify the projects included in a Capital Facility Plan.

The Capital Facilities Plan includes components that respond to predicted growth within the sewer service area; as well as components that focus on improving service to existing customers in the system. The improvements for existing system customers may include replacement of existing infrastructure that has service its useful life or has become problematic for the system. Projects may also include enhancements to the existing sewer system to increase efficiency and/or useful life of the facility. Many expansion projects are viewed as necessary to serve future growth. Some of these projects are designated to be funded largely or entirely by developers. Capacity problems within the existing system created by future development may be funded by future developers. The developer in this scenario would be required to create the downstream capacity for the proposed future growth.

It should be noted that the timing of the projects may change during the planning period. There is a need for flexibility in order to coordinate a joint roadway or other utility project. Although specific projects may be implemented sooner or be delayed, based on current priorities, each jurisdiction invests in capital improvements at the recommended level throughout the planning period in order to maintain the utilities ability to meet customer needs.

## Barriers to Sewer Service Delivery

Sewer utility engineers, planners and administrators take into consideration many factors that may influence the ability to provide sewer service. Each keeps in mind the need to plan for maximum build-out within the sewer service area for which they are planning. This philosophy is reinforced by the Washington State Department of Ecology

policies that allow for a ban on sewer connections if a local or regional sewer utility is nearing the capacity of its system.

There are a few recognized barriers to service delivery:

- Capacity,
- Water quality, and
- Cost.

In the four-county area there is evidence of each of these barriers.

## Capacity

As utilities prepare comprehensive sewer and capital facilities plans, each are required to assess deficiencies of the system. However, there can be short term, temporary localized capacity issues when new demand is placed on the system that was not previously anticipated.

There have been a few occasions when the urban growth area has been modified to increase the amount of urban area. This “new” urban area is then eligible to receive sewer service when it previously was not likely included in a sewer comprehensive plan.

School Districts provide service to both the urban and rural areas. There are many instances in which schools have been located within the rural area. Sewer service can be allowed to schools when they are on the rural side of the urban growth area. Each of these circumstances can have a direct impact on sewer system capacity.

There are also circumstances when sewers must be extended to address health, safety or environmental relief. This has been, in some cases, the failure of an onsite septic system without the ability of repair and abandonment of the structure being served.

There are also situations when large areas within the urban area are rezoned or a significant employer leaves the area and property changes use. This can have a localized impact on capacity in the sewer system capacity.

In any of these cases, the flow may increase, which may cause facilities to increase slightly in size to accommodate the new flow or push forward a capital project sooner than planned. Most sewer comprehensive plans have enough flexibility built into the capital facilities plan and the system to accommodate these short term capacity needs.

One significant project to accommodate capacity in the four-county region is the King County Brightwater Treatment Plant. According to the King County Regional Wastewater Services Plan, the Brightwater Project will be constructed in south Snohomish County to accommodate future wastewater needs in King County’s northern sewer service area. The Plant will have an initial capacity of 36 mgd by approximately 2010, with an additional 18 mgd increase by 2040. The Brightwater Plant will have a marine outfall off Point Wells into the Puget Sound. This Plant will increase the treatment capacity in the King County system with consists of two secondary treatment

plants, South and West Point. King County's wastewater service area includes portions of King, Pierce, and Snohomish Counties. The County's wastewater service area is limited to the urban growth areas as defined by the Growth Management Act and agreements with local sewer agencies.

## Water Quality

The Washington State Department of Ecology is the regulatory agency charged to prevent water pollution and protect water quality. In the case of wastewater treatment and discharge, making sure that the wastewater is adequately treated is key to not polluting water bodies or ground water. In the past ten years, approximately 30 communities statewide have been required to ban sewer connections for a period of time.

The increasing density within the urban area has placed a strain on the onsite septic systems. There has been a number of reported failures that contributed to the water quality problems within local water bodies and ground water. The City of Carnation is an urban area entirely served by onsite septic systems. The Seattle King County Health Department declared the City a health hazard. A description of the City is provided later in this document.

The sewer industry has undergone revisions to water quality and environmental standards. In many cases, communities served by sewer have been able to comply with these standards. In addition, sewer treatment technology is improving and able to produce a higher quality effluent. It is unclear the direction of future regulations or treatment technology, therefore it is up to each utility to respond to the changing industry standards.

## Cost

There are two costs to take into consideration, costs for facility extension for the utility, citizens, businesses or schools and costs associated with operating and maintaining the sewer system.

An area may be designated within a utility service area; but may not currently have any sewer pipe in the vicinity to provide direct sewer service. If a property owner is interested in obtaining sewer service, they most likely will pay the cost to bring the sewer facilities to the location of such property. This could be a significant expense depending on the amount of facilities needed to provide sewer service. The other option for the property owner is to wait until sewer service is extended to the other unsewered properties between this property and the one that has existing sewer service.

There are many areas in the four-county region still served by onsite septic systems. The conversion to sewers is very expensive. In some areas, conversion will cost around \$15,000 to \$20,000 in addition to a monthly sewer rate. Some of these property owners have single-family homes on less than a quarter acre lot and are in an area zoned for single family. This makes it difficult for a single family residence to offset the

cost of hooking up to the sewer system without additional revenue from the sale of the excess property or additional units that might be served.

As mentioned previously, each utility considers topography in the planning process. If the basin boundary or urban growth boundary is adjusted, it is important consider the long term impacts of how those properties will be served with sewer. If the new urban area is not able to take advantage of gravity flow or able to connect to existing facilities close by, then it is likely there will be higher utility operation and maintenance costs associated with serving those properties.

The following are two examples of barriers for sewer service within the four-county region:

■ **City of Tacoma, Pierce (Capacity – Cost Barrier)**

In northern downtown, development is occurring according to plans prepared for zoning and land use. However, there is a short term barrier with the capacity of some of the sewer pipes. In order for the growth to proceed these pipes must have increased capacity to collect and convey the sewer for the new development. These costs will be born by the new development.

■ **City of Carnation, King County (Septic Failure – Cost barrier)**

Currently there is no public wastewater collection and treatment system for the City of Carnation. It is one of the last two cities in King County to be sewerred. At present, individual onsite septic systems are the only option for wastewater management and treatment. Many of these systems, especially within the downtown commercial core and older sections of town are not up to current Seattle-King County Department of Health Standards. In 1999, the City Council created a Sewer Advisory Committee to focus efforts on addressing the future wastewater management needs for 2,000 or so people and businesses in the City of Carnation and its urban growth area.

The City of Carnation partnered with King County to provide collection and treatment. The City will design, construct and maintain the sewer collection system. King County will design, construct, operate and maintain the wastewater treatment facility, which includes a treatment plant and discharge point. The cost to each citizen will be approximately \$155 per month. This is a very significant burden to the citizens of Carnation. This system will be operational in 2007.

■ **Town of Wilkeson, Pierce County (Water Quality – Compliance order)**

In rural Pierce County in the shadow of Mount Rainier, in 1996 the Town of Wilkeson was ordered by the Washington State Department of Ecology to protect water quality. It was banned from allowing new hook-ups to its existing wastewater treatment systems. In June 2003, the Department of Ecology issued a report on the bacteria and temperature impacts on the South Prairie Creek and its tributaries. The small town of nearly 400 people were contributing both fecal coliform and heat loads to Wilkeson Creek.

The sewer systems and aging treatment plant were brought into compliance. In March of 2003, the state lifted the ban on sewer connections.

## Summary

The Growth Management Act has outlined the need for urban services. Sanitary sewer service is an urban service that provides for growth and treatment to levels that comply with water quality standards. There are a few barriers for sanitary sewer service delivery; however most of these are localized issues.

# List of Sewer Service Providers

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In the four county region, there are a number of sewer service providers. In reviewing many utility plans, comprehensive land use plans, and countywide planning policies, there is a distinct effort by the utilities to coordinate local and regional sewer service. The policies, plans and capital project demonstrate the objective to minimize conflict, increase reliability, and provide stability.

Sewer utilities have varying levels service capacity. Some utilities are full service in that they collect, convey, treat and discharge the wastewater. However, some utilities only provide collection or conveyance services and contract with other agencies for treatment and discharge services. There are some utilities that provide treatment and discharge for some of there wastewater and send other portions of there wastewater to another agency for treatment and discharge.

The following is a listing of jurisdictions by county providing sewer service:

## King County

- City of Algona
- City of Auburn
- Town of Beaux Arts
- City of Bellevue
- City of Black Diamond
- City of Bothell
- City of Burien
- Cedar River Water and Sewer District
- Coal Creek Utility District
- City of Duvall
- City of Enumclaw
- Highlands Sewer District
- City of Issaquah
- City of Kent
- City of Kirkland
- King County
- City of Lake Forest Park
- Lakehaven Utility District
- City of Mercer Island
- Midway Sewer District
- City of Milton
- Muckleshoot Indian Tribe
- City of North Bend
- Northeast Sammamish Sewer and Water District
- Northshore Utility District
- City of Pacific
- City of Redmond
- City of Renton
- Ronald Wastewater District
- Sammamish Plateau Water and Sewer District
- City of Seattle
- Skyway Water and Sewer District
- City of Snoqualmie
- Snoqualmie Pass Utility District
- Soos Creek Water and Sewer District
- Southwest Suburban Sewer District
- City of Tukwila
- Val Vue Sewer District
- Vashon Sewer District
- Woodinville Water District

### Kitsap County

- City of Bainbridge Island
- City of Bremerton
- Karcher Creek Sewer District #5
- Kitsap Sewer District #7
- Kitsap County
- City of Poulsbo
- City of Port Orchard

### Pierce County

- City of Auburn
- City of Bonney Lake
- City of Buckley
- Town of Carbonado
- Crystal Mountain Sewer District
- City of DuPont
- Town of Eatonville
- Elbe Water and Sewer District
- City of Fife
- Town of Fircrest
- Fort Lewis
- City of Gig Harbor
- Lakehaven Utility District
- McChord Air Force Base
- City of Milton
- Muckleshoot Indian Tribe
- City of Orting
- City of Pacific
- Pierce County
- City of Puyallup
- Town of Ruston
- State of Washington
- Town of South Prairie
- Town of Steilacoom
- City of Sumner
- City of Tacoma
- Taylor Beach Bay club
- Town of Wilkeson
- Wollochet Harbor Club

### Snohomish County

- Alderwood Water and Wastewater District
- City of Arlington
- City of Bothell
- City of Brier
- Cross Valley Water District
- City of Edmonds
- City of Everett
- City of Granite Falls
- Jordan Village Sewer District
- King County
- Lake Stevens Sewer District
- City of Lake Stevens
- City of Lynnwood
- City of Marysville
- City of Monroe
- City of Mountlake Terrace
- City of Mukilteo
- Olympic View Water and Sewer District
- Olympus Terrace Sewer District
- Silver Lake Water District
- City of Snohomish
- City of Stanwood
- City of Sultan
- Tulalip Tribe

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**VISION 2020 + 20 Update  
Issue Paper on Environmental Justice  
August 18, 2005**

**ENVIRONMENTAL JUSTICE AND THE VISION 2020 UPDATE**

**Growth Management Policy Board  
Puget Sound Regional Council**

**POLICY BOARD ADOPTED *ACTION TO PROCEED* – AUGUST 25, 2005**

## **ENVIRONMENTAL JUSTICE AND THE VISION 2020 UPDATE**

The Puget Sound Regional Council has made a strong commitment to integrating Title VI into its ongoing work program. As part of this commitment, specific Environmental Justice outreach efforts and research programs are being designed to support the update of VISION 2020. This outreach and research will help assure broad participation, and that the region's vision and revised policies take into account issues pertinent to EJ communities. Enhanced outreach will also help to establish a better foundation for ensuring the active participation of special population groups into the regional comprehensive planning process over the long term.

Since the mid-1990s, a renewed emphasis on environmental justice has become an integral part of the planning process for urban regions in the United States. The concept of "environmental justice", derived from Title VI of the Civil Rights Act of 1964 and other civil rights statutes, was reemphasized as a national policy goal by presidential Executive Order 12898, issued in 1994. The Executive Order directs "each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

The Regional Council has developed a three-step environmental justice game plan for the VISION 2020+20 project:

- Step 1 focuses on documenting and communicating the Regional Council's responsibility for environmental justice, along with the findings of analysis and outreach that the Regional Council has conducted to date.
- Step 2 defines the scope of environmental justice analysis that will be conducted as part of the VISION 2020+20 environmental impact statement.
- Step 3 will consist of continued and enhanced direct outreach throughout the VISION 2020+20 project.

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*Additional documentation on the Puget Sound Regional Council's environmental justice program is available at:*

**[www.psrc.org/about/titlevi/ej.htm](http://www.psrc.org/about/titlevi/ej.htm)**

VISION 2020+20 Update  
Issue Paper on Regional Demographics and Growth Trends

Puget Sound Regional Council

August 2005



# Regional Demographics & Growth Trends

## Historical and Forecast Population and Employment

### Key Observations:

- **Population forecast.** The central Puget Sound grew by over 1.3 million people between 1970 and 2000. The region is expected to continue to experience healthy growth, with estimates projecting an increase of nearly 1.6 million more residents by 2040.
- **County population.** King County is the largest of the region's four counties, and is home to more than 1 out of every 2 of the region's residents. However, over the last thirty years, the region's other three counties – Kitsap, Pierce and Snohomish – have shown significantly faster rates of growth, a trend that is expected to continue into the future.
- **Migration.** From 1970 to 2000, net migration was the primary source of population growth in the region, accounting for 58 percent of the increase; natural change (births minus deaths) accounted for the other 42 percent. Migration trends are largely driven by the economy and the strength of job opportunities in the central Puget Sound region relative to areas outside the region.
- **Employment forecast.** The region exhibited tremendous economic growth over the last thirty years, with total employment more than doubling between 1970 and 2000 with the addition of 1.1 million net new jobs. The regional economy is expected to expand at a healthy, albeit more moderate, pace over the next thirty years, with estimates projecting 1.1 million more jobs by 2040.
- **Economic diversification.** The region's economy is more diversified today and less vulnerable to cyclical volatility in the aerospace and natural resources industries. The greater economic stability is largely due to growth and diversification in the services sectors.
- **The service economy.** The major driver of economic growth in the region over the last thirty years has been the finance, insurance, real estate and services (FIRES) sector, which contributed about 1 out of every 2 jobs created between 1970 and 2000. The FIRES sector grew from 20 percent of total employment in 1970, to 36 percent in 2000, and is forecast to represent 42 percent of total employment by 2030.
- **County employment.** King County has historically been and continues to be home to the vast majority – roughly 2 in every 3 – of the region's jobs, and is expected to remain the primary contributor to job growth in the region. Kitsap, Pierce and Snohomish counties are forecast to gain greater shares of total regional job growth over the next thirty years.

## Regional Demographics

### Key Observations:

- **Average household size.** Consistent with national trends, the region's average household size declined significantly during the 1970s and 1980s, then stabilized during the 1990s at about 2.5 persons per household. The regional average household size will likely continue to decline slightly, with downward pressure coming from an expanded senior population, offset by some upward pressure from growth in Latino/Hispanic and immigrant population groups with larger than average family sizes.

- **Race/ethnicity.** Our region has steadily become more racially and ethnically diverse over the past decade. Minorities now comprise 24 percent of the region’s total population, compared to just 15 percent in 1990.
- **Age.** The region’s overall population is younger than either the state or nation. The region has a significantly higher percentage of its population within the younger workforce age cohort of 25 to 44, and a smaller share of its population at or above retirement age. Consistent with national trends, the region’s senior population is expected to swell as the baby boomer generation ages.
- **Education.** The region has a particularly well-educated population, with nearly 1 in 3 persons having attained a Bachelor’s or higher degree, compared to 1 in 4 persons for the nation, and 9 in 10 persons having graduated high school, compared to 8 in 10 for the nation.
- **The “creative class.”** During the 1990s, our region succeeded in attracting a net gain of young, well-educated workers into our workforce. The presence of these young, highly-skilled workers, coined the “creative class,” was found to have played a key role in the development of new technologies and industries, the creation of startup firms, and associated job growth during the technology boom of the late 90s.
- **Income.** Median household income is significantly higher in our region, compared to the state and nation, particularly in King and Snohomish counties.
- **Poverty.** Poverty in the region has remained relatively stable since 1989 and, compared to the state and the nation, the region has a lower percentage of persons living in poverty. However, poverty levels are disproportionately concentrated among minority households and female-headed households with children.

## Recent Growth Trends

### Key Observations:

- **The economic boom.** The region, along with the nation, experienced an economic boom from 1995 to 2000/01. Economic growth during this period was uniquely characterized by the rise of the “New Economy” and high technology industries, with Seattle and East King County emerging as major centers of such activity. Job growth spurred strong population growth across the region.
  - County patterns of employment growth looked very different from population growth. Between 1995 and 2000, a significant share of the job growth, 80 percent, went to King County, while the majority of the population growth, 56 percent, went to Kitsap, Pierce and especially Snohomish counties.
- **Urban growth trends.** The rapid growth of the late 1990s posed the first major test of the region’s urban growth boundaries and attendant growth policies established under the Washington Growth Management Act of 1990.
  - Between 1995 and 2000, 87 percent of population growth and 96 percent of covered employment growth occurred within the region’s designated urban growth areas.
  - In 2000, 77 percent of the region’s urban population lived in cities and towns, compared to 67 percent in 1990, largely as a result of annexations and incorporations.
- **The economic downturn.** A series of economic shocks during 2000 and 2001 had a particularly severe combined impact on the central Puget Sound and many of its key industries. As a result, the region suffered from a deeper and longer recession than the nation at large.
  - Between March 2001 and 2003, regional covered employment declined by 4.5 percent, registering a loss of over 75,000 jobs.

- During 2002-03, population growth decelerated to the lowest level seen in twenty years, 0.8 percent or just 25,500 persons.
- **Economic recovery.** The region has since begun its economic recovery, with Kitsap, Pierce and Snohomish counties having regained and surpassed pre-recession job levels. King County, hit hardest with the recession, continues to struggle and is not expected to make full jobs recovery until 2006. As such, the region will likely see modest increases in population growth rates in the near future, with faster growth occurring outside of King County.

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## I. Introduction

The purpose of this paper is to draw together and summarize key population, employment, and demographic data and analysis from a range of sources, including the *Puget Sound Milestones: Population, Employment and Housing, 1995-2000* report (2002), *2004 Comprehensive Economic Development Strategy for the Central Puget Sound Region* (2004), and *Central Puget Sound Regional Economic Profile* (2003). The data have been updated where possible, and the latest trends are discussed.

The paper is organized into the following areas: historical and forecast population and employment, regional demographics, and recent growth trends. The data and analysis presented here have helped to inform the Regional Council's efforts to update VISION 2020 – the region's growth management, transportation, and economic strategy – and serves to highlight issues that may need to be addressed in the process of updating the multicounty planning policies for urban growth, the economy, housing, social justice, and other areas.

## II. Historical and Forecast Population and Employment

**Population.** The central Puget Sound experienced substantial growth over the last three decades, increasing by over 1.3 million persons between 1970 and 2000. During this period, the region grew at an average annual rate of 1.8 percent, compared to 1.1 percent for the nation overall. The region is forecast to grow by close to another 1.3 million persons over the next thirty years to reach 4.5 million by 2030.

King County, the largest of the region's four counties, is home to more than half the residents of the central Puget Sound area. Over the last thirty years, the largest share of the region's growth went to King County (43 percent), however, the region's other three counties showed significantly faster rates of growth. Since 1970, Kitsap County grew by 135 percent, Pierce County by 80 percent, and Snohomish County by 143 percent, compared to 54 percent for King County. Forecasts project that over half of the expected population growth received by the region over the next thirty years will go to Kitsap, Pierce and Snohomish counties.

**Understanding and using forecast data.** To support its travel demand modeling work, the Regional Council has developed a series of models that produce demographic and economic forecasts for the region. The STEP long-range regional econometric forecast model uses exogenous forecasts of the U.S. economy to predict how the central Puget Sound economy will respond in terms of output, job growth, income gain, and population increases. The STEP model and regional forecasts are updated every three to four years to incorporate new data and long-range national assumptions. The historical data and regional forecasts presented in this paper are derived from the 2002 STEP model.

County-level forecast data are the product of the Regional Council's Demographic and Residential Allocation Model (DRAM) and Employment Allocation Model (EMPAL), two forecast allocation models that take the STEP regional forecasts and disaggregate them to a sub-regional zone structure. The EMPAL model excludes construction and resource employment, due to the difficulty of accurately projecting location for these types of jobs. When using the county-level forecasts, therefore, it is important to bear in mind that the EMPAL-derived regional job totals will not match the STEP model's regional job totals.

The Regional Council's current forecasts through 2010 take the recent economic downturn and recession into account, projecting a decline followed by a recovery to normal economic conditions. Beyond this point, the regional forecasts should be regarded as a projection of how the region would fare under continued normal conditions given the long-range U.S. economic forecast and the region's historical behavior relative to national trends.

**Table 1. Estimated and Forecast Population of the Central Puget Sound**

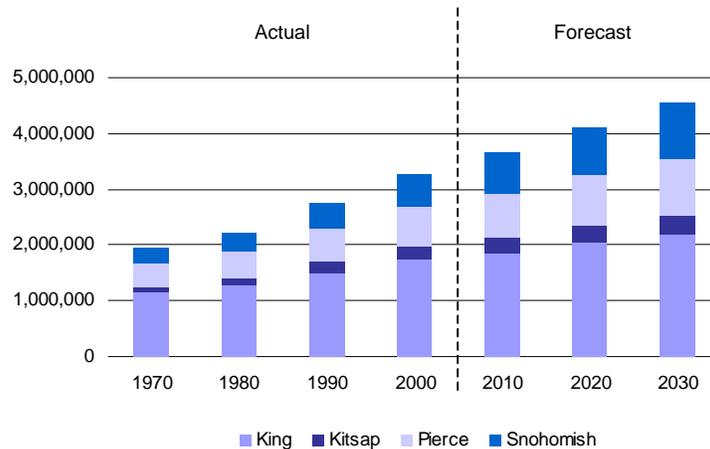
	Actual Population				Forecast Population		
	1970	1980	1990	2000	2010	2020	2030
King	1,159,400	1,269,900	1,507,300	1,737,000	1,869,500	2,039,500	2,202,400
Kitsap	101,700	147,200	189,700	232,000	262,500	301,500	339,900
Pierce	412,300	485,700	586,200	700,800	806,100	914,100	1,007,600
Snohomish	265,200	337,700	465,600	606,000	733,200	860,200	985,200
Region	1,938,700	2,240,400	2,748,900	3,275,800	3,671,200	4,115,300	4,535,100
WA State	3,413,300	4,132,400	4,866,700	5,894,100	6,639,000	7,507,000	8,304,700
U.S.	203,302,000	226,542,200	248,709,900	281,421,900	308,936,000	335,805,000	363,584,000

	Actual Change				Forecast Change		
	1970-80	1980-90	1990-00	2000-10	2010-20	2020-30	2000-30
King	110,500	237,400	229,700	132,400	170,000	162,900	465,300
Kitsap	45,400	42,600	42,200	30,500	39,000	38,400	107,900
Pierce	73,300	100,500	114,600	105,300	108,000	93,500	306,800
Snohomish	72,500	127,900	140,400	127,100	127,000	125,000	379,200
Region	301,800	508,400	527,000	395,300	444,100	419,800	1,259,200
WA State	719,100	734,300	1,027,500	744,900	867,900	797,800	2,410,600
U.S.	23,240,200	22,167,700	32,712,000	27,514,100	26,869,000	27,779,000	82,162,100

	Average Annual Percent Change						
	1970-80	1980-90	1990-00	2000-10	2010-20	2020-30	2000-30
King	0.9	1.7	1.4	0.7	0.9	0.8	0.8
Kitsap	3.8	2.6	2.0	1.2	1.4	1.2	1.3
Pierce	1.7	1.9	1.8	1.4	1.3	1.0	1.2
Snohomish	2.4	3.3	2.7	1.9	1.6	1.4	1.6
Region	1.5	2.1	1.8	1.1	1.1	1.0	1.1
WA State	1.9	1.6	1.9	1.2	1.2	1.0	1.1
U.S.	1.1	0.9	1.2	0.9	0.8	0.8	0.9

Source: U.S. Census Bureau, OFM, PSRC

**Figure 1. Decennial Population of the Central Puget Sound Counties**



**Migration.** Net positive migration has been the primary source of population increase in recent decades, contributing to 58 percent of the region’s growth from 1970 to 2000. Migration is what drives population change from year to year. While growth from natural increase (or births minus deaths) remains fairly stable, net migration is far more dynamic, rising and falling in response to the strength of job opportunities and other attractions in the central Puget Sound relative to areas outside the region.

**Table 2. Regional Population Change by Component**

**Population Change by Component**

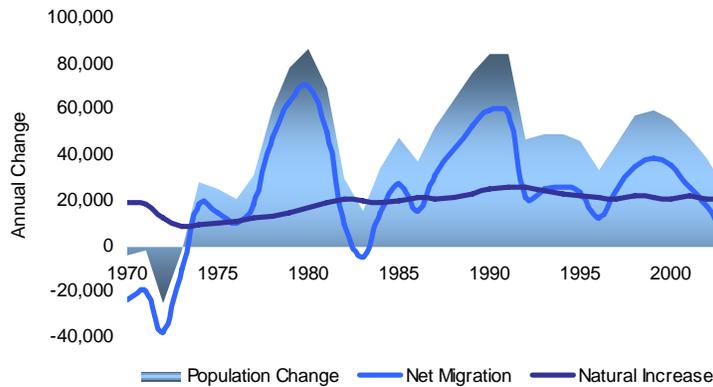
	1970-80	1980-90	1990-00	1970-00
Total population change	301,800	508,400	527,000	1,337,200
Net migration	174,700	297,800	299,500	771,900
Natural increase	127,100	210,600	227,500	565,200

**Population Change by Component Share**

	1970-80	1980-90	1990-00	1970-00
Net migration	57.9%	58.6%	56.8%	57.7%
Natural increase	42.1%	41.4%	43.2%	42.3%

Source: U.S. Census Bureau, OFM, PSRC

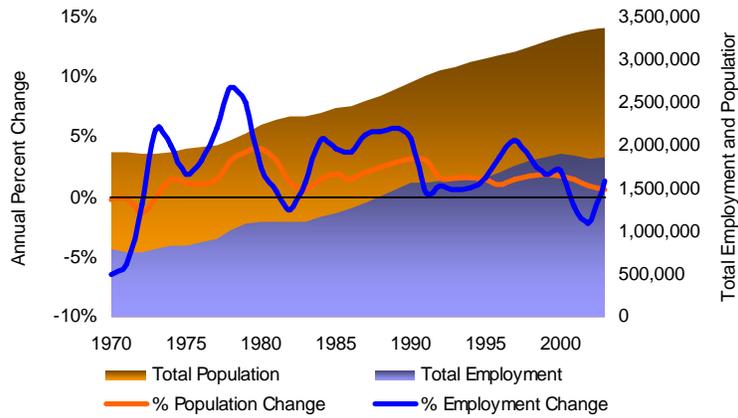
**Figure 2. Regional Population Trends by Component**



**Population growth and the economy.** Population trends are largely driven by cyclical upturns and downturns in the economy, with periods of economic expansion bringing about surges in growth. The central Puget Sound witnessed two such episodes during the last thirty years, once in the late 70s/early 80s during which growth averaged 3.5 percent per year, and again in the mid-late 80s/early 90s when growth averaged 2.8 percent per year.

Population trends during the remainder of the 1990s, in contrast, were characterized by steady increases rather than major growth spurts. The average annual growth rate for the decade was 1.8 percent, well below the boom rates described earlier, but notably higher than the national rate of 1.2 percent per year.

**Figure 3. Regional Population and Employment Trends**



**Employment.** From 1970 to 2000, the central Puget Sound region grew by an estimated 1.1 million jobs, at an average annual rate of 2.9 percent. Total employment more than doubled during this period, rising from just over 800,000 jobs in 1970 to 1.9 million by 2000. Beyond 2000, regional employment is expected to continue to exhibit healthy growth trends. Forecasts project that the region will add more than 800,000 jobs over the next thirty years, at an average annual rate of 1.2 percent.

Employment growth during the 1990s, particularly the second half of the decade, was quite vibrant. Although the economy grew at a distinctly more moderate pace, 2.0 percent per year on average, than it did during the 1970s and 1980s, it was not as subject to the major cyclical instabilities that characterized those earlier decades.

**Table 3. Estimated and Forecast Total Employment for the Central Puget Sound by Sector**

	Actual Total Employment				Forecast Total Employment		
	1970	1980	1990	2000	2010	2020	2030
Const/Resource	55,300	78,400	115,200	139,200	160,300	189,800	211,800
FIRES	163,600	284,600	481,900	691,600	855,600	1,004,400	1,144,600
Manufacturing	161,600	216,800	263,500	237,100	229,200	232,600	235,500
Retail	120,500	184,700	260,300	319,900	352,700	404,400	457,100
WTCU	90,400	131,100	175,200	214,800	234,000	278,400	318,000
Govt/Educ	210,200	217,600	265,600	303,000	338,900	358,700	380,900
<b>Total</b>	<b>801,600</b>	<b>1,113,100</b>	<b>1,561,700</b>	<b>1,905,500</b>	<b>2,170,700</b>	<b>2,468,300</b>	<b>2,748,000</b>

	Actual Change				Forecast Change		
	1970-80	1980-90	1990-00	2000-10	2010-20	2020-30	2000-30
Const/Resource	23,100	36,800	24,000	21,100	29,600	22,000	72,600
FIRES	121,100	197,200	209,800	164,000	148,800	140,200	453,000
Manufacturing	55,200	46,700	-26,500	-7,800	3,400	2,900	-1,600
Retail	64,200	75,600	59,600	32,800	51,700	52,700	137,200
WTCU	40,700	44,200	39,500	19,200	44,400	39,700	103,300
Govt/Educ	7,300	48,000	37,400	35,900	19,800	22,200	77,900
<b>Total</b>	<b>311,600</b>	<b>448,600</b>	<b>343,900</b>	<b>265,200</b>	<b>297,600</b>	<b>279,700</b>	<b>842,500</b>

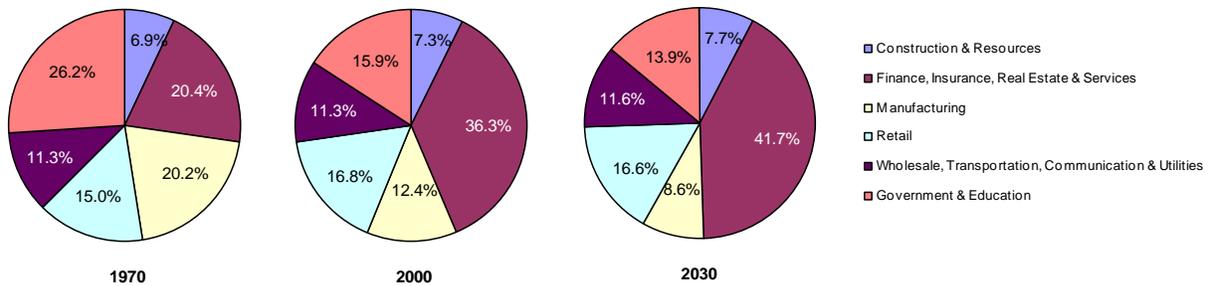
	Average Annual Percent Change						
	1970-80	1980-90	1990-00	2000-10	2010-20	2020-30	2000-30
Const/Resource	3.5	3.9	1.9	1.4	1.7	1.1	1.4
FIRES	5.7	5.4	3.7	2.2	1.6	1.3	1.7
Manufacturing	3.0	2.0	-1.1	-0.3	0.1	0.1	0.0
Retail	4.4	3.5	2.1	1.0	1.4	1.2	1.2
WTCU	3.8	2.9	2.1	0.9	1.8	1.3	1.3
Govt/Educ	0.3	2.0	1.3	1.1	0.6	0.6	0.8
<b>Total</b>	<b>3.3</b>	<b>3.4</b>	<b>2.0</b>	<b>1.3</b>	<b>1.3</b>	<b>1.1</b>	<b>1.2</b>

Source: BEA, PSRC

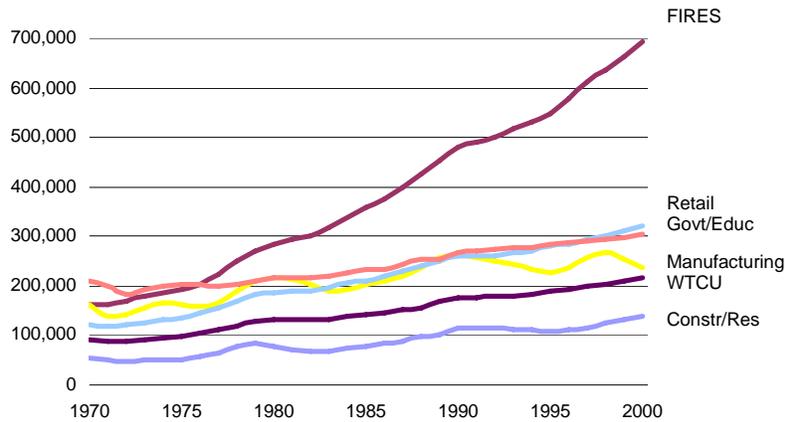
**The service economy.** Consistent with trends in the national economy, the central Puget Sound made a structural shift away from its traditional manufacturing, industrial, and resource base toward a services base during the second half of the 20th century. The region historically had a heavy reliance on its manufacturing sector, most notably on the aerospace industry, which is dominated by Boeing. Past regional employment trends are characterized by dramatic fluctuations, brought on by upswings and downturns in the manufacturing sector.

While the aerospace industry continues to go through significant hiring and lay-off cycles, its impacts on the regional economy have become less severe. The growth and emergence of myriad other industries resulted in the expansion and diversification of the economy, primarily in the finance, insurance, real estate & services (FIRES) sector, lending greater overall stability to the region. Industry diversity is key to maintaining the region’s economic vitality and competitiveness over time.

**Figure 4. Regional Sector Employment**



**Figure 5. Regional Sector Employment Trends**



**Manufacturing.** Job growth in the manufacturing sector over the last three decades slowed considerably, from an average annual rate of 3.0 percent during the 1970s, to 2.0 percent during the 1980s, and even contracted during the 1990s. Manufacturing as a share of the region’s total employment declined from 20 percent in 1970, to 12 percent in 2000, and is forecast to decrease to 9 percent by 2030.

The manufacturing sector and aerospace industry remain a valuable component of the regional economy, but they are not expected to be an area of future job growth. Employment forecasts suggest that the

current downturn in the manufacturing sector will continue through the current decade, then slowly return to present levels from 2010 to 2030.

**Non-manufacturing.** Finance, insurance, real estate & services (FIRES) was the region's most rapidly growing employment sector over the last three decades, adding more than a half million jobs to the economy, about 1 in every 2 jobs created, since 1970. FIRES encompasses a wide variety of business types from financial institutions to business services, health services, and auto repair services, to name a few. A number of "high-tech" and "dot-com" industries and businesses, which played a key role in job growth during the 1990s, fall within the FIRES sector. The FIRES sector has increasingly dominated the region's economy growing from 20 percent of total employment in 1970, to 36 percent in 2000. It is forecast to grow by another 453,000 jobs over the next thirty years to constitute 42 percent of total employment by 2030.

The region's construction & resource, retail, and wholesale, transportation, communications & utilities (WTCU) sectors each exhibited solid growth rates over the last decade, with employment increasing at an average of 1.9 percent, 2.1 percent, and 2.1 percent per year respectively. Over the next thirty years, construction & resource is forecast to add an additional 72,600 jobs, retail 137,200 jobs, and WTCU 103,300 jobs. The shares of total regional employment within each of these sectors have remained steady over the last three decades, and are expected to hold relatively constant into the future.

Government & education as a share of total regional employment has declined steadily over the last three decades, from 26 percent in 1970, to 16 percent in 2000, and is forecast to fall to 14 percent by 2030. The sector is expected to continue to grow, albeit more slowly than other sectors of the economy, adding 77,900 jobs to the region over the next thirty years. Future growth in all non-manufacturing sectors is expected to occur at a healthy, but more measured pace than during previous decades.

**The region, state, and nation.** The central Puget Sound has outperformed U.S. job growth rates during each decade over the last thirty years, most notably during the 1970s and 1980s, attesting to the region’s economic competitiveness nationwide.

**Table 4. Estimated and Forecast Total Employment for the Central Puget Sound by County**

	Actual Total Employment*				Forecast Total Employment*		
	1970	1980	1990	2000	2010	2020	2030
King	466,600	697,400	972,600	1,188,600	1,351,200	1,516,900	1,670,800
Kitsap	38,400	56,700	79,300	83,900	95,300	109,100	122,300
Pierce	163,400	175,900	224,100	259,000	302,200	343,900	384,600
Snohomish	72,500	103,400	169,400	217,300	261,900	308,700	358,200
Region	740,900	1,033,400	1,445,200	1,748,800	2,010,600	2,278,600	2,535,900
WA State	1,491,100	2,109,500	2,863,000	3,551,500	-	-	-
U.S.	91,281,600	114,231,200	139,380,900	166,758,800	-	-	-

	Actual Change				Forecast Change		
	1970-80	1980-90	1990-00	2000-10	2010-20	2020-30	2000-30
King	230,800	275,200	216,000	162,600	165,700	153,900	482,200
Kitsap	18,300	22,600	4,700	11,300	13,800	13,200	38,300
Pierce	12,500	48,200	34,900	43,200	41,600	40,800	125,600
Snohomish	30,900	65,900	47,900	44,600	46,900	49,500	140,900
Region	292,500	411,800	303,600	261,800	268,000	257,300	787,100
WA State	618,400	753,500	688,500	-	-	-	-
U.S.	22,949,600	25,149,700	27,377,900	-	-	-	-

	Average Annual Percent Change						
	1970-80	1980-90	1990-00	2000-10	2010-20	2020-30	2000-30
King	4.1	3.4	2.0	1.3	1.2	1.0	1.1
Kitsap	4.0	3.4	0.6	1.3	1.4	1.1	1.3
Pierce	0.7	2.4	1.5	1.6	1.3	1.1	1.3
Snohomish	3.6	5.1	2.5	1.9	1.7	1.5	1.7
Region	3.4	3.4	1.9	1.4	1.3	1.1	1.2
WA State	3.5	3.1	2.2	-	-	-	-
U.S.	2.3	2.0	1.8	-	-	-	-

Source: BEA, PSRC

Note: \*Excludes construction & resource jobs.

The state and region both exhibited very robust growth during the 1970s and 1980s, and grew at a healthy overall pace during the 1990s. The state grew slightly faster than the central Puget Sound over the last decade, an indication that regions elsewhere across the state fared well. Washington state employment trends tend to move in parallel with trends in our region, given that the region’s jobs constitute a significant share of the state’s total employment. Roughly half of the state’s jobs are located in the central Puget Sound, a percentage that has held constant since at least 1970.

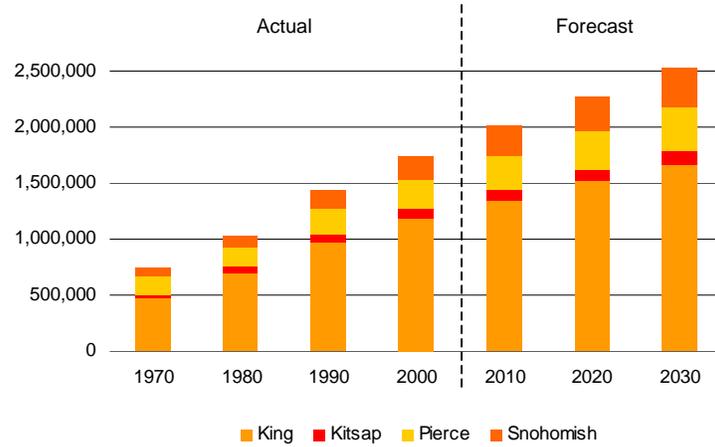
Within the region, King County has historically been and continues to be home to the vast majority, roughly 2 of every 3, of the region’s jobs. As of 2000, King County held 68 percent of the region’s jobs, Kitsap County 5 percent, Pierce County 15 percent, and Snohomish County 12 percent.

King County was responsible for producing over 7 in every 10 new jobs created over the last thirty years, and is expected to continue being the major contributor to job creation in the region. Of the 787,100 new

jobs forecast to be added to the region’s economy from 2000 to 2030, King County is expected to produce 61 percent, Kitsap County 5 percent, Pierce County 16 percent, and Snohomish County 18 percent.

Snohomish County averaged the highest overall rate of employment growth during the last three decades, a trend that is projected to continue into the future. Snohomish County is forecast to grow at an average annual rate of 1.7 percent from 2000 to 2030, compared to 1.1 for King County, and 1.3 percent for Kitsap and Pierce counties.

**Figure 6. Decennial Total Employment\* in the Central Puget Sound Counties**



\*Note: Excludes construction & resource jobs.

### III. Regional Demographics

**Declining average household size.** The average U.S. and regional household size dropped significantly during the 1970s and 1980s, primarily as more women entered the labor force and childbirth was delayed. This decline slowed during the 1990s, as female labor force participation and fertility rates stabilized. National projections forecast a continued slight decline in average household size through 2010.<sup>1</sup> The regional average household size, now at 2.49 persons per household, will likely continue to decrease slightly, with downward pressure coming from an expanded senior population, offset by some upward pressure from growth in Latino/Hispanic and immigrant populations with larger than average family sizes.

Household sizes and trends can vary considerably within the region. In 2000, household sizes in the region's cities ranged from 2.08 in Seattle to 3.13 in Covington. Between 1990 and 2000, household sizes remained relatively stable in places like Seattle, Everett and Tacoma, while they increased noticeably in south King County, Marysville and Monroe, and fell in east King County, Edmonds and Puyallup.

**Race and Hispanic/Latino origin.** Minorities have historically comprised a smaller share of the central Puget Sound's population in comparison to many other major U.S. metropolitan areas and the nation at large. However, the region's racial and ethnic diversity has increased steadily over the past decade, not only in the urban core, but throughout its suburban communities as well.

In 2000, minorities represented nearly 1 in every 4 persons living in our region, or 24 percent of the total population, compared to just 15 percent in 1990. Given its location on the Pacific Rim, the region has a sizeable and growing Asian and Pacific Islander population, 8.8 percent in 2000. The region's Hispanic/Latino population has also grown noticeably over the past decade from 3.0 percent in 1990 to 5.3 percent in 2000.

**Table 5. Population Composition by Race and Hispanic/Latino Origin**

		White	Black/ African American	American Indian/ Alaska Nat	Asian/ Pacific Islander	Other race	2 or more races	Hispanic/ Latino origin	Total minority
1990	King	84.8%	5.1%	1.1%	7.9%	1.1%	-	2.9%	16.7%
	Kitsap	90.2%	2.7%	1.7%	4.4%	1.1%	-	3.3%	11.5%
	Pierce	85.1%	7.2%	1.4%	5.0%	1.4%	-	3.5%	16.7%
	Snohomish	93.3%	1.0%	1.4%	3.5%	0.7%	-	2.3%	8.1%
	Region	86.7%	4.7%	1.3%	6.3%	1.1%	-	3.0%	14.9%
	WA State	88.5%	3.1%	1.7%	4.3%	2.4%	-	4.4%	13.3%
U.S.		80.3%	12.1%	0.8%	2.9%	3.9%	-	9.0%	24.4%
2000	King	75.7%	5.4%	0.9%	11.3%	2.6%	4.1%	5.5%	26.6%
	Kitsap	84.3%	2.9%	1.6%	5.2%	1.4%	4.6%	4.1%	17.8%
	Pierce	78.4%	7.0%	1.4%	5.9%	2.2%	5.1%	5.5%	24.0%
	Snohomish	85.6%	1.7%	1.4%	6.1%	1.9%	3.4%	4.7%	16.6%
	Region	78.7%	4.9%	1.2%	8.8%	2.3%	4.2%	5.3%	23.6%
	WA State	81.8%	3.2%	1.6%	5.9%	3.9%	3.6%	7.5%	21.1%
U.S.		75.1%	12.3%	0.9%	3.7%	5.5%	2.4%	12.5%	30.9%

Source: U.S. Census Bureau

<sup>1</sup> U.S. Census Bureau, "National Households and Families Projections: 1995 to 2010, Series 1, 2, and 3," May 1996.

**Age.** The central Puget Sound has a larger share of its population in the prime workforce age range of 25 to 64 than either the state or nation, indicating that our region and its jobs act as a competitive magnet, drawing workers from other areas of the state and the Pacific Northwest, as well as nationally and internationally.

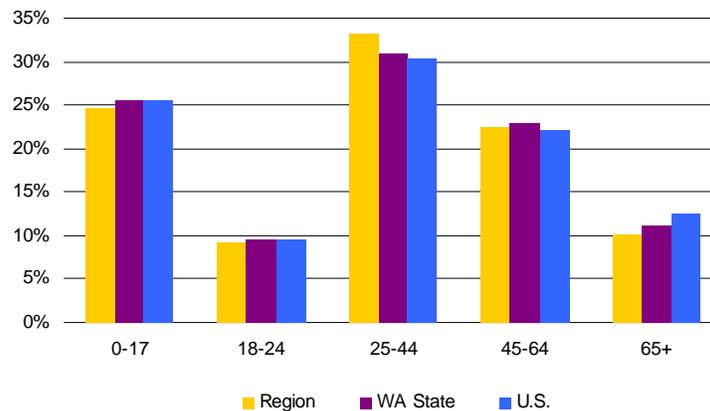
The region has a significantly higher percentage of its population within the younger 25 to 44 age cohort, 33 percent compared to 31 percent for the state and 30 percent for the nation. The region also has a smaller share of its population at or above retirement age, 10 percent compared to 11 percent for the state and 12 percent for the nation.

**Table 6. Population Composition by Age**

		Median Age	0-17	18-24	25-44	45-64	65+
1990	King	33.7	22.6%	10.0%	37.9%	18.4%	11.1%
	Kitsap	31.8	27.9%	10.6%	33.6%	17.1%	10.7%
	Pierce	31.3	27.2%	11.4%	33.6%	17.3%	10.5%
	Snohomish	32.2	27.7%	8.8%	36.6%	17.4%	9.5%
	Region	-	24.8%	10.2%	36.4%	17.9%	10.7%
WA State		33.1	25.9%	10.0%	34.1%	18.1%	11.8%
U.S.		32.8	25.6%	10.8%	32.5%	18.6%	12.6%
2000	King	35.7	22.5%	9.3%	34.7%	23.1%	10.5%
	Kitsap	35.8	26.8%	9.2%	29.6%	23.8%	10.6%
	Pierce	34.1	27.2%	9.8%	31.3%	21.5%	10.2%
	Snohomish	34.7	27.4%	8.5%	33.0%	22.0%	9.1%
	Region	-	24.7%	9.2%	33.3%	22.6%	10.2%
WA State		35.3	25.7%	9.5%	30.8%	22.8%	11.2%
U.S.		35.3	25.7%	9.6%	30.2%	22.0%	12.4%

Source: U.S. Census Bureau

**Figure 7. Regional–State–National Comparison of Age Distribution**



**The baby boomers and baby boomlets.** There are two major age trends taking place in our region and state in parallel with the nation. First, an examination of our forecast age demographics shows the baby boom cohort moving steadily towards retirement age. The population age 65 and older, which currently constitutes 10 percent of the region’s population, is expected to more than double in size over

the next thirty years to reach 759,900 or 17 percent of total population by 2030. The growth rate of the senior population, which averaged 1.4 percent per year during the 1990s, is projected to soar to 3.5 percent per year during the 2010s, and continue at a robust pace of 3.3 percent per year during the 2020s. The forthcoming boom in the senior population is anticipated to bring new and unique demands on the region’s infrastructure and services.

Second, the children of the baby boomers, the baby boomlets, are also making their way up the age pyramid, through our education system, and into the labor force. At present, they are placing a significant strain on the capacity of the region’s K-12 and higher education systems.

**Table 7. Estimated and Forecast Regional Population by Age**

	Actual Population				Forecast Population		
	1970	1980	1990	2000	2010	2020	2030
Age 0-19	37.4%	30.1%	27.5%	27.4%	26.2%	25.4%	25.2%
Age 20-64	54.0%	60.1%	61.8%	62.5%	63.1%	61.2%	58.0%
Age 65+	8.6%	9.8%	10.7%	10.2%	10.7%	13.4%	16.8%

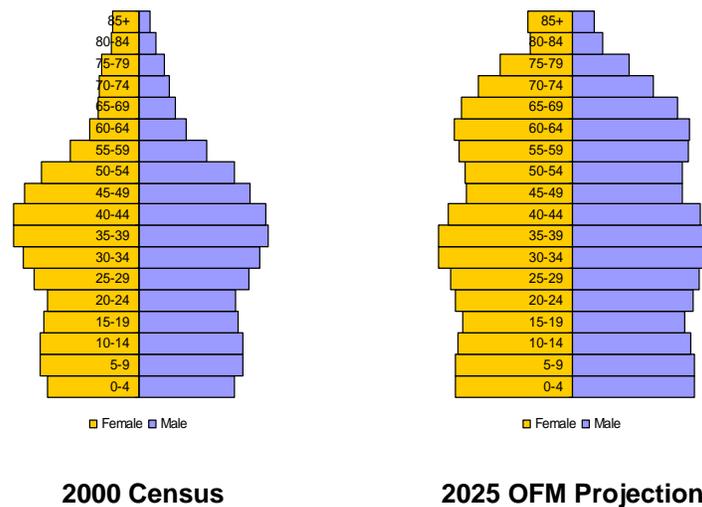
	Actual Change				Forecast Change		
	1970-80	1980-90	1990-00	2000-10	2010-20	2020-30	2000-30
Age 0-19	-49,700	82,000	140,700	66,200	82,500	99,300	248,000
Age 20-64	302,200	352,600	345,900	271,300	203,400	110,700	585,400
Age 65+	53,300	74,000	40,300	58,100	158,400	210,100	426,600

	Average Annual Percent Change						
	1970-80	1980-90	1990-00	2000-10	2010-20	2020-30	2000-30
Age 0-19	-0.7%	1.2%	1.7%	0.7%	0.8%	0.9%	0.8%
Age 20-64	2.6%	2.4%	1.9%	1.3%	0.8%	0.4%	0.8%
Age 65+	2.8%	3.0%	1.3%	1.6%	3.5%	3.3%	2.8%

Source: U.S. Census Bureau, PSRC

**Figure 8. Central Puget Sound Age Pyramid**



**Educational attainment.** The region compares very favorably to the state and nation in terms of educational attainment. We have a particularly well-educated workforce, placing higher than the national average in all categories pertaining to post high school education.

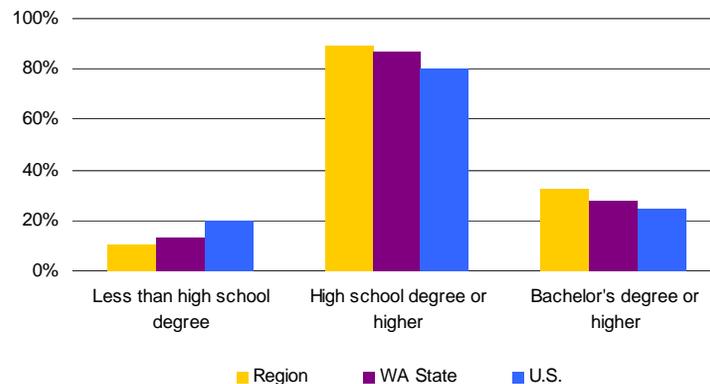
Nearly 1 in 3 persons has earned a Bachelor’s or higher degree, compared to 1 in 4 persons for the nation at large. Moreover, 9 in 10 persons in the region succeeded in completing high school, compared to 8 in 10 for the nation overall.

**Table 8. Population Composition by Educational Attainment**

		Did not graduate high school	High school graduate	Some college, no degree	Associate degree	Bachelor's degree	Graduate or professional degree	High school degree or higher	Bachelor's degree or higher
1990	King	11.8%	22.8%	24.9%	7.7%	22.8%	10.0%	88.2%	32.8%
	Kitsap	13.4%	29.5%	29.0%	8.2%	13.9%	6.0%	86.6%	19.8%
	Pierce	16.8%	33.1%	24.8%	7.8%	12.0%	5.5%	83.2%	17.5%
	Snohomish	14.3%	29.7%	27.6%	9.0%	14.2%	5.1%	85.7%	19.3%
	Region	13.3%	26.5%	25.6%	8.0%	18.6%	8.0%	86.7%	26.7%
	WA State	16.2%	27.9%	25.0%	7.9%	15.9%	7.0%	83.8%	22.9%
U.S.		24.8%	30.0%	18.7%	6.2%	13.1%	7.2%	75.2%	20.3%
2000	King	9.7%	19.2%	23.6%	7.5%	26.6%	13.3%	90.3%	40.0%
	Kitsap	9.2%	25.4%	31.0%	9.0%	17.0%	8.3%	90.8%	25.3%
	Pierce	13.1%	29.8%	28.4%	8.1%	13.7%	6.9%	86.9%	20.6%
	Snohomish	10.8%	25.9%	29.7%	9.1%	17.5%	6.9%	89.2%	24.4%
	Region	10.6%	23.0%	26.2%	8.0%	21.7%	10.5%	89.4%	32.2%
	WA State	12.9%	24.9%	26.4%	8.0%	18.4%	9.3%	87.1%	27.7%
U.S.		19.6%	28.6%	21.0%	6.3%	15.5%	8.9%	80.4%	24.4%

Source: U.S. Census Bureau

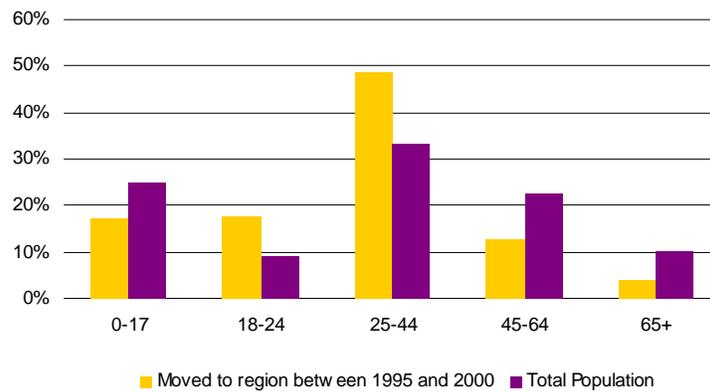
**Figure 9. Regional–State–National Comparison of Educational Attainment**



**Migration and the “creative class.”** Recent studies suggest that a select number of U.S. metropolitan regions, including the greater Seattle area, were very successful in their ability to attract young, educated workers during the 1990s.<sup>2</sup> Data from the 2000 Census support this argument. Well over a half million persons moved to the central Puget Sound between 1995 and 2000, about 140,000 more persons than moved out of the region. Compared to the region’s population as a whole, both in- and out-migrants tended to be younger, falling heavily into the 18-24 (college age) and 25-44 age cohorts. In-migrants also tended to be more highly educated than both out-migrants and the region’s general population.

The region has a tremendous asset in its relatively young, well-educated and well-trained workforce. The presence of these young, highly-skilled workers, coined the “creative class,”<sup>3</sup> has been found to be associated with the development of new technologies and industries, the creation of startup firms, and related job growth. Such a workforce has and will continue to be a key component in the regional economy’s ability to foster, attract, and retain innovative and competitive companies.

**Figure 10. Age Distribution of Recent Movers**



**Income.** Income statistics provide a general measure of an area’s standard of living and economic well-being. Median household income in each of the region’s four counties exceeds the national median, particularly in King and Snohomish counties. Growth in median income levels between 1989 and 1999, adjusted for inflation, were also significantly greater throughout the region compared to the nation at large.

**Table 9. Median Household Income**

	1989 (1989 dollars)	1989 (1999 dollars)	1999
King	\$36,200	\$48,600	\$53,200
Kitsap	\$32,000	\$43,100	\$46,800
Pierce	\$30,400	\$40,900	\$45,200
Snohomish	\$36,800	\$49,500	\$53,100
WA State	\$31,200	\$41,900	\$45,800
U.S.	\$30,100	\$40,400	\$42,000

Source: U.S. Census Bureau

<sup>2</sup> “Brain Gain Cities Attract Educated Young,” Washington Post, November 9, 2003.

<sup>3</sup> Florida, Richard, “The Rise of the Creative Class,” Washington Monthly, 2002.

**Poverty Rate.** Poverty is defined (by the U.S. Census Bureau) as falling below some minimum income threshold determined necessary to meet one’s basic needs. The minimum income threshold varies according to household size and composition, number of children, and age of householder. By examining poverty levels, we are able to compare how well economic benefits are extended to and shared by residents living in different areas, as well as track how changing economic conditions affect financial well-being over time.

Poverty rates are lower in the central Puget Sound than the nation overall. However, consistent with national statistics, poverty in the region is disproportionately concentrated among minority households and female-headed households with children. Moreover, while poverty decreased across the state and nationally from 1989 to 1999, it increased slightly in the region overall, with variation in trends seen in the four counties.

**Table 10. Poverty Rates**

		All persons	Non-White	Hispanic/Latino	All families	Female householder, no husband present, with related children <18
1989	King	8.0	18.5	14.9	5.0	28.5
	Kitsap	9.4	16.7	14.4	7.5	47.1
	Pierce	11.4	22.5	17.0	8.7	41.5
	Snohomish	6.6	11.4	9.3	4.9	29.6
	Region	8.5	18.7	14.7	6.0	33.2
	WA State	10.9	23.2	27.8	7.8	39.5
	U.S.	13.1	27.0	25.3	10.0	42.3
1999	King	8.4	15.1	18.0	5.3	23.4
	Kitsap	8.8	14.1	12.0	6.3	30.3
	Pierce	10.5	18.3	20.5	7.5	29.6
	Snohomish	6.9	12.0	13.8	4.9	22.1
	Region	8.6	15.3	17.6	5.8	25.3
	WA State	10.6	18.8	24.9	7.3	30.8
	U.S.	12.4	22.3	22.6	9.2	34.3

Source: U.S. Census Bureau

#### IV. Recent Growth Trends

The late 1990s was a period of unique economic expansion for the region and nation, as embodied in the emergence of the technology-driven New Economy. This section takes a look at regional growth trends experienced during the 1995-2000/01 economic boom, as well as the subsequent downturn and recession.

**The economic boom.** The region added over a quarter million covered jobs from 1995 to 2001, growing at an average annual rate of 3.0 percent. King County, where the bulk of the region's technology job growth occurred, experienced a vigorous 3.5 percent average annual growth rate during this period. At its peak during the 4<sup>th</sup> quarter of 2000, regional covered employment stood at 1.7 million jobs.

**Understanding Covered Employment.** The employment data reported in this section is derived from the Washington State Employment Security Department (ESD) ES-202 data series, along with supplemental data from The Boeing Company and the Washington State Office of the Superintendent of Public Instruction (OSPI).

The term "covered" refers to wage and salary jobs that are classified under the Unemployment Insurance Act, and includes part-time and temporary employment. If a worker holds more than one job, each job would be reported in the database. Covered employment accounts for 85-90% of total jobs. Categories of jobs that are not included in covered employment are self-employed workers, proprietors, CEOs, and other non-insured workers.

**Table 11. March Covered Employment: 1995-01 and 2001-03**

	1995	2001	2002	2003	1995-01	Avg Annl Pct Chg 1995-01	2001-03	Avg Annl Pct Chg 2001-03
King	940,900	1,155,500	1,094,400	1,078,000	214,600	3.5%	-77,500	-3.4%
Kitsap	68,100	72,400	74,400	75,900	4,200	1.0%	3,500	2.4%
Pierce	209,900	238,200	234,200	240,500	28,300	2.1%	2,300	0.5%
Snohomish	182,500	209,900	203,300	206,000	27,400	2.4%	-3,900	-0.9%
Region	1,401,500	1,676,000	1,606,300	1,600,400	274,600	3.0%	-75,600	-2.3%

Source: ESD, PSRC

Population, spurred by the region's job boom, also picked up during this period, adding 300,000 more residents at an average annual growth rate of 1.6 percent. Snohomish County, the region's fastest growing county, averaged an annual growth rate of 2.6 percent during this period.

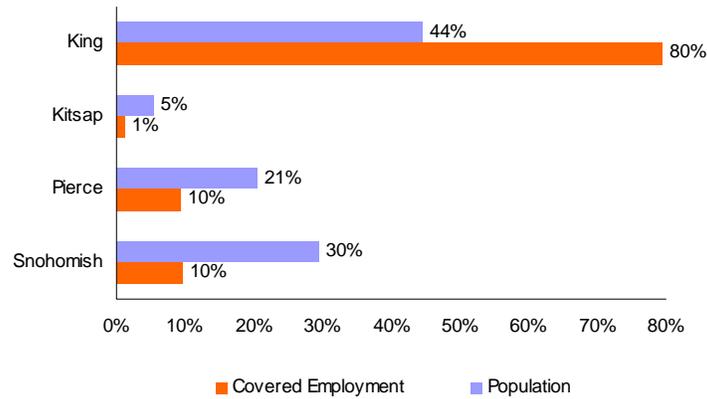
**Table 12. Population: 1995-01 and 2001-04**

	1995	2001	2002	2003	2004	1995-01	Avg Annl Pct Chg 1995-01	2001-04	Avg Annl Pct Chg 2001-04
King	1,625,200	1,758,300	1,774,300	1,779,300	1,788,300	133,100	1.3%	30,000	0.6%
Kitsap	218,300	233,400	234,700	237,000	239,500	15,100	1.1%	6,100	0.9%
Pierce	649,300	713,400	725,000	733,700	744,000	64,100	1.6%	30,600	1.4%
Snohomish	531,700	618,600	628,000	637,500	644,800	86,900	2.6%	26,200	1.4%
Region	3,024,500	3,323,700	3,362,000	3,387,500	3,416,600	299,200	1.6%	92,900	0.9%

Source: U.S. Census Bureau, OFM

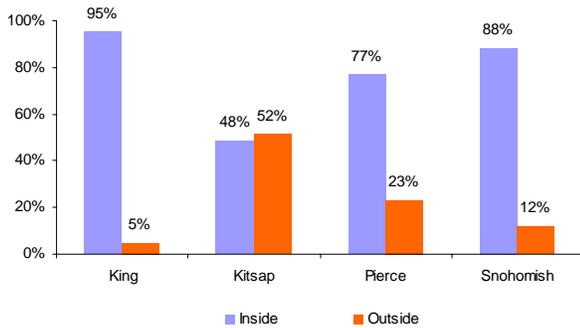
Between 1995 and 2000, 80 percent of the region’s growth in covered employment – 4 in every 5 covered jobs – occurred in King County, whereas 56 percent of the region’s population growth during the same period went to Kitsap, Pierce and especially Snohomish counties.

**Figure 11. Distribution of Population and Covered Employment Growth: 1995-2000**

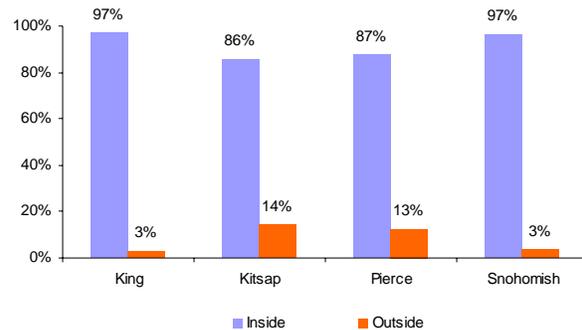


**Urban growth trends.** The rapid growth experienced during the late 1990s posed the first major test of the region’s urban growth boundaries and attendant growth policies established under the Washington Growth Management Act (GMA) of 1990. While counties varied as to when their urban growth boundaries were implemented and what their urban vs. rural growth targets were, the region as a whole directed 87 percent of the population growth that occurred between 1995 and 2000 to its designated urban growth areas. The overwhelming majority of the region’s growth in covered employment, 96 percent, occurred in urban areas as well.

**Figure 12. Population Growth Inside and Outside the UGA: 1995-2000**



**Figure 13. Covered Employment Growth Inside and Outside the UGA: 1995-2000**



During the 1990s, the region experienced a tremendous volume of annexation and incorporation activity by local municipalities, resulting in a significant transfer of jurisdiction over local land use decisions and the provision of public services from counties to cities. This is in keeping with the GMA principle of reinforcing cities and towns as the primary providers of urban services and the preferred locations for the

absorption of new growth. By 2000, 77 percent of the region’s urban population resided in incorporated cities and towns, compared to 67 percent in 1990.

**Table 13. Incorporated UGA Population: 1995 and 2000**

	UGA Population 1995	Percent Incorporated 1995	UGA Population 2000	Percent Incorporated 2000
King	1,506,200	75.3%	1,612,700	85.8%
Kitsap	124,100	53.8%	130,700	55.1%
Pierce	537,200	49.5%	576,700	66.8%
Snohomish	426,200	61.0%	491,500	64.0%
CPS Region	2,593,700	66.6%	2,811,600	76.7%

Source: U.S. Census Bureau, OFM, PSRC

**The economic downturn.** A series of economic shocks during 2000 and 2001, including the dot-com bust and subsequent stock market decline, onset of the national recession, and continued job losses in aerospace manufacturing due to deterioration of the air transportation and tourism sectors in the wake of September 11th, had a particularly severe combined impact on the central Puget Sound and many of its key industries. As a result, the region suffered from a deeper and longer recession than the nation at large.

Between March 2001 and 2003, regional covered employment declined by 4.5 percent, or over 75,000 jobs, registering the deepest recession in the local economy since the Boeing bust of the early 1970s. Unlike the earlier recession, the region did not experience any net population loss during the recent economic downturn, but population growth decelerated to the lowest level seen in twenty years, 0.8 percent or just 25,500 persons, during 2002-03.

**Economic recovery.** Since then, the region has begun its economic recovery, with Kitsap, Pierce and Snohomish counties having regained and surpassed pre-recession job levels. King County, which was hit hardest by the recession, continues to struggle and is not expected to make a full jobs recovery until 2006. As such, the region will likely see modest increases in population growth rates in the near future, with faster growth occurring outside of King County.

## V. Summary

The central Puget Sound region has undergone tremendous expansion and change over the last three decades, with continued growth expected. Projections estimate the region will add 1.1 million more jobs and 1.6 million more residents by the year 2040.

The region and its local jurisdictions laid down the foundations for managing future growth when it adopted VISION 2020, the long-range comprehensive regional strategy for growth management, transportation, and the economy. Through the current VISION 2020 + 20 update process, the region will have the opportunity to further strengthen these foundations to ensure the future health, vibrancy, and natural beauty of the central Puget Sound.



VISION 2020+20 Update

Economic Issue Paper

Puget Sound Regional Council

November 16, 2005

Economic Development District Board of Directors adopted *action-to-proceed* November 16, 2005



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## **A. PURPOSE**

The purpose of this economic issue paper is to link the Prosperity Partnership's Regional Economic Strategy (Strategy) with the update of VISION 2020, the region's long-range growth, economic, and transportation strategy. To that end, the paper describes past and present economic planning efforts and explores the relationship and meaning of these efforts to both local government planning and PSRC's long-range VISION.

The Strategy process has added significant value to PSRC's existing economic planning. It has set the stage to go beyond the existing core of policy concepts (concepts that should be retained in the updated VISION) by providing a more comprehensive framework for discussing economic issues, and by providing input regarding potential elements of an economic vision and economic strategies.

The Strategy is meant to serve as the functional economic plan of VISION 2020 – similar to *Destination 2030*, which is the functional transportation plan. As such, the Strategy is guided by the multicounty planning policies in the VISION and does not contain any additional policies.

The VISION adds value to the Strategy development process through the multicounty planning policies, which have legal standing and relate directly to local and county planning. This broadens the constituency of the Strategy and improves its likelihood of implementation. This paper is meant to inform decision-makers regarding what may be appropriate material to include in the VISION's multicounty planning policies to support and help implement the Strategy.

At the most basic level, the documents complement one another – the Strategy provides the shorter-term implementation mechanism that is regularly updated, and the VISION provides the longer-term guidance that is updated less frequently. When the VISION is updated, and the concepts from the Strategy are integrated into it, the VISION and the multicounty planning policies will then provide guidance to future updates of the Strategy.

## **B. INTRODUCTION**

### **1. Overview**

Economic prosperity is one of the most important elements of our long-range vision. A healthy and growing economy provides good jobs and opportunity. It pays for vital public services such as education, criminal justice, and transportation. It allows us to support the arts, maintain our parks, and build our communities. It permits us to care and provide for our families and ourselves. It enables us to care for those who are vulnerable, to protect the environment, and to preserve the quality of life that makes the region such a special place.

The region has traditionally had a strong but cyclical economy, and it has become more diversified in recent years as software development, information technology, and life sciences have emerged. The region has been fortunate to have a number of local companies gain international prominence and bring wealth into our communities. However, many of the region's traditionally strong employment sectors have declined in past years and some are projected to decline further. Additionally, changes in the national and international economy threaten some of our competitive advantages. An assessment of our peer regions finds that many have become more focused and organized in their economic planning efforts.

In the changing global economy, there is no guarantee of economic success. Accordingly, the region's leaders – both public and private – have begun to collaboratively look ahead to develop shared priorities and actions.

## 2. Background

Following a merger in 2002 between PSRC and the Central Puget Sound Economic Development District, PSRC's Executive Board expressed interest in having PSRC take a more active role in economic strategy development. The Board stressed the importance of working in concert with the region's private sector leaders and the four counties' economic development councils.

Starting in the spring of 2004, PSRC staff crafted a work plan to develop a long-range regional economic strategy. Given the importance of integrating economic planning with land use and transportation planning, the Economic Development District Board agreed that the Strategy should be developed to serve as the functional economic plan of the broader VISION.

The development of the Strategy was launched in the summer of 2004. Over the past year, PSRC has worked with hundreds of business, labor, government, nonprofit, and community leaders in King, Kitsap, Pierce and Snohomish counties and has organized a coalition called the Prosperity Partnership. With the goal of developing a Regional Economic Strategy, the Prosperity Partnership has engaged in a year of analysis, outreach, and discussion. A key objective of the work was to identify discrete, actionable initiatives that were implementable.

The Economic Development District Board released the Strategy for public review and comment in June 2005. This period has closed and the Economic Development District Board adopted the Strategy in September 2005. Following this, the Strategy process now turns towards implementation, and it also begins to inform the update of VISION 2020 and its economic policies.

## 3. Components of the Paper

Components of the economic issue paper describes the following:

- Existing adopted economic development statutes and policies. This section identifies the existing policy framework for economic development and lists Growth Management Act requirements, VISION 2020 policies, and summarizes countywide planning policies.
- The process to update the regional economic policies. This section describes the outcomes from the Growth Management Policy Board and Economic Development District Board's review of the existing VISION's policies in 2004, as well as the comments received from the public through the VISION 2020+20 public scoping period.
- What is currently in process – the Prosperity Partnership's Regional Economic Strategy. This section summarizes the Strategy. Included with this paper, as Attachment 4, is the Summary of the Strategy.
- Best Practice Sidebars: Sidebars are included throughout the paper to showcase innovative economic development activities of local government (and in one example a regional government). This is meant to assist in explaining how the public sector can act as a catalyst for economic development, and thereby to assist in implementing the Strategy. These examples focus on some of the designated regional growth centers as well as the specific tools being utilized.
- Preliminary issues for consideration in updating the economic elements of VISION 2020+20. This section discusses how the existing economics section should be revised to better integrate the findings of the Strategy and to better assist in its implementation. Preliminary issues for consideration are offered regarding concepts that should be incorporated into the VISION's (1) discussion of the economy, (2) economic strategy, and (3) economic multicounty planning policies. Each of these sub-sections starts with a description of the existing VISION and then describes the additional concepts. Included in the policy section are some preliminary actions related to implementing the Strategy.
- Describe the next steps. This section describes the next steps in the Regional Economic Strategy and the VISION 2020+20 update processes.

## C. EXISTING ADOPTED ECONOMIC DEVELOPMENT STATUTES AND POLICIES

This section identifies the region's existing policy framework for economic development. This section lists Growth Management Act (GMA) requirements, VISION 2020 policies, and summarizes the region's four sets of countywide planning policies for economic development and employment.

### 1. What does the GMA say about economic development?

The GMA recognizes the importance of balancing the management of growth with the need for economic development. There are references to economic development in relation to rural areas,<sup>1</sup> to industrial land banks, to essential public facilities, and to transportation projects.

The first section of the GMA – the Legislative Findings – goes beyond the well-known discussion of the threat to the state of Washington from uncoordinated and unplanned growth and states:

*"... the Legislature finds that it is in the public interest that economic development programs be shared with communities experiencing insufficient economic growth."*  
(Revised Code of Washington (RCW) 36.70A.010)

This first statement of policy intent regarding economic development focuses on supporting areas with insufficient economic growth. The most direct guidance, however, for economic planning for the state - as opposed to specific types of areas - is found in two sections of the GMA: (a) the Planning Goals and (b) the requirements for Comprehensive Plans.

#### a. Planning goals

The GMA states that the planning goals are to be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations. The GMA economic development planning goal states:

*(5) Economic Development. Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.*  
(RCW 36.70A.020)

This is the strongest statement of policy intent for economic development in the GMA. The goal provides direction for at least six discrete, but inter-related, topics: (1) consistency with other planning goals in comprehensive plans, (2) promotion of economic opportunity for all citizens, but especially for those most in need, (3) a focus on retention, expansion and recruitment of businesses, (4) recognition of regional differences, (5) encouraging growth in slow-growing areas, and (6) ensuring sufficient capacity exists to accept the economic growth.

#### b. Comprehensive plans - Mandatory elements

Economic development recently became a required element of comprehensive planning<sup>2</sup>; however, because state funding was not provided, the requirement has not yet taken effect. Nonetheless, many local governments address economic activity in their plans.

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<sup>1</sup> The GMA contains significant additional information regarding rural economic development. That topic is being addressed as part of the *VISION 2020 + 20 Rural Issue Paper* and is not specifically addressed here. This paper addresses economic planning for the entire region, not for specific categories of land.

<sup>2</sup> Revised Code of Washington 36.70A.070 (7) – Per Second Substitute House Bill 2697, 2002 Session Laws.

The mandatory element section states:

- (7) *An economic development element establishing local goals, policies, objectives, and provisions for economic growth and vitality and a high quality of life. The element shall include: (a) A summary of the local economy such as population, employment, payroll, sectors, businesses, sales, and other information as appropriate; (b) a summary of the strengths and weaknesses of the local economy defined as the commercial and industrial sectors and supporting factors such as land use, transportation, utilities, education, work force, housing, and natural/cultural resources; and (c) an identification of policies, programs, and projects to foster economic growth and development and to address future needs. (RCW 36.70A.070)*

Different from the planning goals, this language identifies what topics are to be addressed and how economic planning is to be conducted. Some policy guidance, however, is present, with (1) a focus on economic growth, vitality and high quality of life, and (2) the necessity of addressing future needs.

To assist local communities in developing the new element, the Washington State Department of Community, Trade, and Economic Development developed an *Economic Development Element Fact Sheet*. The fact sheet provides an overview on economic development, discusses the components and steps of developing the element, and identifies the key stakeholders to include in the planning process. This fact sheet is included as Attachment 1. The fact sheet is currently being more fully detailed into a guidebook, but will not be completed until the winter of 2006.

Some local communities have developed economic development elements in their plans, but the state of the practice is not commensurate with other comprehensive plan elements. The economic development councils/boards have often taken the lead in creating economic development plans. These efforts are client-based and effective; however, for the most part they do not have the same long-term focus.

The lack of a complete requirement and the shorter-term focus have created a situation where economic planning has been largely isolated from growth management and transportation planning, and has not always been institutionalized and sustained.

## 2. What does VISION 2020 say about economic development?

VISION 2020 promotes a diverse region composed of economically and environmentally healthy communities framed by open space and connected by a high-quality, efficient transportation system. It envisions more compact, people-oriented living and working places, and promotes development practices that protect environmentally sensitive areas, create complete communities, and reduce sprawl. It is a public policy commitment to both managed growth and the efficient provision of public services. By linking land use and transportation planning, VISION 2020 creates an economic nexus by providing the structure for accommodating regional growth, enhancing mobility, and protecting valuable rural and resource lands from suburban sprawl.

### Assembling Land

Assembling land for development is complex and can take many years. Most businesses do not have the staying power to hold land for long periods of time. This limits the ability of developers from implementing some of the larger-scale projects envisioned in local comprehensive plans.

Local governments have the luxury of much longer time periods for a return-on-investment, making them better at assembling larger parcels.

### Auburn's Municipal Parking Lots

In March 2005 the city issued a Request for Proposals to find a developer to partner in developing the downtown parking lots owned by the city.

The RFP stated that proposals should address the sale or lease of surface or air rights, use of the properties for commercial/residential, and to retain of existing levels of parking as part of the project.

This approach has put a significant amount of downtown land – over 122,000 square feet – on the market for development. Auburn will further leverage this tool with other incentives – such as tax abatements, impact fee exemptions, reduced parking requirements, and a removal of height restrictions – to help ensure success.

VISION 2020's chapter on economics promotes a sustainable and stable regional economy to provide economic vitality and family wage jobs, while managing growth and supporting our downtowns and regional centers. The VISION 2020 strategy emphasizes public and private sector collaboration to identify needs such as infrastructure and employment sites, investments in services that will promote economic activity, and the importance of developing sound economic data and other information to monitor, evaluate, and guide our progress.

To achieve these broad strategies, economic multicounty planning policies are provided in four topic areas: (1) retention and expansion of the region's employment base and diversification of the region's economy, (2) development of centers and compact communities, (3) accessibility to centers and the flow of goods and services in and through the region, and (4) regional data and information management system.

The existing VISION is described in greater detail in section F.

### 3. What do the countywide planning policies say about economic development?

As required by the GMA, each of the region's four counties has adopted countywide planning policies related to economic development. Countywide planning policies are policy statements used for establishing a countywide framework for county and city comprehensive plans. For economic development, the GMA states that a countywide planning policy shall at a minimum address:

(g) *Policies for county-wide economic development and employment.* (RCW 36.70A.210 (3))

This sentence is the extent of the guidance for economic planning at the countywide policy level. Multicounty planning policies are provided the same guidance.

Despite the limited requirement, each of the counties and their cities have developed policies that cover a wide variety of topics. Figure 1 below provides an overview of the region's four sets of countywide policies on economic development and employment. VISION 2020 and GMA policy direction (as spelled out in RCW 36.70A) are also included for comparison.

Figure 1: Matrix of countywide planning policies (CPPs)

	King	Kitsap	Pierce	Snohomish	V2020	GMA
<b>Section Information</b>						
# of section pages (# of document pages)	6(86)	2(26)	4(73)	1(33)	9(92)	n.a.
Percent of total set of CPPs	6%	6%	5%	3%	10%	n.a.
Number of goals	9	2	7	-	4	1
Number of policies	24	16	38	6	17	n.a.
Definition of economic development	X	-	-	-	X	X
<b>Section Topics</b>						
<b>1. Business development</b>						
Expansion	X	X	X		X	X
Recruitment	X	X	X	X	X	X
Retention	X	X	X		X	X
Diversification	X	X	X	X	X	
Revitalization	X	X	X		X	X
Business assistance		X	X			
Marketing and promotion			X			
Finance	X	X				
New business development	X	X	X			
Centers development	X	X	X	X	X	

	King	Kitsap	Pierce	Snohomish	V2020	GMA
<b>2. Coordination</b>						
Public and private partnerships	X	X	X	X	X	
Regional coordination	X					X
Other collaborations	X	X	X		X	X
Tribal		X				
Jurisdictions	X	X		X	X	X
Information database		X	X		X	
<b>3. Workforce development</b>						
Education/training	X	X	X		X	
Minority empowerment	X	X	X		X	
Employment opportunities	X	X	X		X	X
<b>4. Public infrastructure and capital facilities</b>						
General	X	X	X	X	X	X
Transportation	X		X	X	X	
<b>5. Land use and development</b>						
General	X	X	X	X		
Permit process	X	X	X			
Housing			X	X	X	
Neighborhoods			X			
Environmental consideration	X	X			X	
Energy conservation	X					
Infill			X			
Transit and pedestrian						
Regulatory practice	X	X	X	X		
Commercial/industrial development	X	X		X		
Tourism	X				X	
Mixed use			X	X		
Regulatory reform		X		X		
<b>6. Other economic topics</b>						
Sustainability					X	X
Tax			X			
Monitoring and evaluation (name of identified lead agency)	(GMPC)	(EDC)	not specified	not specified		
Rural development					X	X
Incentive program	X		X			
Agriculture/natural-based industries	X		X		X	
Program support	X		X			

**Legend:** X = addressed in CPPs

As can be seen from the table, the counties are fairly consistent in terms of how much emphasis they place on economic development and employment as compared to other topics. The primary focuses are in the areas of Business Development as well as Land Use and Development.

Overall, the policies match closely to the GMA's economic development planning goal (*shown on page 4*), in that they address (1) coordination, (2) minority empowerment and employment opportunities, and (3) discuss retention, expansion and recruitment of businesses. Some of the planning goal's concepts could be more developed, including (4) discussions of regional (and subregional) differences, (5) encouraging growth in slow-growing areas, and (6) ensuring sufficient capacity exists to accept the economic growth.

## D. THE PROCESS TO UPDATE THE REGIONAL ECONOMIC POLICIES

Beginning in the fall of 2003, the Regional Council began the process of updating VISION 2020, with the goal of extending the planning horizon to the year 2040.

Through the fall of 2003 to summer 2004, the Regional Council conducted an expanded scoping process to initiate the development of alternative concepts for consideration and evaluation in an environmental review process. A significant number of comments were received regarding the importance of planning for the economy, with a central theme regarding the need to conduct economic planning and outreach at a regional level. This is discussed in section C.1.

One key component of the scoping process was a review of the existing VISION by PSRC's Growth Management Policy Board and the Economic Development District Board. This is discussed in section C.2.

### 1. Comments from VISION 2020+20 public scoping

During the public scoping period, almost 10 percent of all the comments received were related to the region's economy. This amount was slightly more than the number of comments regarding the environment, slightly less than land use, and far less than transportation.

Ninety-three percent of respondents to a public opinion survey conducted by PSRC in November 2003 said they thought businesses, community organizations, and government should have an overall, regional economic strategy. However, 43 percent thought that a cooperative regional economic strategy did not currently exist, and nearly half (48 percent) thought the region was on the wrong track in planning for future economic growth. In addition:

- One in three respondents said the number of jobs and economic opportunities in their community were poor.
- 70 percent of respondents thought our regional economy was worse in 2004 than it was five years before that.
- Four out of five respondents preferred an economic strategy that promotes diversity in the region.
- 79 percent favored encouraging growth and development by attracting new business over limiting growth in the region.
- Respondents favored both using incentives to attract growth (65 percent) and requiring growth to pay for impacts (67 percent).

### Simplifying Development Regulations

The Growth Management Act has taken development regulations one large step forward by requiring that they be consistent with the policies in the jurisdiction's comprehensive plan.

Many jurisdictions have continually streamlined their regulations over the years. However, little has been done to ensure that the myriad approaches taken by governments throughout the region have greater consistency.

This diversity of regulations hinders development, and is particularly difficult for smaller businesses, which have limited staff resources.

### Snohomish and King County Master Builders "Urban Centers Model Code"

Working with the Snohomish County Economic Development Council, the Master Builders hired a Planner/Architect to develop a model development code for Snohomish County's "Urban Centers."

The goal was to radically overhaul and simplify local development codes to encourage and provide incentives for creating quality urban environments in urban centers. Components of the new code address the following topics:

- I. Types of Districts within a Center
- II. Types of Streets
- III. Allowable Development Intensity
- IV. Building Heights
- V. Parking
- VI. Uses
- VII. SEPA Review

This new code is meant to be much shorter, easier to use, and will be applicable across multiple jurisdictions.

The public scoping period was brought to a close in June 2004, and public comments were summarized. For the economy, the following is a summary of the comments related to the economy:

- A sustainable, robust regional economy is critical to the region's future.
- The region should build on existing resources, structures and organizations to help develop a coordinated regional economic strategy, and link it to an expanded economic element in VISION 2020.
- The regional vision could address issues such as cooperative competition, shared revenues, coordinated metropolitan area marketing, joint recruitment, and other techniques to foster growth.
- The region's vision should emphasize the role of the private sector and market forces in implementing the region's plans, and provide guidance for more effective community economic development.

## 2. Review of VISION's existing economics section

PSRC's Growth Management Policy Board and the Economic Development District Board reviewed the VISION's existing economic strategies, discussions, and policies in the fall of 2003 and into the winter of 2004. They provided direction to staff regarding clarifying, eliminating, and adding to the existing strategies and policies. The Boards directed staff to maintain the existing concepts of focusing and supporting growth through infrastructure investments, and including public-private perspectives in economic decision-making. Further, they identified preliminary concepts in need of additional discussion and consideration in the update to the economic section:

- Promoting an integrated approach<sup>3</sup> to economic development to consider a whole variety of quality-of-life issues.
- Identifying existing and emerging industry clusters<sup>4</sup> and discussing the importance of different clusters in different subareas of the region.
- Understanding the land needs of some of the clusters the region wants to pursue.
- Understanding the need to use public infrastructure funds to leverage private investment in desired locations.
- Describing the economic value of the growth strategy.
- Describing the existing diversity of regulatory processes and the value of creating greater consistency.
- Providing clearer guidance on the Regional Council's role in economic development and possible participation in developing a regional economic strategy.

These preliminary concepts, and the comments received during public scoping, formed the basis for the development of the work-program for the Regional Economic Strategy (*discussed in section E*) and remain relevant for the update to the economics section of the VISION.

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<sup>3</sup> Definitions vary regarding what an integrated approach to economic development means. From a planning perspective, a good definition can be found in the *Ahwahnee Principles for Economic Development*. These principles are shown in Attachment 2.

<sup>4</sup> An explanation of industry clusters is provided in section E.4, on page 12.

## E. WHAT IS CURRENTLY IN PROCESS – PROSPERITY PARTNERSHIP'S REGIONAL ECONOMIC STRATEGY

The Summary of the Regional Economic Strategy is attached; however, this section further summarizes the Strategy's analysis, findings, and recommended initiatives.

### 1. Background on Strategy

Concurrent with the scoping period for the VISION 2020 update, PSRC staff developed a work-program for the Regional Economic Strategy in the spring of 2004. The work-program was incorporated wholesale into a Request For Proposals and the project began in the summer of 2004. The Request identified a series of broad goals, desired project outcomes, and preliminary approaches that the Strategy should consider. These are discussed below.

- Broad goals: The broad goals for the Strategy were to take a comprehensive look at the economy and be focused on implementation. It was meant to recognize other planning objectives and take a regional-scale approach. It was to be based heavily on private sector input, but recognize both public and private needs. Last, it was to foster economic growth that was in concert with our environmental aspirations, promote a high quality of life, and provide economic opportunity for all segments of the region's diverse population.
- Desired outcomes: The desired outcomes for the Strategy were to start with a vision and then make the difficult choice of focusing on specific clusters in the pilot phase. It was to recognize the key need to compete for people and intellectual capital. It was to create a new willingness to invest boldly in infrastructure, human capital, marketing, planning, and for activities related to job retention, expansion, and recruitment. It was to help the region reduce internal competition, which hurts us in real terms and in terms of perception, which meant also supporting efforts in other parts of the state.
- Preliminary approaches: Built directly from the review of the existing VISION, the Strategy was to focus on export-oriented clusters, to use the region's growth and transportation strategies to create development potential and economic opportunity, to reduce business costs through regulatory consistency and better up-front planning, and to focus on people, including the creative class and the region's culturally diverse populations.

Additional approaches included stopping the leakage of money from the region by producing, buying, and hiring locally, focusing on research and development and commercialization, and by focusing on environmental technologies to gain a competitive advantage in these newer industries.

To a greater or lesser degree, all of these goals, outcomes, and approaches were considered and incorporated into the Regional Economic Strategy.

### 2. Strategy development process

The process to develop the Strategy contained many components, including:

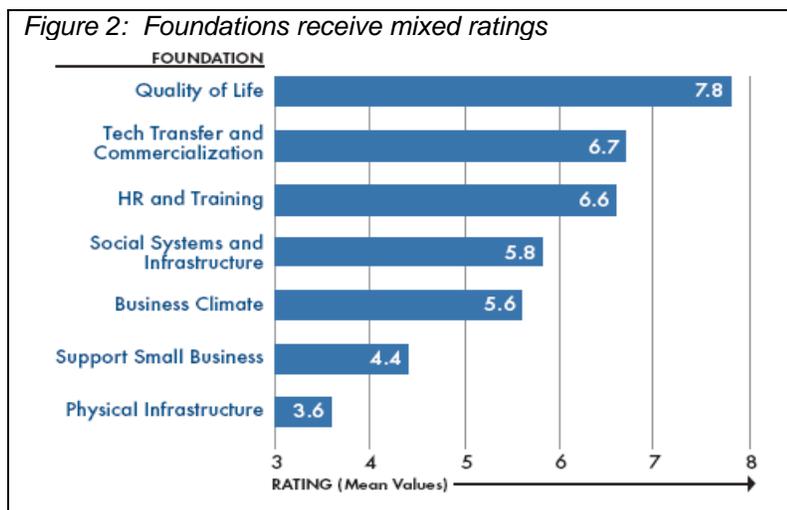
- An economic analysis of the region, using economic data, interviews with key leaders, a survey of regional stakeholders, and case study comparisons with peer regions.
- A regional economic summit (*results shown in section C.3*).
- Coalition building, as well as communications and outreach. The coalition now includes over 150 businesses, labor, government, and nonprofit organizations.
- The formation of cluster working groups for five pilot industry clusters, with each group producing a set of action initiatives to address particular needs of those industries.
- A draft Strategy for the Economic Development District Board, which was approved for public release in June 2005.

- Public outreach throughout the project with intensive outreach during summer 2005, asking for suggestions to improve the Strategy, as well as finding ways to effectively implement it.
- Adoption of the Strategy in September 2005 by the Economic Development District Board. The Strategy includes an implementation matrix detailing who is responsible for what actions and by when.

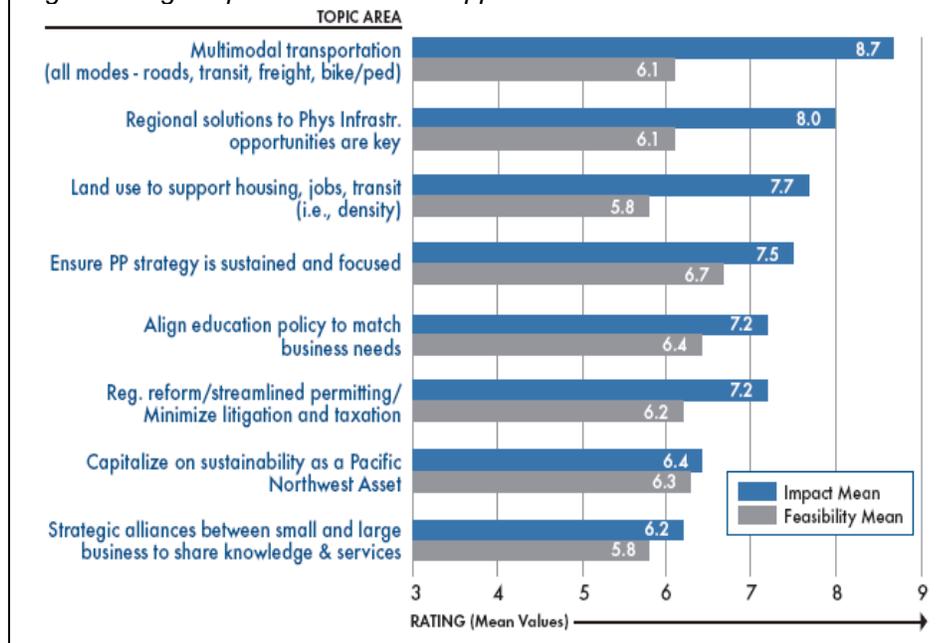
### 3. Regional economic summit results

The summit was held in November 2004 at an early stage in the development of the Strategy and was attended by over 1,100 people from the public, private, and nonprofit sectors. The goal of the summit was to identify the key opportunities and impediments to economic growth in the region. Participants worked in small groups to identify the opportunities and impediments and used real-time polling both to rate the region's economic foundations and to judge the region's opportunities based on the level of impact and the level of feasibility.

Figure 2 shows where participants felt the region's economic foundations were either strong or weak. Confirming some of the initial findings (based on interviews and surveys of private and public sector leaders), the region's primary asset was found to be its quality of life, and the region's primary challenges include infrastructure and support for small business.



*Figure 3: High Impact and Feasible Opportunities*



Of the more than 150 opportunities identified in the small group sessions, participants judged 17 of them in terms of level of impact and level of feasibility.

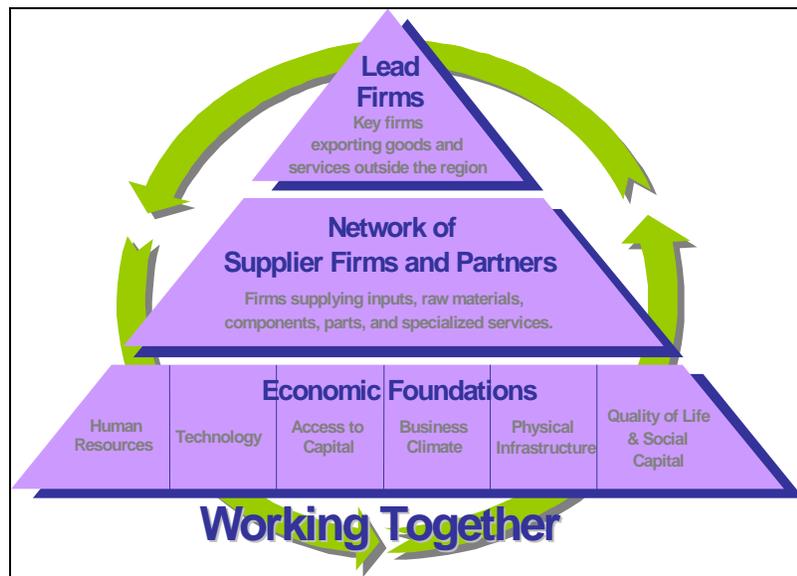
Figure 3 shows the eight that were identified as having a high impact and a high likelihood of being feasible. The top three opportunities, and the sixth one, are planning and GMA-related issues.

Other findings from the summit's polling were that participants believed retention was a higher priority than recruitment (although both were seen as important), that quality of life is of equal importance to "hard business costs," and that providing infrastructure was a better approach to economic growth than providing financial incentives.

#### 4. A focus on industry clusters

Rather than a typical economic analysis of major sectors, the Strategy development process focused on industry clusters – concentrated sets of competing and complementary industries. Cluster industries, especially those that export goods and services and import wealth into the region, help drive the economy. They are both a smaller and more focused unit of analysis and a method more relevant to businesses' experience. This approach was a more compelling way to engage the private sector.

Figure 4: Industry Cluster Conceptual Diagram



Source: Economic Competitiveness Group

Clusters create wealth by selling products or services outside the region, generating income that fuels the rest of the economy. Without these economic drivers, a region would only circulate money already in the local economy and risk losing economic momentum over time.

A focus on clusters also helps a region adapt to economic change. If regional leaders, institutions, technology, capital and infrastructure are attuned to the pressures facing key clusters, they are then better positioned to respond to specific industry needs.

#### 5. Development of economic principles

A key benchmark of the Strategy was the identification of an economic vision, given the desire to make decisions within a larger context. The Prosperity Partnership identified the following economic principles:

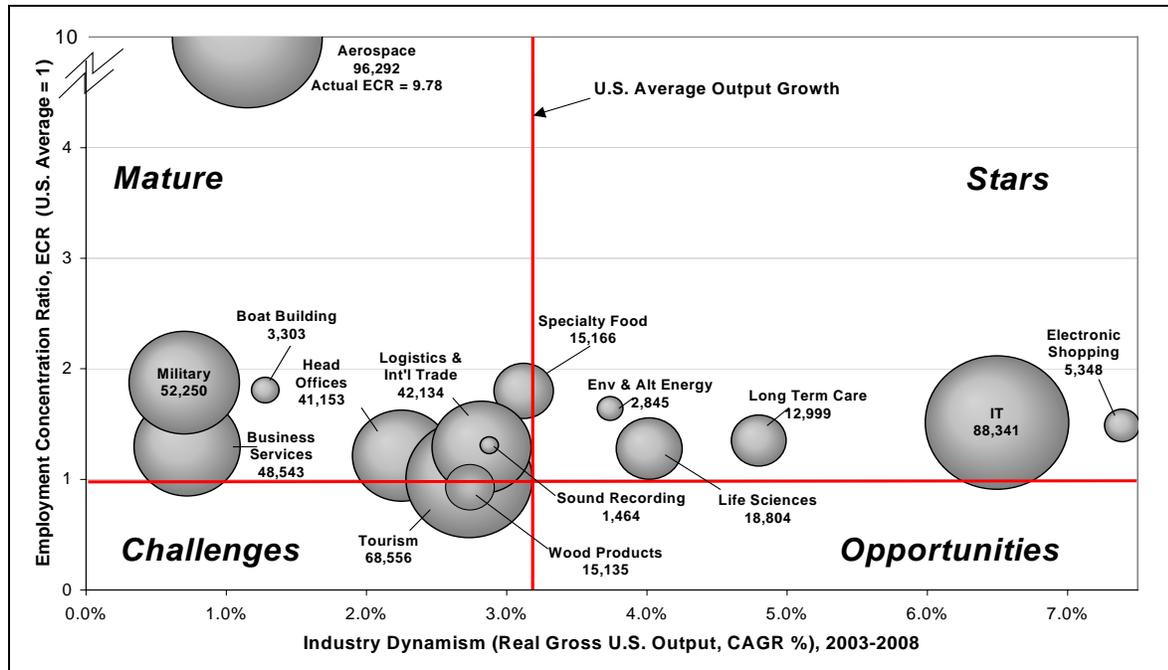
- People living here have good jobs and earn good incomes.
- Jobs are created by businesses.
- Embracing our region's diversity is good for business.
- The region has vibrant cities and thriving communities.
- The region has a healthy and beautiful environment and a good quality of life.
- Regional collaboration on a shared economic agenda ensures our region's long-term sustainable economic prosperity.

## 6. Summary of findings: A regional economy with promise - and challenges

The Puget Sound region has thrived for over a century, and many of the building blocks for continued prosperity are in place. Mature industries exist along with new and emerging enterprises. The region also has good schools, strong communities and a wonderful natural environment.

Figure 5 shows the 15 clusters identified as being present in the region today. The figure illustrates their concentration,<sup>5</sup> the number of employees in the cluster, and the projected national growth rate<sup>6</sup> of the cluster.

Figure 5: Central Puget Sound region's clusters: aerospace dominates and many other clusters are forecast to grow more slowly than the U.S. average.



Source: Global Insight Inc., 2004, and Economic Competitiveness Group.

The chart reveals some good news and some bad news. The region has a large number of clusters on which it can build. Less promising is the fact that employment in most of the clusters is only slightly more concentrated than in the typical U.S. region and that many are in industries forecasted to grow slower than the average national growth rate. The dominance of aerospace - an industry that is fairly volatile and prone to cyclical fluctuations - highlights the need for continued efforts to diversify and to support the growth of other clusters.

There are other ominous signs as well. The region's economic foundations - such as workforce education, infrastructure, and business climate - were identified as having worked well in past years but needing to adapt to the new economic environment. Some examples follow:

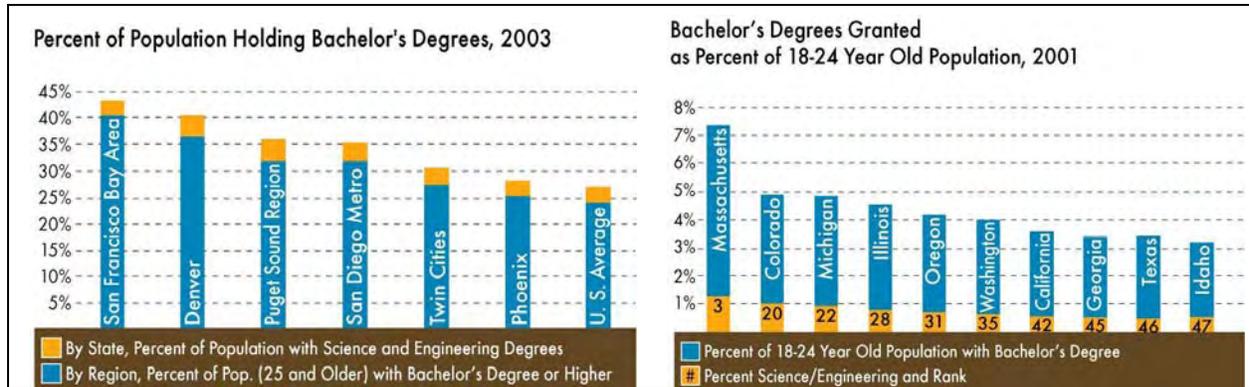
- Not enough students are graduating from our public schools with the technical, analytical and creative skills companies need now and into the future.
- The public high school dropout rate - 30 percent - is much too high.

<sup>5</sup> *Concentration*: Clusters above the dark horizontal line (at 1.0) are more highly concentrated in the central Puget Sound area than in the typical U.S. region of the same size, meaning, Tourism is typical, and Aerospace is nearly 10 times as concentrated as typical. Higher than average concentration is a sign of a competitive advantage.

<sup>6</sup> *Industry Dynamism* reflects the forecasted compound annual growth rate (CAGR) in the U.S. for each cluster. The dark vertical line (near 3.0 percent) shows the forecast growth rate for the U.S. economy as a whole.

- Universities don't have enough openings for undergraduates and aren't producing enough bachelor's degrees.
- Too many barriers exist for the innovations developed in our outstanding research institutions to develop into commercial products.
- As noted in figure 6, there is a mismatch between the high concentration of workers in knowledge industries/clusters and the limited number of degrees that are granted in science and engineering – skills which are necessary to successfully work in jobs in this sector.

Figure 6: For a region with many high-tech jobs, the region is weak in providing the sort of education needed for jobs in this sector.

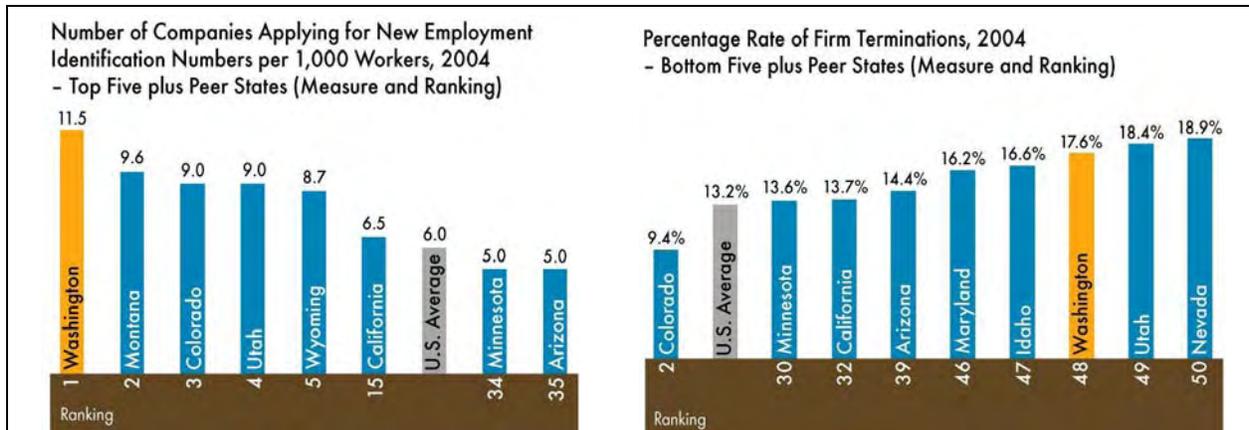


Source: ECG, Global Insight, Inc.

Source: Technology Alliance, US Dept of Commerce

And, as noted in figure 7, while Washington has the highest rate of new company formation in the U.S., the state is nearly the worst at keeping businesses open. The state's Business and Occupation tax, levied on gross receipts, may be part of the reason for the high rate of business closings, as the tax is particularly hard on small businesses and startups.

Figure 7: Washington is the best in the nation in business starts but, unlike some peers, is near the worst in keeping them open.



Source: Corporation for Enterprise Development

These trouble signs loom at a time when the economic environment is undergoing dramatic change. The global economy is becoming increasingly integrated. Nations are forming large trading blocs, and foreign businesses are improving their competitive positions. The marketplace is demanding profound technological innovation and development of advanced consumer products. All these forces put pressure on our regional economy to adapt and meet the new challenges.

And, while talented people have flocked to the region to work and live – in large part because of our stunning natural beauty and cultural abundance - our prosperity in an increasingly integrated global economy is not assured. In fact, it has never been more tenuous, and the reason is basic: the key factor of the global economy is no longer simply goods, services, or flows of capital, but also the competition for people. The ability to attract people is dynamic and sensitive given that information technology and mobility of goods and services means that many businesses can choose to locate anywhere. This new reality means that new centers of the global creative economy can emerge quickly; established players can lose position just as easily.

Worldwide competition is not just among countries but also among economic regions. As the author Richard Florida notes in his recent book, *The Flight of the Creative Class*, "...when it comes down to it, creative people choose regions. They don't simply think of the United States versus England, Sweden versus Canada, or Australia versus Denmark. They think of Silicon Valley versus Cambridge, Stockholm versus Vancouver or Sydney versus Copenhagen."<sup>7</sup>

Metropolitan regions have emerged as a basis for global competition. Around the world, regions are pooling their public and private talent and resources to pursue economic goals. The regional approach makes sense for central Puget Sound, where communities are so interconnected that they can be seen as a single economic unit.

## 7. Taking action: a two-pronged approach to achieve our economic goals

Based on the economic analysis, the Prosperity Partnership organized five pilot cluster working groups to identify key actions, investments, and public policy changes that would strengthen their sectors locally. The Prosperity Partnership also organized a Partnership Roundtable to identify needed changes to the regional economic foundations. Reflecting the analysis and outreach, the Strategy has two primary elements:

- a. **Cluster Action Initiatives**, to meet the needs of specific industry sectors.
- b. **Regional Foundation Initiatives**, to strengthen the general underpinnings of the economy.

These are described in the next two sub-sections and are more fully explained in attachment 4, the Summary of the Regional Economic Strategy. The complete Strategy can be accessed online at [www.prosperitypartnership.org](http://www.prosperitypartnership.org).

### a. Cluster action initiatives

Clusters help drive a region's economic wealth by selling their products or services outside the region, drawing income into the area that fuels the rest of the local-serving economy. Of the 15 clusters in the central Puget Sound region, five were chosen to be pilots for developing cluster-specific action initiatives.

The initial year of the Prosperity Partnership centered around five pilot industry clusters. Leaders in each of these clusters worked to identify critical issues and developed over 20 individual action initiatives that the Prosperity Partnership coalition will seek to implement, with several already being implemented.

- **Aerospace:** Initiatives to recommend short and long term legislative action; create an aerospace enterprise consortium for small and medium-sized businesses; develop an aggressive workforce development initiative; form centers of innovation in aerospace technology; and implement aerospace suppliers incentive program.
- **Clean Technology:** Initiatives to determine the need for and feasibility of creating a clean technology advocacy organization; and increase clean technology demonstration projects.

<sup>7</sup> *Flight of the Creative Class: The New Global Competition for Talent*. Richard Florida. HarperCollins. 2005.

- **Information Technology:** Initiatives to broaden and strengthen research and development to increase our region's intellectual capital; conduct an external marketing campaign that showcases the IT cluster; conduct a communications/economic literacy campaign that underscores the benefits of the IT cluster to the region, and map the "ecology" of the IT cluster.
- **Life Sciences:** Initiatives to develop and enact a vision for the cluster; create an ecosystem that can mix companies at different stages of development with available technical and financial resources; support; improve and build on current life sciences curricula and education programs in K-12; develop a inventory of skills and needs to guide decisions by education and training institutions; support joint use facilities to encourage collaboration among multiple life science companies and organizations; and connect and leverage the region's technological and intellectual strengths by creating a 'virtual research park.'
- **Logistics and International Trade:** Initiatives to communicate a jointly developed cluster message; develop a small business and entrepreneurial support network; enhance freight mobility through sustained funding and developing transportation chokepoint solutions; create a domestic logistics mission; attract Foreign Direct Investment; stage an export promotion symposium and classes for small and medium-sized businesses; and capitalizing on the Seattle 2010 Winter Olympic Games.

#### **b. Regional foundation initiatives**

In addition to the clusters, the Prosperity Partnership has identified six foundation initiatives to improve the core elements that contribute to the sustainable growth and development of all areas of our economy. These include:

1. **Education:** Ensure a vibrant, well-educated and adaptable workforce with an entrepreneurial spirit.
2. **Technology commercialization:** Improve the movement of technological innovations from research institutions to the marketplace.
3. **New & small business support:** Nurture entrepreneurs and small businesses.
4. **Tax structure:** Implement balanced, pro-competitive tax reforms.
5. **Transportation:** Build an effective transportation system to support a world-class region.
6. **Social capital and quality of life:** Secure broad-based prosperity in all parts of the region through a strong civic and nonprofit community.

Within these six broad categories, the Prosperity Partnership will work on over 80 individual action initiatives. The Strategy and its initiatives address the authority of the public sector, including local government, in the market. They also provide guidance to the update of the VISION. These relationships are described in section F.

#### **Showing Leadership**

Local governments have a lot on their plate, making economic development one among many priorities. At the same time, a strong economy provides the revenues needed to address many of these other priorities.

Some jurisdictions in the region are more focused on economic development than others. This focus is most likely to bear fruit if it comes with strong leadership and a "customer service" attitude towards economic development.

#### **Tacoma's Downtown Resurgence**

After decades of decline, downtown Tacoma has made a tremendous recovery in the past dozen years. The recovery took place within the context of adaptive reuse, brownfields reclamation, and infill development. Tacoma used multiple tools:

- A 7-page Destination Downtown building code.
- An "8 Weeks or Your Money Back" permitting program.
- Lobbying for and using the multifamily tax abatement program.
- Setting a downtown living goal of 2010 new units by 2010.
- Shortening the capital projects list from 80 to 7 downtown projects.
- Meeting with the private sector and delivering on milestones weekly.

While the tools are important, of primary importance was working as a full partner with the private sector to set common goals, share the risk, and to deliver on priorities. This type of public leadership and interest in partnership is credited with much of the city's success.

## F. PRELIMINARY ISSUES FOR CONSIDERATION IN UPDATING THE ECONOMIC ELEMENTS OF VISION 2020+20

Each of the topic chapters in the existing VISION contains a discussion of the topic, a description of the regional strategy for the topic, and a set of multicounty planning policies. While the structure *may* change as part of the update process, this section discusses how the existing economics section should be revised to better integrate the findings of the Strategy and to better assist in its implementation.

Preliminary issues for consideration are offered regarding concepts that should be incorporated into the VISION's (1) discussion of the economic issues facing the region, (2) economic strategy, and (3) economic multicounty planning policies. Each of these sub-sections starts with a description of the existing VISION and then describes additional concepts for consideration. Included in the policies section are some preliminary actions related to implementing the Strategy. All of this chapter's concepts are summarized in matrix form - see Attachment 3.

### 1. Concepts to incorporate into the VISION's economic discussion

#### a. Existing discussion

The existing VISION discussion touches on many themes, including:

- The complexity of the economy, the identification of some major sectors, and a focus on the prominence of trade activity to our region and state.
- The cyclical nature of some of our leading industries and how this leads to a less stable economy.
- The emergence and stabilizing role of new sectors.
- The importance of stability and the need for regional policies, which are based on reliable data and are flexible and timely to avoid unintended consequences.
- The need to maintain high quality infrastructure that meets the needs of the public-private sectors, consistent with other planning objectives.

#### b. Preliminary concepts to incorporate

The Regional Economic Strategy identified concepts that are part of the existing VISION that warrant additional attention, including:

- Recognize the importance of trade as a cluster. Trade continues to be a key component of the region's economy, and it creates an important connection to the rest of the State. Beyond that, trade and logistics were identified as a cluster (and one that serves the other clusters), making our knowledge and experience a product in itself. At least as important is our competitive advantage of being located one day closer to Asian ports than other West Coast regions.
- Recognize the importance of integrating economic development with land use and transportation planning in a sustainable manner. Our region has increased its economic strength<sup>8</sup> and its quality of life by working toward an integrated nexus among land use, transportation, and economic planning. This is demonstrated by the region's continued positive net in-migration of young, well-educated workers.

<sup>8</sup> A recent report by the Brookings Institute studied the academic literature regarding the fiscal and competitive advantages of smart growth development patterns. In the report, *Investing in a Better Future: A review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns (2003)*, the authors concluded that "A portfolio of provocative evidence suggests quite strongly that smart growth has the potential to reduce governments' capital facility costs, reduce their costs of delivering services, and improve regional economic performance as well." [Emphasis added]

The Strategy goes beyond the existing core of policy concepts and, while the documents have different timeframes, many of the concepts in the Strategy fit well with the longer-term tenure of the VISION.

Some concepts to incorporate include:

- *Recognize the changing global economy and the need to improve the region's economic foundations that support all businesses.* Clusters and businesses in general require strong regional economic foundations, especially in a globalizing economy. The Regional Economic Strategy identified these foundations as including human resources (including education), technology, access to capital, business climate, physical infrastructure, and quality of life and social capital. For our region to be successful, we need to ensure that these foundations are strong and remain at least comparable with other peer regions.
- *Recognize the importance of industry clusters for both diversification and specialization.* This means helping our clusters achieve world-class status so that they can export their goods and services and bring wealth into the region. While diversification has been a cornerstone of past economic approaches, the Strategy brings the new concept of striving to make our existing clusters world class. As regions specialize, they will also need to form collaborative relationships to purchase goods and services that only other regions can provide.
- *Recognize our region's cultural and ethnic diversity as an economic asset.* The region's diversity has enriched our quality of life, but as important is the fact that in an increasingly global economy, it is a strategic asset. Our diverse populations are connected to people in other countries, giving us a connection and toehold for mutually beneficial collaborative trade relationships with other regions and countries.
- *Recognize the importance of the region's culture, history, and regional character to the region's economy.* These assets - our culture, history, and regional character - are part of what drives the region's economy, *both* for tourists and for the businesses already here and those potentially choosing to locate here. It is what makes us special - rather than generic - and is a key to our economic success.
- *Recognize the importance of new and small business.* New and small businesses employ half of the nation's private sector employees, and over the last decade generated over 60 percent of the region's new jobs. Supporting these businesses by addressing some of the unique issues they face - in areas such as taxation, access to capital, and access to affordable health care for their employees - will be critical in competing in an entrepreneurial economy of the future.
- *Broaden the focus from public-private perspectives to also include the nonprofit sector.* The nonprofit sector helps to ensure that prosperity is shared, which in turn helps create the stability that any good economy requires. These stakeholders should be included in all stages of planning efforts.
- *Recognize new sustainable business technologies.* In many parts of the world, businesses are improving their productivity and improving their quality of life by embracing the concepts of natural capitalism.<sup>9</sup> Embracing these concepts helps position the region for sustainable economic development that fits within the capacity of the region's natural resources, infrastructure and character.

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<sup>9</sup> *Natural Capitalism: Creating the Next Industrial Revolution.* By Paul Hawken, Amory B. Lovins, and L. Hunter Lovins. Little, Brown (1999). The central strategies of natural capitalism include: (1) radically increased resource productivity, (2) biomimicry or redesigning industrial systems on biological lines to enable the constant reuse of materials in continuous closed cycles, (3) shifting to a service and flow economy, meaning a shift from goods and purchases to a flow of economic services, and (4) investing in natural capitalism through reinvestments in sustaining, restoring, and expanding stocks of natural capital.

## 2. Concepts to incorporate into the VISION's economic strategy

### a. Existing strategy

The existing VISION's economic strategy description identifies principles and objectives, including:

- The strategy is based on the following principles – identify economic needs based on public-private perspectives, balance these demands with public resources, and develop information to support decision-making.
- Emphasize business retention, expansion, and diversification through public-private coordination that helps to identify needs.
- Recognize the unique business needs in urban centers, to enhance the viability of centers and compact communities by providing adequate housing, employment, amenities and transportation.
- Support viable economic growth in rural areas and use management practices that protect long-term productivity.
- Identify transportation and communications investments that are necessary to support economic activity, accessibility, and the flow of people, information and goods.
- Build a regional database to track the economy and support decision-making.

### b. Preliminary concepts to incorporate

The existing VISION's economic strategy description touches on many of the same topics as those identified in the Regional Economic Strategy. However, a few additional concepts should be incorporated into the VISION's strategy, including:

- Recognize the critical importance of coordinated planning for our economy. Places such as Ireland, India, and Shanghai, not to mention peer regions within the nation, are developing economic strategies and are competing fiercely with our region for new jobs, and for our existing jobs. This is likely to continue far into the future and is therefore appropriate in the long-range VISION. Further, addressing some of the known issues of today will take time, and improvements we set out to achieve may not be seen for many years. These factors make it imperative that we continue to plan for our economy in a coordinated and sustained fashion, which involves integrated planning at both the regional and local jurisdictional level.
- Support industry clusters for both diversification and specialization. (see page 17)
- Recognize need to collaborate with the rest of the state and with other regions. In a globalizing economy, where regions continue to specialize in distinct clusters, our region needs to embrace a strategy based on forming collaborative relationships with the rest of the state and with other regions. This is especially important as we focus on trade-oriented industries, where potential customers and potential collaborators may be the same regions.
- Recognize and build on our assets of cultural and ethnic diversity, history, culture, and regional character. (see page 17)

#### Fostering Coordination

In August 2005, planning staff from British Columbia's Greater Vancouver Regional District (GVRD) came to Seattle to discuss regional long-range planning. GVRD planners discussed a tool - Regional Context Statements - that is used to achieve consistency between local and regional growth management plans.

This tool could be very helpful for fostering coordinated, but flexible and locally responsive, economic planning.

#### British Columbia's Regional Context Statements

Regional Context Statements are a special form of agreement between member municipalities and the GVRD, as required by B.C.'s planning enabling legislation (called the *Local Government Act*).

Prepared by the municipalities as a chapter within their Official Community Plans (OCP), the Regional Context Statements describe the municipal OCP objectives and policies that support the regional plan (called the Livable Region Strategic Plan). Where necessary, the statements describe how OCP local policies will evolve over time to provide greater consistency with the regional plan.

The Regional Context Statement process requires acceptance from the GVRD Board in order for the local government to adopt their local plans. Revised Statements are submitted for GVRD Board acceptance when OCP updates occur, typically every five years as required by provincial legislation.

- Support new and small business. (see page 17)
- Broaden the public-private focus to include nonprofit sector perspectives. (see page 17)
- Recognize the need to improve the region's economic foundations that support all businesses in the changing global economy. (see page 17)
- Recognize the importance of investing in our people, communities, and quality of life. In a high-tech and mobile economy, jobs can be located almost anywhere. Our region can compete for these jobs through a more integrated approach<sup>10</sup> to economic development. This is where the VISION and local jurisdictions can make a difference by helping to envision and make the region a place where people want to live and work; in short, a region that can compete for people and for economic prosperity. Doing so involves improving our willingness and ability to make needed investments and to make the most efficient use of existing investments.
- Recognize the need to work together to mitigate the impacts of globalization. The Strategy development process has made it clear that the region must work together to support the private sector as they compete in the globalizing economy. As this happens, it must be recognized that globalization has significant impacts – social, environmental, and economic. The strategy must also recognize the need to work together to minimize these impacts on the region's residents.
- Embrace sustainable business technologies to encourage job growth and to create healthier communities. The concepts of natural capitalism (see page 17) and a focus on environmental technologies and practices, renewable resources, green development practices, and a strong environmental ethic helps position the region for sustainable economic development. It also helps to create healthy communities by improving the built environments in our homes, offices, schools, and community gathering places.

### **3. Concepts to incorporate into the VISION's economic multicounty planning policies**

The VISION adds value to the Strategy process through the multicounty planning policies, which have both legal standing and relate directly to local and countywide planning. They provide an opportunity to broaden the constituency of the Strategy and improve its likelihood of implementation.

This section describes the existing multicounty planning policies and how they should be used to implement the Strategy. This is meant to ensure that local economic planning occurs and in a manner consistent with the regional VISION and Strategy.

#### **a. Existing policies**

The existing VISION contains 17 multicounty planning policies related to the economy. They organized under four topic areas. These are summarized as follows:

- Framework topic areas: (1) Through regionwide coordination, foster economic opportunity and stability while managing growth. Support efficient mobility for people, freight, and goods by (2) focusing growth in, and (3) supporting accessibility to and within, centers and compact communities. (4) Maintain reliable data that supports economic decision-making.
- Coordinate to identify and address infrastructure and space needs, and transportation needs for accessibility to and within centers.
- Support local and countywide economic plans and strategies and invest in community services, infrastructure and amenities.
- Encourage jobs in areas with adequate public services and in designated centers.
- Recognize the needs of centers such as housing, jobs that match residents' skills, and an economical and efficient transportation system. This means investing in community services, infrastructure and amenities.

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<sup>10</sup> See Attachment 2.

- Balance the needs of commercial/industrial employers with the growth strategy. Develop a regionwide industrial strategy that promotes reuse and redevelopment, discourages non-supportive uses, and provides adequate infrastructure and coordinated investments to maximize industrial sites, ports, and manufacturing/industrial centers.
- Support export-oriented and leading edge clusters by identifying their transportation needs and by developing a multimodal transportation system.
- Support rural and natural resource areas by recognizing their distinct character and maintaining appropriate infrastructure, and foster renewable resources in these areas through management practices that protect long-term productivity.
- Prepare regionwide and subarea forecasts, maintain a regionwide clearinghouse of data, and monitor performance and implementation.

***b. Preliminary policy concepts to incorporate***

The boards provided guidance to staff to maintain the existing concepts (see page 5) while adding some additional ones (see page 9). These additional concepts, goals from the GMA, the common themes in the countywide planning policies, and the outcomes of the Regional Economic Strategy process, suggest some revisions to the structure of the multicounty planning policies related to the economy.

Expanding from the four topic areas contained in the existing VISION (see page 5), the following represents a framework for policy focus areas to organize the economic policies in the VISION update:

- (i) promote economic planning that is integrated, coordinated, and sustained,
- (ii) encourage job creation,
- (iii) invest in our people, communities, and quality of life,
- (iv) provide sufficient and appropriate infrastructure, and
- (v) provide reliable data to support decision-making.

Following these are some preliminary policy concepts, and related actions that can be taken, beyond the policies, to help implement the Strategy.

**i.a. Policy Focus Area: Promote economic planning that is integrated, coordinated, and sustained.** In many respects, the region competes nationally and internationally as a single economic unit. Given global economic competition, the region will only be successful if regional and local governments engage with the private and nonprofit sectors in coordinated and sustained economic planning. This planning must be integrated with other components of the VISION, in particular land use and transportation.

- Ensure that regional and local economic development planning is consistent with the region's VISION. The existing VISION promotes economic growth primarily inside the urban growth area (with appropriate amounts of growth in rural areas), inside cities, and inside regional growth and manufacturing/industrial centers, and focuses on connecting these areas with an efficient,

**Providing Infrastructure**

Adequate public infrastructure such as telecommunications, roads, sewer, water, and more - are the backbone of economic development. Providing new facilities is a key challenge for new cities, and maintaining or retrofitting existing facilities is a challenge for older cities.

Revenues to public agencies have been reduced in recent years, requiring the public sector to be more creative in providing infrastructure.

**Everett's Multimodal Station**

A long time in the planning stages, the city completed Everett Station, which is a multimodal, multi-use transportation hub immediately adjacent to the city's downtown center. The Station serves as a connection point for multiple transportation modes, including Amtrak, Sound Transit, Everett Transit, Community Transit, Greyhound, and Trailways. The Station is served by private shuttles, taxis, and vanpools, and has bicycle lockers and a park-&-ride lot.

Not willing to settle for a transportation-only facility, the city added additional uses, including a higher education facility, a career development center and a café that serves as a gathering place for community events.

Co-locating all of these uses makes them more accessible to the public, and makes the Station a more efficient public infrastructure investment.

transit-oriented, multimodal transportation system. Throughout the region this approach is adding value and creating stronger local economies, and local plans should be consistent with this VISION.

- Ensure that local economic planning and economic development activities are consistent and coordinated, and that local governments play a role implementing the Strategy. While recognizing the necessity for jurisdictions to build on their own competitive advantages, mechanisms should also be put in place to ensure some degree of consistency (this was termed co-opetition in the Strategy). These mechanisms should help to ensure that local governments are encouraged to take on a role in implementing the Strategy.
- Foster an integrated approach to local and regional economic development. Local plans should build on the guidance provided by the GMA and consider a whole variety of quality-of-life issues (see *attachments 1 and 2*) at both the countywide and local level. Part of the approach is to recognize and build on the strategic assets of our location in relation to the rest of the State, and to the nation as a whole.
- Ensure that economic growth fits within the capacities of the region's natural resources, public services, and public facilities. The GMA specifically addresses the need for balance in the economic development planning goal, stating that economic growth should be "within the capacities of the state's natural resources, public services, and public facilities." Given the crucial need for integration, and for maintaining the region's high quality of life, economic development must be balanced with other areas of concern. As noted in the section on countywide planning policies (see *page 6*), some of this balance already occurs, but could potentially be improved.

#### **i.b. Related actions**

Beyond policies, there are a number of actions that should be taken to support integrated, coordinated, and sustained planning.

- Pursue state funding for local economic planning. It is urgent that sufficient funding be made available for local governments to be able to engage in sustained, coordinated, and successful economic planning. PSRC members should work closely with the state to secure some funding for local governments to assist them in developing economic elements for their local plans.
- Promote and recognize economic planning best practices. With or without state funding for economic planning, PSRC should consider creating a set of technical assistance tools to assist local governments in crafting and enacting local economic plans to address GMA requirements and to support the themes of the Strategy.
- Enact tools to ensure that plans are coordinated and consistent. Some tools that should be considered, and developed collaboratively, to help foster coordination include potentially certifying economic elements of local comprehensive plans when they become a mandatory element (similar to how PSRC certifies transportation elements), exploring the development of incentives (for example, tax revenue sharing), and/or potentially new programs (for example, British Columbia's Regional Context Statement – see *page 18*).
- Enact tools to encourage local governments to help implement the Strategy. Some tools that should be considered, and developed collaboratively, to help foster support for implementation could include an awards program (similar to the VISION 2020 awards), the use of regionally managed federal transportation funds as appropriate (potentially to encourage the adoption of economic elements in local comprehensive plans), or other programs.
- Harness the legislative clout of regional and local government to support economic development and economic foundation initiatives. Beyond educating the public, regional and local governments should use their legislative clout and continue to work closely with the rest of the state to ensure sufficient legislative support to improve the region's (and the state's) economic foundations (see *page 15*). While ensuring that its core economic messages are not diluted, the Prosperity Partnership has a greater chance of implementing these needed initiatives through the active partnering with local government.

- Raise profile of economic planning and assist in coordination efforts by setting employment targets. As noted in the VISION 2020+20 Issue Paper on Growth Targets, employment targets to some extent already exist and add value.<sup>11</sup> Setting employment targets is an important step in raising the prominence of economic planning, and can help to implement goals of having employees living closer to work and/or being able to commute to work using a variety of modes.

**ii.a. Policy Focus Area: Encourage job creation.** Economic prosperity is one of the most important elements of our long-range vision. The public sector has an important role in encouraging job growth and in ensuring that it is done in a sustainable manner. The sector also has many tools for supporting economic growth, and some examples are noted in the best practices sidebars. These tools include policies and regulations, permitting and planning, and investing and purchasing. Beyond this, the public sector has direct authority over the tax system, business climate and, in large part, quality of life needs and the provision of infrastructure.

And, of critical importance in a globalizing economy, the public sector supports job growth through decisions it makes as it manages its part of the education system.

- Support export-oriented clusters and businesses. Businesses that export goods and services and import wealth into the region help drive the economy (and, in part, the rest of the state's economy). This income increases the region's economic wealth and fuels the rest of the economy. Without these economic drivers, a region would only circulate money already in the local economy, and risk losing economic momentum over time.
- Embrace and support our culturally and ethnically diverse communities. (see page 17).
- Support new and small businesses. (see page 17)
- Seek to strengthen and improve the economic foundations that support all businesses. (see page 19)
- Use government purchasing to support local goods and service providers. Local government and government in general, are major purchasers of infrastructure products - from new buildings, to municipal fleets, and more. Where appropriate, local governments can support local industries - and the region's economy - by purchasing from local product providers. This helps keep jobs and money in the region and

### Sharing the Risk

In the past, local government's economic development efforts have often taken a "zone it and they will come" or "set the table" approach. These approaches are proactive, but do not necessarily lead to the expected results or to any results at all.

A new approach seems to be taking hold - working closely with the private sector to identify all the cost factors in a project and to invest as part of a partnership. This partnership creates more certainty, minimizes risks, and helps ensure a sufficient return on investment.

### Renton's Metropolitan Place

Located directly adjacent to the downtown core, Metropolitan Place includes a transit station, public plaza, shared parking garage, and much more. The project is an important catalyst for additional downtown development.

Many economic development tools were used to make this project successful, but the primary one seems to be the partnership between the city and all of the project's stakeholders.

To start the project, the city worked with the existing businesses (car dealerships) and helped move them to land closer to the freeway. The city then partnered with other public agencies to secure the transit station and shared parking garage. The city approached a developer and worked closely to create a project that worked well for both parties. Part of making the project feasible was the city's willingness to build infrastructure ... right up to the front doors of the development! This helped minimize the risk for the developer, and helped move the project to construction.

<sup>11</sup> *Growth Management By the Numbers: Growth Targets in the Central Puget Sound Region*. July 2005. Page 102. Much of the analytical work needed to set employment targets is already done by the jurisdictions because of the Buildable Lands program, which requires a "review [of] commercial, industrial, and housing needs by type and density range to determine the amount of land needed for commercial, industrial, and housing for the remaining portion of the twenty-year planning period used in the most recently adopted comprehensive plan." [RCW 36.70A.215 (3)(c).] The Central Puget Sound Growth Management Hearings Board commented but did not rule on this issue, stating "Because urban growth consists of people and jobs, the county is therefore charged with authority to undertake a task that is essentially an allocation of population and employment." [Edmonds v. Snohomish County. 93-3-0005c]

can help a newer industry grow and then begin to sell in national markets.

- Employ environmental technologies and practices to encourage sustainable job growth and quality of life. (see page 20)

## ii.b. Related actions

Beyond policies, there are a number of actions that should be taken to encourage job creation.

- Participate in economic literacy campaign to create support among citizens for economic growth. Citizens' and businesses' first point of contact with the government is through their local municipality. Making economic development – especially an integrated approach that is consistent with the regional Strategy – part of each jurisdiction's message helps build support for business growth and for needed investments. It is through this interaction, perhaps more than any other, that local governments can foster support for economic development and help implement the Strategy.
- Work to implement economic foundation initiatives. The key foundation initiatives for encouraging job creation include:
  - Technology commercialization: Improve the movement of technological innovations from research institutions to the marketplace.
  - New & small business support: Nurture entrepreneurs and small businesses.
  - Tax structure: Implement balanced, pro-competitive tax reforms.
- Seek to increase consistency among local permitting processes. While individual jurisdiction's permitting processes have been continually streamlined over the years, more work can be done to ensure that the diversity<sup>12</sup> of local processes becomes more consistent. Participants in the Strategy process noted that the diversity of processes had a harmful impact on development - especially for smaller businesses. As noted on page 11, participants in the regional economic summit indicated that regulatory consistency was one of the most important opportunities for growing the economy. Establishing consistency among permit standards will involve changes to terminologies, processes and time frames, methodologies, and, in some cases, perhaps to the standards themselves. Efforts to improve consistency among local processes should be developed carefully as to not impinge on local prerogatives, reduce protections, nor codify the lowest common denominator.
- Recognize and support the use of local incentives and innovative tools. The Strategy addressed the topic of incentives cautiously, stating that they should result in a positive net return on investment, and not be speculative. However, incentives clearly play a role in economic development. Equally true is the removal of disincentives. Regional and local government have a role in marketing existing tools, tailoring regulations to focus job growth to areas that have sufficient public services and infrastructure, and considering innovative tools, such as those highlighted in the best practices sidebars.

**iii.a. Policy Focus Area: Invest in our people, communities, and quality of life.** The Strategy is, at its heart, about retaining and recruiting people. This competition is won and lost through quality of life. The GMA and the VISION's holistic and balanced approach – focusing on land use, transportation, economic development, and the environment – is central to securing the region's high quality of life. And, the VISION, by focusing growth and transportation investments, creates great communities and an economic nexus that drives the region's economy.

Participants in the regional economic summit indicated that land use supporting housing, jobs, and transit was the third most important opportunity for growing the economy. They also indicated that quality of life is just as important as "hard business costs" for economic growth.

- Understand and mitigate the impacts of globalization on the region's residents. (see page 19)

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<sup>12</sup> As an example, the Regional Council's two-year assessment of GMA-mandated transportation concurrency programs found that no two programs were identical. This meant that developers needed to learn each jurisdiction's program anew in order to work in multiple jurisdictions.

- Prioritize investments in our people. Increasingly, economic development practitioners are recognizing that what is good for people is good for the economy. There are many components to this – from a good education system to workforce training to a strong social capital network. Only when our region's people are supported can they fully contribute to economic growth. Decisions about how to prioritize should be based on solid, reliable information and data.
- Promote economic opportunity for all citizens of the region, especially for unemployed and for disadvantaged persons. This concept comes directly from the GMA economic development planning goal. For the region to sustain the momentum generated by the Prosperity Partnership, it is crucial that there be widespread public support, and part of ensuring the support is by seeking to ensure that prosperity is shared.
- Protect and enhance our region's culture, history and regional character. (see page 17).
- Invest in physical and social infrastructure to make great communities. Local governments' primary contribution to the economy is through the creation of great communities. These communities have great things in them - parks, cultural amenities, community centers, libraries, quality infrastructure, and more. The old adage is true, "it takes money to make money." Communities that invest in themselves are more likely to be successful and to help the region to compete for people and for prosperity.
- Support efforts to provide an adequate and diverse housing supply. An area where the region is weak is in the provision of housing - for both owners and renters - that is affordable and accessible to all economic segments of the population. This is fundamentally about supply, but also about the diversity of housing options. Leadership is required at the regional and local level to ensure that sufficient new housing is built to accommodate future growth. This involves addressing incentives and disincentives, making land available, and ensuring that land is developed efficiently. Additional recommendations regarding housing can be found in the VISION 2020+20 Issue Paper on Housing.
- Continue to encourage jobs in areas with adequate public services and in designated centers and subregional centers. Focusing growth into areas, such as designated regional centers, where adequate capacity exists or is planned should remain a strong component of the VISION. Recognize that other important areas of activity exist in subregional centers, and that these may be appropriate locations for the focusing of growth.
- Continue to recognize the needs of designated centers and subregional centers. These include needs such as housing, jobs that match residents' skills, and an economical and efficient transportation system. This means investing in community services, education, infrastructure, and amenities.

### **Making Sites Shovel Ready**

Getting from concept to moving dirt is one the riskiest phase for a developer, with equity tied up in the land as the project moves through the permitting and public comment stages. If the project is denied, or needs significant changes, the risks and associated costs only grow.

Even developments that are consistent with the local plan and zoning must go through the State Environmental Policy Act, or SEPA, process. Reforms exist that allow local governments to "pre-permit" for development within the urban growth area.

A Planned Action EIS allows a city to clearly identify zoned uses and build out, and then spells out the environmental mitigation that is required for development to occur. When actual development proposals come to the permit stage, if they are within the thresholds identified in the EIS, they only require a determination of consistency with the earlier EIS.

### **Kent's SEPA Planned Action for Kent Station**

In 2002, Kent prepared a Planned Action EIS for a 20-acre parcel - named Kent Station - located adjacent to their downtown core and commuter rail station.

The Planned Action calls for mixed-use development that is of a greater density than the surrounding area, and includes an upscale grocer, a cinema, restaurants, and a Community College satellite campus (a use that was seen as magnet tenant).

The Planned Action established thresholds for uses (such as a maximum footages for retail and office) within which a project would not need to perform additional SEPA analysis.

This incentive helped the city attract a developer, who was selected through a competitive process. The developer broke ground on the first phase of a \$100 million, 470,000 square foot project in 2004, and Phase I is scheduled to open in late 2005.

- Continue to support appropriate economic development in rural and natural resource areas. This means supporting rural and natural resource areas by recognizing their distinct character and maintaining appropriate infrastructure and fostering renewable resources in these areas through management practices that protect long-term productivity.

### iii.b. Related actions

Beyond policies, there are actions that should be taken to invest in our people, communities, and quality of life.

- Work to implement economic foundation initiatives. The key foundation initiatives for investing in our people, communities, and quality of life include:
  - Education: Ensure a vibrant, well-educated and adaptable workforce with an entrepreneurial spirit.
  - Social capital and quality of life: Secure broad based prosperity in all parts of the region through a strong civic and nonprofit community.

**iv.a. Policy Focus Area: Provide sufficient and appropriate infrastructure.** Competitive regions provide not only basic services such as electricity, ports, roads, water, and waste management, but also more advanced infrastructure, such as sophisticated telecommunications capacities that enhance business efficiency and links to external markets. In this regional context, economic infrastructure also includes increased housing supply, fully funding all levels of education, providing for public safety, and more.

Participants in the regional economic summit indicated that multimodal transportation improvements, and regional solutions to infrastructure were the top two opportunities for growing the economy. They also indicated that providing infrastructure was more important than providing financial incentives for economic growth.

- Ensure that all forms of infrastructure are provided in a manner consistent with the region's growth strategy. Infrastructure has a key role in guiding development and growth. Infrastructure should be used to support growth in areas identified for development and should be limited in areas that are not.
- Continue to coordinate to identify infrastructure needs. This means coordinating with the public-private-nonprofit sectors to identify and address infrastructure and space needs as well as telecommunications and transportation needs for reliable access to and within centers and other important activity and business centers.
- Optimize infrastructure needs for clusters, manufacturing and regional growth centers. Continue to assess the needs of clusters and the needs for designated centers, and seek to optimize the provision of infrastructure and the focusing of growth and protection of residential neighborhoods in a manner that benefits multiple components of the region's economy. This also means continuing to support an industrial strategy that promotes reuse and redevelopment, discourages non-supportive uses, and provides adequate infrastructure and coordinated investments to maximize industrial sites, ports, and manufacturing/industrial centers.
- Employ sustainable building and development practices. By promoting cleaner technologies in our building and development practices - from buildings, to clean trucks and buses, to the use of recycled materials - local governments can further support the Strategy's efforts to gain a competitive advantage in these industries.

### iv.b. Related actions

Beyond policies, there are a number of actions that should be taken to provide sufficient and appropriate infrastructure.

- Recognize need and create support for investing in all types of infrastructure. Any work done to support and enhance the region's economy through the "related actions" in sections i.b (see page 21 - especially the bullet on "harnessing the clout of government") and ii.b (see page 23 - especially the

bullet on "participating in an economic literacy campaign") must help the region build all of its infrastructure to support and help focus growth.

- Work to implement economic foundation initiatives. The key foundation initiative for providing sufficient and appropriate infrastructure is:
  - Transportation: Build an effective transportation system to support a world-class region.
- Make strategic public sector investments to support local businesses and clusters. In many communities, local governments are often one of the largest employers and purchasers of goods and services. Where appropriate, the use of *local* products and services can be a stepping-stone for an industry to grow and begin to sell in national markets. This was identified by at least one of the Strategy's workgroups - the Clean Technology cluster - as needing to be part of a plan for introducing new products into the market.
- Make strategic public sector investments to support sustainable building and development practices. Similar to the action above, government has a greater ability to utilize clean technology practices. Government usually has a greater ability than the private sector to accept a longer timeframe for a return on their investments. This allows them to purchase products in a different fashion than the private sector and can be useful in fostering new technologies and industries.

**v.a. Policy Focus Area: Provide reliable data to support decision-making.** Credible and reliable data has been a cornerstone of the Regional Council's planning activities. As the Regional Council continues to engage in economic planning, it should play a similar role in economic data compilation and sharing as it does in land use and transportation. Improving its economic data capabilities will help to ensure integration. Key to success will be coordinating with others' data collection and analysis efforts.

- Continue to collaborate with others to maintain a regionwide clearinghouse of data and monitor performance and implementation.
- Looking for opportunities to use data to help integrate land use, transportation, and economic development. Given our growing understanding of the interdependencies in these planning areas, opportunities may exist to refine our existing data collection and analysis practices at the local and regional levels.

**v.b. Related actions**

Beyond policies, there are actions that should be taken to provide reliable data to support decision-making.

- Continue to prepare regionwide and subarea forecasts.

## **G. NEXT STEPS**

This section discusses next steps in the Strategy's implementation and the VISION update process.

### **1. Implement the Strategy**

Over the summer of 2005, the Prosperity Partnership engaged the region in a dialogue about the six foundation initiatives and the five sets of cluster initiatives. With the adoption of the Strategy in September 2005, the Prosperity Partnership will now take the following actions:

- **Implement the foundation initiatives**

At the same time as it supports the cluster initiatives, the Prosperity Partnership will move the foundation initiatives forward. With over 150 partner organizations, high visibility in the community and momentum, the Prosperity Partnership may offer the best chance yet for achieving the ambitious results we seek in the foundation initiatives.

- **Continue the work of the five pilot clusters**

To varying degrees, the leadership of the cluster working groups see the value in continuing the work of their groups. This could include supporting work on the cluster initiatives, helping those implementing the action initiatives break through obstacles, helping to find needed resources and seed funding, and keeping the Partnership's leaders informed of progress.

Some working groups might want to launch new initiatives to strengthen their clusters' business environments. The Prosperity Partnership will support the cluster working group processes as they continue. Where leadership changes are warranted, new leaders may be found within the existing groups. Efforts to add new cluster participants will continue.

- **Add new clusters to the process**

The five pilot clusters are not the only clusters driving our economy. Ten others are contributing to regional prosperity. Perhaps as early as 2006, with careful consideration and, perhaps, additional research, the Prosperity Partnership will focus efforts on those additional clusters that are ripe for forming cluster working groups.

Beyond these actions, the Prosperity Partnership is working to develop an organizational structure to ensure that the effort is sustained.

### **2. Update the VISION**

The update of the VISION includes two primary next steps: developing a new VISION, complete with strategies, provisions, and policies, and engaging in an environmental review and public outreach process. The issue papers will be used as a starting point for developing the updated VISION, and each paper's preliminary considerations and/or recommendations are likely to change as the public outreach and comment periods are conducted.

The schedule and some key milestones are noted in the following table.

September – January 2006	Develop Draft EIS	
February 2006	Release Draft EIS	Analysis of four growth alternatives
February – March 2006	Public Outreach / Public Comment	
April – August 2006	Develop Supplemental EIS and Draft VISION	
September 2006	Release Supplemental EIS	Analysis of preferred growth alternative
	Release Draft VISION	Draft topic area strategies and policies
September – October 2006	Public Outreach / Public Comment	
November – December 2006	Develop Final EIS and Final VISION	
January 2007	Release Final EIS	Presentation of refined preferred growth alternative
	Release Final VISION	Overall growth strategy, topic area strategies and policies, implementation actions, and future work
January – February 2007	Board Review and Action on Final VISION	
March 2007	General Assembly Action on Final VISION	

## H. CONCLUSIONS

The Regional Economic Strategy represents a major collaborative step forward for the region in terms of coordinated, regionwide economic planning to help the region remain competitive in the globalizing economy. The Prosperity Partnership has brought together diverse interests from the public, nonprofit, and private sectors.

Implementation will require all sectors to continue to work together. The VISION and local governments working together have an important role in creating a sustainable long-term framework that supports implementation of the actions and concepts in the Strategy.

## I. ATTACHMENTS

### 1. CTED Economic Development Element Fact Sheet

This attachment provides guidance regarding information, resources, and a fairly comprehensive process a local jurisdiction might engage in when developing an economic element to their comprehensive plans.

### 2. Integrated Approach example: The Ahwahnee Principles for Economic Development

This attachment provides guidance regarding planning principles that could be considered when engaging in economic planning. The principles are meant to serve as a comprehensive model, which recognizes the value of natural and human capital, and embraces economic, social, and environmental responsibility.

In 2002, the Puget Sound Regional Council's transportation plan, *Destination 2030*, and its Transit Station Communities Project received an Ahwahnee Award. The projects were honored together in the Regional Initiatives category for supporting sustainable land use patterns through efficient transportation investments. These awards honor outstanding projects and programs that create livable communities in the 14 western states.

### 3. Summary Matrix of Section F of the Economic Issue Paper - Preliminary Issues for Consideration in updating the economic elements of VISION 2020+20

This attachment summarizes section F of the economic issue paper in a matrix form, given its length and amount of content. This matrix should be used only as a summary guide to the section as it does not provide all of the content or background information.

### 4. Prosperity Partnership's Regional Economic Strategy – Summary. *(Supporting materials attached for Growth Management Policy Board members and alternates. For copies of the complete agenda packet, please contact the Information Center, (206) 464-7532.)*

This attachment summarizes the Regional Economic Strategy, which provides the basis for much of the content and preliminary issues for consideration that are described in this economic issue paper.

(Insert Attachment 1)

## **1. CTED Economic Development Element Fact Sheet**

November 16, 2005

(Attachment 2)

## 2. Integrated approach example - The Ahwahnee Principles for Economic Development

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**Local Government Commission**

*"The LGC is a nonprofit organization working to build livable communities."*

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Commission's Website:

<http://www.lgc.org/ahwahnee/index.html>

## Ahwahnee Principles for Economic Development

### **Smart Growth: Economic Development for the 21st Century**

*A Set of Principles for Building Prosperous and Livable Communities*

#### **Preamble**

Prosperity in the 21st Century will be based on creating and maintaining a sustainable standard of living and a high quality of life for all. To meet this challenge, a comprehensive new model is emerging which recognizes the economic value of natural and human capital. Embracing economic, social, and environmental responsibility, this approach focuses on the most critical building blocks for success, the community and the region. It emphasizes community-wide and regional collaboration for building prosperous and livable places. While each community and region has unique challenges and opportunities, the following common principles should guide an integrated approach by all sectors to promoting economic vitality within their communities, and in partnership with their neighbors in the larger region.

#### **1. Integrated Approach**

Government, business, education, and the community should work together to create a vibrant local economy, through a long-term investment strategy that:

- encourages local enterprise
- serves the needs of local residents, workers, and businesses
- promotes stable employment and revenues by building on local competitive advantages
- protects the natural environment
- increases social equity
- is capable of succeeding in the global marketplace.

#### **2. Vision and Inclusion**

Communities and regions need a vision and strategy for economic development according to these principles. Visioning, planning and implementation efforts should continually involve all sectors, including the voluntary civic sector and those traditionally left out of the public planning process.

#### **3. Poverty Reduction**

Both local and regional economic development efforts should be targeted to reducing poverty, by promoting jobs that match the skills of existing residents, improving the skills of low-income individuals, addressing the needs of families moving off welfare, and insuring the availability in all communities of quality affordable child care, transportation, and housing.

#### **4. Local Focus**

Because each community's most valuable assets are the ones they already have, and existing businesses are already contributing to their home communities, economic development efforts should give first priority to supporting existing enterprises as the best source of business expansion and local job growth. Luring businesses away from neighboring communities is a zero-sum game that doesn't create new wealth in the regional economy. Community economic development should focus instead on promoting local entrepreneurship to build locally based industries and businesses that can succeed among national and international competitors.

#### **5. Industry Clusters**

Communities and regions should identify specific gaps and niches their economies can fill, and promote a diversified range of specialized industry clusters drawing on local advantages to serve local and international markets.

#### **6. Wired Communities**

Communities should use and invest in technology that supports the ability of local enterprises to succeed, improves civic life, and provides open access to information and resources.

#### **7. Long-Term Investment**

Publicly supported economic development programs, investments, and subsidies should be evaluated on their long-term benefits and impacts on the whole community, not on short-term job or revenue increases. Public investments and subsidies should be equitable and targeted, support environmental and social goals, and prioritize infrastructure and supportive services that promote the vitality of all local enterprises, instead of individual firms.

#### **8. Human Investment**

Because human resources are so valuable in the information age, communities should provide life-long skills and learning opportunities by investing in excellent schools, post-secondary institutions, and opportunities for continuous education and training available to all.

#### **9. Environmental Responsibility**

Communities should support and pursue economic development that maintains or improves, not harms, the environmental and public health.

#### **10. Corporate Responsibility**

Enterprises should work as civic partners, contributing to the communities and regions where they operate, protecting the natural environment, and providing workers with good pay, benefits, opportunities for upward mobility, and a healthful work environment.

#### **11. Compact Development**

To minimize economic, social, and environmental costs and efficiently use resources and infrastructure, new development should take place in existing urban, suburban, and rural areas before using more agricultural land or open space. Local and regional plans and policies should contain these physical and economic development planning principles to focus development activities in desired existing areas.

#### **12. Livable Communities**

To protect the natural environment and increase quality of life, neighborhoods, communities and regions should have compact, multi-dimensional land use patterns that ensure a mix of uses, minimize the impact of cars, and promote walking, bicycling, and transit access to employment, education, recreation, entertainment, shopping, and services. Economic development and transportation investments should reinforce these land use patterns, and the ability to move people and goods by non-automobile alternatives wherever possible.

### **13. Center Focus**

Communities should have an appropriately scaled and economically healthy center focus. At the community level, a wide range of commercial, residential, cultural, civic, and recreational uses should be located in the town center or downtown. At the neighborhood level, neighborhood centers should contain local businesses that serve the daily needs of nearby residents. At the regional level, regional facilities should be located in urban centers that are accessible by transit throughout the metropolitan area.

### **14. Distinctive Communities**

Having a distinctive identity will help communities create a quality of life that is attractive for business retention and future residents and private investment. Community economic development efforts should help to create and preserve each community's sense of uniqueness, attractiveness, history, and cultural and social diversity, and include public gathering places and a strong local sense of place.

### **15. Regional Collaboration**

Since industries, transportation, land uses, natural resources, and other key elements of a healthy economy are regional in scope, communities and the private sector should cooperate to create regional structures that promote a coherent metropolitan whole that respects local character and identity.

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## **About the Ahwahnee Principles**

In 1991, the Local Government Commission staff-member Peter Katz, author of the New Urbanism, and the commission brought together a group of architects who have been leaders in developing new notions of land use planning: Andres Duany and Elizabeth Plater-Zyberk, Stefanos Polyzoides and Elizabeth Moule, Peter Calthorpe, and Michael Corbett. They were asked to come to agreement about what it is that the new planning ideas - from neotraditional planning to sustainable design - have in common and from there to develop a set of community principles.

They were then asked how each community should relate to the region, and to develop a set of regional principles. Finally, they were charged with defining how these ideas might be implemented by cities and counties. The architects' ideas were drafted by attorney Steve Weissman into a form that would be useful to local elected officials and provide a vision for an alternative to urban sprawl. A preamble, topics of specific ideas, community principles, regional principles and implementation of the principles was presented in the fall of 1991 to about 100 local elected officials at a conference at the Ahwahnee Hotel in Yosemite. There they received both a highly enthusiastic response and their title- the Ahwahnee Principles. Since that time, the group has developed principles on other topics such as economic development, water resources planning, and more.

*More information and case studies of each principle are in the Local Government Commission's guidebook "The Ahwahnee Principles for Smart Economic Development: An Implementation Guidebook" available at the LGC Bookstore ([www2.lgc.org/bookstore/](http://www2.lgc.org/bookstore/)).*

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For more information, contact the LGC Center for  
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### 3. Summary Matrix of Section F - Preliminary Issues for Consideration

1. Concepts to incorporate into the VISION's economic discussion	
<p><b>a. Existing discussion</b></p> <ul style="list-style-type: none"> <li>▪ The complexity of the economy, the identification of some major sectors, and a focus on the prominence of trade activity to our region and state.</li> <li>▪ The cyclical nature of some of our leading industries and how this leads to a less stable economy.</li> <li>▪ The emergence and stabilizing role of new sectors.</li> <li>▪ The importance of stability and the need for regional policies, which are based on reliable data and are flexible and timely to avoid unintended consequences.</li> <li>▪ The need to maintain high quality infrastructure that meets the needs of the public-private sectors, consistent with other planning objectives.</li> </ul>	<p><b>b. Preliminary concepts to incorporate</b></p> <ul style="list-style-type: none"> <li>▪ Recognize the importance of trade as a cluster. <i>(changes in bullet text, page 16)</i></li> <li>▪ Recognize the importance of integrating economic development with land use and transportation planning in a sustainable manner.</li> <li>▪ Recognize the changing global economy and the need to improve the region's economic foundations that support all businesses. <i>(changes in bullet text, page 17)</i></li> <li>▪ Recognize the importance of industry clusters for both diversification and specialization.</li> <li>▪ Recognize our region's cultural and ethnic diversity as an economic asset.</li> <li>▪ Recognize the importance of new and small business.</li> <li>▪ Broaden the focus from public-private perspectives to also include the nonprofit sector.</li> <li>▪ Recognize new sustainable business technologies. <i>(changes in bullet text, page 17)</i></li> </ul>
2. Concepts to incorporate into the VISION's economic strategy	
<p><b>a. Existing strategy</b></p> <ul style="list-style-type: none"> <li>▪ The strategy is based on following principles – identify economic needs based on public-private perspectives, balance these demands with public resources, and develop information to support decision-making.</li> <li>▪ Emphasize business retention, expansion, and diversification through coordination that helps to identify needs.</li> <li>▪ Recognize the unique business needs in urban centers to enhance the viability of centers and compact communities by providing adequate housing, employment, amenities and transportation.</li> <li>▪ Support viable economic growth in rural areas and use management practices that protect long-term productivity.</li> <li>▪ Identify transportation and communications investments that are necessary to support economic activity, accessibility, and the flow of people, information and goods.</li> <li>▪ Build a regional database to track the economy and support decision-making.</li> </ul>	<p><b>b. Preliminary concepts to incorporate</b></p> <ul style="list-style-type: none"> <li>▪ Recognize the critical importance of coordinated planning for our economy.</li> <li>▪ Support industry clusters for both diversification and specialization.</li> <li>▪ Recognize need to collaborate with the rest of the state and with other regions. <i>(changes in bullet text, page 18)</i></li> <li>▪ Recognize the importance of the region's cultural and ethnic diversity, history, and regional character.</li> <li>▪ Support new and small business.</li> <li>▪ Broaden the public-private focus to include nonprofit sector perspectives.</li> <li>▪ Recognize the need to improve the region's economic foundations that support all businesses in the changing global economy.</li> <li>▪ Recognize the importance of investing in our people, communities, and quality of life.</li> <li>▪ Recognize the need to work together to mitigate the impacts of globalization.</li> <li>▪ Embrace sustainable business technologies to encourage job growth and to create great communities.</li> </ul>
3. Concepts to incorporate into the VISION's economic multicounty planning policies	
<p><b>a. Existing policies</b></p> <ul style="list-style-type: none"> <li>▪ Framework topic areas: (1) Through region-wide coordination, foster economic opportunity and stability while managing growth. Support efficient mobility for people, freight, and goods by (2) focusing growth in, and (3) supporting accessibility to and within, centers and compact communities. (4) Maintain reliable data that supports economic decision-making.</li> <li>▪ Coordinate to identify and address infrastructure and space needs, and transportation needs for accessibility to and within centers.</li> <li>▪ Support local and countywide economic plans and strategies and invest in community services, infrastructure and amenities.</li> <li>▪ Encourage jobs in areas with adequate public services and in designated centers.</li> <li>▪ Recognize the needs of centers such as housing, jobs that match resident's skills, and economical and efficient transportation system. This means investing in community services, infrastructure and amenities.</li> <li>▪ Balance the needs of commercial/industrial employers with the growth strategy. Develop a region-wide industrial strategy that promotes reuse and redevelopment, discourages non-supportive uses, and provides adequate infrastructure and coordinated investments to maximize industrial sites, ports, and manufacturing/industrial centers.</li> <li>▪ Support export-oriented and leading edge clusters by identifying their transportation needs and by developing a multimodal transportation system.</li> <li>▪ Support rural and natural resource areas by recognizing their distinct character and maintaining appropriate infrastructure, and foster renewable resources in these areas through management practices that protect long-term productivity.</li> <li>▪ Prepare region-wide and subarea forecasts, maintain a region-wide clearinghouse of data, and monitor performance and implementation.</li> </ul>	

<b>b. Preliminary policy concepts to incorporate</b>	
<i>Policy Focus Areas and Concepts</i>	<i>Related Actions</i>
<p><i>i. Promote economic planning that is integrated, coordinated, and sustained.</i></p> <ul style="list-style-type: none"> <li>▪ Ensure that regional and local economic development planning is consistent with the region's VISION.</li> <li>▪ Ensure that local economic planning and economic development activities are consistent and coordinated, and that local governments play a role implementing the Strategy.</li> <li>▪ Foster an integrated approach to local and regional economic development. <i>(changes in bullet text, page 21)</i></li> <li>▪ Ensure that economic growth fits within the capacities of the region's natural resources, public services, and public facilities.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pursue State funding for local economic planning.</li> <li>▪ Promote and recognize economic planning best practices.</li> <li>▪ Enact tools to ensure that plans are coordinated and consistent. <i>(changes in bullet text, page 21)</i></li> <li>▪ Enact tools to encourage local governments to help implement the Strategy. <i>(changes in bullet text, page 21)</i></li> <li>▪ Harness the legislative clout of regional and local government to support economic development and economic foundation initiatives. <i>(changes in bullet text, page 21)</i></li> <li>▪ Raise profile of economic planning and assist in coordination efforts by setting employment targets.</li> </ul>
<p><i>ii. Encourage job creation. (changes in bullet text, page 22)</i></p> <ul style="list-style-type: none"> <li>▪ Support export-oriented clusters and businesses. <i>(changes in bullet text, page 22)</i></li> <li>▪ Embrace and support our culturally and ethnically diverse communities.</li> <li>▪ Support new and small businesses.</li> <li>▪ Seek to strengthen and improve the economic foundations that support all businesses.</li> <li>▪ Use government purchasing to support local goods and service providers.</li> <li>▪ Employ environmental technologies and practices to encourage <u>sustainable</u> job growth and quality of life.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participate in economic literacy campaign to create support among citizens for economic growth.</li> <li>▪ Work to implement economic foundation initiatives: Technology commercialization, New &amp; small business support, and Tax structure.</li> <li>▪ Seek to increase consistency among local permitting processes.</li> <li>▪ Recognize and support the use of local incentives and innovative tools.</li> </ul>
<p><i>iii. Invest in our people, communities, and quality of life.</i></p> <ul style="list-style-type: none"> <li>▪ Understand and mitigate the impacts of globalization on the region's residents.</li> <li>▪ Prioritize investments in our people.</li> <li>▪ Promote economic opportunity for all citizens of the region, especially for unemployed and for disadvantaged persons.</li> <li>▪ Protect and enhance our region's culture, history, and regional character.</li> <li>▪ Invest in physical and social infrastructure to make great communities.</li> <li>▪ Support efforts to provide an adequate and diverse housing supply.</li> <li>▪ Continue to encourage jobs in areas with adequate public services and in designated centers and subregional centers. <i>(changes in bullet text, page 24)</i></li> <li>▪ Continue to recognize the needs of designated centers and subregional centers. <i>(changes in bullet text, page 24)</i></li> <li>▪ Continue to support appropriate economic development in rural and natural resource areas.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Work to implement economic foundation initiatives: Education, Social capital and quality of life.</li> </ul>
<p><i>iv. Provide sufficient and appropriate infrastructure.</i></p> <ul style="list-style-type: none"> <li>▪ Ensure that all forms of infrastructure are provided in a manner consistent with the region's growth strategy.</li> <li>▪ Continue to coordinate to identify infrastructure needs. <i>(changes in bullet text, page 25)</i></li> <li>▪ Optimize infrastructure needs for clusters, manufacturing and regional growth centers. <i>(changes in bullet text, page 25)</i></li> <li>▪ Employ sustainable building and development practices.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Recognize need and create support for investing in all types of infrastructure.</li> <li>▪ Work to implement economic foundation initiatives: Transportation.</li> <li>▪ Make strategic public sector investments to support local businesses and clusters.</li> <li>▪ Make strategic public sector investments to support sustainable building and development practices.</li> </ul>
<p><i>v. Provide reliable data to support decision-making.</i></p> <ul style="list-style-type: none"> <li>▪ Continue to collaborate with others to maintain a region-wide clearinghouse of data, and monitor performance and implementation.</li> <li>▪ Creating looking for opportunities to use data to help integrate land use, transportation, and economic development.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to prepare region-wide and subarea forecasts.</li> </ul>

(Insert Attachment 4)

#### **4. Prosperity Partnership's Regional Economic Strategy - Summary**

VISION 2020 + 20 Update  
Issue Paper on Transportation

Puget Sound Regional Council

January 12, 2006

Transportation Policy Board adopted *Action to Proceed* January 12, 2006



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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 to 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.

## Data and Analysis Years

This transportation paper will be updated as necessary to support both the VISION 2020 and Destination 2030 plan update efforts. Data for this paper has been gathered from several sources and reports and as such, has resulted in multiple analysis years (2025, 2030, 2040, etc.). When the plan update is complete in 2008, all efforts will be made to better integrate the analysis years to improve the readability of the document.

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<sup>1</sup>. 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

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<sup>1</sup> The Washington Transportation Plan's key issues are System Preservation, System Efficiencies, Safety, Transportation Access, Bottlenecks and Chokepoints, Contributing to a Strong Economy and Good Jobs, Moving Freight, Building Future Visions, and Health and Environment.

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 Governments<sup>2</sup> 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.<sup>3</sup>

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

<sup>2</sup> 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.

<sup>3</sup> 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.<sup>4</sup>

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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<sup>4</sup> 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.<sup>5</sup>

### **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.

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<sup>5</sup> *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.

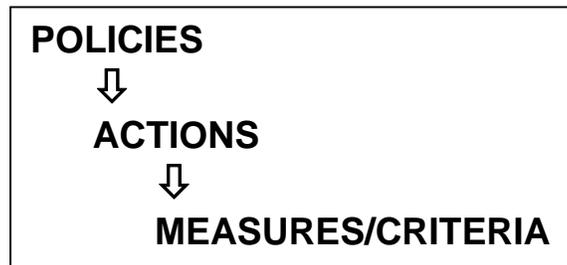
Plan policy should guide actions and investment decisions, but to do this effectively, policies should lend themselves to the identification of decision criteria. State and federal laws require that regional transportation plans must also utilize a least-cost planning analysis and must integrate a congestion 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.





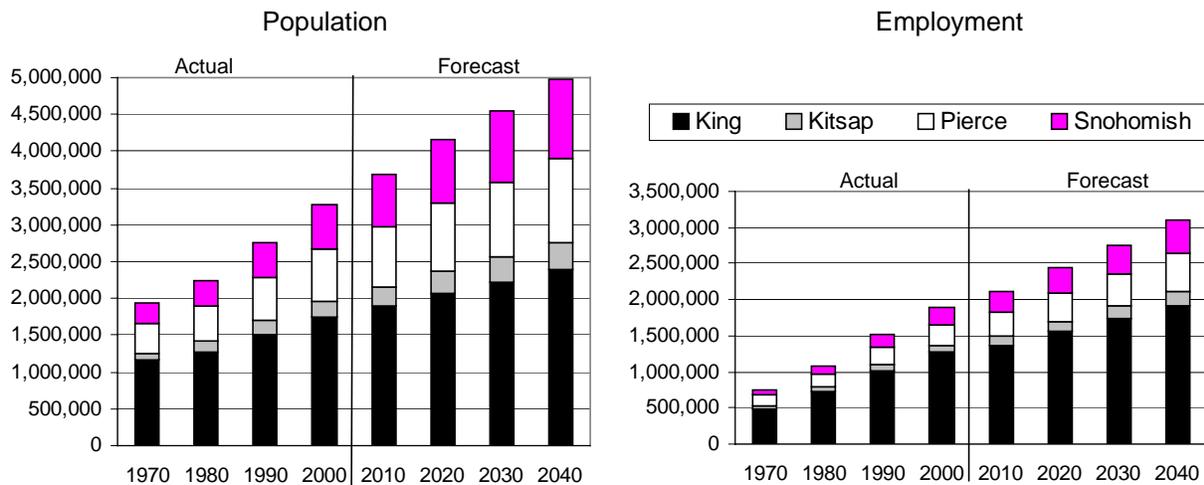
## II. REGIONAL TRENDS

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.

**Figure 1. Population and Employment<sup>6</sup> in the Central Puget Sound Region, 1970-2040**



Source: Puget Sound Regional Council

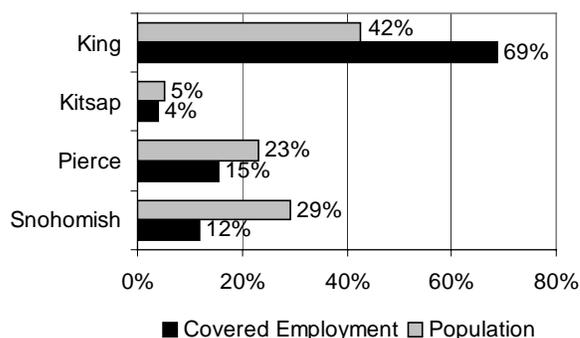
**Growth has been focused within the designated Urban Growth Area.** With the passage of the Growth Management Act in 1990, most of the growth in the past decade has been focused within defined urban growth areas. Between 1995 and 2003, the region as a whole directed 85 percent of its population growth and 96 percent of its employment growth into urban growth areas (UGAs).<sup>7</sup> The distribution of this growth has not been proportionate among the region's four counties. Between 1995 and 2003, King

<sup>6</sup> Total employment is estimated by PSRC from wage and salary employment reported by Washington State's Employment Security Division, plus estimated self-employment workers taken from U.S. Bureau of Labor Statistics data. Excludes construction and resource jobs.

<sup>7</sup> 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**



**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.

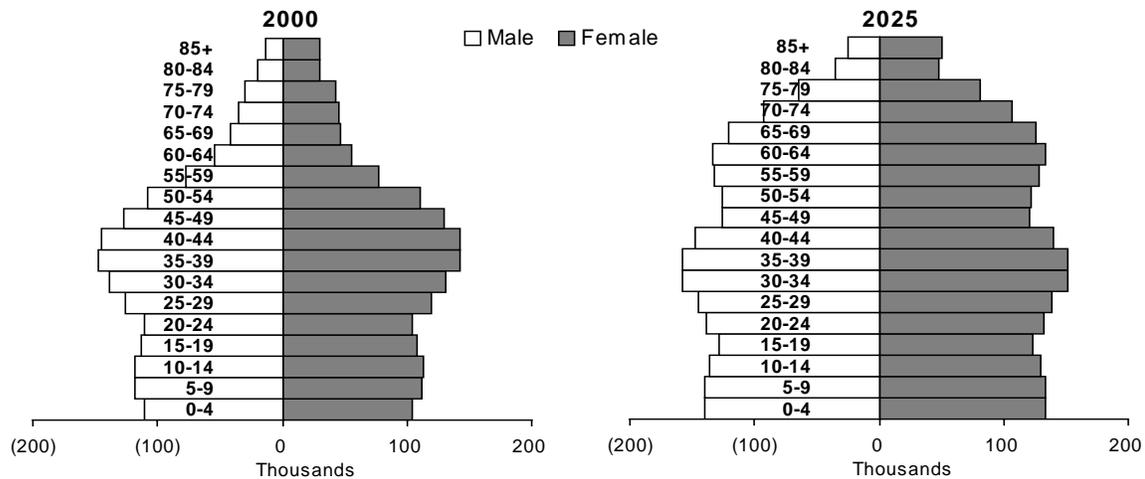
**Centers have emerged as focal points for growth.** A key goal of focusing development in urban growth areas is to attract an increased proportion of the region's jobs and housing into designated Regional Growth Centers. Currently, 25 locations in the region have been designated as Growth Centers. When 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

region's employment growth.<sup>8</sup> 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 “squaring 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.<sup>9</sup> 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.<sup>10</sup>

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



Source: County Growth Management Population Projections: 2000 to 2025, County Projections by Age, State Office of Financial Management, 2002

## 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.<sup>11</sup> (See Figure 4.)

<sup>8</sup> 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.

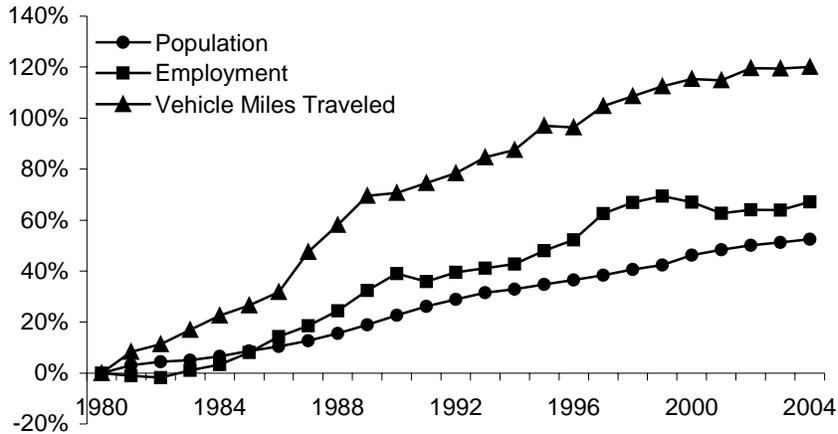
<sup>9</sup> For more information about Environmental Justice and the VISION 2020 Update, go to [www.psrc.org/about/titlevi/ej.htm](http://www.psrc.org/about/titlevi/ej.htm). (9/05)

<sup>10</sup> Travel Indicators and Trends in Washington State (April 2005)

<sup>11</sup> Puget Sound Trends (#T2 Oct 2004)

**Figure 4. Cumulative Growth in the Central Puget Sound Region, 1980-2004**

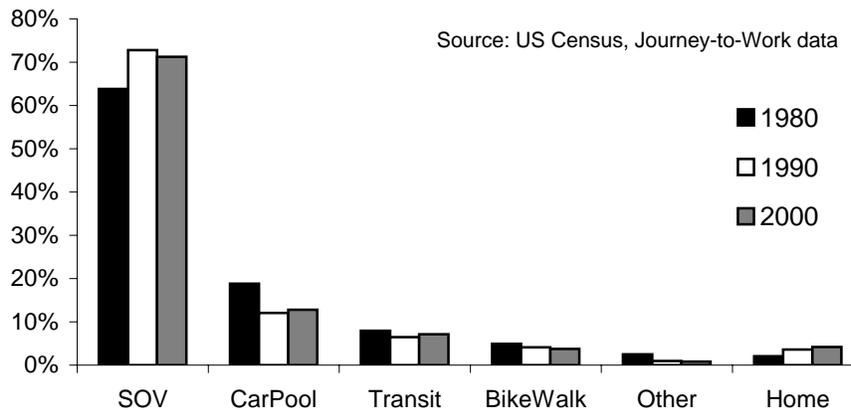
Note: While VMT outpaced population and employment between 1980 and 1992, since then the three growth rates have been similar.



Source: US Census Bureau; State Office of Financial Management (for noncensus years); US Bureau of Labor Statistics; State Department of Transportation

**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**

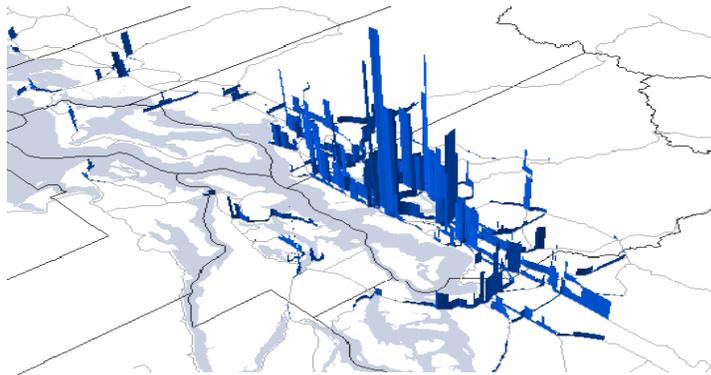


Source: US Census, Journey-to-Work data

**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.<sup>12</sup> 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.<sup>13</sup> 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.<sup>14</sup> This enormous influx of vehicle trips on a relatively sparse network of roadways has led to significant traffic congestion problems throughout the region. Figure 6 depicts the delay caused by congestion on the region's major roadways.

**Figure 6. Daily Vehicle Hours of Delay per Lane Mile on State Roadways in the Puget Sound Area**



Source: 2002 WSDOT Highway Pavement Management System

**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.<sup>15</sup>

**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

<sup>12</sup> 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.

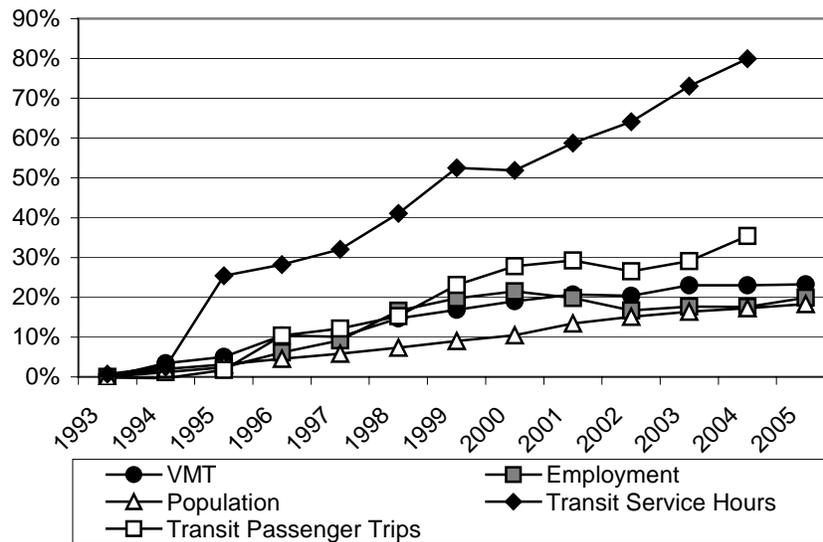
<sup>13</sup> Texas Transportation Institute's Urban Mobility Reports. The Seattle area's travel time index\* for 2003 is ranked 12th in a field of 85 urban areas, and 4th among the 26 areas that are in the population range of 1 million to 3 million. \*Travel time index is the ratio of travel time in 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.

<sup>14</sup> Puget Sound Trends (#T-13, June 2003)

<sup>15</sup> *Washington State Freeway HOV System*, WSDOT, March 2005

from 2 percent to 4 percent during the 1990s.<sup>16</sup> 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.

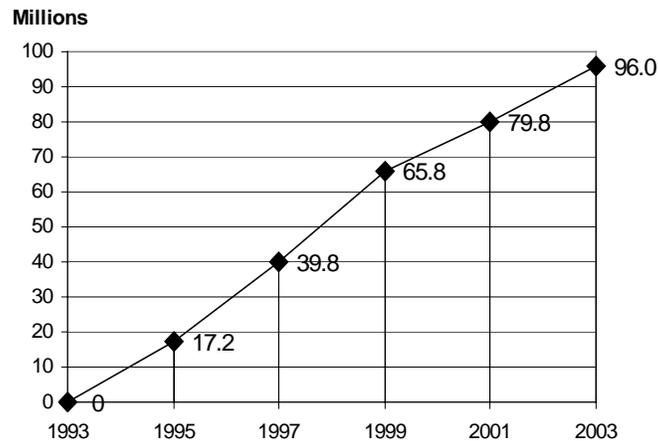
**Figure 7. Population, Employment, VMT, Transit Service Hours and Ridership Cumulative Growth, 1992 - 2004**



**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.<sup>17</sup> 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.

<sup>16</sup> 2000 U.S. Census  
<sup>17</sup> 2000 Census

**Figure 8. CTR Long-Term Worksites: Reduction<sup>18</sup> in Average Annual VMT**



Source Data: WSDOT Public Transportation and Commute Options Office

**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<sup>19</sup> 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<sup>20</sup> 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

<sup>18</sup> 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.

<sup>19</sup> 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.

<sup>20</sup> *Temporal Monitoring of Puget Sound Sediments: Results of the Puget Sound Ambient Monitoring Program, 1989-2000*, Washington Department of Ecology, July 2005

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.<sup>21</sup> 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:<sup>22</sup>

- **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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<sup>21</sup> *Executive Summary of the Freight Report, Draft Washington Transportation Plan, WSDOT, January 2005*

<sup>22</sup> *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<sup>23</sup>. 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.<sup>24</sup>

"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."

– *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<sup>25</sup> 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,

<sup>23</sup> 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.

<sup>24</sup> Revised Code of Washington, Chapter 47.80.023 and .026

<sup>25</sup> *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 2030<sup>26</sup> 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 facilities<sup>27</sup> 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/vision/pubs/issuepapers.htm>).

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<sup>26</sup> *Destination 2030*, Puget Sound Regional Council, May 24, 2001, Page 38 (Referenced growth strategies are titled, "Best Practices: Investigating Regulatory Reforms and Development Strategies" and "Best Practices: Investigating Financial Incentives.")

<sup>27</sup> 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.<sup>28</sup> Additionally, 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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<sup>28</sup> 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)).<sup>29</sup> 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.<sup>30</sup>

**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.

### Partial Inventory of the Region's Transportation Assets

#### Streets/Roads/Highways

- 17,664 total centerline miles of roads (22 percent of state's total roads)
- 642 miles of major truck routes (average gross annual truck tonnage of 4 million+)
- National Highway System intermodal connectors

#### Pedestrian and Bicycle Facilities

- 323 miles of on-road bike lanes
- 217 miles of separated off-road bike paths

#### Bridges

- 1,303 state bridges
- 415 county bridges
- 329 city bridges

#### Public Transit

- 2067 transit buses
- 511 paratransit vehicles
- 1524 publicly sponsored vanpools
- 125 regional park-ride lots (30,580 parking spaces)
- 50 transit centers/stations
- 10 bus transit operating bases

#### Marine/Ferries

- 23 auto-passenger ferries, 4 passenger-only ferries, 11 state-owned regional ferry terminals (58 percent of state's ferry terminals), 4 county/local ferry terminals (Pierce & Kitsap)
- 3 deep water ports and Gateway terminal complexes, handling over 4 million TEUs in 2005

#### Airports

- 1 primary commercial service hub airport (Sea-Tac International)
- 1 non-hub airport serving general aviation, cargo carriers, small commercial passenger airline and other aircraft
- 20 public use general aviation airports
- 4 seaplane bases
- 2 military airports

#### Passenger and Freight Rail

- More than 400 railroad route miles

## CONGESTION, MOBILITY AND SYSTEM EFFICIENCY

Congestion<sup>31</sup> 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

<sup>29</sup> 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.

<sup>30</sup> Chapter 44.75 RCW, Transportation Performance Audit Board

<sup>31</sup> 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.<sup>32</sup> 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.<sup>33</sup>

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<sup>34</sup>. 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.<sup>35</sup> 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<sup>36</sup> 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 shorter-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.

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<sup>32</sup> *Congestion Relief Analysis for the Central Puget Sound, Spokane and Vancouver Urban Areas*, Washington State Department of Transportation, August 2005

<sup>33</sup> *Rail Capacity Study*, Washington Public Ports Association, 2004

<sup>34</sup> Washington Division (USDOT, FHWA) Eastside Freeway Safety Improvements

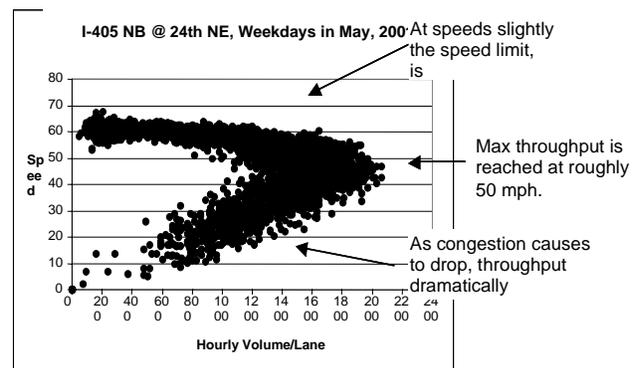
<sup>35</sup> For more information about demand strategies in the region, see the Puget Sound Milestones report, *Metropolitan Transportation System: Transportation Demand Strategies*, Puget Sound Regional Council, February 2005, <http://psrc.org/projects/monitoring/tds.htm> (9/05)

<sup>36</sup> 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.<sup>37</sup> 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.

**Figure 9. Volume/Speed Relationship**



**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.<sup>38</sup> 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.

<sup>37</sup> 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.

<sup>38</sup> 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.<sup>39</sup> 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,<sup>40</sup> 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<sup>27</sup> 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.

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<sup>39</sup> 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).

<sup>40</sup> 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<sup>41</sup> 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.<sup>42</sup> 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.<sup>43</sup> However, too many people still die in motor vehicle accidents each year in the central

<sup>41</sup> 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.

<sup>42</sup> "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).

<sup>43</sup> 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.<sup>44</sup>

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:<sup>45</sup>

- 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.<sup>45</sup>

**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.<sup>45</sup>

**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.<sup>45</sup>

**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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transportation system with no deaths or disabling injuries. Some key objectives of the plan include recognizing and building upon existing safety programs, bringing traffic safety partners together and coordinating statewide safety visions and goals. The state Legislature passed a law that every driver and passenger in Washington is required to wear a safety belt, and 93 percent of them do. Half of the state's motor vehicle fatalities involve the 7 percent of people who do not. Use of safety belts increases the chances of surviving a collision by up to 70 percent. The "Click-it or Ticket" enforcement campaign, which the Washington State Patrol began in May 2002, has helped significantly increase safety belt use in Washington. The state Legislature also passed an Intermediate Driver's License law that went into effect in July 2001. The law requires that parents or guardians of young drivers under the age of eighteen spend an additional 50 hours supervising their children's driving time before the new drivers can obtain their driver licenses. It also limits the number of other teenagers who can ride with a newly licensed teen driver and places limits on nighttime driving.

<sup>44</sup> Data provided by WSDOT Transportation Data Office

<sup>45</sup> *Washington Transportation Plan Update – Safety*, Washington State Dept of Transportation, May 31, 2005

**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.<sup>43</sup> 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

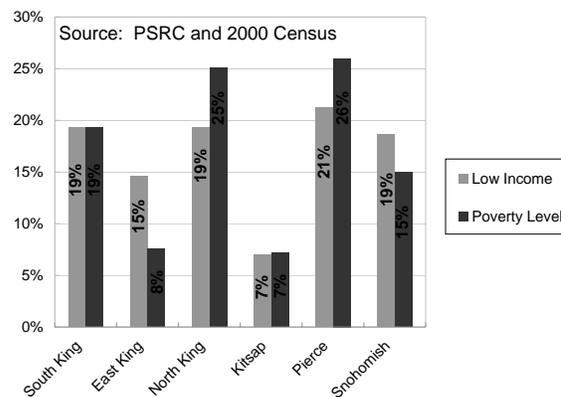
Although progress has been made to improve and expand travel options, much of the region's population still primarily depends on auto travel for most of their travel needs. Significant segments of the population, however, do not have access to a car or, for a variety of reasons, cannot drive and generally 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.<sup>46</sup> 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.<sup>47</sup> 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.<sup>48</sup> This low level of auto use/access seriously diminishes personal mobility. A national study<sup>49</sup> 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.<sup>50</sup> 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.



**Figure 10. Low Income and Poverty Level Share of Region's Population**

<sup>46</sup> 2000 Census

<sup>47</sup> *Regional Special Needs Transportation Coordination Plan, Draft*, Sound Transit, April 2005

<sup>48</sup> 2000 Census

<sup>49</sup> *Aging Americans: Stranded Without Options*, Surface Transportation Policy Project, April 2004

<sup>50</sup> 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.<sup>51</sup>

**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<sup>52</sup> 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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<sup>51</sup> Data source: 2000 Census

<sup>52</sup> 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<sup>53</sup> 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<sup>54</sup> for aerospace and logistics & international trade,<sup>55</sup> (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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<sup>53</sup> 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.

<sup>54</sup> *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.

<sup>55</sup> 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

- *Marine Cargo Forecasts*, Washington Public Ports Association, Washington Department of Transportation, 2004
- *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<sub>2.5</sub>), 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<sub>2.5</sub> standard that would be closer to the lower regional goal set by PSCAA. The most significant PM<sub>2.5</sub> 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<sup>56</sup> 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.<sup>57</sup> 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,<sup>58</sup> 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.

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<sup>56</sup> *Temporal Monitoring of Puget Sound Sediments: Results of the Puget Sound Ambient Monitoring Program, 1989-2000*, Washington Department of Ecology, July 2005

<sup>57</sup> For more information about the links between health and transportation, see *Issue Paper on Health: What's Health Got to Do With Growth Management, Economic Development and Transportation?*, Puget Sound Regional Council, December 2004, <http://psrc.org/projects/vision/pubs/health.pdf> (9/05)

<sup>58</sup> Federal Transportation Equity Act for the 21<sup>st</sup> 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.<sup>59</sup> 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.<sup>60</sup>

**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.<sup>61</sup>

**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.<sup>62</sup> 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.

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<sup>59</sup> 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.

<sup>60</sup> For more information about environmental justice and the VISION 2020 Update, go to [www.psrc.org/about/titlevi/ej.htm](http://www.psrc.org/about/titlevi/ej.htm). (9/05)

<sup>61</sup> 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.

<sup>62</sup> 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/vison/pubs/environment.pdf](http://www.psrc.org/projects/vison/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.<sup>63</sup> 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).<sup>64</sup>

### **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.

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<sup>63</sup> 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.

<sup>64</sup> 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.<sup>65</sup>

### 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.

<sup>65</sup> Puget Sound Milestones: Transportation Finance 1989-2000, <http://www.psrc.org/projects/monitoring/finance.htm> and Destination 2030: 2004 Review and Progress Report, <http://www.psrc.org/projects/mtp/2004progress/progress.htm>, Puget Sound Regional Council

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

<b>Real Per-Capita Revenue</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Local Transit	\$206.07	\$165.69	\$172.84	\$172.07	\$174.70	\$187.33	\$199.15	\$199.10	\$223.14	\$221.36	\$177.06	\$202.10	\$192.05
Regional Transit								131.33	161.53	209.95	290.17	270.28	284.80
Highways	180.94	151.32	176.24	161.45	195.97	148.06	148.23	117.27	97.14	103.88	112.08	146.49	162.68
Streets	205.05	205.84	236.90	240.56	252.34	225.44	210.56	218.95	231.17	227.76	234.59	245.53	232.34
Roads	171.35	179.15	190.96	195.61	200.20	230.96	241.08	249.66	235.81	234.51	229.62	280.12	243.30
Ferries	50.96	42.85	43.54	45.35	52.77	60.40	63.13	56.27	55.53	54.70	39.86	44.48	45.03
<b>Total</b>	<b>\$627.82</b>	<b>\$553.67</b>	<b>\$609.52</b>	<b>\$599.98</b>	<b>\$653.42</b>	<b>\$623.30</b>	<b>\$632.43</b>	<b>\$683.90</b>	<b>\$709.52</b>	<b>\$743.79</b>	<b>\$746.94</b>	<b>\$822.91</b>	<b>\$817.08</b>

**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**

<b>Category</b>	<b>Percentage of 37.5-Cent Gas Tax</b>	<b>Percentage of 28-Cent Gas Tax</b>	<b>Percentage of 23-Cent Gas Tax</b>
Cities	8%	9%	11%
Counties	13%	16%	19%
County Road Administration Board	3%	4%	4%
Transportation Improvement Board	8%	11%	13%
Washington State Department of Transportation	65%	57%	48%
Washington State Ferries	3%	4%	5%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Total Cities and Counties</b>	<b>31.88%</b>	<b>39.13%</b>	<b>47.64%</b>

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.<sup>66</sup>

**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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<sup>66</sup> 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

FRAMEWORK POLICIES	System Preservation	Congestion, Mobility & System Efficiencies	Safety & Security	Special Needs Transportation	Prosperous Economy	Freight Movement	Health & Environment	Building Future Visions	Transportation Finance
<b>RG-1</b> 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.	✓	✓			✓	✓	✓	✓	
<b>RC-2</b> 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.		✓	✓		✓		✓	✓	
<b>RF-3</b> 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.	✓	✓	✓				✓	✓	✓
<b>RH-4</b> 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.		✓		✓	✓		✓	✓	
<b>RR-5</b> 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.					✓		✓	✓	
<b>RO-6</b> 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.					✓		✓	✓	
<b>RE-7</b> 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.		✓			✓	✓		✓	✓

<p align="center"><b>ADOPTED TRANSPORTATION POLICIES</b></p> <p><i>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.</i></p>	System Preservation	Congestion, Mobility & System Efficiencies	Safety & Security	Special Needs Transportation	Prosperous Economy	Freight Movement	Health & Environment	Building Future Visions	Transportation Finance
<b>OPTIMIZE &amp; MANAGE THE USE OF TRANSPORTATION FACILITIES &amp; SERVICES</b>									
<p><b>RT-8.1</b> Develop and maintain efficient, balanced, multimodal transportation systems which provide connections between urban centers and link centers with surrounding communities by:</p> <ul style="list-style-type: none"> <li>a. Offering a variety of options to single-occupant vehicle travel.</li> <li>b. Facilitating convenient connections and transfers between travel modes.</li> <li>c. Promoting transportation and land use improvements that support localized trip-making between and within communities.</li> <li>d. Supporting the efficient movement of freight and goods.</li> </ul>	✓	✓		✓	✓	✓			
<p><b>RT-8.2</b> Promote convenient intermodal connections between all elements of the regional transit system (bus, rail, ferry, air) to achieve a seamless travel network which incorporates easy bike and pedestrian access.</p>		✓		✓			✓	✓	
<p><b>RT-8.3</b> 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.</p>	✓	✓	✓	✓			✓		
<p><b>RT-8.4</b> Maximize multimodal access to marine ferry routes through:</p> <ul style="list-style-type: none"> <li>a. Coordinated connections to land-based transit;</li> <li>b. Safe and convenient bicycle and pedestrian linkages;</li> <li>c. Preferential access for high-occupancy vehicles, and freight and goods movement on designated routes.</li> </ul>		✓	✓	✓		✓	✓		
<p><b>RT-8.5</b> 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.</p>					✓	✓			
<p><b>RT-8.6</b> Promote efficient multimodal access to interregional transportation facilities such as airports, seaports, and intercity rail stations.</p>		✓		✓	✓	✓			
<p><b>RT-8.7</b> 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.</p>		✓	✓				✓	✓	
<p><b>RT-8.8</b> 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.</p>		✓							
<p><b>RT-8.9</b> 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.</p>		✓						✓	
<p><b>RT-8.10</b> Support the retrofit of existing roadways and other transportation facilities to control and reduce noise, polluting runoff and barriers to fish passage.</p>							✓	✓	

<p align="center"><b>ADOPTED TRANSPORTATION POLICIES</b></p> <p><i>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.</i></p>	System Preservation	Congestion, Mobility & System Efficiencies	Safety & Security	Special Needs Transportation	Prosperous Economy	Freight Movement	Health & Environment	Building Future Visions	Transportation Finance
<b>MANAGE TRAVEL DEMAND ADDRESSING TRAFFIC CONGESTION &amp; ENVIRONMENTAL OBJECTIVES</b>									
<b>RT-8.11</b> 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.		✓					✓		
<b>RT-8.12</b> Support transportation system management programs, services, and facility enhancements which improve transit's ability to compete with single-occupant vehicle travel times.		✓		✓			✓		
<b>RT-8.13</b> 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.		✓		✓			✓	✓	
<b>RT-8.14</b> Emphasize transportation investments that provide alternatives to single-occupant vehicle travel to and within urban centers and along corridors connecting centers.		✓		✓			✓	✓	
<b>RT-8.15</b> 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.		✓			✓		✓	✓	✓
<b>RT-8.16</b> Support opportunities to use advanced transportation and information technologies, which demonstrate support for regional growth and transportation strategies.		✓					✓	✓	
<b>FOCUS TRANSPORTATION INVESTMENTS THAT SUPPORT TRANSIT &amp; PEDESTRIAN-ORIENTED LAND USE PATTERNS</b>									
<b>RT-8.17</b> Integrate land use and transportation solutions that offer the best opportunity to reduce air pollution, conserve energy, and protect the natural environment.		✓			✓		✓	✓	
<b>RT-8.18</b> 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.		✓		✓			✓	✓	
<b>RT-8.19</b> Promote transportation improvements that support the redevelopment of lower-density, auto-dominated arterials to become more pedestrian and transit compatible urban transportation corridors.		✓		✓			✓	✓	
<b>RT-8.20</b> 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.		✓		✓			✓	✓	
<b>RT-8.21</b> 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.		✓		✓			✓	✓	

<p align="center"><b>ADOPTED TRANSPORTATION POLICIES</b></p> <p><i>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.</i></p>	System Preservation	Congestion, Mobility & System Efficiencies	Safety & Security	Special Needs Transportation	Prosperous Economy	Freight Movement	Health & Environment	Building Future Visions	Transportation Finance
<p><b>RT-8.22</b> Support the establishment of high capacity transit stations that advance regional growth objectives by:</p> <ul style="list-style-type: none"> <li>a. Maximizing opportunities to walk, bike or take short transit trips to access regional transit stations.</li> <li>b. Locating stations within urban centers and at sites supporting development of concentrated urban corridors.</li> <li>c. Providing direct, frequent and convenient regional transit service between urban centers.</li> <li>d. Providing system access to urban areas in a manner that does not induce development in rural areas.</li> </ul>		✓		✓			✓	✓	
<p><b>RT-8.23</b> 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.</p>		✓		✓				✓	
<p><b>RT-8.24</b> 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.</p>		✓		✓				✓	
<p><b>RT-8.25</b> 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.</p>		✓		✓			✓	✓	
<p><b>EXPAND TRANSPORTATION CAPACITY OFFERING GREATER MOBILITY OPTIONS</b></p>									
<p><b>RT-8.26</b> 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.</p>		✓						✓	✓
<p><b>RT-8.27</b> 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.</p>		✓	✓	✓			✓	✓	

<p align="center"><b>ADOPTED TRANSPORTATION POLICIES</b></p> <p><i>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.</i></p>	System Preservation	Congestion, Mobility & System Efficiencies	Safety & Security	Special Needs Transportation	Prosperous Economy	Freight Movement	Health & Environment	Building Future Visions	Transportation Finance
<b>RT-8.28</b> 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.		✓		✓					
<b>RT-8.29</b> Promote and support the development of arterial HOV lanes and other transit priority treatments in urban areas to facilitate reliable transit and HOV operations.		✓		✓					
<b>RT-8.30</b> 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.		✓		✓	✓	✓			
<b>RT-8.31</b> 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.	✓			✓	✓			✓	✓
<b>RT-8.32</b> 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.		✓		✓		✓	✓		
<b>RT-8.33</b> 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.		✓	✓	✓			✓		
<b>RT-8.34</b> 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.		✓				✓	✓		
<b>RT-8.35</b> 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.						✓			
<b>RT-8.36</b> Transportation investments in major facilities and services should maximize transportation system continuity and be phased to support regional economic development and growth management objectives.		✓			✓			✓	
<b>RT-8.37</b> 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.		✓	✓	✓					
<b>RT-8.38</b> 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.	✓	✓	✓	✓			✓	✓	
<b>RT-8.39</b> Develop a high-capacity transit system along congested corridors that connects urban centers with frequent service sufficient to serve both community and regional needs.		✓		✓	✓			✓	
<b>RT-8.40</b> 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	System Preservation	Congestion, Mobility & System Efficiencies	Safety & Security	Special Needs Transportation	Prosperous Economy	Freight Movement	Health & Environment	Building Future Visions	Transportation Finance
<p><b>RG-1.6</b> 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:</p> <ul style="list-style-type: none"> <li>a. Addition of transit facilities, pedestrian-oriented retail, offices, housing, and public amenities,</li> <li>b. Building design and placement, street improvements, parking standards, and other measures that encourage pedestrian and transit travel, and</li> <li>c. Provision of pedestrian and bicycle connections between transportation corridors and nearby neighborhoods.</li> </ul>		✓		✓	✓		✓	✓	
<p><b>RG-1.9</b> 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.</p>		✓		✓			✓	✓	
<p><b>RG-1.10</b> 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.</p>		✓		✓			✓	✓	
<p><b>RE-7.6</b> 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.</p>		✓			✓			✓	
<p><b>RE-7.12</b> 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.</p>	✓	✓	✓		✓	✓		✓	
<p><b>RE-7.13</b> 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.</p>	✓	✓			✓	✓		✓	
<p><b>RE-7.14</b> 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.</p>		✓			✓	✓		✓	✓
<p><b>RE-7.15</b> 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.</p>		✓			✓	✓		✓	



## **APPENDIX B:**

### **Comprehensive List of Transportation Demand Strategies**

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

#### Improved Transport Options

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

#### Incentives To Use Alternative Modes and Reduce Driving

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

<sup>67</sup> Located at <http://www.vtpi.org/index.php> (9/05)

### **Parking and Land use Management**

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

### **New Urbanism Accessible, Livable Community Design**

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

### **Policy and Institutional Reforms**

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

### **Miscellaneous TDM Programs and Program Support**

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

## **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.<sup>68</sup> 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 policies should direct local jurisdictions to incorporate 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.

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<sup>68</sup> 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.

Note:

The views expressed in this discussion paper are those of the author and are not necessarily those of the members or staff of the Puget Sound Regional Council.

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**At The Microscale: Compact Growth and Adverse Health Impacts**

**Gail M. Sandlin**  
**University of Washington**

**Informational Paper Prepared for**

**Puget Sound Regional Council**

**November 2005**

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Informational Paper on  
"Compact Growth and Adverse Health Impacts"

This paper was developed by University of Washington Doctoral Student Gail Sandlin under a contract with the Puget Sound Regional Council. The scope of the contract contained the following primary tasks:

- Provide information and perspective on the topic of “Compact Growth and Adverse Health Impacts”
- Discuss the key findings from a literature review regarding the adverse health impacts of compact city design.
- Discuss possible mitigation measures that might be appropriate as part of the analysis of alternatives and potential mitigation measures in the VISION 2020+20 environmental impact statement process.

The purpose of the paper is to provide information to support the Environmental Impact Statement process for Vision 2020+20. The paper is meant to provide Puget Sound Regional Council a literature review on the environmental (adverse health) impacts of the compact city design. The final report summarizes some the major articles/reports on the topic, and includes a set of key findings. The paper provides a brief discussion of applicability to various growth scenarios and possible mitigation measures.

## Purpose

To advance a broader understanding of (1) the potential adverse health impacts of compact city design on vulnerable populations, and (2) the relationship of traffic, air quality and land use patterns within the micro or local scale of compact urbanization. This paper is meant to improve the understanding of these issues as part of the update of VISION 2020 + 20.

## Introduction

The Washington State Growth Management Act is designed to protect the natural environment by such initiatives as controlling sprawl through regional countywide and local comprehensive plans. The antithesis of sprawl is compact growth that promotes active living by encouraging physical exercise through mobility - either walking or bicycling - in a pedestrian-friendly urban environment. Looking towards the future within its VISION 2020+20 update the Puget Sound Regional Council (PSRC) proposes, for environmental assessment, four growth alternatives where population and employment increases are distributed throughout the various regional geographies categorized as metropolitan cities, core suburban cities, larger suburban cities, smaller suburban cities, unincorporated UGA or rural areas. The targeted growth areas of many of these regional geographies are transected by urban freeways thus creating at the microscale or local level a nexus of land use, transportation and air quality; in other words, the potential for localized air pollution impacts on populations living or attending schools within close proximity to high volume traffic.

As reported in the recent *Issue Paper on Environmental Planning* this scenario of air quality “hot spots” from heavy traffic is recognized by PSRC as an emerging issue (PSRC 2005c p 8, 13, 32). To advance a broader understanding of the potential adverse health impacts of compact growth for consideration in the environmental impact analysis of project VISION 2020 + 20, this paper examines this relationship of traffic, localized air quality and land use patterns. Section one of this paper will provide a synopsis of recent reports, studies and academic literature on localized air quality as a consequence of compact urbanization within developed countries, not as an admonition of compact growth but rather to increase awareness amongst planners and policy makers. Section two will include a summary of the potential adverse health impacts as reported in recent scientific studies and reviews. The third section will briefly discuss mitigation strategies with the paper concluding by posing questions for future research.

Within the context of this paper, it is important to define several terms, particularly (a) *vulnerable populations*, (b) *adverse health impacts*, (c) *compact growth*, and (d) *density*.

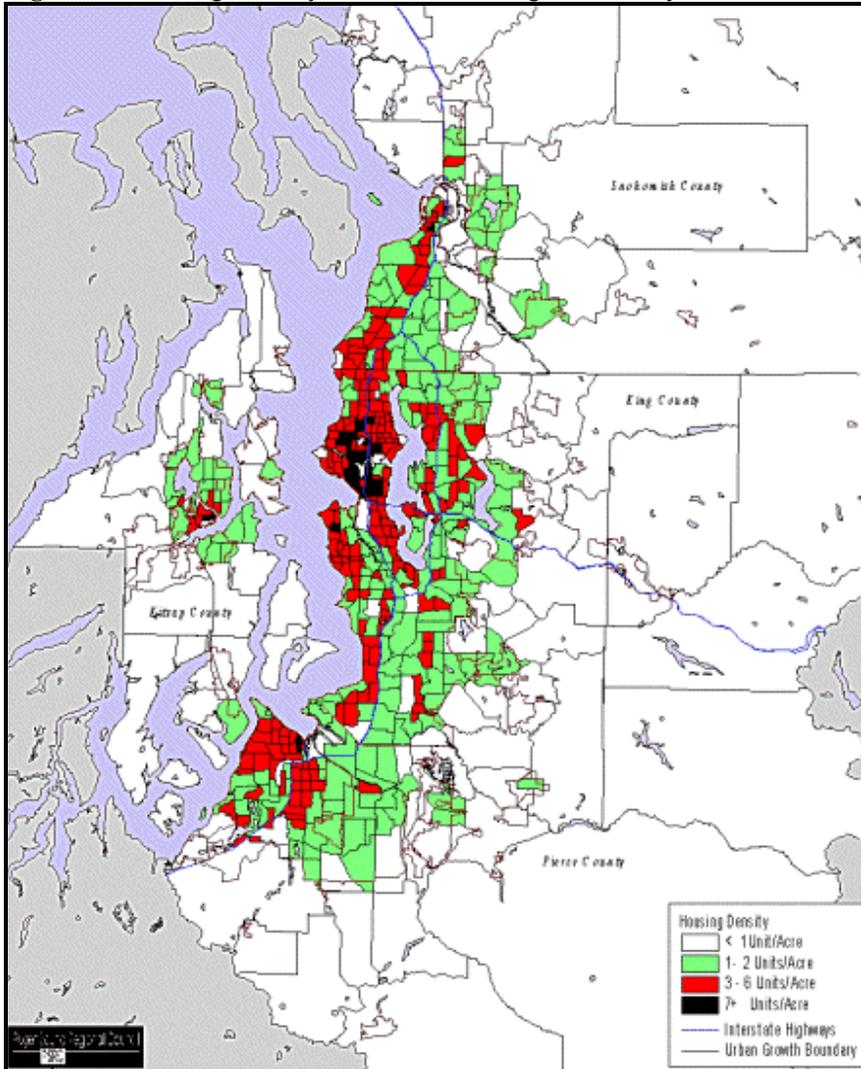
(a) *Vulnerable populations* include populations that have an increased sensitivity to environmental pollutants, typically children, the elderly and those with pre-existing health conditions such as cardiovascular or respiratory disease (American Academy of Pediatrics 2004; California Air Resources Board 2005). In addition, there is an increasing body of research that suggests that low income / minority populations within the urban environment may also be more vulnerable to the impact of environmental burdens (Gwynn and Thurston 2001; Houston et al. 2004). This may be the consequence of proximity relationships i.e. poverty and poor environmental quality or other confounding factors such as poor quality housing, inadequate nutrition or limited access to health care.

(b) *Adverse health impacts*, for the purposes of this discussion paper, refers to the range of health effects that may occur as a result of exposure of vulnerable populations to environmental pollutants, especially pollutants from high volume traffic sources, see Section 2.

(c) *Compact growth* includes both compact urban centers and communities. Although there a range of variables to define compact growth, for the VISION 2020 + 20 update, the compact urban form is a function of population/employment density that includes pedestrian oriented design scale and transportation modes.

(d) *urban density*. There are a variety of methodologies to estimate urban density, the most common are housing density, as residential units-per- acre; and population density, as persons-per-acre. According to the Central Puget Sound Growth Management Hearings Board (GMHB) an urban density has been defined as four (4) units/net developable acre, although less density may be appropriate in areas with large environmentally sensitive systems (CPSGMHB 2004 p 402).<sup>1</sup> By color-coding the housing units per acre, Figure 1 illustrates the 1999 Central Puget Sound’s regional housing densities for each census tract.<sup>2</sup> Population density is then determined by utilizing a *housing unit measure* calculated as the number of occupied housing units in a census tract’s housing stock multiplied by the tract’s average household size (PSRC 1999).<sup>3</sup>

**Figure 1:** Housing Density in the Central Puget Sound by Census Tract: 1999



<http://www.psrc.org/datapubs/pubs/pophsg99-fig21.htm>

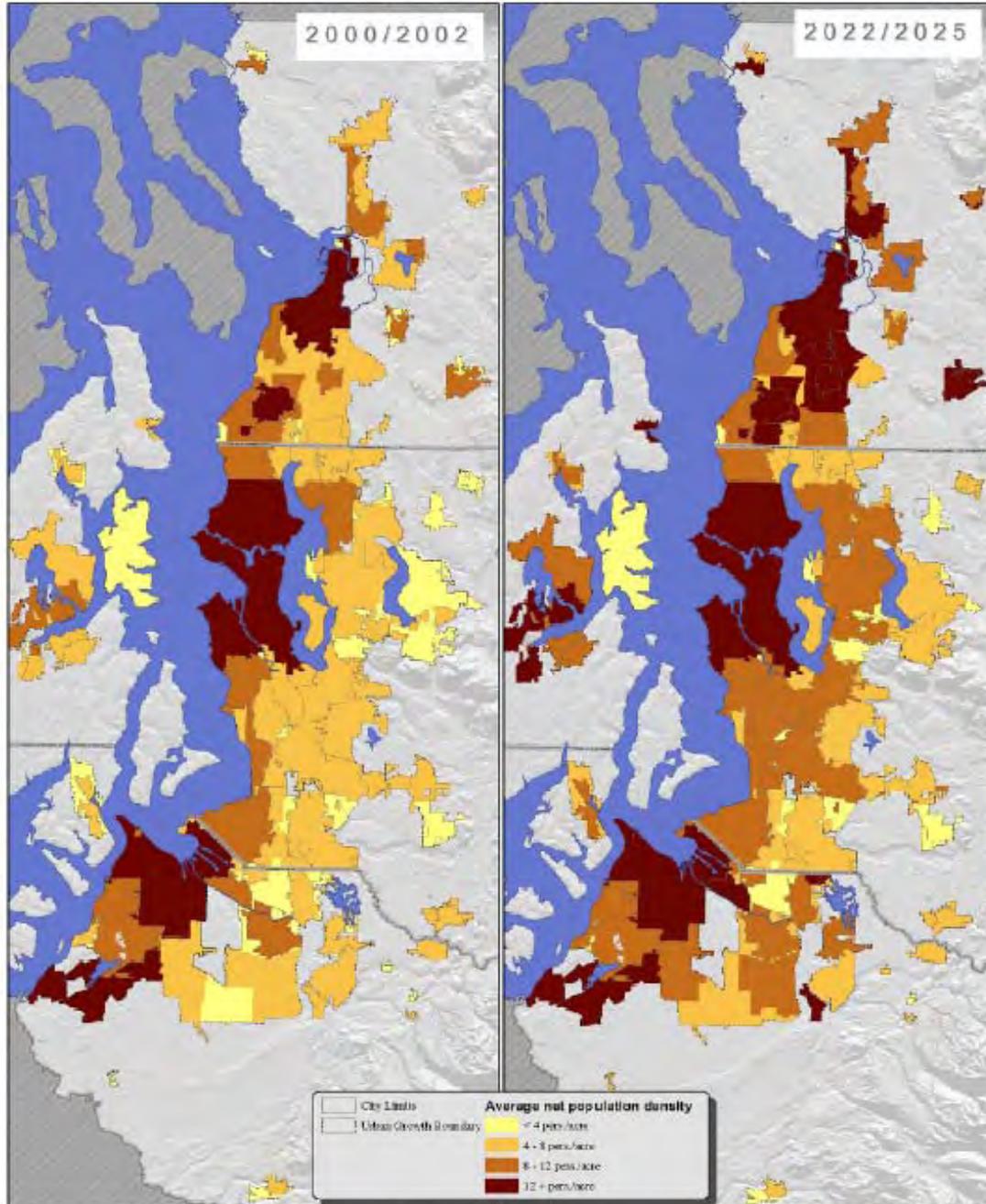
<sup>1</sup> Gross density = total residential units / total development land area (acres) ; Net density = total residential units / total residential land area (excludes roads and other areas)

<sup>2</sup> It is important to note that the population estimates were calibrated from the 1990 Census data to match Washington State Office of Financial Management’s April 1, 1999 population estimates (OFM 1999).

<sup>3</sup> As a reference comparison, 1 person per acre is equivalent to 640 persons / square mile

The region's counties use different methodologies for establishing growth targets, however, the Regional Council, as a multicounty planning agency compared the growth targets in its 2005 *Growth Management by Numbers* paper (PSRC 2005b). An example of the results are illustrated in Figure 2 that maps the adopted growth targets of regional cities as a function of average net population density per acre. In addition, Regional Council guidance policies emphasize that the "strategy is to contain much of the region's projected growth within defined urban growth areas, creating compact urban communities" (PSRC 1995).

**Figure 2:** Regional Growth Targets: Twenty Year Net Population Density Change



<http://www.psrc.org/projects/monitoring/growthtargets/growthtargets.pdf>

## Background of Vision 2020+20 update

The four regional growth alternatives of the VISION 2020 + 20 update distribute future growth patterns amongst a set of regional geographies – this data is provided in Table 1. The data in the lower section of Table 1 provides the total estimates for residential and employment populations<sup>4</sup> in the various regional geographies in 2040 (as well as the percent distributions), whereas, the data in the top section of the table estimates the residential and employment population increases in 2040 from the year 2000 baseline, also including the percent distributions amongst the regional geographies.

**Table 1: Regional Growth Alternatives - Percent Distribution of Growth to the year 2040**

<b>VISION 2020+20 Update - Alternatives Data Summary</b>						
<b>Amount of Change</b>	<b>Metropolitan Cities</b>	<b>Core Suburban Cities</b>	<b>Larger Suburban Cities</b>	<b>Smaller Suburban Cities</b>	<b>Uninc. UGA</b>	<b>Rural Area</b>
<b>Alternative #1: No Action</b>	25%	15%	10%	10%	25%	15%
Population	482,637	292,874	150,528	199,482	401,776	244,447
Employment	432,675	312,694	77,781	192,387	107,238	93,461
<b>Alternative #2: Metropolitan Cities</b>	40%	25%	15%	10%	5%	5%
Population	706,916	441,822	265,093	176,729	88,364	88,364
Employment	486,494	304,059	182,435	121,624	60,812	60,812
<b>Alternative #3: Larger Cities</b>	20%	30%	30%	5%	10%	5%
Population	353,458	530,187	530,187	88,364	176,729	88,364
Employment	243,247	364,871	364,871	60,812	121,624	60,812
<b>Alternative #4: Smaller Cities</b>	10%	10%	5%	30%	35%	10%
Population	176,729	176,729	88,364	530,187	618,551	176,729
Employment	121,624	121,624	60,812	364,871	425,683	121,624
<b>End State Figures</b>						
<b>Base Year 2000</b>						
% Population	30%	18%	10%	8%	19%	15%
Population	959,653	578,410	332,581	254,397	622,292	473,378
% Employment	50%	27%	6%	6%	7%	4%
Employment	909,931	502,377	115,940	103,423	122,060	77,333
<b>Alternative #1: No Action</b>						
% Population	29%	17%	10%	9%	20%	14%
Population	1,442,290	871,284	483,109	454,065	1,019,427	717,825
% Employment	44%	27%	6%	10%	8%	6%
Employment	1,342,606	815,071	193,721	295,810	229,298	170,794
<b>Alternative #2: Metropolitan Cities</b>						
% Population	33%	20%	12%	9%	14%	11%
Population	1,666,569	1,020,232	597,674	431,126	710,657	561,742
% Employment	46%	26%	10%	7%	6%	5%
Employment	1,396,425	806,436	298,375	225,047	182,872	138,145
<b>Alternative #3: Larger Cities</b>						
% Population	26%	22%	17%	7%	16%	11%
Population	1,313,111	1,108,597	862,768	342,761	799,021	561,742
% Employment	38%	28%	16%	5%	8%	5%
Employment	1,153,178	867,248	480,811	164,235	243,684	138,145
<b>Alternative #4: Smaller Cities</b>						
% Population	23%	15%	8%	16%	25%	13%
Population	1,136,382	755,139	420,945	784,584	1,240,844	650,106
% Employment	34%	20%	6%	15%	18%	7%
Employment	1,031,555	624,001	176,752	468,294	547,743	198,957

Source: PSRC, 2005

<sup>4</sup> With the VISION 2020+20 project, the concept of *activity unit* is introduced that combines residential and employment populations as a measure of density per acre.

To summarize the alternative growth patterns:

- Alternative #1 – This *no action* growth alternative continues to concentrate populations in metropolitan cities, the unincorporated UGA, and the rural area.
- Alternative #2- The *metropolitan cities* growth alternative shifts populations away from unincorporated UGA to the metropolitan and core suburban cities.
- Alternative #3- The *larger cities* growth alternative shifts populations to core suburban and larger suburban cities.
- Alternative #4 - The *smaller cities* growth alternative concentrates populations in smaller suburban cities and in the unincorporated UGA.

Cities located within the regional geographic categories are listed in Table 2 and what is interesting to note, urban freeways transect or border the targeted growth areas of many of these cities as illustrated either in the city’s planning web site or the 2002 PSRC report *Regional Growth Centers – Characteristics and Comparisons* (PSRC 2002).

**Table 2:** Cities within Regional Geographies

*Note: Italicized and boldfaced cities: urban freeways transect or border targeted growth areas*

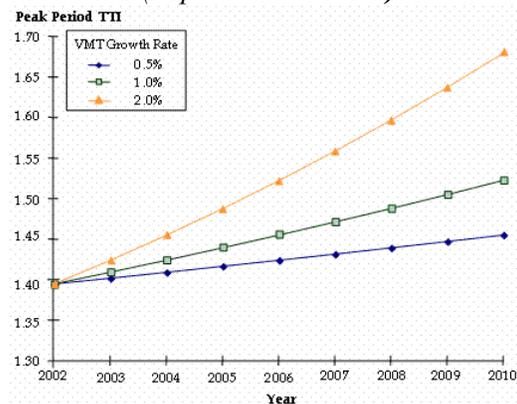
<b>Metropolitan Cities</b>	<b>Core Suburban Cities</b>	<b>Larger Suburban Cities</b>	<b>Smaller Suburban Cities</b>
<i>Bellevue</i> , Bremerton, <i>Everett</i> , <i>Seattle</i> , <i>Tacoma</i>	Auburn, <i>Bothell</i> , Burien, <i>Federal Way</i> , Kent, <i>Kirkland</i> , <i>Lakewood</i> , <i>Lynnwood</i> , Puyallup, Redmond, <i>Renton</i> , <i>SeaTac</i> , Silverdale, <i>Tukwila</i>	Bainbridge Island, Des Moines, Edmonds, <i>Issaquah</i> , Kenmore, <i>Marysville</i> , Mercer Island, <i>Mountlake</i> <i>Terrace</i> , Mukilteo, Sammamish, <i>Shoreline</i> , University Place, <i>Woodinville</i>	Type A: Smaller Cities and Towns (inside Contiguous UGA): <i>Algona</i> , Arlington, Black Diamond, Bonney Lake, Brier, Covington, DuPont, Edgewood, <i>Fife</i> , Fircrest, Gig Harbor, Lake Forest Park, Lake Stevens, Maple Valley, Medina, Mill Creek, Milton, Newcastle, Normandy Park, Orting, <i>Pacific</i> , Port Orchard, Poulsbo, Ruston, Steilacoom, Sumner. Type B: Small Residential Towns (inside Contiguous UGA): Beaux Arts, Clyde Hill, Hunts Point, Woodway, Yarrow Point. Type C: Free-Standing Cities and Towns: Buckley, Carbonado, Carnation, Darrington, Duvall, Eatonville, Enumclaw, Gold Bar, Granite Falls, Index, Monroe, North Bend, Roy, Skykomish, Snohomish, Snoqualmie, South Prairie, Stanwood, Sultan, Wilkeson.

## Discussion of Compact Growth and Transportation

In 2002, the Center of Disease Control in Atlanta, Georgia sponsored a workshop attended by an interdisciplinary scientists to explore a research agenda that might be associated with the influence of community design on air pollutant emissions and consequently adverse health effects (Dannenberg et al. 2003). One question posited, “What tradeoffs in terms of criteria air pollutants, particulate matter, and air-borne toxics are involved with land-use policies that promote increased density, walkability, and connectivity? For example, although higher density may reduce per capita vehicle emissions on a regional basis, it may create more traffic congestion and higher levels of different pollutants in dense areas” (Dannenberg et al. 2003 p 1504). In other words, emissions output may be highly concentrated in high-density cities which may lead to more concentrated impacts and higher exposure (Frank and Engelke 2005; Kenworthy and Laube 2002). It should also be pointed out that these authors are not advocating dispersal and sprawl but rather attention paid to the relationship of traffic emissions and population density at the local level.

This brings us to the issue of the impact on land use policies that seek to address automobile use. An literature review by Badoe and Miller examined the empirical findings that investigated a range of variables on the transportation-land-use interaction such as residential density, employment density, accessibility, neighborhood design, automobile ownership, socioeconomics and transit supply (Badoe and Miller 2000). The authors concluded that the collective research yields mixed results on the influence of urban form on travel. To add to the debate, according to the study by Kitamura et al. attitudes are more strongly associated with travel than are land use characteristics with the authors suggesting that policies that promote higher densities may not alter travel demand (Kitamura et al. 1997). The important issue here is that compact urban growth centers may not be void of traffic, especially considering the proximity of urban freeways to many of the cities within the PSRC regional geographic categories. In addition, the movement of goods and services will still require commercial fleets, which may release ultrafines, diesel particulates and toxic air pollutants within the microscale pedestrian environment and within proximity to urban freeways.

**Graph 1. Projected Growth in Urban Freeway Congestion under Different VMT Growth Rates, 2002-2010 (Top 78 Metro Areas)**



**Notes:**

- The Travel Time Index (TTI) is a measure of total congestion. It is the ratio of the peak-period travel time to the travel time under ideal conditions. A TTI value of 1.4 indicates that peak-period travel takes 40 percent longer than under ideal conditions
- Specific congestion data for Seattle:  
[http://mobility.tamu.edu/ums/congestion\\_data/tables/seattle.pdf](http://mobility.tamu.edu/ums/congestion_data/tables/seattle.pdf)

Furthermore, the August 2005 *Puget Sound Trends* report states that “that automobile travel in the central Puget Sound region has grown at the same rate as population and employment” (PSRC 2005a). The report also states that “If the construction of new roads simply keeps pace with this growth, then congestion at current levels or worse may continue into the foreseeable future” (PSRC 2005a).

The Federal Highway Administration also examined the effect of different vmt growth rates on urban freeway congestion. As presented Graph 1, a 2% increase in vmt has a significant impact on travel time index (TTI) as a measure of congestion (Cambridge Systematics 2004). The important point is not to debate whether construction of roads

is a solution to traffic congestion but to point out that 1) increasing vehicle miles traveled (vmt) may result in increasing congestion and 2) congestion alleviation may result in freeway expansion projects. Specific local freeway expansion projects can be viewed at Washington State Department of Transportation's web site (WSDOT 2005). If given that both freeway congestion and expansion exist regionally, then the issue to explore with respect to adverse health impacts (see Section 2) is whether populations are living or attending schools within proximity to congested freeways. Within the context of the regional growth alternatives, if densification occurs, does this also encourage infill? With respect to population proximity to high volume traffic, can infill create a "coming to the nuisance" or alternatively, with freeway expansion is the nuisance coming to populations and who are these populations?

## **Section 1. The Microscale or Local Environment**

In 2004, a session of the annual conference sponsored by the Health Effects Institute was based on the "emerging evidence [that] suggests that air pollution gradients within cities and associated health effects may be larger than previously appreciated" (Tager 2004 p 5). The importance of this is that both regional and local air quality should be considered when determining pollution impacts from motor vehicles. Although aggregation is a standard methodology, the consideration air quality impacts within the growth centers of the regional alternatives is perhaps of equal importance. After all, is it not the local where that sense of place, of community and the pedestrian-oriented environment exists? The following studies, research reports and legal rulings may provide both insight into microscale air quality impacts within urban communities and perhaps guidance for future assessments of PSRC's growth alternatives.

### **a) Localized Air Quality Impacts**

Considering that many traffic pollutants disperse from the roadside edge at an exponentially decreasing concentration, the obvious question may be to investigate whether populations reside or attend schools within this microscale environment. European researchers have been doing just that. Although the European compact city is often referenced as a pedestrian-oriented urban growth model, the following studies suggests that the relationship between compact living and motorized traffic presents potential adverse health conditions. As stated by Dutch environmental epidemiologist Bert Brunekreef "society is witnessing a transition from classical pollution, dominated by SO<sub>2</sub> and particles generated by coal and oil combustion ... to pollution mixtures dominated by traffic exhausts" (Brunekreef and Sunyer 2003). It should also be noted that within Washington State, the primary source of air pollutants is motor vehicles (American Lung Association of Washington 2005; Puget Sound Clean Air Agency 2003; Washington State Department of Ecology 2005).

In the Puget Sound region, carbon monoxide is often monitored at busy intersections, however, air quality monitors are rarely sited within 100 m of urban freeways with the exception of a CO monitor near Interstate 5 at 5<sup>th</sup> and James St, Seattle<sup>5</sup> and a recently sited particulate black carbon monitor at 20 meters from the freeway edge of Interstate 5 at Olive Street, Seattle (Gilroy et al. 2004; PSCAA 2005). Black carbon is a surrogate for diesel particulate matter and mobile sources, especially diesel engines, are a major source of black carbon. Exactly what the black carbon levels are at increasing distances from the freeway is currently not measured but given that populations both live and attend schools within 100 m to urban freeways, this information would be important. Also, within planning practice the interdisciplinary bridge to

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<sup>5</sup> Monitoring ended February 28, 2001

environmental health may not be adequately understood, yet there may be significant environmental health consequences of planning actions.

**Figure 3.** Highway A13 - Rotterdam-Overschie



### *Netherlands*

There have been numerous environmental health studies on the adverse health effects from residential or school proximity to major traffic sources in urbanized areas of the Netherlands; Figure 3 (Brunekreef et al. 1997; Janssen et al. 2003; Roorda-Knape et al. 1998; van Vliet 1997). These studies examined the respiratory health of children either residing or attending a school within 300 meters of roadways that had an average of 70-150 thousand vehicles per day. Various traffic pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, black smoke, NO<sub>2</sub> and benzene were monitored at various distances from these roadways. The most prevalent impacts on respiratory health were observed within 100 meters of the traffic sources. Unlike similar studies within the United States, these studies did not investigate the socio-economic status (SES) of populations in their study area with the exception of van Vliet et al. This research group found that even after controlling for SES confounding factors, that “the associations between traffic related air pollution and respiratory health was mainly to children of intermediate to low SES” (van Vliet 1997).

**Figure 4:** Oxford Street, London U.K.



### *United Kingdom*

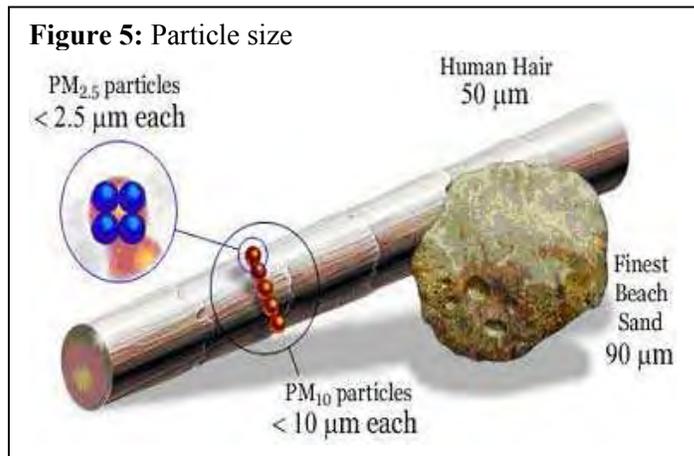
Research studies investigating the adverse health impact on populations that live within proximity to busy roads have also been conducted in the United Kingdom (Edwards and Walters 1994; Venn et al. 2001; Zhang et al. 2003). The Zhang study is most intriguing since it utilizes what the researchers describe as “a natural exposure chamber – that is, a street in London (Oxford Street) with almost exclusively diesel-vehicle traffic” to test the hypothesis whether diesel exhaust leads to a worsening of asthma symptoms and reduced lung function, Figure 4 (Zhang et al. 2003 p 7). Measured concentrations of elemental carbon, a surrogate

for diesel, was found to be five times greater at Oxford St. than the concentration at the control area – Hyde Park. Another recent study from the British Heart Foundation reported that urban cyclists may also be at increased risk of heart disease from exposure to bus diesel exhaust (Templeton 2005).

### *Japan*

Modern, motorized and very dense urban areas in Japan, despite the existence of sophisticated subways systems, have felt the impact of traffic on local air quality. An early study examined the adverse health impact of traffic emissions on adult females living within 20 meters of major

roadways in the suburbs of Tokyo (Nitta et al. 1993). As researchers continued to reveal a link between particulate matter and asthma, the courts responded with a ruling that, “the Japanese government as the road administrator must pay compensation to plaintiffs in Amagasaki who lived in or commuted to the area within 50 meters from Route 43 when they contracted asthma”(Kanemoto et al. 2001 p 2). In response, the Environmental Ministry of Japan recently announced initiation of a five year survey to investigate the causal relationship between traffic pollution and asthma in children (The Japan Times 2004). This study will focus on approximately 16,000 elementary schoolchildren at 60 various schools in major cities where the schools are located within proximity to traffic sources that exceed 40,000 vehicles per day. Controls for this study include elementary school children attending schools not within proximity to traffic or in rural areas.



### **Australia**

An emerging area of research with respect to traffic emissions is the release of ultrafine particles, which are less than 0.1 micron size, in other words, particles so small that their total mass is insignificant when compared to PM<sub>10</sub> or PM<sub>2.5</sub>. Figure 5 illustrates the size of PM<sub>2.5</sub>, in comparison to human hair and ultrafines are 25x smaller than PM<sub>2.5</sub>. According to Australian researchers, in an urban environment over 80% of particle

matter in terms of *number* is related to ultrafine particles (Morawska et al. 1998). It is important to note that due to the complex surface areas of ultrafines that “particle toxicity may be more closely related to the surface area of the particles than to their mass” (Bates and Caton 2002 p 113.) A study of major roadways in Brisbane, Australia concluded that exposure to ultrafine particles is significantly increased within distances up to 150 m from the edge of major roadways as compared to urban average exposure levels so that “it is reasonable to assume that personnel living and working in close proximity to an urban freeway will likely be exposed” (Hitchins et al. 2000 p 59). Significant research on ultrafines has also been conducted in the U.S. as discussed in the next section.

### **United States**

Within the United States, there is a growing body of research on the adverse health effects from proximity to traffic emissions, however, this section will discuss only a few of the recent studies which have influenced policy initiatives and legal settlements. Researchers from the University of California Los Angeles measured ultrafine particles at various distances downwind from a nine lane freeway with a traffic volume of approximately 300,000 vehicles per day (Zhu et al. 2002). Within 100 m of the freeway edge the concentrations of ultrafines were 25x higher than background, with the researchers concluding, similar to the Australian study, that “people who live, work or travel within 100 m downwind of major traffic sources will have much higher ultrafine exposure than those who live further from such sources” (Zhu et al. 2002 p 1032).

Of course, the potential adverse health impacts of proximity to traffic prompts the question, “who lives next to major traffic sources and are they vulnerable?” This was the focus of two important California studies (Green 2004; Gunier et al. 2003). The statewide Gunier study found that low-income and minority children were three times more likely to live in high traffic areas than white children. The study by Green et al. found that a higher percentage of minority

and low income schools were located near high traffic roads. The environmental justice implications were influential in having Senator Escutia of District 30 of Los Angeles County introduce Senate Bill 352 (California Senate 2003). This approved Bill, referencing data from both studies, amended Section 17213 of the Education Code restricting the siting of a new school within 500 feet from the closest traffic lane of a freeway or busy traffic corridor.

Recently the California Air Resources Board issued a guidance document, citing Senate Bill 352 and previous research on the potential health impacts associated with proximity to air pollution sources, which included freeways and high traffic sources as risk factors (California Air Resources Board 2005). This document characterizes both sensitive populations and land uses. The former is described as “segments of the population most susceptible to poor air quality (i.e. children, the elderly and those with pre-existing serious health problems affected by air quality).” (California Air Resources Board 2005 p 2). Sensitive land uses are described as residences, schools, day care centers, playgrounds and medical facilities. The recommendations are only advisory in nature and the guidance document does not address the topic of what to do about existing facilities. Nevertheless, the *Air Quality and Land Use Handbook: A Community Health Perspective* is a useful educational tool for planners concerned about the nexus between traffic, land use and local air quality impacts.



A recent court settlement agreement may bring salient an understanding of local air quality impacts of traffic sources or perhaps facilitate a universalized policy (U.S. District Court 2005). The Sierra Club had filed suit regarding the initial Environmental Impact Statement for a 4-lane expansion of US 95 in Las Vegas, Nevada, claiming that it did not sufficiently address local air quality impacts on local residents. In December 2004, the American Academy of Pediatrics published its policy statement on ambient air pollution and health hazards to children by summarizing the recent literature and listing recommended action items. The literature review included the impact of traffic related pollutants on children’s health with the Academy recommending the "siting of school and child care facilities should include consideration of

proximity to roads with heavy traffic" (American Academy of Pediatrics 2004). The position of the American Academy of Pediatrics and the large body of scientific evidence connecting traffic pollutants to adverse health effects in children were influential in the terms of a settlement agreement, ending a ten year legal battle(Sierra Club 2005).

In return for Sierra Club withdrawing its challenge to the U.S. 95 project, the Nevada Department of Transportation and the Federal Highway Administration will conduct air quality monitoring at three elementary schools that will be located within 100 m of a freeway with a volume of 300,00 vehicles per day as a result of the expansion project, see Figure 6. In addition, five major highways across the country will be selected for local air quality monitoring to determine the level and behavior of diesel particulates and diesel organic gases. With respect to this settlement agreement, the policy position of the American Academy of Pediatrics, and the California’s legislation regarding school siting near freeways, the Executive Director of the Association of Local Air Pollution Control Officials states “ I predict that within a couple or three years you’ll see the same kinds of ordinances almost everywhere” (Young 2005).

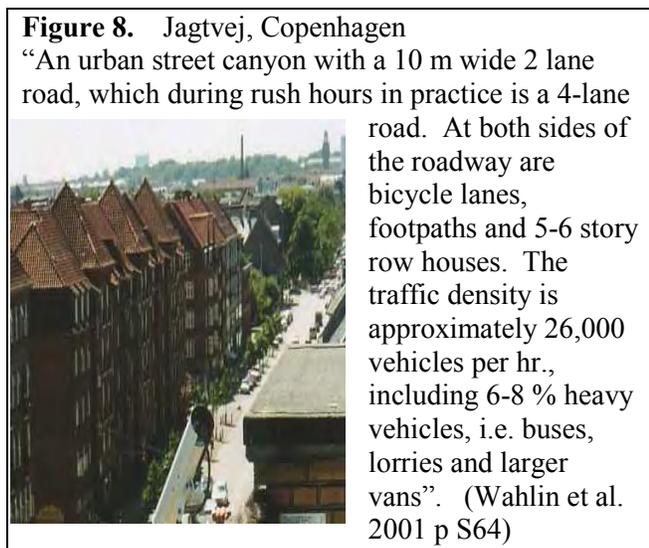
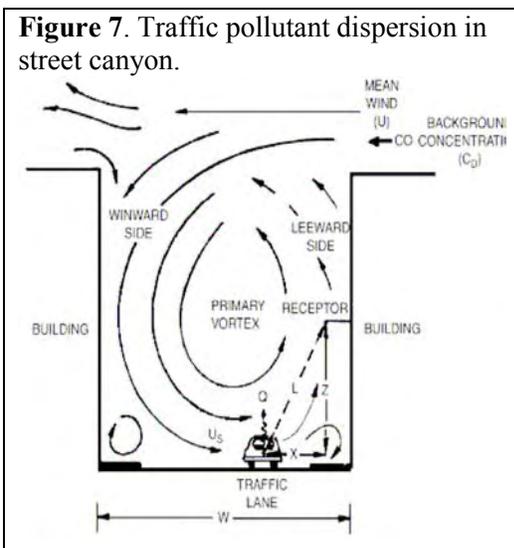
In the Puget Sound region, Professor Christine Bae and doctoral students from the Department of Urban Design and Planning at the University of Washington are conducting

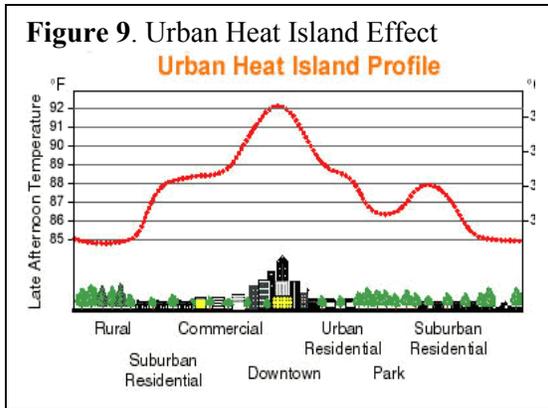
research on spatial land use patterns within proximity to urban freeways. The preliminary findings of the UW research team indicate that retirement homes, multifamily residential complexes, day care facilities and public / private schools are located within 100 m of the freeway edge. Although private school data is not readily available, the researchers found that public schools located within 100 m of urban freeways are attended by predominately low-income and minority students. The findings suggest that existing land use patterns within proximity to urban freeways may already place vulnerable populations at risk to exposure to motor vehicle pollution from high volume traffic.

## b) Emerging Issues of Compact Growth

### *Urban canyons*

Urban canyons, described as urban streets flanked by buildings on both sides, may also have concentrations of high traffic pollutants as illustrated in Figure 7 (Vardoulakis et al. 2003). A Danish study also found that there was significant correlation in the average weekly cyclic patterns of  $\text{NO}_x$ , CO and ultrafine particle concentrations detected in an urban street canyon, indicating that traffic was their major source, Figure 8 (Wahlin et al. 2000). Modeling urban street canyon pollutants is somewhat complex, for example, in a test exercise, 24 modellers used a range of models to predict pollutant concentrations in the same street canyon with large discrepancies between the various model predictions (Vardoulakis et al. 2003). It is also rare for regulatory air monitoring to occur in urban canyons due to temporal variations caused by changing wind, temperature and traffic conditions. Nevertheless, urban canyons in compact urban areas may be a potential source of pedestrian and building occupant exposure to traffic pollutants. If we look forty years into the future, strategies for densification such as increasing building heights may require us to pay closer attention to the issue of urban canyons within the Puget Sound region's growth centers.





### **Urban Heat Island**

Urban areas with heat absorbing materials such as metal, asphalt and concrete maintain higher temperatures than the surrounding countryside. As illustrated in Figure 9, this disparity in regional ambient temperature is described as the urban heat island (UHI) (Ote 1995). The heat island effect is one factor among several that can raise summertime temperatures to levels that pose a threat to public health (U.S. EPA 2005a).

According to the CDC, exposure to excessive heat can cause illness, injury and

death, with the elderly, the very young, and people with chronic health problems most at risk (Center of Disease Control 2005). After 60 heat-related fatalities in 1992, Seattle became a participating city in the heat-health warning system (U.S. EPA 2005b).

### **Noise**

Another environmental health problem with respect to traffic is its contribution to urban noise, impacting large segments of the urban population who live within proximity to freeways, busy highways and streets (Sanford 1977; U.S. DOT 2000; World Health Organization 1999). The *Guidelines for Community Noise* published by the World Health Organization states that populations vulnerable to the adverse health effects of noise include children and the elderly (World Health Organization 1999). According to the Federal Highway Administration for populations living within 150 meters of heavily traveled freeways, one truck at 55 miles per hour sounds as loud as 28 cars traveling at the same speed. Although barrier walls are a common mitigation strategy, noise compatible land use planning is another alternative. This strategy both encourages the location of less noise-sensitive land uses next to highways and promotes the use of open space to minimize noise impacts (Federal Highway Administration 2002).

With respect to the PSRC growth alternatives and targeted growth areas transected by urban freeways, does this bring us back to a similar issue as with microscale air quality; “does infill create a “coming to the nuisance?” Or in the case of freeway expansion is the “nuisance coming to populations”?

## Section 2. Summary of Literature Review Regarding Adverse Health Impacts within Urbanized Areas

This summary is intended to provide an understanding of the scope of adverse health effects rather than reflect a comprehensive list.

Adverse Health Effects	Study Findings	Study Area/ Scope	Reference
Respiratory	Children within 100 m of truck traffic had reduced lung function.	Six residential areas in the densely populated Province of South Holland	Brunekreef et al. 1997
	Pronounced respiratory symptoms in children living within 100 m of freeway.	Six residential areas in the densely populated Province of South Holland	Roorda-Knape et al. 1998
	Respiratory symptoms in children with allergies exasperated by proximity to busy roads.	City districts within central southwestern part of the Netherlands	Janssen et al. 2003
	Cough, wheeze, and doctor diagnosed asthma were significantly more reported for children living within 100 m of major roads.	Major freeways in the Province of South Holland.	van Vliet et al. 1997
	High incidence of wheeze amongst children living within 90 m of busy road.	Nottingham, U. K.	Venn et al. 2001
	Children under 4, admitted to the hospital for asthma are more likely to live in an area with high traffic flow.	Birmingham, U.K.	Edwards et al. 1994
	Exposure to diesel exhaust lead to reduced lung function and aggravation of asthma symptoms.	Oxford St in London, U.K. where only diesel buses, taxis and pedestrians are permitted	Jhang et al. 2005
	Respiratory symptoms more prevalent amongst individuals residing within 20 m of major roads in suburban Tokyo.	Kannana-dori Ave within several residential areas of Tokyo, Japan	Nitta et al. 1993
	Proximity to high traffic flows related to an increase in repeated medical visits for asthma.	San Diego County, CA	English et al. 1999
	Exposure to high volumes of traffic/trucks within 200 m of homes contributes to childhood asthma hospitalizations.	Eerie County, N.Y.	Lin et al. 2002
	Traffic related air pollution is associated with respiratory symptoms in children.	San Francisco Bay Area, CA	Kim et al. 2004
Cardiovascular	Respiratory health in children is adversely affected by local exposure to outdoor NO <sub>2</sub> or other freeway-related pollutants	10 communities in Southern California	Gauderman et al. 2005
	Adults who live near a main road were almost twice as likely to die from hear or lung disease	Participants from 29% of the municipalities in the Netherlands	Hoek et al. 2002
	Diesel fumes significantly damage blood vessels, increasing the risk of heart disease for urban cyclists.	Cycle paths along bus lanes in London, U.K.	British Heart Association, 2005
	An association between exposure to ultrafine particles and cardiovascular morbidity in the population with chronic heart diseases.	Australian Government, Health Impacts of Ultrafines	Morawska et al. 2004
Low Birth Weight	Ultrafine particle exposure may precipitate acute cardiovascular responses ranging from increased blood pressure to myocardial infarction.	Review of epidemiological literature.	Delfino et al. 2005
Low Birth Weight	Increase of low birth weight infants associated with residential proximity to high traffic sources.	Los Angeles County, CA	Wilhelm and Beate 2003
Heat-related	Excess heat related death rates in Seattle, Washington, have actually increased compared with the 1960s-1970s.	Heat related mortality trends for 29 major U.S. cities.	Davis et al. 2003
Noise	Overview of the adverse health effects of noise with emphasis on the growth of urban environmental noise.	International study	World Health Organization, 1999

### Section 3. Potential Mitigation Strategies

#### a) *Microscale Air Quality*

It does seem paramount that prior to initiating any mitigation strategy, there's a broad understanding of the scope of the problem. Some questions arise:

- What guidance can be provided regarding incompatible land uses next to high volume traffic?
- Does it make sense to site a day care center or school within proximity to urban freeways without at least asking the question of the dispersion patterns of vehicle pollutants?
- Can the question even be simply answered when dispersion is influenced by such variables as temperature, topography, atmospheric stability or wind speed and direction?

If we assume the development of compact urban centers that support pedestrian and mass transit mobility, we cannot also assume the elimination of motor vehicle traffic, either commercial or private, especially on urban freeways. The issue, then, may be one of understanding incompatible land uses within the nexus of transportation, air quality and populations.

- Incompatible Land Use:

The California Air Resources Board recently released the "*Air Quality and Land Use Handbook: Community Health Perspective.*" that provides guidance on incompatible land uses within proximity to air pollutants from heavy traffic sources. Least this study is dismissed as an issue peculiar to the population density and traffic volumes of southern California, there is also this spatial relationship between populations, traffic and air quality within the Puget Sound region.

- Education:

Brian Stone reported in his article *Air Quality by Design* that only 7% of accredited planning programs in North America offer specialized course work in air quality planning, (Stone Jr. 2003). For broad understanding of air quality issues within the urban context, another important step might be found with improvement in the academic planning curriculum. Considering the lack of air quality education in planning schools, then it is likely that urban planners are not familiar with the interdisciplinary relationship of planning and air quality, except what might be understood through contemporary initiatives. Air quality education for planning practitioners would assist in a broader understanding of incompatible land uses.

- Technological Advances:

Least there is an impression that no progress is being made, it is important to mention several initiatives. The Puget Sound Clean Air Agency has led in the introduction of *Diesel Solutions*, developed in cooperation with U.S. EPA's voluntary retrofit program to assist the conversion of public and private fleets to clean burning fuels, including school buses, waste collection trucks and transit buses (PSCAA 2003). Diesel Solutions partners include Seattle and Tacoma Port Authorities, Pierce Transit, Kitsap Transit, King County metro, the City of Seattle, the City of Tacoma and the Boeing Company just to name a few. Also in 2007, the U.S. Environmental Protection Agency will be implementing its rule on clean fuel requirements for heavy duty trucks and buses.

- Other Initiatives

The design of greenbelts are not new, however, as congestion continues to be resolved in part by freeway expansions and the expansions occur in the greenbelt area then obviously this reduces or eliminates its effectiveness as a buffer zone. Interestingly, Japan's Ministry of Land,

Infrastructure and Land Use is aggressively pursuing through the land purchase, the construction of green belts (MLIT 2002). Another important mitigation strategy can be found in the Las Vegas settlement agreement. Since indoor air quality is oftentimes reflective of outdoor air quality, air filtration systems will be installed in the three elementary schools that will be next to the expanded freeway.

#### ***b) Urban Canyons***

Due to the vertical barrier of tall buildings pollutants trapped in street canyons cannot easily flow out without horizontal flushing provided by cross streets or spacing between buildings. Interestingly, the City of Toronto's *Environmental Improvement Strategy* also suggests minimizing street canyons through sloping away the building façade from the street allowing for better crosswind removal of pollutants (City of Toronto 2003). Perhaps another approach is designing tall narrow buildings with adequate spacing for cross wind movements. However, a discussion of mitigation strategies is hindered without comprehensive air monitoring / modeling data. Nevertheless, as VISION 2020+20 plans to the future, today's emerging issues should be considered.

#### ***c) Heat Island***

- Vegetation

The inclusion of open space with shade trees is a common strategy to mitigate the heat island effect. VISION 2020 +20 includes open space connectivity in its environment assessment but the limitations of the modeling tools becomes evident with similar data for all four growth alternatives. Another mitigation tool is the installation of green roofs, which is becoming an increasingly common trend in the Puget Sound area.

- Technological Advances:

Advanced roofing systems has been designed to reduce the heat island effect from buildings and throughout the country incentive programs have been initiated to encourage installation of such materials. Paving materials are also available to minimize the absorption of solar heat on roads and parking lots.

#### ***d) Noise***

The potential mitigation measures for noise are similar to microscale air quality and include:

- Understanding incompatible land uses through improvement in planning education.
- Stressing the importance of greenbelts as buffers.
- Technological advances for noise abatement include noise insulation in building construction; barrier wall design; road paving materials; and tire technology.

Corrective mitigation of the adverse health effects of urbanization may be costly, so as we look to the future in VISION 2020+20 it seems prudent to first evaluate the effectiveness of different mitigation strategies. This requires incorporating a range of complex issues within the environmental assessment of the various growth alternatives.

#### **Section 4. Potential Future Research Topics**

Vision 2020+20 forecasts 40 years into the future so one might anticipate technology improvements such as cleaner fuels and combustion processes, however, it's in the getting there from here. Even recent advances in reducing vehicle emissions have been offset by increasing vehicle miles traveled and traffic volume. Also competing with these technological advances is the emerging research on the adverse health impacts of ultrafines and air toxics, which may act independently, cumulatively or synergistically. Furthermore, current initiatives to investigate microscale air quality are minimal at best, including the phenomenon of urban canyons. The evaluation of the alternative growth scenarios would benefit from a more refined understanding of traffic pollutants, their behavior and their adverse health effects. Some of possible research questions to contemplate:

- Thinking Regionally / Acting Locally

Are planning agencies receiving guidance on the impacts of growth as related to land use and traffic pollutants at the local level? What about the emerging issue of urban air canyons?

- What are incompatible land uses?

Are there land uses such as schools, day care centers, residential complexes or retirement homes that should not be sited next to high traffic sources?

- Technology – Salvation or Revelation?

While technology continues to provide improvements, we should not ignore the possible advances in our understanding of environmental health such as the potential impact of cumulative air pollutants or the emerging research on the health impacts of ultrafines.

#### **Conclusion:**

The purpose of this paper is to broaden the discussion of the potential adverse health impacts of compact growth at the local scale where that sense of place and community begins. Are there “tradeoffs” as posed by Dannenberg or can compact growth in the Puget Sound region provide for healthy, vibrant communities for all? The Puget Sound Regional Council envisions, within its VISION 2020+20 update, a growth alternative that is inclusive and sustainable. Perhaps an examination of these potential adverse health effects within its Environmental Impact Assessment will aid in that process.

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**Appropriate Urban Densities in the Central Puget Sound Region:  
Local Plans, Regional Visions, and the Growth Management Act**

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Joseph W. Tovar, FAICP

November 2, 2005

## Informational Paper on “Appropriate Urban Densities”

This paper was developed by Joe Tovar under a contract with the Puget Sound Regional Council. The scope of the contract contained the following primary tasks:

- Provide information and perspective on the topic of “appropriate urban densities.”
- Review the issue of appropriate urban densities including relevant statutory provisions and case law established by the Central Puget Sound Growth Management Hearings Board, and any reviewing court.
- Discuss actions the Regional Council could consider taking in the VISION 2020 update project to assist local governments in addressing or clarifying this issue.

The purpose of the paper is to provide information regarding the context, origin and evolution of “appropriate urban densities” in GMA law and planning practice, specifically as it applies to areas designated for single-family residential uses. The paper examines concerns and perspectives expressed by various stakeholder groups about the meaning and application of this term and identifies potential ways that this issue could be addressed, including potential multicounty planning policies in the VISION 2020+20 update project.

## **I. Scope and Purpose of This Issue Paper**

### ***A. Overview***

VISION 2020, the adopted regional growth management strategy for King, Kitsap, Pierce, and Snohomish counties, and the 82 cities within those counties, contains this region’s multicounty planning policies (MPPs). Local government comprehensive plans and multicounty planning policies are adopted pursuant to the authority and requirements of the Washington State Growth Management Act (GMA).<sup>1</sup>

First adopted by the Puget Sound Regional Council (PSRC) in 1990, VISION 2020 was last amended in 1995. This issue paper is prepared to assist the VISION 2020+20 Update which looks out to the year 2040, with a specific focus on the size and location of the region’s urban growth areas, rural areas and resource lands.

It is the purpose of this paper to explain the context, origin, and evolution of “appropriate urban densities” in GMA law and planning practice, specifically as it applies to areas designated on the Future Land Use Maps of cities and counties for single-family residential uses. The paper examines concerns and perspectives expressed by various stakeholder groups about the meaning and application of this term and identifies potential ways that this issue could be addressed, including possible multicounty planning policies contained in the VISION 2020+20 update.

Three central assumptions underlie this discussion. First, all of the 2040 regional growth scenarios presently under review assume that the metropolitan urban growth area (UGA) boundary will remain essentially as it is today, albeit with some minor adjustments. Second, although multi-family housing at various densities will be a major component of future growth accommodation, it will be important to provide a broad range of single-family lot sizes and forms as part of the housing choices with the UGA. Third, there is a 15-year gap between the horizon year (2025) of city and county land use plans being updated pursuant to GMA and the horizon year (2040) of regional efforts, most notably the VISION 2020+20 Update.

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### ***B. Methodology and Organization***

Research in support of this paper included a review of the relevant published opinions of the Washington State Central Puget Sound Growth Management Hearings Board

(CPSGMHB or Growth Board), the Washington Appellate Courts, bill reports from the 2005 legislative session, VISION 2020, various local and national media, personal interviews with city and county planning staffs in the four-county region, and the compilation of data regarding residential densities submitted by city staff or derived at the countywide level from GIS data by PSRC staff. The sources of information are cited in the text, endnotes or the appendices. This paper is organized as follows:

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## **II. Short Term Local Plans in Context of Long-Term Regional Visions**

The comprehensive plans developed under the authority of the Growth Management Act utilize a 20-year horizon. The urban growth areas are to be sized to accommodate 20 years of growth forecasted by the Office of Financial Management [RCW 36.70A.110]. In every county, this 20-year forecast has been allocated among the cities and county by means of the countywide planning processes.

As the name suggests, the VISION 2020+20 regional plan update utilizes a 35-year horizon, which is to say, out to the year 2040. Thus, it presumes that development that occurs in the “15-Year Gap” between 2025 and 2040 will not preclude meeting the growth, transportation and other objectives ultimately set forth in the updated regional plan. For that matter, it assumes that development that occurs even in the first 20 years will not frustrate the vision for 2040.

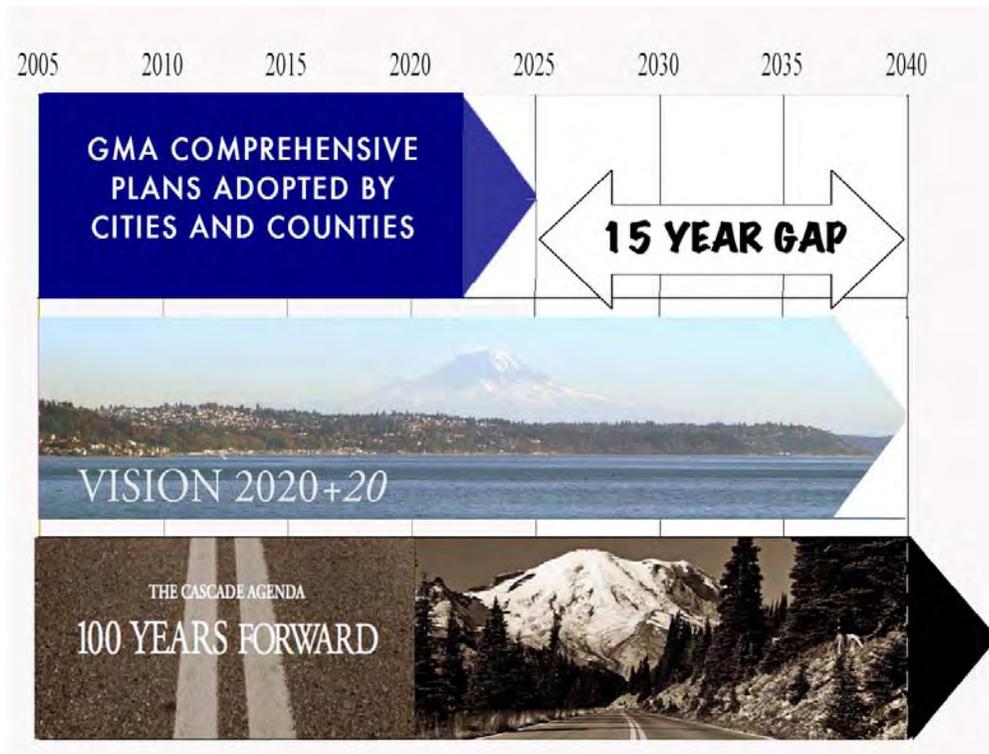


Fig. 1

In large measure, VISION 2020+20 is a growth accommodation plan, focused largely on enabling and channeling population and employment within the UGA. At the same time, other major regional initiatives with even longer time frames call for the identification and achievement of conservation and restoration priorities essential to sustainability and livability for this region.

The *Cascade Agenda*<sup>2</sup> (a private initiative not part of GMA planning) has set out to identify conservation priorities for the next 100 years. While the region of the *Cascade Agenda* (King, Pierce, Snohomish, and Kittitas counties) does not overlap exactly with the PSRC jurisdiction, it nevertheless provides significant environmental context for the “appropriate urban densities” discussion. While the *Cascade Agenda* looks well beyond even 2040, that year has been identified as a significant milestone. By that date, the *Cascade Agenda* staff suggest,<sup>3</sup> this region will know whether the major conservation opportunities in the rural and resource areas of these three counties have been secured or lost.

The *Shared Salmon Strategy for Puget Sound*<sup>4</sup> focuses on the recovery of Chinook Salmon runs within the Puget Sound Ecologically Significant Unit (ESU). While the deadlines and milestones for efforts to achieve this objective will vary from watershed to watershed, there is no doubt that these efforts will rely largely on the coordinated actions of local governments and that they will take a long-term view. As shown in Figure 2, the scope of the ESU and the Watershed Inventory Resource Areas which it includes subsume the four-county region of the VISION 2020+20 regional strategy.



Fig. 2

The Executive Summary of the *Draft Shared Salmon Strategy Plan* conveys the long-term vision necessary to address salmon recovery:

Across Puget Sound, leaders at all levels aspire for a future in which the Puget Sound region has demonstrated to the world that economic prosperity, more people and a healthy environment can co-exist. The many contributors to this draft Puget Sound Salmon Recovery Plan ... hope that fifty years from now, their great-grandchildren will be able to say:

*Our elders got it right. They listened to what the salmon were telling them.* Anticipating the region's growth, the choices they made in the early 2000's and the hard work that followed, created the vibrant community we share today, where both people and nature thrive and the salmon are once again teeming in our rivers and streams.

This issue paper, and subsequent research undertaken as part of the environmental review for the update, are designed to inform PSRC and its member jurisdictions about the viability of the year 2040 growth distribution alternatives under consideration. It will identify potential regional policies to increase the long-term viability of the region's

urban growth areas and improve near-term certainty for local governments seeking to achieve compliance with the regional plan and state law. Policies contained within the VISION 2020+20 Update can also provide a framework to coordinate the near-term actions of local governments to help achieve the long-term conservation objectives of the *Cascade Agenda* and the restoration objectives of the *Shared Salmon Strategy*.

### **III. The “Urban Densities” Controversy –Stakeholder Perspectives**

An examination of this subject begins by recounting the concerns, questions, and confusion expressed by different stakeholder groups about appropriate urban densities and the meaning of the threshold of “four dwelling units per acre.”

- Some cities contend that the “appropriate urban densities” concept, as interpreted and applied by the Growth Board, does not allow sufficient discretion to zone for large residential lots.<sup>5</sup>
- Some argue that an allowance must be made to accept built-out neighborhoods that fall below the four units per acre threshold.
- Some believe that the only measure of compliance with the GMA’s urban densities requirements should be meeting the 20-year growth targets.
- Some are concerned that, even with more definitive large-lot “exceptions” spelled out in recent case law, cities are still too exposed to challenges for alleged noncompliance with RCW 36.70A.110 (requirements regarding urban growth areas).
- Other jurisdictions that have designated all their serviceable and environmentally unconstrained residential lands at or above the four unit per acre threshold have questioned the equity of the continued practice by some cities of large lot zoning.
- Builder, realtor, and business organizations oppose the removal of a threshold of four units per acre, either as a benchmark or safe harbor, contending that without such parameters some local governments will needlessly restrict the supply of single-family lots and drive up costs.<sup>6</sup>
- Planning and growth management organizations have expressed concerns that to equate appropriate urban densities with “accommodation of the 20-year population targets” serves to promote rather than “reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.”<sup>7</sup>
- A shared theme of supporters of the four unit per acre threshold is the principle that scarce land should be used efficiently. Some argue that large lots needlessly limit the opportunity for additional single-family homes,<sup>8</sup> while a more efficient land use pattern broadens housing choices and promotes affordability.<sup>9</sup>
- The 15-year gap between the 2025 and 2040 planning horizons raises the question of whether perpetuating a pattern of development at relatively low densities will foreclose future options to accommodate growth beyond 2020 without compromising the urban/rural line.

## IV. The Statutory Context of the Growth Management Act

Much has been written describing the history, structure and rationale for the Growth Management Act and its many provisions. For purposes of this paper, the necessary context is grouped under these headings: (A) Regional diversity and “bottom up” planning under the GMA; (B) the GMA landscape – urban, rural, and resource lands; and (C) the purpose and inter-play between the Act’s goals and its requirements.

### *A. Regional Diversity and “Bottom up” Planning Under the GMA*

The bulk of the GMA was initially adopted in two increments – in the 1990 and 1991 legislative sessions. The Growth Management Hearings Boards were created in 1991 to hear and determine allegations of local government noncompliance with the goals and requirements of the Act. Although the legislature did borrow the concept of urban growth areas from Oregon, it very deliberately did not adopt that state’s centralized and “top-down” approach to plan approval and appeals. States with variations on growth management statutes are shown in gray in Fig. 3.

The Oregon model requires first a review and administrative approval of local plans by an administrative state agency (the Land Conservation and Development Commission) then an opportunity for an appeal to a single state-wide land use court (the Land Use Board of Appeals or LUBA). In contrast, the GMA directs that local actions are presumed valid upon adoption and de-centralizes the appeals process to three regional Growth Boards rather than a single court in the state capital. The Washington system is designed to enable the growth boards’ reviews to reflect the regional diversity within the state.



Fig. 3 – Growth Management States (in gray)

The GMA has been described by some as a “bottom-up” planning process because it requires that comprehensive land use plans be developed by cities and counties, as

opposed to state agencies. However, by virtue of its framework of state goals and requirements, as well as its mechanism for dispute resolution and enforcement by a state agency (e.g., Growth Board authority to hear appeals, determine invalidity, and recommend gubernatorial sanctions) it is incorrect to describe the GMA as a purely or exclusively “bottom-up” system. In reality, Washington’s legislature has chosen a middle path between the extreme poles of centralized, top-down planning (i.e., Oregon) and de-centralized, “bottom-up” planning of most other states.

### ***B. The GMA Landscape: Urban, Rural and Resource Lands***

The GMA requires that counties and cities designate all lands as one of three mutually-exclusive<sup>10</sup> landscapes: urban, pursuant to RCW 36.70A.110, rural, pursuant to RCW 36.70A.050(7), or resource lands (including agricultural and forest lands), pursuant to RCW 36.70A.170. In this sense, “designate” means to map on the Future Land Use Map adopted as part of comprehensive plans. These collective local government designations in the Central Puget Sound region are shown in Fig. 4.

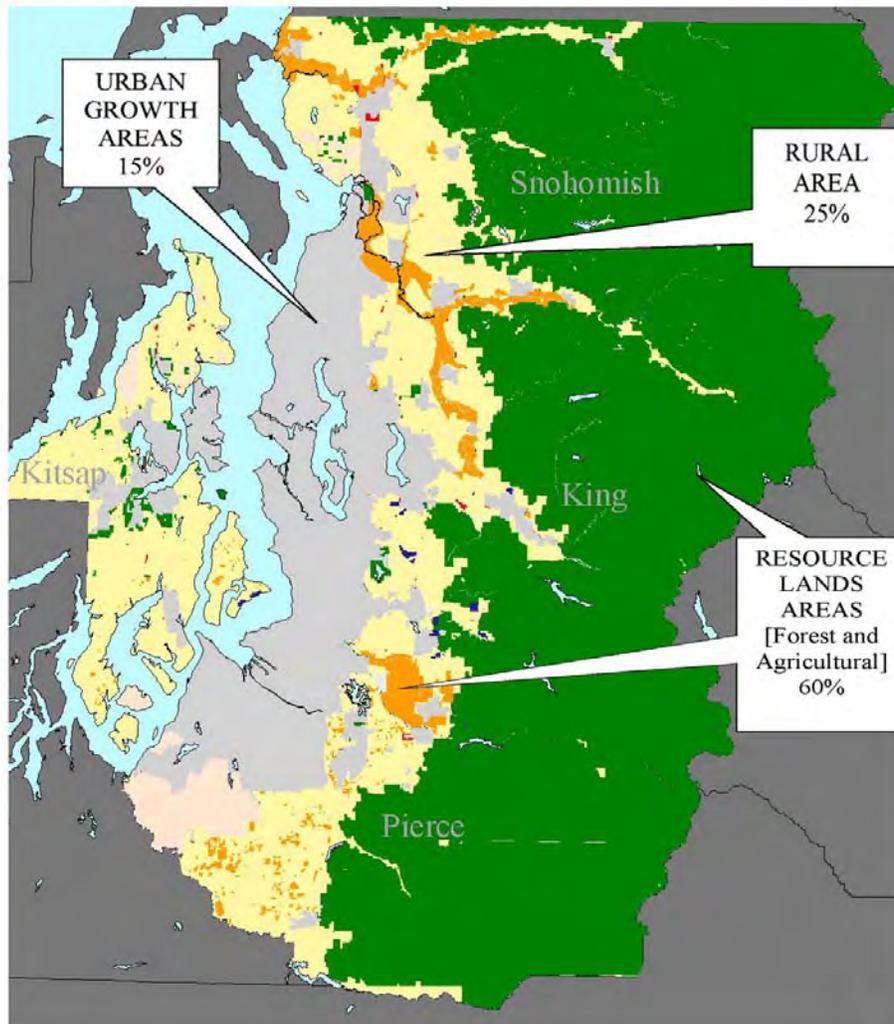


Fig. 4 – the GMA landscape

One of the key organizing principles in the GMA is to concentrate urban development within urban growth areas and to prohibit it in rural areas and resource lands. If the UGA boundary expands, it can do so only at the expense of either rural or resource lands. Therefore, the long-term sustainability of the region's rural and resource lands depends to some degree on the ability of the UGA to accommodate growth, at least for the coming 20 years, and potentially beyond. The long-term viability of the UGA, in turn, depends upon the ability to utilize serviceable and environmentally unconstrained land in an efficient manner.

### ***C. GMA goals and GMA Requirements***

In the realm of urban densities, the relevant Growth Board cases have cited not only the anti-sprawl goals of RCW 36.70A.020(1) and (2), but also the urban growth area requirements of RCW 36.70A.110. These provisions are set forth in Appendix A. The manner in which the board reviewed and applied these specific goals and requirements is discussed in Section IV below.

The planning goals of the Act are set forth at RCW 36.70A.020. The preamble to the Goals section provides:

The following goals are adopted to guide the development and adoption of comprehensive plans and development regulations of those counties and cities that are required or choose to plan under RCW 36.70A.040. The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations . . .

Emphasis added.

The use of the word “exclusively” is accurate as it applies to the activities of cities and counties in preparation of plans and regulations. However, the planning goals also serve at least two other purposes.

First, in the event that a Growth Board rules that a local action is noncompliant with a requirement of the GMA, the board may also evaluate whether or not the local action would “substantially interfere with the fulfillment of the goals” of the Act. If the board so determines, RCW 36.70A.302 authorizes the board to enter a finding of “invalidity” which would prevent permit applications from vesting.

Second, the goals have been used by the Growth Board to help illuminate the meaning of GMA requirements. For example, the board has said that the Act's concurrency requirements at RCW 36.70A.070(6) must be reviewed “in light of, not in lieu of [GMA planning] goal 12.”<sup>11</sup>

While cities and counties have a duty to be consistent with both the goals and requirements of the GMA, it is significant that most requirements are more detailed and

directive than any goal. For this reason, the Growth Board, and the courts, have consistently held that a GMA planning goal may not be used to excuse a local government from a specific GMA planning requirement.

This axiom was most clearly articulated in a 2003 decision of the Court of Appeals, wherein the Court rejected the City of Bellevue’s argument that in order to satisfy certain planning *goals* it was justified in exempting certain development projects from the GMA’s concurrency *requirements*. In *Bellevue v. East Bellevue*,<sup>12</sup> the Court held:

Bellevue argues that the concurrency requirement cannot trump all other goals of the GMA. The portion of the GMA that Bellevue infers might conflict with imposing a concurrency requirement for neighborhood shopping centers is found in RCW 36.70A.070(2) [the GMA’s concurrency requirement]. But concurrency is not a goal, it is a requirement. . . .

Emphasis added, footnote omitted.

Two weeks later, in the *Quadrant* case<sup>13</sup>, the same Division of the Court of Appeals re-affirmed its *Bellevue* holding as follows:

We conclude that the first two goals listed in RCW 36.70A.020 are general requirements which do not supersede the more stringent, specific requirements found in RCW 36.70A.350.

Emphasis added.

## **V. GMA Case Law Context from the Growth Board**

### ***A. The Central Puget Sound Growth Management Hearings Board Cases***

The four counties and 82 cities within the jurisdictional boundaries of the Central Puget Sound Growth Board are identical to the service area of the PSRC and therefore are subject to the multicounty planning policies adopted as VISION 2020. This four-county region is a unique metropolitan region within the state with a population density 12 times that of the rest of the state.<sup>14</sup>

#### **1. GMA’s cascading hierarchy of policy**

While community vision will vary from city to city and county to county, they all take place within the framework and context of state law and regional policy. The Growth Board has described our state’s land use decision-making system as a “cascading hierarchy” of state statutes, regional and local plans, capital budgets, development regulations, and permits.

Figure 5 illustrates that directive and substantive policy direction flows from state statute to various policy documents adopted by cities and counties, such as multicounty planning policies (MPPS) and countywide planning policies (CPPS), then to comprehensive plans, then to development regulations and finally to development permits.

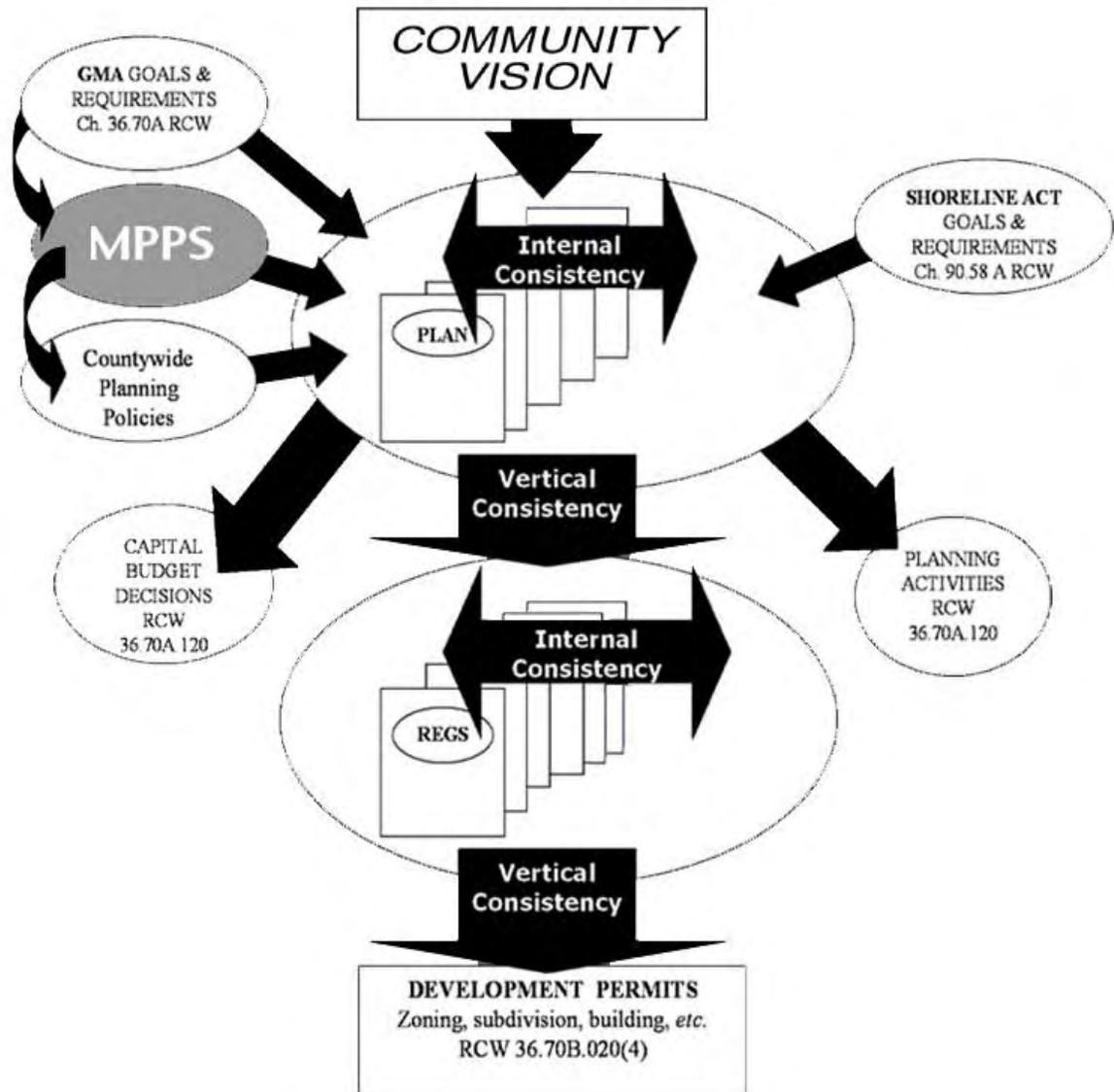


Fig. 5 – The “Cascading Hierarchy”

Because a major focus of this paper is the update of VISION 2020 and potential future multicounty planning policies, Fig. 5 highlights the place of MPPs in this planning hierarchy. As shown, MPPs may provide direction either to countywide planning policies or to city and county comprehensive plans or both.

## 2. VISION 2020 and Regional Form – a compact urban landscape

In the 1995 *Bremerton I* decision, the Growth Board evaluated the GMA’s requirements for urban growth areas and rural areas and described the regional physical form implicit in these collective provisions. The board cited the adopted regional plan for the region, VISION 2020, stating:

The regional physical form required by the Act is a compact urban landscape, well designed and well furnished with amenities, encompassed by natural resource lands and a rural landscape . . . This region’s unique circumstances make the compact urban development model even more compelling, as evidenced by its adopted regional growth management strategy [VISION 2020] which provide[s]:

Create a Regional System of Central Places Framed by Open Space, and provide ... a regional urban form characterized by compact, well defined communities. VISION 2020, at page 12.

...

The intent of the strategy is to promote a regional urban form characterized by compact, well-defined communities framed by a network of open spaces and connected by new transit lines and ferries. VISION 2020, at page 20.

*Bremerton I*, at page 20. Footnotes omitted. Emphasis added.

Ten years after the *Bremerton I* decision, the public policy rationales for a compact urban form have been augmented by two worsening national trends: one in public health, the other in energy. A study published last year by the RAND Corporation developed a “sprawl index” of 38 metropolitan regions to assess the linkage between health and auto-dependency. “Other risk factors aside, people in densely populated places graced with sidewalks and shops had the lowest rates of diabetes, hypertension, heart disease, and stroke . . . rates rose steadily as communities became more spread-out and less walkable.”<sup>15</sup>

A recent article in Business Week<sup>16</sup> observed that U.S. gasoline prices have doubled in recent years, heralding the beginning of a post-oil economy. What was once an abstract caution has become a pressing reality. A wide variety of regional development strategies are called for in regional and local plans, including investments in transit, transit-oriented design, and a better localized balance between jobs and housing. Another vital strategy will be to optimize the cost-effectiveness of roadway and other infrastructure investments by minimizing the inefficiencies inherent in a widespread land use pattern of large residential lots.

At the same time, it is a mistake to presume that a pattern of compact urban development is a prescription for an unbroken landscape of asphalt and buildings. To the contrary, in the *Rural Residents*<sup>17</sup> Final Decision and Order (FDO) in 1994, the Growth Board observed:

“Compact urban development” does not require that the urban environment be exclusively a built environment, nor that the built environment be of a homogenous intensity, form or character. Other provisions of the Act will require that the urban landscape be interspersed with natural systems, passive and active open space and a variety of public facilities. For example, UGAs must include “greenbelts and open space areas” (RCW 36.70A.110(2)), and critical areas must be protected (RCW 36.70A.060), regardless of whether they are inside or outside of the UGA.

One of the major reasons for designating compact urban growth areas has been to concentrate urban growth in areas with service capacity and to reduce the conversion of land to inappropriate low density sprawl [RCW 36.70A.020(1) and (2)].

### 3. The evolution of appropriate urban densities in Growth Board case law

The Growth Board has issued a dozen Final Decisions and Orders over the past decade addressing the GMA goals and requirements that govern urban densities. The seminal case was the first county comprehensive plan reviewed by the board in 1995, *City of Bremerton, et al. v. Kitsap County (Bremerton I)*.<sup>18</sup> Among the many allegations against Kitsap County were that the adopted county plan impermissibly allowed urban growth in the rural area, contrary to the mandate in RCW 36.70A.110 that urban growth is to occur in urban growth areas and the mandates in .070(5) that urban growth is prohibited in rural areas.

The facts before the board required it to analyze the statutory language of the GMA, particularly the planning goals at RCW 36.70A.020, the definition of “urban growth” in RCW 36.70A.030(18), and the requirements for urban growth areas at RCW 36.70A.110. These are excerpted in Appendix A. To answer the legal issues in *Bremerton I*, the board had to construe the meaning of these statutory provisions and then apply them to the facts and argument in the case. The board rejected the argument that the Act specified a hard and fast rule for urban and rural densities and held:

The Board instead adopts as a general rule a “bright line” at four net dwelling units per acre. Any residential pattern at that density, or higher, is clearly compact urban development and satisfies the low end of the range required by the Act.

Emphasis added.

The four units per acre threshold has been applied, clarified and evolved over a series of board decisions from 1997 through 2004. Several local governments (Woodway, Pierce County, Woodinville, and Bonney Lake) were determined not to have been guided by RCW 36.70A.020(1)(2) and were found non-compliant with the requirements of RCW 36.70A.110. All these local governments subsequently took action to achieve compliance. Two other cities, Federal Way and Redmond, were found to comply with

those statutory provisions, and the board dismissed the challenges to their plans. Through this series of cases and decisions, the board clarified the “general rule and reasonable exceptions” it had first articulated in *Bremerton I*.

In 1997, in *Litowitz v. City of Federal Way (Litowitz)*,<sup>19</sup> the Growth Board held that the city was justified in designating lands below the four units per acre threshold for the Hylebos wetlands portions of the city. Based upon the information in the city’s record, the board concluded that the environmentally sensitive features in Federal Way were (1) large, (2) complex in function and (3) of a high rank order of value, and found the city’s low-density residential designations to be in compliance with GMA provisions.

Two years later, in *LMI/Chevron v. Town of Woodway (LMI)*,<sup>20</sup> the board considered this matter again. Both the petitioner and the town agreed that four units per acre was an “appropriate urban density,” but they disagreed whether the facts in Woodway justified the lower density designations. The board applied the three-part test announced in *Litowitz* to the facts in Woodway’s record and determined that there was not an adequate scientific basis to support low-density land use designations. The town was directed to amend its plan to achieve compliance with RCW 36.70A.020(1)(2) and .110.

In July of 2005, the Growth Board issued two decisions regarding appropriate urban densities for the cities of Normandy Park and Issaquah. In the first case, the board found Normandy Park’s plan non-compliant and invalidated it in its entirety. In the latter case, the board upheld the majority of Issaquah’s plan, remanding only a small portion of the land designated below the four per acre threshold for further work to achieve compliance.

In *Kaleas, et al., v. City of Normandy Park*<sup>21</sup> (*Kaleas*), the Growth Board found that the city’s plan, which designated a large proportion (84%) of the city’s entire residential land area for densities between 2.2 and 2.9 dwelling units per acre, failed to comply with the goals and requirements of the Act. In the *Kaleas* case, the board affirmed its prior reasoning regarding the general rule and reasonable exceptions (e.g., critical areas addressed in the *Litowitz* decision and equestrian areas referenced in the *Bremerton* decision) and further expanded the range of factors to consider, including geological or topological features and growth phasing. The complete list of factors set forth in *Kaleas* appears in Appendix B.

The board stated that, while accommodating the allocated growth is a major component of the GMA, the Act’s predilection for compact urban growth and its explicit goals and requirements impose a broader framework within which local governments must plan.

The Growth Board concluded that Normandy Park had failed to designate appropriate urban densities because there was no support in the record to merit designating 84% of its land as low and medium density. The board found noncompliance, remanded the challenged plan update, and invalidated the noncompliant plan update provisions. Normandy Park has appealed the board’s decision to Superior Court.

The day after issuing *Kaleas*, the Growth Board issued its FDO in *1000 Friends of Washington v. City of Issaquah*<sup>22</sup> (**1000 Friends**). At issue were the City of Issaquah’s designation of lands below the threshold of four dwelling units per acre. The board applied its reasoning and factors articulated in *Kaleas* to the facts in Issaquah.

Issaquah demonstrated that it was accommodating its targets and promoting compact urban growth with limited provisions within the city’s plan for lower densities (6% of total land area) where necessary to protect critical areas. The Growth Board agreed with the city’s arguments for the majority of the areas in question, however, it directed Issaquah to amend its policies with respect to one lower density area that currently lacks sewers and that is in the service area of an independent water and sewer district. Issaquah did not appeal the decision to Superior Court.

## **VI. Relevant Washington State Supreme Court Cases**

### ***A. Appellate Cases Interpreting Legislative Intent About Local Discretion***

A point of conflict and confusion in the urban densities discussion has been the degree of discretion available to local governments in adopting local plans. The State Supreme Court’s most recent analysis of the deference required by RCW 36.70A.3201 was set forth in May of this year in *Quadrant Corporation, et al., v. State of Washington Growth Management Hearings Board (Quadrant)*<sup>23</sup>, the court stated:

“We hold that deference to county planning actions that are consistent with the goals and requirements of the GMA . . . cedes only when it is shown that a county’s planning action is in fact a ‘clearly erroneous’ application of the GMA.”

The *Quadrant* decision affirmed prior State Supreme Court rulings in 2000 and 2002. For instance, in 2000, the court held that “Local discretion is bounded . . . by the goals and requirements of the GMA.” *King County v. Central Puget Sound Growth Management Hearing Board (King County)*.<sup>24</sup>

In 2001, Division II of the Court of Appeals applied the *King County* holding and further clarified, “Consistent with *King County*, and notwithstanding the ‘deference’ language of RCW 36.70A.3201, the board acts properly when it foregoes deference to a . . . plan that is not ‘consistent’ with the requirements and goals of the GMA.” *Cooper Point Association v. Thurston County (Cooper Point)*.<sup>25</sup>

In 2002, the Supreme Court affirmed the *Cooper Point* decision by the Court of Appeals on this point; it affirmed *Thurston County v. Western Washington Growth Management Hearings Board (Thurston County)*.<sup>26</sup>

All of these appellate decisions were GMA cases, which is to say that in each of these cases the meaning of RCW 36.70A.3201 (legislative intent regarding deference owed to local decisions) was directly on point, had been briefed by the parties, and ruled upon by a Growth Management Hearings Board. This is an important distinction between this

string of cases and the most recent Supreme Court discussion of the subject of urban densities in *Viking v. Holm (Viking)*<sup>27</sup>, discussed below.

### ***B. The Supreme Court's Decision in Viking v. Holm***

As noted, the much commented-upon *Viking* case was not a GMA case – it was a covenants and property rights dispute between two private parties. The actual dispute requiring a judicial ruling was whether the City of Shoreline's zoning designation of four units per acre voided a pre-GMA covenant which restricted lot sizes to two units per acre. Neither the city nor the Growth Board was a party to the case, therefore, no city or Growth Board action, facts, or argument were before the court.

Nevertheless, in determining that neither the GMA nor local zoning void pre-GMA restrictive covenants, the court engaged in gratuitous and confusing *dicta*<sup>28</sup> about the meaning of RCW 36.70A.3201. This confusion was compounded by the *Viking* court's discussion of goals without always distinguishing between the meaning of goals in the generic sense as opposed to the specific planning goals set forth in RCW 36.70A.020.

First, the court said:

Viking's public policy argument also fails to the extent that it implicitly requires us to elevate the singular goal of urban density to the detriment of other equally important GMA goals. To do so would violate the legislature's express statement that the GMA's general goals are nonprioritized. RCW 36.70A.020 ("The following goals are not listed in order of priority ...") *Viking*, at page 127.

Emphasis added.

In actuality, there is no "urban density goal." While RCW 36.70A.020(1) "encourage[s] urban growth in urban areas" and .020(2) calls for "reducing the conversion of land to sprawling, low-density development," in neither instance is urban density named as a goal. In contrast, the GMA provisions on which the Growth Board's decisions regarding appropriate urban densities have turned are not the Act's goals, but rather its urban growth areas requirements set forth at RCW 36.70A.110.

Second, despite twice repeating its earlier holdings that planning goals are not prioritized,<sup>29</sup> and despite Shoreline's own balancing of those goals which resulted in the four unit per acre choice, the *Viking* court apparently went on to do its own balancing of the goals in a way that arguably would elevate Planning Goal 6 (property rights) above the other 13 Planning Goals. The *Viking* court stated:

Indeed, although enforcement of a restrictive covenant may impede some of the GMA's goals, it simultaneously furthers the achievement of others. This observation is not surprising within the context of the GMA, inasmuch as the goals are frequently in tension, if not outright in conflict. See, e.g., 1992 Op. Att'y Gen. No. 23, at page 8 (noting that "there is an inherent tension in seeking to accommodate by comprehensive action all of these goals, some of which are in

conflict”); 24 Heller Ehrman White & McAuliffe, Washington Practice: Environmental Law and Practice § 18.2, at 174 (1997) (describing the general goals as “vague and contradictory”).

Here, it is indisputable that enforcement of the covenant furthers certain GMA goals. For example, because restrictive covenants represent valuable property interests, enforcement furthers the GMA goal of protecting private property rights. *See* RCW 36.70A.020(6).... Likewise, enforcement of the covenant furthers the GMA goal of preserving open space... Balancing the GMA’s goals in accordance with local circumstances is precisely the type of decision that the legislature has entrusted to the discretion of local decision-making bodies. RCW 36.70A.3201. *Viking Properties, Inc. v. Holm*, 155 Wn.2d 112, 128, 118 P.3d 322 (August 2005).

Emphasis added.

It is both ironic and perplexing that the above-emphasized portions of the court’s *dicta* would seem to suggest that deference would be accorded to Shoreline (i.e., the “local decision-making body” whose “balancing [of] the GMA’s goals in accordance with local circumstances” resulted in the four units per acre choice) rather than that of the parties to the *Viking* case or the court itself.

Finally, the court’s discussion about the “inherent tension” and “conflict” between and among the GMA’s goals offers an incomplete characterization of the GMA provisions at issue in the court’s *King County* case decided in 2000. In *Viking*, the court said:

We are ever cognizant that this is a legislative prerogative and have prioritized the GMA’s goals only under the narrowest of circumstances, where certain goals came into direct and irreconcilable conflict as applied to the facts of a specific case. *See King County v. Cent. Puget Sound Growth Mgmt. Hearings Bd.*, 12 Wn. 2d 543, 558, 14 P.3d 133 (2000).

Emphasis added.

However, a detailed review of the court’s decision in *King County* reveals that the “conflict” was not simply between or among GMA goals – rather, it was between a GMA requirement (the conservation of designated agricultural resource lands required by RCW 36.70A.060), and the recreation goal (RCW 36.70A.020(9)) to which the county and soccer enthusiasts had pointed to justify soccer fields on farm lands. In *King County*, the fact that the county had “prioritized” the planning recreation goal (9) ahead of the resource industries goal (8) did not excuse it from the GMA requirement to conserve designated agricultural land.<sup>30</sup> This construction of the law is parallel to and consistent with the Court of Appeals conclusions in the *Bellevue* concurrency case cited on page 9 of this paper.

In summary, the *Viking* decision lacked the clarity of the earlier Supreme Court decisions on these subjects. Much of what the *Viking* court said on the subjects of deference, the relationship of goals to requirements and hence, appropriate urban densities, was *dicta*, rather than holdings, and therefore of limited, if any, precedential value.

To clarify, GMA goals and GMA requirements are not the same. Goals are not requirements and vice versa. Standing alone and in the abstract, there is inherent tension and even conflict between and among goals. However, tension or conflict between a GMA goal and a GMA requirement is resolved in favor of the requirement, not the reverse.

Perhaps most significantly, in *Viking* the Supreme Court did not repudiate or modify its above cited holdings in *King County* (2000), *Thurston County* (2002), and *Quadrant* (2005) regarding the level of deference owed to local governments under RCW 36.70A.3201. Cities and counties continue to enjoy deference in how they plan for growth – including their choices about appropriate urban densities - provided that their choices are consistent both with the goals and the requirements of the Act. The *Viking* decision did not alter that.

## **VII. Growth Board Decisions after *Viking***

In a case decided in August of 2005, the Growth Board upheld the City of Bothell against challenges filed by many parties on the urban densities issues. The case was captioned *Fuhriman v. City of Bothell (Fuhriman II)*.<sup>31</sup>

All petitioners challenged some of Bothell’s residential land use designations and the city’s definition of “net buildable area.” The city’s definition provided that certain areas be deducted from gross acreage to determine the net acreage upon which density calculations are to be based. The board found that Bothell’s definition was not clearly erroneous and within its discretion to define. The board found that the densities provided for by the city’s residential land use designations were appropriate urban densities, including two low density designations established to protect critical areas – a hydrologic system critical area [North Creek] and a geological critical area [Norway Hill].

The board was aware of the *Viking* decision issued by the Supreme Court the preceding week, as evidenced by its explicit statement on page 7 of the FDO:

Pursuant to WAC 242-02-660(2), the Board takes notice of *Viking Properties Inc. v. Oscar W. Holm and Martha J. Holm*, 2005 WL 1981699 (Wash).

Although there is no specific discussion in the *Fuhriman II* FDO of *Viking* or its meaning, it is notable that the only references to “bright line” in the FDO appear where those words were uttered by the petitioners, not the board [FDO, at pages 20-23]. In contrast, the board characterized the four dwelling units per acre threshold as a “safe harbor” rather than a “bright line.”

On page 24 of the FDO, the board said:

In another early case also involving, among other things, the sizing of final urban growth areas and urban residential density designations, the Board concluded that 4 *net* du/acre constituted an appropriate urban density, generally, a residential density that complied with the Act – a safe harbor.

Emphasis added.

Notwithstanding the *Viking* court’s *dicta* regarding GMA goals, the board reiterated the view that the four dwelling unit per net acre threshold is a matter of settled land use planning practice in this region (see Section VIII for preliminary documentation of this fact).

Thus, while the board does not presently assert that the four units per acre threshold constitutes a “bright line,” the board nevertheless affirmed that this threshold constitutes a “safe harbor” which is to say that it is an irrefutably valid appropriate urban density.

### **VIII. Existing Land Use Designations in Central Puget Sound**

King, Pierce, and Snohomish counties have adopted the four units per net acre threshold for unincorporated urban areas, as have many cities. Table 1 below shows aggregate numbers for cities in the four counties in the region, derived from a review by PSRC staff of geographic information system (GIS) data of adopted future land use maps (FLUMs) in city comprehensive plans. The information in Table 2 was provided by city staff contacted by the author at one of four meetings with the technical staffs of the cities and counties in the region.<sup>32</sup>

The aggregate numbers in Table 1 include all 82 cities in the region and represent only those portions that their FLUMs designate as residential single-family areas. Most cities contain residential uses of much greater densities in multi-family, mixed-use, and commercial centers (for example, Everett, Bellevue, Bremerton, Tacoma, and Seattle); however, due to the topical scope of this paper, the Tables 1 and 2 focus only on those portions of the communities typically described as single-family neighborhoods of varying lot sizes.

**Table 1**  
**Percentage, by county, of aggregate city residential land areas designated above and below four gross units per acre threshold**

<b>Cou nty</b>	<b>% above threshold</b>	<b>% below threshold</b>	<b>Notes</b>
Snohomish	92	8	
Pierce	89	11	
King	85	15	
Kitsap	20	70	Bainbridge Island skews aggregate figure

**Table 2**

**Percentage of single family residential land area designated above and below 4 du/acre. (See explanation in paragraphs following table)**

City	% above	% below	Notes
<b>100% ABOVE</b>			
Algona	100	0	
Arlington	100	0	
Bremerton	100	0	
Everett	100	0	
Fircrest	100	0	
Gig Harbor	100	0	
Lynnwood	100	0	
Mountlake Terrace	100	0	
Port Orchard	100	0	
Poulsbo	100	0	
Ruston	100	0	
Seattle	100	0	
Shoreline	100	0	
Snohomish	100	0	
Steilacoom	100	0	
Tacoma	100	0	

<b>90 to 99%</b>			
SeaTac	98	2	
Covington	95	5	1 acre/du in “urban separator” creek zones
Monroe	95	5	
Issaquah	94	6	
Kirkland	94	6	97:3 w/o equestrian areas per <i>Bremerton</i> case
Puyallup	94	6	
Renton	93	7	96:4 w/o urban separators, wetlands, and parks
Bothell	92	8	The 8% was upheld in <i>Fuhriman II</i> case
DuPont	92	8	
Maple Valley	91	9	100:0 w/o golf courses

<b>70 to 79%</b>			
Lynnwood	79	21	
North Bend	79	21	The 21% is constrained land in the floodplain
Pacific	75	25	
Auburn	77	23	

There is no data for 80-89 percent.

Federal Way	76	24	81:19 w/o Hylebos wetlands per <i>Litowitz</i> case
Sammamish	76	24	
Kent	75	25	Pending rezoning would change this to 87:13
Redmond	72	28	83:17 if parks are deducted

City	% above	% below	Notes
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<b>60 to 69%</b>			
Mercer Island	64	36	

<b>50 to 59%</b>			
	None		
Bellevue	59	41	81:19 w/o public, parks, equestrian lands
Burien	59	41	61:39 w/o parks and schools

<b>40 to 49%</b>			
Sumner	49+	51-	Lowest density ranges from 3.93 to 5.1 du/acre
Woodinville	49	51	

<b>30 to 39%</b>	None		
<b>20 to 29%</b>	None		

<b>10 to 19%</b>			
Normandy Park	16	84	
Woodway	10	90	

<b>0 to 9%</b>			
Brier	5	95	
Bainbridge Island	3	97	Very anomalous situation in region.
Clyde Hill	0	100	20,000 sq. foot lots, some existing are smaller
Hunts Point	0	100	
Medina	0	100	

The information in Table 2 gives a general sense that the future land use maps of the cities which participated in the survey have designated the majority of their lands above the four units per acre threshold. It also indicates that many of those cities with lands below that threshold have circumstances that either were specifically upheld by the Growth Board as “appropriate urban densities” (e.g., Bothell in *Fuhrman II*, Federal Way in *Litowitz*, and Redmond in *Benaroya*) or, in the assessment of this observer, would be (e.g., Covington, Kirkland, and Sumner).

The aggregate totals for cities in King, Snohomish, and Pierce counties show a relatively high percentage of residential lands above the four units per acre threshold (between 85% and 92%). The aggregate percentage for Kitsap cities is very low (only 20%) due to

Bainbridge Island. The other three cities in Kitsap County have 100% at or above the four units per acre threshold. The city aggregate figure is heavily skewed by Bainbridge Island, which has 97% of its land area below the four units acre threshold, and a land area nearly as large as the three other cities combined (28 square miles vs. 31 square miles for Poulsbo, Port Orchard and Bremerton collectively.)

There is no apparent relationship between city population or overall land area and the percentage of residentially designated lands below the four units per acre threshold. A number of cities identified non-residential uses in residential areas, such as parks, institutions, golf courses and cemeteries, for which density designations are meaningless, but which are included in the “gross” statistics in Table 2 of lands below the four unit threshold. The Growth Board has not explicitly addressed the latitude available to local governments to designate such lands at low densities.

Another argument sometimes heard in this discussion has been that existing or built-out neighborhoods at below four units per acre should similarly be excluded from any general rule regarding appropriate urban densities. This may be a good point with respect those neighborhoods subject to the kind of pre-GMA restrictive covenants at issue in the *Viking* decision discussed in Section VI. However, in the absence of such covenants, national trends, recent regional development patterns and adopted policies suggest otherwise.

A 2004 paper from the Brookings Institute projects that, by the year 2030, “half of the buildings in which Americans live, work, and shop will have been built after 2000, most of that space will be residential space, and in the West that figure will be about 87%, a near doubling of built space.”<sup>33</sup> Locally, much of the growth and development that has occurred in this region has taken the form of urban redevelopment and infill projects. This trend is projected to continue into the future, reflected in adopted countywide population allocations wherein 35% of the current 20-year population forecast for King County is to be accommodated in Seattle, a city with only 20% of the county’s urban growth area.

The limitations of the responses and depth of the inquiry in the Table 2 survey preclude drawing more conclusions at this time. In view of the concerns expressed by a number of city officials that there is little certainty about the outcome of a potential challenge, it may be worthwhile to consider the adoption of countywide or multicounty planning policies to increase certainty. Section IX below examines that strategy. In such an effort, it would be appropriate to undertake a more complete and methodical inventory of the circumstances throughout the region under which certain cities have designated lands below the four units per acre threshold.

## **IX. Countywide Planning Policies (CPPs) and Multicounty Planning Policies (MPPs)**

All city and county comprehensive plans must be consistent not only with the goals and requirements of the GMA, but also with other jurisdictions with whom they share issues or common borders (RCW 36.70A.100).<sup>34</sup> Local plans must also be consistent with countywide planning policies (CPPs) and multicounty planning policies (MPPs) adopted pursuant to RCW 36.70A.210. VISION 2020 and its subsequent update contain the MPPs for the central Puget Sound region.

In addition to providing the framework to coordinate city and county comprehensive plans, VISION 2020+20 provides an opportunity to take the longer-term view (longer than 20 years of UGA land) and thereby achieve a better match between local plans and major public policy decisions and investments with much longer time horizons.

### 1. Countywide Planning Policies

King, Pierce, and Snohomish counties have specifically adopted the 4 du/acre threshold in their comprehensive plans as an appropriate urban density for lands within unincorporated urban areas. In addition, several counties have adopted countywide planning policies (**CPPs**) that address this general issue for both the county and its cities.

For example, the Pierce County CWPPs state:

6. The County and each municipality shall adopt within their respective comprehensive plans, policies to ensure that development within the urban growth area uses land efficiently, provides for a wide variety of uses, conserves natural resources, and allows for the connection of communities to an efficient, transit-oriented, multimodal transportation system. Policies shall:
  - 6.1 provide for more choices in housing types and moderate increases in density to achieve at least an **average net density of four units per acre.**;
  - 6.2 support infill and compact development;

King County CPP Framework Policy FW-1, Step 7d states:

Development on the land added to the urban growth area under this policy shall be limited to residential development and shall be at a **minimum density of four units to the acre.** Proposals shall meet King County comprehensive plan density and affordable housing goals.

Both the Growth Board<sup>35</sup> and the Court of Appeals<sup>36</sup> have held that countywide planning policies have directive effect on the comprehensive plans of cities and counties. Thus, a CPP may provide either general, aspirational direction to city and county plans or specific and prescriptive direction. The most prominent examples of the latter are the allocation

of population and employment to cities, and the drawing of the urban growth boundaries, both of which are accomplished through CPPs.

## 2. Multicounty Planning Policies

The same section of the GMA that authorizes CPPs also authorizes the adoption of multi-county policies (MPPs). MPPs adopted pursuant to RCW 36.70A.210(7) are essentially CPPs adopted by two or more counties. The VISION 2020 Regional Plan includes MPPs for the four-county region. VISION 2020+20 will likewise contain MPPs.

The value added of MPPs is several-fold. First, the MPPs are incorporated into a long range vision at the multicounty level. They provide a common framework for both CPPs and regional plans.

Second, MPPs illustrate how local plans and policies adopted to meet near-term objectives (e.g., the population allocations for the next 20 years) can help achieve, or at least not thwart, long-term objectives (e.g., greater transportation efficiencies and preservation of the urban/rural line).

Third, MPPs also provide an opportunity for the local elected officials in this region to collectively craft a solution to the appropriate urban densities questions without having to craft an answer that fits other parts of the state. Regional policies could take the form of a definition, a general rule with specifically listed exceptions, or other approaches.

Finally, MPPs provide assurance to all member jurisdictions that needs defined regionally will be addressed regionwide and that local urban density designations will occur within a collaborative and equitable framework rather than 86 fragmented and unilateral ones (82 cities and four counties).

MPPs can run the gamut from very detailed to very general. At the detailed end of the spectrum might be an MPP that spells out what appropriate urban densities are. Several potential examples follow.

To better focus on the 15-year gap between 2025 and 2040, an MPP might adopt as a regional policy the need for a more efficient use of environmentally unconstrained urban land that has urban services available. For example:

MPP 06-01 In order to maintain the long-range viability of the urban growth boundaries in the region, residential development patterns within the UGA must use unconstrained lands in an efficient manner. While a portion of the housing needs for the region will be accommodated in designated centers, such as multi-family and mixed-use projects, a significant portion must also occur in neighborhoods outside of the centers.

To increase certainty about what density designations would be found compliant with the GMA, an MPP could be written to essentially codify the precedents set forth in existing

Growth Board and judicial case law. In addition, an MPP to memorialize the “general rule and reasonable exceptions” framework in case law could also add exceptions or factors heretofore not considered by the board or courts. Such an MPP might read as follows:

MPP 06-02 All residentially designated lands within the urban growth areas shall meet appropriate urban densities. In determining what an appropriate density is, cities and counties shall be guided by the following criteria:

- (a) a residential density of four net dwelling units per acre is irrefutably urban and is therefore a safe harbor designation on the future land use map.
- (b) residential densities below the safe harbor threshold are also appropriate in the following circumstances:
  - (i) when supported by evidence in the record that demonstrates the presence of critical areas that are large in scope, complex in nature, and with a high rank order value and when accompanied by a finding by the local legislative body that lower densities on the future land use map are therefore necessary to augment the critical areas protections adopted pursuant to RCW 36.70A.060(2); or
  - (ii) when supported by evidence in the record that demonstrates a pattern of equestrian facilities, such as trails, paddocks, barns, arenas, and horse parks; or
  - (iii) when applied to non-residential uses such as public schools, public parks, cemeteries, fire stations, golf courses, or essential public facilities. If and when such uses convert to residential uses, this sub-section no longer applies; or
  - (iv) when recorded covenants or documented vested rights establish long-term private rights to an existing pattern of larger lots; or
  - (v) apart from the allowances in (i) through (iii) above, and in order to provide a variety of housing types and densities, each local government may also designate residential densities below the four net dwelling units per acre threshold, provided that the land area in such designation does not exceed 5% of the residential land area of the jurisdiction. A higher percentage for individual jurisdictions to account for other factors may be approved through the adoption of countywide planning policies for the county in which the jurisdiction is located; and
  - (vi) in order to maintain the option for increasing densities in urban residential areas beyond the 20-year horizon of the local plan, development regulations shall not authorize restrictive covenants that would perpetuate lot sizes below the safe harbor threshold. Any new subdivision of residential land at below the safe harbor threshold must be “shadow platted” to show how the proposed pattern of lots, roads and utility easements could accommodate additional growth in the event of a future increase in permitted densities.

Last, it would be desirable to have city and county plans reviewed for consistency with whatever the adopted MPP states. Such certification would be a way to assure

jurisdiction to jurisdiction equity in meeting any regional policies and serve to help protect a city plan designation from GMA appeals. A PSRC “certification” process presently occurs with respect to the transportation-related provisions of city and county plans as to the regional transportation plan. An MPP to specifically address this process for appropriate urban densities might look like this:

MPP 06-03 As part of the Regional Council’s review of local comprehensive plans and certification of transportation-related provisions, those plans shall also be reviewed by PSRC for consistency with the relevant multicounty planning policies concerning appropriate urban densities. A locally adopted or amended plan will not be considered consistent with the MPPs and RCW 36.70A.100, RCW 36.70A.210(7), and RCW 47.80.023 until it has been formally certified. [Note: The certification action indicates that the plan both conforms with the provisions of the Growth Management Act and is consistent with the MPPs. Localities whose plans are not certified are not eligible to compete for PSRC-managed funds.]

## **X. Conclusions and Recommendations**

### **A. Conclusions**

#### The state of the law

- The board has never found noncompliance with a “bright line”; it has found noncompliance with RCW 36.70A.110.
- While the controversy over the term “bright line” lingers on, it is notable that the Growth Board has not included those words in any of its holdings since 1995, even before the *Viking* Court opined that the Growth Board lacks authority to adopt a “bright line.”
- The *Viking* decision does not stand for the proposition that local governments should attach no significance to the four units per net acre threshold. It would appear that the four per acre threshold still constitutes a “safe harbor” for those local governments who are concerned about a future allegation of non-compliance with the urban growth area requirements of RCW 36.70A.110.
- The circumstances that would support a designation below the four unit per net acre threshold as an appropriate urban density have been reiterated, clarified, and expanded by the Growth Board post-*Viking* in the *Fuhriman v. Bothell* decision.
- While the *Viking* decision, and *Quadrant* before it, admonished the board for not being sufficiently deferential to the local government prerogative to balance the planning goals of RCW 36.70A.020, neither decision asserted that a local government’s discretion to balance goals excuses it from compliance with a requirement of the Act, such as the urban growth area requirements of RCW 36.70A.110.
- To the contrary, neither *Viking* nor *Quadrant* alter the Supreme Court’s prior and more complete reading of legislative intent regarding deference to local decisions

(RCW 36.70A.3201) set forth in the Supreme Court's decision in *Thurston County* (affirming the Court of Appeals holding in *Cooper Point*).

- The net result appears to be that the board will continue to review challenged plans for compliance with both the **goals** of the GMA and the **requirements**, most prominently RCW 36.70A.110.

#### The state of urban density designations in central Puget Sound

- The average percentage of city residential land areas designated below the four per acre threshold is relatively low – 9% among Snohomish County cities, 12% among Pierce County cities, and 15% among King County cities. Kitsap is much higher (70%), primarily due to the anomaly of Bainbridge Island.
- A large number of cities have designated no residential land uses below the four unit per acre threshold, while others have designated a relatively small percentage (less than 10%.) Most cities are below 25%.
- A relatively small number of cities have designated a large percentage of their residential land areas below the four units per acre threshold (between 50% and 100% in some King County cities).
- No comprehensive review has been made to examine what portions of these cited gross percentages meet the Growth Board's criteria, such as critical areas or equestrian areas. While it would be possible to tabulate more detailed information for comparative purposes, that exercise is beyond the scope of this paper.
- There are many land uses that are typically found within urban residential areas but for which a residential density designation is superfluous (e.g., schools, parks, golf courses).
- It is an overstatement to say that all established or built-out neighborhood patterns are permanent. Experience suggests that these terms are relative, not absolute. Much of the new housing stock in existing cities, both large and small, has been built in areas previously considered established or built out.

#### The Future Viability of the Urban Growth Area Boundary

- There appears to be continuing support among cities, at least in King County, to maintain the urban-rural boundary essentially in place beyond 2025, although several cities have expressed the sentiment that some minor adjustments should be considered.
- It is neither practical for the long-term viability of the region's UGA nor equitable for those cities that are stepping up to meet new growth demands, that outlying jurisdictions consider a pattern of large lots to be frozen in perpetuity.
- To say that a neighborhood will not re-develop or infill within the 20-year horizon of a GMA plan is one thing. It is quite a different thing, with potentially serious regional implications, to presume that established neighborhoods must be immune from growth and change within the 35-year horizon of VISION 2020+20, or, for example, the 100-year horizon of the *Cascade Agenda*.

- The “15-Year Gap” between the horizon of GMA plans and the horizon of VISION 2020+20 is both a problem and an opportunity. However, absent some framework, such as MPPs or CPPs, to assure that serviceable and environmentally unconstrained urban land is used efficiently, the credibility and viability of the 2040 metropolitan UGA line is compromised.

## ***B. Recommendations***

- To the extent that the member jurisdictions of the PSRC would like to increase certainty about what “appropriate urban densities” are in this region, the MPPs would appear to be a viable way to craft a region-specific solution. Such an MPP would be one way to shield local governments from GMA appeals.
- Countywide planning policies could also be one way to adopt a county-specific solution to the question of what is an appropriate urban density.
- If PSRC or member counties and cities wished to fine-tune the factors to be considered in the clarification of appropriate urban densities, it would require some additional review and analysis of a variety of information.

## **ENDNOTES**

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<sup>1</sup> The Growth Management Act is Chapter 36.70A of the Revised Code of Washington (RCW). City and county comprehensive plans are adopted pursuant to the authority and requirements of section RCW 36.70A.040. Multicounty planning policies, such as those contained in VISION 2020, are adopted pursuant to the authority and requirements of section RCW 36.70A.210(7).

<sup>2</sup> *The Cascade Agenda* was issued on May 18, 2005. It is posted online at [www.cascadeagenda.org](http://www.cascadeagenda.org).

<sup>3</sup> Conversation with Michelle Conner, Vice-President of Cascade Agenda Programs, Sept. 12, 2005.

<sup>4</sup> The draft Puget Sound Salmon Recovery Plan was issued on June 30, 2005. It is posted online [www.sharedsalmonstrategy.org/plan/index.htm](http://www.sharedsalmonstrategy.org/plan/index.htm).

<sup>5</sup> Speaking in opposition to the four units per acre threshold at legislative hearings in 2005 were the Association of Washington Cities, the Washington State Association of Counties, the City of Bellevue and the City of Puyallup. Bill reports on HB 1967 and ESHB 5907.

<sup>6</sup> Speaking in support of the four units per acre threshold at legislative hearings in 2005 were the Association of Washington Business, the Building Industry Association of Washington, and the Washington Association of Realtors. *Ibid.*

<sup>7</sup> Speaking in support of the four units per acre threshold at legislative hearings in 2005 were the Washington Chapter of the American Planning Association and 1000 Friends of Washington (a/k/a Futurewise). *Ibid.*

<sup>8</sup> Futurewise contends that King County cities alone can create an additional supply of 6,400 single family homes units simply by achieving the four unit per acre density on just their buildable lands below that threshold. Growth Management Fact Sheet: page 2.

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<http://www.futurewise.org/resources/publications/Encouraging%20Urban%20Growth%20in%20the%20UGA.pdf/view?searchterm=Fact%20Sheet>.

<sup>9</sup> “A large, growing, and underserved market exists for housing types that lie between the typical low-density subdivisions and high density multi-family complexes . . . and with the limitations on land availability – due to both urban growth lines and infrastructure capacity – the only way to get that supply increase is through more efficient use of the land that is developable.” The Housing Partnership, excerpted from Catalog of Housing Innovation in Washington, online at [www.rightsizehome.org](http://www.rightsizehome.org).

<sup>10</sup> The only exception to this mutually exclusive aspect is when resource lands are designated within city limits. Such city designations may only occur if the city has also adopted a purchase or transfer of development rights program. RCW 36.70A.060(4).

<sup>11</sup> *McVittie v. Snohomish County*, CPSGMHB Case No. 99, 3-0016c, FDO, Feb. 9, 2000, at page 19.

<sup>12</sup> *City of Bellevue v. East Bellevue Community Municipal Corporation*, No. 49852-5-I, CONSOLIDATED WITH No. 50624-2-I, COURT OF APPEALS OF WASHINGTON, DIVISION ONE, 119 Wn. App. 405; 81 P.3d 148; 2003 Wash. App., LEXIS 2912, December 15, 2003, Filed.

<sup>13</sup> *Quadrant Corporation v. Central Puget Sound Growth Management Hearings Board*, 119 Wn. App. 562, 578, [Division I] 81 P.3d 918 (December 2003) [Affirmed in part and reversed in part by *Quadrant Corporation v. Central Puget Sound Growth Management Hearings Board*, 154 Wn.2d 224, 110 P.3d 1132 (May 2005).]

<sup>14</sup> *City of Bremerton, et al., v. Kitsap County, (Bremerton I)*, CPSGMHB Case No. 95-3-0039c, FDO, October 6, 1995.

<sup>15</sup> Newsweek magazine. October 3, 2005 issue, “Designing Heart Healthy Communities.” pp. 60-66.

<sup>16</sup> “Living too large in Exurbia” published in Business Week online ([http://www.businessweek.com/magazine/content/05\\_42/b3955060.htm](http://www.businessweek.com/magazine/content/05_42/b3955060.htm)) summarizes this phenomenon:

A lifestyle built on cheap energy costs and low mortgage rates is in jeopardy. Consumers who hardly gave a thought to gassing up when regular was \$1.50 a gallon are abandoning their hulking sport-utility vehicles and pickups, signing up for carpools, and leaving the motorboat in the backyard now that prices are stuck at nearly twice that.

<sup>17</sup> *Rural Residents v. Kitsap County, (Rural Residents)*, CPSGMHB Case No. 93-3-0010, FDO, June 23, 1994, at page 19.

<sup>18</sup> *Bremerton I*, at page 35.

<sup>19</sup> *Litowitz, et al. v. City of Federal Way*, CPSGMHB Case No. 96-3-0005, FDO, July 22, 1996.

<sup>20</sup> *Lawrence Michael Investments, et al., v. Town of Woodway*, CPSGMHB Case No. 98-3-0012, FDO, January 9, 1999.

<sup>21</sup> *Kaleas, et al., v. City of Normandy Park*, CPSGMHB Case No. 05-3-0007c, FDO, July 19, 2005.

<sup>22</sup> *1000 Friends of Washington v. City of Issaquah*, CPSGMHB Case No. 05-3-0006, FDO, July 20, 2005.

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<sup>23</sup> *Quadrant v. CPSGMHB*, SUPREME COURT OF WASHINGTON, 154 Wn.2d 224, 248, 110 P.3d 1132 (2005).

<sup>24</sup> *King County v. CPSGMHB*, No. 68284-4, SUPREME COURT OF WASHINGTON, 142 Wn.2d 543, 561, 14 P.3d 133, 2000 Wash. LEXIS 834, December 14, 2000, Filed.

<sup>25</sup> *Cooper Point Ass'n v. Thurston County*, COURT OF APPEALS OF WASHINGTON, DIVISION II, 108 Wn. App. 429, 444, 31 P.3d 28 (2001).

<sup>26</sup> *Thurston County v. Cooper Point Ass'n*, No. 71746-0, SUPREME COURT OF WASHINGTON, 148 Wn.2d 1, 15, 57 P.3<sup>rd</sup> 1156; 2002 Wash. LEXIS 719, November 21, 2002, Filed.

<sup>27</sup> *Viking Properties v. Holm, et al.*, \_\_Wn.2d\_\_, 118 P.3d 322 (August 18, 2005).

<sup>28</sup> *Dicta (plural of dictum)* – A statement, remark, or observation. The word is generally used as an abbreviated form of *obiter dictum*, “a remark by the way;” . . . Statements or comments in an opinion concerning some rule of law or legal proposition not necessarily involved nor essential to determination of the case in hand are *obiter dicta*, and lack the force of an adjudication. Black’s Law Dictionary, 6<sup>th</sup> Edition.

<sup>29</sup> The *Viking* Court stated: “The GMA contains 13 expressly nonprioritized goals that guide local government...” *Viking*, at 125; and “... We are ever cognizant that this [nonprioritization of goals] is a legislative prerogative and have prioritized the GMA's goals only under the narrowest of circumstances, where certain goals came into direct and irreconcilable conflict as applied to the facts of a specific case. *See King County v. Central Puget Sound Growth Mgmt. Hearings Bd.*, 142 Wn.2d 543, 558, 14 P.3d 133 (2000). *Viking*, at pages 127-128.

<sup>30</sup> The confusion about the relationship between GMA goals and GMA requirements expressed by the *Viking* Court was mirrored in the dissenting opinion of Justice Charles Johnson in the *King County* decision. Had the *Viking* court’s reasoning that “prioritization of GMA goals trumps GMA requirements” held sway in 2000, the *King County* decision arguably would have had a different outcome.

<sup>31</sup> *Fuhriman (II), et al., v. City of Bothell (Fuhriman II)*, CPSGMHB Case No. 05-3-0025c, FDO issued August 29, 2005.

<sup>32</sup> These meetings were held in August and September of 2005 with the planning staff members of the Pierce County Growth Management Coordinating Council, Snohomish County Tomorrow, Kitsap County Regional Planning Council, and the King County Planning Directors. The information in Table 2 was provided by participating city and county officials.

<sup>33</sup> Toward a New Metropolis: The Opportunity to Rebuild America, Executive Summary posted online at [http://www.brookings.edu/metro/pubs/20041213\\_rebuildamerica.htm](http://www.brookings.edu/metro/pubs/20041213_rebuildamerica.htm).

<sup>34</sup> In addition to the provisions in RCW 36.70A.210 of the GMA, the supporting legislation for Regional Transportation Planning Organizations in Chapter 47.80 lists a number of guidelines and principles to be addressed in transportation planning for both regional agencies and local governments. Among the factors to be addressed is “residential density.” Since the MPPs are required to include both urban growth area and transportation provisions, they are an appropriate venue for providing direction on how residential density is to be addressed to also satisfy this section of Washington state law.

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<sup>35</sup> *Cities of Edmonds and Lynnwood v. Snohomish County*, (**Edmonds**), CPGMHB Case No. 93-3-0005c, FDO, Oct. 4, 1993; *see also*, *City of Snoqualmie v. King County*, (**Snoqualmie**), CPSGMHB Case No. 92-3-0004c, FDO, March 1, 1993, at pages 62-63.

<sup>36</sup> *King County v. CPSGMHB*, No. 39333-21, No. 39914-4-I, No. 40310-9-I, COURT OF APPEALS OF WASHINGTON, DIVISION ONE, 91 Wn. App. I; 951 P.2d 1151; 1998 Wash. App. LEXIS 344, March 2, 1998, Filed, as modified August 6, 1998. In this decision, the Court of Appeals, Div. I, cited and adopted the Growth Board's holdings in *Snoqualmie* regarding the directive effect of CPPs and the three-part test to determine what matters are subject to the directive effect of countywide planning policies.

## **Appendix A**

Excerpts of Growth Management Act provisions regarding goals, definitions, substantive requirements, and Growth Board deference owed to local government decisions.

### **1. GMA Goals**

The Act's goals are set forth at RCW 36.70A.020, which provides in relevant part:

The following goals are adopted to guide the development and adoption of comprehensive plans and development regulations of those counties and cities that are required or choose to plan under RCW 36.70A.040. The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations:

- (1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
- (2) Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
- (3) Transportation. Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.
- (4) Housing. Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
- ...
- (8) Natural resource industries. Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.

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(9) Open space and recreation. Retain open space, enhance recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.

(10) Environment. Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

...

(12) Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.

## **2. GMA definition of "urban growth"**

The Act's definitions are set forth at RCW 36.70A.030, which includes:

(18) "Urban growth" refers to growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources, rural uses, rural development, and natural resource lands designated pursuant to RCW 36.70A.170.

## **3. GMA substantive requirements**

RCW 36.70A.070 clarifies that urban growth is not permitted in rural areas (emphasis underlined):

(5) Rural element. Counties shall include a rural element including lands that are not designated for urban growth, agriculture, forest, or mineral resources. The following provisions shall apply to the rural element:

...

(b) Rural development. The rural element shall permit rural development, forestry, and agriculture in rural areas. The rural element shall provide for . . . other innovative techniques that will accommodate appropriate rural densities and uses that are not characterized by urban growth and that are consistent with rural character.

RCW 36.70A.110 sets forth the Act's requirements with respect to urban growth areas (emphasis underlined), providing in relevant part:

(1) Each county that is required or chooses to plan under RCW 36.70A.040 shall designate an urban growth area or areas within which urban growth shall be encouraged and outside of which growth can occur only if it is not urban in nature. Each city that is located in such a county shall be included within an urban

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growth area. An urban growth area may include more than a single city. An urban growth area may include territory that is located outside of a city only if such territory already is characterized by urban growth whether or not the urban growth area includes a city, or is adjacent to territory already characterized by urban growth, or is a designated new fully contained community as defined by RCW 36.70A.350.

(2) Based upon the growth management population projection made for the county by the office of financial management, the county and each city within the county shall include areas and densities sufficient to permit the urban growth that is projected to occur in the county or city for the succeeding twenty-year period, except for those urban growth areas contained totally within a national historical reserve.

Each urban growth area shall permit urban densities and shall include greenbelt and open space areas. In the case of urban growth areas contained totally within a national historical reserve, the city may restrict densities, intensities, and forms of urban growth as determined to be necessary and appropriate to protect the physical, cultural, or historic integrity of the reserve. An urban growth area determination may include a reasonable land market supply factor and shall permit a range of urban densities and uses. . .

#### **4. Growth Board standard of review and deference owed to local decisions**

RCW 36.70A.320 provides:

(1) Except as provided in subsection (5) of this section, comprehensive plans and development regulations, and amendments thereto, adopted under this chapter are presumed valid upon adoption.

(2) Except as otherwise provided in subsection (4) of this section, the burden is on the petitioner to demonstrate that any action taken by a state agency, county, or city under this chapter is not in compliance with the requirements of this chapter.

(3) In any petition under this chapter, the board, after full consideration of the petition, shall determine whether there is compliance with the requirements of this chapter. In making its determination, the board shall consider the criteria adopted by the department under RCW 36.70A.190(4). The board shall find compliance unless it determines that the action by the state agency, county, or city is clearly erroneous in view of the entire record before the board and in light of the goals and requirements of this chapter.

...

RCW 36.70A.3201 provides:

In amending RCW 36.70A.320(3) by section 20(3), chapter 429, Laws of 1997, the legislature intends that the boards apply a more deferential standard of review to actions of counties and cities than the preponderance of the evidence standard provided for under existing law. In recognition of the broad range of discretion

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that may be exercised by counties and cities consistent with the requirements of this chapter, the legislature intends for the boards to grant deference to counties and cities in how they plan for growth, consistent with the requirements and goals of this chapter. Local comprehensive plans and development regulations require counties and cities to balance priorities and options for action in full consideration of local circumstances. The legislature finds that while this chapter requires local planning to take place within a framework of state goals and requirements, the ultimate burden and responsibility for planning and harmonizing the planning goals of this chapter and implementing a county's or city's future rests with that community.

## Appendix B

The factors are listed on pages 5 and 6 of the Growth Board's *Kaleas* decision:

“In short, the factors the Board considers when a PFR [Petition for Review] is filed that challenges whether a city's urban densities are appropriate and comply with the GMA, include:

- Whether the jurisdiction is able to accommodate its share of the 20-year growth forecast by the Office of Financial Management, and allocated by the County, now and in the future;
- Whether the jurisdiction is encouraging and stimulating urban growth within its borders;
- Whether the jurisdiction is providing for compact urban growth consistent with those Goals of the Act that are typically fulfilled and furthered by providing for urban densities;
- Whether the jurisdiction has determined that its critical areas regulations do not adequately protect identified and designated critical areas;
- For those areas within the jurisdiction designated below 4 dwelling units per acre (based upon the Board's “bright-line” or “safe harbor”) do those areas;
  - Contain large scale, complex, high value critical areas that require the additional level of protection provided by lower densities than can be provided by the jurisdiction's existing critical areas regulations [*Litowitz* test-hydrologically focused].
  - Contain limited unique geologic or topographical features that require the additional level of protection provided through lower densities than can be provided by the jurisdiction's existing critical areas regulations [expansion of the *Litowitz* test].
  - Contain existing equestrian communities [*Bremerton*].
  - Perpetuate an existing low density pattern.
  - Fall within a “phasing area” where the city has adopted an explicit phasing program for the provision of urban services and facilities that limits densities

- 
- until a date certain, within the Plan's time horizon, when adequate urban services and facilities will be provided; and
- Whether the jurisdiction, as a whole, is providing for appropriate net urban densities as required by the goals and requirements of the Act, considering:
    - The portion of the jurisdiction's residential land area that is designated at densities of 4 du/acre or more (in particular, the extent to which considerably higher densities are allowed and encouraged; and
    - The portion of the jurisdiction's residential land area that is designated at densities less than 4 du/acre; and what portion of this land is vacant, underdeveloped and appropriate for redevelopment and infill.”

**VISION 2020 + 20 Update**

Informational Paper on: Pre-GMA Vested Development in Rural Areas of the Central Puget Sound Region

Puget Sound Regional Council

December 2005

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Informational Paper on  
"Pre-GMA Vested Development in Rural Areas of the Central Puget Sound Region"

Puget Sound Regional Council staff developed this paper with the assistance of two graduate students from the University of Washington Evans School of Public Affairs. This paper serves as a follow-up project to the work done by PSRC staff on the VISION 2020+20 Issue Paper on Growth Targets.<sup>1</sup> The scope of the project contained the following primary tasks:

- To document the legal and policy context of the vested rights doctrine in Washington State as it relates to pre-Growth Management Act (GMA) vested development rights.
- To review local jurisdictions' regulatory practices in relation to vesting.
- To analyze pre-GMA vested development capacity, and recent vesting trends and patterns in the region's rural areas.

The paper presents information to support the Vision 2020+20 update, and to help explain some of the issues that were identified in the Growth Targets paper. The paper provides members with an understanding of the topic and with the complexities of the analysis. It also points to potential opportunities to continue to monitor this topic.

The work done by the graduate students provides more detail regarding "pre-GMA vesting" case law, the policy context, and existing practices at the county level. The students' report is titled *The Impact of Vested Development In the Puget Sound Region*. Margo Tufts & Christina O'Claire. University of Washington Daniel J. Evans School of Public Affairs. (May 2005). Copies are available through the Evans School of Public Affairs.

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<sup>1</sup> *Growth Management By the Numbers: Population, Household, and Employment Growth Targets in the Central Puget Sound Region*. July 2005. (published as part of PSRC's Puget Sound Milestones series)

## **PURPOSE**

The purpose of this paper is to document (I) background regarding the vesting project, (II) provide a brief primer on vesting, (III) state the project findings, and (IV) state the project conclusions and recommendations.

## **I. BACKGROUND ON PROJECT**

### ***A. Genesis of Project***

In the fall of 2004, the Puget Sound Regional Council (PSRC) conducted research on the Growth Management Act (GMA) mandated growth targets adopted by the four central Puget Sound region counties and their respective cities. The research was published in July 2005 in a Puget Sound Milestones report titled *Growth Management By the Numbers: Population, Household, and Employment Growth Targets in the Central Puget Sound Region*. The paper also served as an Issue Paper for the VISION 2020+20 update.

One of the findings in the report was that there was a significant variance in some counties between the old growth targets that were adopted in 1992 and actual development trends from 1995-2002, with more growth occurring in the region's rural areas than targeted. Vested development (*see section II for a definition of vesting*) was mentioned by some of the reviewers of the Growth Targets report as one potential cause of this variance.

While recognizing the significant complexities of the issue, PSRC undertook a preliminary research effort to assess the impact of pre-GMA vested development rights on recent development patterns. The PSRC secured the help of two University of Washington graduate students – Margo Tufts and Christina O'Claire – to undertake this study as part of their master's degree requirements.

A determination was made early in the project that the focus should be narrowed to each county's **rural area**, both to limit the scope of the analysis, and to focus on the geography where pre-GMA vesting was most likely to have a significant impact on development trends. Also, while vesting can occur with different types of land use applications, this study focused on subdivision permits.

Recognizing the importance of understanding each county's approach, PSRC staff contacted the lead staff person from each county and asked them to assist the graduate students. In all counties, staff agreed to assist the students.

### ***B. Project Structure***

The project included three components, with each component seeking to answer a set of questions. The components and related questions were as follows:

1. A review of the legal and policy context of the vested rights doctrine.
  - a) What is the Vested Rights Doctrine (VRD)? What court cases have been important in shaping the understanding and interpretation of vested rights in this state? How and when does a development right vest? How and when does a vested right expire?
  - b) What additional elements comprise the legal/policy framework governing vesting? How and when do these laws and regulations supersede the VRD?

2. A review of local regulatory practices in relation to vesting.
  - a) How are the counties dealing with vested development? What tools have they utilized or enacted to address vested development and its impacts?
  
3. An examination of vesting-related data.
 

To what degree has/can pre-GMA vesting impact(ed) rural residential development in the region's counties? Specifically:

  - a) Since GMA development regulations were adopted by each county, how many building permits authorizing new housing units in the counties' rural areas were issued on pre-GMA vested lots?
  - b) How many of these pre-GMA vested lots are not consistent with current GMA lot size and density regulations?
  - c) How many active lot applications and undeveloped lots vested under pre-GMA development regulations still exist in each county?

## II. BRIEF PRIMER ON VESTING

Vesting in Washington "refers generally to the notion that a land use application, under the proper conditions, will be considered only under the land use statutes and ordinances in effect at the time of the applicant's submission."<sup>2</sup>

In the GMA context, pre-GMA vesting refers to developments that are allowed to occur under regulations that were in place prior to the effective date of the local government's comprehensive plan (i.e., the date when the plan's development regulations are adopted and take effect).

Figure 1: Growth Management Act Implementation Timeline as Related to Vesting

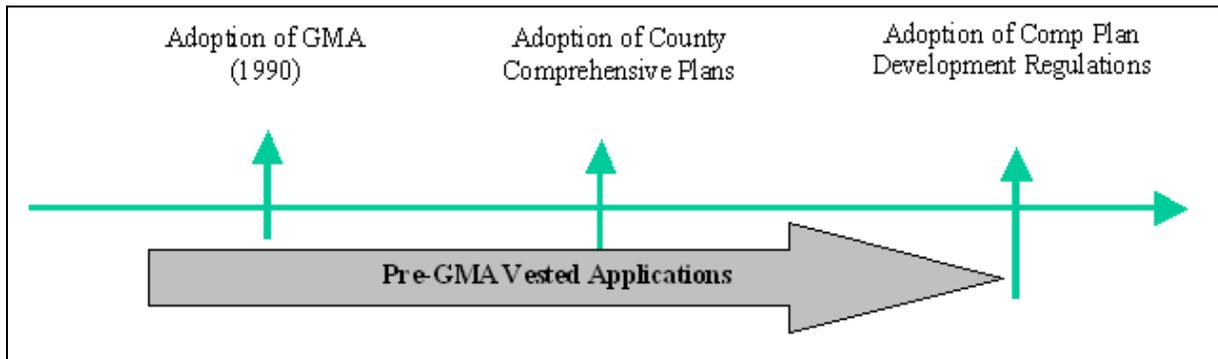


Figure 2: GMA Adoption Dates: Comprehensive Plans and Rural Zoning Regulations

	Adoption Date of Comprehensive Plans	Adoption Date of GMA Rural Zoning Regulations
King County	February 1994	February 1994
Kitsap County	May 1998	May 1998
Pierce County	November 1994	July 1995
Snohomish County	June 1995	December 1996

<sup>2</sup> *Noble Manor v. Pierce County*, 133 Wn.2d 269, 275. 1997

Vesting is important because "a proposed development, which does not conform to newly adopted laws, is, by definition, inimical to the public interest embodied in those laws. If a vested right is too easily granted, the public interest is subverted."<sup>3</sup>

Given the study's focus on the rural area, pre-GMA vesting is important because most counties' GMA comprehensive plans changed the development standards for rural areas. The new regulations have changed the density allowances, impervious coverage ratios, septic requirements, and clearing and grading restrictions. Pre-GMA vested lots in the rural areas will not need to comply with the majority of these new approaches to rural land development and will therefore have impacts that are likely to be greater than if developed under the newer regulations.

Last, pre-GMA rural vesting has the potential to undermine the GMA's planning goals to "encourage development in urban areas" and to "reduce the inappropriate conversion of undeveloped land."<sup>4</sup> The results of the Growth Targets report showed that more growth was occurring outside of urban areas than was targeted, potentially at levels that were leading to an inappropriate conversion of undeveloped land.

## II. PROJECT FINDINGS

The following are the major findings of the project:

### A. Policy framework

1. The discrete rights that vest continue to get defined in the courts, but at this time are essentially as follows for subdivision permits:
  - Rights that vest include: (a) the right to subdivide, (b) the right to build the proposed use, and (c) the right to build based on the land use regulations in place at time of application.
  - Note: Items that violate current public health and safety codes, or federal regulations such as endangered species listings, may not be allowed to be built regardless of the vested right. Items that violate critical areas designations and regulations are typically dealt with on a case-by-case basis.

### B. Tools exist to address pre-GMA vesting

2. Lots become permanently vested when the final lot application is approved and the lots are recorded. However, there are opportunities along the subdivision permitting timeline for addressing vested development rights. (Note: Information regarding each county's use of these tools is shown in Appendix A: County Policy Tools Regarding Pre-GMA vesting):

#### *Prior to Lot Application Approval and Recording*

- Active lot applications that exceed the time limit for final approval can be expired (RCW 58.17.140). A local ordinance must be adopted.
  - All the counties have adopted a local ordinance to expire lot applications. Some allow 3 years and some allow 5 years.
  - King, Kitsap and Pierce counties allow for unlimited extensions (typically 1 year) based on good faith effort. King County limits extensions to "qualified plats." Snohomish County allows one 1-year extension that is granted by the land use review department, and

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<sup>3</sup> *Erickson & Associates v. McLerran*, 123 Wn.2d 864,874. 1994

<sup>4</sup> Revised Code of Washington - GMA Planning Goals - 36.70A.020 (1) and (2)

an additional extension of no more than four months, which is granted by the County Council.

*After Lot Application Approval and Recording*

- The proposed use in the approved lot application can be expired after five years (RCW 58.17.170).
  - With the exception of Pierce County, the counties have not enacted this expiration provision through local ordinances.
  - Note: If the vested land use permit has expired, counties generally still allow the landowner to build 1 single-family dwelling unit on each lot to allow a "reasonable use" of the property to address property rights issues.

**C. Complete data is limited**

3. Fully answering the project’s data questions required the collection and analysis of multiple data sets from each county that varied widely in terms of format, quality, and usability. In each county, the data were incomplete and/or could not be electronically interconnected to conduct the full analysis as originally planned.

**D. A sampling method was developed**

4. Given the data limitations, an alternative methodology that utilizes a combination of random sampling and manual data research was developed for estimating answers to questions #3a and #3b. (Note: Answering question #3c was determined to be infeasible because of data limitations.) The data issues and methodology are described in detail in Appendix B: Data Analysis Methodology.

The graduate student researchers completed the data analysis to answer question #3a for two selected years in Kitsap and Snohomish counties. Time limitations precluded the students from completing the analysis for King and Pierce counties. The researchers applied a random sample approach in Kitsap County, and a full analysis of formal plat developments (which excludes short plats) in Snohomish County. The results of the students’ analysis are shown in Figure 3 below.

*Figure 3: Data Analysis Results for Question #3a*

County	Year	Total Permits Issued in Rural Areas	Sample Size	Issued on Pre-GMA Vested Lots	
				Number	Percentage
Kitsap	2003	735	Random: 50	44	92%
	2000	703	Random: 50	46	88%
Snohomish	2003	861	Formal Plat: 426	365	86%
	1999	1,100*	Formal Plat: 507	476	94%

\*Includes 30 permits for which plat type was undetermined.

- The results of the initial work indicate that vested development continues to comprise the overwhelming majority of new housing permitted for construction in these counties’ rural areas.
  - Kitsap County: As recently as 2003, 92 percent of the randomly sampled building permits in the rural area in the analysis were issued on lots with pre-GMA vested development rights.

- Snohomish County: As recently as 2003, 86 percent of all building permits issued on formal plat lots in the rural area were pre-GMA vested.
  - (Note: The results for Snohomish County may look different after accounting for short plat development, which constitutes roughly half of permitted rural housing construction in the county. A random sample analysis of short plat building permits would determine if there are significant variances between formal and short plat development characteristics.)
- However, conclusions regarding trends are difficult to establish from the preliminary data analysis.
  - Kitsap County: Due to the size of the data samples, the results do not show a statistically valid trend from 2000 to 2003.
  - Snohomish County: While there is a valid measured decline in building permits issued on vested formal plat lots from 1999 to 2003, these results cannot be extrapolated to short plats, on which half of all the permitted rural housing units were issued in the years analyzed.
  - In both counties, data points for additional years would strengthen the validity of an observed trend line.
- A more robust trend analysis would require expanding the sample size in Kitsap County, conducting a random sample analysis of short plats in Snohomish County, and would analyze additional years in both counties.

***E. The data analysis to answer the conformity question could not be completed***

5. The students were unable to complete the data analysis to answer question #3b which determines whether the vested lots conform to GMA zoned minimum lot size and/or maximum density requirements. A number of technical questions remain unresolved regarding data availability and how non-traditional zoning practices, e.g. rural clustering, may impact the analysis.

**III. PROJECT CONCLUSIONS & RECOMMENDATIONS**

The project has resulted in a demonstrated method for determining how many of the new housing units being authorized in rural areas are associated with pre-GMA vested lots.

The preliminary results of the analysis indicate that a surprisingly large proportion of the new housing permitted in rural areas is occurring on vested lots, providing evidence that pre-GMA vesting may indeed have played a role in recent development patterns deviating from the planned distribution of growth under the counties' original growth targets.

***A. Existing tools can help lessen potential negative impacts from vested uses on recorded lots***

*Conclusion:* A variety of tools and mechanisms exist to manage vested development rights. These include: (a) the expiration of the proposed use on vested lots, and (b) an array of additional mechanisms such as septic requirements, lot coverage ratios, transfer of development rights programs, lot consolidation requirements, and critical areas ordinances that may be applied to address and minimize the number of nonconforming lots.

While it is important that a tool exists to expire vested uses on recorded lots, the application of this particular tool in the rural area is complex. And, it is uncertain if the impact of expiring vested uses would be significant.

- Vested development rights in the rural area are likely to be predominantly single family residential.
- Because vested lots have permanent boundaries, expiration of the vested use would still leave the lot, resulting in nonconforming development densities where the size or number of lots is different than what is allowed under GMA zoning regulations.
- And, because counties generally still allow the landowner to build one single-family dwelling unit to allow a "reasonable use" of the property, the impact of expiring the vested use would seem to be negligible.
- For multifamily or commercial development that is vested, expiring vested uses might have more value. However, this project did not conduct sufficient analysis to understand this issue.

*Recommendation:* It appears that more important than expiring vested uses is the use of other tools, as noted above. Counties should continue to apply these other available tools as appropriate.

***B: There may be value in sunseting any pre-GMA vested lot applications if they exist***

*Conclusion:* It is unclear how many pre-GMA vested active development applications still exist (i.e., are still in the pipeline). While each county has an ordinance on the books that expires these, the unlimited allowance of extensions has effectively made them permanent. Therefore, some need may exist to expire these active lot applications still in the pipeline.

*Recommendation:* To better manage any additional pre-GMA vesting, counties should consider limiting the extensions in order to expire any pre-GMA permit applications still in the pipeline. These approaches should be monitored and kept up to date.

***C: Random sampling methodology adds value and should be utilized by the counties***

*Conclusion:* The original scope and methodological approach to the project's data analysis component could not be implemented due to data insufficiencies and other complexities. Developing the county databases necessary for carrying out the original methodology would require significant resources. But the random sampling methodology designed in response to existing data limitations allows for partial analysis of the impacts of pre-GMA rural vesting on an ongoing basis.

- Compiling the data necessary to fully answer this project's questions will require a significant (and currently unfunded) effort on the part of the counties.
- However, using the alternative methodology is manageable and would seem to allow counties to begin to track and understand the scale of the pre-GMA vesting issue in their county.

*Recommendation:* Counties should consider using the random sampling methodology to complete the preliminary data analysis initiated by the students:

- Kitsap: Expand the initial sample size for answering question #3a.
- Snohomish: Analyze development activity on short plats to complete the analysis for question #3a.
- King and Pierce: Test the random sampling methodology to answer question #3a for these counties.
- All Counties: Complete the data analysis to answer question #3b, if methods to address existing technical issues are determined to be feasible.

***D: PSRC, in collaboration with the counties, should continue to track rural vested development trends***

*Conclusion:* The initial data analysis results seem to support the anecdotal comment that much of the variance in some counties between the old growth target and recent development trends, especially in the rural area, is an outcome of pre-GMA vested development.

*Recommendation:* The PSRC should continue to monitor this trend, and undertake a regionwide program in collaboration with the counties to track the impacts of pre-GMA rural vesting on an ongoing, periodic basis using the sampling methodology. This effort will require some PSRC staff resources, as well as technical and data support from county staff.

Also, future analysis of growth trends should include a caveat recognizing the impact of pre-GMA vesting. If more data becomes available on pre-GMA vesting trends, this information should be used in future descriptions and explanations of growth trends.

#### **IV. NEXT STEPS**

PSRC staff met with the lead county staff and others and confirmed the project's findings, conclusions, and recommendations. PSRC and county staff agreed that the appropriate next step was for PSRC, in collaboration with the counties, to periodically update the trend analysis of pre-GMA vested development rights. This information would be published as a part of the PSRC's *Puget Sound Trends* series.

#### **APPENDICES**

- A. County Policy Tools Regarding Pre-GMA vesting
- B. Data Collection & Analysis Methodology

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## APPENDIX A: County Policy Tools Regarding Pre-GMA vesting

Figure A-1 is excerpted from the student's report (*The Impact of Vested Development In the Puget Sound Region*. Margo Tufts & Christina O'Claire. University of Washington, Daniel J. Evans School of Public Affairs. May 2005), even though the table is not complete. Information for Snohomish County has been updated based on comments sent by county staff.

The following table outlines tools related to pre-GMA vesting authorized under Washington State law and the regulations adopted by each county. The opportunity to expire vested rights provides valuable tools for counties to manage pre-GMA vesting. However, if counties do not apply the divesting ordinances, development permits with vested rights remain in the permitting system.

<u>Legend for Figure A-1</u>	
<input checked="" type="checkbox"/>	Tool adopted by county (may contain stricter standards than state law)
<input type="checkbox"/>	Not adopted by county
?	Need further information

Figure A-1: Policy Tools Regarding Pre-GMA vesting

	State Law	King	Kitsap	Pierce	Snohomish
<b>Pre-Application Meeting</b>					
Meeting	Jurisdictional Option	Meeting Mandatory	Meeting Recommended	Meeting Recommended	Meeting Recommended
<b>Preliminary Application Review Period</b>					
Review Period	<input checked="" type="checkbox"/> 90 days, plus 21 days if public hearing is requested, extension if approved by applicant (RCW 58.17.140)	?	?	?	<input checked="" type="checkbox"/> SCC 32.70, requires a maximum 120-day period for issuance of a decision. Period begins when application is complete <b>and</b> there is sufficient information to continue processing it. The "clock" stops while PDS is awaiting submittals or additional information.
<b>Preliminary Application to Final Application – Term of Approval</b>					
Short Plat	<input checked="" type="checkbox"/> 5 years	<input checked="" type="checkbox"/> 5 years (KCC 19A.12.040)	<input checked="" type="checkbox"/> 3 years (KCC 16.48.140)	<input checked="" type="checkbox"/> 3 years (PCC 16.08.040)	<input checked="" type="checkbox"/> 5 years (30.41B SCC)
Formal Plat	<input checked="" type="checkbox"/> Final plat must be approved and recorded within 5 years of preliminary approval (RCW 58.17.140)	<input checked="" type="checkbox"/> 5 yrs (need code)	<input checked="" type="checkbox"/> 5 yrs (KCC 16.52.140)	<input checked="" type="checkbox"/> 3 yrs (PCC 16.08.040)	<input checked="" type="checkbox"/> 5 yrs (30.41A.600 SCC)
Extensions	<input checked="" type="checkbox"/> State law allows local jurisdictions to enact ordinances, which would allow for extensions of time (RCW 58.17.140)	<input checked="" type="checkbox"/> None, except 'qualified' plats may have extended periods (need code)	<input checked="" type="checkbox"/> Extension w/good faith effort + additional subject to request (need code)	<input checked="" type="checkbox"/> 1 yr extension w/good faith effort + additional subject to request (need code)	<input checked="" type="checkbox"/> One 1-year extension with good faith effort may be granted by department. Additional period up to 4 months may be granted by council. (SCC 30.41A.300)

	<b>State Law</b>	<b>King</b>	<b>Kitsap</b>	<b>Pierce</b>	<b>Snohomish</b>
<i>Final Recorded Plat – Term of Approval on Vested Use</i>					
<i>Short Plat</i>	<input type="checkbox"/> None <i>(not determined by statute, but usually less than five years)</i>	<input type="checkbox"/> Allows building permits to fall under plat regulations for 5 years <b>(need code)</b>	<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None
<i>Formal Plat</i>	<input checked="" type="checkbox"/> Valid land use for 5 years after final plat approval, unless public safety is threatened (RCW 58.17.170)	<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None
<i>Plat Re-Division Period</i>					
<i>Short Plat</i>	<input checked="" type="checkbox"/> Cannot re-divide within 5 years w/o filing formal plat (RCW 58.17.060)	<input checked="" type="checkbox"/> Conforms with state law <b>(need code)</b>	<input checked="" type="checkbox"/> Conforms with state law <b>(need code)</b>	<input checked="" type="checkbox"/> Conforms with state law <b>(need code)</b>	<input checked="" type="checkbox"/> Conforms with state law <b>(need code)</b>
<i>Formal Plat</i>	<input checked="" type="checkbox"/> Any re-division requires new formal plat application <b>(need RCW)</b>	<input checked="" type="checkbox"/> Conforms with state law <b>(need code)</b>	<input checked="" type="checkbox"/> Conforms with state law <b>(need code)</b>	<input checked="" type="checkbox"/> Conforms with state law <b>(need code)</b>	<input checked="" type="checkbox"/> Conforms with state law <b>(need code)</b>

## APPENDIX B: Data Collection & Analysis Methodology

### Introduction

The data analysis portion of the Impact of Vested Development project was aimed at evaluating the effects of pre-GMA vesting on rural development trends in the region. This appendix details the methodology that was developed to answer key questions put forth in this section.

### Data Questions

The project posed the following questions for data analysis:

- 3) To what degree has/can pre-GMA vesting impacted/impact, rural residential development in the region's counties? Specifically:
  - a) Since GMA development regulations were adopted by each county, how many building permits authorizing new housing units in the counties' rural areas were issued on pre-GMA vested lots?
  - b) How many of these pre-GMA vested lots are not consistent with current GMA lot size and density regulations?
  - c) How many active lot applications and undeveloped lots vested under pre-GMA development regulations still exist in each county?

The following diagram, Figure B-1, depicts the universe of all existing recorded lots and active lot applications. Lots and lot applications are considered pre-GMA vested if the preliminary application for subdivision was submitted prior to the GMA effective date.

*Figure B-1. Universe of Recorded Lots and Active Lot Applications*

		GMA Passage ▼	GMA Effective Date ▼
		Pre-GMA Vested preliminary subdivision application submitted prior to GMA effective date	Non-Vested (or GMA Vested) preliminary subdivision application submitted on or after GMA effective date
		(A)	(B)
Development Potential	(1)	Active Lot Applications not yet recorded	Active Lot Applications not yet recorded
	(2)	Recorded Lots not yet developed	Recorded Lots not yet developed
Completed Development	(3)	Recorded Lots developed on or after GMA effective date  - Link to PSRC permit database	Recorded Lots developed on or after GMA effective date  - Link to PSRC permit database
	(4)	Recorded Lots developed prior to GMA effective date	

Question #3a seeks to tally, for rural areas, the number of building permits for new housing units issued for recorded lots in cell A-3, as well as these permits as a percentage of all building permits for new housing issued for recorded lots in cells A-3 and B-3. Question #3b seeks to determine conformity to

GMA zoned minimum lot size and/or maximum density requirements for the recorded lots in cell A-3. (Cells A-3 and B-3 are shaded in dark orange).

Question #3c seeks to tally, for rural areas, the number of active lot applications in cell A-1 and recorded lots in cell A-2. (Cells A-1 and A-2 are shaded in light orange). After meeting with county planning staff, however, it was determined that this line of analysis was infeasible due to the necessary data being unavailable or unsuitable.

**Methodology**

The methodology for answering the data questions was developed in collaboration with county planning staff. The general methodological approach is described and documented here, along with examples of how the methodology can be tailored for local implementation to account for differences in data availability, format, and quality between counties.

***GMA Effective Date***

To apply the methodology, the effective date of GMA implementation must first be established. Given that the data analysis was focused on the region’s rural areas, the adoption date of GMA rural zoning regulations by each county was determined to be the appropriate effective date.

***Figure B-2: GMA Adoption Dates: Comprehensive Plans and Rural Zoning Regulations***

	<b>Adoption Date of Comprehensive Plans</b>	<b>Adoption Date of Rural Zoning Regulations</b>
King County	February 1994	February 1994
Kitsap County	May 1998	May 1998
Pierce County	November 1994	July 1995
Snohomish County	June 1995	December 1996

Note: If this analysis were to be applied to other areas, e.g. urban unincorporated areas, cities, the effective date would be the adoption date of GMA zoning regulations for those areas.

***Data Requirements***

The methodology describes how to create relationships between multiple data sets to link otherwise disconnected data attributes together in a single database to run the data analysis. Figure B-3 below identifies the data sets and required data fields needed to conduct the analysis and indicates if the data set is available in geospatial file format.

**Figure B-3: Data Requirements**

<b>Data Set</b>	<b>Data Fields</b>	<b>Geospatial?</b>
PSRC Building Permit Data	County Parcel ID number Address Issue date Permit type (new, demo, replacement) Structure type (sf, mf, mh, other) Number of units UGA	✓
<i>(See Figure B-2)</i>	<i>GMA effective date</i>	
County Parcel Layer	Parcel ID number	✓
County Assessor Data	Parcel ID number Address Legal lot name Lot size	
County Subdivision Data	Parcel ID number Legal lot name Preliminary application date Parent lot size Number of child lots Number of dwelling units Gross density	
<i>Intermediate Data Set (See Figure B-5b)</i>	<i>Varies by county</i>	
County Comprehensive Plan Zoning Layer	Comprehensive plan zoning Zoned minimum lot size Zoned maximum density	✓

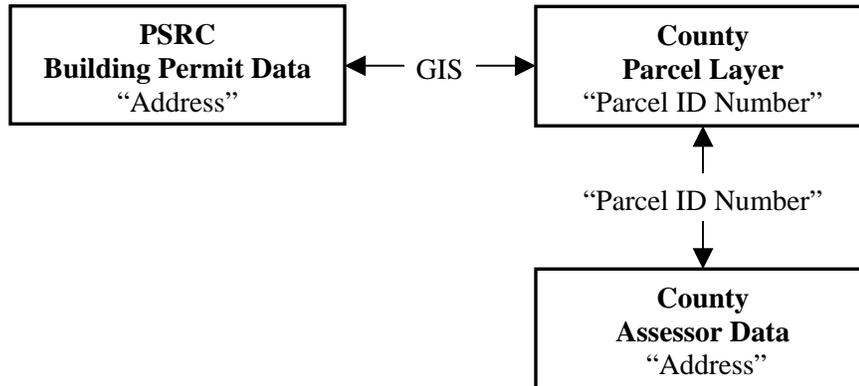
**PSRC Building Permit Data**

PSRC’s database of residential building permits provides the foundation for the data analysis. The database contains individual records of building permits issued within the region for new housing, as well as demolitions and replacements, each year from 1991-2003. The records, with few exceptions, have a “Parcel ID Number” and “Address” and are geo-referenced with x,y coordinates that allow the data to be brought into a GIS. The records are also coded with the following attributes: county, year of issue, permit type, structure type, number of units, and a binary UGA field which indicates if the permit is located inside or outside of the region’s designated urban growth areas.

The methodology begins by querying the permit database, by county for a selected year of issue, for all records of new housing units permitted outside of the UGA, along with the “Parcel ID Number” and “Address” fields. The “Parcel ID Number” is the key field for establishing relationships between the building permit data and other data sets, and must be as complete as possible for the analysis to be robust.

In cases where a building permit record is missing a “Parcel ID Number,” it can be obtained by overlaying the building permit with the county parcel layer in GIS. The building permit may not always align with the correct parcel, however, due to geocoding error and conflation issues (where GIS layers are out of alignment). To verify the match, one needs to join the county assessor data to the county parcel layer via the “Parcel ID Number” field, then compare the “Address” fields between the building permit and assessor data. (See Figure B-4).

**Figure B-4. Connecting the Data –  
Obtaining “Parcel ID Numbers” Where Missing or Incorrect in the PSRC Building Permit Data**



**Analysis Part I – Pre-GMA Vesting and Recent Development Trends**

*Question #3a: Since GMA development regulations were adopted by each county, how many building permits (number and percentage) authorizing new housing units in the counties’ rural areas were issued on pre-GMA vested lots?*

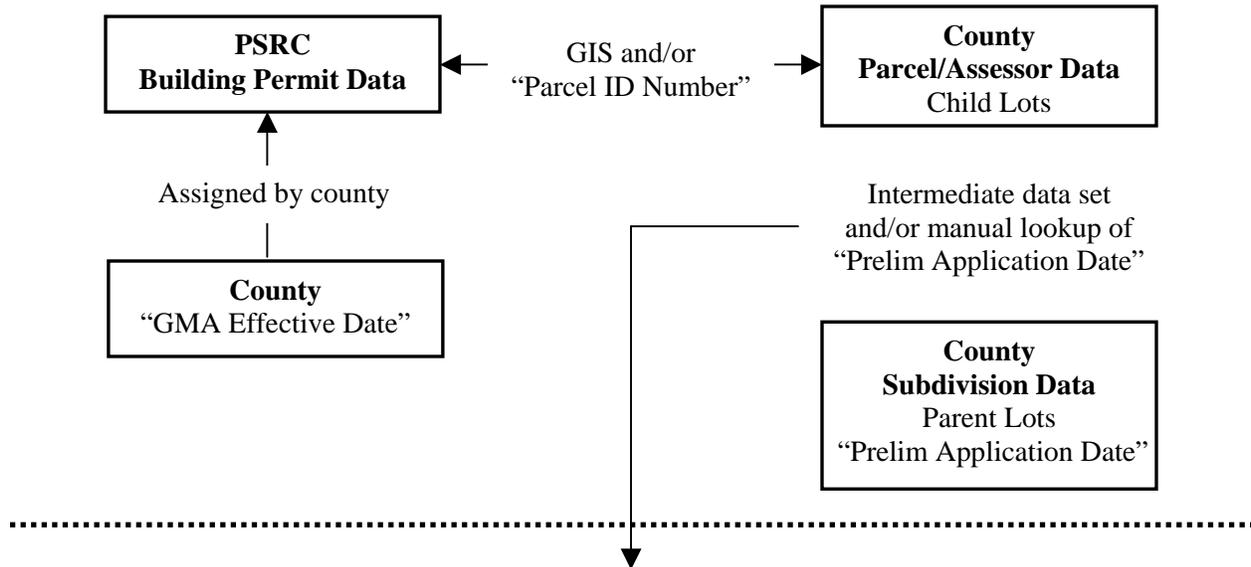
To answer Question #3a, the queried building permit records must first be assigned the relevant “GMA Effective Date” from the table in Figure B-2. They are then associated with lot records in the county parcel layer and assessor data via the “Parcel ID Number” field. The lots must then be related to county subdivision data to obtain a “Preliminary Application Date” for each lot. The comparison of the “GMA Effective Date” and “Preliminary Application Date” will determine whether or not the development was permitted on a pre-GMA vested lot (see Figure B-5a and B-5b).

**The Random Sample Method**

Creating the relationship between child lots in the parcel/assessor data and parent lots and “Preliminary Application Dates” in the subdivision data can be extremely difficult, however, and requires a tailored approach in each county to account for differences in local data availability, format, and quality. The process is greatly facilitated by the availability of an electronic county subdivision database. The database should extend at least as far back as the county’s GMA effective date and include the following data attributes: “Parcel ID Number,” “Legal Lot Name,” and “Preliminary Application Date.” An intermediate data set is also likely to be needed to link the “Parcel ID Number” and/or “Legal Lot Name” of the parent lot with those of the resulting child lots on which the building permits were issued.

If an electronic subdivision database and supporting intermediate data set are unavailable or incomplete, the “Preliminary Application Date” for each lot must be manually looked up in the county’s databases or data archives, which can be an arduous, time-consuming process. Where this is the case, the data analysis can be continued on a random sample of the building permit records – 10% suggested – to reduce the amount of manual research required to a reasonable level.

**Figure B-5a: Connecting the Data – Answering Question #3a**



**Figure B-5b: Connecting the Data – Relating Child Lots to Parent Lots**

County	Electronic Subdivision Data	Intermediate Data Set	Manual Lookup?
King County	✓	Incomplete (Parent-to-child parcel history table)	✓
Kitsap County	Incomplete	??	✓
Pierce County	Incomplete	✓ (Geospatial subdivision layers)	✓
Snohomish County			
Formal Plats:	✓	✓ (Plat-to-child parcel numbering system)	No
Short Plats:	Not available	??	✓

**Data Limitations**

In each county, there are limitations present in the data sets needed to carry out the ideal methodology for answering Question #3a. The limitations are documented here:

- King County:** King County has a complete electronic subdivision database of formal plats, short plats, and planned unit development (PUD) applications going back to 1989. However, the intermediate data set needed to establish the connection between the county’s subdivision and parcel/assessor data, a history table of parent “Parcel ID Numbers” and the resulting child “Parcel ID Numbers,” is incomplete. As such, the “Preliminary Application Dates” for lots connected to the King County building permits would need to be obtained through manual lookup between the parcel/assessor and subdivision data sets.
- Kitsap County:** Kitsap County has an electronic Land Information System (LIS) database of land use permits, including subdivision applications. However, the subdivision permits in the LIS database do

not contain “Preliminary Application Dates.” As such, the “Preliminary Application Dates” for lots associated with the Kitsap County building permits must be obtained through manual lookup in the county’s data archives.

- **Pierce County:** Pierce County has an online database of land use permits, including subdivision permits that are coded with “Subdivision Permit Numbers” and “Preliminary Application Dates.” The county also has a set of geospatial subdivision layers (of format plats, short plats, large lots and mobile home parks), which are coded with “Subdivision Permit Numbers” that can be assigned to the building permit records and parcel/assessor data via a GIS overlay. However, there are two major limitations in the county’s online subdivision permit database that limits its usability. First, the online subdivision database cannot be accessed in a tabular electronic format, which effectively prevents it from being connected to other data sets. As such, the “Preliminary Application Dates” for lots connected to the Pierce County building permits must first be looked up manually in the online subdivision database based on the “Subdivision Permit Number.” Second, the “Preliminary Application Date” field in the database is incomplete. If the “Preliminary Application Date” is unavailable online, it must be obtained through manual lookup in the county’s data archives.
- **Snohomish County:** Snohomish County has the data sets needed for carrying out the ideal methodology to answer Question #3a for formal plat lots. The county has an electronic database of all format plat subdivisions recorded since 1995. The formal plat records are coded with a 6-digit “Plat ID Number” and “Preliminary Application Date.” The county utilizes a parcel numbering system for formal plat lots, in which the 6 digits of the “Plat ID Number” are adopted as the leading digits in the 12-digit child “Parcel ID Number.” This numbering system effectively functions as the intermediate connection between parent plats in the subdivision database and child lots in the county’s parcel/assessor data that are associated with the Snohomish County building permits. For short plats, the “Preliminary Application Date” must be manually looked up in the county’s data archives.
- **All Counties:** Finally, in all counties, the following technical issue may pose complications for connecting a child lot with the correct county subdivision record. For large, phased subdivisions, counties may permit each phase separately, where each phase has a unique “Preliminary Application Date” but still retains the same parent “Parcel ID Number.” In rare cases, some phases of the subdivision may be pre-GMA vested, while others are not. In such instances, additional information or local review would be needed to ensure that the child lot is connected to the correct subdivision phase record.

In short, data limitations prevent the methodology for answering Question #3a from being fully implemented in each county, with the exception of formal plat lots in Snohomish County. But the random sampling plus manual research approach should allow for a limited, but statistically valid, analysis that can be used to estimate, for each county, the percentage (but not number) of building permits authorizing new housing in the rural areas that were issued on pre-GMA vested lots.

### ***Analysis Part 2 – Analysis of Conformity***

*Question #3b: How many of these pre-GMA vested lots (number and percentage) are not consistent with current GMA zoned minimum lot size and maximum density requirements?*

The methodology for answering Question #3b has not yet been tested. However, this section lays out a proposed approach for conducting the analysis.

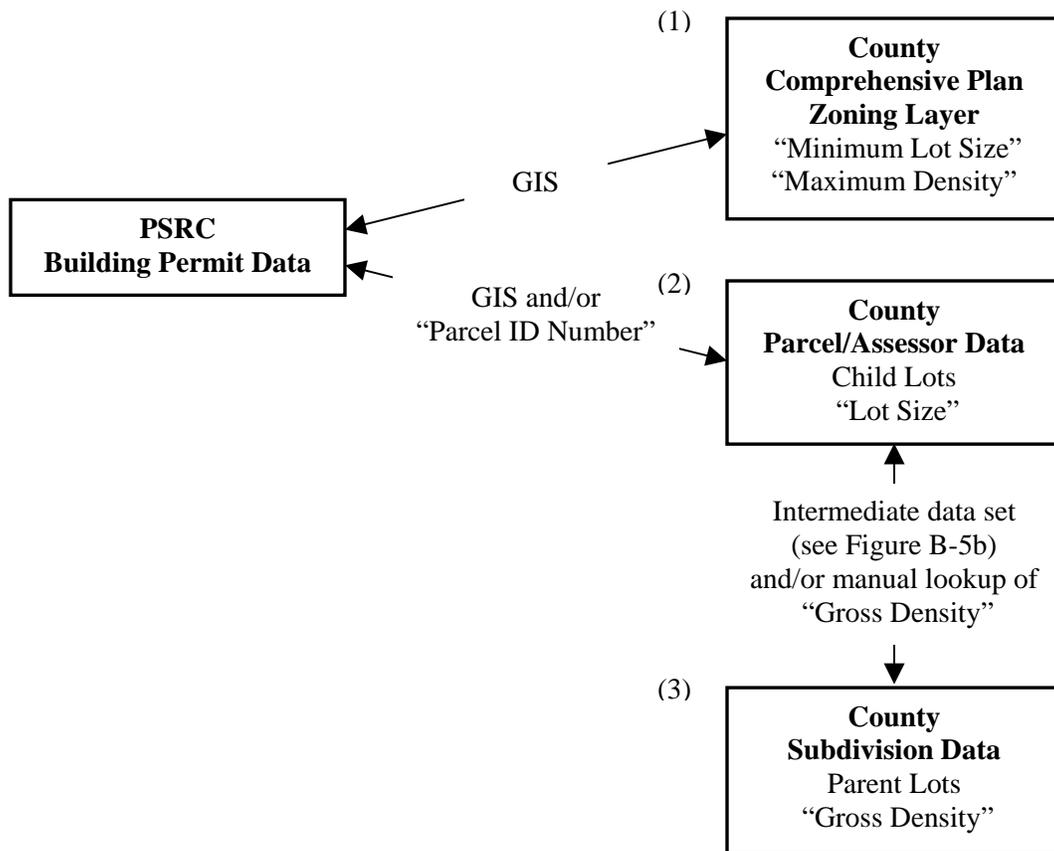
(1) To answer Question #3b, the building permit records would first need to be assigned with the current GMA zoned “Minimum Lot Size” and “Maximum Density” regulations governing development. This can

be done by overlaying the building permit records with a county’s comprehensive plan zoning layer in GIS.

(2) Then, the building permit records need to be reconnected with lot records in the counties’ parcel/assessor databases to obtain “Lot Size” information. A comparison of actual “Lot Size” against the zoned “Minimum Lot Size” is the first step to determining whether a pre-GMA vested development is in conformance with current GMA lot size regulations or not. If this first test indicates that the “Lot Size” of a permitted development is non-conforming, an additional test is required.

(3) For the second test, the building permit records and associated child lots must be reconnected to county subdivision data to obtain the actual “Gross Density” of the subdivision. A comparison of zoned “Maximum Density” with actual “Gross Density” should, in theory, establish whether a permitted development is in conformance with GMA zoned density regulations or not (see Figure B-6). (Note: In some cases, “Built Density” or “Net Density” instead of “Gross Density” may be the more appropriate measure for determining conformity).

**Figure B-6: Connecting the Data – Answering Question # 3b**



**Data Limitations**

Again, this methodology requires establishing a connection between the child lots on which the building permits were issued and parent lot records in each county’s subdivision database. The data limitations described in section “Methodology Part I” will thus pose the same barriers to carrying out the methodology for answering Question #3b. If random sampling and manual research were required to answer Question #3a for a county, they would be necessary for answering Question #3b as well.

It is also possible that additional technical issues may complicate the proposed approach to answering Question #3b. For example, it is not known if the data necessary for calculating the “Gross Density” of parent lots is consistently available in each county’s subdivision database. Moreover, if “Built Density” or “Net Density” is the more relevant measure of conformity, it is not known if that information is also available in the county subdivision databases. Finally, there may be circumstances where a development was allowed under a non-standard provision or exception to established GMA zoning regulations – e.g. rural cluster developments – and is considered compliant with GMA, although it may not pass minimum lot size and maximum density conformity tests. In such cases, additional information or local review would be needed to make the final determination of conformity.

### **Appendix B – Summary**

The two-part methodology documented in this appendix should allow for the analysis of how pre-GMA vesting has affected recent residential development trends in the region’s rural areas. The first part estimates the annual share of building permits authorizing new housing in the counties’ rural areas that is comprised of pre-GMA vested development. The second part then determines, in theory, how much of the vested development is out of conformance with current GMA zoned lot size and density regulations, and therefore inconsistent with that component of the GMA development standards for rural communities.

Data limitations in each county currently prevent the methodology from being carried out on the full universe of building permit data. However, a tailored approach in each county, supported by manual data research, can be carried out on a random sample of the building permits and associated lots to produce statistically valid results. Moreover, the analysis can be run for any year from 1991 onward, making it a powerful tool for establishing and tracking trends in vested development over time. It is hoped that this data analysis methodology will provide a useful and practical monitoring tool that the region’s counties can use to inform their ongoing growth management planning efforts.

**VISION 2020 + 20 Update**

**Information Paper on the Cost of Sprawl**

**Puget Sound Regional Council**

**December 19, 2005**

## Overview

Over the past several decades there have been numerous studies analyzing the costs of development, especially comparing and contrasting alternative development patterns. Most of the studies have been spurred by the desire to prove the hypothesis that sprawling growth is more costly than smart growth. Studies vary in terms of the definitions of sprawl, methodologies, and findings, but most of the studies do conclude that costs are generally higher with sprawl-type development than with compact development or 'smart growth.' The Real Estate Research Corporation's *The Costs of Sprawl* (1974) is widely cited as a seminal piece of work in its isolation of density and location as key variables in the cost of development. Although it was later criticized for its methodology, the report was quite influential, stimulating additional studies and critiques through the 1970s and beyond.

This issue paper reviews some of the prominent research dealing with comparing the costs of alternative development patterns and summarizes the findings to draw general conclusions about the costs of sprawl. The purpose of this paper is to provide evidence and rationale for excluding a sprawl alternative in the VISION 2020+20 EIS.

This issue paper is organized as follows:

- Defining Sprawl: a discussion about the varying definitions of sprawl and how that can influence studies measuring the costs of alternative development patterns.
- What Sprawl Means in Washington State: a review of what the Growth Management Act, Growth Management Hearings Board and VISION 2020 say about sprawl.
- A Review of the Literature: a review of 11 key documents addressing the costs of sprawl in terms of study area, methodology, and findings/conclusions.
- Summary of Findings: a summary of the studies' findings on the costs and impacts of sprawl versus smart growth development.
- Where We Are Now: The Debate Goes On: a discussion of the continued debate between sprawl and smart growth.

## Defining Sprawl

It is difficult to concretely define sprawl. Varying definitions and misconceptions make calculating the costs of sprawl quite challenging and differing studies difficult to compare. *Sprawl* can be broadly described as development that has occurred in a haphazard, undirected manner, often at a pace faster than that of population growth. Sprawl also can and has occurred in regions that are losing population. It is often associated with low density development, separated land uses, road infrastructure that favors the automobile over pedestrians or bicyclists, and weak or nonexistent centers of activity.

*"Much as Justice Potter Stewart said of pornography, most people would be hard pressed to define urban sprawl, but they know it when they see it."*

- Ewing, Pendall and Chen, *Measuring Sprawl and Its Impacts*, 2002

Based on a review of previous literature on sprawl, Burchell, et al developed a list of 10 common elements found in the varying definitions.<sup>1</sup> Developments that contain most of these 10 elements are viewed as sprawl:

1. Low residential density.
2. Unlimited outward extension of new development.
3. Spatial segregation of different types of land uses through zoning regulations.
4. Leapfrog development.
5. No centralized ownership of land or planning of development.

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<sup>1</sup> Burchell, et al. "The Costs of Sprawl—Revisited." Transportation Research Board. 1998. p.124.

6. Transportation dominated by privately-owned motor vehicles.
7. Fragmentation of governance authority over land use between many local governments.
8. Great variance in fiscal capacity of local governments within a metropolitan area (revenue-raising capability strongly tied to property values and economic activity within municipal borders).
9. Widespread commercial strip development along major roadways.
10. Major reliance on the trickle-down process to provide housing for low-income households.

The alternative to sprawl, often referred to as *smart growth*, *higher density development*, or *compact development*, emphasizes the efficient use of land resources in existing urban and regional centers, public transit options, and neighborhoods that are pedestrian-friendly and have a mix of uses.

The difficulty in rationalizing one type of development over another is in the burden of proof. Debating the costs and benefits of alternative development patterns requires that we are clear about our terms of reference. While in theory it is reasonable to talk about research and findings that are “grounded in proven results or measurable outcomes,” in practice this is quite problematic, particularly in something as complex as the urban built environment. Difficulties encountered include the ambiguity of what constitutes evidence, a lack of common service specific standards, variation in personal preference, and limited relevant data and information. In some studies, overall density is used as the indicator of a region’s degree of sprawl. But this measure alone is insufficient to describe patterns of growth.

For example, by density alone (persons per square mile), Los Angeles has the highest gross density of any U.S. city.<sup>2</sup> However, if you consider neighborhood mix and accessibility, the assessment of L.A. looks quite different. For example, Ewing et al. developed a 4-factor sprawl index based on (1) residential density, (2) neighborhood mix of homes, jobs, and services, (3) strength of activity centers and downtowns, and (4) accessibility of the street network.<sup>3</sup> This index recognizes that compactness and density, while important, are not the only elements to smart growth.

“Smart Growth can be applied in a variety of conditions, including rural, suburban and urban. For example, in rural areas it means clustering more development into villages, and in suburban areas it means creating complete, mixed-use, walkable neighborhoods. It is concerned with how people are distributed within a community, not with the total size of the community or the average density over a large area.”<sup>4</sup> Therefore, the manner in which sprawl and its alternatives are defined is crucial in understanding the results of any study comparing the costs of differing development patterns.

## **What Sprawl Means in Washington State**

This section describes relevant sections of the state and region’s policy framework associated with sprawl that taken together provide a characterization of what sprawl means and how it is treated in Washington. Excerpts from the State Growth Management Act, Growth Management Hearings Board decisions and VISION 2020 are presented and discussed below.

### **1. What the *Growth Management Act* Says about Sprawl**

The terms sprawl or sprawling are rarely used in the State Growth Management Act (GMA). Where they do appear is in the GMA’s planning goals. An alternative to sprawl, that is, efficient urban development, is in the goals as well. These goals together show that a sprawling, low density development pattern is discouraged in favor of development in urban areas.

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<sup>2</sup> Litman, T. “Understanding Smart Growth Savings.” Victoria Transport Policy Institute. 2004.

<sup>3</sup> Ewing, R., R. Pendall and D. Chen. “Measuring Sprawl and Its Impacts.” Smart Growth America. 2002.

<sup>4</sup> Litman, T. “Understanding Smart Growth Savings.” Victoria Transport Policy Institute. 2004.

### **RCW 36.70A.020 Planning goals.**

The following goals are adopted to guide the development and adoption of comprehensive plans and development regulations of those counties and cities that are required or choose to plan under RCW 36.70A.040. The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations:

- (1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
- (2) Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.

## **2. What the *Central Puget Sound Growth Management Hearings Board* Says about Sprawl**

In Washington state, the issue of sprawl has primarily been addressed through the state's quasi-judicial hearings boards, which are authorized under the GMA. This section highlights some of the key Final Decision and Orders of the board that has jurisdiction in the central Puget Sound region.

The following decisions explicitly interpret the GMA as striving for compact urban development, considering it the “antithesis of sprawl:”

- The Board holds that *compact urban development* is the antithesis of sprawl. By *striving* to achieve a land use pattern and urban form that is compact, cities and counties will serve the explicit direction of Planning Goals 1 and 2. [*Rural Residents, 3310, FDO, at 18-19, footnotes omitted*]
- Since the GMA's initial adoption in 1990, one of its bedrock principles has been to direct urban development into urban growth areas and to protect the rural area from sprawl. [*Burrow, 9318, FDO, at 18.*]
- Comprehensive plans, including Final Urban Growth Areas (FUGAs), must follow the direction provided by the three fundamental purposes of both Urban Growth Areas (UGAs) and Countywide Planning Policies (CPPs): ... and (3) *to achieve compact urban development*. [*Tacoma, 4301, FDO, at 12.*]

One of the early board decisions addressed the topic of sprawl, and it concisely listed the negative consequences of sprawl in eight points.

- [T]here are at least eight major negative consequences of sprawl: (1) it needlessly destroys the economic, environmental and aesthetic value of resource lands; (2) it creates an inefficient land use pattern that is very expensive to serve with public funds; (3) it blurs local government roles, fueling competition, redundancy and conflict among those governments; (4) it threatens economic viability by diffusing rather than focusing needed public infrastructure investments; (5) it abandons established urban areas where substantial past investments, both public and private, have been made; (6) it encourages insular and parochial local policies that thwart the siting of needed regional facilities and the equitable accommodation of locally unpopular land uses; (7) it destroys the intrinsic visual character of the landscape; and (8) it erodes a sense of community, which, in turn, has dire social consequences. [*Bremerton, 5339c, FDO, at 28.*]

The Hearings Board makes distinctions between compact development in urban areas within the UGA and development in rural areas. The distinction between urban and rural development is discussed mainly in terms of land use patterns and lot sizes.

### Urban

- Generally, any residential pattern of four net dwelling units per acre, or higher, is compact urban development and satisfies the low end of the range required by the Act. Any larger urban lots will be subject to increased scrutiny. [*Bremerton*, 5339c, FDO, at 50.]<sup>5</sup>
- Land within an UGA, [including subarea planning areas], reflects the jurisdiction's commitment and assurance that it will develop with urban uses, at urban densities and intensities, and it will ultimately be provided with urban facilities and services. [*MBA/Brink*, 02310, FDO, at 11.]
- A pattern of 1- and 2.5-acre lots meets the Act's definition of urban growth.... However, a pattern of 1- or 2.5-acre lots is not an appropriate urban density either.... An urban land use pattern of 1- or 2.5-acre parcels would constitute sprawl; such a development pattern within the rural area would also constitute sprawl. [*Bremerton*, 5339c, FDO, at 49.]
- [A future land use map designation for residential development that permits only 1 du/2 ac within city limits (UGA) is not an appropriate urban density and constitutes sprawling low-density development.] [*LMI/Chevron*, 8312, FDO, at 24.]

### Rural

- Any residential pattern of 10 acre lots, or larger, is rural. [*Vashon-Maury*, 5308c, FDO, at 79.]
- A pattern of 10-acre lots is clearly rural and the Board now holds that, as a general rule, a new land use pattern that consists of between 5- and 10-acre lots is an appropriate rural use, provided that the number, location and configuration of lots does not constitute urban growth; does not present an undue threat to large scale natural resource lands; will not thwart the long-term flexibility to expand the UGA; and will not otherwise be inconsistent with the goals and requirements of the Act. As a general rule, any new land use pattern that consists of lots smaller than 5 acres would constitute urban growth and is therefore prohibited in rural areas. The greater the density becomes, the more difficult it will become to justify an exception to the general rule. The exceptions to this general rule are few, both because the circumstances justifying them are rare and because excessive exceptions will swallow a general rule. [*Sky Valley*, 5368c, FDO, at 46.]
- Any smaller rural lots will be subject to increased scrutiny by the Board to assure that the pattern of such lot sizes (their number, location and configuration) does not constitute urban growth.... [*Vashon-Maury*, 5308c, FDO, at 79.]
- For purposes of determining if a proposed use constitutes impermissible urban growth or permissible rural growth, the Board will consider "such lands" to refer not to an individual parcel, but rather to the *land use pattern* in the immediate vicinity of a

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<sup>5</sup> ...densities of less than four dwelling units per acre have been challenged before this Board and found to be appropriate urban densities in limited circumstances. The Board has stated, "The presence of special environmental constraints, natural hazards and environmentally sensitive areas may provide adequate justification for residential densities under 4 du/acre within a UGA. (Citation omitted.) [*Forster Woods*, 1308c, FDO, at 31.]

proposed use, and whether the proposed use will be compatible with rural character of the land use pattern in the vicinity. [*Vashon-Maury*, 5308c, FDO, at 68.]

- ESB 6094's amendments to RCW 36.70A.070(5) explicitly clarifies: the legislature's continuing intent to protect rural areas from low-density sprawl; and that while some accommodation may be made for infill of certain "existing areas" of more intense development in the rural area, that infill has to be "minimized" and "contained" within a "logical outer boundary." *With* such limitations and conditions, more intense rural development in areas where more intense development already exists could constitute permissible compact urban development; *without* such limitations and conditions more intense rural development would constitute an impermissible pattern of urban growth in the rural area. [*Bremerton/Port Gamble*, 5339c/7324c, 9/8/97 Order, at 24.]

### **3. What *VISION 2020* Says about Sprawl**

The terms sprawl or sprawling are only mentioned a few times in the *VISION*. Each time it is in reference to the GMA's goal of reducing sprawling, low-density development. Sprawl, per se, is never mentioned in the strategies or the multicounty planning policies but encouraging alternatives to sprawl is implied throughout the *VISION*. For example:

"Building on the base provided by the Growth Management Act, countywide planning policies, and local comprehensive plans, the *VISION 2020* strategy for urban growth areas includes three parts: (1) identify and maintain urban growth areas, (2) support compact communities, and (3) focus growth in centers. Taken together, these three parts encourage a more compact development pattern that conserves resources and creates additional transportation, housing, and shopping choices." [p.14]

## **A Review of the Literature**

Some of the most prominent and influential literature dealing with the costs of sprawl are summarized here in terms of the specific study question, methodology, and major findings or conclusions, as well as notable critiques made by other researchers. A more extensive list of references related to the cost of sprawl is included at the end of this issue paper.

### **Real Estate Research Corporation. "The Costs of Sprawl." (1974)**

"The Costs of Sprawl" report by the RERC, referenced in the introduction, compared the costs of six hypothetical communities with 10,000 dwelling units each and concluded that high density development was less costly. The cost was evaluated in terms of 4 key indicators: (1) energy cost, (2) environmental impact, (3) capital cost, and (4) operating cost. The study methodology assumed different space standards for different types of dwelling units, so the differences in cost were a function of size, not density or location.

The RERC study was criticized for not assuming all housing units were the same size. However, in reality higher density units are smaller, so RERC's assumption is not necessarily wrong. The RERC study was also criticized for being based on a theoretical analysis and not on actual experience. Critics also raised the issue that standards of service change with increased density, though this was not addressed in the study. For example, sidewalks, street lights, and mass transit exist in higher density urban areas, but may not be desired or required in suburban to rural areas.<sup>6</sup>

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<sup>6</sup> Frank, James E. "The Costs of Alternative Development Patterns: A review of the literature." Urban Land Institute. 1989.

**Robert B. Smythe, et al. “Density-Related Public Costs.” American Farmland Trust. (1986)**

This study asked whether low density development was more costly than higher density development and attempted to answer the question using a real life case study— Loudoun County, Virginia. The authors had two objectives in conducting this study: (1) to develop a methodology that would be straightforward and easily replicated by other counties or regions, and (2) to do so using only readily available county and local data. The study was limited to public economic aspects and compares costs to tax revenues generated to derive net fiscal impacts of varying development densities. Given the available data, they were able to measure variations in cost attributed to density for school operation and instruction, school transportation, road maintenance and construction, and water and sewer services.

What they found was a net revenue shortfall for all 4 residential densities tested, from 0.2 (1 unit/5 acres) to 4.5 dwelling units per acre. But net public costs were found to be three times more per unit for the lowest density developments as for the highest. Fiscal deficits for the 2 lower density communities were 2 to 3 times as large as for the 2 higher density communities. Taxes generated by these residential developments outside the urban fringe were not sufficient to offset the additional cost of providing the infrastructure and services households required. The hypothesis that “residential development of rural land produces public revenues in excess of public costs” is disproved by the results of this study.

**James E. Frank. “The Costs of Alternative Development Patterns: A review of the literature.” Urban Land Institute. (1989)**

In this Urban Land Institute publication, Frank reviewed literature on the costs of development and sprawl from the 1950s to 1970s and adjusted all cost estimates to 1987 dollars to compare the studies’ findings against each other. He found that “[d]istinctions among alternative development factors form the experimental variables that are manipulated to observe the extent to which development costs change concurrently.” Such crucial variables include density, lot size, contiguity of development, improvement standards, and distance to central facilities, among others.

With a focus on the capital costs of streets, sewers, water, storm drainage and schools, the author found that the total cost of low density sprawl located 10 miles from a sewage treatment plant was slightly more than \$48,000 per dwelling unit, excluding housing and land costs. Costs of infrastructure were reduced with tiered increases in density and housing mix and proximity to facilities to a low of \$18,000 per dwelling unit. The author touches on issues such as the potential cost reductions based on reduction of standards (e.g., dirt roads, septic tanks), cross-subsidies between more compact development and sprawl which prevent prices from reflecting true costs of development, and gaps in knowledge such as the amount of existing capacity available for infill opportunities before new capital facility costs need to be considered.

**Robert W. Burchell, et al. “The Costs of Sprawl—Revisited.” Transportation Research Board. (1998-2000)**

**Robert W. Burchell, et al. “The Costs of Sprawl—2000.” Transportation Research Board. (2002)**

Burchell, et al. published “The Costs of Sprawl—Revisited” in 1998 through the Transportation Research Board, a comprehensive review and synthesis of the literature on sprawl and its impacts. The follow-up to that document, “The Costs of Sprawl—2000” attempts an objective analysis of the costs of two alternative development patterns – controlled and uncontrolled growth (sprawl) over a 25-year period for the nation as a whole. This 600-page tome is a product of more than 5 years of research by Rutgers University. Together, these two documents are probably the most comprehensive studies on the topic of the costs of sprawl.

“Part I” of “The Costs of Sprawl—2000” begins with a description of sprawl in historical context. It then lays out the definitions and characteristics of sprawl and describes the databases that are used to project growth in the U.S. at the county level. Growth is projected under uncontrolled (sprawl) and controlled (some sprawl allowed, but overall more compact, higher density growth) scenarios for 15 economic areas in the U.S. “Part II” focuses on the impact of sprawl in 5 areas: land supply, water and sewer infrastructure, road infrastructure, public service costs, and real estate development costs. “Part III” is devoted to the personal costs of sprawl, namely, travel miles and costs, quality of life variables and sprawl’s relationship to urban decline. “Part IV” discusses some of the benefits of sprawl, policies in response to sprawl, and future research on sprawl.

The analysis found that sprawl would result in \$227 billion in additional costs for uncontrolled vs. controlled growth. Uncontrolled growth leads to greater costs for land consumption and physical infrastructure and creates fiscal costs that exceed revenue. Sprawl does not often come in a form that provides for housing types other than single family detached units on large lots, so overall housing costs were greater for the uncontrolled growth scenario. There are also more personal travel costs due to the auto dependence of sprawl development.

The report does state some of the benefits of sprawl that are not as easily measured. This includes less expensive single-family housing than in central city areas, a wider variety of community settings, and in some cases less traffic congestion due to the trend of suburb-to-suburb trips over focused, city centers traffic. However, the study concludes that an alternative development pattern that is more resource- and cost- efficient is possible without sacrificing those benefits associated with sprawl.

**Ken Snyder and Lori Bird. “Paying the Costs of Sprawl: Using Fair-Share Costing to Control Sprawl.” U.S. Department of Energy’s Center of Excellence for Sustainable Development. (1998)**

This study focuses on how sprawl is often subsidized in the U.S. and discusses methods for allocating costs more fairly. The impacts of sprawl highlighted by the authors are presented in 5 categories: (1) loss of open space and agricultural lands, (2) auto dependence, (3) urban blight/urban core disinvestment, (4) higher resource consumption, and (5) higher infrastructure and services costs. The authors present common arguments in favor of sprawl and then cite literature showing how sprawl has hidden costs that are not often considered in those arguments, such as the cost of new infrastructure and capital facilities, and air and water quality impacts due to increased vehicle miles traveled.

The evidence demonstrates how sprawl is more costly—economically, environmentally and socially—than more compact, smart growth. Snyder and Bird then go on to describe how tools such as fees, taxes and other growth management strategies can be used to steer growth away from sprawling patterns by placing a fair share of the cost of growth-related impacts into the cost of developing at lower densities. There is also a discussion of the potential policy implications of such tools.

**J. Dixon Esseks, et al. “Fiscal Costs and Public Safety Risks of Low-Density Residential Development on Farmland: Findings from three diverse locations on the urban fringe of the Chicago metro area.” American Farmland Trust. (1999)**

**Ann A. Sorenson and J. Dixon Esseks. “Living on the Edge: The Costs and Risks of Scatter Development.” American Farmland Trust. (1999) (a summary of the original research)**

This study compares the fiscal costs and public safety risks for three types of scattered development built on agricultural land in Northeastern Illinois: early scatter (new sprawl), maturing scatter (development that is older, but not fully built out and that is scattered on one acre or larger lots), and

transitional scatter (This is an area whose overall density is low but placement is on smaller lots compactly placed along public roads served by city sewer and water lines. It is produced by municipal annexation and will have higher overall density once the area is fully developed, but may have large open spaces between developments). The analysis was limited to single-family detached homes with shared local government services between the scatter area and a nearby municipality. The purpose of this is to test for differences in costs and service response times that could be attributable to density and location rather than to differences in service providers. The authors analyzed four service areas: public schooling, emergency services, public road maintenance and public sewer and water services.

The study finds that in scatter development sites, homes do not generate enough taxes to educate the children who live there. They also fail to pay the full cost of maintaining the roads that lead to and through their subdivisions. The cost of water and sewer infrastructure, where available, may be paid by other taxpayers in the adjoining municipality. In terms of emergency services, the study found that those living in remote locations can face increased risks to their personal safety due to longer response times. On average, police response times were as much as 600 percent longer; ambulance response was 50 percent longer; and fire response was 33 percent longer.

**Reid Ewing, Rolf Pendall and Don Chen. “Measuring Sprawl and Its Impacts.” *Smart Growth America*. (2002)**

Ewing et al surveyed 83 metro areas and ranked them by their Sprawl Index. They then compared the top ten most sprawling metro areas with the ten least sprawling in the following travel and transportation related outcomes:

- Daily vehicle miles traveled per capita.
- Average vehicle ownership.
- Percent of commuters taking transit to work.
- Percent of commuters walking to work.
- Average commute times.
- Average annual traffic delay.
- Traffic fatalities per 100,000 people.
- Ozone pollution levels.

The least sprawling metro areas were found to perform better than their sprawling counterparts in nearly every outcome: fewer miles driven per day, fewer cars owned, greater percentage of commuters walking or taking transit to work, fewer traffic fatalities and lower ozone levels. Interestingly, sprawling and compact regions were not found to have a significant difference in commute time or traffic delay per capita, dispelling the belief that we can sprawl our way out of traffic congestion.

**Cameron Speir and Kurt Stevenson. “Does Sprawl Cost us All? Isolating the effects of housing patterns on public water and sewer costs.” *Journal of the American Planning Association*. (2002)**

This study aims to further refine the relationship between costs of providing water and sewer services and development patterns by isolating 3 spatial attributes: (1) *lot size*—the separation between houses, (2) *tract dispersion*—the separation between development tracts, and (3) *distance*—separation from existing water and sewer centers. Based on a hypothetical scenario of 3,000 new single-family detached housing units in a town of 30,000 (3.5 people per housing unit), they used a cost simulation model to analyze 60 different scenario combinations. The 3 attributes are combined in different ways with each attribute allowed to vary across all scenarios while the other 2 are held constant. This way the cost consequence of each attribute can be isolated. The study found that smaller lots, shorter distances and lower tract dispersion all led to reduced water

and sewer costs. The cost of services was most sensitive to changes in lot size (.25 to .5 acre) with an average increase of 30%. Cost increases attributed to a doubling in tract dispersion (1 to 2) and distance (.25 to .5 mile) were about 6% and 3%, respectively. Large lots were also assumed to use more water to water lawns, so water use was increased by 25%, a valid adjustment.

**Wendell Cox and Joshua Utt. “The Costs of Sprawl Reconsidered: What the data really show.” The Heritage Foundation. (2004)**

In this paper, Cox and Utt attempt to debunk the prevailing notion that sprawl costs more than smart growth. The paper outlines three of what the authors believe to be the “Current Urban Planning Assumptions” which are: (1) Lower spending per capita will be associated with higher population densities, (2) Lower spending per capita will be associated with lower rates of population growth, and (3) Lower spending per capita will be associated with older municipalities. The report uses an econometric analysis for more than 700 municipalities to attempt to determine the portion of municipal costs related to the impact of sprawl. They conclude that the opposite is true for the assumptions they listed:

- Highest-density municipalities have higher than average expenditures per capita
- Slowest-growing municipalities have higher than average expenditures per capita
- Oldest municipalities have the highest expenditures of all per capita

The authors also critique the results of the “The Costs of Sprawl—2000” report, saying that the additional cost of \$227 billion is minimal over the 25-year period, amounting to \$29 per capita per year.

**Todd Litman. “Understanding Smart Growth Savings: What we know about public infrastructure and service cost savings, and how they are misrepresented by critics.” Victoria Transport Policy Institute. (2004)**

Litman presents a detailed critique of the Cox and Utt study showing that the latter either misunderstands or intentionally misrepresents smart growth, producing inaccurate conclusions about the cost of sprawl from their findings. This report summarizes various studies comparing the costs of alternative development patterns and finds that smart growth could provide savings of anywhere from \$5000 to \$75,000 annually per unit for publicly-borne development costs (roads and utility lines) and \$500 to \$10,000 annually per unit for incremental operations, maintenance and service costs.

According to Litman, Cox and Utt’s analysis of the costs of alternative development patterns contains several critical errors. First, they assume that smart growth is primarily about increasing density (no matter what form it takes) or slowing growth, as opposed to accommodating expected growth in smarter ways. They also performed their analysis at the municipal scale. Most sprawl occurs outside of existing municipal urban areas, so their analysis ignores the additional costs of development in those areas. They also do not take into account conventional versus cluster development within municipal boundaries. They conclude that the cost savings of smart growth compared to sprawl are insignificant or non-existent, yet they measure only the difference in public costs and fail to consider the costs borne by the private sector and residents. These include direct costs such as well water, septic systems and garbage disposal. They also consider higher municipal employee wages in higher density cities to be a cost and an inefficiency, ignoring differences in overall wages in each area. Finally Litman criticizes Cox and Utt’s claim that sprawling development is what consumers prefer because of the market distortions that favor sprawl. Litman suggests that households would be willing to shift to smarter growth locations if the true cost of sprawling locations were accurately reflected.

**Mark Muro and Robert Puentes. “Investing in a Better Future: A review of the fiscal and competitive advantages of smarter growth development patterns.” Brookings Institution. (2004)**

This report argues that compact development patterns and investing in urban centers can save taxpayers money and improve overall regional economic performance. Based on a literature review of academic empirical literature, the authors find that:

- “The cost of providing public infrastructure and delivering services can be reduced through thoughtful design and planning.”
- “Regional economic performance is enhanced when areas are developed with community benefits and the promotion of vital urban centers in mind.”
- “Suburbs also benefit from investment in healthy urban cores.”

## **Summary of Findings**

For the purpose of this paper, the cost of sprawl is the additional cost of a sprawling development pattern compared to compact development or smart growth. Methodologies vary widely: some studied existing development, others used the hypothetical; some studied specific geographic areas while others analyzed the country as a whole. Many of the studies measure a certain aspect of development costs, but no study can measure all the potential added costs of sprawl. They may only measure the costs to government and thus ignore the costs of privately provided services. Some studied capital costs while others included operating and maintenance costs.

Because of the variability among these studies, it is hard to make too many generalizations about the results. For the most part, these studies found that sprawl was more costly than smart growth. Based on the literature review and the review of the policy context in Washington state, the more easily measured cost differences between sprawl and smart growth are found for physical infrastructure (e.g., roads and utilities) and public services (e.g., schools, police, emergency response). The reasoning is fairly straightforward: sprawling development requires more lane-miles and longer water and sewer pipes than more compact communities. Compact areas can also more effectively share public services within a smaller geographic scope, requiring fewer fire and police stations per capita.

A review of these studies shows that the greatest savings that can be gained through smart growth is in capital facilities costs. Moderate savings can be found for operations and maintenance and service delivery costs.

There are less tangible costs associated with sprawl, such as the additional time spent on congested roadways, health impacts associated with pollution and safety, and impacts to wildlife and natural habitat from additional greenfields being consumed by development instead of being preserved for open space or conservation purposes. The environmental and social impacts of alternative development patterns on quality of life and social equity are difficult to quantify in monetary terms but are just as, if not more important to how we decide to grow as physical infrastructure and public services costs.

These negative impacts can be considered costs and some researchers would try to monetize these. But there is also merit in terms of discussing these impacts as having true costs that are beyond monetary measure. Some researchers would argue that trying to measure these in dollars and cents trivializes the cost. At the same time, the benefits of smart growth are equally difficult to quantify. For example, increased economic productivity is associated with higher-density, compact development, but it is extremely difficult to identify cause and effect relationships.

Qualitative impacts are discussed alongside quantitative costs in the following summary of findings from the review of the literature and the policy context:

#### Public Infrastructure and Services

- Sprawl had greater capital costs related to building more schools and extending roads, water and sewer lines and stormwater drainage systems, even as existing infrastructure may be operating below capacity. Economic viability is threatened by diffusing rather than focusing needed public infrastructure investments.
- Operations and maintenance costs for schools, roads, water and sewer lines, and stormwater drainage were higher for low density development.
- School busing costs were higher for low density development due to the greater distances between stops and schools.
- Sprawl across municipal boundaries blurs local government roles, fueling competition, redundancy and conflict among those governments. It also encourages insular and parochial local policies that thwart the siting of needed regional facilities and the equitable accommodation of locally unpopular land uses.

#### Transportation and Travel-related Costs

- Daily vehicle miles traveled per capita was higher in sprawl areas leading to greater air pollution/ozone levels which in turn produced negative impacts on public health.
- Average vehicle ownership is higher in sprawl areas, leading to greater private vehicle expenses such as gas, insurance, and maintenance.
- There are more traffic fatalities per 100,000 people in sprawl areas. Street design in sprawl areas favors the automobile, which leads to more unsafe conditions for pedestrians or bicyclists. There are fewer or marginal sidewalks and wider streets, especially in strip mall areas.
- The percentage of commuters taking transit or walking to work is lower in sprawl areas. Fewer transit options and unsafe streetscapes make these commute alternatives unworkable. Those who cannot drive and must use transit or other options to get to work or school experience negative impacts in the form of opportunity costs. Sprawl areas do not support the kind of regular public transit options that more compact development does.

#### Land and Natural Habitat Costs

- Sprawl consumes more land and privatizes previously common green spaces into large subdivided lots, destroying the intrinsic visual character of the landscape. Natural habitat and wildlife corridors are impacted by sprawl and its associated activities (e.g., more roads and cars, more urban runoff).
- Sprawl is associated with greater water and energy usage than compact development, as well as more building materials due to larger, predominately single-family detached housing developments on large lots than in smart growth areas.
- More urban runoff/water pollution is created by sprawl areas due to greater water usage, more cars, and more paved areas.

#### Health and Safety

- Sprawl areas experience longer wait times for police, fire and medical response.
- There are more traffic fatalities per 100,000 people in sprawl areas. (See Transportation and travel-related costs above).
- Sprawl has been associated with rising obesity. This may be linked to the design of sprawl areas, which offer fewer opportunities for physical exercise and health due to fewer sidewalks and walkable neighborhoods, and lack of interesting streetscapes or landscapes to walk in.

## Quality of Life

- Urban decline. Older urban neighborhoods tend to overpay for public services, which subsidize newer lower density development on the urban fringe, or tax base is shifted from existing urban centers to pay for new capital facilities on the urban fringe. This leads to abandonment of established urban areas where substantial past investments, both public and private, have been made.
- Social inequities exist for transportation and mobility due to fewer transit options and segregation of land uses. This is of particular concern for low-income households, and non-drivers such as seniors and youth.
- Some sprawl has been associated with less community cohesion. As activities shift to inside the home or in the backyard, there are fewer eyes on the street and less neighbor interaction. Single-use areas (fewer sidewalks and walkable neighborhoods, separated uses, large superblocks) induce residents to get in their cars for every trip, instead of walking or biking around their neighborhoods.
- Segregation along economic and racial lines exists between city and suburb, although this pattern is changing in some areas.
- Urban/rural social divide. Urbanites moving to rural areas may consider typical farming activities with its associated odors and early morning schedules to be nuisances. This can affect the productivity of traditional farming communities forced to modify their behavior to suit newcomers.
- The predominance of single-family detached housing inhibits housing choice for the variety of income levels and preferences that exist. Forecasters project that aging baby boomers, echo-boomers, people having kids later in life or not at all, and others may prefer to live in urban areas or compact village or regional centers with a range of housing options and cultural amenities that sprawl areas do not offer.

In some of these areas, the performance standard is a variable that changes the extent of the additional cost, revealing the complexity of the relationship between density and costs. Litman shows the relationship as a tilde (~). In rural areas costs start low due to more residents providing their own water and sewage and service standards that are relatively low. Costs increase in suburban areas where public services are provided to dispersed development. As densities increase and there is clustering, costs decrease due to efficiencies. Costs then tend to increase at very high densities due to congestion and high land values. However, there are additional benefits such as reduced land consumption, increased economic productivity and reduced transportation costs associated with high-density central business districts.<sup>7</sup>

## **Where We Are Now: The Debate Goes On**

Despite the number of studies finding sprawl to be more costly than compact development, the debate over the costs of sprawl persists. It is largely a political and a subjective matter as some of the quality of life impacts listed above might suggest. The “pro-sprawl” side argues that sprawl concerns are exaggerated and that the majority of Americans prefer it. “Anti-sprawl” advocates maintain that we cannot sustain another 50 years of population growth with the same type of sprawling development that characterized the last 50. They also argue that Americans, if given the true costs of sprawl and attractive alternatives, would choose smarter growth development patterns.

The following table summarizes some of the arguments or “myths” which support continued sprawl and their counterarguments.

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<sup>7</sup> Litman, T. “Understanding Smart Growth Savings.” Victoria Transport Policy Institute. 2004.

**Table. Prevailing Arguments in Defense of Sprawl and the Counterarguments**

Arguments in Defense of Sprawl	Counterarguments
<ul style="list-style-type: none"> <li>• Development is cheaper in suburban/rural areas</li> </ul>	<ul style="list-style-type: none"> <li>• True, but real costs are not measured. Adjoining municipalities often subsidize the more extensive and less efficient infrastructure needed for sprawl development.</li> </ul>
<ul style="list-style-type: none"> <li>• The additional cost of sprawl is privately provided indicating people’s willingness to pay more for sprawl and their desire for sprawl</li> </ul>	<ul style="list-style-type: none"> <li>• Again, real costs are not reflected in the price of sprawl development. Adjoining municipalities often subsidize the more extensive and less efficient infrastructure needed for sprawl development.</li> </ul>
<ul style="list-style-type: none"> <li>• People prefer low density development over high density development</li> </ul>	<ul style="list-style-type: none"> <li>• Survey results showing more people preferring low density development can be misleading due to varying perceptions of “high density.” Surveys that use visual examples are more useful and show that many are willing to sacrifice low density and more square footage for better designed homes with a range of nearby amenities.</li> </ul>
<ul style="list-style-type: none"> <li>• Residential development in rural areas produces public revenues in excess of public costs</li> </ul>	<ul style="list-style-type: none"> <li>• “Working” land, such as in agricultural production provides revenues in excess of public costs.</li> </ul>
<ul style="list-style-type: none"> <li>• Commutes are shorter in suburbs</li> </ul>	<ul style="list-style-type: none"> <li>• Due to growing suburb-to-suburb commuting, travel to work may be shorter for many workers, but more trips are necessary because of separated uses. Trips are longer and there are few alternatives for those who can’t drive.</li> </ul>
<ul style="list-style-type: none"> <li>• Cars are the most versatile form of transportation and as cars get more fuel efficient and less polluting, environmental impacts will no longer be a concern</li> </ul>	<ul style="list-style-type: none"> <li>• Cars are still a long way from being environmentally friendly, but even if they were totally clean, it does not solve the problem of loss of wildlife habitat, resource consumption, traffic congestion or traffic fatalities resulting from sprawl type road infrastructure and lack of sidewalks or bike lanes. Auto dependent development also prevents non-drivers from having choices in how to get around. 32% of the U.S population can’t drive.</li> </ul>
<ul style="list-style-type: none"> <li>• We are able to grow more crops with less land and labor, so prime farmland being lost to development is bunk</li> </ul>	<ul style="list-style-type: none"> <li>• The problem is where and what land is being lost. Productive farmland close to urban centers is being lost. New land could be brought into agricultural production but often at high economic and environmental cost. Also the farther farmlands must move from urban centers—where the consumers are—the more inefficient it is to bring products to market, especially for smaller farms selling their produce in local markets.</li> </ul>

Clearly there are varying opinions about the qualitative costs and benefits of sprawl, but the quantitative studies still suggest that sprawl is more costly, both in monetized and non-monetized terms, than smart growth development. Municipalities should be aware of these facts when determining land use policies.

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**Informational Paper Describing Current and Future Land Uses in the  
Central Puget Sound Region's Regional Growth Centers**

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**KING COUNTY**

**Auburn Regional Growth Center (Core Suburban City)**

Historic Main Street is considered an important asset for the city because buildings along this street have retained their original scale and form. Auburn Regional Medical Center, the largest employer and economic generator, is located just off of Main Street. Main Street is well lit, but the remainder of the downtown area is dark and isolated. Retail throughout Auburn is discontinuous, with a lack of connections within downtown districts. Many properties are underutilized and include few pedestrian amenities. A mix of industrial and single-family residential uses is located east of the historic Main Street district. A defined pedestrian environment does not exist off of Main Street, and residential and retail areas are poorly connected.

Future land use will likely vary throughout Auburn. According to the 2001 Auburn Downtown Plan/Final EIS, about one-third of the area is planned for mixed-use development, including retail, service, residential, office, and government uses. Medical and office uses are planned to border the mixed-use development to the north, and the eastern section of Auburn is planned for auto-oriented commercial uses. The remaining land is dedicated primarily to future residential uses, with a small business park area (Auburn, 2001).

**Burien Regional Growth Center (Core Suburban City)**

Burien encompasses approximately 353 acres and is designed on a traditional street grid. The average block size is less than 4 acres, which is a scale appropriate for pedestrians. A mix of land uses exist within Burien, and the Burien Transit Center connects it to the rest of the region. Burien's pedestrian and bicycle facilities are not well connected. Bicycle facilities are limited and are not connected comprehensively. Several areas lack sidewalks and other pedestrian amenities, and existing sidewalks are often in poor or fair condition. (Burien, 2004).

Future land use in Burien will likely be devoted primarily to a mixed-use, pedestrian-friendly environment in the downtown core. Uses may include high-density residential development, retail, office, commercial, government, cultural and entertainment. More land-intensive, auto-oriented commercial development is planned to occupy the area east of Burien's core. The western edge of the core is planned to be a mix of moderate-intensity commercial uses to serve planned multi-family residential development to the south (Burien, 2005).

## **Downtown Bellevue Regional Growth Center (Metropolitan Suburban City)**

Downtown Bellevue was platted in large “superblocks” characteristic of post-war, auto-oriented development patterns. Today, the average block size is very large and roads are typically very wide, but most have well-constructed sidewalks. The City of Bellevue has been trying to break up the large blocks with additional pedestrian walkways. Large surface parking areas are a hindrance to compact development. A small section of historic Main Street continues to thrive as a pedestrian-oriented specialty retail area.

Current land use in Downtown Bellevue is predominantly commercial (31 percent) and office (18 percent). Parks and open space make up 5 percent and multi-family residential accounts for another 5 percent. Vacant land makes up nearly 8 percent (about 32 acres). Altogether, employment-related land uses comprise 54 percent of its land use.

In its Comprehensive Plan, Downtown Bellevue is envisioned as the most intensively developed downtown district of King County’s Eastside. It has a variety of high-intensity uses, such as multi-family residential development, regional office and retail uses, and civic and institutional uses (Bellevue, 2002).

## **Federal Way Regional Growth Center (Core Suburban City)**

Most of Federal Way is currently developed with low-intensity uses. Buildings are dispersed throughout the area, and many lack pedestrian connections to each other and to public rights-of-way. Current land use patterns favor auto-oriented commercial activity. Existing development in Federal Way is typically one story, with off-street surface parking generally located between streets and structures. Few blocks in the Federal Way have sidewalks, street trees, landscaping, or other amenities that support a comfortable pedestrian environment. A city inventory revealed a general lack of pedestrian and bicycle facilities.

The primary land use in Federal Way is retail (70 percent) followed by office, manufacturing, residential. SeaTac Mall is the most prominent development in the area. No public spaces are present and private green spaces, plazas and meeting spaces are few. Steel Lake Park to the northeast and Celebration Park to the southwest are located on the perimeter Federal Way.

In its Comprehensive Plan, high-density and mixed-use development is envisioned for nearly all of Federal Way. Future land uses are planned to include a mix of commercial, office and residential uses, as well as open spaces and other public amenities. Federal Way would transition from low-density auto-oriented development to a higher-density mixed-use pattern that would support transit and pedestrian access (Federal Way, 1995).

## **Kent Regional Growth Center (Core Suburban City)**

Kent is one of the smaller, more compact Regional Growth Centers. Downtown Kent is divided by a dense grid of local streets scaled for pedestrians. About 11 percent of land use is devoted to commercial and retail uses, although some developable land still exists and many downtown buildings remain underutilized. Community shopping, recreational, medical and civic functions are located in downtown Kent, along with some heavy industry. About 40 percent of the land is divided fairly evenly among single-family housing, office, schools, parking and vacant land.

The King County Regional Justice Center has brought new life to Kent, and is expected to act as a catalyst for further redevelopment. Kent has an active farmers’ market and several festivals throughout the year. In addition to a number of small parks, nearby Earthworks Park offers hiking and picnicking opportunities.

Future land use plans show that all of Kent will be devoted to mixed-use development, including multi-family residential, retail and office land uses (Kent, 1995).

### **Northgate Regional Growth Center (Metropolitan City)**

Northgate developed around an auto-oriented suburban style mall, and is consequently built in a pattern of large blocks separated by busy arterial streets. Most blocks, however, have connected sidewalks. Northgate is bisected by I-5, which serves as the western edge of the commercial core.

The most prominent feature in Northgate is the Northgate Mall complex. Existing structures are typically one- to two-story commercial buildings surrounded by large surface parking lots, surrounded by a ring of large apartment complexes. Single-family neighborhoods lie beyond the multi-family development.

Land use is varied in Northgate, with approximately 18 percent of the area devoted exclusively to commercial land uses, 10 percent to office space, and about 16 percent to multi-family and single-family housing.

Over half of planned future land use is devoted to mixed-use commercial development. Multi-family residential surrounding the commercial core is planned to account for 30 percent of land use. Lower-density residential and institutional uses, such as hospitals, are planned to comprise the remainder of land uses in Northgate (Seattle, 1993).

### **Redmond Regional Growth Center (Core Suburban City)**

Redmond is characterized by its original downtown area, the Redmond Town Center complex to the south, and the developing retail-civic-housing district to the north. The Sammamish River forms the western border, providing access to the regional trail system via the Sammamish River Trail.

Redmond contains a mix of residential land uses (11 percent) and commercial and office uses (40 percent). Existing development is typically one to three stories, with off-street parking. The newer higher-density residential developments include townhouses and apartments that are pushed up to the sidewalk, with parking located beneath the building or in the interior of the block. These housing projects are creating an urban, pedestrian-friendly streetscape. Nine parks enhance Redmond. Pedestrian walkways lined with trees and flower planters contribute to downtown Redmond's livability. Redmond Town Center is a 1.6 million square foot, pedestrian-oriented, mixed-use shopping and office complex.

Plans for Redmond support a mix of uses to attract people during the day and evening and to create a more pedestrian-friendly urban place. Over 97 percent of future land use is planned for mixed-use development including office, retail, and urban residential. The remaining area would be devoted to high-density residential development, parks, and pedestrian and bike trails (Redmond, 1995).

### **Renton Regional Growth Center (Core Suburban City)**

Renton lies west of Interstate 405, south of the Lake Washington shoreline and east of Rainier Avenue South. Renton is divided into two distinct parts: the old downtown commercial district to the south and industrial development to the north. Immediately west of the industrial area is Renton Municipal Airport, which is used heavily by the Boeing Company.

The southern half of Renton contains small blocks and a good pedestrian scale. The industrial area to the north is comprised of just three large blocks.

Forty percent of Renton's land use is industrial. The remaining uses are scattered among commercial, residential, civic, parks, office, parking, and warehousing. Slightly over 7 percent of the land is vacant. Renton's downtown transit-oriented development, Metropolitan Place, includes 4,000 square feet of ground-level retail space and apartments above a two-story garage. It is located across from the newly expanded Renton Transit Center.

Future land use plans are for Renton to devote an even larger amount of land to industrial uses (72 percent). About 22 percent would be dedicated to mixed-use development including office, retail, services and high-density residential. This area would be centered in southern Renton, which is already amenable to pedestrians (Renton, 1995).

### **SeaTac Regional Growth Center (Core Suburban City)**

SeaTac is a three-mile narrow strip along SR-99, bordered on the west by Seattle-Tacoma (Sea-Tac) International Airport. A long linear pattern of auto-oriented development forms a significant barrier to east-west travel, especially for pedestrians and bicyclists. There is also a profusion of large, tall signs and billboards that visually dominate the setting.

Residential development is the predominant land use in SeaTac, with multi-family residential accounting for 11 percent and single-family housing 17 percent of the area. An additional 8 percent is devoted to several mobile home parks, which will eventually be removed as part of the airport's noise mitigation program. Approximately 15 percent of current land use is commercial, and 10 percent is vacant. Much of the commercial activity is airport-related, including hotels, restaurants, and airport parking. Civic and public uses account for 6 percent of the area. A large portion of downtown SeaTac is devoted to surface parking lots.

Although International Boulevard has been improved with sidewalks and landscaping, many of the streets in SeaTac do not have sidewalks. In addition, the large, suburban-scale blocks are not amenable to pedestrians.

Future land use plans for SeaTac call for significant high-intensity commercial development (36 percent). Much of this development is planned to be oriented toward hotels, restaurants, and other commercial activity associated with the airport. Medium-density residential would account for 22 percent of land use in SeaTac, with low- and high-density residential areas comprising 11 percent. An Aviation Business Center is also planned, which would make up 15 percent. Future land use plans call for 8 percent of land area to be devoted to parks (SeaTac, 1999).

### **Seattle Downtown Regional Growth Center (Metropolitan City)**

Seattle Downtown includes the city's historic central business and retail districts, and 35 percent of the city's jobs. Downtown has retained a compact, small-block form even as it has grown to contain over 80 million square feet of non-residential floor space. It includes historic areas such as the Pioneer Square Historic District, the International District, the Pike Place Market, and some 40 historic landmarks.

Seattle Downtown has a relatively uniform grid of streets and alleys. Almost all blocks have sidewalks. Due to a dense street network, nearly 42 percent of the area is in public rights-of-way. About 2 percent of Downtown is used for public parks and open space, and office and commercial uses each comprise 11 percent of land area. Parking and multi-family residential each account for about 7 percent.

In Seattle's Comprehensive Plan, almost 90 percent of Seattle Downtown is planned for mixed-use development, accommodating waterfront activity, commercial, office, residential and industrial land uses. Most of the remainder of the land is planned for industrial uses only (Seattle, 1994).

### **Seattle Uptown Queen Anne Regional Growth Center (Metropolitan City)**

Seattle Uptown Queen Anne is known for its steep hills, tight urban grain, and sweeping views of the Seattle skyline, Elliott Bay, and Lake Union. The three neighborhoods within Seattle Uptown Queen Anne are the Uptown Center Regional Growth Center Village, the Uptown Park Neighborhood, and the Seattle Center. Uptown Center contains a mix of residential, commercial, retail, and entertainment uses. Uptown Park is a park-like residential neighborhood. Seattle Center is home to premier sports, art, and entertainment facilities.

Land use is varied throughout Seattle Uptown Queen Anne. The majority of the land is evenly divided among commercial, office, civic, parking and multi-family residential uses. Existing development is typically two to five stories, with parking provided on street, on street, and in structures. Nearly all blocks in Seattle Uptown Queen Anne have sidewalks, the majority with mature and well-tended street trees and landscaping.

According to the Queen Anne Neighborhood Plan, over 80 percent of future land use in this area is planned for commercial/mixed-use development. Much of the remaining land is planned for multi-family residential uses (Seattle, 1999).

### **Seattle University Community Regional Growth Center (Metropolitan City)**

The University of Washington dominates the Seattle University Community, occupying nearly a third of the land area. The western portion is characterized by a wide range and mix of commercial (10 percent) and residential (14 percent) land uses. Development in is typically two stories, with both on-street and off-street parking. Most blocks in have sidewalks, street trees, and landscaping.

Land use plans envision over 40 percent of land use devoted to mixed-use development. Much of the remaining area would be used for exclusive multi-family residential development or major institutions, presumably the University of Washington. About 3 percent of land would be set aside for open space (Seattle, 1998).

### **Seattle First Hill/Capitol Hill Regional Growth Center (Metropolitan City)**

First Hill/Capitol Hill is characterized by a variety of land uses: dense urban multi-family residential areas, storefront commercial streets, mixed-use structures, medical centers, and Seattle University. Existing development in First Hill/Capitol Hill consists of multiple-story structures with shallow (if any) setbacks from property lines. Parking is provided on-street, in surface lots, and in single-purpose and mixed-use parking structures. Most blocks are small, have sidewalks, and many have mature street trees, landscaping, and other amenities that support walking.

Land use varies in Seattle First Hill/Capitol Hill with nearly 25 percent of the area associated with employment-producing land uses (e.g., office, commercial, government) and about 22 percent devoted to exclusive multi-family and single-family residential uses.

According to future plan designations, over half of First Hill/Capitol Hill will continue to be used for multi-family residential development. About 27 percent of future land use is planned for mixed-use development to accommodate commercial, office and high-density residential uses. Major industrial development is intended to grow from less than 1 percent to 14 percent of future land use (Seattle, 1994).

### **Tukwila Regional Growth Center (Core Suburban City)**

Tukwila is dominated by the Southcenter Shopping Mall and other large retail development. Large block size is predominant and reflects its auto-oriented nature. With its wide, busy streets, large parking lots, large blocks, and long distances between intersections, Tukwila is not very pedestrian-friendly.

Very little housing exists within Tukwila, but a large area of multi-family housing is located across I-405 near City Hall. About 30 percent of Tukwila contains commercial business uses, and warehousing accounts for 25 percent. Nearly 10 percent of the area's land is vacant.

Future land use in Tukwila is planned for a mix of retail, office, commercial, residential and industrial. About 5 percent of the land would be devoted to low-density residential development (Tukwila, 1995).

### **Totem Lake (Kirkland) Regional Growth Center (Core Suburban City)**

Totem Lake encompasses about one square mile, bounded by I-405 on the east and by established single-family residential areas on the south and west. Development in and around Totem Lake includes residential, office, retail, light industrial and institutional uses, and the city's largest employer, Evergreen Hospital Medical Center. It also contains the Totem Lake Mall, a regional retail center. Residential uses are primarily moderate- to high-density multi-family development, which is an important source of workforce housing. Residential development in the surrounding area tends to be lower density.

According to Kirkland's Comprehensive Plan, commercial and office uses are planned to comprise one-third of future land uses in Totem Lake. The remainder of the area is divided among an area of mixed office and multi-family development, medium- and high-density residential, industrial, and open space uses (Kirkland, 2004).

## ***KITSAP COUNTY***

### **Downtown Bremerton Regional Growth Center (Metropolitan City)**

With the exception of the large land parcels associated with the Puget Sound Naval Shipyard, Downtown Bremerton generally reflects a traditional grid street pattern and block configuration. Bremerton's oldest neighborhoods and structures are located in the downtown area. Downtown Bremerton contains a wide range of housing options for a variety of income levels.

Downtown Bremerton contains a mix of land uses including community shopping, office and retail employment, education and medical facilities, and major industry. In 1990 the waterfront was substantially redeveloped with a public marina, promenade, and tourist attractions. The Naval Shipyard, however, is the dominant land use in Downtown Bremerton, comprising over 45 percent of the land area. About 17 percent of the land area is devoted to single-family residential, and commercial and office space comprises less than 10 percent of current land uses.

According to Bremerton's Comprehensive Plan, only 30 percent of future land is planned for heavy industry/military use. A mix of low- and medium-density residential uses is planned for over 40 percent of future land uses. Commercial uses would continue to account for a relatively small percentage of land uses (Bremerton, 1995).

### **Silverdale Regional Growth Center (Core Suburban City)**

Silverdale is comprised of several major types of land uses. The downtown core is bordered by single-family residential development to the east and industrial development to the west.

Future land use will include a variety of discrete uses, each lying in a distinct area. The planned main commercial area is intended to provide for regional service and retail needs. Smaller-scale commercial development is also planned, to serve the daily needs of those in the immediate area. A small area is designated for business park development, grouping small- and medium-sized businesses within a park-like setting. Residential development planned for Silverdale includes a variety of densities (Silva, 2005).

## ***PIERCE COUNTY***

### **Downtown Puyallup Regional Growth Center (Core Suburban City)**

Downtown Puyallup, the region's smallest Regional Growth Center, is characterized by a tight street grid, small blocks, a mix of older homes, and transitioning commercial land uses. Single-family residential uses occupy approximately 17 percent and multi-family residential approximately 7 percent. Commercial use comprises nearly 14 percent. Only 3 acres in the downtown are vacant, but much of the land is underutilized.

Downtown Puyallup's status as the city's business, cultural and government focal point is being eroded by commercial and office growth on the city's periphery, especially in South Hill. The downtown has seen a significant decline in investment and property maintenance.

According to Puyallup's Comprehensive Plan, over half of Downtown Puyallup is planned for auto- and pedestrian-oriented commercial development. This development is planned to be surrounded by high-density residential development and light industrial uses (Puyallup, 1994).

### **Downtown Tacoma Regional Growth Center (Metropolitan City)**

Downtown Tacoma encompasses two historic districts and the emerging urban waterfront along the Thea Foss Waterway. Downtown Tacoma is the site of city, county, and state government, as well as hospitals and schools. Existing development in this Regional Growth Center is typically between two and six stories, with a combination of on-street, off-street, and structured parking. Downtown is characterized by a fine-grained street network, with small blocks that are accessible to both pedestrians and vehicles. Nearly all blocks have sidewalks.

Land use in the Downtown Tacoma Regional Growth Center is primarily devoted to commercial business (30 percent). Twenty-three percent of the land is currently vacant. About 4 percent is devoted to single-family residential and 8 percent to multi-family residential development.

Future land use in Downtown Tacoma is planned for a mix of high-density uses. The plan envisions a mix of street-level retail, high-rise office buildings and hotels, government offices and services, theaters and cultural uses, residential uses in a variety of densities, educational facilities, and limited warehouse uses (Tacoma, 1999).

## **Lakewood Regional Growth Center (Core Suburban City)**

The Lakewood Regional Growth Center currently has a suburban shopping center character. The Lakewood Mall site is being redeveloped to provide more of an outdoor shopping experience, with large retail stores distributed among adjoining smaller parking lots. The remaining former mall spaces are being transformed into larger retail spaces that face outward to adjacent streets and walkways instead of into an enclosed shopping mall.

Current land uses are predominantly commercial (22 percent) and residential (19 percent). Just over 7 percent of the Lakewood (about 38 acres) is vacant land. Land use follows a typical auto-oriented pattern, with commercial retail uses along the major arterial streets and auto parking surrounding the mall areas. To the southeast, Lakewood contains a mix of residential areas and commercial development. Only the older residential areas in southeast Lakewood contain block sizes that are more amenable to pedestrians.

Future land use plans show nearly all of Lakewood as mixed-use. The mixed-use designation includes a variety of commercial services and shopping, employment, multi-family housing, and a range of housing densities (Lakewood, 2000).

## **South Hill Regional Growth Center (Core Suburban City)**

South Hill is a rapidly growing subarea within Puyallup. Major development includes the South Hill Mall and auto-oriented retail businesses. Commercial activity accounts for 17 percent of land use in South Hill, industrial comprises 10 percent, and residential uses account for 14 percent of land use. Over 27 percent (approximately 257 acres) is currently vacant.

South Hill has a discontinuous road system with only three arterial streets that traverse the entire center. Many of the streets, however, do have sidewalks. The average block is very large, and roads are widely spaced and offer few interconnections.

The City of Puyallup's Comprehensive Plan calls for a continuation of auto-oriented commercial development in South Hill, devoting 34 percent of future land to this use. Business and industrial uses would be clustered in the eastern section of South Hill, comprising 24 percent of future land use. High- to moderate-density residential development would surround the commercial area, with about 5 percent of land area devoted to open space (Puyallup, 1994).

## **Tacoma Mall Regional Growth Center (Metropolitan City)**

Lying approximately 2 miles southwest of Downtown Tacoma, Tacoma Mall is an important retail district within the city. Land use in Tacoma Mall is predominantly commercial (primarily the shopping center and commercial businesses surrounding it), occupying 27 percent of total land use. Single-family residential accounts for 7 percent of land use, and multi-family accounts for 5.5 percent. Commercial and residential land uses lie within discrete parts of Tacoma Mall.

Existing development is typically one to two stories with off-street surface parking and some structured parking. Most blocks in the Tacoma Mall area have sidewalks, although few have extensive street trees, landscaping, or other amenities that support walking.

According to the city-wide Comprehensive Plan, future land use in Tacoma Mall is devoted to a high-intensity mix of uses. The plan envisions a mix of street-level retail, high-rise office buildings and hotels, government offices and services, theaters and cultural uses, residential uses in a variety of densities, educational facilities, and limited warehouse uses (Tacoma, 1999).

## ***SNOHOMISH COUNTY***

### **Bothell Canyon Park Regional Growth Center(Core Suburban City)**

Bothell Canyon Park has evolved from a bedroom community to a Regional Growth Center, while still maintaining a strong residential character. Bothell Canyon Park contains approximately 1,722 acres, divided into 20 very large blocks. Existing development in Bothell Canyon Park is typically one story with off-street surface parking. Few blocks have fully developed sidewalks, and roadways are generally widely spaced.

Land use in the Bothell Canyon Park is currently devoted to general commercial (10 percent), industrial (10 percent), multi-family residential (26 percent) and single-family residential (19 percent) uses. There is potential for major future development because over 15 percent of the land area (204 acres) is currently vacant. It contains significant steep slopes, natural areas, wetlands, and wildlife habitat areas that require extensive protection. Residential areas are generally located around the boundaries and contain 9,600-square-foot lots or larger. Multi-family development is concentrated at the area's southern boundary.

Future land use plans for Bothell Canyon Park envision a mixed-use area of office, light industry, commercial, and open space. Much of this space is intended for low-density office park developments. These uses are planned to comprise almost 60 percent of the area, with the remainder devoted to residential development and a small portion dedicated to education and civic uses (Bothell, 1995).

### **Downtown Everett Regional Growth Center (Metropolitan City)**

Everett is the largest city in Snohomish County. Approximately 5 percent of the Everett population resides in the downtown area. Primary land uses include government offices (federal, county, and city), the Public Utility District office, a hospital, library, performing arts theater, art galleries, specialty retail stores, and restaurants. Downtown Everett is characterized by a compact, low-rise form with a fine-grained network of narrow streets and small blocks. Nearly all roads have complete and interconnected sidewalks.

Existing land use in Downtown Everett is primarily commercial (20 percent), multi-family residential (19 percent), and single-family housing (13 percent). In addition, large areas in Downtown Everett are devoted to parking.

The City of Everett Comprehensive Plan shows a majority of the area devoted to mixed use, including commercial and higher-density multi-family housing. Low- to medium-density residential and public/civic uses are planned for the remainder of the area (Everett, 1994).

### **Lynnwood Regional Growth Center(Core Suburban City)**

Lynnwood is a major suburban shopping destination with over 5.9 million square feet of commercial space. Lynnwood is located in a typical suburban, auto-oriented environment, focused on the Alderwood Mall in the northeast and commercial retail and office uses that have developed along major arterial

streets in the southwest. Lynnwood's large blocks are composed mostly of surface parking. The street network is made up of broad, widely-spaced arterials, some with landscaped medians. Some aisles within large surface parking lots are used as surrogates for local streets. Large parking lots and aging low-intensity office buildings offer opportunities for infill and redevelopment.

Land use in Lynnwood currently includes a significant amount of multi-family residential use (42 percent), commercial (36 percent), and office (5 percent) uses. Three percent of land area in Lynnwood is vacant and available for future development.

Over half of future land use in Lynnwood is planned for a mix of retail and office. Lynnwood would continue to serve as a retail destination, with residential and park/civic uses each comprising only about 10 percent of land area (Lynnwood, 1995).

# A Regional Design Strategy

## In Support of VISION 2040 for the Central Puget Sound Region

*June 2007*

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*Prepared for:*

Washington State Department of  
Community, Trade and Economic  
Development

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# Chapter One: Introduction

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## Background

The central Puget Sound region is graced with a spectacular natural setting, and many of its cities and towns are known for their beauty, livability, and dynamic economies. All of this makes Puget Sound one of the most desirable metropolitan regions in the country. However, much of the urbanized area is characterized by auto-oriented development typical of the mid to late 20<sup>th</sup> Century. Increased listings of endangered species indicate that human activities threaten the regional ecosystem, and current development patterns are overtaxing the region's transportation and infrastructure systems. With projected growth, the region will accommodate a forecasted 1.6 million new residents and 1.1 million new jobs within the next 35 years.

This dramatic region-wide forecast presents both challenges and opportunities for harnessing the energy of incoming residents. To this end, the Puget Sound Regional Council (PSRC) is updating VISION 2020 (adopted in 1995), the region's long-range strategy for growth, transportation, and the economy. The product of this update, VISION 2040, aims for an environmentally friendly and economically successful growth pattern that can be efficiently served by infrastructure, services, and amenities. The updated vision will provide a common framework for the region's leadership to coordinate efforts that support the needs of a growing population by promoting a preferred growth pattern.

The Regional Design Strategy supports the goals of VISION 2040 by providing design concepts, strategies, and tools to implement VISION 2040's policies at the local level. Successful growth management requires the application of design, which is distinct from planning in the role that it plays in shaping the physical environment: creating livable communities, integrating land use and transportation systems, restoring habitats, and providing an intentional connection between human built structures and the natural environment. This strategy addresses the design issues that a regional long range plan, such as VISION 2040, will face in accommodating dynamic change in the central Puget Sound region. And, as PSRC Growth Management Policy Board Member and Seattle City Council Member Peter Steinbreuk has pointed out, "you can't have quantity without quality." This is a strategy to help local governments maintain and strengthen that quality on a regional scale.

# Purpose and Intent of a Regional Design Strategy

## Scope of Work

In July 2006, the Washington State Department of Community Trade and Economic Development (CTED) awarded a grant to the Puget Sound Regional Design Team for 2006 through 2007. Money was granted, through PSRC as the fiscal agent, for two purposes. The first, create a Regional Design Strategy that would link urban design to regional long range planning in a way that would be useful to other regions and communities throughout Washington State. The second charge was to help PSRC by providing them with design assistance during the development of VISION 2040.

## Process

This Regional Design Strategy is the result of a highly collaborative process. Initial grass roots efforts from a dedicated group of volunteer urban design professionals and academicians from the University of Washington resulted in the formation of The Puget Sound Regional Design Team and a committed partnership with the Puget Sound Regional Council. The Design Team actively sought assistance from the urban design community throughout the region through a series of workshops and outreach events. The Design Team Steering Committee worked collaboratively to craft the Regional Design Strategy. (*For a more detailed description of this process, please refer to Appendix A.*)

## The Intent of a Regional Design Strategy: What *is* Regional Design?

The notion of regional design is a new one, so a further description of its make-up and intent is warranted. In detailing the characteristics of regional design, it is especially useful to describe what it is not.

Regional design, as practiced in this project, is **not a master plan** with a preconceived set of built elements. Nor is it aimed at a steady-state, unchanging vision of a regional Tomorrowland. Just as values, physical context, economic forces, and other conditions change, so must the physical setting change and, with it, design objectives, models, and strategies. Design provides a framework within which markets act and react. Therefore, the ultimate goal of regional design is to allow Puget Sound communities to evolve in a variety of ways that meet local objectives through preferred development practices, providing enough direction for better coordination of activities, greater compatibility between jurisdictions, increased efficiency of regional infrastructure systems, and more effective achievement of overarching regional goals. In conceptual terms, the desired outcome of design efforts is a dynamic, changing physical environment which responds to changing values and conditions.

In this regard, regional design is **not a top-down effort**, with some regional entity setting standards for local governments. The Regional Design Strategy does recommend a set of multicounty planning policies to be included in VISION 2040; however, private investment and civic projects (guided by local governments), agency and institutional activities, and public efforts will still be the primary shapers of the region's environment. A regional design strategy will provide a conceptual framework and a means of better coordinating these activities. Regional design is primarily about coordination and cooperation. It is about better integrating physical elements into a functional and attractive pattern, but, even more, it is about bringing ideas, disciplines, governments, organizations, and interests together to address the broader challenges facing the region.

Design, especially regional design, is **not simply about aesthetics**. Functional, ecological, economic, and social objectives are equally of concern, if not more, than mere physical beauty. However, it is the premise of this work, so far upheld by recent experience, that achieving economic, ecological, and community-based objectives involves enhancing the physical and visual environment, and that all of these objectives are intimately related.

## **The Value and Importance of Regional Design**

### The Value of Design

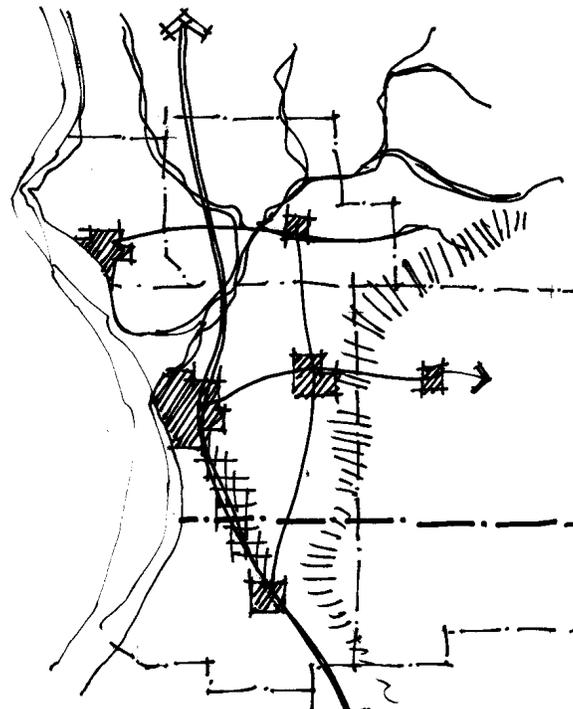
Urban design, distinct from planning, focuses on physical form, sensory characteristics, and guides implementation at a full range of scales. Because of this emphasis, design can be invaluable for at least five reasons:

1. Design can be used as a problem solving tool to integrate diverse objectives and elements. For example, design solutions have proven effective in integrating land use and transportation (station area planning involves design measures), fitting transportation improvements to the local community (context sensitive design), increasing the compatibility between uses (mixed-use centers), and incorporating environmental restoration in development.
2. Design can be used to translate regional scale policies and strategies to a local level. For example, the VISION 2020 strategies from 1995, when calling to develop a range of urban centers, relied heavily on design measures at the local level to create desirable places to attract growth.
3. Design is the discipline that most directly addresses livability objectives. Designers have long emphasized creating walkable neighborhoods, providing urban amenities, protecting cherished resources and views, enhancing visual qualities, and revitalizing business districts to provide local commercial and community services.

4. Design can be used to paint a picture of what larger policy directives and quantitative planning parameters will look and feel like (for example the number of dwelling units per acre) by translating for the public what those numbers will mean in their communities. During the past decades, designers have used graphics to illustrate proposed conditions or design guidelines that will reduce negative impacts; these techniques have helped communities make increasingly proactive and participatory decisions about accommodating growth. Similarly, protecting and enhancing ecological systems at the regional scale will require design solutions that can both accommodate growth and enhance individual environmental assets.
5. Design tools facilitate effective public participation in planning issues. Because design illustrations help people to understand the issues, design provides solutions to resolve apparent conflicts. Designers have developed a number of participation techniques, such as visual preference surveys and alternative evaluation exercises. As a result, design has proven invaluable in meaningful public participation.

### Why Design is Important at the Regional Level

While local governments have used design measures in comprehensive and sub-area planning to build urban districts and central places, design large public facilities, maintain rural corridors, and accomplish a variety of other objectives, there are numerous challenges and opportunities for design at the regional scale and at least three reasons for undertaking a regional design strategy. First, many of the region's most cherished elements, ecological systems and characteristics—such as rural valleys, shorelines, foothills, and river corridors—extend well outside municipal boundaries. Similarly, many of the region's human-made systems, such as arterials and highways, transit corridors, clusters of emerging centers, and industrial areas, traverse multiple jurisdictions, as illustrated by Figure 1. Indeed, they are the connective tissue that ties the region together.



*Figure 1: Many design issues and regional systems transcend jurisdictional boundaries*

Second, many planning challenges are shared by communities throughout the region. For example, several cities are undertaking innovative steps to radically improve their urban centers to provide affordable housing, better link transportation and land use, and upgrade their civic identities. Sharing the experiences and information at the regional level can facilitate these local efforts and create a body of successful practices for others to use.

Third, there is the question of regional character. All communities would benefit from a more clearly defined sense of regional character. A strong identity or “sense of place” increases a sense of belonging to and caring for a community and is an asset for increasing economic activity, livability, and collective action. More clearly defined regional character will give local communities clearer perspective on how they fit within the regional setting and will help them to define their own unique identities. Finally, exploring the region’s physical, social, and cultural identities will begin to identify the common values and objectives that are common throughout Puget Sound, providing a stronger basis for a broad range of management and enhancement activities.

## Potential Leadership Role for Regional Planning

The regional design proposals in this document primarily address regionally scaled issues. The recommendations (in Chapter Five) focus on activities wherein PSRC can play a leadership role or at least participate meaningfully. These encompass three roles for PSRC:

1. Extending PSRC’s tradition of regional research to design issues. PSRC should be recognized as an entity for generating design research and for disseminating design assistance to local jurisdictions. PSRC is ideally positioned to play a much larger role in strengthening a sense of regional identity among citizens by building awareness of the region’s unique characteristics. Part of this support will include monitoring achievements and providing local governments with examples of successful processes.
2. Coordinating group activities and providing information and guidance. Some of the recommendations begin with a step that explores identified issues and then addresses the concerns by supporting collective action from local governments. This coordination will also serve to foster continued dialogue among urban design professionals across the region.
3. Funding transportation and economic development projects that advance regional design objectives. Parts of the Regional Design Strategy could provide design and development criteria for evaluating proposed transportation or economic development projects that uphold design and livability objectives.

Together this Regional Design Strategy points to a more active commitment on the part of PSRC to address the physical quality of the region’s environment. This is a dramatic step that would take full advantage of an invaluable growth management tool which is critical for addressing the many challenges and opportunities that currently face the central Puget Sound region.

## Document Organization

Figure 2 shows how the chapters in the Regional Design Strategy, in blue, relate to each other. It also shows how the Design Strategy provided design assistance to PSRC’s VISION 2040, in red. Each box represents a chapter as follows:

- Four Guiding Principles** (Chapter Two) – These basic principles are modes of thought, or ways of thinking about regional planning and design issues. They are themes that surfaced repeatedly during Design workshops with members of the region’s professional urban design community. They provide both the basis for the policies the Design Team recommended to PSRC’s VISION 2040 and the conceptual underpinnings for the rest of the document.

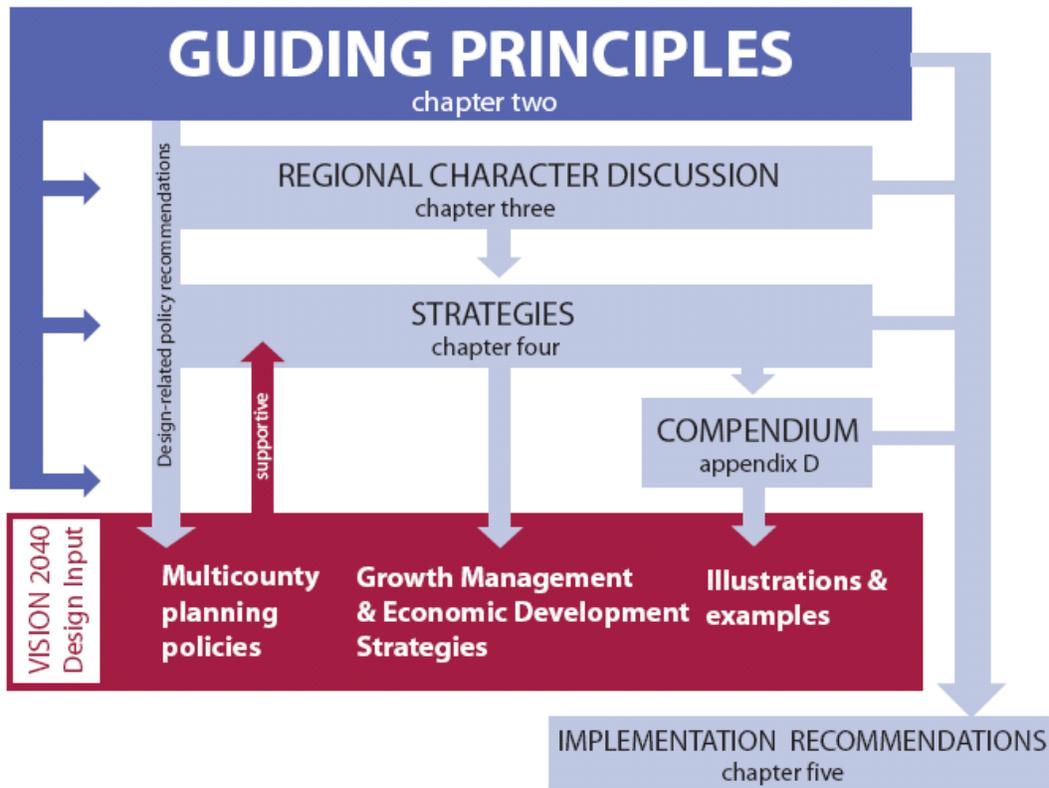


Figure 2: This organizational chart shows relationships among chapters in the Regional Design Strategy (in blue), and how those elements have impacted PSRC’s VISION 2040 (in red).

- **A Guided Discussion about the Character of a Region** (Chapter Three) – This chapter provides a compelling narrative that begins to identify regionally critical characteristics, identifies the values embedded in VISION 2040 policy language, and ties regional character to issues of policy implementation on the local level. This guided discussion has the potential to assist local planning practitioners by providing them with means for supporting on-the-ground implementation of regional policies.
- **Strategies to Shape the Region’s Physical Structure** (Chapter Four) – This chapter identifies six integrated sets of recommended actions to address geographically specific challenges and opportunities within the central Puget Sound region. Each strategy focuses on a geographic setting or land use element, such as urban centers, linear systems, industrial estuaries and floodplains, suburban-to-rural transitions, or automobile-oriented suburban areas. These strategies have been chosen because they reinforce the values and important regional characteristics in the Chapter Three discussion on regional character.
- **Compendium Examples** (Appendix D) – This appendix is an initial collection of models, concepts, and examples of best practices that illustrate ways in which pieces of the strategies are being implemented in the region. As this piece continues to be expanded through collaborative process, it will become an additional practical resource for planning and design practitioners.
- **Implementation Recommendations** (Chapter Five) – This chapter provides a listing of the Regional Design Team’s top priority recommendations, with suggestions regarding how actions may be pursued.

As Figure 2 shows, all of these chapters form the basis for the design assistance that the Regional Design Strategy has provided to VISION 2040. The Design Team recommended design-related multicounty planning policies to PSRC’s Regional Staff Committee and Growth Management Policy Board. A number of these design policies were incorporated into VISION 2040’s draft multicounty planning policies, and the design team in turn used all of the VISION 2040 draft multicounty planning policies to support the recommended strategies (Chapter Four) and the discussion on regional character (Chapter Three).

The strategy outlined in this document involves new ideas, changes in current development trends, ambitious collective action, and sustained effort over time. But the rewards for undertaking such a program will be great, for it will pass on to future generations the wonderful legacy we have enjoyed.

# Definitions

Terms used in this document are defined as follows:

- **Region:** King, Kitsap, Pierce, and Snohomish counties, along with their cities and towns.
- **Eco-region:** All lands within central Puget Sound's watershed, extending beyond the four counties.
- **Design:** As used here, design, commonly called urban design or community design, refers to the manipulation of the built environment through a public process that responds to all stakeholder interests, considers a range of scales (human, building, neighborhood, city, region), and addresses the sensory environment (i.e., what the results of an action will look and feel like). Thus, design is distinct from planning in the conscientious role it plays in shaping physical environment. Because of its emphasis on linking physical design to social, economic, and ecological objectives, urban design has proven invaluable in coordinating diverse disciplines (such as science, engineering, and planning), facilitating public participation, and mobilizing civic action.

Design is, in essence,  
giving form to values  
*-Rueben Rainey*

- **Regional Design:** The extension of urban design practices to the regional level in order to support regional planning objectives.
- **Regional Systems and Landscapes:** Elements or processes that function at a regional scale and extend beyond jurisdictional boundaries. A systems approach creates an integrated whole from more than one component and multiple objectives.
- **Corridors:** Linear elements or features including natural elements, such as river corridors and ridge lines, and human made features, such as transportation routes and linear development patterns.

## In summary

This Regional Design Strategy provides:

- A conceptual framework of principles, policies and strategies that will support city and county efforts to meet both local and regional objectives,
- A mode of communication and coordination to integrate individual local and organizational efforts to achieve greater success.
- A method for discussing regional image and character and taking collective steps to enhance the region's sense of place.
- A portfolio of examples, models, best practices and information resources to assist local governments, and communities in their efforts.

## Chapter Two: Four Guiding Principles

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The following fundamental principles were developed during the three Puget Sound Regional Design Team work sessions in the summer of 2006 (see *Appendix A*). These workshops involved gathering together urban design professionals and recording their collective design experience in the central Puget Sound region. Each workshop revealed thematic ways of thinking about regional scale issues, and these themes have been distilled into four principles to guide the approach to design at a regional scale. Thus, these principles provide goal statements and guiding concepts that give rise to the strategies and actions recommended in this Regional Design Strategy.

### Four Guiding Principles

#### Principle 1

**The natural environment - and the ecological processes that support it - is a primary basis for regional form and is fundamental to regional character.**



This principle acknowledges that protecting and enhancing the region's ecological system is a primary challenge. Because these systems are regional in scale (e.g., watershed systems), design efforts must be applied at the regional as well as the local level, such as the examples illustrated in *Figure 3*. Objectives falling within this principle include:

#### Balance Ecology with Human Settlement

The central Puget Sound region will be characterized by the physical beauty of natural features integrated with the built environment.

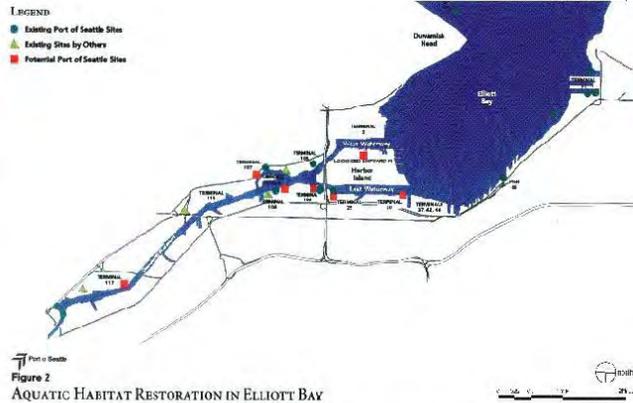
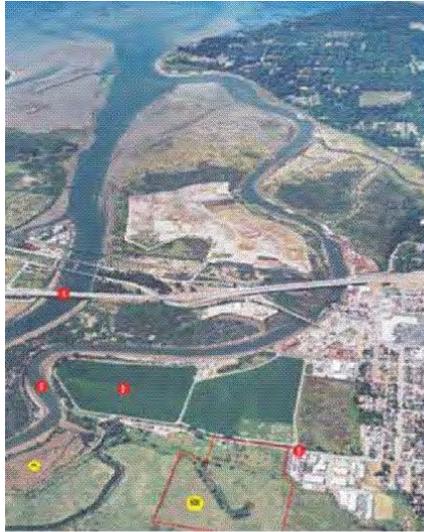
#### Regional Open-space

The region will feature an integrated park-open-space-trail system that links urban, rural, and resource lands, provides amenities to all citizens, sustains environmental systems and contributes to the region's visual character.

*Sustainability* meets needs of the present without compromising the ability of future generations to meet their own needs. *United Nations Brundtland Report, 1987.*

Resiliency

The region’s ability to cope with adverse trends, economic cycles, and disasters will be enhanced by creating more sustainable communities able to adapt to change and by reducing dependency on non-renewable resources. The region will anticipate climatic and economic changes related to global warming and use technological innovation and or low-impact development strategies to address those challenges.



The Port of Seattle has a comprehensive restoration plan which it is implementing as part of their facilities development. (Courtesy: Port of Seattle)

The 1997 Snohomish Estuary Wetland Integration Plan (SEWP) is being through The Everett’s and Marysville’s Shoreline Master Programs and several restoration projects

Environmental scientists and designers are learning to create more successful restoration plans in estuary and nearshore habitats such as at the Dickman Mill site at Tacoma (Courtesy: Anchor Environmental)



Figure 3: *Environmental restoration is becoming an increasingly important part of shaping the urban environment. The challenge for planning is to make local improvements that accomplish the most in restoring landscape scale ecosystems. The challenge for design will be to better integrate environment restoration with recreation improvements and private development opportunities.*

## Principle 2

### **Apply a systems approach.**

A systems approach considers planning issues in a multidimensional, multidisciplinary manner and seeks to understand the intertwined relationships between elements and systems to better address issues in a holistic manner.

Urban design generally applies the systems approach to address land use, transportation, environmental, morphological, and social concerns holistically. However, design (and systems thinking) at the regional scale involves larger, more complex systems, such as watersheds, clusters of communities, regional land use allocation, and more integrated transportation systems. A systems approach is broader than a single-issue or individual jurisdictional perspective from which problems are usually addressed: for example, if we think in terms of larger systems, we consider not just “transportation systems” but “land use-transportation systems.” Design has not usually been applied at the regional scale because of both jurisdictional constraints and the lack of key elements, such as funding, information, and a conceptual framework. Therefore, a systems approach, seeking to integrate various systems and elements through design measures, is a fundamental principal of this work and is of critical importance. The following objectives adhere to this principle:



*Systems:* a set of related elements that interact with at least one other element in the set

*In terms of regional design...* systems might include ecological systems, social systems, transportation systems and other similarly interactive and regionally relevant structures.

#### Regional Design through an Integrated Systems Approach

Systems that cross jurisdictional boundaries (ecosystems, topographical systems, transportation systems, economic systems, development systems) will be treated at a regional scale.

#### An Interconnected Mobility Network

Transportation networks will be well connected, region-wide, multi-modal, and inextricably integrated with land use, population density and infrastructure. Transit and multi-purpose trails and a comprehensive pedestrian system will assume greater prominence.

## Principle 3

### **Reflect design values equally at all scales, from the site to the region; the big is reflected in the small.**

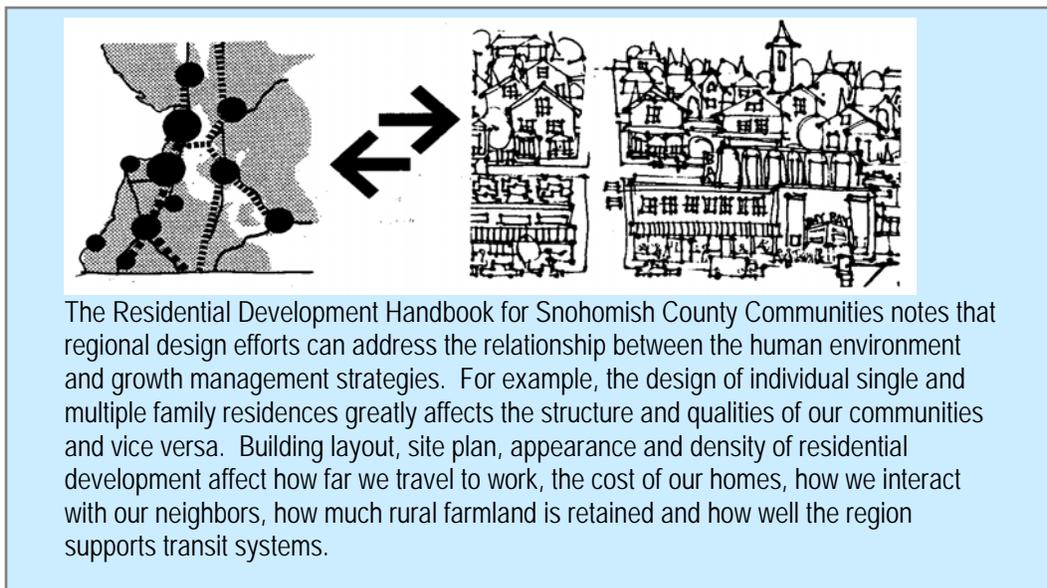


There should be an identifiable sense of place at the neighborhood, city, and regional level, achieved through human-made and natural networks linking a diversity of individual communities. Communities draw a sense of identity both from the complex social and historical influences unique to local context and from a shared sense of belonging to and impacting regional character. Systems such as open space, pedestrian networks, and

community structures should function equally well at the regional, municipality, community, neighborhood, and individual scales. Regional design should identify common values that shape our regional character and ways to support those values at all scales.

#### Livability on a Regional Scale

Individual communities will be distinct, each with unique physical character, yet share common characteristics such as a safe, walkable blend of land uses and a supportive public realm. Regional-scale mobility will be enhanced, connecting new and existing neighborhoods while maintaining a high level of social cohesion. Open space will be connected across jurisdictional boundaries in a



The Residential Development Handbook for Snohomish County Communities notes that regional design efforts can address the relationship between the human environment and growth management strategies. For example, the design of individual single and multiple family residences greatly affects the structure and qualities of our communities and vice versa. Building layout, site plan, appearance and density of residential development affect how far we travel to work, the cost of our homes, how we interact with our neighbors, how much rural farmland is retained and how well the region supports transit systems.

regionally planned network, neighborhoods will be connected to fingers of the network, and smaller-scale open spaces will be included within neighborhoods.

#### Coherent Sense of Character on a Neighborhood, City-wide and Regional Scale

Individuals will be able to identify a coherent sense of place on a neighborhood scale because communities throughout the region are assisted in capitalizing on social and historical assets. Cities will have a central focus for public activity such community buildings and other facilities that support civic engagement and advance public benefits. Citizens will feel part of a regional community, one that can be identified by its special character, physical features, and lifestyle choices.

#### Principle 4

### **Transition from a landscape of competition to a landscape of cooperation.**

Until now in the region's development, urban and economic landscape has been shaped by competition: businesses competing for the prime locations that will ensure customers and efficient production, municipalities competing for development that will bring in revenue, developers competing for land at the lowest price. More efficient land use, effective governance, economic vitality, and environmental sustainability depend on the competitive activities being augmented by cooperative efforts. Principle 4 identifies several areas where greater cooperation, communication, and coordination could advance these objectives and create a greater sense of regional citizenship (see Figure 4).



#### Regional Citizenship

Regional planning and decision-making foster regional citizenship and resource sharing across jurisdictional boundaries. The region's physical form and distribution of resources will contribute to the social, environmental and economic equity for all citizens.

#### Partnership

Jurisdictions, non-profit agencies and private businesses will participate in collaborative efforts to strengthen regional character.<sup>1</sup> The mutually dependant relationship between urban, rural, agricultural and resource areas will be strengthened for the benefit of the region.

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<sup>1</sup> Training sessions for Integrated Design Process have been very successful for green building and development. This kind of training could also benefit the collaborative process of regional design.

	<b>Competitive Environment</b>	<b>Cooperative Environment</b>
<b>Land use development practices</b>	Market Driven. Short term "highest and best" use	Market forces shaped: greater long term efficiencies & collective benefits
	Businesses compete for land and access	Businesses still compete but in more stable and varied environment (opportunities for broad range of business and development models)
	Communities compete for high cost land uses & revenue sources	Strategic inter-jurisdictional cooperation: development standards, service provision & business incentives, potential revenue sharing.
<b>Competing interests</b>	Pitched battles: environmentalists vs. developers & resource industries	Cooperative agreements (e.g.: Fish & Forest agreement)
	Neighborhood interests vs. comprehensive objectives and systems	Mechanisms for communication & cooperation between local interests and larger governments or agencies. (top down + bottom up)
	Urban interests vs. rural interests	More explicit focus on resolving conflicting perceptions and interests.
<b>Organizational roles and practices</b>	Narrowly focused, single objective agency missions	Coalitions between agencies and governments
	Inflexible or confrontational project review & permitting processes	Cooperative agreements. More flexible project review and permitting mechanisms (E.g.: PUDs, contract rezones)
	Restrictive, circumscribed private & government roles	Active government actions and cooperative agreements.
	Uncoordinated activities by individual governments	Cooperative inter-jurisdictional agreements (E.g.: rural corridor planning)

Figure 4: This table considers the comparison the competitive and cooperative environments that impact planning, design, and livability

Monitoring

Goals and benchmarks for physical conditions are established and periodically monitored (such as the example in Figure 5). Basic growth management and planning assumptions as well as regional design strategies are re-evaluated periodically to determine if modifications to policy or practice are necessary. Measurable indices for the following general characteristics are:

- |                    |                              |
|--------------------|------------------------------|
| Livability         | Ecological health            |
| Community vitality | Non-motorized vehicle access |
| Open space         | Visual quality               |

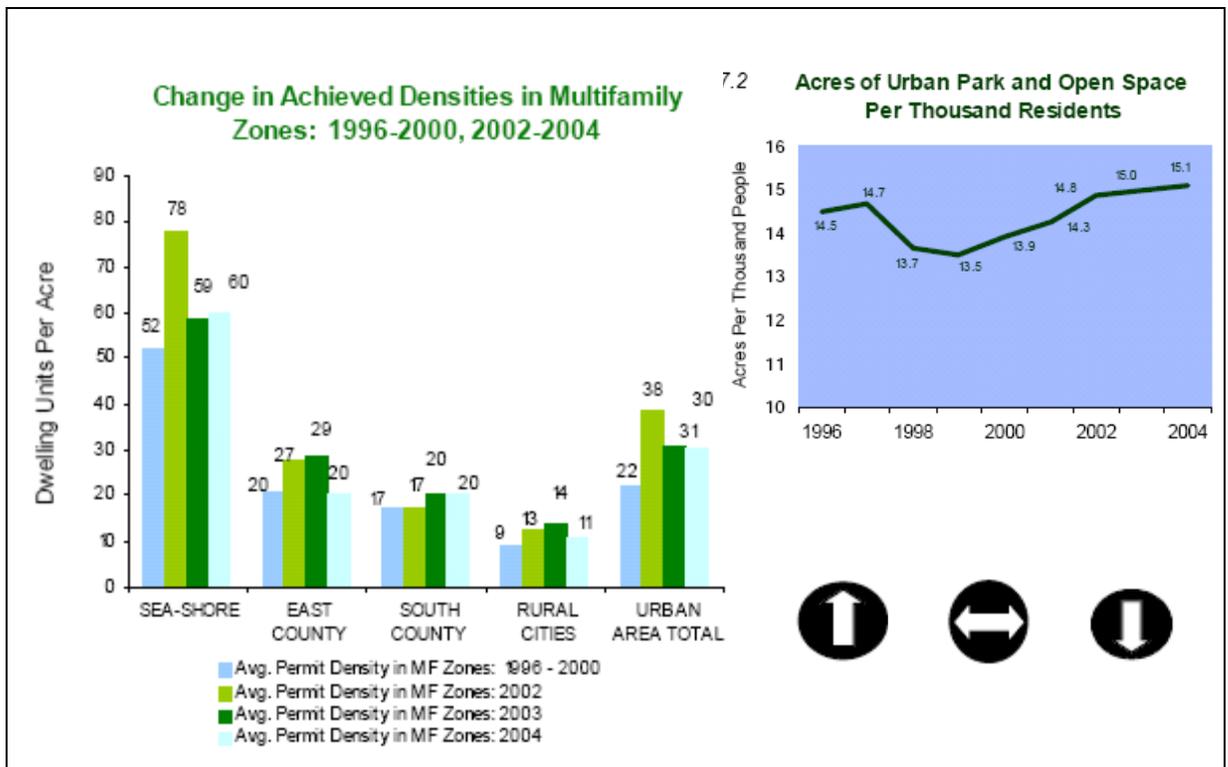


Figure 5: King County has a well-established benchmark and monitoring program that might be a useful model for monitoring and program assessment.



# Chapter Three: A Guided Discussion about the Character of a Region

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## Purpose of this Section

In Chapter One, design was defined as the relationship between values and form. Because the relationship between value and character (or identity) is important in any design process, this chapter discusses the relationship between regional values and regional character. Activities affecting local character overwhelmingly happen at the local level. Additionally, generating a regional long range plan, such as VISION 2040, means that there is a need to answer certain questions: As a region, what do we want to become and who are we now? As residents of this region we ask ourselves:

- Who are we?
- What makes this place “*this place?*”
- How do we identify ourselves and how do others identify us?
- What do we cherish and value?
- How can we identify the values that we share?
- How are those values being expressed now and how will they be expressed later?
- How do we make sure that the things we cherish about this region are sustained in the future?

Other parts of this Regional Design Strategy and many parts of PSRC’s VISION 2040 suggest actions to take: policies, strategies, implementation recommendations, actions, measures, work programs, and compendiums. Embedded in these actions and policies is a set of values, and these values are intrinsically related to our sense of who we think we are as a region. By exploring the relationship between values and character, this chapter will supply the reader with one possible argument to support policy implementation.

Over the next 35 years, planning practitioners may find themselves confronted with the question “Why should our local community implement a particular policy or expend resources to take a particular action?” The goal of this chapter is to provide a baseline discussion that might prove helpful in such a situation by considering two points:

- Regional policies come from a regional sense of who we are.
- Regional policies support and will eventually shape a regional sense of who we are.

It is our hope that this structure will provide a useful analytic tool for explaining and supporting VISION 2040 policies and strategies. This chapter will proceed in three sections:

- **What do we mean by regional character, and why is it important?**  
This section presents definitions of regional character and visual image as well as a framework to consider how design is related to the notion of regional character.
- **Steps for discussing regional character.** This section describes the steps that the Regional Design Team took in exploring how regional character is related to design and policy implementation
- **Illustrating the connection between regional character and policy implementation.** Building on the steps listed above, this section illustrates potential design outcomes for the central Puget Sound region.

Identity is a major factor in the quality of life; it represents that synthesis of the relationship between the individual and his or her city. Identity, self esteem, a feeling of belonging-all are closely connected to points of reference that people have about their own city.

*Jaime Lerner*

*From a forward to 2007 State of the World : Our Urban Future*

## What do We Mean by Regional Character, and Why is it Important?

The fundamental idea of a regional character and identity itself is a difficult one. How can one person or one group begin to say *what* it is? How can the idea of regional identity take into account different perspectives of a large and diverse regional population? How can it accommodate changing attitudes and perceptions over time? To explore these questions, a clear vocabulary is needed which can describe the conceptual framework.

### **Definition: Visual Image**

The term visual image is used to describe the sum total of mental pictures or impressions that describe a region. While the visual image of the central Puget Sound region varies from one person to another, there may be a set of mental pictures held in common by a preponderance of the region's citizens that describes a collective image of the region. While it may not be possible to sharply define this collective regional image, the concept is useful because it allows for discussion of shared perceptions about the landscape and how they contribute to a regional sense of character.

**Definition: Regional Character**

Figure 6 illustrates that the content of regional character includes: the historical, physical, social, economic, and cultural elements that make a place unique; how those elements are arranged; and how those elements relate to the passage of time and the inevitable complexity and change within a region. The content of a region’s character goes beyond identity (a potentially over-simplified collection of icons, symbols, and the latest funky styles). Changes within this inevitable complexity give us our stories of who we are in this place. It is through these stories, and this culture, that we teach ourselves how build the environment around us.

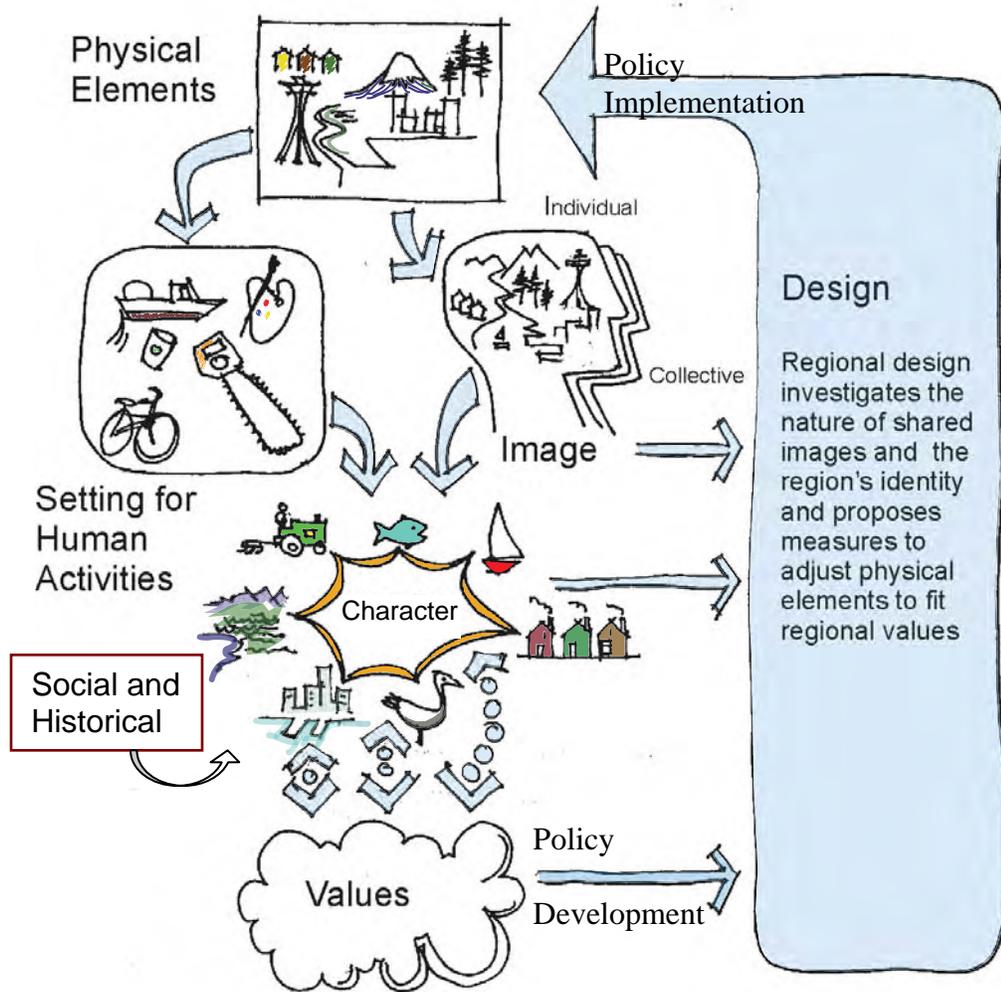


Figure 6: Our perception of regional character is influenced by the region’s distinctive physical elements, the images we have of our region, the activities we engage in, our complex socio-historical context, and the values we hold. There is a circular relationship where our perception of regional character influences our policy development choices, and in turn, implementation of those policies and strategies impacts the way regional character will be perceived in the future. At both large and small scales, design is informed by perception of regional character, and design shapes the physical setting of the region project by project.

We use this cultural context to learn how to read the environment, meaning that we tend to assign cultural values to physical standards. Through time, our values change, our understanding of the world changes and our physical standards change correspondingly. This is one way to describe the way our sense of regional character can shift as new ideas come into existence. (For example, currently, no one familiar with the Bay Area around San Francisco today can conceive of that region without the BART system, but it was nearly impossible for most people to conceive of the BART system before it actually became a physical reality.) Therefore design and policy implementation both have critical roles in influencing the content of regional character.

However, it is rare that people have the luxury to fully examine the links between values, design, and policy development or implementation. There is a tendency instead to want to keep pace with examples from other cities and other regions, rather than to analyze what would be best in *this* place. And even those good examples that we compare ourselves to or try to imitate are themselves often the result of luck, opportunity, fortune and well-timed events (and not the result of a careful, collective investigation and application of principles and values). The more that individual places can honor the unique history and psychology of a place, at that point in time, by defining who they are and where they are trying to go, the more likely they will be to maintain the political will necessary for long term implementation of policies. This leads to the importance of regional policies and principles as a common baseline from which to start this discussion.

### **Framing the Role of Design in This Discussion**

As the diagram in Figure 6 illustrates, the region's physical elements and characteristics give rise to visual images (individual and collective) of the regional landscape and, at the same time, support characteristic activities. These two, combined with the region's complex socio-historical context, inform regional character, which is intimately tied to how we see ourselves as a region and how we identify our collective values. Of course, these values are not consistent from person to person or through time. But to an extent, a design strategy for an urban region can identify key aspects of a shared character and supporting actions, which in turn enhance the physical environment.

## **Steps for Discussing Regional Character.**

This section describes the steps the Puget Sound Regional Design Team took in order to explore the issue of regional character. These steps are provided here both as an explanation for the illustrations in following section (which uses the Puget Sound as a test case), and to provide a basis for future discussions.

## **Listing Regional Qualities and Characteristics**

Through the course of numerous workshops and events in recent years, we asked ourselves as urban design professionals, “What are the things that make central Puget Sound region distinct? What are the qualities and entities that distinguish the character of this place? How do we see ourselves as a region? How do others see this region from the outside?” To get at these questions, we first compiled a working list.

We recognize that this is not *the* list which can summarize the identity of this region. This list is not comprehensive, and this list represents only those things that urban designers think about in the course of their profession at this juncture in time. This list does not claim to represent what everyone in the region thinks, or even what the design community will still think years from now. Rather, this list is most valuable as a starting point for future discussions with other groups and communities to begin to answer the question “How do we see ourselves?” If this discussion were to be held by active environmentalists, or festival organizers, or Boeing and Microsoft employees, or a community group from a distressed neighborhood, or by even by the same urban design community in 20 years, it would have different components as a result of each discussion; and some components would overlap. And the idea that these components might shift with time empowers people to know that this list can change. (*To see a complete version of this list, please refer to Appendix B.*)

### **General Observations**

What can we say about these characteristics now that we have them in one place? We found it easier to divide the list into five subcategories so we can consider the qualities and characteristics that we as urban design professionals commonly associate with the following elements of regional character:

- A. The natural environment
- B. The built environment
- C. The intersection of the natural and the built environments
- D. The social, cultural, and economic organization of the region
- E. The history of place

Under these subcategories, we found it easier to look at smaller, related sections of the list and derive some general observations. What patterns can we see by looking back at our list? What do these patterns say about the way the region functions now? What do they say about how we think about ourselves as a region?

## Review of Relevant Regional Policies and Principles

What are the ways to connect these general observations to policy development and implementation? Regional identity and character are reinforced by policy decisions, and policy decisions and implementation will in turn have an impact on regional identity and character in the long run. The Design Team turned to the regional planning policies, statements of intended regional action, and matched them to the characteristic subcategories. We looked for common threads between the characteristics and observations, which help define a picture of the region, and the policies, which speak to intended regional action and implementation. We also correlated the subcategories to relevant principles (from Chapter Two) to guide our thoughts (see Figure 7). In a case where current regional policies are unavailable, this juncture could be an ideal place to set up a framework for crafting or updating them.

		Subcategories of Regional Characteristics				
		A Natural Environment	B Built Environment	C Natural and Built Environment	D Organization	E History
Principles	1 Nature	✓		✓		
	2 Systems		✓	✓	✓	✓
	3 All Scales			✓	✓	
	4 Cooperation		✓	✓	✓	✓

Figure 7: This table shows the influence of the principles over the way the steering committee dealt with the subcategories of regional characteristics.

## Generating Illustrative Examples: What We Can Imagine

This final step uses creative, yet rational, narrative to establish a connection between regional character (in the characteristics and observations) and policy development and implementation. Each subcategory from the original list gets its own set of illustrative examples: **What we can imagine**. Each example is a collaborative attempt by the Design Team to picture the kind of character our region could have if those policies are implemented, if principles are adhered to, if cherished regional characteristics are passed forward. Each illustrative example looks at future patterns (what the region might look like) and processes (how the region might function on a daily basis within those patterns) at a variety of scales.

# Connecting Regional Identity and Character with Policy and Implementation

This section applies all four of the above steps to the central Puget Sound region as a test case and example. The four steps are applied to each of the five subcategories (taken from the initial list of regional qualities and characteristics): natural environment, built environment, intersection between the natural and built environments, social structures, and history.

## A. The natural environment

### Characteristics we associate with the natural environment

- Water surrounds us (proximity to ocean, the Sound, the lakes, the estuaries, the rivers, the rain)
- Mountains (views of the Olympics, the Cascades, the silhouettes of Mt. Rainier, Mt Baker or Mt. Hood)
- Trees and plants (the evergreens, the silhouette of evergreens on hilltops and bluffs, blackberries, bull kelp)
- Salmon and other aquatic life
- Wildlife diversity (orcas & whales, starfish, otters, seabirds, eagles, deer, protected species)
- Colors (green, gray, brown)
- Topography (many hills and valleys, particularly north-south orientation)
- The rare sunny day (secret gift to those who live here)

*This list was generated as the product of numerous Design Team workshops.*

### 1. Observations:

These are all powerful visual images that are used again and again to represent the central Puget Sound region. The sheer physical magnitude of these natural features has impressed these elements on the collective imagination of many who live here, yet the vitality of many natural systems is being threatened.

This region has strong natural edges and extensive shorelines, making it easier for people to orient themselves and for people to get a visual and spatial sense of the region from numerous vantage points. The region also has many strong linear physical elements, which are ways to consider linking various landscapes.

## 2. Summary of Relevant Multicounty Planning Policies and Principles:

Several of the VISION 2040 draft multicounty planning policies describe the protection and enhancement of: air and water quality, open space, natural resources, critical areas, native vegetation, freshwater and marine shorelines, watersheds, and the long-term integrity of the natural environment. *(For a complete listing of relevant policies, please refer to Appendix B.)*

Relevant principle: Principle 1 – The natural environment is a primary basis for regional form (see Figure 7).

## 3. What we can imagine:

Our region is known around the world for its intimately accessible and dramatic natural landscape and for its exemplary stewardship of natural systems. As a society, we have invested substantial amounts of human, fiscal, and regulatory capital in the reparation and protection of the natural environment. Numerous private, non profit and government activities are organized to repair damaged parts of the region's natural systems, caring for both small and large scales, using adaptive management to sustain landscape-scale ecological processes. This care is reflected in our region's design aesthetics, which seek to incorporate natural systems and environmental responsibility into all aspects of the built environment (see Figure 8). Socially, we have changed our daily process from one which collectively lives *on* the environment to one that lives *with* uncompromised ecological systems.

As a result, natural systems have vigorous integrity and it is easy to see the way ecological systems are fully fused and interconnected with one another in a way that is functional and successful. For example, waterways are cleaner, providing



healthy habitat for salmon and other wildlife, restored estuaries are used both as urban buffers and urban amenities, and the region has a comprehensive greenspace network.

*Figure 8: There is a more intimate relationship between the urban and natural environments in Puget Sound than in most other regions. For example, marine habitat restoration is an important part of the Olympic Sculpture Park on Seattle's Central Waterfront. Photo courtesy Anchor Environmental.*

## B. The built environment

### Characteristics we associate with the built environment:

- Architectural monuments (The Tacoma Glass Museum, the EMP, the Seattle Central Library)
- The Space Needle and the Seattle skyline (Smith Tower, Columbia Tower)
- Infrastructure: ferries, north-south freeways, locks, bridges
- Industrial global contributions (Boeing, Microsoft, Starbucks, Weyerhaeuser) and national contributions (microbrews, biotech and hi-technology, music, wood industry)
- Military influence
- Tribal influence on space (dichotomy and dialogue, role of tribal lands on regional land use patterns)
- Emphasis on quality residential neighborhoods (fine grained urban form)
- Trends towards mixed use development *and* tendency to favor big box centers to augment tax base
- Housing affordability is decreasing (renter population on the rise, mobility of young people)
- Increasing density and the desire to become an important regional center (young wealthy and retired moving to downtown areas and condos).
- The linear development along a number of our thoroughfares

*This list was generated as the product of numerous Design Team workshops.*

### 1. Observations:

Our infrastructure is the most substantive and unique aspect of this region's built environment. This region had a tradition of investing in innovative, high quality, well designed, large scale infrastructure projects (see Figure 9). However, in recent years we have viewed infrastructure mainly in functional terms for only one use, forgetting its importance in the landscape and in our everyday lives.

Our current architecture emphasizes the modern and dynamic. However, corporate driven styles tends towards the repetitive. Our architectural monuments are iconic but not necessarily grand. Some unanswered questions remain as to the existence of a neo-northwest architectural style, possibly one which combines native and natural materials with contemporary, high-tech building systems and traditional craftsmanship.



*Figure 9: The region has a legacy of excellent public works designed by engineers who care for a project's aesthetics as well as its function. This tradition should be continued as new systems are constructed.*

Another big design challenge in this region is the large portion of our built environment that is structured around poorly designed linear arterials. A large amount of our landscape is devoted also to big box center typology, scattered throughout the region. This pattern is likely to change; the structures are temporary, waiting for a future higher and better use of that land. On the other hand, we are currently witnessing an explosion of highly innovative green building technology. Even if the building technologies we currently use in most situations are antiquated in comparison to the latest green

building innovations, these industry standards seem poised to change dramatically in the near future.

Overall, urban design plays an important role in understanding the way the built environment is perceived and interpreted, and then in applying that knowledge to the way the built environment continues to be built. The urban design challenge is to create a cohesive unit from a variety of public and private efforts. This goal has been tackled in Tacoma, both along the Thea Foss waterway and at the UW Tacoma campus around Union Station (see Figure 10).

## 2. Summary of Relevant Multicounty Planning Policies and Principles:

Several of the VISION 2040 draft multicounty planning policies focus on the continued development of regional growth centers and compact urban communities. The policies seek to improve or transform underutilized lands, local street patterns, and linear systems. The policies place a high value on sense of place, housing choice, diversity, quality public spaces, urban design, historic preservation, arts, visual and cultural resources and the protection of both manufacturing-industrial centers and military lands from the encroachment of adjacent incompatible use. *(For a complete listing of relevant policies, please refer to Appendix B.)*

Relevant Principles: Principle 2 – Apply a systems approach, and Principle 4 – Balance competition with cooperation (see Figure 7).

## 3. What we can imagine

On a local scale, communities are vibrant: people can walk to recreation or take an easy bus ride to a nearby center and job site. Jurisdictions are encouraged to

develop and nurture non-natural identifiers, localized icons and symbols which are authentic to their settings and local in scale. We can perceive that the pieces of our urban environment are integrated into our central places and neighborhoods. For example, large institutional complexes fit into their surroundings and new developments work together, resulting in a whole greater than the sum of its parts.



*Figure 10: A key challenge in upgrading the built environment is integrating new development components into a cohesive whole. Tacoma's recent redevelopment in the UW Campus-Museum District-Convention Center-Thea Foss Waterway illustrates how several elements (not to mention the diverse but compatible) activities can be combined to create an exciting new urban district.*

This integration of built elements also occurs at a large scale so that individual communities are linked to larger urban compositions. Additionally, efforts are made to improve the quality of public investment in infrastructure projects and civic buildings by: holding design competitions, refining rather than ornamenting projects, designing for more than just one use and relating every project to the human scale.

Arterials function better at a human scale because activities are concentrated along a string of well connected centers. One gets a sense of sequence traveling along the arterials or boulevards, which are broken down into a series of nodes. Such facilities make more effective and efficient use of the land and are more thoughtfully seamed and stitched into adjacent neighborhoods.

Big box centers have been adapted to integrate mixed use, residential and commercial space, and improved street patterns in a compact, pedestrian, transit-oriented manner consistent with regional vision. Our region provides guidelines and assistance so that centers can successfully undertake this task.

Our region is capitalizing on its population growth. By focusing nearly 1.6 million people within the urban growth area, we are adding built environment (houses, streets, schools, hospitals, etc.) that takes every opportunity to integrate innovative change. Our development is energy and resource efficient, low impact, and environmentally responsible. Our development is lean and our buildings are healthy.

## C. The intersection of the natural and the built environments

### Characteristics we associate with the intersection of the natural and built environments:

- Get outside (REI, outdoor sports, recreation, parks that encourage interaction with natural amenities, bike to work, leave urban areas on weekends)
- Interact with the wildlife (aquarium, whale watching, explore tidal pools and touch starfish, watch the salmon runs, visit zoos and botanical gardens)
- Respond to the rain (It rains a lot, tourists see the rain first, cozy wooden interiors, covered walkway, the importance of interior lighting, *real* Pacific North westerners don't own umbrellas)
- Respond to the water and views (preserve views, limited public and private access to water, proximity to natural amenities increases property value)
- Agriculture
- Fishing industry
- The water-based ports and industrial areas
- Salmon culture (in festivals, in restaurants, as activists)
- Seismic and Flooding hazards (impact on built environment and development)
- Increasing interest in both growing and consuming local and organic foods and products
- Green Building increasingly desired
- Connections among these natural environments (Burke Gillman trail, Mountains to Sound Greenway, Interurban Trail) and historical environments (historic or heritage routes and trails).

*This list was generated as the product of numerous Design Team workshops.*

### 1. Observations:

Beyond its visual presence and power, the region's natural environment has shaped human activity and local history, and therefore has influenced the regional approach to urbanism. The natural environment is a part of even our most intense urban areas, such as the aquatic habitats which exist along cultural waterfronts (see Figure 8).

Water bodies and topography fragment the urban environment, forcing this region towards multi nucleated forms rather than a highly centralized one.

We have great tradition of excellence in horticulture and landscape architecture. We place a high value on views, sometimes to the point of overbuilding our steep slopes.

Climate change is on our doorstep and impacts on our water supply seem inevitable.

## 2. Summary of Relevant Multicounty Planning Policies and Principles:

Several of the VISION 2040 draft multicounty planning policies support agriculture and forestry, walking and bicycling, food systems, regional identity, natural boundaries, rural and natural resource areas, environmentally sensitive land use management and development practices, health and well-being, and the region's role in international economy. *(For a complete listing of relevant policies, please refer to Appendix B.)*

Relevant Principles: Principle 1 – Natural environment is a primary basis for regional form, Principle 2 – Apply a systems approach, Principle 3 – Design at all scales, and Principle 4 – Balance competition with cooperation (see Figure 7).

## 3. What we can imagine:

In a flight over the region, we see a configuration of well defined centers responding to natural elements and corridors. Natural systems are incorporated within the centers, and the edges of major urban areas are a well defined regional open space network of parks, trails, restored habitats, greenbelts, bluffs, and resource lands (see Figure 11). Our communities, separated by edges, give us definition of space and a span of control.



*Figure 11 Restoration of linear environmental systems, such as rivers can be combined with regional trails. Photo of Sammamish Slough restoration taken from the Sammamish Trail.*

The identity of individual places builds on indigenous character, both natural and human made. The region is not as Seattle-centric as it was; other centers have more individual cultural services and resources. Because local communities are only loosely connected to each other physically, there is heightened value to

integrating and balancing the built environment with natural systems at the local scale. Our urban fabric includes natural systems as valued amenities, whether these are daylighted creeks or restored shorelines in the middle of dense urban form. By restoring a shoreline as the central focal point for a downtown area (be it Tacoma, Bremerton, Edmonds, Kirkland, or Seattle), this region showcases the high value we place on balancing the human built and natural environments.

On smaller scales, we are no longer content for generic store-bought yards to dominate our region's landscapes. Our notions of landscaping are shaped by rediscovering and capitalizing on regionally indigenous plants. This is amplified by a regional tradition of excellent landscape architecture and horticulture related to Seattle's globally significant system of Olmstead parks and boulevards.

Culturally, we put public investments into the acquisition of damaged lands for restoration and protection. We are more restrictive in how we think about development in environmentally sensitive areas, further limiting an intrusion of the built environment into the natural ecological systems that we value, whether they are steep slopes, estuaries, or riparian buffers. This comes from a recognition that the preservation of those areas is as critical as the technical ability to build there.

Resource lands are a treasured and valuable part of the regional landscape. The region has a viable agricultural system; local food is produced on working farms. Sustainable farming and timber harvest are economically viable and important parts of the regional open space system.

Climate change affects nearly all of our defining regional characteristics, including water and rain. The possible decrease in water supply will have a profound impact on fire hazards as well as on native flora and fauna. How we respond to this major event that is taking place over time speaks to how regional resiliency figures into our decision making.

#### D. The social, cultural, and economic organization of the region.

##### Characteristics we associate with the way we think about things and the way we get things done

- Growth Management (Urban Growth Areas, Comprehensive Plans)
- Activism is important (many grassroots movements, importance of neighborhoods within cities)
- Grand plans and strong leadership are lacking, but high profile market individuals are not (Bill Gates, Paul Allen, Howard Schultz)
- Dynamic information and technology-oriented economy and creative class (cosmopolitan, outward and forward looking, high quality of life attracts people to move here and stay here).
- The Seattle Process (political action takes a long time, even outside of Seattle itself)
- Seattle-centrism (results, both positive and negative, of tension between one major city and its surrounding metropolitan and rural areas)
- Cultural diversity with a public goal of inclusionary society
- Funding services and facilities and other economic forces shape our region's identity and drive internal competition within the region
- Imitation and use of local examples (one Hot Spot competing with another for vitality)
- Community that sustains dynamic arts and culture (high arts such as symphony, ballet and theater, but *a/so* underground musical vibrancy and glorious past, literary community)
- Center for new immigration and addition of new cultures
- An informal atmosphere (polar fleece and jeans to work)
- The scale of the physical features feels impressive
- Strong culture of youth
- Highly educated population

*This list was generated as the product of numerous Design Team workshops.*

# 1 Observations:

One of the region's characteristics is its dynamic, information and technology

oriented economy. While an original attraction for moving to the region was the resource based jobs and perhaps later the attractive setting, currently the region is seen as a cosmopolitan, outward and forward looking place. The region has historically been a center for in-migration and the addition of new cultures, adding to the region's outward-looking perspective (see Figure 12).

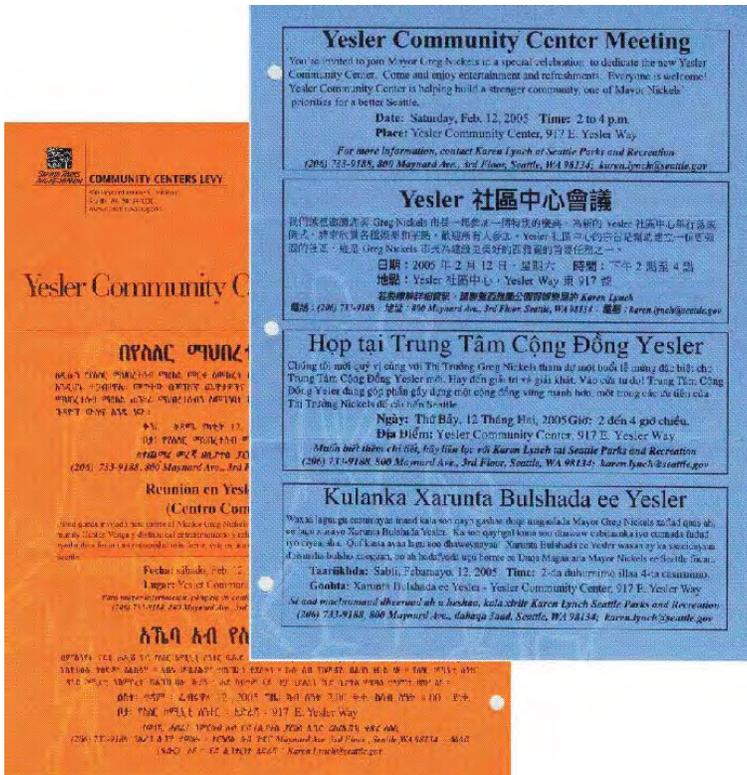


Figure 12: The region's growing global role has meant increased social and cultural diversity. The reopening of Yesler Community Center was announced in 7 languages, all commonly spoken in the neighborhood.

The region has a history of local grassroots activism and a general antipathy toward strong leaders, grand plans and top-down governmental structures. It seems that leadership in this

region, when it does happen, starts with efforts from below. Many of the region's defining artistic, business and cultural activities occur outside the arena of formal cultural institutions or large scale organizations.

It seems likely that virtual communities will create tension with more traditional notions of community as related to physical, geographically-defined space.

We evaluate the financing of public infrastructure on a short term and local basis and have a tendency to ignore the long term return on investment and regional benefits. We are currently living with the decisions 20 to 30 years ago *not* to support the long term investment in regional facilities, such as transit systems and water treatment facilities.

## 2. Summary of Relevant Multicounty Planning Policies and Principles:

Several of the VISION 2040 draft multicounty planning policies address the ways in which schools, rural areas, and regional capital facilities support the regional vision. The policies favor transit-supportive densities, a diversity of family-wage jobs, services for a diverse population, innovative planning techniques to keep growth within urban areas, strategies for strengthening the regional stock of affordable housing, community development as components of transportation projects, and targeted economic opportunities in distressed areas. The policies encourage high performance, energy efficient, and environmentally friendly development standards. *(For a complete listing of relevant policies, please refer to Appendix B.)*

Relevant Principles: Principle 2 – Apply a systems approach, Principle 3 – Design at all scales, and Principle 4 – Balance competition with cooperation (see Figure 7).

## 3. What we can imagine:

This region takes measures to include human and cultural diversity in its vision. In-migrations of new people are able to find those communities which accommodate a wide range of cultures. Lifestyles and activities that fall outside the mainstream are incorporated into pre-existing communities, creating more vibrant new communities and building on local cultural and historical amenities. This cultural and creative diversity adds a dynamism to the region, expanding its economic base as well as strengthening its sense of identity.

Across the region, communities incorporate inclusionary infill-development to ensure that affordable incubator spaces are available to low and moderate levels of income and that these spaces are integrated with market rate development in addition to being close to services, transit, and employment options. Through region-wide and consistent inclusionary policies, our regional culture promotes an equitable quality of life for all.

Everyone has good creative access to an open and transparent decision making process. On a large social scale, people maintain an open dialogue about the ways in which virtual community impacts more traditional definitions of community. Our tax and fiscal policies support growth management and quality urban design.

The region has made a dramatic investment in transportation improvements to simultaneously enhance region-wide mobility and inter-jurisdictional cohesion.

## E. The history of place

### Characteristics we associate with the history of this place:

- Settlement clustered near and interacted with water (water as transportation)
- Both borrowing from and ignoring native cultural precursors to European culture (appreciation of natural setting, salmon festivals, overfishing, ignorance of prior uses of landscape)
- Extraction (Logging, Mining)
- Volatile boom and bust economic cycles
- Rapid post-war expansion: most of the communities already existed, and they expanded outwards and grew together; some retained their historical core while others did not (opposed to California, expansion put new built environment where nothing had been before)
- Historic districts and cultural landscapes
- Agricultural roots
- Denny Hill sluicing (total willingness to reshape the land)
- Vestiges of original platting of small lots and tight streets on hillsides and early settlement and development patterns

*This list was generated as the product of numerous Design Team workshops.*



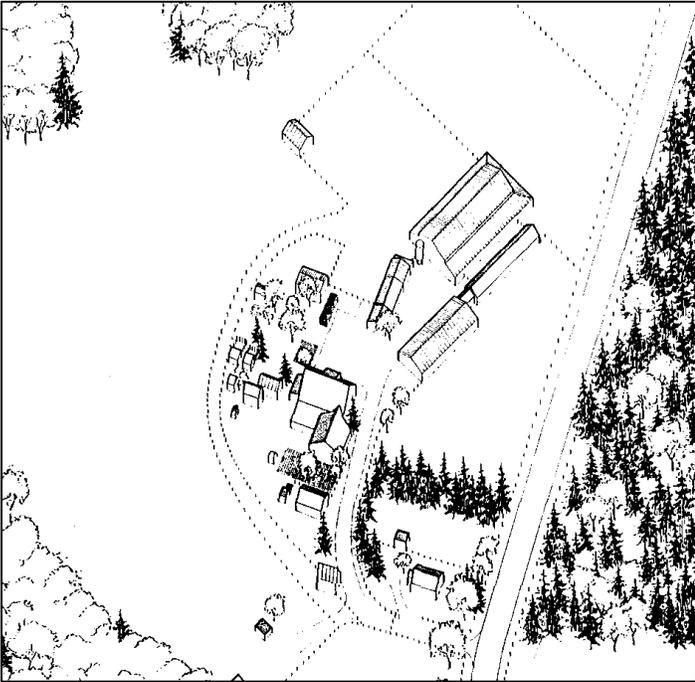
*Figure 13: The region's working landscapes are an important part of its identity. We will all lose a part of our history when the last saw mill closes down.*

### 1. Observations:

Regional character and identity flow from history and culture as well as physical setting. Our character now is determined by the sequencing of events that have come before, as well as the extent to which we collectively acknowledge or ignore those events (see Figure 13). Historical influence on the present can be thought of as a working landscape to be passed to future generations holistically and systematically, rather than as a collection of items to be preserved individually.

Many of the region's historic and cultural resources are concentrated in urban centers, which are particularly susceptible to change given the current growth strategies and our history of volatile boom and bust cycles. On the other hand, our rural and agricultural landscapes are an important part of our historic legacy and they are also susceptible to changes and development (see Figure 14).

Many communities have lost their traditional commodity base. We are experiencing a new kind of cultural settlement pattern now; the suburbanization movement now is different from post WWII suburbanization. Growth used to follow infrastructure, and now infrastructure is trying to match outward patterns of growth migration.



We have not always recalled the sense of place which the region provided to native peoples and cultures prior to the arrival of European settlers.

We are revitalizing our historic town centers and communities.

*Figure 14: Steve Juroszek has analyzed the characteristics of the Puget Sound agricultural landscape and notes that the region's farms have unique physical characteristics but can vary depending on the local setting and type of farming. This kind of information is useful in exploring ways to retain historical landscape characteristics. From Juroszek, Steve, The Characteristics and Patterns of Rural Environments in South Central King County, Masters Thesis, University of Washington 1991.*

2. Summary of Relevant Multicounty Planning Policies and Principles:

Several of the VISION 2040 draft multicounty planning policies preserve regional historic, visual, and cultural landscapes and support urban design, historic preservation, and the arts. (For a complete listing of relevant policies, please refer to Appendix B.)

Relevant Principles: Principle 2 – Apply a systems approach, and Principle 4 – Balance competition with cooperation (see Figure 7).

### 3. What we can imagine

In the same way that the region values natural amenities by daylighting creeks, this region also daylight its own unique cultural history. There is high emphasis on education that connects us to a better understanding of native perspectives on the surrounding landscape. We invest resources on the identification, location and preservation of cultural, working and Native American landscapes; these are integrated into our perceived heritage as historical or thematic districts rather than as disconnected points. This appreciation and conservation of our history counterbalances the future-oriented advances of regional development

On a local scale, spaces are enhanced so that this social and historical narrative can be articulated. Communities value the spaces that can host festivals, parades, and events that celebrate the regional relationship to diverse history. Pieces of our regional past are preserved and become a complex but integral part of our current character and identity.

## General Outcomes and Conclusions

Based on this preliminary exploration of regional character, we can draw a number of tentative general conclusions about what is important to urban design professionals when thinking about the future of this region:

- **Diversity** is a key attribute in all senses of the word: diversity of culture, space, design, use patterns, perspectives, and natural systems. The challenge will be maintaining diversity in as rapid growth patterns and corporate and marketing dominate regional development.
- This region is **dynamic**. Tension between opposing perspectives lends vitality to regional character:
  - Natural environment vs. intense urban environment – the two are relatively close in proximity here as compared to other US regions.
  - Regional design style vs. corporate architecture
  - Neighborhood autonomy vs. city governments
  - Outward looking cosmopolitan view vs. insular focus on local concerns
  - Virtual community vs. traditional face-to-face communities
  - Historical context vs. rapid development
  - Outward, international influences vs. the traditional resource-based economy and emphasis on an individualistic, outdoor-oriented lifestyle.

The challenge will be sustaining a balance among these characteristics so that diversity and dynamism are maintained.

# Chapter Four: Strategies to Shape the Region's Physical Structure

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## Overview

Participants at the summer 2006 work sessions suggested numerous actions to achieve regional design and planning objectives. The Design Team found that actions can be grouped by their physical settings and thus developed a series of strategies to address various components of the regional landscape. Each strategy outlines a program for innovative and collaborative action on issues which would benefit from a regional approach and which include components to protect and enhance valuable local and regional resources.

The Design Team detailed measures to initiate these strategies, compiling a Compendium of examples, models, programs, and resources to assist local governments and organizations in pursuing them (see *Appendix D*). The map in Figure 15 is a working visualization of the general geographic locations for all six of the strategies, which include:

### 1. Continue the development of a hierarchy of urban centers and focal points.

The region has made impressive progress implementing a vision<sup>2</sup> to create more intense, pedestrian and transit-oriented mixed-use urban centers. This strategy focuses on continuing that effort by sharing information and local experience from the last decade and by coordinating the growth of neighboring centers for greater efficiency and mutual benefit.



There are new models for concentrating growth that are proving effective but are not recognized in PSRC's regional planning. Some of these models are presented here as a means of developing mixed-use communities outside current centers. Several groupings of regional centers, such as Tukwila, Renton, Burien, and SeaTac, are emerging that could act as frames for exciting metropolitan complexes, and this strategy explores such possibilities.

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<sup>2</sup> The original VISION 2020 strategy was adopted in 1990 and updated in 1995.

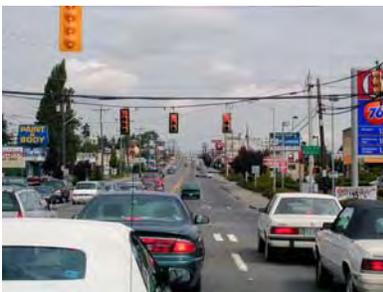
## 2. Create a green infrastructure and open space network.



A network of open spaces—including wild, rural, and urban open spaces, marine and fresh waters, agricultural and forest lands, critical areas, parks, trails, greenbelts, and green streets—is critical for the region’s environmental sustainability, recreation, visual identity, and community livability. Numerous local governments, public agencies, and interest groups are working on individual elements of this system. This strategy advocates

coordinating these efforts for greater efficiency and preparing a collaborative open space plan for the region that identifies priority actions, implementation tools, and funding mechanisms. Examples and information sources are presented to suggest methods for such integration.

## 3. Recycle Existing Urban Areas.



Many of the land forms, ecological systems, land use patterns, and transportation and infrastructure systems are essentially linear in nature. Because they usually extend beyond jurisdictional boundaries, they can best be addressed at the regional level. Moreover, these are the systems that connect communities, sustain the ecology, frame landscapes, define our visual character, and, in general, tie the region

together. This strategy calls for more focused attention and collaborative efforts on these elements, particularly on restructuring or upgrading land use and transportation systems where development and multi-modal transportation improvements should be better integrated.

## 4. Transform industrialized estuaries and floodplains.



The region’s industrialized estuaries and floodplains, such as the Duwamish, Green, Cedar, Snohomish and Puyallup Rivers, are critical to both the regional economy and ecology and offer opportunities for redevelopment and environmental restoration. They are also generally located on geologically hazardous and flood-prone areas. The long-term use of

industrial lands is an open question because there has been no comprehensive regional study of future industrial activities and their needs. Therefore, this strategy begins with identifying short and long-term industrial land use needs and proposes measures to better integrate ecological

restoration, economic development, recreational facilities, and gray field redevelopment of urbanized estuaries and floodplains.

**5. Protect threatened rural areas and resource lands.**

Retaining the rural and resource-based land uses outside the urban growth area has long been recognized as a particular challenge. At the September 2007 workshop, participants exploring this issue noted that some edges of the urban growth area are more susceptible to urban encroachment than others. This strategy calls for identifying those areas in greater detail and focusing efforts on protecting them through a variety of measures, including, land use controls, transfer of development rights, purchase of development rights, and rural design guidelines.



**6. Restructure portions of automobile-oriented suburban areas.**

The large area encompassing the arc of suburban development around the Puget Sound includes portions of many of the elements listed above, such as linear land use and transportation systems. While the urban center strategy has been quite successful, vast portions of this area remain in low-intensity, auto-oriented land uses and residential areas without walkable access or local services. This strategy recommends a variety of techniques to diversify and intensify portions of automobile-oriented suburban areas to create more livable communities. Because restructuring much of the suburban single-family areas will be difficult, the strategy emphasizes identifying special opportunities, such as near high capacity transit stations and transitioning commercial strips.



Figure 15: Compilation Map

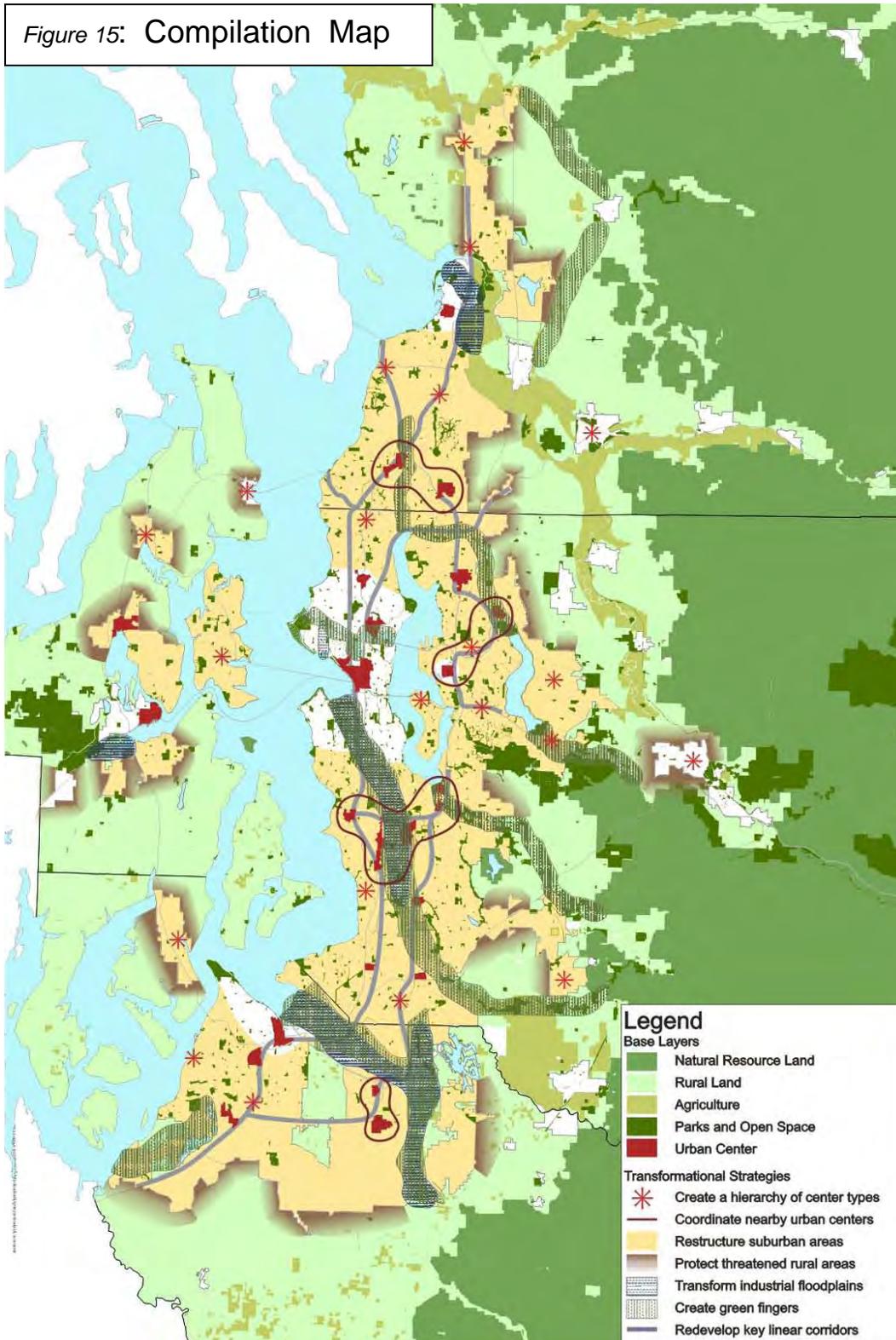


Figure 15: This map compiles the conceptualized geographic extent of all six of the strategies detailed in this chapter. (Full versions of each strategy map can be found in Appendix C.)

## Recommended Strategies

The description of each of these strategies includes:

- Issues and context: The conditions that are to be addressed and the reasons for the strategy.
- A statement of what the strategy entails and an explanation of some basic concepts.
- Goals and policies supporting the strategy. These are summarized from VISION 2040's draft multicounty planning policies.
- Priority actions. Recommended actions that PSRC or other entities can undertake to initiate the strategy's implementation.
- *Initial examples to illustrate how design elements of the strategy can be applied are compiled in the Compendium, Appendix D. Some of the models are new conceptual ideas while others describe practices and projects that exemplify the types of actions recommended.*

***Note on all the maps illustrating these strategies:***

*The maps which accompany this chapter are conceptual and do not necessarily accurately indicate the location or extent of features shown. For example, the brown strips indicating where priority should be given to protect threatened rural areas are not based on the extensive analysis that would be required to map such areas. Additionally, the colors do not imply that the strategy would be directed to the whole area shown. For example, it is not the intent to create open space throughout the "green fingers" shown on the map. The strategy is to protect, enhance, create and connect open spaces within those fingers, but it is acknowledged that the open spaces would only encompass a modest portion of the land uses within those areas shown in green.*

# 1. Continue the Development of a Hierarchy of Urban Centers

## Issues and Context

The 1990 VISION 2020 plan and the 1995 Update emphasized the establishment of higher intensity mixed-use centers connected by a multimodal transportation network. These earlier editions presented compelling descriptions of the way in



Figure 16: Walkable streetscape in Bremerton's urban center. Courtesy PSRC Design Guidelines Manual.

which centers could provide for more efficient land use and transportation systems and attractive living conditions. This strategy has worked well. Many municipalities have taken ambitious steps to create urban mixed-use centers. These range from the dramatic revitalization of urban centers, such as Bremerton (see Figure 16) and Tacoma, the continued intensification in Seattle, Bellevue, and

Kirkland, and the development of new downtown districts, such as in Kent and Renton, and the creation of an all new center in Mill Creek.

## Recommendations

While the creation and enhancement of urban centers is accomplished by individual municipalities and is proceeding well, there are a few opportunities where regionally based support and facilitation could enhance local efforts, namely:

**1. Create, or at least support, means of sharing urban center development techniques to assist local efforts.** Individual municipalities have learned many practical lessons about urban center development. These lessons, tools, and best practice examples should be compiled and made available to other communities. Information sharing activities might include: mini-conferences, workshops or symposiums to discuss a special topic; research reports; case studies to explore new techniques; or compilation of relevant examples. Special topics could include:

- Public-private partnership techniques (example: Kent Station, see Figure 17)

- Methods of providing open space and guidelines for urban open space
- Building an urban center near a large institutional or regional facility
- Multicriteria analysis of public actions (e.g., public costs of encouraging urban center development vs. long-term revenues)
- Use of market and feasibility analyses in urban center development
- Design review techniques
- Funding of public improvements

PSRC, in its role as an information source and coordination organization, would be a likely initiator of this activity. The Municipal Research Center, local American Planning Association chapter, Futurewise, or CTED are likely partners and may lead certain efforts.



Figure 17: Kent Station, courtesy PSRC

- 2. Encourage new models for urban centers.** PSRC has established particular definitions for regional growth centers. Some of the counties have more extensive hierarchies of central places, while other established areas would benefit from creating walkable, mixed-use concentrations of development. For example, there are potential nodes along arterials and commercial strips (especially at transit stops) where there is currently no opportunity to meet urban center criteria but where increased pedestrian-oriented mixed-use development would serve regional growth management and local neighborhood interests. Similar situations occur in outmoded shopping centers, shopping centers being redeveloped, key locations in large suburban residential tracts, and unincorporated urban areas within the urban growth area.

These areas should be recognized, particularly as places where the urban center development techniques recommended above are also appropriate. Part of this recommendation is also to recognize the important contribution of these different types of urban concentrations and to ensure that they receive appropriate levels of funding and support, especially when opportunities for redevelopment occur as part of transportation improvements.

- 3. Coordinate the development of nearby urban centers and integrate their functions for greater efficiency.** Within the region, there are several

groupings of urban centers which are in close proximity to one another, especially in suburban areas; these groupings would benefit from inter-jurisdictional coordination, improved transportation links, and integrated economic development and land use planning strategies. (See Figure 18 as well as Figure 36 in Appendix C for the full map.)

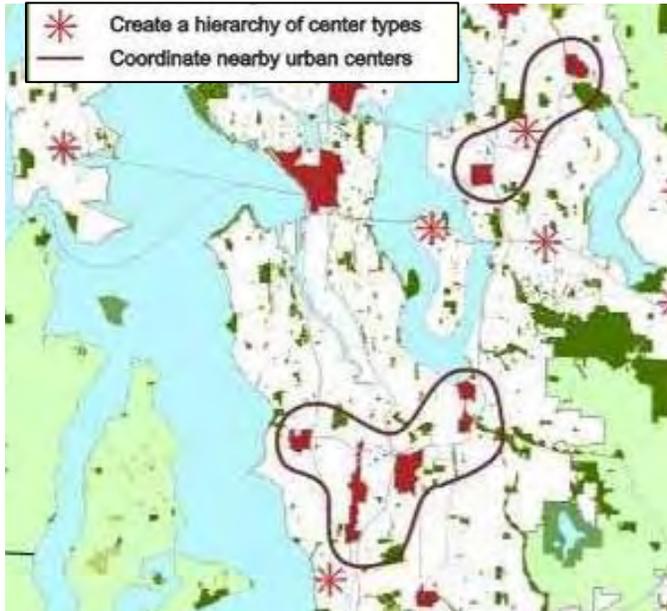


Figure 18: Potential spatial groupings of nearby centers. (See also Figure 36 in Appendix C for the full map.)

For example, in some cases one city's center has a larger population base, while another acts as an employment or retail center. Linking these two or three centers together with high-capacity transit might benefit each jurisdiction. Or perhaps two jurisdictions with close urban centers might collaborate on a regional park with trails to both communities.

Cooperative efforts might begin with discussions regarding mutual interests and progress to cooperative planning,

intergovernmental agreements regarding land use and infrastructure (such as the Bellevue Redmond Overlake Transportation Study), and finally, where appropriate, some form of revenue or cost sharing. Admittedly, this is an ambitious goal, but the rewards for such an effort could be great. For example, by working together and thinking of themselves as spatially connected, a group of municipalities along a transit line could more effectively lobby and increase their priority for high capacity transit improvements.

### Supporting Policies

VISION 2040's draft multicounty planning policies call for providing a regional framework for designating and evaluating centers. Additional policies address the development of other types of centers and activity nodes, as well as priority funding for centers.

### Priority Actions

1. PSRC, the University of Washington, or other agencies or institutions should prepare guidance materials to assist local governments in developing centers, including new concepts in different types of centers.

## 2. Create a Green Open Space Network

### Issues and Context

Open space is critical for the region's ecological sustainability, livability, resource conservation, and visual identity. Open space accomplishes many functions, including those addressing:

- Ecological systems
- Recreation and human health
- Access and circulation
- Visual identity
- Resource land preservation
- Livability, especially in urban centers

The region is especially blessed with open space resources. Wide areas in the Cascade Mountains are in public ownership. The sound and lakes act as large visual and recreational open spaces. Agricultural valleys still maintain some of their open, rural character. The beginnings of an extensive regional trail system are in place, and local governments have developed a spectrum of much loved public parks.

However, in order to further achieve the open space functions noted above, the region must take further action to upgrade its open space systems as a comprehensive whole. The following challenges still remain:

- **Connectivity.** Open spaces are more used if they are connected in linear networks and trail systems. While the region has made great strides in this regard, there are critical missing trail links and unrealized opportunities for extending greenbelts and linear open spaces.
- **Enhancement of Ecological Systems.** Open space protection and enhancements are needed for protection of wildlife habitats, salmon recovery, and, more fundamentally, the general health of aquatic systems.
- **Integration.** To be most effective in achieving recreation and community livability, open spaces must be integrated with surrounding development. In these instances, the design, location, and relationship to surroundings are important.
- **Use of Streets, Boulevards, Utility Easements, and Other Resources.** Because open space is so expensive, especially in urban areas, the use of streets and other lands—as well as public-private partnerships—is key to meeting local and regional greenspace needs.
- **Protection of Existing Resources.** Many of the region's most loved open spaces are privately owned agricultural lands and forested areas. Actions may be required to ensure that these lands remain in resource-based uses.

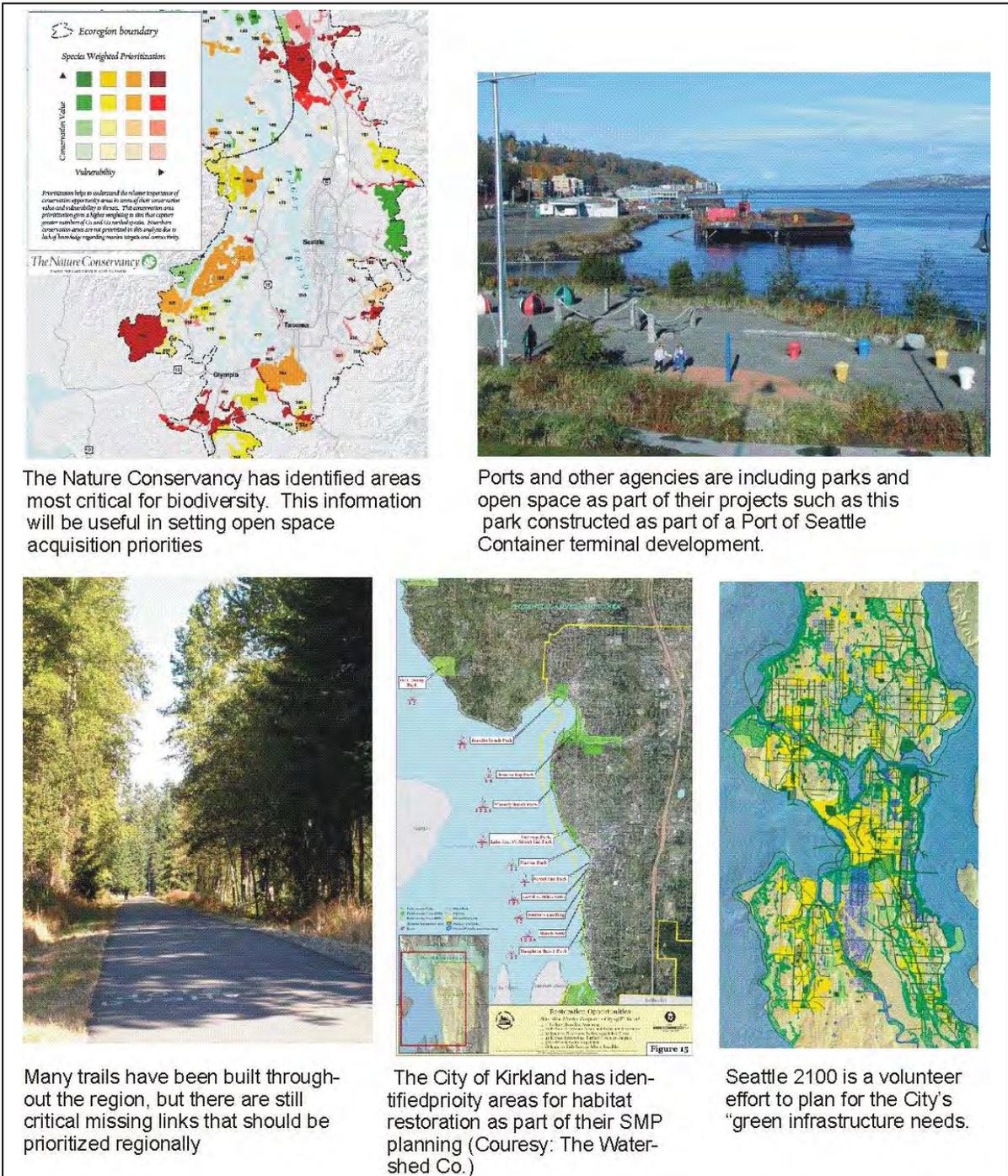


Figure 19: Several non-government organizations and local governments are actively working on elements of open space planning. Some are for specific jurisdictions, others focus on trails and still others pursue ecological objectives. The key is to combine these efforts and establish a more comprehensive approach maximizing all objectives, setting priorities, leveraging opportunities and building regional consensus for action.

Numerous local governments, agencies, and volunteer groups are currently working to upgrade the amount and quality of open space in the region (see Figure 19). Most parks departments are implementing comprehensive park plans, and some local planning departments are ensuring that new development either contributes funds for or includes usable open space. Several regional trails are being improved segment by segment, and some new highway improvements, such as the SR 520 bridge replacement, include separated bikeways and open space improvements. In terms of environmental efforts, Watershed Resource Inventory and Assessment teams have prepared habitat conservation plans that identify protection and restoration measures in each watershed, and The Nature Conservancy has identified priority habitats most important to the region's biodiversity that are threatened with development. Snohomish, King, and Pierce County have each undertaken a separate sustainable agriculture program. Non-governmental organizations such as the Cascade Land Conservancy, Seattle 2100, and land trusts are working on their own initiatives.

## Recommendations

Figure 20 shows the geographic conceptualization of what a regional open space plan could look like which would organize and support these various efforts for maximum benefit. Such a plan would:



*Figure 20 Initial conceptual identification of key green corridors.  
(See also Figure 37 in Appendix C for the full map.)*

- Present a clear vision of how the various efforts and recommended actions would result in a regional open space system serving ecological, visual, recreational, economic, and community objectives.
- Create greater collaboration between the various entities improving the area's open spaces.

- Identify priorities for regional funding, including key missing links in trail systems, shoreline restoration projects, projects for communities deficient in open space, and special opportunities.
- Include a funding and implementation mechanism, such as a Regional Open Space Investment District, similar to the Regional Transportation Investment District. Other implementation measures might include a regional transfer of development rights or purchase of development rights program or incentives to keep resource lands in active production.
- Develop tools and techniques to address common issues within the region, such as measures to provide open space in highly urbanized areas and in unincorporated urban areas outside the urban growth area, agricultural land retention, use of streets and other resources as open space, and bicycle facility design in downtown situations.
- Create regional open space linkages. A fundamental concept from the Design workshops was the notion of water systems and associated open spaces extending upland with the arc of agricultural, forested, and park lands, while fingers of green from those lands extend in towards the water.
- Integrate open space improvements with land use, transportation, and economic development planning. For example, the transformation of industrial estuaries will provide an opportunity to extend some of the green infrastructure along the region's waterways. While open space should be a part of urban center and station area development, the green space should be leveraged to provide development incentives and economic benefits as well.

PSRC, because of its regional coverage and comprehensive growth management and transportation responsibilities, would be a likely entity to lead in the preparation of a regional open space plan.

### Supporting Policies

VISION 2040's draft multicounty planning policies call for identifying, preserving, and enhancing significant regional open space. The VISION 2040 draft plan includes a proposed implementation action calling for the development of a regional open space strategy.

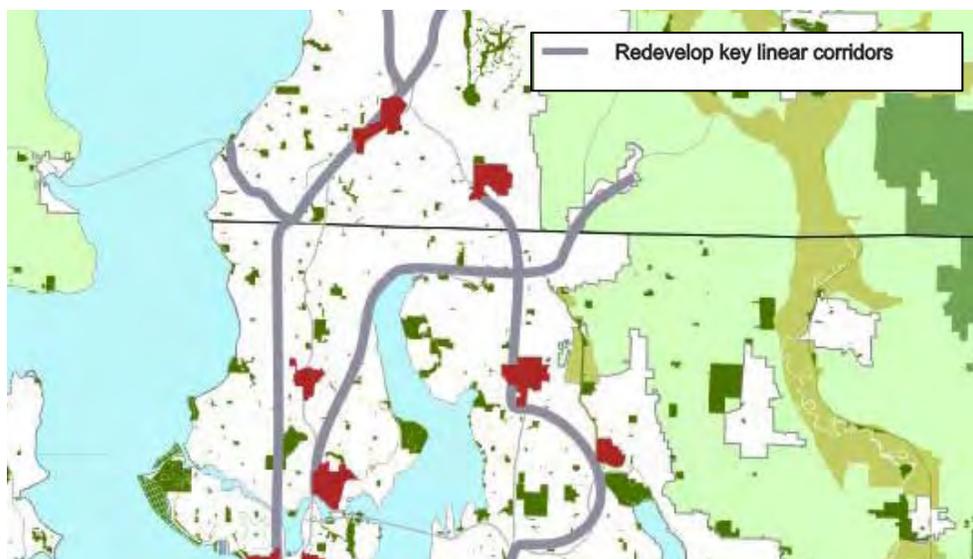
### Priority Actions

1. In conjunction with other entities, develop a regional open space plan integrating current open space, environmental, and comprehensive planning activities.
2. Initiate funding mechanisms for regional open space acquisition and development.

### 3. Redevelopment Opportunities – Recycling Existing Urban Areas

#### Issues and Context

Major portions of the urban region have significant vacant or underutilized land in previously developed areas – these sites used to have, or may still have, buildings, parking, and other uses. Given the pattern of historic development along our waterways and transportation routes, many areas for possible redevelopment or infill are linear in character and function. (See Figure 21 and also Figure 38 in Appendix C for a full map.) This pattern has granted unbalanced emphasis on transportation systems at the expense of the land use development that those systems infringe upon.



*Figure 21 Areas to focus redevelopment opportunities. (See also Figure 38 in Appendix C for the full map.)*

This strategy, which rethinks the more linear-type development of the region's past, is critical because:

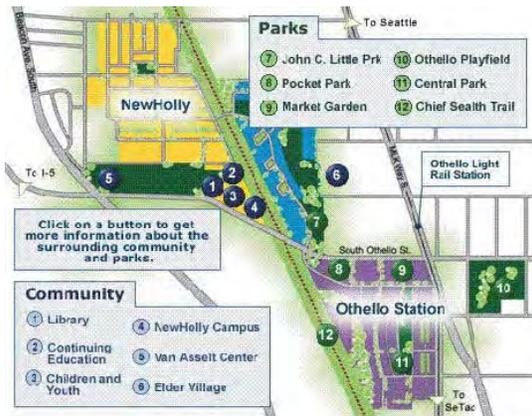
- Much of our current linear land use patterns, especially along roadways, is counterproductive to community development and degrades the performance of transportation systems.
- Even using current planning and design practices, it has proven very difficult to redevelop the land along these linear systems into configurations which are more suitable for a human scale and which are better integrated into surrounding neighborhoods

- Transit and transportation will continue to connect nodes from one jurisdiction to the next, so we need collaborative and shared strategies.
- There is the opportunity to create a distinct sense of place and integration of land uses and transportation systems at individual activity nodes and transit station areas.
- Movement is primarily point-to-point. Because it is important to integrate mobility, land use, and the environment, we need strategies to seam the mobility systems from activity nodes into adjacent neighborhoods and districts.

Where redevelopment opportunities occur along natural systems, such as rivers, shorelines, valleys and ridgelines, infill and new development can be designed and constructed in a way that helps to enhance the natural functions of these systems. Along key arterials and thoroughfares, opportunities for infill and redevelopment should be pursued in a more holistic manner that coordinates land use and transportation planning. For example, roadways should be reconstructed to become multimodal facilities that better accommodate transit, walking, biking and the movement of goods, in addition to automobiles. Previous strip development should be refocused around nodes and activity points along linear travel routes.

Context-sensitive design is a desired approach for considering the total community and environmental setting, thereby linking transportation decisions with land use and vice versa. Such an approach is collaborative and interdisciplinary and involves various stakeholders to ensure that transportation facilities (and adjacent properties) are redeveloped in a manner that fits the given physical setting while preserving scenic, aesthetic, historic, and environmental resources.

Numerous municipalities and communities in the region are attempting to redevelop commercial strips (see Figure 22). Examples of successful street reconstruction projects and redevelopment of strips into higher density nodes and hubs exist throughout the region, such as in University Place in Pierce County and Shoreline in King County. The recommendations below build on these efforts and are intended to help create more efficient, more functional, and more livable districts that complement our primary regional growth centers.

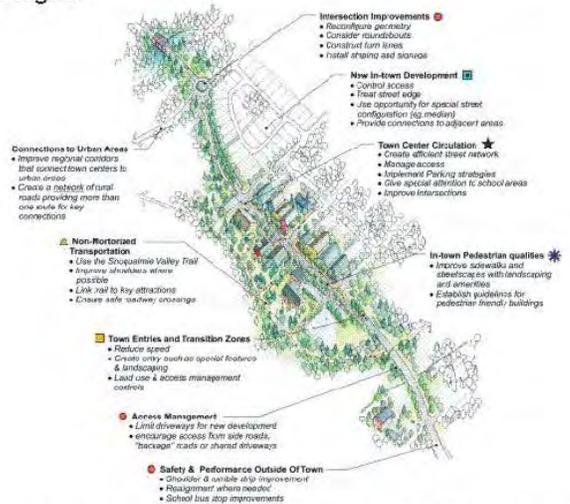


Seattle Housing Authority's New Holly and Othello Station leverages a comprehensive set of LRT, park, and community development actions to create a new neighborhood in the Rainier Valley corridor.

Edmonds is working with property owners to revitalize portions of the Aurora corridor. Innovative ideas such as a "North International District" have emerged



Lake City Way illustrates how street improvements and rezoning/community development efforts can transform an auto-oriented strip; although it took nearly 20 years to achieve the high density mixed use development.



PSRC conducted the "Rural Town Centers and Corridors" study which identified practices to better combine highway design and rural community development and resulted in funds for similar rural corridor improvements

Figure 22: Examples of strip redevelopment projects

## Recommendations

- 1. Focus on specific areas that provide opportunities for redevelopment and transit.** While properties along many stretches of older highways and arterials are sometimes sandwiched between the street in front of them and single family neighborhoods to their rear, there are some nodes and intersections where larger, mixed use development could occur. Additionally, there are other sections with near by amenities or institutions that might support desirable residential neighborhoods. Frequent and reliable transit can also serve as a catalyst for redevelopment.
- 2. Consider all major transportation projects as community development projects.** Part of the funds for any major arterial, highway or transit corridor project should include a significant community redevelopment component that employs the full complement of public and private land use redevelopment strategies. Redevelopment of poorly performing properties may be cost effective for the local community in the long run. A pilot project would be useful for initiating this proposal. In addition to allocating resources to community development, other techniques would set a strong framework for integrating transportation and land use. For example, Seattle's street classification system includes a consideration of adjacent land uses and community setting, and Tacoma's street reconstruction supporting its light rail link is creating a much more attractive development setting.
- 3. Reconstruct automobile-dominant arterials as multimodal facilities.** In the urban region, thoroughfares should be redesigned and rebuilt to better accommodate transit, bicycles, pedestrians, and goods movement, along with vehicular traffic. Redesigning arterials to become multimodal boulevards provides an increased impetus to foster redevelopment and infill that is more transit-oriented. Models for new clusters of development may be similar to those being built in response to the LINK light rail system. A recent example is the reconstruction of Aurora Avenue in Shoreline with a Business and Transit (BAT) access lane which makes transit more efficient. Landscaping improvements along the segment create a better environment – both physically and aesthetically – for the community and for economic development. Transit systems are not the only transportation projects that can foster desirable redevelopment. Bicycle trails and greenbelts are proving to be an attractive amenity that can encourage residential growth and should be used as a development incentive.
- 4. Utilize emerging public-private development techniques to build better development.** Reconstruction of older arterials and redevelopment of adjacent properties particularly worthy of public attention and resources and also attracts private sector investments. A program to encourage local governments to foster arterial redevelopment might lead to greater progress, especially if it can be combined with physical street improvements that will alter the character of the street and access to adjacent properties.

- 5. Consider the sequential experience and aesthetic qualities in the design of transportation systems.** Of course, transportation designers already consider aesthetics, but too often landscaping, special features or simply the cleanliness of street elements do not receive the attention they merit. Also, the quality of many streets varies from community to community along an arterial or highway. This recommendation is for designers to take a more ambitious look at roadway aesthetics, especially as a part of an area's redevelopment. Additionally, the sequence of views, vistas and spaces that travelers experience as they move from section to section should be considered, as this is perhaps the most common way people experience the region and also contributes heavily to people's visual image of the region. Low impact development techniques can be introduced that create innovative approaches to dealing with stormwater runoff from streets and roadways. Boulevard treatments, with tree canopies and other landscape improvements, are visually pleasing and are known to reduce surface temperatures and pollutants.

### Supporting Policies

VISION 2040 includes draft multicounty policies that call for integrated and interdisciplinary approaches at all levels of planning, transformation of underutilized lands to higher density mixed use areas that complement centers and existing neighborhoods, encouraging alternatives to driving alone, and increasing travel options.

### Priority Actions

1. Initiate a program to plan selected areas around high-capacity transit stops. This might be a cooperative effort between Sound Transit, local transit providers, and PSRC.
2. Conduct a pilot study of a small redevelopment site along an arterial which would otherwise present redevelopment challenges.
3. Study the option of more assertive public redevelopment efforts such as a public development authority for a specific corridor or set of corridors. Explore the option of urban renewal actions along appropriate highway sections.
4. Encourage local jurisdictions to develop redevelopment plans that include design measures, similar to the PSRC Rural Town Centers and Corridor project.
5. Initiate an effort to direct transportation projects to include community redevelopment funding. This would be a more pro-active approach to mitigation and a way to leverage the transportation project with development that increases multimodal transportation.

## 4. Transform Industrialized Estuaries and Floodplains

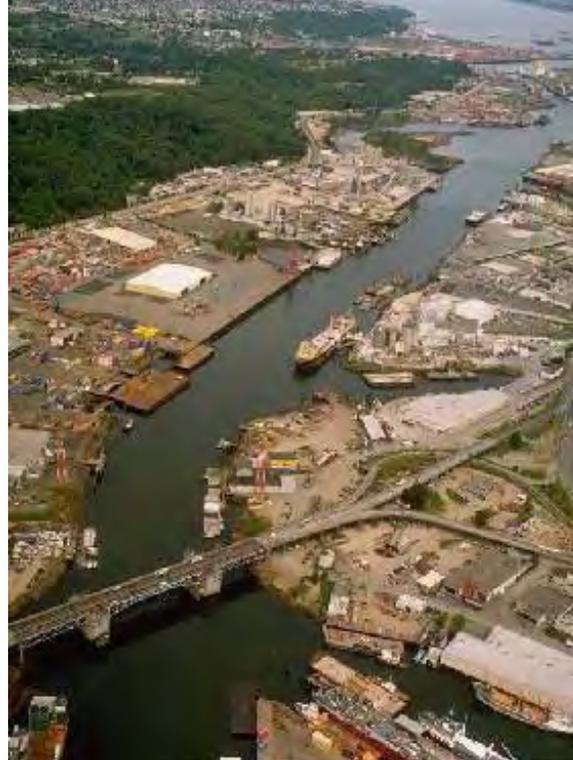
### Issues and Context

Puget Sound's estuaries are potentially among the most biologically productive ecosystems in the region. They are critical to the proper functioning of marine nearshore habitats and the watershed as a whole, making their restoration a key part of salmon recovery efforts. Likewise, environmentally healthy floodplains and their systems of river channels, wetlands, and plant communities are essential for critical ecological processes which are in turn necessary for healthy aquatic and terrestrial habitats, water quality, and flood hazard minimization (see Figure 24). Unfortunately, most of our urban estuaries and floodplains have been heavily developed, frequently for industrial and commercial activities. Vitrally productive mudflats and salt marshes have been dredged and diked and upland wetlands filled and paved. Natural river channels, so important for salmon migration, have been encased in concrete. As a result, only a fraction of the ecological benefits of Puget Sound's estuaries and floodplains remain.

From a human use standpoint, industrialized areas have been critical to the region's economy, providing facilities for water-dependent activities such as ports, boat construction, processing of materials shipped by water, and marinas (see Figure 23). However, as the importance of waterborne transport and



*Figure 24: Biologically productive and ecologically balanced estuaries and floodplains.*



*Figure 23: Industrial areas critical for economic vitality*

industry has lessened over time, high-intensity water-dependent industry has been in many cases replaced by nonwater-oriented commercial uses. Additionally, the river systems extending from the sound to the mountains are seen as a potential public amenity, as part of a regional open space and trail system. Portions of the river systems also pass through or near urban centers, where they could foster ecologically sensitive mixed-use redevelopment.

The challenge, then, is to transform these urbanized estuaries and floodplains into more ecologically productive, efficient, multi-use areas that further ecological, economic, recreational, and community development objectives (see Figure 25).

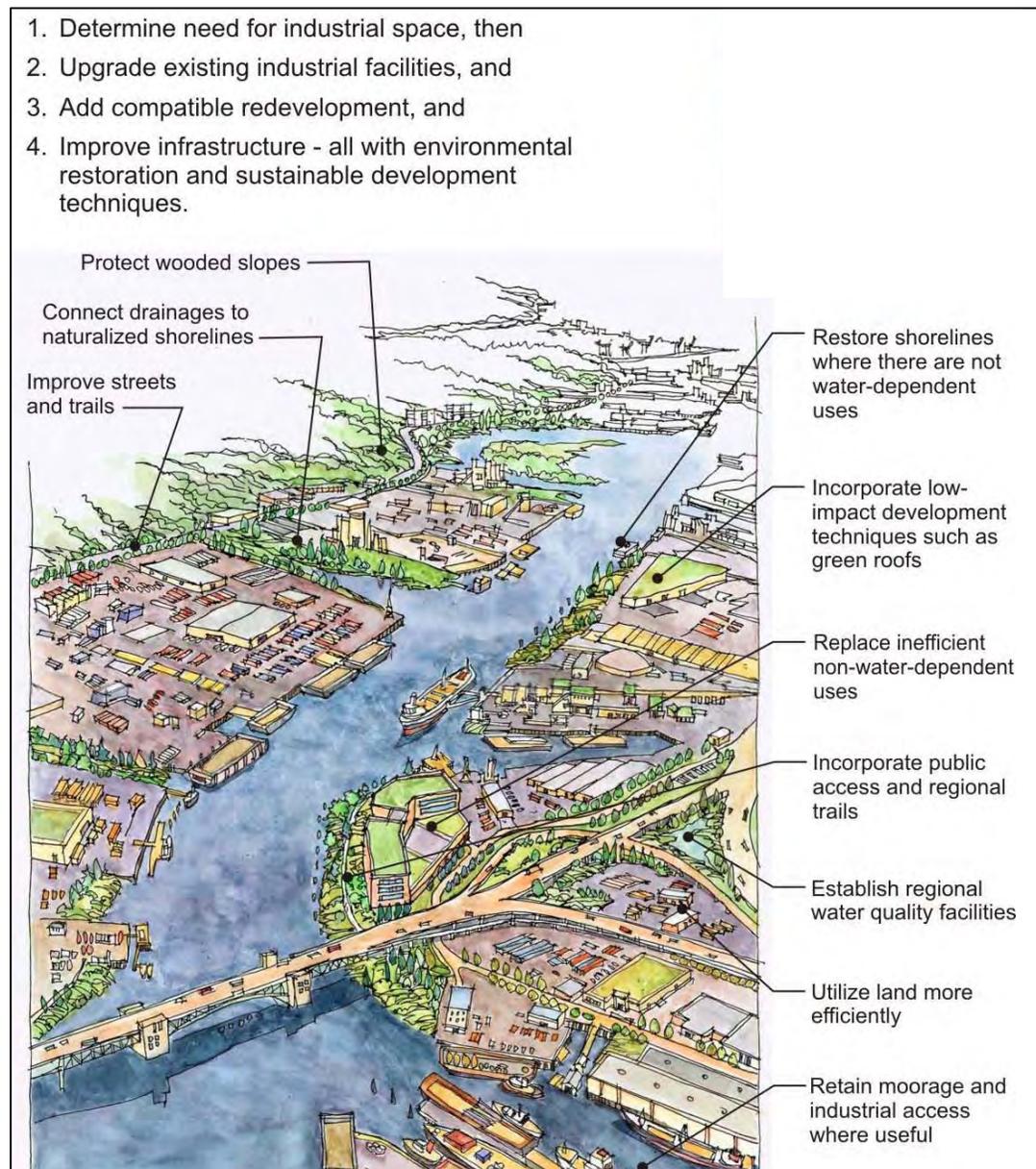


Figure 25: Transforming the industrial landscape shown in Figure 23. Diagram courtesy MAKERS Architecture

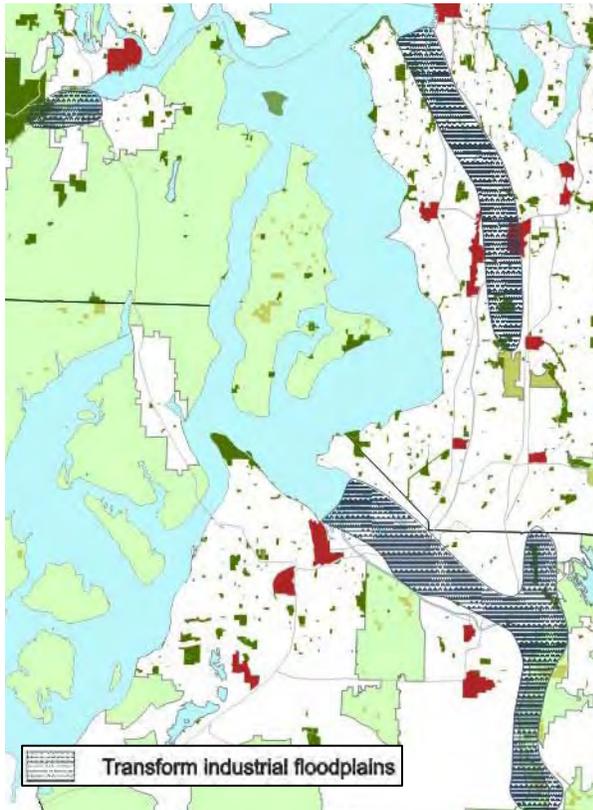


Figure 26: Conceptualization of where industrialized lands coincide with key estuaries and floodplains. See also Figure 39 in Appendix C for the full map.

## Recommendations

Numerous municipalities, port districts, governmental agencies, and organizations are working to restore urban shorelines and link trail and recreation systems. What is missing, at least on some estuaries, is first, a comprehensive, organized approach and second, incorporation of redevelopment to achieve multiple objectives (see Figure 26 and also Figure 39 in Appendix C for a full map). Therefore, the following steps are recommended:

**1. Identify current and future regional needs for industrial lands, particularly those dependent upon proximity to the water (water-dependent uses).**

Better understanding of the region's needs for types, locations, and amount of industrial land is critical for

economic development and land use planning, as well as for estuary and floodplain restoration and redevelopment.

**2. Identify priority shoreline and environmental restoration projects.**

The Waterfront Resource Inventory Assessment (WRIA) plans have already identified a comprehensive set of restoration projects, and new shoreline master programs will include comprehensive, jurisdiction-wide shoreline restoration plans. So, much of this step will already be accomplished.

**3. Identify priority park, open space, and trail needs and opportunities.**

Most jurisdictions have already identified desired open space and trail elements.

#### **4. Identify potential redevelopment sites.**

Most urban estuaries, even in intensely developed areas, contain unused or underused sites. Some of these have access to navigable waters but others are located on shallow waters of marginal utility for water-dependent uses.

#### **5. Based on information from items 1 through 4 above; prepare a comprehensive redevelopment and restoration strategy for the estuaries and floodplains.**

As noted above, most of the base information (except for cost of industrial land needs) has been accomplished. The key is to actively combine those objectives across jurisdictions and to focus on redevelopment as a tool to achieve environmental, economic, and recreational objectives. In establishing different areas for various uses and restoration activities, preference should be given, in descending priority, for:

- a. Water-dependent industries, environmental restoration, and public access.
- b. Other water-dependent activities.
- c. Uses and activities that use the shoreline as an amenity (water-enjoyment uses).

Various mixes of compatible uses should be encouraged; for example: build residential development (especially as part of mixed-use development), where restoration and public access is provided, where it is compatible with nearby uses, and where water-dependency is not a high priority.

#### **6. Prepare an action strategy to implement the plan.**

The implementation program should identify use regulations, development standards, or design guidelines to direct new development, as well as a list of priority capital improvements. A coalition organization of affected governments, agencies, organizations, and stakeholders may be necessary to coordinate implementation.

The three salient aspects of such redevelopment or restoration plans are: first, to leverage and coordinate existing activities toward a larger vision; second, to think in more creative terms about mixing uses along industrialized shorelines; and third, to build cooperation among all participants.

Success will largely be dependent on a coalition of governments, agencies, and organizations articulating a compelling case for action—and then sustained cooperative effort over time. But linking economic, environmental, and community objectives on this issue can bring results. For example, PSRC's VISION 2040 document incorporates a substantial environmental element that the strategy to transform industrialized estuaries will support.

## Supporting Policies

VISION 2040's draft multicounty planning policies address improving air and water quality, soils, and natural systems to ensure the health of people, fauna, and flora. They also promote the use of innovative environmentally sensitive development practices and the redevelopment of brownfield sites.

## Priority Actions

Two actions are recommended to initiate this strategy:

1. Conduct a study to forecast the amount, type, and location of industrial lands needed in the short and long-term future, especially water-dependent industrial sites.
2. Conduct a pilot study for an estuary and floodplain restoration or redevelopment plan to test the application of the strategy described above. This pilot study would follow a process similar to the one PSRC employed in the Rural Town Centers and Corridors Program.

## **5. Protect Threatened Rural Areas and Resource Lands**



*Figure 27: Rural and agricultural land in the central Puget Sound region.*

### Issues and Context

Current vesting laws in Washington state continue to allow some urban-type growth to creep into rural areas and resource lands. Some areas just outside the urban growth area are particularly susceptible to new growth for several reasons, including:

- There is no natural or ownership barrier to development—such as a water body, steep cliff, or public lands.
- There is extensive development pressure due to good access or especially desirable land.
- Ownership is in smaller parcels, which makes it difficult to use as resource land but easy to develop.

- Some of the area has already been developed into residential or commercial uses.

Retaining the open character and resource function of these areas will be especially difficult. Additionally, some lands are especially valuable for ecological, visual, and recreational reasons (see Figure 27). For example, The Nature Conservancy has compiled a profile of areas that are both key to maintaining biodiversity and threatened by development (see Figure 28).

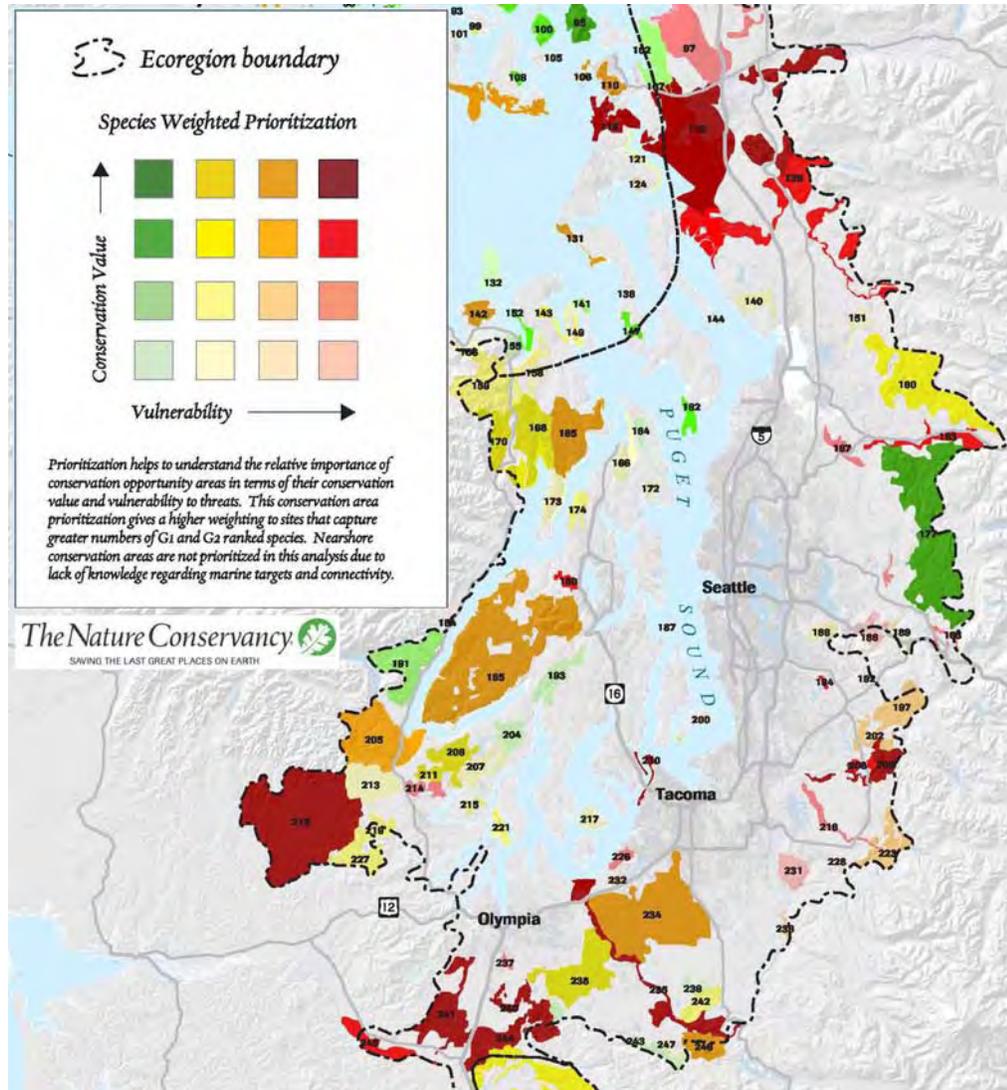
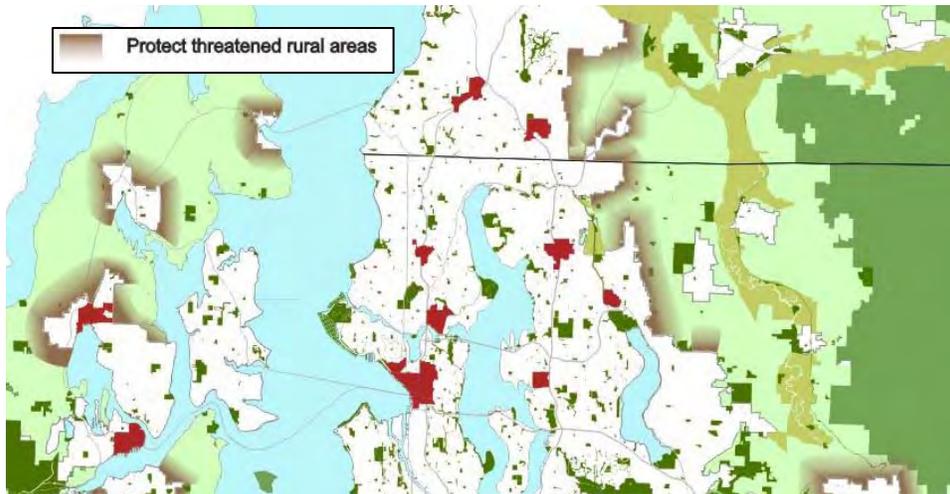


Figure 28: Nature Conservancy has mapped areas in the central Puget Sound region that are both essential to biodiversity within this ecoregion and threatened by development pressures .

Numerous small lots platted prior to the Growth Management Act that are gradually being developed. This development erodes rural character and exacerbates transportation demands in rural and suburban areas.

## Recommendations

### 1. Identify and focus rural and resource land preservation efforts on those areas that are most threatened and valuable.



*Figure 29: Conceptualization of areas of the urban growth area that may be susceptible to additional growth pressures. (See also Figure 40 in Appendix C for the full map.)*

The map in Figure 29 (and the full map in Figure 40 in Appendix C) is conceptual only, so a detailed inventory of those areas should be undertaken. All available rural and resource protection tools should be considered (illustrated in Figure 30 and Figure 31, including:

1. Purchase and transfer of development rights programs (PDRs and TDRs).
2. Tax incentives.
3. Conservation zoning ordinances.
4. Rural design guidelines.
5. Low-impact development standards.

### 2. Explore, refine, and implement rural and resource land preservation tools.

Many of the tools named above have been used in isolated cases. A comprehensive and in-depth study regarding the utility of these tools should be undertaken, perhaps by conducting some case studies to test them.

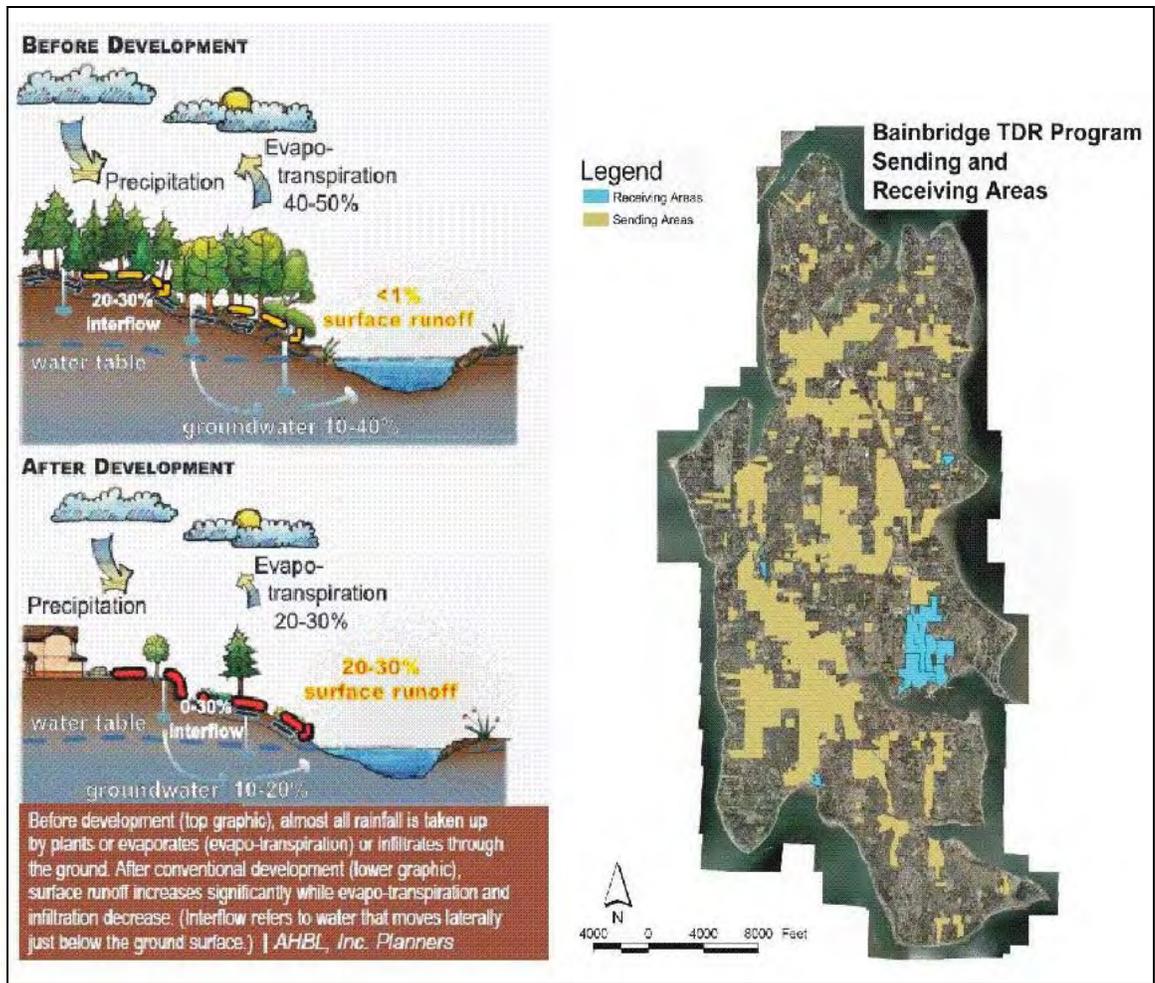


Figure 30: Protecting open space and resource based activities near the urban growth boundary will require a number of design and planning tools. Two of these will be low impact development and transfer of development rights.

### Supporting Policies

VISION 2040's draft multicounty planning policies call for sustaining the ecological functions and resource value of rural lands, using innovative and environmentally sensitive land use management and development policies and applying various tools to prevent fragmentation of rural lands.

### Priority Actions

1. PSRC should identify developmental threats to rural and resource lands and develop mitigation measures to address these threats.
2. PSRC, in partnership with the counties, the University of Washington, and CTED, should conduct a study identifying useful planning and design tools to protect rural and resource lands from development.

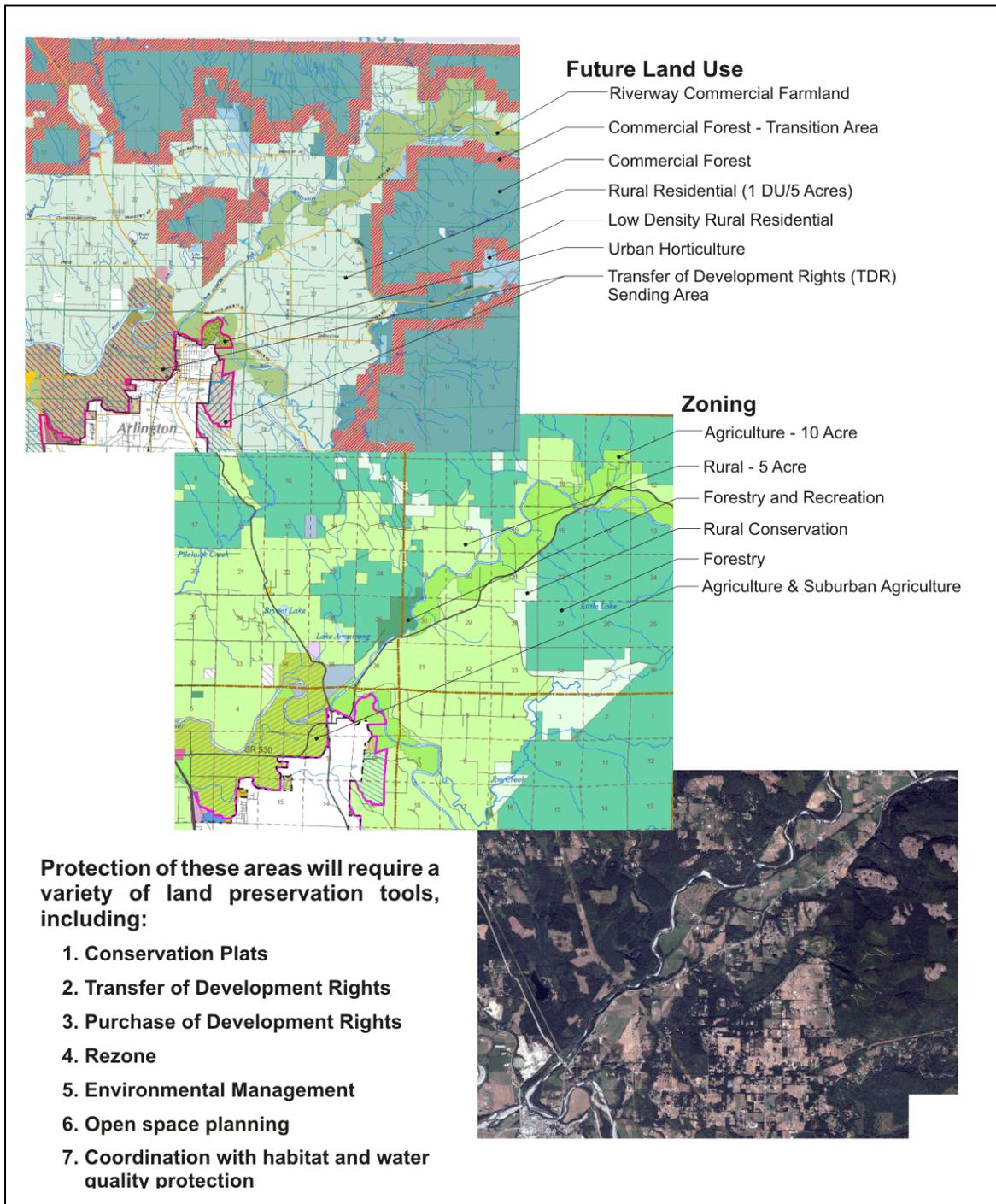


Figure 31: Tools for protecting threatened rural areas susceptible to suburban development outside the urban growth area

## 6. Restructure Portions of Auto-Oriented Suburban Areas

### Issues and Context

Seen from a regional perspective, or from the 3,000-foot-high vantage point, the arc of suburban development—from Marysville south to South Hill in Puyallup and northward up the eastern margin of the Kitsap Peninsula—is relatively homogeneous and diffused. Composed mainly of tracts of low-density single-family residences, crisscrossed by arterials with commercial strips, and punctuated by shopping centers of various sizes, this mid to late-20<sup>th</sup> Century land use pattern has proven attractive to many families. This suburban land use structure has several disadvantages; namely, it is auto-reliant, supports only minimal transit service, and does not typically create cohesive and distinct neighborhoods and housing choices. (See Figure 32 and also see Figure 41 in Appendix C for the full map.)

While these characterizations are gross generalizations, it is clear that many areas within the suburban arc and outside of the urban centers would benefit greatly from some restructuring to provide:

- More walkable neighborhoods, with convenient commercial and transit services.
- Greater housing choices.
- More efficient land use.
- Greater visual diversity and identity.

Most of the incorporated areas within the suburban arc are largely developed, but there are also large unincorporated areas that are at least only partially developed. Most of these unincorporated areas are rapidly developing, generally without the community structure to provide livable, walkable neighborhoods or efficient land use patterns. Immediate action is needed if these areas are to provide viable, sustainable communities.

There are two different conditions to address: largely developed areas



*Figure 32: Many portions of the suburban arc will face common issues as they increase community livability and decrease automobile dependency*

within municipal boundaries and rapidly developing unincorporated areas within the urban growth area. These two conditions are discussed separately below.

Within developed incorporated areas, single-family residents will likely be resistant to change. Even new multifamily or mixed-use development at the perimeter of residential tracts may be opposed. Therefore, opportunities for adding intensity, diversity, and even community-based improvements will be location-specific and generally on commercial or undeveloped sites. At the local level, better transit, pedestrian and bicycle circulation, local services, and community cohesiveness can be provided in limited circumstances through traditional planning and community development tools, such as rezoning, street and park improvements, and housing programs (see Figure 33).

### Recommendations

A regional strategy for transforming suburban areas consists mainly of several tools discussed in other sections, including:

- **Centers.** Expand the types of centers that receive attention and promote greater cooperation between nearby centers.

Projects such as the Overlake park and ride mixed use development can strengthen a neighborhood by providing transportation services and housing choices

UW students are exploring opportunities to create a new town center for Shoreline combining city facilities, open space, and mixed use development

Innovative developers are experimenting with new mixed-use development models in outlying suburbs such as the Saffron center in Sammamish

**Implementation Phasing**

**PHASE 1**  
0-5 Years

**PHASE 2**  
5-10 Years

**PHASE 3**  
10-20 Years

- Heritage Park
- Heritage District Center
- Civic Center
- Bellevue Town
- 17th Street Corridor
- Aurora Ave NE Improvements
- Pike Hill City Street Improvements

- 20th Street - the east side of Aurora Ave NE
- Shoreline - the North & West Street project

- 20th Street - the east side of Aurora Ave NE
- 17th Street - the east side of Aurora Ave NE
- Pike Hill City Street Improvements

Figure 33: Remodeling auto-oriented suburban communities will take a variety of innovative approaches, such as the ones illustrated here.

- **Land Use and Transportation Spine Redevelopment.** Include a significant community redevelopment component in major transportation projects, build small centers at transit stations, and consider more comprehensively the strip land use patterns in the region.
- **Green Network.** Connect open space and trail systems through these suburban areas. Even narrow corridors can have a powerful effect on connectivity and neighborhood desirability. Networks of green boulevards, which function equally well for a multiplicity of users, can be an additional way of stitching verdure and greenspaces into the everyday urban experience (Figure 34).
- **Special Facilities.** Schools and other civic facilities and institutions, including places of worship, should be located inside the urban growth area and designed in a manner that fits a more urban context and physically locates these critical facilities in the center of communities.

While the strategy to intensify and diversify the large swath of suburban development into more livable neighborhoods and efficient land use and transportation systems will consist of a number of tools and incremental actions without a regional blueprint or master plan, it is important to articulate it as a distinct strategy because:

- It provides a generalized vision of how this area can improve and emerge over time.
- It provides a set of design tools, such as design guidelines, joint transportation and development projects, and new street improvement models, that will be necessary to successfully achieve local and regional objectives.
- As a regional form, the suburban arc is too large and too important to the region to ignore.
- Walkability and its relationship to human health is particularly a challenge within the suburban arc. Regional programs addressing this objective should be focused there.
- Regional linear systems, such as transportation lines, greenways, and trails, can play an important role in restructuring homogeneous suburban areas.

Structuring urban unincorporated areas within the urban growth area incorporates many of the same tools used for suburban areas within municipalities. However, most important to success in these areas is active collaboration between the applicable county government and the city that will ultimately annex the area. Counties will need to establish standards to direct new development in ways that create walkable, sustainable communities and land use patterns that are sustainable and transit-supportive. In some areas, this may mean more detailed county or city subarea-type planning implemented through urban tools, such as design guidelines, street improvements, and open

space dedication, that benefit not only the individual development but are oriented to the emerging community as well.

### Supporting Policies

VISION 2040's draft multicounty planning policies call for accommodating growth first and foremost within the urban growth area, creating vibrant and sustainable community, enhancing existing neighborhoods, and designing schools, institutions and other facilities in keeping with the size and scale of the community.

### Priority Actions

1. Conduct a collaborative city or county case study to explore measures to develop more viable communities in unincorporated urban areas within the urban growth area. While the intensification and diversification of parts of the suburban arc in developed areas will be an incremental process over time, areas inside the urban growth area perimeter merit immediate attention because they are developing rapidly and the opportunity to create structured communities will soon be lost.
2. Focus neighborhood walkability resources within the suburban arc. Identify new opportunities, techniques, and tools.



*Figure 34: Seattle's Street Edges Alternatives program is an example of how a residential streetscape improvement can add a sense of place as well as improve water quality in a neighborhood.*

# Chapter Five: Implementation

## Recommendations

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The policies proposed by the Puget Sound Regional Design Team are making their way through the PSRC VISION 2040 adoption process and will, if adopted, have a significant impact on practices and resources for regional design activities in support of growth management objectives. Additionally, the Design Team recommends a set of actions to implement the program's principles and strategies. While the Regional Design Strategy is an ongoing and long term effort, the following recommendations represent projects and activities that could reasonably be initiated in the next five to six years. Because regional coordination of design activities is a relatively new practice, many of the recommendations are steps toward more ambitious efforts once a more substantial foundation of information, analysis, conceptual models, policy framework, and funding programs is in place. Of the 14 recommendations:



- Seven recommendations call for **studies** to better identify the issues and possible design measures.



- Six recommendations begin with comprehensive region-wide planning to **coordinate** activities and establish priorities for greater effectiveness.



- One recommendation includes **advocacy** and policy measures to redirect current practices and public activities.

The intent of all of these recommendations is ultimately to produce positive physical changes in the regional landscape, at all scales, which are consistent with VISION 2040 goals. One of the Design Team's primary findings is that regional design can play a significant role in achieving growth management objectives. Indeed, one could argue that design activities are essential for achieving the livability, ecological viability and economic vitality.

## Primary Recommendation: PSRC Regional Design Program

The Design Team's primary, overarching recommendation is that PSRC establish a Regional Design Program to pursue the majority of the following recommendations. The Regional Design Strategy is primarily about collaboration, and there is a critical need for a regional leader with broad

perspective and long term commitment to initiate regional design efforts.<sup>3</sup> By taking on a leadership role in regional design, PSRC would implicitly further its central mission and substantially support its other activities.

Two primary reasons support the need for a regional leader to take the central role of housing a Regional Design Program:

- At any scale, from local to regional, good design thrives upon good knowledge. Just as successful businesses value up-to-date research, it is essential to support regional design with a strong research and development program. In practice, design is highly mimetic, borrowing from other places or experiences. The most successful designs are carefully adjusted to meet the needs of new places and situations, and these adjustments rely on detailed knowledge and research about how the new place or situation functions. PSRC has received recognition for its history of providing research to support its regional programs, a tradition which should be extended to supporting a Regional Design Program in order to keep the central Puget Sound region at the forefront of regional planning and coordination.
- The Regional Design Team found that no organization currently coordinates regional design efforts. While there are numerous and laudable efforts currently directed at shaping pieces of the regional landscape, they are often focused on a single issue or are geographically limited in scope. Most of the recommendations below require an entity to initiate the given activity. Because of the regional nature of these recommendations, PSRC is the logical initiator, sponsor, or implementer of the activities.

The Design Team suggests that the research focus of a Regional Design Program would include:

- Assessing socio-cultural, spatial-ecological, and multimodal mobility functionality of the region. How well to do our places work? This question is the logical place for urban design research to start, and it should be applied: to existing environments, to new developments that are testing selected approaches and design principles, and to theoretical physical urban system models. Regional research can support questions about where to locate new high-quality urban activities or questions about how to determine the best multi-use structures for connecting places to one another.

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<sup>3</sup> Green building development and charrettes have recently benefited from successful training programs in Integrated Design Process, which places a high value on interdisciplinary collaboration. This kind of training could also be successful at integrating the design dimensions of the many design processes necessary for a cooperative regional design strategy. Information about Integrated Design Process training was pulled from the following website on June 21, 2007:  
[http://www.cascadiagbc.org/resources/events-flyers/june-events/CGB\\_IDP\\_June28\\_29.pdf](http://www.cascadiagbc.org/resources/events-flyers/june-events/CGB_IDP_June28_29.pdf)

- Supporting, undertaking, and using research about how people know, use and value the region and its constituent places. This would include information about perception, way finding and navigation, aesthetics and place valuing. The increasing diversity of cultural backgrounds in the region requires that a regional design effort pay close attention to and gather detailed knowledge about how people use space and read the landscape; a regional design effort also requires the discovery of the most appropriate forms for supporting human behavior.
- Researching both a) the spatial and form patterns of places, and b) the complex societal conditions, functions and processes which are supported by the existing configurations of urban space and environment. Regional design research can include exploratory models and reasoning that extends knowledge as a way of looking closely at ideas. Without research and evaluation at the regional level - of the region itself or of conditions within it - efforts to design a better, stronger, more sustainable region will fall short, continuing to rely on adjusting a present array of design solutions to try to fit new, emerging needs.

## Additional Recommendations

The following 14 recommendations are organized based on a possible implementation schedule. Two recommendations relate to work on the draft VISION Update and are noted as completed. Others that might be considered over the next three years are identified as "short-term." Actions that would be pursued in the next five-to-six years are identified as "mid-term."

Many of the recommendations that follow complement other proposed actions that have been developed to implement provisions in the draft revised multicounty planning policies. Parallel and complementary actions are noted.

1. **As part of the VISION 2040 process, incorporate policies and actions suggested by the Regional Design team as amended and incorporated by the Staff Committee and Policy Board.** (completed ✓)



*Through a series of work sessions in 2006, the Regional Design Team developed a number of multicounty planning policies and related actions and transmitted them to PSRC's Regional Staff Committee and Growth Management Policy Board for consideration. These policies and actions comprise a broad spectrum of directions related to the use of design measures and activities to support ecological restoration, integration of land use and transportation, the creation of walkable, livable and efficient communities, and the protection of rural and resource lands. The majority of these recommendations have been incorporated into the draft VISION 2040.*

2. **As part of refining the preferred growth alternative for the VISION, identify developmental threats to rural and resource lands.** (completed ✓)



*At the summer 2006 work sessions, the Regional Design Team schematically identified areas that appear to be especially susceptible to urban encroachment, so the SEPA analysis could assess impacts in these areas and target possible mitigation measures. The Draft Environmental Impact Statement (EIS) addressed these concerns – which are carried forward into the Supplemental DEIS.*

3. **Prepare guidance materials to assist local governments in developing centers, including distinct concepts for different types of centers.** (short-term – complements other actions calling for study and evaluation of centers, as well as development of a common framework for identifying centers)



*The PSRC has already completed several products to help guide centers development. The Council should work with partner agencies and institutions to develop additional guidance for centers. (The Compendium of Regional Design Concepts, Tools, Models and Examples included in the Regional Design Strategy already contributes to this effort.)*

4. **Conduct a study to identify the benefits of facilitated subregional planning which coordinates development in proximate urban centers and other development nodes.** (short-term – could be integrated with previous recommendation)



*The results of such coordination might bear substantial savings and benefits in terms of transportation access, land use efficiency, service and amenity provision and a greater spectrum of development opportunities.*

5. **Initiate a program to plan selected areas around primary transit centers and station areas.** (short-term – complements an action to explore land use and planning practices that promote increasing mode split for multimodal travel – especially for centers)



*Such a program would be a cooperative effort between PSRC and one or more transit agency. It could be modeled after station area planning undertaken by Sound Transit relating to light rail development or King County Metro park-and-ride mixed use development projects.*

6. **Conduct a study identifying useful planning and design tools to protect rural and resource lands from development.** (short-term – relates to action calling for development of a regional strategy for transfer of development rights and other innovative techniques to protect rural and resource lands from overdevelopment)



*PSRC would collaborate with the counties and cities, state agencies, and others on this effort.*

- 7. Initiate an effort to direct transportation improvement projects to include community redevelopment funding.** (short-term – complements actions to prioritize funding for centers)



*This would be a more pro-active approach to mitigation and a way to leverage the transportation projects to encourage development that supports adopted public policy for focusing growth in centers and compact urban communities, while increasing the use of transit and nonmotorized transportation.*

- 8. Building on PSRC's regional trail planning, undertake a comprehensive non-motorized plan.** (short-term – relates to action calling for PSRC to work with members and other groups to establish a safe and efficient regional nonmotorized network)



*Incorporate design measures to facilitate connections and usability. Establish an aggressive implementation program with priorities for funding that focus on most pressing needs. Identify funding sources and consider regional funding of such a program, combining funds from several sources. PSRC would collaborate with WSDOT, transit agencies, and local governments.*

- 9. Develop a regional open space plan integrating current open space, environmental, and comprehensive planning activities.** (mid-term, parallels action calling for development of a regional greenspace strategy)



*This plan should focus on a network of open spaces and environmental systems and incorporate a wide variety of design and implementation measures including ecological restoration, purchase or transfer of property rights, street improvements, trails, regulatory measures and incorporation of open space in new development. There are several governments and institutions currently working on this topic. Their efforts should be combined under a larger effort. PSRC should initiate discussions regarding how this cooperative effort should be organized. Part of this plan should be an implementation strategy that identifies funding. Consider establishing a regional funding mechanism, if you will, create a "Regional Open Space Investment District" (ROSID)*

- 10. Conduct a study to forecast the amount, type, and location of industrial lands needed in the short- and long-term future, especially water-dependent industrial sites.** (mid-term – relates to action calling for PSRC to update its inventory of industrial lands and to develop a region-wide strategy for industrial lands)



*It would also be a great benefit to various agencies and private interests involved in land use and economic development at both the regional and local levels. Such a study could identify areas where industry should grow, as well as identify brownfield sites that could be redeveloped for non-industrial use.*

- 11. Conduct a collaborative city and county case study to explore measures to develop more viable communities in unincorporated urban areas within the UGA.** (mid-term – relates to action calling for countywide planning bodies to develop approaches to reconcile different standards for development and infrastructure in urban unincorporated areas)



*Urban unincorporated areas merit attention because incremental development threatens the opportunity to create orderly and cohesive communities. The study might also be modeled after PSRC's Rural Town Centers and Corridors project which first examined the conditions and opportunities in representative areas, then identified policy changes, tools and implementation measures to address the issue, and then conducted a case study and framed policy recommendations on the results.*

- 12. Conduct a case study of redevelopment sites, especially along transportation arterials.** (mid-term – relates to an action calling for countywide growth management planning groups to develop strategies for brownfield clean-up, as well as to an additional action directed at local jurisdictions to identify underused lands for future redevelopment or reuse)



*The purpose of this study would be to identify ways to overcome the challenges posed by small lot redevelopment on major arterials, especially those with multi-modal transportation and wider rights of way. This effort might include the study of more assertive public redevelopment efforts, such as a public development authority for a specific corridor or set of corridors and the option of urban renewal actions along appropriate highway sections.*

- 13. Building on the case study of small site redevelopment, conduct a corridor plan for an entire arterial section that incorporates redevelopment and design measures.** (mid-term – could be integrated with previous recommendation)



*The corridor plan should include multi-jurisdictional measures to create a visually attractive corridor that provides a suitable setting for positive community development. An ultimate goal of this effort is a program to facilitate positive corridor redevelopment. PSRC's Rural Town Centers and Corridors project offers a model of how this might be organized as an inquiry into the special challenges along urban highways and arterials.*

14. **Conduct a pilot study for an estuary or floodplain restoration and redevelopment plan to test the application of new methods and collaborated redevelopment efforts.** (mid-term – could be integrated with previous two recommendations)



*This pilot study might be jointly developed by local port districts, municipalities and PSRC.*



# Appendix A

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## Process

This Regional Design Strategy is based on previous efforts. During the winter and spring of 2005, Dennis Ryan and John Owen led a class of students at the University of Washington College of Architecture and Urban Planning that explored the use of urban design practices to achieve regional planning and growth management objectives. The students conducted a set of workshops with design and planning professionals and prepared a brief report of their work. Through this effort, the students found that there is indeed a useful role for urban design, and that a set of design related concepts, strategies, policies and implementation tools could substantially support growth management efforts in the central Puget Sound region. Building on this work, Michael Hintze wrote his masters thesis on the role of urban design in regional planning, presenting the historical importance of design in regional planning theory and practice. The class work was presented at a Washington Chapter American Planning Association 2005 conference where it received positive attention.

To pursue these ideas further, John Owen, Dennis Ryan and Bill Trimm approached Rocky Piro at the Puget Sound Regional Council (PSRC) with a proposal to put together a more extensive Regional Design Strategy (RDS) which could provide design support for VISION 2040. They proposed that the effort be conducted by a group of volunteers called the Puget Sound Regional Design Team. The Design Team itself would consist of a steering committee, urban design professionals, and interested parties participating in a series of work sessions and other volunteer efforts. PSRC staff agreed to explore this idea and pursue a grant that would fund management of the project. Rocky Piro was named the PSRC staff contact and became a leader in the Design Team.

### A grant from CTED

In July 2006, the Washington State Department of Community Trade and Economic Development (DCTED) awarded a grant to the Design Team for 2006 through 2007. Money was granted, through PSRC as the fiscal agent, for two purposes. The first, create a Regional Design Strategy that would link urban design to regional long range planning in a way that would be useful to other regions and communities throughout Washington State. The second charge was to help PSRC by providing them with design assistance during the development of VISION 2040.

Immediately upon receiving the grant, the four core members of the Design Team hired an intern to manage the process and expanded the steering committee to include the following members:

- Lyle Bicknell, City Design, Seattle Department of Planning & Development
- Michael Hintze, AHBL
- John Owen, MAKERS Architecture and Urban Design
- Rocky Piro, Program Manager, Puget Sound Regional Council
- Dennis Ryan, Professor of Urban Design and Planning, University of Washington
- Bill Trimm, Planning Director, City of Mill Creek
- Ron Turner, Retired Architect, Planner and University Teacher
- Roger Wagoner, BHC Consultants, LLC

Working as an expanded steering committee allowed more people to become closely involved with the project. This larger group contributed a wider variety of perspectives and by working together, they have modeled the kinds of collaborative processes that the regional design strategy ultimately seeks to foster. Meeting on a nearly weekly basis, the steering committee has envisioned the final product, increased the outreach lists, planned and facilitated numerous Design Team workshops, helped synthesize and summarize the ideas that came from those workshops, contributed numerous perspectives and narrations towards the final product, written and edited multi county planning policies, and discussed strategies for presenting policies to PSRC's regional staff committee and policy boards.

### Three Workshops: Summer 2006

#### *July 26, 2006*

The first half-day workshop of the summer was structured to increase awareness of the Regional Design Strategy within the professional urban design community and also provide participants with a way to respond to the VISION 2040 Draft Environmental Impact Statement (DEIS) before the public comment period ended on July 31. Approximately 150 people were invited; the outreach list was collectively created by members of the steering committee. Workshop participants were sent a package of background materials that provided both an introduction to the intended efforts of the Puget Sound Design Team and an overview of the VISION 2040 DEIS. Over 30 people attended the event hosted at PSRC. PSRC staff presented an overview of VISION 2040 and the DEIS. In two smaller facilitated groups, participants were asked to identify some physical issues that would be important in the region over the next 30 years. They were also asked to respond to VISION 2040, particularly to the hierarchy of regional geographies identified in the DEIS.

This event was successful at engaging the participants in thinking about design issues on a regional scale. The two small groups generated many ideas of what kinds of physical concepts needed to be addressed regionally over the next 30 years, sketching graphic representations of their ideas and posting them on the wall. They were also primarily concerned that the PSRC hierarchy of regional geographies would interfere with a more holistic notion of a regional-scale systems approach. These ideas were collected and summarized into a letter that was transmitted to PSRC on July 30<sup>th</sup>.

*August 10, 2006*

The Design Team Steering Committee organized and conducted a second half-day work session to develop regional design policies and actions. To prepare for the event, the Steering Committee examined the VISION DEIS and results from the July event to generate a number of draft policies. These draft policies were intended to give workshop participants a loose policy basis to start the discussion; questions accompanied each set of proposed policies to aid the discussion. The same outreach list was contacted and invited, and approximately 10 people attended this event. PSRC Staff was on hand during this meeting to assist with policy language where needed, but in the end, participants were more focused on generating ideas for a complete policy package for regional design, rather than responding to previously generated PSRC multicounty planning policies. These policies were combined with the results of the September workshop and compiled into draft design policy working paper. This working paper was formatted so policies might fit more easily within the larger set of VISION 2040 policies; the paper was presented to the PSRC Regional Staff Committee (a committee of planners from various jurisdictions from throughout the region). The response from the Regional Staff Committee was encouraging: they reviewed the design team's working paper and included some of the design related policies in their own policy package that they recommended to the elected officials on November 9, 2006. A number of the language and intent of the Design Team's design related multicounty planning policies have been incorporated into PSRC's "VISION Update: Draft Revised Multicounty Planning Policies."<sup>4</sup>

*September 15, 2006*

On September 15, the Design Team Steering Committee organized a full-day event to develop more comprehensive concepts and graphic images for structuring a regional design strategy. The approximately 30 participants were asked to self select into one of 5 groups: Linear Elements, Design a Region, Visual Character, Regional Ecology and Edge Conditions. The steering committee chose these categories based on a summary of key components of the design-related multicounty planning policy document. Participants in each of these smaller groups were given a series of questions, the multicounty planning policies related to the group topic, a variety of helpful 24x36 maps all at the same

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<sup>4</sup> Mar 2007, . [www.psrc.org/projects/vision/index.htm](http://www.psrc.org/projects/vision/index.htm)

scale (generated by PSRC, many of which were presented in the DEIS document), and tracing paper, markers, and other drafting implements. The groups were asked to respond to the questions by generating drawings and graphics (using the maps for guidance, information, and ideas on regional-scale spatial relationships). Many of the questions focused the groups towards generating prioritized lists of geographically specific transformational strategies, while other questions asked the group to brainstorm about overarching principles that could guide regional design strategies in a more general sense (potentially applicable to other regions). The five categories were deliberately designed to overlap with one another, allowing for the possibility that many people would discuss similar subjects. Each group was facilitated by a member of the steering committee.

Participants were allowed the freedom to move among groups, and the groups presented their results to everyone else halfway through (to allow for cross-pollination of thoughts and ideas). The smaller groups then went back to their topics with fresh ideas and completed their work. The graphics were posted on the walls for one final large group discussion and presentation before the workshop was officially adjourned. The results of this highly energetic and successful workshop were used to re-structure the multicounty planning policy document (from the August workshop), to generate one poster that could summarize all of the geographically specific strategies, and to bring together notions of overarching themes in regional design (these would eventually become the Principles in the Regional Design Strategy). The work from this workshop helped shape the packet of draft design-related policies that was presented to the Regional Staff Committee in October.

#### October 4-6, 2006: Yakima APA Conference

An initial poster for the Regional Design Strategy was presented at the Washington Chapter American Planning Association Conference in Yakima on October 4-6, 2006. The poster, showing a map of proposed transformational strategies, was well received at the conference and served as a good piece from which to generate many discussions on regional design issues.

#### Interim Report and Outreach

From September through the end of 2006, the Design Team has worked closely with PSRC staff and policy committees to incorporate key design-related policy language into the multicounty planning policies which were presented to the elected officials at the beginning of November.

The Design Team Steering Committee, with input and assistance from University of Washington students and other Design Team members, refined the results from all three work sessions and incorporated recommendations from the PSRC staff and PSRC Regional Staff Committee into an interim report.

This interim report provided the basis for a presentation of the “project so far” at three events:

- Washington Chapter APA Brown Bag, February 14, 2007
- Forum on Regional Identity and Character, Design Team event, March 2, 2007
- Urban Affairs Association 37<sup>th</sup> Annual Meeting, April 28, 2007

#### Washington Chapter APA Brown Bag, February 14, 2007

By February of 2007, the Steering Committee had produced a 25 page interim report summary. This summary was the basis for a presentation of the Design Team’s accomplishments to date at a Washington APA Brown Bag. This also provided an opportunity for members of the Steering Committee to form a panel to guide a question and answer discussion with the Brown Bag participants. The event was well attended and well received, eliciting a number specific detailed recommendations and suggestions from the participating audience.

#### Forum on Regional Identity and Character: Design Team event, March 2, 2007

One of the major obstacles to finalizing the initial draft of the complete Regional Design Strategy was the issue of regional identity and visual character. Discussions during every workshop recognized that the final product would need to explore the larger question of regional values and regional identity. Each workshop produced extensive lists of regional characteristics that make the central Puget Sound region distinct.

The Steering Committee members were divided on how to treat the issue of regional identity, but they did agree to host a final outreach event to once again include a larger urban design professional community, hosting a Forum on Regional Identity on March 2, 2007. About 40 participants attended and were split into smaller groups with members of the Steering Committee facilitating and recording for each group. Participants were asked to discuss both the broad strokes and the pertinent details of regional character in the central Puget Sound region. The discussions were lively and varied and produced lists of many cherished characteristics in the Puget Sound area as well as ways in which those characteristics might be passed forward and enhanced in a time of rapid growth.

#### Urban Affairs Association 37th Annual Meeting, April 28, 2007

The Design Team again had an opportunity to present the Regional Design Strategy at the Urban Affairs Association 37th Annual Meeting at the Westin Hotel in Seattle. Also participating on the panel was Dr. David Prospero from Florida Atlantic University, who presented the results of an academic study of metropolitan morphology. He describes the necessity of a multi scalar and

spatial analysis of metropolitan form, as opposed to non-spatial ways of thinking about regional economics or ecology. He also defines urban design as a form, neither good nor bad, that exists now as the result of a process. Prosperi's work seemed to corroborate well with the prescriptions of the Regional Design Strategy, and in any case presents a future source for academic ties to the project. Dr. Prosperi is developing his paper with the collaboration of Dr. Anne Vernez-Moudon of the University of Washington.<sup>5</sup>

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<sup>5</sup> In a previous article, Prosperi explores the link between metropolitan airports and economic clustering:  
[http://programm.corp.at/cdrom2007/archiv/papers2007/corp2007\\_PROSPERI.pdf](http://programm.corp.at/cdrom2007/archiv/papers2007/corp2007_PROSPERI.pdf)

# Appendix B: Chapter Three Notes

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## Complete List of Regional Characteristics

*The following list was generated by urban design professionals during a series of Puget Sound Regional Design Team workshops and events.*

### 1. Qualities and characteristics we associate with the natural environment:

- Water surrounds us (proximity to ocean, the Sound, the lakes, the estuaries, the rivers, the rain)
- Mountains (views of the Olympics, the Cascades, the silhouettes of Mt. Rainier, Mt. Baker or Mt. Hood)
- Trees and plants (the evergreens, the silhouette of evergreens on hilltops and bluffs, blackberries, bull kelp)
- Salmon
- Wildlife diversity (orcas & whales, starfish, otters, seabirds, eagles, deer, protected species)
- Colors (green, gray, brown)
- Topography (many hills and valleys, particularly north-south orientation)
- The rare sunny day (secret gift to those who live here)

### 2. Qualities and characteristics we associate with the built environment:

- The Space needle and the Seattle skyline (Smith Tower, Columbia Tower)
- Architectural monuments (the EMP, the Seattle Central Library, The Tacoma Glass Museum)
- Infrastructure: ferries, north-south freeways, locks, bridges
- Industrial global contributions (Boeing, Microsoft, Starbucks, Weyerhaeuser) and national contributions (microbrews, biotech and hi-technology, music, wood industry)
- Military influence
- Tribal influence on space (dichotomy and dialogue, role of tribal lands on regional land use patterns)
- Emphasis on quality residential neighborhoods (fine grained urban form)

- Trends towards mixed use development
- Tendency to favor big box centers to augment tax base
- Housing affordability is decreasing (renter population on the rise, mobility of young people)
- Increasing density and the desire to become an important regional center (young wealthy and retired moving to downtown areas and condos).
- The linear development along a number of our thoroughfares

**3. Qualities and characteristics we associate with an intersection where natural and built environments overlap:**

- Get outside (REI, outdoor sports, recreation, parks that encourage interaction with natural amenities, bike to work, evacuate urban areas on weekends)
- Interact with the wildlife (aquarium, whale watching, explore tidal pools and touch starfish, watch the salmon runs, visit zoos and botanical gardens)
- Respond to the rain (It rains a lot, tourists see the rain first, cozy wooden interiors, covered walkway, the importance of interior lighting, *real* North westerners don't own umbrellas)
- Respond to the water and views (preserve views, limited public and private access to water, proximity to natural amenities increases property value)
- Agriculture
- Fishing industry
- The water-based ports and industrial areas
- Salmon culture (in festivals, in restaurants, as activists)
- Seismic and Flooding hazards (impact on built environment and development)
- Increasing interest in both growing and consuming local and organic foods and products
- Green Building increasingly desired
- Connections among these natural environments (Burke Gillman trail, Mountains to Sound Greenway, Interurban Trail) and historical environments (historic or heritage routes and trails)

**4. Qualities and characteristics we associate with the social structures, the processes, and the organization of with this place; i.e. the way we think about things and the way we get things done**

- Growth Management (Urban Growth Areas, Comprehensive Plans)

- Activism is important (many grassroots movements, importance of neighborhoods within cities)
- Grand plans and strong leadership are lacking, but high profile market individuals are not (Bill Gates, Paul Allen, Howard Schultz)
- Dynamic information and technology-oriented economy and creative class (cosmopolitan, outward and forward looking, high quality of life attracts people to move here and stay here).
- The Seattle Process (political action takes a long time, even outside of Seattle itself)
- Seattle-centrism (results, both positive and negative, of tension between one major city and its surrounding metropolitan and rural areas)
- Cultural diversity with a public goal of inclusionary society
- Current tax policy is driving internal competition within the region
- Imitation and use of local examples (one Hot Spot competing with another for vitality)
- Community that sustains dynamic arts and culture (high arts such as symphony, ballet and theater, but *also* underground musical vibrancy and glorious past, literary community)
- An informal atmosphere (polar fleece and jeans to work)
- The scale of the physical features feels impressive
- Vestiges of original platting of small lots and tight streets on hillsides and early settlement and development patterns
- Strong culture of youth
- Highly educated population

##### **5. Qualities and characteristics we associate with the history of this place:**

- Extraction (Logging, Mining)
- Settlement clustered near and interacted with water (water as transportation)
- Both borrowing from and ignoring native cultural precursors to occidental culture (locks, salmon festivals, fishing, ignorance of prior uses of landscape)
- Volatile boom and bust economic cycles
- Rapid post-war expansion: most of the communities already existed, and they expanded outwards and grew together; some retained their historical core while others did not (opposed to California, expansion put new built environment where nothing had been before)
- Historic districts and cultural landscapes

- Agricultural roots
- Denny Hill sluicing (total willingness to reshape the land)
- Center for new immigration and addition of new cultures

## Multicounty Planning Policies Relevant to Discussion of Regional Character

The following lists of policies correspond to the Summary of Multicounty Planning Policies under each of the five subcategory headings in Chapter 3. The wording and numbering of these policies has been taken from the *Draft Revised Multicounty Planning Policies* as acted on at the March 22<sup>nd</sup> Executive Board Meeting. (accessible through the following link: [http://www.psrc.org/projects/vision/policies/mmp\\_draft\\_rev0307.pdf](http://www.psrc.org/projects/vision/policies/mmp_draft_rev0307.pdf)).

### 1. Natural Environment

SUMMARY: VISION 2040 includes draft multicounty planning policies which describe the protection and enhancement of: air and water quality, open space, natural resources, critical areas, native vegetation, freshwater and marine shorelines, watersheds, and the long-term integrity of the natural environment.

- MPP-En-3 Maintain and, where possible, improve air and water quality, soils, and natural systems to ensure the health and wellbeing of people, animals, and plants. Reduce the impacts of transportation on air quality and climate change.
- MPP-En-8 Identify, preserve, and enhance significant regional open space networks and linkages across jurisdictional boundaries
- MPP-En-9 Designate, protect and enhance significant open spaces, natural resources, and critical areas through the review and comment of countywide planning policies and local plans and provisions.
- MPP-En-12 Preserve and restore native vegetation to protect habitat, especially where vegetation contributes to the overall ecological function.
- MPP-En-14 Maintain natural hydrological functions within the region's ecosystems and watersheds and where feasible, restore them to a more natural state.
- MPP-En-15 Restore -where appropriate and possible - the region's freshwater and marine shorelines, watersheds, and estuaries to a natural condition for ecological function and value.
- MPP-DP-1 Protect and enhance significant open spaces, natural resources, and critical areas.
- MPP-DP-2 Establish best management practices that protect the long-term integrity of the natural environment, adjacent land uses, and, the long-term productivity of resource lands.
- MPP-DP-3 Support the sustainability of designated resource lands.
- MPP-DP-50 Identify, protect and enhance those elements and characteristics that give the central Puget Sound region its identity, especially the natural visual resources and positive urban form elements.

## 2. Built Environment

SUMMARY: VISION 2040 includes draft multicounty planning policies that focus on the continued development of regional growth centers and compact urban communities. The policies seek to improve or transform underutilized lands, local street patterns, and linear systems. The policies place a high value on sense of place, housing choice, diversity, quality public spaces, urban design, historic preservation, arts, visual and cultural resources and the protection of both manufacturing-industrial centers and military lands from the encroachment of adjacent incompatible use.

- MPP-EC-15 Utilize urban design strategies and approaches to ensure that changes to the built environment preserve and enhance our region's unique attributes and each community's distinctive identity in recognition of the economic value of sense of place.
- MPP-EC-16 Concentrate a significant amount of economic growth in designated centers and connect them to each other in order to strengthen the region's economy and communities and to promote economic opportunity.
- MPP-EC-17 Maximize the use of existing designated manufacturing and industrial centers by focusing appropriate types and amounts of employment growth in these areas and by protecting them from incompatible adjacent uses.
- MPP-DP-9 Focus a significant share of population and employment growth in designated regional growth centers.
- MPP-DP-14 Give funding priority – both for transportation infrastructure and for economic development – to designated regional manufacturing and industrial centers consistent with the regional vision, including regional, county-level, and local funding.
- MPP-DP-18 Preserve and enhance existing neighborhoods and create vibrant sustainable compact urban communities that provide diverse choices in housing types; a high degree of connectivity in the street network to accommodate encourage walking, bicycling and transit use, and sufficient public spaces.
- MPP-DP-19 Support the transformation of key underutilized lands to higher-density mixed-use areas to complement the development of centers and the enhancement of existing neighborhoods.
- MPP-DP-32 Achieve and sustain - through preservation, rehabilitation, and new development – an adequate supply of low-income, moderate-income and special needs housing that is equitably and rationally distributed through the region.
- MPP-DP-37 Develop and provide a range of housing choices across the region in a manner that promotes accessibility to jobs and provides opportunities to live in proximity to work.
- MPP-DP-41 Develop and implement design guidelines to encourage construction of healthy buildings and facilities to promote healthy people.
- MPP-DP-47 Protect military lands from encroachment by incompatible land uses.
- MPP-DP-51 Preserve significant regional historic, visual and cultural resources including views, landmarks, archaeological sites, historic and cultural landscapes and areas of special character.
- MPP-DP-52 Develop high-quality, compact urban communities throughout the region's urban growth area that impart a sense of place, preserve local character, provide for mixed uses and choices in housing types, and encourage walking, bicycling, and transit use.

- MPP-DP-53 Provide a wide range of building and community types to serve the needs of a diverse population.
- MPP-DP-54 Support urban design, historic preservation, and arts to (a) enhance quality of life, (b) improve the natural and human-made environment, (c) promote health and wellbeing, (d) contribute to a prosperous economy and (e) increase the region's resiliency in adapting to changes or adverse events.
- MPP-DP-55 Design public buildings and spaces that contribute to a sense of community and a sense of place.
- MPP-DP-56 Identify opportunities to create parks, civic places and public spaces, especially in or adjacent to centers.
- MPP-DP-59 Address design and community development issues related to important linear systems – such as linear land use patterns, natural systems, transportation and infrastructure systems and edges between differing land uses – with special attention to those linear systems that cross jurisdictional boundaries.
- MPP-T-12 Improve local street patterns –including their design and how they are used – for walking, bicycling, and transit use to enhance communities, connectivity and physical activity.
- MPP-T-18 Design transportation facilities to fit within the context of the built or natural environments in which they are located.
- MPP-T-19 Apply urban design principles in transportation programs and projects for regional growth centers and high-capacity transit station areas

### 3. Intersection of built and natural environments

SUMMARY: VISION 2040 includes draft multicounty planning policies which support agriculture and forestry, walking and bicycling, food systems, regional identity, natural boundaries, rural and natural resource areas, environmentally sensitive land use management and development practices, public health, and the region's role in international economy.

- MPP-DP-25 Contribute to improved ecological functions and more appropriate use of rural lands by minimizing impacts through innovative and environmentally sensitive land use management and development practices.
- MPP-DP-30 Support long-term solutions for the environmental and economic sustainability of agriculture and forestry within rural areas.
- MPP-DP-38 Design communities to provide an improved environment for walking and bicycling.
- MPP-DP-42 Support agricultural, farmland, and aquatic uses that enhance the food system in the central Puget Sound region and its capacity to produce fresh and minimally processed foods.
- MPP-DP-50 Identify, protect and enhance those elements and characteristics that give the central Puget Sound region its identity, especially the natural visual resources and positive urban form elements.
- MPP-DP-58 Allow natural boundaries to help determine the routes and placement of infrastructure connections and improvements.
- MPP-DP-59 Address design and community development issues related to important linear systems – such as linear land use patterns, natural systems,

transportation and infrastructure systems and edges between differing land uses – with special attention to those linear systems that cross jurisdictional boundaries.

- MPP-EC-13 Support the contributions of the region's culturally and ethnically diverse communities in helping the region continue to expand its international economy.
- MPP-EC-20 Support economic activity in rural and natural resource areas at a size and scale that is compatible with the long-term integrity and productivity of these lands.
- MPP-PS-1 Protect and enhance the environment and public health and safety when providing services and facilities.

#### 4. The social structures and organization (the way things work)

SUMMARY: VISION 2040 includes draft multicounty planning policies which address the ways in which schools, rural areas, regional capital facilities support the regional vision. The policies favor transit-supportive densities, a diversity of family-wage jobs, innovative planning techniques to keep growth within urban boundaries, community development as components of transportation projects, and targeted economic opportunities in distressed areas. The policies encourage high performance, energy efficient, and environmentally friendly development standards.

- MPP-PS-5 Encourage the design of public facilities and utilities in rural areas to be at a size and scale appropriate to rural locations, so as not to increase development pressure.
- MPP-PS-21 Site schools, institutions, and other community facilities that primarily serve urban populations within the urban growth area in locations where they will promote the local desired growth plans.
- MPP-PS-22 Locate schools, institutions and other community facilities serving rural residents in neighboring cities and towns and design these facilities in keeping with the size and scale of the local community.
- MPP-PS-23 Site or expand regional capital facilities in a manner that (1) reduces adverse social, environmental and economic impacts on the host community; (2) equitably balances the location of new facilities; and (3) addresses regional planning objectives.
- MPP-PS-24 Do not locate regional capital facilities outside the designated urban growth area unless it is demonstrated that a non-urban site is the most appropriate location for such a facility.
- MPP-T-22 Do not increase roadway capacity through rural areas, unless (1) commitments to access management have been made, and (2) appropriate zoning is in place to prevent unplanned growth.
- MPP-T-24 Target transportation investments into areas that have or are planning for transit-supportive densities and land uses.
- MPP-T-28 Promote transportation financing methods that sustain investment and reflect the costs imposed by users.
- MPP-EC-7 Encourage all businesses to incorporate environmental and social responsibility into their practices.

- MPP-EC-8 Promote economic activity and employment growth that creates widely shared prosperity and sustains a diversity of family-wage jobs for the region's residents.
- MPP-EC-12 Foster appropriate and targeted economic growth in distressed areas to create economic opportunity for residents of these areas.
- MPP-EC-13 Support the contributions of the region's culturally and ethnically diverse communities in helping the region continue to expand its international economy.
- MPP-EC-14 Ensure that economic development sustains and respects the region's environmental quality.
- MPP-DP-32 Achieve and sustain - through preservation, rehabilitation, and new development – an adequate supply of low-income, moderate-income and special needs housing that is equitably and rationally distributed through the region.
- MPP-DP-34 Encourage inter-jurisdictional cooperative efforts and public-private partnerships to advance the provision of affordable and special needs housing.
- MPP-DP-35 Expand the supply and range of housing, including affordable units, in centers throughout the region
- MPP-DP-38 Design communities to provide an improved environment for walking and bicycling.
- MPP-DP-43 Encourage the use of innovative techniques, including the transfer of development rights and the purchase of development rights, to provide mechanisms for focusing growth within the urban growth area (especially cities), to lessen pressures to convert rural and resource areas to more intense urban-type development, and to sustain rural and resource-based uses.
- MPP-DP-44 Support and provide incentives for increasing percentages of new development and redevelopment –both public and private – to be built at higher performance, energy efficient, and environmentally friendly standards.
- MPP-DP-53 Provide a wide range of building and community types to serve the needs of a diverse population.
- MPP-DP-57 Address issues affecting community development – including opportunities to improve communities, as well as impacts on communities – in the design of transportation projects and other infrastructure projects, recognizing that such facilities should also advance community development.

## 5. The history of this place

SUMMARY: VISION 2040 includes draft multicounty planning policies which preserve regional historic, visual, and cultural landscapes and support urban design, historic preservation, and the arts.

- MPP-DP-43 Encourage the use of innovative techniques, including the transfer of development rights and the purchase of development rights, to provide mechanisms for focusing growth within the urban growth area (especially cities), to lessen pressures to convert rural and resource areas to more intense urban-type development, and to sustain rural and resource-based uses.
- MPP-DP-44 Support and provide incentives for increasing percentages of new development and redevelopment –both public and private – to be built at higher performance, energy efficient, and environmentally friendly standards.

- MPP-DP-51 Preserve significant regional historic, visual and cultural resources including views, landmarks, archaeological sites, historic and cultural landscapes and areas of special character
- MPP-DP-54 Support urban design, historic preservation, and arts to (a) enhance quality of life, (b) improve the natural and human-made environment, (c) promote health and wellbeing, (d) contribute to a prosperous economy and (e) increase the region's resiliency in adapting to changes or adverse events



## Appendix C: Maps from Strategy Chapter

Portions of the following maps were represented in Chapter Four to illustrate each of the geographically specific strategies, and Figure 35 shows a compilation of all six of the strategies. The full maps are represented in this Appendix. Note that all of these maps are conceptual and do not necessarily accurately indicate the location or extent of features shown. For example, the brown strips indicating where priority should be given to protect threatened rural areas in Figure 40 are not based on the extensive analysis that would be required to map such areas. Additionally, the colors do not imply that the strategy would be directed to the whole area shown.

For example, it is not the intent to create open space throughout the green fingers shown on the map in Figure 37. The strategy is to protect, enhance, create and connect open spaces within those fingers, but it is acknowledged that the open spaces would only encompass a modest portion of the land uses within those areas shown in green.

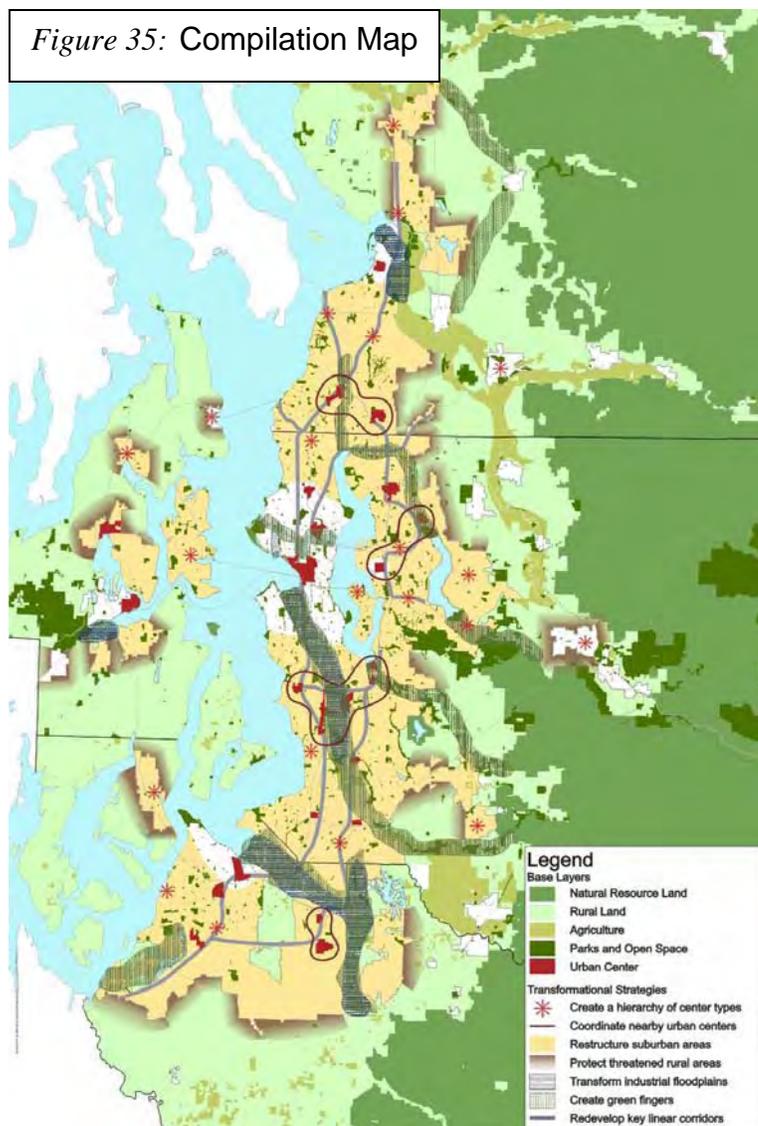


Figure 35: This map compiles the conceptualized geographic extent of all six of the strategies detailed in Chapter Four. All maps in this appendix were digitized by Dara O'Byrne of Makers Architecture.

Figure 36: Chapter Four – Strategy One

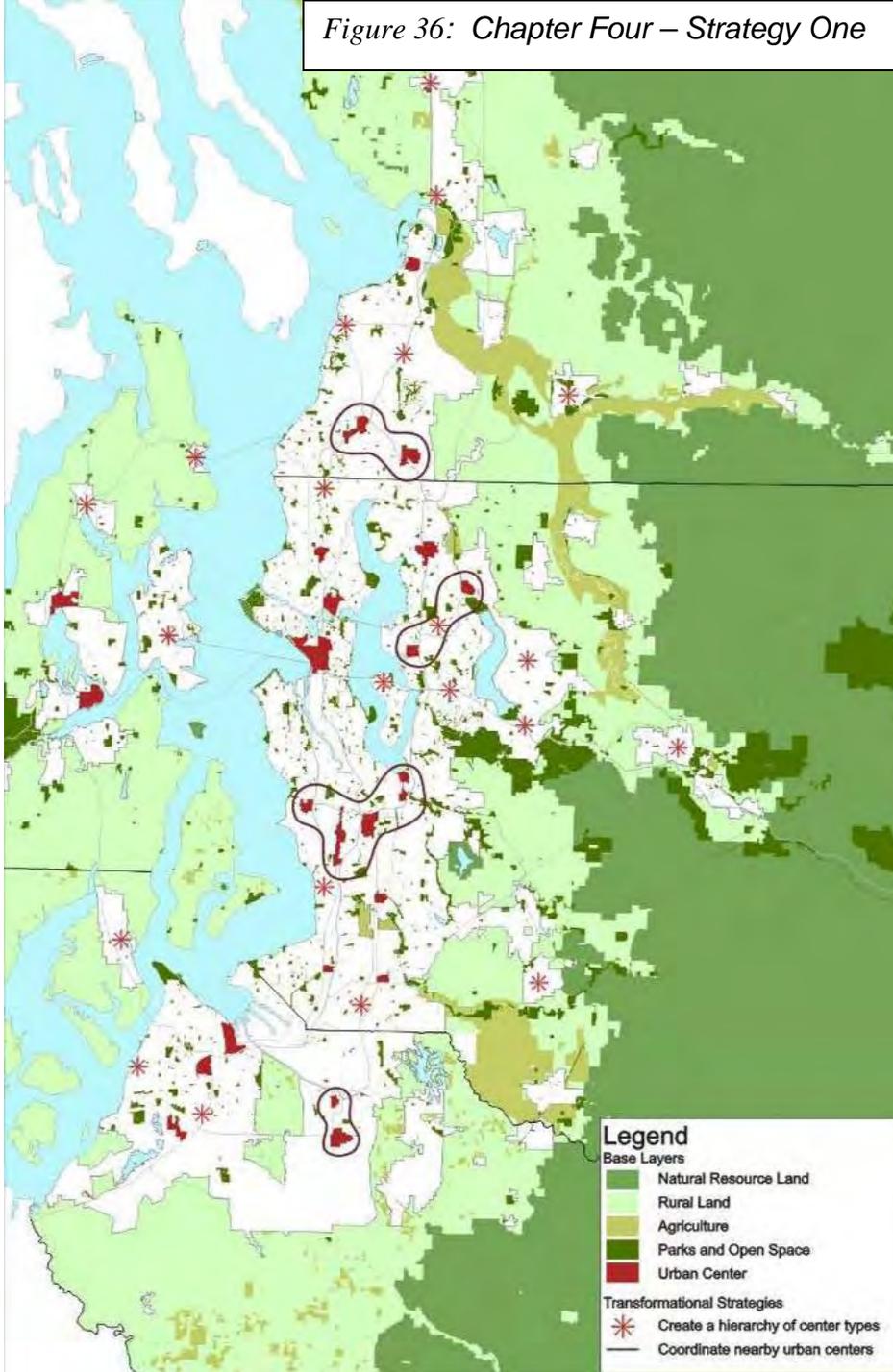


Figure 36: **Strategy One: Continue the Development of a Hierarchy of Urban Centers.** This map shows the potential spatial groupings of nearby centers.

Figure 37: Chapter Four – Strategy Two

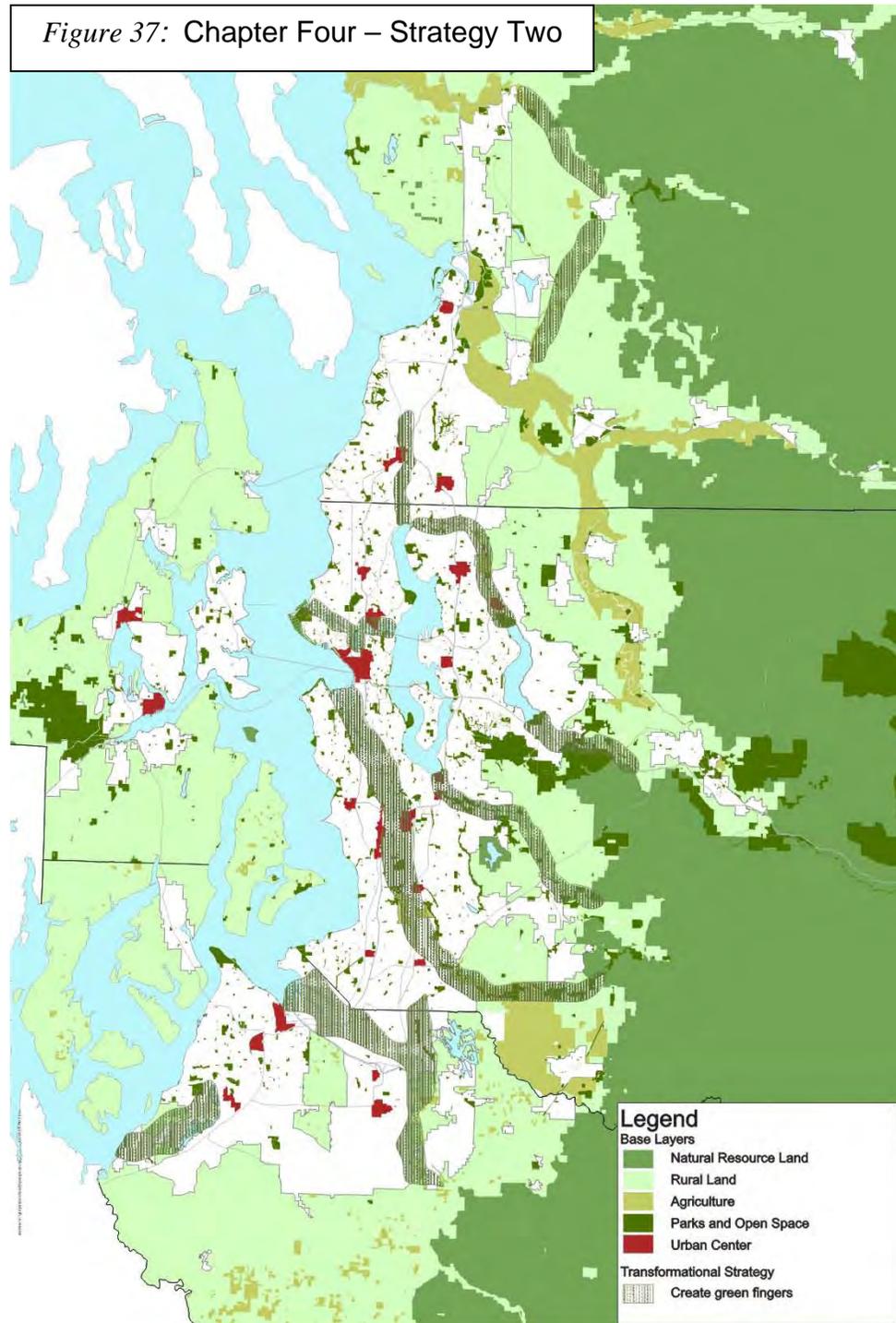


Figure 37: **Strategy Two: Create a Green Open Space Network.** This map suggests key green corridors that could help coordinate regional efforts to implement a fully articulated green infrastructure and open space network.

Figure 38: Chapter Four – Strategy Three



Figure 38: **Strategy Three: Redevelopment Opportunities – Recycling Existing Urban Areas.** This map indicates where land use patterns can benefit from a strategy to break linear monotony into vibrant activity nodes at key intersections and transit station areas.

Figure 39: Chapter Four – Strategy Four

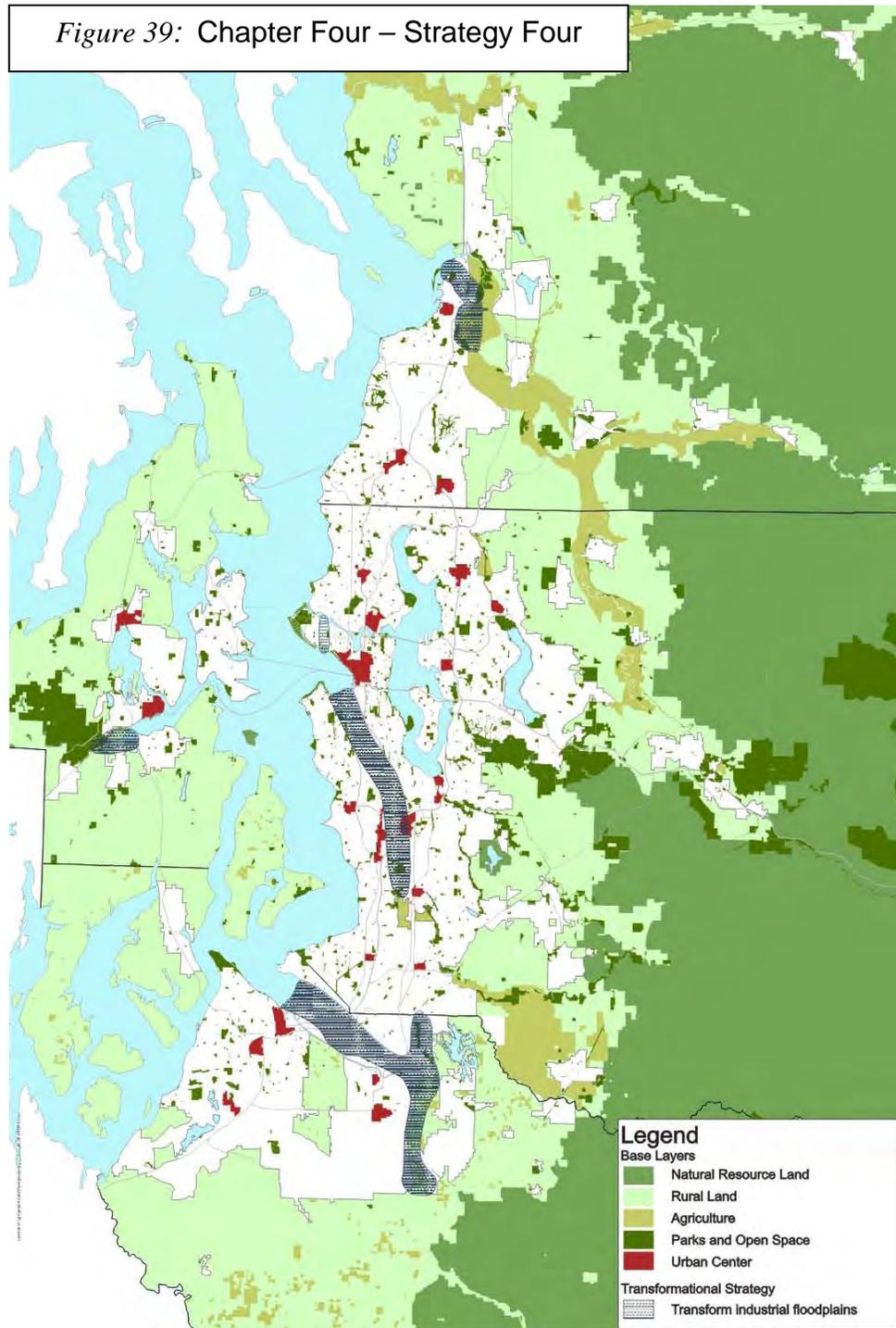


Figure 39: **Strategy Four: Transform Industrialized Estuaries and Floodplains.** This map indicates areas that are both critical to industrial vitality and ecological restoration.

Figure 40: Chapter Four – Strategy Five

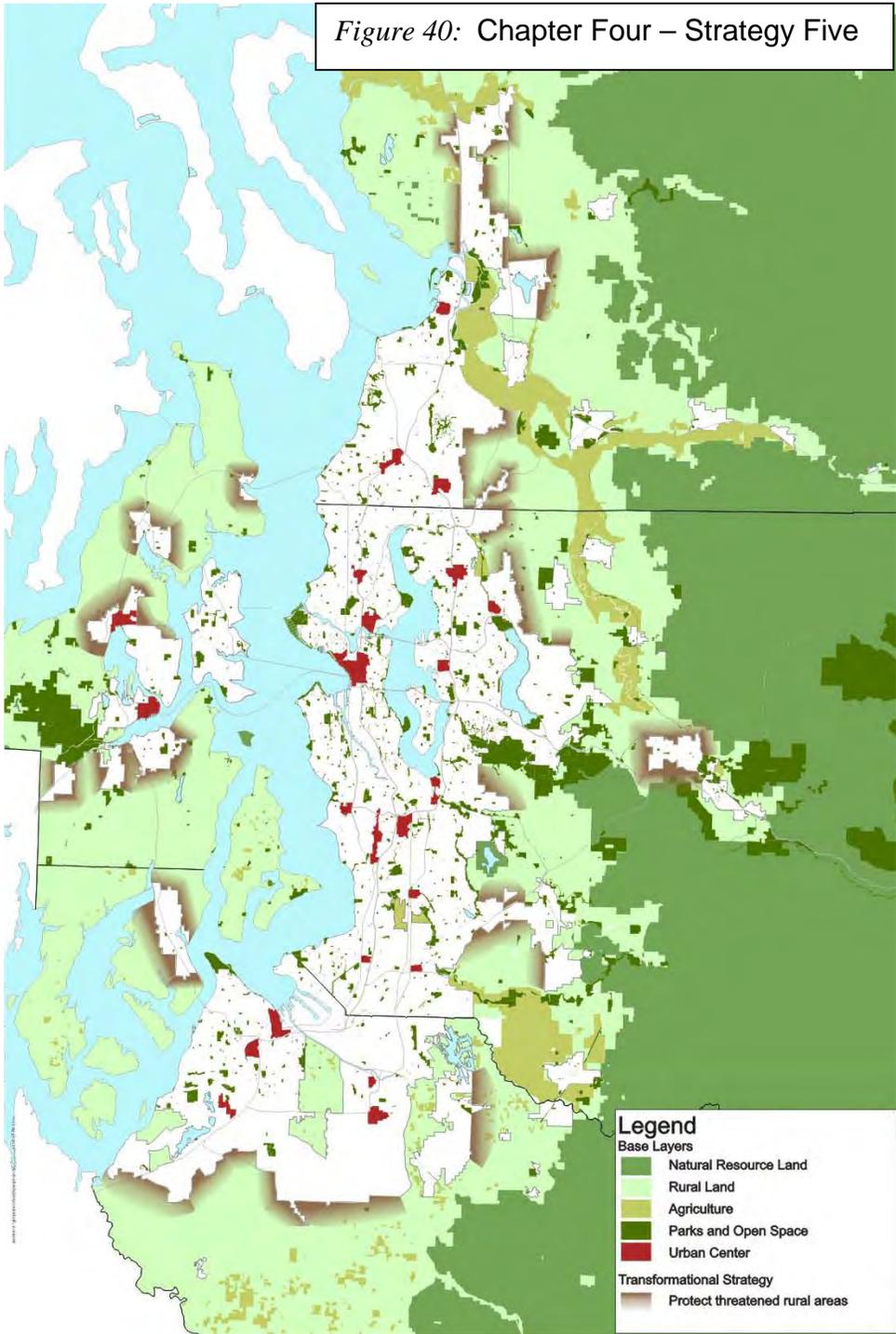


Figure 40: **Strategy Five – Protect Threatened Rural Areas and Resource Lands.** This map conceptualizes what an effort might look like to identify edges of the urban growth area which experience more pressure to expand than other areas.

Figure 41: Chapter Four – Strategy Six

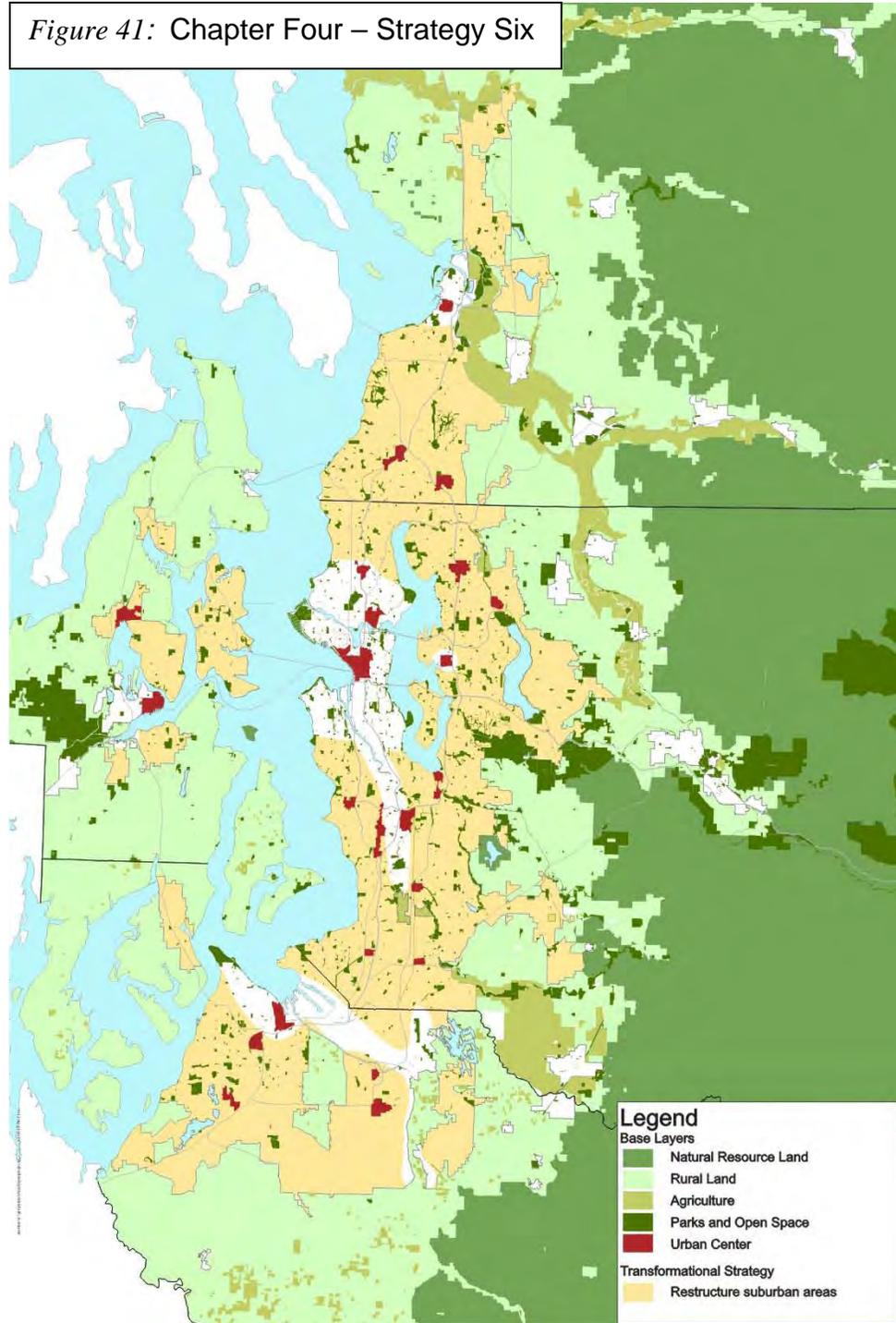


Figure 41: **Strategy Six: Restructure Portions of Auto-Oriented Suburban Areas.** This map shows that suburban areas in the region form a great arc around the Puget Sound. Portions of this arc can benefit from a strategy that facilitates coordination and information sharing as many local jurisdictions face common issues in the process of promoting livable communities and reducing automobile dependency.



## Appendix D: Compendium Examples

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This Appendix provides an initial Regional Design Compendium. It is intended to serve as a compelling and easy to use supplement that translates between the regional scale values, policies, and principles (discussed in the Regional Design Strategy and in VISION 2040) and local implementation of design related policies.

The Regional Design Compendium is to be used in tandem Chapter Three of the Strategy, which addresses regional character. The Compendium presents methods, techniques, and examples that describe how to work towards, implement, and achieve design objectives and qualities.

The Compendium has been designed as a piece that can be regularly amended and revised. Adding new material to the Compendium will mean engaging citizens in an iterative and collaborative process. Collaboration with professionals, public agencies, academics and interest organizations throughout the region can be accomplished by teams working on specific issues over a series of three to four articulation events. These will be critical activities for developing broad-scale knowledge of and commitment to regional design.

The Compendium, and the process of expanding it, will engender a sense of regional citizenship while helping identify character-defining features and historic and cultural areas as early steps in local projects. The essential elements in the compendium will draw on knowledge and practices within the region so that the resultant product will be strongly relevant to the region and provide an excellent base from which to build.



## Coordination of Urban Center Development at Overlake

The Redmond Town Center-Overlake-Downtown Bellevue spine offers an excellent example of the potential benefits of collaborative urban center planning. Overlake is a linear area situated in both Bellevue and Redmond and located roughly between the two city centers (see Figure 42). The area is currently served by regional transit and includes a variety of institutional, industrial, and commercial land uses, including the Microsoft and Nintendo campuses. Both cities are preparing subarea and neighborhood plans for their portions of the area and both are evaluating different development scenarios. There is a current intergovernmental agreement in place that limits the amount of net new commercial development, and the two cities are coordinating their planning efforts.

The creation of an efficient, pedestrian-friendly mixed-use community at Overlake will be greatly enhanced for several reasons, including:

- Land uses can be organized for maximum efficiency, development feasibility, and community stability.
- Transportation systems, including pedestrian and bicycle routes, cross jurisdictional boundaries.
- Balancing jobs and housing will be easier if both jurisdictions are considered.
- Overlake is perceived as one area, so that unifying its character and identity will require a consistent approach.
- There may be benefits from combining infrastructure systems, such as storm water treatment.

Also, special opportunities are occurring in the near term:

- Transit improvements could provide much improved access within the Bellevue-Redmond spine. Sound Transit's plan for a light rail line through the area may be a decade or so away, but rapid transit buses could link the area in the short term and encourage transit-oriented development that would eventually support light rail. It may be that the east side light rail construction could begin with the Bellevue to Redmond segment as it would connect three vital centers and key regional transit stations.
- Large parcels in the area are in the process of redevelopment, and major employers in the area are expanding.
- Given the burgeoning demand for commercial space, public actions will be needed to ensure that there will be sufficient additional residences to support

a viable neighborhood. Creating a viable residential community will require connecting existing and new neighborhoods in both jurisdictions.

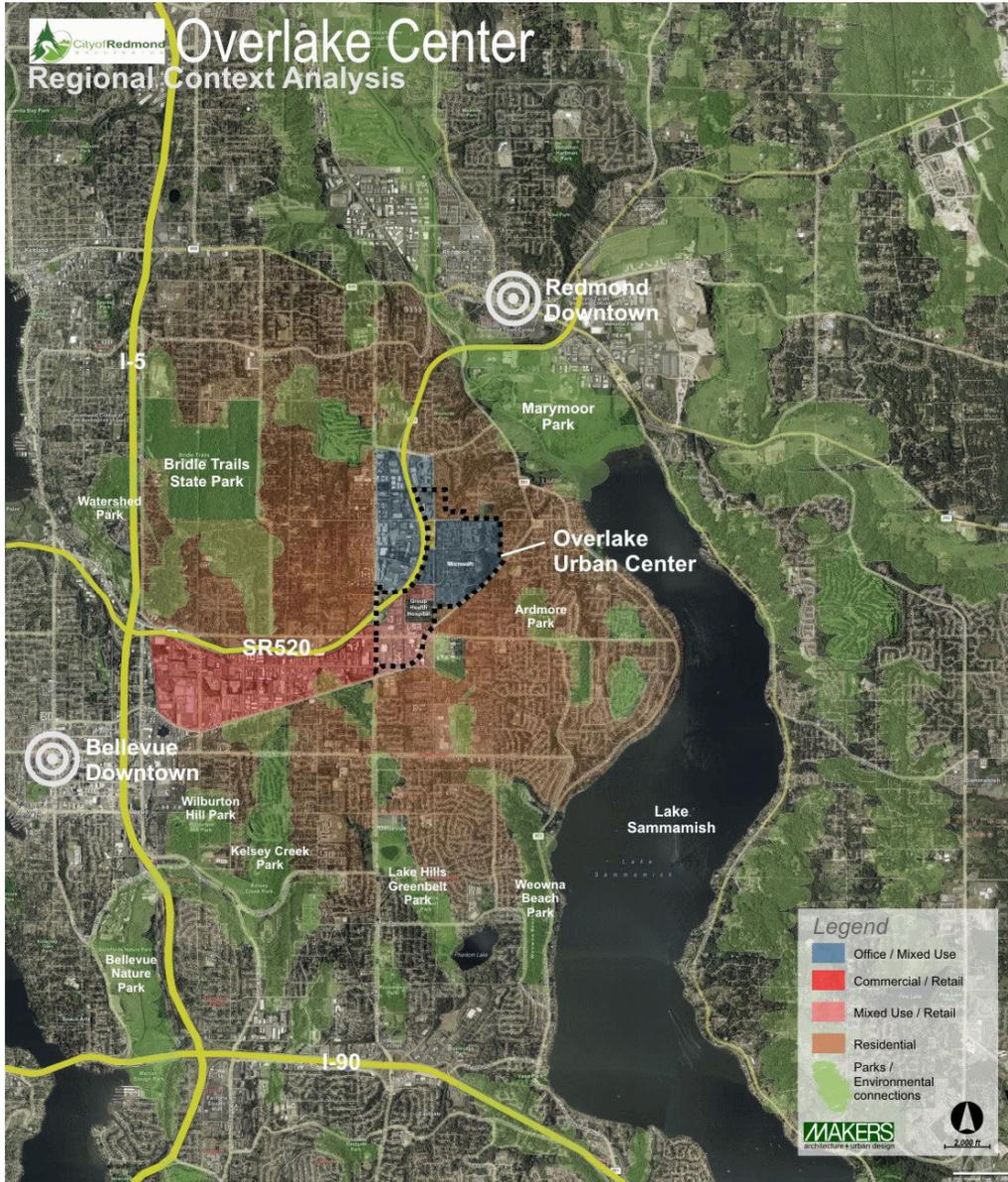


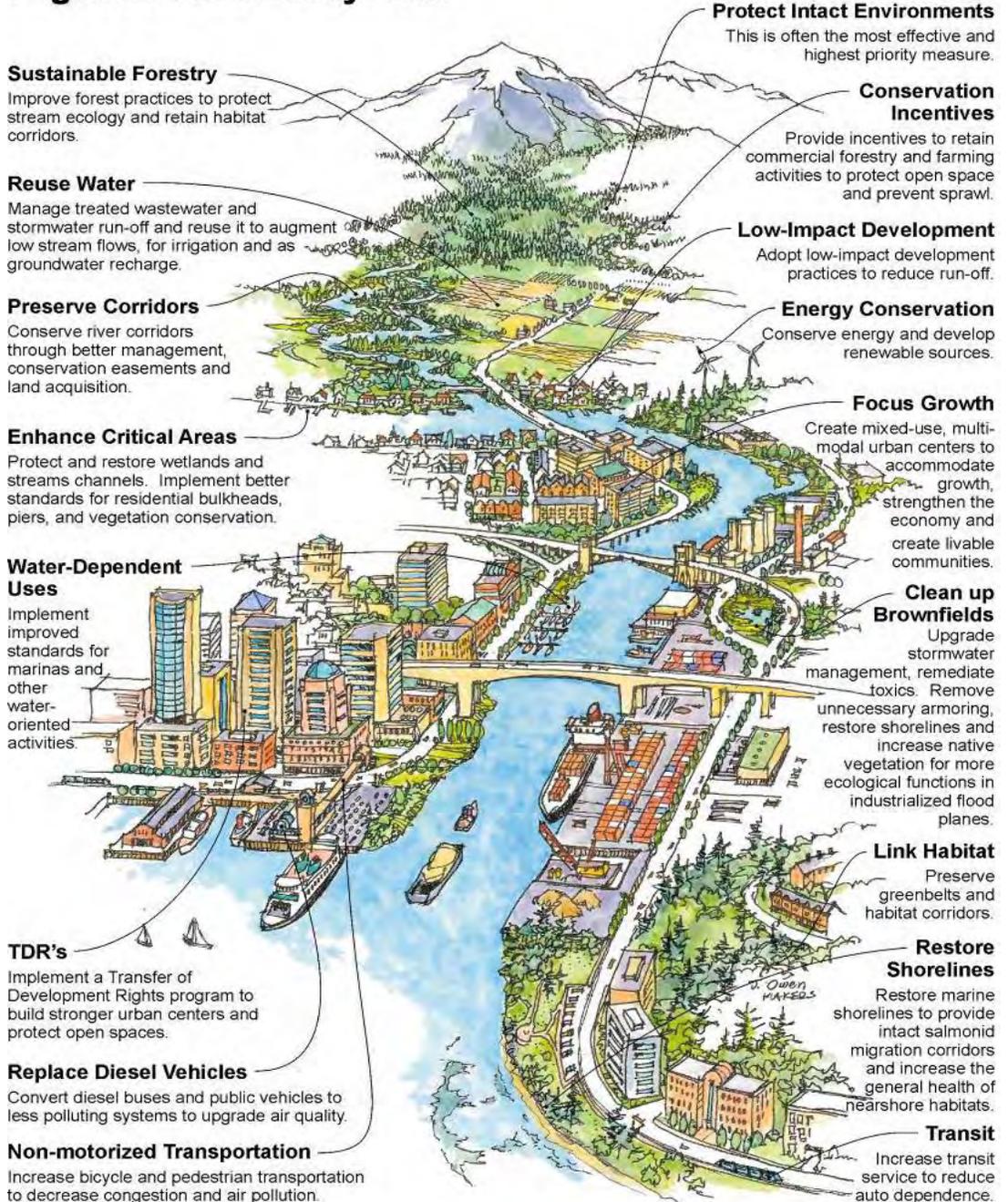
Figure 42: Bellevue-Redmond-Overlake Center

In summary, Overlake has the potential to become an even more powerful economic engine, preserve its own identity, accommodate mixed-use neighborhoods, and functionally link the Bellevue-Redmond corridor. More importantly, it could become the keystone in a type of urban structure not otherwise found in Puget Sound – a multi-nodal corridor that integrates and unifies an emerging sub-regional area. This potential is greatly magnified if collaborative efforts continue and the advantages of this unique type of urban concentration (center) are exploited.

## Environmental Element: PSRC VISION 2040

PSRC's VISION 2040 Incorporates a substantial environmental element that the strategy to transform industrialized estuaries will support.

### Actions to Improve Puget Sound's Ecosystem





## Water Resource Inventory Areas

The 1998 legislature passed The Watershed Planning Act, which set a framework for developing local solutions to watershed issues on a watershed basis. The purpose of the Act is to develop a more thorough and cooperative method of determining what the current water resource situation is in each Watershed Resource Inventory Area of the state and to provide local citizens with the maximum possible input concerning their goals and objectives for water resource management and development. There are eighteen Watershed Resource Inventory Areas covering the central Puget Sound region, shown in Figure 43.

### Watershed Resource Inventory Area 8: Proposed Lake Washington-Cedar-Sammamish Watershed Chinook Salmon Conservation Plan

The Lake Washington-Cedar-Sammamish Watershed (Watershed Resource Inventory Area 8), located in western Washington, is home to three populations of Chinook salmon: Cedar River, North Lake Washington, and Issaquah. Each year, Chinook salmon spawn and rear in the Watershed Resource Inventory Area 8 rivers and streams and use the lakes, rivers, estuary, and nearshore to rear and migrate to the ocean. Development in the watershed for human use has dramatically altered habitat that salmon need to survive. Chinook salmon (known more commonly as king salmon) are in trouble; they are far less abundant now than they were even in recent decades, and all three populations are at high risk of extinction. In 1999, the federal government listed Puget Sound Chinook salmon and bull trout as threatened under the Endangered Species Act.

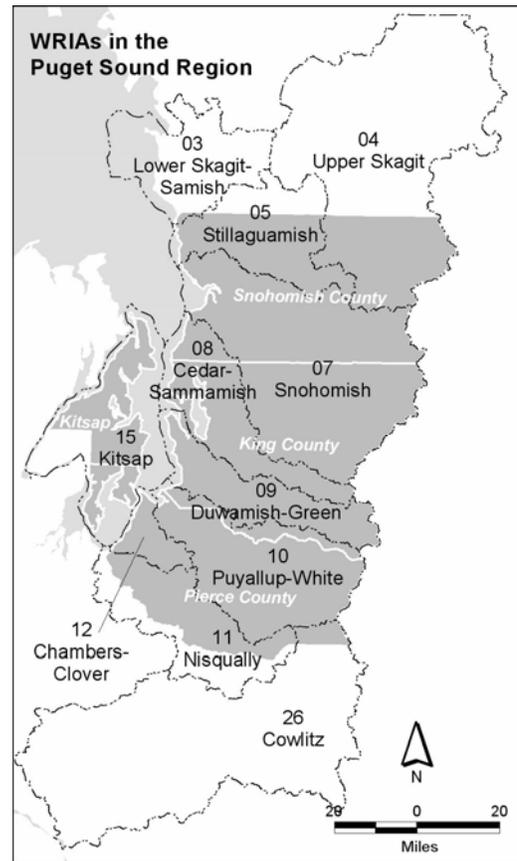


Figure 43: Watershed Resource Inventory Areas in the Puget Sound region

Salmon have historically been, and continue to represent, a vital part of the culture and economy of this watershed. The health of salmon populations is an indicator of overall watershed health. Condition of fish habitat is linked to the quality of the environment and the benefits human inhabitants reap from it.

Concerned about the need to protect and restore habitat for Chinook salmon for future generations, 27 local governments in Watershed Resource Inventory Area 8, including King and Snohomish counties, Seattle, and 24 other cities in those counties, signed an inter-local agreement in 2001 to jointly fund the development of a conservation plan to protect and restore salmon habitat.

The Watershed Resource Inventory Area 8 Steering Committee developed this plan through a multiple stakeholder planning process. The Steering Committee is composed of city and county elected leaders, concerned citizens, scientists, and representatives from business and community groups, water and sewer districts, and state and federal agencies. The Steering Committee's *Proposed WRIA 8 Chinook Salmon Conservation Plan* is the result of these collaborative efforts. It is a science-based plan that contains recommendations for prioritized actions to restore and protect salmon habitat and a collaborative approach for implementing these actions over the next ten years. The current plan recommends a comprehensive and detailed treatment program. The plan includes a short list of 170 priority actions and a larger list of 1,200 actions.

Unifying this broad range of actions is a commitment to adaptive management, an approach that emphasizes monitoring conditions and revising the management program as conditions warrant. Actions for the plan were developed in three broad categories:

- *Land use, planning, and infrastructure:* Actions that address habitat-forming processes at a landscape scale and focus on accommodating future growth while minimizing impacts to salmon habitat.
- *Site-specific habitat protection and restoration projects:* Actions that protect or restore a specific area or parcel through acquisition or easement and restoration projects.
- *Public outreach and education:* Actions that support the land use and site-specific actions or educate and encourage behavior that benefits habitat health.

### **Implications for Regional Design**

- The Watershed Resource Inventory Area conservation plans identify areas (tiers) where new development will have an especially severe impact on Chinook salmon runs unless successfully mitigated. This should be reviewed during the State Environmental Protection Act and alternative formulation process to determine what the relative impacts to those areas are. Additionally, the plans identify key restoration projects and activities that will enhance salmon survivability and, at the same time, the fundamental aquatic processes on which the regional ecology's health depends.

## Cascade Land Conservancy

Cascade Land Conservancy is an entrepreneurial nonprofit land conservation organization, currently working in King, Kittitas, Pierce, Mason, and Snohomish counties with both public and private sector involvement. Its mission is to protect wild and open space lands to sustain the natural beauty and health of the environment. Utilizing a variety of innovative conservation methods, the Cascade Land Conservancy works to strategically conserve and steward critical landscapes that span our service area—from headwaters to estuaries and foothill forests to urban centers. The Cascade Land Conservancy’s comprehensive Conservation Agenda enables it to assess threats to ecosystems, identify regional conservation opportunities, and conserve and steward these important lands.

The *Cascade Agenda*, a report from the Cascades Dialogues project is a narrative and visual articulation of a landscape vision for the 21st century that captures the best features of our community and region. This strategic plan will guide our actions and influence the region to conserve and care for a landscape that will sustain us for the next century.

### Description of the Issue

The region’s population could double during the next century. If current land development trends persist, this will mean a dramatic loss of forest lands, agricultural lands and open space in the region (see Figure 44).

The *Cascade Agenda* addresses the following parameters in its goals and action strategy:

- Amount and productivity of forest land.
- Amount and productivity of rural land.
- Amount and quality of parks and open space.
- Amount and quality of restored and protected stream corridors and shorelines.
- Amount of impervious surface.

### Justification of the Issue As a Priority

Through the Cascade Dialogues process, the Cascade Land Conservancy and its partners have found substantial and consistent support for resource and open space protection for ecological, economic, recreational and aesthetic reasons.

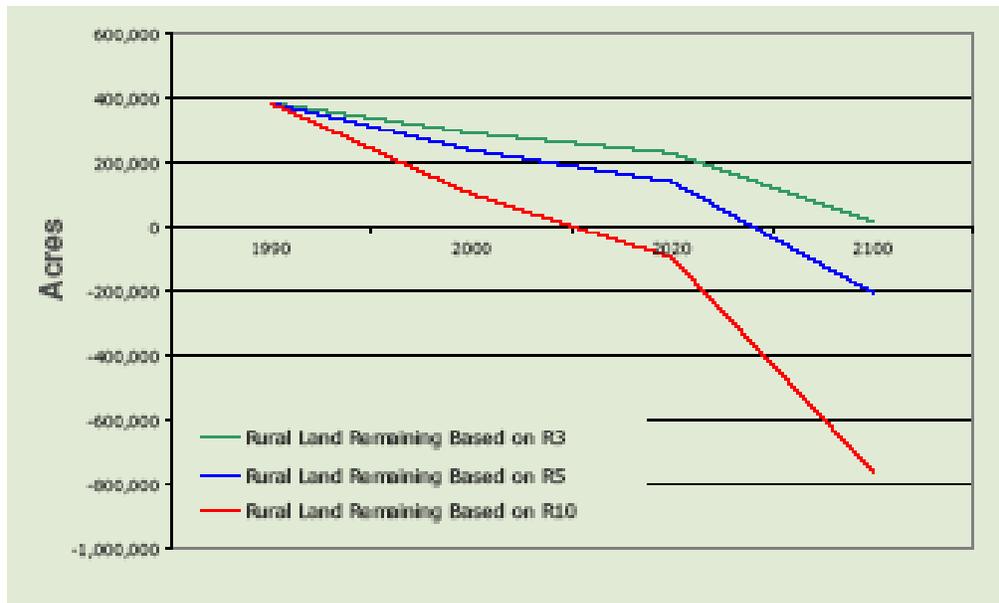


Figure 44: Acres of rural land remaining.

### Current or Proposed Management Efforts

The *Cascade Agenda* proposes protecting and restoring significant portions of the region’s resource lands, shorelines and open space. The following are the draft goals which are subject to further research and review.

The Cascade Dialogues team is preparing an ambitious implementation strategy that combines a variety of funding sources to acquire at-risk land, support sustainable land based resource businesses, preserve recreational and natural resource lands and acquire development rights to rural and resource lands through a TDR program. The Cascade Land Conservancy is calculating the fiscal resources and cooperative actions needed to reach the goals listed above and identifying a means to attain them.

### Implications for VISION 2040

For the purposes of VISION 2040, the *Cascade Agenda’s* outreach and public participation program provides evidence that such a conservation agenda has broad public, governmental and agency support and that there is regional interest in conserving the environment, resource lands and open space. The Agenda identifies quantitative figures for achieving environmental goals. While these figures merit review and testing over time, they at least provide a preliminary target that can be discussed and tested through VISION 2040. The goals for various types of land and enhancement measures might be considered in one of the Index based alternatives.

*Note: Background material taken from Cascade Land Conservancy website and Cascade Dialogues website. Specific information was taken from the slide show for the April 6 2006 Steering Committee.*

## Restoration Plans Prepared as Part of Shoreline Master Program Updates

The Department of Ecology administers the Washington State Shoreline Management Act. Local governments prepare shoreline master programs containing policies and regulations to protect and restore the shoreline environment, provide public access, and give priority to uses that are dependent or benefit from a shoreline location.

In 2003 the Department of Ecology adopted new shoreline management guidelines that call for significantly improved environmental protection and enhancement practices. Now, when local governments amend their shoreline master programs, they must conduct a comprehensive environmental characterization of their shorelines and identify measures to protect and restore shoreline ecological processes. This new measure can be an important vehicle for translating watershed objectives and analysis into implementable local regulations because local governments must now show that there will be “no net loss” of ecological functions on a comprehensive basis.

Additionally, as part of a shoreline master program update, Local governments must develop an Environmental Restoration Plan identifying restoration opportunities. These restoration plans must take into account the priorities of the watershed –wide concerns identified in the WRIA plan and other scientific analysis. The restoration plans include policies and recommended actions with an implementation plan of how environmental goals will be achieved

### Implications for Regional Design

Because these restoration plans translate watershed-wide objectives to the local level and identify feasible projects tied to a regulatory program, they will potentially be very useful in identifying those open space lands and restoration projects to be included in open space planning.

Additionally, because the Shoreline Management Act objectives balance environmental protection with provision of water oriented uses, jurisdictions preparing SMP's will be looking for ways to achieve both appropriate development and ecological restoration. This is an area where design can play a leading part and the sharing of information on this issue will benefit local governments.



## The Nature Conservancy Biodiversity Portfolio

“The Nature Conservancy is a leading international, nonprofit organization dedicated to preserving the diversity on life on Earth. [Its mission is] to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.”<sup>6</sup>

The Nature Conservancy, along with agencies and other partners, is developing products throughout the U.S. and internationally called ecoregional assessments that identify priorities for biodiversity protection based on biological values and conservation suitability in the context of large areas called ecoregions. The Nature Conservancy, along with partners such as the Washington Department of Fish and Wildlife, has developed ecoregional assessments that identify the most important places for biodiversity in the Willamette Valley-Puget Trough-Georgia Basin ecoregion with high conservation value and opportunity. Because higher

value areas with fewer human impacts tend to be in less populated places and because of the use of a suitability index (see below), most of these areas in the portfolio are non-urban and located near public lands. Within the ecoregion, The Nature Conservancy set goals for the persistence of terrestrial, freshwater, and marine species and natural systems. The result can be summarized in aggregate measures that state the percent of species that have met the prescribed biodiversity goals within portfolio areas in the

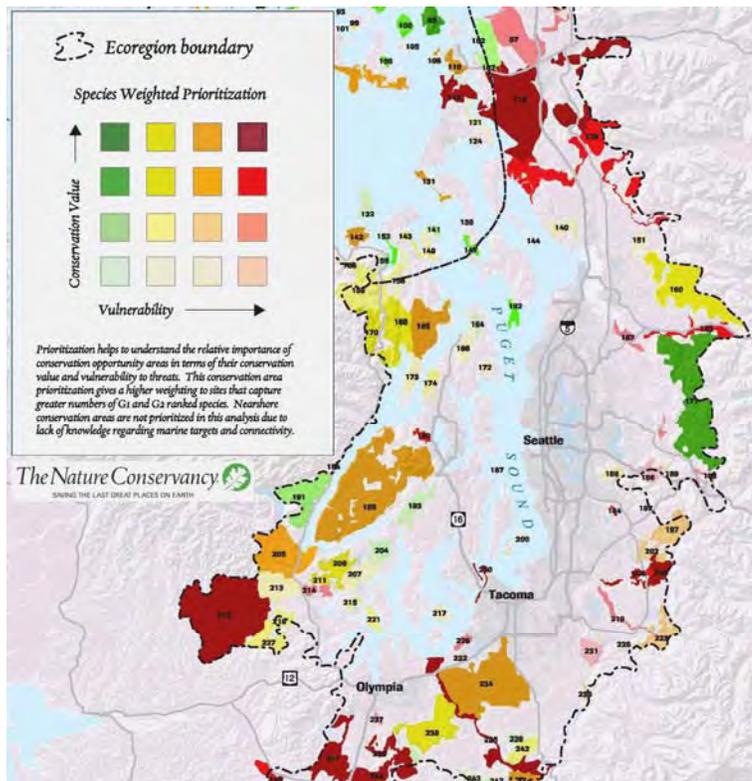


Figure 45: Prioritization of portfolio areas identified near Puget Sound

<sup>6</sup> Retrieved March 11, 2005 from The Nature Conservancy web site: <http://nature.org>.

ecoregion.

In assessing human impacts in the ecoregion, a suitability index was also developed to find not only the most biologically valuable areas, but those most suitable for conservation. Factors for the suitability index included items such as proximity to urban growth boundaries, density of roads, land use, presence of dams, etc.

The completed report is a first approximation of the high priority places for terrestrial and nearshore marine conservation across the ecoregion. Figure 45 shows a prioritization of the portfolio areas that were identified, according to value and threats for the Puget Sound portion of the ecoregion. The table in Figure 46 summarizes terrestrial systems' and species' goal performance for the entire Willamette Valley-Puget Trough-Georgia Basin ecoregion, which includes the Puget Sound area.

Target	Percent Meeting Goal
<b>TERRESTRIAL</b>	<b>15%</b>
Terrestrial Systems	68%
Plant Communities	9%
Terrestrial Species	13%

*Figure 46: Percentage of terrestrial species and systems within the portfolio meeting ecological goals*

### **Current or Proposed Management Efforts**

This problem is being addressed by The Nature Conservancy through land acquisition, easement and landowner incentive programs, working with other organizations and agencies on common conservation priorities, as well as governmental policy work. The Willamette Valley-Puget Trough-Georgia Basin Assessment also recommends management strategies for those involved in conservation planning:

### **Implications for Regional Design**

The Biodiversity Portfolio and associated information will be useful in identifying high priority lands for protection as part of a comprehensive open space plan. The maps themselves present compelling visual images that are useful in public information materials, presentations and consensus building activities. Additionally, the Nature Conservancy has been working on recommendations for urban land and is a great resource for planning and design to protect and enhance the ecology.

## Port of Seattle

The Port of Seattle has restored and provided public access at a number of segments along the Duwamish as part of mitigation for development projects (see Figure 47). While these projects were located where opportunities arose and are scattered along the river, together with Seattle Parks and Recreation projects and the development of a pedestrian and bicycle trail with planned connections to the Mountain-to-Sound and Green River Interurban trails, they provide an example of how individual efforts can be coordinated toward a regionally important recreational amenity and environmentally significant restoration along with industrial development

(see Figure 48).

### LEGEND

- Existing Port of Seattle Sites
- ▲ Existing Sites by Others
- Potential Port of Seattle Sites

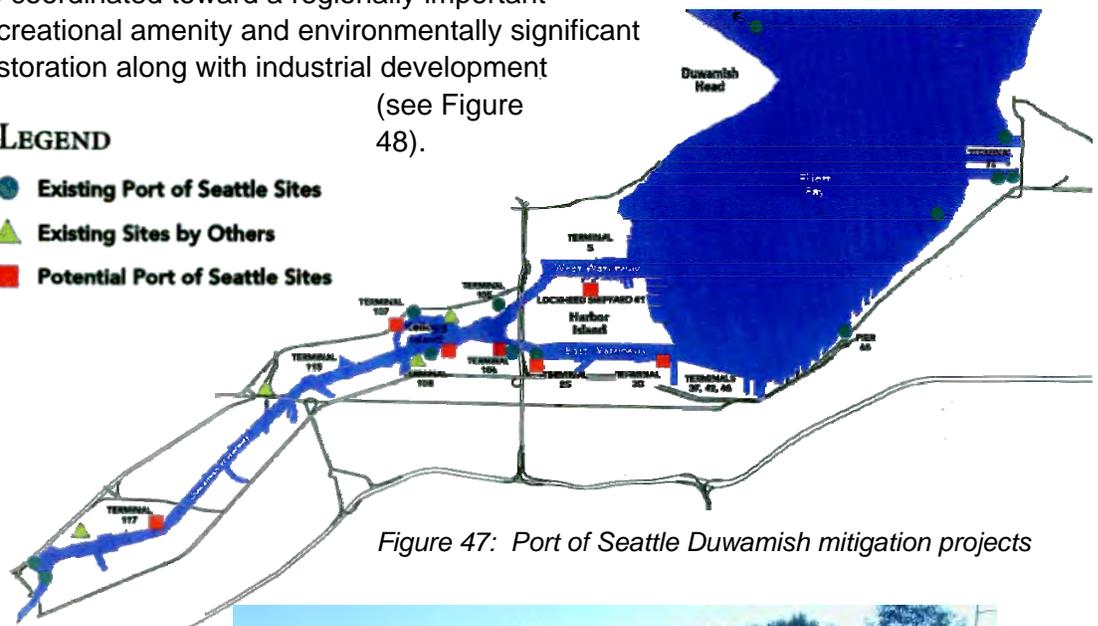


Figure 47: Port of Seattle Duwamish mitigation projects



Figure 48: A Port of Seattle habitat restoration project

The Port has worked with a number of citizen groups to provide habitat and recreational opportunities as part of the Terminal 5 expansion, seen before and after in Figure 49.

*Figure 49:  
Terminal 5  
Before*



*After*

## Snohomish Estuary Wetland Integration Plan and Implementing Activities

The 1997 SEWIP is a comprehensive strategy for managing the estuary's wetlands while accommodating human activities. Recent implementation activities illustrate how larger comprehensive planning can be translated into local implementation measures and on-the-ground improvements. Based on the SEWIP effort, the City of Everett prepared a shoreline master program and a public access plan around the Everett Peninsula that integrates industrial expansion, environmental restoration, and public access (see Figure 50).



Figure 50: A portion of Everett's Public Access Plan.

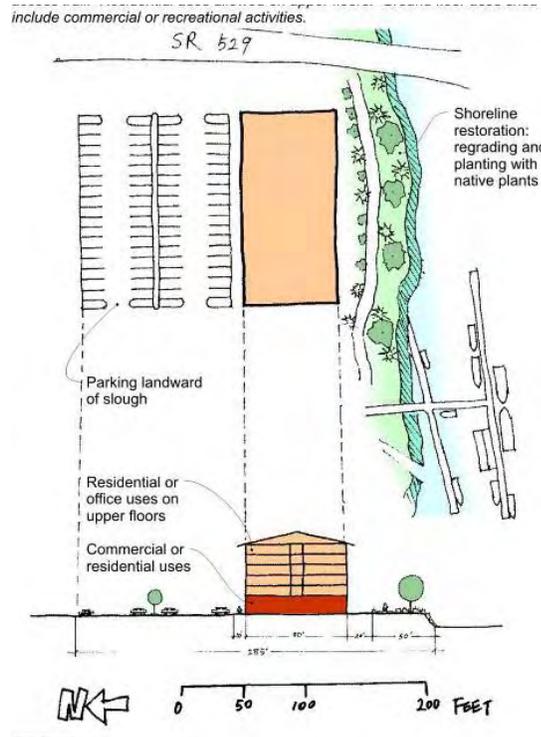


Figure 51: Provisions from Marysville's Shoreline Master Program.

The City of Marysville's vision for a stretch of Ebey's Slough (part of the Snohomish River estuary) calls for retention of an old mill where logs may be rafted, a boat launch and shallow-draft water recreation area, the restoration of a large salt marsh, and mixed-use development, all linked with a trail system (see Figure 51). Consequently, the City's new shoreline master program includes specific regulations allowing mixed-use and residential development if public access and substantial shoreline restoration are provided. This approach represents a significant departure from typical shoreline use regulations generally discouraging residential development. But Washington



Department of Ecology agreed with the City's direction in this case because it will achieve environmental and public access objectives.

In terms of physical restoration improvements, the Snohomish Basin Salmon Recovery Forum, a voluntary coalition of governments, tribes, special purpose districts, and non-governmental organizations, has been awarded \$2.3 million for five projects that will substantially improve the estuary's ecology (See Figure 52).

*Figure 52: Priority habitat restoration projects.*

## Shared Strategy for Puget Sound

The Shared Strategy<sup>7</sup> is a groundbreaking collaborative effort to protect and restore salmon runs across Puget Sound. Shared Strategy engages local citizens, tribes, technical experts and policy makers from all levels of government to build a practical, cost-effective recovery plan endorsed by the people living and working in the watersheds of Puget Sound, the extent of which is depicted in Figure 53. Shared Strategy works with and builds on existing recovery efforts across the Sound in the belief that local stakeholders are in the best position to find lasting solutions for their communities to complex ecological, economic and cultural challenges. National Oceanic and Atmospheric Administration—Fisheries and the U.S. Fish and Wildlife Service, the federal agencies responsible for implementing the Endangered Species Act, have endorsed the Shared Strategy and are active participants.

The primary objective of the Shared Strategy is to recover and maintain an abundance of naturally spawning salmon at self-sustaining, harvestable levels.

The ultimate outcome will be recovery of the listed species and improved conditions for the entire ecosystem. They are in the fourth step of a five-step process that began in 2001. The 5-Step Shared Strategy is summarized below:

- Identify what should be in a recovery plan and assess how current efforts can support the plan.
- Set recovery targets and ranges for each watershed.
- Identify actions needed at the watershed level to meet targets.
- Build regional consensus to develop strategies and commitments on cross-watershed issues.
- Finalize and submit the plan and prepare for successful implementation.



Figure 53: Shared Strategy's map of the Puget Sound Watershed

<sup>7</sup> This information was compiled from the Shared Strategy for Puget Sound website: <http://www.sharedsalmonstrategy.org/index.htm>.

As the next significant milestone, local and regional Shared Strategy members are planning to deliver the 14 watershed chapters, a nearshore chapter and regional (cross-watershed) plan elements as a single, comprehensive plan to the National Oceanic and Atmospheric Administration—Fisheries and the U.S. Fish and Wildlife Service on June 30, 2005.

### **Developing a Recovery Plan for Puget Sound Salmon**

The June 2005 plan is a significant step in managing regional salmon recovery. Early indications are that recovery is possible and the region has already started down the path toward achieving it. It appears that the individual watersheds are:

- Identifying the causes of decline and threats to salmon and the needed actions to address them.
- Developing a focused 10-year plan within a long-term recovery context.
- Prioritizing the most important projects to make a difference in the next ten years.
- Linking major actions to improvements for fish.

With the Watershed Resource Inventory Area components, nearshore, and regional (cross-watershed) plan elements, the June 2005 plan identifies the goals, strategies and actions needed to achieve salmon recovery. It will emphasize the key decisions that have been made at this time and where we have the greatest certainty and priority for action. By the end of the year, the final plan will also include implementation commitments for many of the key actions needed to start the region on a recovery path in the next ten years. The plan will clearly identify decisions still underway and the game plan to address issues that are on a longer time frame.

### **Implications for Regional Design**

The shared strategy can provide very useful guidance in identifying open spaces and restoration activities that would benefit aquatic ecosystems.



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