Land Use

This chapter discusses existing and planned land use policies and development patterns, as well as the region’s overall urban and rural form. It then discusses potential impacts to these policies and development patterns under each of the growth distribution alternatives.

5.2.1 Affected Environment

A. REGULATORY SETTING

Land use in the region is managed through comprehensive plans prepared for each jurisdiction and guided by the multicounty planning policies of VISION 2040 and the countywide planning policies adopted in accordance with the Growth Management Act. Land use management is accomplished through each jurisdiction’s development regulations and capital investment programs. Generally, development outside the region’s urban growth area is constrained by lower-density zoning and restrictions on the extension of utilities and services.

Passage of the Washington State Growth Management Act in 1990 and VISION 2020 in the late 1980s represented a landmark change for land use planning. The Growth Management Act required the adoption of land use plans at the regional, countywide, and local levels. The Growth Management Act and its mandated land use plans help shape and influence the pattern of future land use and development in the region.

The Growth Management Act establishes the underlying framework for local governments and state and regional agencies within the central Puget Sound region to coordinate their respective comprehensive plans and transportation planning efforts. King, Kitsap, Pierce, and Snohomish counties and their respective cities and towns have all developed and adopted countywide planning policies and comprehensive plans. These plans and countywide policies provide specific policy direction to the counties and their cities and towns for designating urban growth areas and preparing their individual comprehensive plans to accommodate population and employment growth. The county comprehensive plans also provide direction for managing growth in the unincorporated areas within the county.

Overall, the countywide planning policies include provisions for desired land use patterns that:

- Protect natural resource lands.
- Discourage development and the extension of urban services and/or infrastructure in rural areas.
- Promote growth and higher development densities in urban areas, particularly in regional growth centers and activity centers.
- Promote high-capacity transit to connect centers.
The Growth Management Act and Land Use

The Growth Management Act identifies three mutually exclusive landscapes: urban lands, rural lands and natural resource lands (e.g., agricultural, forest and open space, mineral and other). While the exclusive nature of these lands is important to recognize, the long-term sustainability of the resource and rural lands are also dependent on accommodating development demands within the urban growth area. Within each of the three land use categories, there are different land use types. Figures 5-2-1 and 5-2-2 illustrate the land use categories and present the number of square miles within each of them.

FIGURE 5-2-1: LAND USE CATEGORIES UNDER GMA

Source: Puget Sound Regional Council, 2006


- **Urban Land.** Counties and cities are required to designate urban growth areas under Revised Code of Washington (RCW) 36.70A.110. These are designated areas where growth is intended to be concentrated as a means of controlling suburban sprawl. The presently adopted urban growth areas in King, Kitsap, Pierce and Snohomish counties and their respective cities and towns comprise about 16 percent of the region’s total land area. Urban growth on urban land refers to growth that makes intensive use of land for the location of buildings, structures, commercial and industrial uses, 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. Part of the intent of designating urban growth areas is to help channel investments in infrastructure within the already built-up areas (especially cities) and to discourage growth in rural areas. Within the urban area, there are incorporated lands (cities), and unincorporated urban growth areas. Portions of the region’s unincorporated urban lands are designated as “potential annexation areas.”

- **Rural Land.** Counties are required to designate rural lands. This is done primarily through the development of county comprehensive plans, and the requirement for a “rural element” of a county comprehensive plan under RCW 36.70A.070(5). Rural lands are those lands that are not designated for urban growth, agriculture, forest, or mineral resources. Rural development can consist of a variety of uses and residential densities, including clustered residential development, at levels that are consistent with the preservation of rural character. Rural development does not refer to agriculture or forestry activities that may be conducted in rural areas. Comprising about 24 percent of the region’s total land area, rural lands in the region contain different types of uses and each county has a unique approach to rural development.

- **Natural Resource Land.** Counties and cities are required under RCW 36.70A.170 to designate natural resource lands. Comprising the majority of the region’s total land area, about 60 percent, natural resource areas contain: (a) agricultural lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products, (b) forest lands that are not already characterized by urban growth and that have long-term significance for the commercial production of timber, (c) mineral resource lands that are not already characterized by urban growth and that have long-term significance for the extraction of minerals, and (d) critical areas which are resident within the other three categories (see the next bullet). The vast majority of this land, 95 percent, falls under the forest lands designation and much of this is protected under federal, state and local regulations.

- **Critical Areas.** The Growth Management Act requires that each city and county identify critical areas before identifying areas of urban growth. Critical areas include both hazardous areas such as floodplains and steep slopes (see Chapter 5.13 – Earth), and environmentally sensitive areas like wetlands and streams (see Chapters 5.5 – Ecosystems and 5.6 – Water Quality and Hydrology). Critical areas also include zones that are important for protecting groundwater. The Growth Management Act requires counties to protect the “functions and values” of these identified critical areas. Examples of wetland functions are filtration of pollutants, wildlife habitat, flood control, and groundwater recharge. The importance of these areas is made apparent in language of the Growth Management Act that specifies this designation as a top priority of the Growth Management Act.

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1 These affiliated areas are called Potential Annexation Areas in King County, sometimes referred to as Urban Service Areas in Pierce County and as Municipal Urban Growth Areas for parts of Snohomish County. For more information on Potential Annexation Areas and their targeted growth, see the VISION 2040 Issue Paper on Growth Targets ("Growth Management by the Numbers"), which is included in FEIS Appendices - Appendix I-F.
These designated areas exist within the other three categories of land, and contain the following types:
(a) wetlands, (b) areas with a critical recharging effect on aquifers used for potable water, (c) fish and wildlife habitat conservation areas, (d) frequently flooded areas, and (e) geologically hazardous areas. Interestingly, the definition of “critical areas” lists these five types but also states that they include “the following areas and ecosystems” (for more information, see Chapter 5.5 – Ecosystems). Critical areas are managed through development regulations (36.70A.060), have defined guidelines for classification (36.70A.170), and require that the “best available science” be used in their designation and protection (36.70A.172). Per RCW 36.70A.480, shorelines of the state may contain critical areas, but are subject to the requirements of the Shoreline Management Act as set forth in RCW 90.58.020, not to the Growth Management Act.

VISION 2040 and Land Use Planning

VISION 2040 includes policies and provisions that address a range of land use issues, including resource lands, rural areas, urban growth areas, and contiguous and orderly development. VISION 2040 provides a regionwide framework for local, county and regional planning. To that end, the VISION is the foundation for an overarching strategy for enhancing mobility and protecting valuable rural and resource lands from inappropriate urban development and urban sprawl through compact regional growth. The components that define the compact urban form include population and employment density with pedestrian-oriented design, scale and a variety of transportation modes.

- **Urban Land.** The VISION calls for focusing growth and development within the region’s urban growth areas. In addition, regional growth centers are to be designated as locations of higher intensity residential and employment development. These centers are to be connected by an efficient transportation system with high-capacity transit. Additionally, regional manufacturing/industrial centers are identified as areas for more intensive activities, and the VISION call for protecting these areas from incompatible adjacent uses.

- **Rural Land.** The VISION 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. “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)

- **Natural Resource Land and Critical Areas.** The VISION calls for preserving the region’s resource lands for their natural, economic, and ecological value. The VISION also calls for protecting critical areas as environmentally significant lands, recognizing that their protection contributes to health, safety, and the well-being of the region.

B. PHYSICAL SETTING: EXISTING LAND USE AND TRENDS

This section discusses existing land use trends by the land use categories described in the previous sections.

**Urban Land**

As of 2003, urban areas contained the vast majority of the region’s population, employment and housing. As shown in the following figure, variations exist among the four counties in terms of how much of each activity is contained within each county’s designated urban growth area.

<table>
<thead>
<tr>
<th>Region</th>
<th>Population</th>
<th>Percent in UGA</th>
<th>Covered Employment</th>
<th>Percent in UGA</th>
<th>Housing Units</th>
<th>Percent in UGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>King</td>
<td>1,652,900</td>
<td>92.9%</td>
<td>1,059,600</td>
<td>98.3%</td>
<td>728,300</td>
<td>93.9%</td>
</tr>
<tr>
<td>Kitsap</td>
<td>133,600</td>
<td>56.4%</td>
<td>62,200</td>
<td>82.0%</td>
<td>56,000</td>
<td>58.0%</td>
</tr>
<tr>
<td>Pierce</td>
<td>584,500</td>
<td>79.7%</td>
<td>223,000</td>
<td>92.7%</td>
<td>235,600</td>
<td>80.1%</td>
</tr>
<tr>
<td>Snohomish</td>
<td>515,900</td>
<td>80.9%</td>
<td>194,000</td>
<td>94.2%</td>
<td>206,100</td>
<td>81.8%</td>
</tr>
<tr>
<td>Region Total</td>
<td>2,886,900</td>
<td>85.2%</td>
<td>1,538,800</td>
<td>96.1%</td>
<td>1,226,100</td>
<td>86.5%</td>
</tr>
</tbody>
</table>

Note: Totals may vary due to rounding. Source: Puget Sound Regional Council, 2005
Within the region’s urban lands, cities have designated regional growth centers and manufacturing/industrial centers as part of the process begun with the 1995 VISION 2020 document. These are illustrated in the following figure and are discussed in summary fashion in the following text.

FIGURE 5.2.4: MAP OF DESIGNATED REGIONAL GROWTH CENTERS AND MANUFACTURING/INDUSTRIAL CENTERS
**Regional Growth Centers.** The central Puget Sound region first embraced the concept of centers in the original VISION adopted in 1990. Centers were presented in a hierarchy of mixed-use, compact communities where people could live, work, and play. Regional growth centers are envisioned as focal points of higher-density population and employment, with efficient multimodal transportation infrastructure and services. They are intended to house mixed-use neighborhoods containing jobs, retail, services, and housing. Twenty-one regional growth centers were identified in the 1995 update of VISION 2020. Since that time, five additional centers have been designated.

**FIGURE 5-2-5: DESIGNATED REGIONAL GROWTH CENTERS**

<table>
<thead>
<tr>
<th>King</th>
<th>Auburn*</th>
<th>Seattle Downtown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Burien*</td>
<td>Seattle First Hill/Capitol Hill</td>
</tr>
<tr>
<td></td>
<td>Bellevue Downtown</td>
<td>Seattle Northgate</td>
</tr>
<tr>
<td></td>
<td>Federal Way</td>
<td>Seattle South Lake Union</td>
</tr>
<tr>
<td></td>
<td>Kent</td>
<td>Seattle University Community</td>
</tr>
<tr>
<td></td>
<td>Redmond</td>
<td>Seattle Uptown Queen Anne</td>
</tr>
<tr>
<td></td>
<td>Renton</td>
<td>Totem Lake (Kirkland)*</td>
</tr>
<tr>
<td></td>
<td>SeaTac</td>
<td>Tukwila</td>
</tr>
<tr>
<td>Kitsap</td>
<td>Bremerton</td>
<td>Silverdale</td>
</tr>
<tr>
<td>Pierce</td>
<td>Lakewood</td>
<td>Tacoma Downtown</td>
</tr>
<tr>
<td></td>
<td>Puyallup Downtown</td>
<td>Tacoma Mall</td>
</tr>
<tr>
<td></td>
<td>Puyallup South Hill</td>
<td></td>
</tr>
<tr>
<td>Snohomish</td>
<td>Bothell Canyon Park Everett</td>
<td>Lynnwood</td>
</tr>
</tbody>
</table>

Note: The asterisk (*) identifies those centers that have been designated after the adoption of the 1995 update of VISION 2020.

Overall, cities anticipate focusing much of their growth within regional growth centers. Some cities have aggressive plans to add substantial numbers of housing units within these centers, while others expect nominal increases in population but large increases in jobs. The regional growth centers represent planning areas that are expected to develop as the region’s major hubs over time, although it is not the intent that they all develop uniformly. Some centers may have a greater mix of housing, jobs, or other activities, while other may remain predominantly places with a high concentration of employment. Although regional growth centers have been identified as major locations for accommodating a significant portion of development anticipated in the region over the next 35 years, most are commercially oriented and only a few currently have large concentrations of population and housing. During the development of VISION 2040, additional center-like places were identified and discussed as part of the process to develop alternatives. These places were termed "subregional" or "countywide" centers.

**Manufacturing/Industrial Centers.** These centers have a much different urban form and purpose than regional growth centers. The region’s manufacturing/industrial centers can be characterized as areas of large contiguous blocks served by the region’s major transportation infrastructure, including roadways, rail, and port facilities. They generally have developed an urban form suitable for manufacturing and industrial uses, which often requires areas for outdoor storage, buffers from residential areas, and facilities with large spaces for assembly lines. Typically, there is not a residential component in these types of centers. Evolving over many decades, the size, shape, and location of the manufacturing/industrial centers have been determined by the needs of the region’s industrial market and the need for efficient access to the region’s land and water transportation systems. They also account for a large number of jobs within the areas in which they are located.

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2 See FEIS Appendices - Appendix I-F: Informational Paper Describing Current and Future Land Uses in the Central Puget Sound Region’s Regional Growth Centers.
3 See FEIS Appendices - Appendix I-F: Issue Paper on Subregional Centers.
The purpose of designating manufacturing/industrial centers is to help protect and preserve areas of intense manufacturing and industrial uses and to provide them with the necessary services and infrastructure to allow these uses to continue. These areas have been affected by suburban growth, which has consumed large areas for housing, schools, stores, streets and other urban uses.

- **Shorelines.** These lands are governed under the State Shoreline Management Act (RCW 90.58); however, the state requires close coordination of shorelines with Growth Management Act planning. Most of the shorelines in King and Pierce counties are within urban areas, although this is less the case in Snohomish County or Kitsap County. The impacts of development on Puget Sound shorelines and the Sound itself have been significant, including water pollution, sediments laden with toxic pollutants, and declines in populations of salmon, orcas, marine birds and rockfish. Puget Sound has experienced significant physical changes to its near shore habitat as well as population declines in some of its best-known, important plant and animal species:
  - Human development has modified one-third of the Puget Sound shoreline.
  - Intertidal salt marsh habitat has declined 75 percent since the 1800s.
  - Nine of the 10 species listed as endangered or threatened within the Puget Sound region inhabit the nearshore.
  - Three Puget Sound salmon species have been listed as in danger of becoming extinct according to the federal Endangered Species Act.
  - Resident orca whale populations have declined significantly from 97 in 1996 to 82 in 2003.

The recent listing of orca whales as threatened under the federal Endangered Species Act is likely to affect both shoreline and upland development activities.

**Rural Land**

The region’s varied rural areas offer a diverse set of natural amenities. Common elements of rural areas include small-scale farms, wooded areas, lakes and streams, and open spaces. Historically, rural lands have undergone rapid change as they became more accessible. Between 1995 and 2003, the amount of land within the region’s rural area has remained relatively stable; however, about 24 square miles of additional land have been added to the urban areas, with the majority of the land coming from the region’s rural lands.⁴

The following figure depicts parcel sizes in the region’s rural non-resource areas. As of 2004, 85 percent of parcels were less than 5 acres in size, and another 10 percent were between five and 10 acres in size. Meaning, only 5 percent of the parcels in the region’s rural areas were greater than 10 acres in size. At the same time, the parcels that are greater than 10 acres in size account for all most half (45 percent) of the land area.

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FIGURE 5.2-7: PARCEL SIZE IN THE REGION’S RURAL AREAS

Source: Puget Sound Regional Council, 2004
Natural Resource Land

The Growth Management Act is designed to protect the natural environment by such initiatives as controlling urban sprawl through regional countywide and local comprehensive plans. The Growth Management Act also contains specific provisions to ensure that most of the region’s future growth is accommodated in or immediately adjacent to areas that are already urban in character. This approach has helped to protect existing rural areas, environmentally sensitive areas, and resource lands.

• Agricultural Land. Agricultural production remains a meaningful contributor to the region’s economy and makes up about 3 percent of the region’s land and 5 percent of the region’s natural resource land. In addition to supplying food for the central Puget Sound region, agricultural lands provide open spaces close to cities, towns and rural communities. Well-managed agricultural lands also provide habitats and buffers for salmon and upland wildlife, aquifer recharge, floodwater retention, urban-rural separators, and scenic vistas. The recent housing development boom and ensuing increase of agricultural land real estate value have resulted in increased pressure to develop these lands for other uses.

• Forest Land. Forest land represents 57 percent of the region’s land and 95 percent of the region’s natural resource land. Today nearly two-thirds (64 percent) of all forestlands in Washington are owned or managed by federal, state, local, and tribal governments. The U.S. Forest Service is the largest land manager in the state, overseeing 9.2 million acres of national forest land. Given the changing management emphasis on federal lands and the highly controversial nature of national forest timber sales in recent years, commercial timber harvests on the national forests in Washington have dropped to a small fraction of historic levels. Washington lumber producers also have been affected by the large volumes of lumber imports, coming not only from Canada, but also from producers in Europe and South America. Growth in the central Puget Sound region is affecting forestland in several ways:
  — Some forest land is being converted to building sites, street networks, and other non-forest uses.
  — The long-term future of forestland adjacent to urban development is uncertain and, therefore, has become less attractive to investors in long-term timber production and more attractive to developers. (Source: Municipal Research and Services Center Web site.)

• Mineral Resource Land. Mineral resource industries take a very small percentage of the region’s land, much less than 1 percent. Coal mining is no longer active in the four-county region. The last coal mined for energy purposes was sold to large institutional users, such as the University of Washington in Seattle and state correctional facilities in Shelton and Monroe. By the 1970s these users had converted to natural gas and other sources.

Critical Areas

In practice, counties and cities do allow a certain amount of development in critical areas. In most jurisdictions, however, development can occur only under certain circumstances such as when disruption to critical areas is minimal. Many critical areas are also considered habitat for endangered species. The Endangered Species Act, a federal statute protecting threatened and endangered species, can override rights to develop by prohibiting certain activities on private property (see Chapter 5.5 – Ecosystems).

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5 County Critical Areas Ordinances: Pierce County Critical Areas Ordinance Title 18E, King County Critical Areas Ordinance 21A.24, Snohomish County Critical Areas Regulations Chapter 30.62B, Kitsap County Critical Areas Ordinance Title 19.
5.2.2 Analysis of Alternatives (Long-Term Impacts)

A. IMPACTS COMMON TO ALL ALTERNATIVES

The alternatives distribute future growth among a set of regional geographies that include metropolitan cities, core cities, larger cities, small cities, unincorporated urban or rural areas. Under the Growth Management Act, local governments must be able to provide transportation and other urban services that are needed to support growth.

The currently adopted countywide planning policies for King, Kitsap, Pierce, and Snohomish counties support the strategy of preserving and developing compact communities, redeveloping urban transportation corridors, and encouraging a greater portion of planned employment and housing growth to locate in urban areas. Consistent with the Growth Management Act, and the VISION, the countywide planning policies all support, to varying extents, the maintenance of the rural area and its existing rural character through limiting growth. The alternatives are based on the same urban growth area and assume that directing growth anywhere within the region’s urban growth area would be generally consistent with state law and local plans and regulations. At the same time, the Central Puget Sound Growth Management Hearings Board has interpreted the Growth Management Act to support the focusing of growth into incorporated cities, as opposed to unincorporated urban areas, in order to lead 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.”

Regardless of the alternative selected, adopted plans, some jurisdiction's policies and regulations would need to change to accommodate any of the future growth alternatives. Local jurisdictions would determine the actual permitted densities and types of land uses within the planned urban growth areas, and outside them in each county’s rural area.

The actual changes in land use and development patterns that could occur with each alternative would be attributed to complex interactions between many variables, including the national and regional economy’s health, the balance between transportation infrastructure investments and development, land use policies and tax structure, political leadership, and public consensus on the region’s future. Mixed-use, which represents compact growth and higher densities of residential and commercial land uses close together, might generally be expected to be focused within urban centers, manufacturing/industrial centers, activity nodes, and along certain major redevelopment corridors - this is more likely under the focused alternatives, given that the regionally-designated centers are located in metropolitan and core cities. Individual preferences regarding where to live and work is also a key factor, as is local communities’ willingness to promote and accept higher densities.

Now in the second decade of planning under the Growth Management Act, many regional agencies and local governments are refining growth plans. As part of these refinements, growth and transportation plans are increasingly focusing on making strategic infrastructure investments to help concentrate growth where utility and transportation infrastructure capacity exists or is planned to exist.
Proximity Analysis

Using the INDEX model grid cell data, PSRC conducted supplemental analysis to estimate the amount of population and employment that are within a quarter mile of specific resources under each of the alternatives. These are presented below.

**FIGURE 2-5: CONCEPTUAL ESTIMATE OF POPULATION AND EMPLOYMENT WITHIN ¼ MILE OF TRANSIT ROUTES**

<table>
<thead>
<tr>
<th>Base Year 2000</th>
<th>Preferred Growth Alternative</th>
<th>Growth Targets Extended Alternative</th>
<th>Metropolitan Cities Alternative</th>
<th>Larger Cities Alternative</th>
<th>Smaller Cities Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pop &amp; Emp</td>
<td>% of Total</td>
<td>Pop &amp; Emp</td>
<td>% of Total</td>
<td>Pop &amp; Emp</td>
</tr>
<tr>
<td>King</td>
<td>2,562,000</td>
<td>86%</td>
<td>3,754,000</td>
<td>91%</td>
<td>3,847,000</td>
</tr>
<tr>
<td>Kitsap</td>
<td>185,000</td>
<td>62%</td>
<td>318,000</td>
<td>57%</td>
<td>316,000</td>
</tr>
<tr>
<td>Pierce</td>
<td>580,000</td>
<td>62%</td>
<td>1,027,000</td>
<td>58%</td>
<td>921,000</td>
</tr>
<tr>
<td>Snohomish</td>
<td>556,000</td>
<td>66%</td>
<td>1,033,000</td>
<td>64%</td>
<td>925,000</td>
</tr>
<tr>
<td>Region</td>
<td>3,882,000</td>
<td>77%</td>
<td>6,132,000</td>
<td>76%</td>
<td>6,010,000</td>
</tr>
</tbody>
</table>

Note: Totals may vary due to rounding.

**FIGURE 2-6: CONCEPTUAL ESTIMATE OF POPULATION AND EMPLOYMENT WITHIN ¼ MILE OF THE URBAN GROWTH AREA BOUNDARY**

<table>
<thead>
<tr>
<th>Base Year 2000</th>
<th>Preferred Growth Alternative</th>
<th>Growth Targets Extended Alternative</th>
<th>Metropolitan Cities Alternative</th>
<th>Larger Cities Alternative</th>
<th>Smaller Cities Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pop &amp; Emp</td>
<td>% of Total</td>
<td>Pop &amp; Emp</td>
<td>% of Total</td>
<td>Pop &amp; Emp</td>
</tr>
<tr>
<td>King</td>
<td>142,000</td>
<td>5%</td>
<td>197,000</td>
<td>5%</td>
<td>237,000</td>
</tr>
<tr>
<td>Kitsap</td>
<td>46,000</td>
<td>15%</td>
<td>88,000</td>
<td>16%</td>
<td>94,000</td>
</tr>
<tr>
<td>Pierce</td>
<td>101,000</td>
<td>11%</td>
<td>178,000</td>
<td>10%</td>
<td>190,000</td>
</tr>
<tr>
<td>Snohomish</td>
<td>88,000</td>
<td>10%</td>
<td>215,000</td>
<td>13%</td>
<td>201,000</td>
</tr>
<tr>
<td>Region</td>
<td>377,000</td>
<td>7%</td>
<td>679,000</td>
<td>8%</td>
<td>723,000</td>
</tr>
</tbody>
</table>

Note: Totals may vary due to rounding.

**FIGURE 2-7: CONCEPTUAL ESTIMATE OF POPULATION AND EMPLOYMENT WITHIN ¼ MILE OF NATURAL RESOURCE LANDS**

<table>
<thead>
<tr>
<th>Base Year 2000</th>
<th>Preferred Growth Alternative</th>
<th>Growth Targets Extended Alternative</th>
<th>Metropolitan Cities Alternative</th>
<th>Larger Cities Alternative</th>
<th>Smaller Cities Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pop &amp; Emp</td>
<td>% of Total</td>
<td>Pop &amp; Emp</td>
<td>% of Total</td>
<td>Pop &amp; Emp</td>
</tr>
<tr>
<td>King</td>
<td>70,000</td>
<td>2%</td>
<td>95,000</td>
<td>2%</td>
<td>110,000</td>
</tr>
<tr>
<td>Kitsap</td>
<td>100</td>
<td>0%</td>
<td>100</td>
<td>0%</td>
<td>1,000</td>
</tr>
<tr>
<td>Pierce</td>
<td>39,000</td>
<td>4%</td>
<td>45,000</td>
<td>3%</td>
<td>64,000</td>
</tr>
<tr>
<td>Snohomish</td>
<td>63,000</td>
<td>7%</td>
<td>118,000</td>
<td>7%</td>
<td>127,000</td>
</tr>
<tr>
<td>Region</td>
<td>172,000</td>
<td>3%</td>
<td>258,000</td>
<td>3%</td>
<td>303,000</td>
</tr>
</tbody>
</table>

Note: Due to size of some of the figures, the totals are rounded to the hundreds, rather than to the thousands. Totals may vary due to rounding.

6 For all alternatives conceptual estimates: Regional Council staff used INDEX, a software analysis tool (see FEIS Appendices - Appendix I-E for additional information), to “paint” or assign population and employment growth jurisdiction-by-jurisdiction at the 5.5-acre grid cell level. The painting of all alternatives was guided by the future land use designations drawn from current local comprehensive plans.
As noted in Figure 5-2-8, each of the alternatives is estimated to increase the amount of population and employment that is located adjacent (meaning, within ¼ mile) to existing and planned transit routes, with an increase of between 48 to 66 percent over the base year (2000). However, the levels of population and employment will vary among the alternatives both at the regional and county levels. As noted in Figure 5-2-9, each of the alternatives is estimated to increase the amount of population and employment that is located adjacent (meaning, within ¼ mile) to the urban growth area boundary, with an increase of between 66 to 172 percent over the base year (2000). However, the levels of proximity will vary among the alternatives both at the regional and county levels. It can be assumed that additional growth adjacent to the urban growth area boundary will have the potential for increasing pressure for additional annexations or incorporations.

Urban Land

With compact growth, new residential development could occur at increased densities and there could be more intensive use of land. Cities might need to incorporate a percentage of their projected population growth in the form of infill (on developable or redevelopable parcels within city boundaries) and counties might need to adopt policies designed to direct new development in unincorporated areas near existing city boundaries or within city spheres-of-influence.

The region’s urbanized area will become denser as an additional 1.6 million people populate the region by 2040. A variety of development trends may challenge the region’s ability to realize its growth and transportation objectives over the next 35 years: ⁷

- Comparatively low-density suburban development dispersed throughout the urban area may result in less efficient delivery of services. Lower density development translates into added distances between sites, which in turn translates into longer lengths for infrastructure and service delivery. For example, larger amounts of sewer and water pipes might be necessary, and there may be related operational issues of additional pumping stations needed to move sewage and water greater distances. These types of infrastructure can be complicated to implement in an already built urban environment. Local bus transit service may not adequately serve the majority of the population in the lower-density communities (fewer than four households per acre). For these areas, the automobile will likely remain the dominant transportation option.

- If not properly considered when siting, residential development has the potential to impact existing uses of commercial and industrial land, creating incompatible adjacent uses.

- Low-density suburban development often occurs in areas that are not close to employment opportunities. Yet when housing is developed near employment centers, there may be a mismatch between the types of employment available and the relative affordability of the local housing being developed. The result may be an increasing reliance on expanded transportation infrastructure.

- Low-density suburban development creates challenges for the siting of commercial services in a more pedestrian-friendly, transit-oriented manner and increases reliance on the automobile to access goods and services in areas more removed from residential areas.

- The high cost and complexity of in-fill development may lead to higher costs of housing in urban areas.

Rural Land

The region’s counties all support maintaining rural character; however, they have taken different approaches to how much growth to assign to the rural area in their Growth Targets processes. All of the alternatives allocate additional growth to the region’s rural areas — some at levels that exceed currently adopted Growth Targets, and some at levels lower than adopted Targets. The growth has the potential to impact existing rural character; however, it also has the potential to increase opportunity for economic and land development. Depending on how this development occurs, there is the possibility that the new growth can either help to maintain rural character and rural-based economic development, or hinder it. For example, farm uses, particularly livestock, can be incompatible with higher levels of

residential development. Complementary industries or enterprises, such as farmers markets or farm-related businesses could improve the viability of productive rural lands.

Another possibility, in relation to the amount of growth estimated to be located adjacent to the urban growth area boundary (Figure 5-2-9), is that the levels of growth may lead to expanding the size of the urban growth area or potentially allowing levels of development in the region’s rural area that may impact existing rural character. If the urban growth area expands to include these areas, there will be significantly different development options than what currently exists today and the existing character will likely change.

**Natural Resource Land**

The alternatives do not envision any additional growth on any of the natural resource lands. However, growth close to these lands can have environmental impacts and create pressure for conversion of these lands to other land use types, although this depends on a number of factors including location, how development is designed and what mitigations are put in place through the development process. Alternatives that minimize development adjacent or proximate to these lands are likely to have less impact on water resources (see Chapter 5.6 – Water Quality and Hydrology), ecosystem change (see Chapter 5.5 – Ecosystems), or infrastructure impacts (see Chapters 5.7 – Public Services and Utilities and 5.3 – Transportation).

Alternatives that minimize growth close to resource lands are less likely to create conversion pressure. This is particularly a factor for agricultural lands, given their relative ease of conversion and the fact that they often are surrounded on all sides by rural non-resource lands. Further, alternatives that assign less growth adjacent to these areas are likely to decrease the potential for conflicts between incompatible land uses, such as residential and some types of farming and/or forestry activities.

Figure 5-2-10 estimates the amount of population and employment that could be located adjacent to land currently designated as natural resource. Each of the alternatives is estimated to increase the amount of population and employment located adjacent to these lands, with an increase of between 48 to 102 percent over the base year (2000). However, the levels of population and employment will vary among the alternatives both at the regional and county levels.

**Critical Areas**

The alternatives do not envision growth in lands that are categorized as critical areas. However, similar to natural resource lands, growth close to critical areas can have environmental impacts and create pressure for conversion of these areas to other land use types. Alternatives that minimize development adjacent or proximate to critical areas are likely to have less impact on floodplains and steep slopes, and other environmentally sensitive areas like wetlands and streams (see Chapters 5.5 – Ecosystems and 5.6 – Water Quality and Hydrology).
B. ANALYSIS OF EACH ALTERNATIVE

Using the grid-cell data of the INDEX model, the following figure presents a conceptual illustration of existing density in the base year 2000. This map is meant to provide context for the next set of maps that show density increases (between 2000–2040) and future density conditions (in 2040).

FIGURE 5-2-11: EXISTING DENSITY OF POPULATION AND EMPLOYMENT (2000)

Source: Puget Sound Regional Council, 2006
PREFERRED GROWTH ALTERNATIVE

Under the Preferred Growth Alternative, planned growth would be focused inside the urban area and, within the urban area, in cities with regional and subregional centers. This focusing would create a closer balance between jobs and housing than exists today in all of the regional geographies, including in unincorporated urban and rural areas.

Compared to current plans (Growth Targets Extended Alternative), the Preferred Growth Alternative concentrates growth in fewer regional geographies - with a focus on the more dense, urbanized geographies - thereby affecting land use in fewer areas.

This alternative would result in a land use pattern of highly developed cities (metropolitan and core cities), a second set of moderate density cities (the larger cities), and other areas of lower density urban and/or rural character (see 5.12 – Visual Quality and Aesthetic Resources). This alternative falls in the middle of the range of the alternative studied in term of impact to how much growth is assigned to individual regional geographies, which therefore reduced impacts to land use. The Preferred Growth Alternative would share the types of land use impacts described as common to all alternatives in the Draft Environmental Impact Statement.

The region’s small cities, unincorporated urban growth areas, and rural areas are assigned less population and employment growth under this alternative than under current plans (except for unincorporated urban growth areas receiving slightly more employment growth), which potentially means less land use change in these areas.

The following figures present a conceptual illustration of additional density of activity, and future density conditions, under the Preferred Growth Alternative.
EXISTING DENSITY OF POPULATION AND EMPLOYMENT (2000)

FIGURE 5-2-12A: PGA CONCEPTUAL MAPS: DENSITY OF POPULATION AND EMPLOYMENT — GROWTH (2000-2040)
FIGURE 5-2-12B: PGA CONCEPTUAL MAPS: DENSITY OF POPULATION AND EMPLOYMENT — FUTURE CONDITION (2040)
The following discussion of the Preferred Growth Alternative relates to the land use classes under the Growth Management Act and to the draft VISION 2040 regional geographies.

**Urban Land.** Compared to current plans (Growth Targets Extended), the most built-out portion of the urban area would undergo slightly more change under in this alternative, and the less built out areas would undergo slightly less change. It is expected that this growth could result in higher-density housing in urban areas, with higher employment levels also resulting in an increase in commercial and industrial land uses. Locating commercial and industrial land uses close to more compact residential uses supports goals to achieve a closer balance between employment and housing in the counties and regional geographies.

The Preferred Growth Alternative would likely support the trend in many local jurisdictions of passing zoning ordinances that allow infill development, small-lot single-family homes, multi-family homes, and mixed-use development. As displayed in the proximity analysis tables above, the Preferred Growth Alternative is estimated to have the third highest amount of population and employment that could be located adjacent to existing and planned transit routes, with almost 6,132,000 (an increase of about 58 percent over the base year 2000). This is over 120,000 more than current plans.

- **Metropolitan Cities** receive more population and slightly less employment growth than under Growth Targets Extended, with the second highest amount of growth overall. By concentrating a larger share of growth in metropolitan cities (and core cities), these areas could become much more compact with mixed-use neighborhoods containing jobs, retail, services, and housing. Potentially, the levels of growth distributed under this alternative might lead to the designation of new centers in these places.

  The impacts of this growth are similar to those under Growth Targets Extended, although, because there is more residential growth and slightly less employment growth (creating a closer balance between jobs and housing), this alternative could have less impacts in these cities and their neighborhoods. Because there is slightly more population than under Growth Targets Extended, potential impacts could include increased crowding, which could negatively impact some residents and employees in these cities. At the same time, the closer job-to-housing balance could require more mid- to high-rise multifamily development, with mixed-use development being more likely than under Growth Targets Extended. This intensification could lead to a change in the existing character of these cities.

- **Core Cities** receive the second largest amount of population growth and third most employment growth under this alternative. This alternative has a fair amount of additional residential growth and slightly more employment growth than under Growth Targets Extended. These places all have designated regional growth centers, which could accommodate a substantial amount of the growth. The amount of growth under this alternative might lead to infill development and additional densification in both residential neighborhoods and in smaller commercial centers throughout these cities. Potentially, the levels of growth distributed under this alternative might lead to the designation of new centers in these cities. The increased population growth under this alternative would improve the job-to-housing balance, and the alternative could lead to more mid-rise multifamily development. Mixed-use development is probably slightly more likely than in Growth Targets Extended. Impacts could be similar, although to a lesser extent, to those described for metropolitan cities under this alternative.

- **Larger Cities** receive the third most population and employment growth under this alternative, but at levels well below those assigned in the Larger Cities Alternative. The impacts and effects of this growth could be slightly greater than under Growth Targets Extended. The growth assigned to these cities could potentially lead to the designation of new growth centers — possibly leading to the creation of a new class of "subregional center" as discussed in the VISION 2040 Issue Paper on Subregional Centers (see FEIS Appendices - Appendix I-E). Whether designated or not, some of these cities might choose to focus their growth in central locations, and might seek to encourage mixed-use development. Impacts could be similar, although to a lesser extent, to those described for metropolitan cities.
• **Small Cities** receive the second least amount of growth under this alternative — at levels similar to Growth Targets Extended but well below the Smaller Cities Alternative. This amount of growth could potentially be accommodated without a dramatic impact on the area as a whole, given the number of cities in this regional geography. There could be some increase in short-platting, and some of the larger lots may be subdivided, but major new commercial centers and major areas of new residential development might not be needed. More so than under current plans, the Preferred Growth Alternative provides a closer balance between population and employment growth.

• **Unincorporated Urban Growth Areas** would receive the third most amount of growth under this alternative, and at levels comparable to Growth Targets Extended. Similar to the discussion of small cities above, the impacts of this growth might not have a dramatic change to land use in these areas overall, given the geographic size of this regional geography. Key issues would relate to annexation and incorporation of these lands. As displayed in the proximity analysis tables above, this alternative is estimated to have the second lowest amount of population and employment that could be located adjacent to the urban growth area, with almost 680,000 (an increase of about 80 percent over the base year 2000). This is almost 44,000 less than current plans.

**Rural Land.** This alternative is equal to Growth Targets Extended with the least amount of employment growth in the rural area, and has just over half of what of the population growth assigned under Growth Targets Extended. By creating a closer balance between residential and employment growth in these areas, this alternative is likely to have less impact on the rural area. While this amount of growth could certainly have some impact on the creation of additional developed lots, it is possible that growth could be accommodated with minimal increases in arterials (although there might need to be some additional collector roads). This alternative could also help preserve a higher percentage of the rural lands from being developed, although this potentially impacts economic and land development in these areas.

**Natural Resource Land.** There is a correlation between the amount of growth assigned to the rural areas (and to some extent the unincorporated urban growth areas) and the impacts on these lands. Key issues that arise for natural resource lands are increased likelihood for conversion to other land use categories and the potential for land use conflicts. The Preferred Growth Alternative, in the aggregate, has less growth assigned to these two regional geographies than Growth Targets Extended, and therefore, the impacts to natural resource lands are likely to be minimized. As displayed in the proximity analysis tables above, this alternative is estimated to have the second lowest amount (essentially in the middle of the Metropolitan Cities and Larger Cities Alternatives) of population and employment that could be located adjacent to natural resource lands, with about 258,000 (an increase of about 50 percent over the base year 2000). This is nearly 45,000 less than Growth Targets Extended.

**Critical Areas.** These areas span all three Growth Management Act land use classes – urban, rural, and natural resource. Similar to natural resource lands, more growth in the rural areas (and to some extent the unincorporated urban growth areas) where there are many critical environmental areas, and increases the potential for impacts. The Preferred Growth Alternative has, in the aggregate, a lower amount of growth in these regional geographies as compared to Growth Targets Extended, and therefore the impacts are likely to be smaller.
GROWTH TARGETS EXTENDED ALTERNATIVE

With Growth Targets Extended, current adopted comprehensive plans and growth targets would extend to 2040 and their relative share and distribution of planned growth would be maintained. Localized intensification of land use or compact growth could occur consistent with adopted plans, policies, and regulations, although the extension to 2040 may require revisiting existing land use designations. The following figure presents a conceptual illustration of future density of activity under the Growth Targets Extended Alternative.

EXISTING DENSITY OF POPULATION AND EMPLOYMENT (2000)

FIGURE 5-2-13A: GROWTH TARGETS EXTENDED CONCEPTUAL MAPS: DENSITY OF POPULATION AND EMPLOYMENT — GROWTH (2000-2040)
FIGURE 5-2-13B: GROWTH TARGETS EXTENDED ALTERNATIVE CONCEPTUAL MAPS: DENSITY OF POPULATION AND EMPLOYMENT — FUTURE CONDITION (2040)
This alternative concentrates growth in the largest number of the regional geographies, thereby affecting many areas throughout the region. The form of development would essentially be an intensification of current planned development throughout the region. As noted in Figure 5-2-8, this alternative is estimated to have the second lowest amount of population and employment that could be located adjacent to existing and planned transit routes with almost 6,010,000 (an increase of about 55 percent over the base year 2000).

**Urban Land**

Land use densities might be more evenly distributed among the regional geographies than currently exists, with concentrations in metropolitan cities, core cities, and the unincorporated urban area.

- **Metropolitan cities** would see significant increases in both population and employment. It is likely that this might be accommodated through additional mixed-used development given the large increases in both population and employment. Similar to the Preferred Growth and Metropolitan Cities Alternatives, this alternative could mean increased densities in these already dense areas. This could be accommodated through infill development as well as development of underutilized parcels. Accommodating the residential growth under this alternative could probably be accomplished through multifamily housing — sometimes this might replace existing single-family homes. These cities contain designated regional growth centers that are anticipating higher rates of growth. Growth might continue to be focused into these areas. However, the levels of growth allocated under this alternative might lead to the designation of new centers. A fair amount of residential growth could need to be accommodated in these cities’ neighborhoods, and smaller commercial centers might grow — potentially with higher-rise office buildings.

  Also, these cities have some of the densest street networks, making it possible to accommodate growth and provide some level of walk-access to transit facilities. For those cities with manufacturing/industrial centers, there could be some degree of additional employment growth in these places. While the alternatives do not paint employment growth by sector or industry, it is possible that these types of centers might see continued encroachment of non-manufacturing industries. The general character of these cities could be much more intense, with much more activity than what exists today. This intensification would likely lead to a change in the existing character of these cities and their neighborhoods as both more (and potentially larger) buildings are developed to accommodate this growth. The growth could also impact crowding, traffic congestion, service levels for all types of infrastructure, and could potentially require upgrades and retrofits to existing utilities. For more information, see Chapter 5.7 – Public Services and Utilities.

- **Core cities** would receive the second least amount of growth under this alternative. Spread across the 13 cities and unincorporated Silverdale, this growth could likely be accommodated through infill development. Each of these cities has a designated regional growth center where higher rates of growth are anticipated. Regional growth centers could likely take a good proportion of the employment growth and probably some of the residential growth. These cities could see an increase in multifamily housing, and some mixed-use development may occur. The general character of these cities might be more urban and active than exists today. Impacts could be similar, although to a lesser extent, to those in metropolitan cities.

- **Larger cities** would also receive the second least amount of growth under this alternative (and less than half of what is envisioned for the core cities). Spread across 13 cities, this growth might potentially be accommodated with a much more limited amount of land use change. There could certainly be some growth in the downtowns of these cities, which might accommodate much of the employment growth, although some employment could likely spread to industrially-zoned areas or other small commercial centers in these cities. Residential growth might be absorbed through land use tools such as short plats, and perhaps some additional multifamily housing. The general character of these cities might not be significantly different than what exists today.

- **Small cities** would receive the second most growth under this alternative (similar to the Preferred Growth Alternative, but dramatically less than the Smaller Cities Alternative). Spread across these 52 cities, the growth might be accommodated by some increased development, but without dramatic changes in land use. Similar to the larger cities in this alternative, the majority of the employment growth might be accommodated in the downtown areas, and industrially-zoned areas or other small commercial centers. Residential growth might be absorbed throughout these cities’ neighborhoods, without much multifamily or mixed-use development. The general character of these cities might not be significantly different than what exists today.
Unincorporated urban growth areas would see a large amount of growth under this alternative, particularly on the residential side. Growth Targets Extended results in the second most amount of growth in unincorporated urban areas. Given that existing conditions are predominantly residential, as is the growth assigned under this alternative, the types of land uses might not change dramatically. However, this alternative could represent some significant intensification of land use in these areas, and there might be a fair amount of low-rise multifamily development, such as townhomes. For the most part, these areas have more limited road networks, meaning there could be a need for additional collector and local arterial streets to be built to provide access to new residences and commercial centers. This might be one of the larger land use impacts of this alternative in these areas. The general character of these areas could be more urban and intensified than what exists today. As noted in Figure 5-2-9, this alternative is estimated to have the second highest amount of population and employment that could be located adjacent to the urban growth area boundary with about 720,000 (an increase of about 90 percent over the base year 2000), which could impact the placement of the boundary.

Rural Land

This alternative has the largest amount of residential development on rural lands (although, combined with employment, it has the second most growth overall). Similar to the unincorporated urban areas, growth under this alternative could require additional collector streets and local arterials, thereby changing the character of these areas. Achieving this amount of growth potentially represents opportunities for economic and land use development, and the ensuing impacts this would have on rural economies and rural character. Although rural land areas might be attractive for increased residential development due to lower land costs, they could be more remote from employment opportunities, services and other urban amenities. It is possible that there could be housing types other than single-family residential, with townhomes being the most likely type — this would represent a change from the typical housing stock in these areas.

Whereas in the first decade of planning under the Growth Management Act the region witnessed an overall reduction in the percent of development occurring in rural-designated areas, under this alternative, there would be increased growth in rural areas in the subsequent decades up to 2040. The general character of these areas might still be predominantly residential, although more suburban and busier than what exists today.

Natural Resource Land

Given that no population or employment growth was assigned to any of these lands, the largest issue for these areas is how much growth is accommodated nearby and the pressure this creates for conversion. A second issue is the potential for conflicting land uses, with residential land uses close to uses such as forestry or agriculture. As this alternative has the second most growth in these rural and unincorporated growth areas, it has the second most potential for impact. Similarly, as noted in Figure 5-2-10, this alternative is estimated to have the second highest amount of population and employment that could be located adjacent to natural resource lands, with over 300,000 (an increase of about 75 percent over the base year 2000).

Critical Areas

While critical areas are resident through all the geographies in the region, a higher amount of it exists outside of the urban area (see Chapter 5.5 – Ecosystems and 5.6 – Water Quality and Hydrology). Therefore, similar to natural resource lands, more growth in the rural areas (and to some extent the unincorporated urban areas) increases the likelihood for conversion and the potential for land use conflicts. As this alternative has the second most growth in these rural and unincorporated growth areas, it has the second most potential for impacts to critical areas.
METROPOLITAN CITIES ALTERNATIVE

With the Metropolitan Cities Alternative, planned growth would be shifted from rural areas and the unincorporated urban growth area to metropolitan cities and core cities. Because of this shift, unincorporated urban and rural areas might remain relatively similar to how they are currently. The following figure presents a conceptual illustration of future density of activity under the Metropolitan Cities Alternative.
This alternative concentrates growth in the fewest of the regional geographies, thereby affecting land use in fewer areas throughout the region. In simple terms, this alternative could lead to highly developed cities (metropolitan and core cities) and much less intensely developed areas (in the smaller cities, unincorporated urban and rural areas) leading to more differentiation between urban and rural land character (see Chapter 5.12 – Visual Quality and Aesthetic Resources). The region’s smaller cities, unincorporated urban areas, and rural areas are assigned less growth under this alternative than under Growth Targets Extended, meaning less land use change. The Metropolitan Cities Alternative would result in the most centrally focused growth compared to the other alternatives. As noted in Figure 5-2-8, this alternative is estimated to have the highest amount of population and employment that could be located adjacent to existing and planned transit routes, with almost 6,460,000 (an increase of about 65 percent over the base year 2000). This is almost 450,000 more than Growth Targets Extended.

Urban Land

The most built-out portion of the urban area would undergo the most change under in this alternative. It is expected that this growth could result in higher-density housing in the urban areas. Higher employment levels may also result in an increase in commercial and industrial land uses. Locating commercial and industrial land uses close to more compact residential uses could support goals to achieve a better balance between employment and housing in the region. The Metropolitan Cities Alternative would support a recent trend in many local jurisdictions to pass zoning ordinances that allow infill development, small-lot single-family homes, multi-family homes, and mixed-use development.

- **Metropolitan cities** receive more growth in the Metropolitan Cities Alternative than in any of the other alternatives, with essentially the same amount of employment as under Growth Targets Extended, but with more residential growth. Cities with regional growth centers such as Bellevue, Bremerton, Everett, Seattle, and Tacoma would be expected to have higher amounts of growth. By concentrating a much larger share of growth in metropolitan cities (and core cities), these areas could become much more compact with mixed-use neighborhoods containing jobs, retail, services, and housing. Potentially, the levels of growth allocated under this alternative might lead to the designation of new centers in these cities. The impacts of this growth are similar to those under Growth Targets Extended, although, because there is more residential growth, this alternative could lead to the most impacts in these cities and their neighborhoods. Potential impacts could include crowding, which could negatively impact some residents’ and employees’ experience of these cities.

The increased population growth under the Metropolitan Cities Alternative could mean a closer job-to-housing balance than under Growth Targets Extended and could require more mid- to high-rise multifamily development. Mixed-use development is probably also more likely than in Growth Targets Extended. This intensification could lead to a change in the existing character of these cities, at levels similar to those described under the Growth Targets Extended Alternative.

- **Core cities** receive the second most amount of growth under this alternative. This alternative has slightly more employment growth than under Growth Targets Extended and a fair amount of additional residential growth. These cities all have designated regional growth centers, which could accommodate some of the growth — probably more employment growth than residential growth. However, this amount of growth might lead to infill development and additional densification in both residential neighborhoods and in smaller commercial centers throughout these cities. The impacts of this growth are similar to those under Growth Targets Extended. Potentially, the levels of growth allocated under this alternative might lead to the designation of new centers in these cities. The increased population growth under the Metropolitan Cities Alternative wouldn’t be meaningfully different than Growth Targets Extended in terms of job-to-housing balance, but the alternative could lead to more mid-rise multifamily development. Mixed-use development is probably slightly more likely than in Growth Targets Extended. Impacts could be similar, although to a lesser extent, to those described for metropolitan cities.
• **Larger cities** receive the second most amount of growth under this alternative, but at levels well below those assigned in the Larger Cities Alternative. The impacts and effects of this growth might be greater than under Growth Targets Extended. The growth assigned to these cities could potentially lead to the designation of new regional growth centers — possibly leading to the creation of a new class of “subregional center” as discussed in the VISION 2040 Issue Paper on Subregional Centers (see FEIS Appendices - Appendix I-F). Whether designated or not, some of these cities might choose to focus their growth in central locations, and might seek to encourage mixed-use development, although there is the likelihood that growth could potentially spillover into these cities’ neighborhoods. Impacts could be similar, although to a lesser extent, to those described for metropolitan cities.

• **Small cities** receive the second least amount of growth under this alternative — at levels similar to the Growth Targets Extended and Preferred Growth Alternatives, but well below the Smaller Cities Alternative. Given the number of cities in the regional geography, this amount of growth could potentially be accommodated without a dramatically noticeable impact overall. There could be some increase in short-platting, and some of the larger lots may be subdivided, but major new commercial centers and major areas of new residential development might not be needed.

• **Unincorporated urban growth areas** would receive the least amount of growth under this alternative. Similar to the discussion of small cities above, the impacts of this growth might not significantly change land use in these areas. The larger change for these areas is in the area of land use planning, as the amount of growth is significantly less than called for under current plans. Achieving this amount of growth might require downzones or other planning actions to limit growth. As noted in Figure 5-2-9, this alternative is estimated to have the lowest amount of population and employment that could be located adjacent to the urban growth area boundary, with almost 630,000 (an increase of about 65 percent over the base year 2000). This is almost 95,000 less than Growth Targets Extended.

**Rural Land**

This alternative ties with the Larger Cities Alternative for the least amount of overall growth assigned to the rural areas of any of the other alternatives (although it has more employment growth than under the Growth Targets Extended and Preferred Growth Alternatives). This amount of growth could have some impacts on parcelization. However, it is possible that it could be accommodated with minimal increases in arterials, although there might need to be some additional collector roads. In rural areas, this alternative could help preserve a higher percentage of the rural lands from being developed, although this potentially impacts economic and land development in these areas. Similar to unincorporated urban growth areas, this amount of growth might be inconsistent with adopted plans for these lands and might require some planning actions to limit growth.

**Natural Resource Land**

As noted under Growth Targets Extended, there is a correlation between the amount of growth assigned to the rural areas (and to some extent the unincorporated urban areas) and the impacts on these lands. The Metropolitan Cities Alternative has, in the aggregate, the least amount of growth in these areas, and therefore, the impacts are likely to be the least to natural resource lands. Additionally, as noted in Figure 5-2-10, this alternative is estimated to have the second lowest amount (essentially equal to the amount for the Preferred Growth Alternative) of population and employment that could be located adjacent to natural resource lands, with over 250,000 (an increase of about 50 percent over the base year 2000). This is almost 50,000 less than Growth Targets Extended.

**Critical Areas**

Similar to natural resource lands, more growth in the rural areas (and to some extent the unincorporated urban areas) increases the likelihood for conversion, and the potential for land use conflicts. The Metropolitan Cities Alternative has, in the aggregate, the least amount of growth in these areas, and therefore, the impacts to critical areas are likely to be the least.
LARGER CITIES ALTERNATIVE

The Larger Cities Alternative would focus the largest amounts of growth in the region’s core cities and larger cities, shifting growth from the unincorporated urban growth area, rural area, and metropolitan cities. The following figure presents a conceptual illustration of future density of activity under the Larger Cities Alternative.
FIGURE 5-2-15B: LARGER CITIES ALTERNATIVE CONCEPTUAL MAPS: DENSITY OF POPULATION AND EMPLOYMENT — FUTURE CONDITION (2040)
This alternative falls between Growth Targets Extended and the Smaller Cities Alternative in terms of how many of the regional geographies, and therefore areas, might be affected by significant amounts of new growth. This alternative could lead highly developed cities (metropolitan and core cities) and a second set of highly urbanized cities (the larger cities) — in short, a larger number of highly intense nodes of activity and other areas of low-density urban and rural character. Similar to the Metropolitan Cities Alternative and less than Growth Targets Extended, there could remain areas of much less intense development (in the smaller cities, and unincorporated urban and rural areas). As noted in Figure 5-2-8, this alternative is estimated to have the second highest amount of population and employment that could be located adjacent to existing and planned transit routes, with almost 6,310,000 (an increase of about 50 percent over the base year 2000). This is almost 300,000 more than Growth Targets Extended but 150,000 less than the Metropolitan Cities Alternative.

**Urban Land**

This alternative has an identical amount of growth being assigned to the region’s urban lands as the Metropolitan Cities Alternative, meaning the overall impact on the urban area, from a land use perspective, is likely to be very similar. However, growth is shifted from the metropolitan cities to the larger cities. The corridors within and between these larger cities may also experience greater infill and redevelopment. Higher densities and shorter commute trips may also support future transit operations within these geographies. The amount of growth could mean greater intensification in the urban area overall and in parts that have traditionally not had as significant an amount of higher-density development.

- **Metropolitan cities** are assigned less than half the amount of growth under this alternative as they are under the Metropolitan Cities Alternative. As such, the impacts to land use are decreased. Population and employment growth could be accommodated through infill and some redevelopment. Housing could take the form of townhomes, and other mid-rise housing types, in contrast to the high-rise housing that was more likely under the Growth Targets Extended and the Metropolitan Cities alternatives for these cities. It is possible that the majority of this growth could be accommodated in or around each of these cities’ designated regional growth centers and other local activity centers.

- **Core cities** receive a similar amount of growth (although more employment) under the Larger Cities Alternative as under the Metropolitan Cities Alternative. From a land use perspective, the impact could be similar to those described under the Metropolitan Cities Alternative.

- **Larger cities** is the geography that shows the most distinction in this alternative as compared to the others, with more than double the amount of growth as compared to the next largest alternative (the Metropolitan Cities Alternative) for these cities. As the larger cities become more intensively developed and compact, there could be greater potential for higher intensity land uses to spill over into adjacent neighborhoods. Depending on how growth is accommodated, there could be pressure to expand these cities’ current boundaries. As noted under the Metropolitan Cities Alternative, this amount of growth could likely lead the establishment of additional designated growth centers, whether regional, subregional, or local.

Under this alternative, these cities could experience the greatest intensification of their land uses. This intensification could likely lead to a change in the existing character of these cities and their neighborhoods as both more (and potentially larger) buildings are developed to accommodate this growth. The growth could also impact crowding, traffic congestion, service levels for all types of infrastructure and could potentially require upgrades and retrofits to existing utilities. For more information, see Chapter 5.7 – Public Services and Utilities.

At the same time, this alternative could enable increased densities, or mixed-use development and may provide greater opportunities for employment near residential land uses in these locations. This alternative may also offer an opportunity for the expansion of commercial and office land uses in suburban areas, although residential land use may also compete with land available for employment uses.
• **Small cities** receive their least amount of growth under this alternative. From a land use perspective, there might be the least amount of change from today. The larger change for these cities could be in the area of land use planning, as the amount of growth is about half of that called for under adopted plans. Achieving this amount of growth might require downzones or other planning actions to limit growth.

• **Unincorporated urban growth areas** receive double the amount of growth they would receive under the Metropolitan Cities Alternative. They receive approximately the same amount of employment and less than half the residential growth as under the Preferred Growth Alternative (meaning a stronger commercial than residential focus). However, from a land use and land use planning perspective, the impacts would fall between those described under the Preferred Growth and Metropolitan Cities alternatives. As noted in Figure 5-2-9, this alternative is estimated to have the second lowest amount of population and employment that could be located adjacent to the urban growth area boundary, with about 650,000 (an increase of about 75 percent over the base year 2000). This is about 75,000 less than Growth Targets Extended, and in the middle between the Metropolitan Cities and Preferred Growth Alternatives.

**Rural Land**

The amount of growth assigned to rural lands is identical to the amount of the Metropolitan Cities Alternative, therefore, the impacts under this alternative to rural areas are identical to those under the Metropolitan Cities Alternative.

**Natural Resource Land**

The impacts under this alternative are nearly identical to the Metropolitan Cities Alternative, although the increased amount of development in the unincorporated urban growth areas as compared to the Metropolitan Cities Alternative means that the potential to impact these lands may be somewhat higher. The Larger Cities Alternative is estimated to have the third lowest amount (but nearly equal to the Preferred Growth Alternative) of population and employment that could be located adjacent to natural resource lands (as shown in Figure 5-2-10), with over 260,000 (an increase of about 50 percent over the base year 2000). This is about 40,000 less than Growth Targets Extended.

**Critical Areas**

Similar to natural resource land, impacts to critical areas under this alternative are nearly identical to the Metropolitan Cities Alternative, although the increased amount of development in the unincorporated urban growth areas compared to the Metropolitan Cities Alternative could slightly increase the potential for impacts to critical areas.
SMALLER CITIES ALTERNATIVE

The Smaller Cities Alternative would focus a larger amount of growth in small cities and the unincorporated urban growth area, shifting growth from metropolitan cities and core cities. In both geographies, the amount is at levels that are substantially higher than is currently planned. The following figure presents a conceptual illustration of future density of activity under the Smaller Cities Alternative.
FIGURE 5-2-16B: SMALLER CITIES ALTERNATIVE CONCEPTUAL MAPS: DENSITY OF POPULATION AND EMPLOYMENT — FUTURE CONDITION (2040)
This alternative concentrates growth in just a few of the regional geographies. These geographies contain a large number of cities and unincorporated areas throughout the region, which means that this alternative could affect land use in many areas throughout the region. This alternative could lead to a form that would be much less differentiated (between urban and rural land uses) than what exists today. The existing highly urbanized portions of the region (metropolitan cities, core cities, and larger cities) could remain much as they are currently. However, intensified land use could occur at the urban fringe and beyond (small cities, unincorporated urban areas, and rural areas), essentially spreading low-density urban development throughout the urban growth area and into the rural area. As noted in Figure 5-2-8, this alternative is estimated to have the lowest amount of population and employment that could be located adjacent to existing and planned transit routes, with over 5,750,000 (an increase of about 50 percent over the base year 2000). This is about 250,000 less than Growth Targets Extended and about 700,000 less than the Metropolitan Cities Alternative.

**Urban Land**

The Smaller Cities Alternative would result in the most dispersed growth and the most growth at the edge of the region’s urban growth area. This alternative assigns just a little bit less growth to the urban area than Growth Targets Extended. However, the growth is shifted to the smaller cities and to the unincorporated urban area.

- **Metropolitan cities** receive by far their least amount of growth. From a land use perspective, there might be the least change from today, and almost none of the change as described under the Growth Targets Extended and Metropolitan Cities alternatives. The larger change for these jurisdictions is in the area of land use planning, as the amount of growth is significantly less than called for under adopted plans, and anticipated growth rates for designated regional growth centers may not be fulfilled. Achieving this amount of growth might require downzones or other planning actions to limit growth.

- **Core cities** are treated the same as metropolitan cities under this alternative, and similarly, there might be little change from today to the land use in these cities. Similar to metropolitan cities, this amount of growth could be similarly inconsistent with adopted plans for these cities and might require some planning actions to limit growth.

- **Larger cities** are treated the same as metropolitan cities under this alternative, and similarly, there might be little change to the land use in these cities from today. However, the amount of growth is not as significantly different from adopted plans; therefore, there could likely not be as much need for planning actions to limit growth.

- **Small cities** is the geography that shows the most distinction in this alternative as compared to the others, with more than triple the amount of growth as compared to the next largest alternatives (Growth Targets Extended and to a slightly lesser extent the Preferred Growth Alternatives) for these cities. Land use in these cities could change dramatically from what exists today. Although the growth could be spread to some extent over the 52 cities, there could almost certainly be more areas of high-density commercial development and probably more mid-rise housing than what exists today. Neighborhoods throughout these smaller cities might be impacted by the growth, with spillover of both commercial and residential growth.

Under this alternative, these cities could experience the greatest intensification of their land uses. This intensification could likely lead to a change in the existing character of these cities and their neighborhoods as both more (and potentially larger) buildings are developed to accommodate this growth. The growth could also impact crowding, traffic congestion, service levels for all types of infrastructure, and could potentially require upgrades and retrofits to existing utilities. For more information, see Chapter 5.7 – Public Services and Utilities. This could be particularly challenging for these cities, as they have traditionally not had as much mid-rise and high-rise development, and these might be necessary in order to accommodate the allocated levels of growth. Also, this alternative could likely mean that these cities will need to revisit adopted plans to ensure that planned land uses can accommodate these levels of growth.

Industrial areas and smaller commercial centers in these cities could see increased growth, and it is possible that taller buildings could be developed. Given the limited road network in many of these areas, there could be the need for a significant amount of collector and arterial streets to be built. In most cases, to achieve greater densities in smaller cities, the cities might require developing new downtown-type plans and design concepts, and potentially the designation of new subregional or local growth centers. To achieve a balance in land uses (jobs/housing), perhaps the highest amount of interjurisdictional planning could be needed to help achieve agreements on geographical boundaries (i.e., annexations) and to help ensure that the land use mix in the plans would allow balanced development. Land uses in these cities may develop at a variety of densities, and locations where lower-density residential commercial and office land uses are developed may result in challenges to achieving balance between housing and employment.
• **Unincorporated urban growth areas** are similar to small cities under this alternative in that they would receive significantly more growth under this alternative than under any of the others (overall, more than double the next largest alternatives — Growth Targets Extended and to a slightly lesser extent the Preferred Growth Alternatives). Land use in these areas could change dramatically from what exists today, with effects similar to those described for the small cities. The residential orientation of these areas could change, with significant increases in commercial activities. This might require the development of new commercial centers. There could be more multifamily housing in these areas compared to today. And, given the limited road network in many of these areas, there could be the need for a significant number of collector and arterial streets to be built. It is possible this amount of growth in these areas could lead to expansions of the existing urban growth area, with potential for these lands to be annexed into cities, or to incorporate as new cities. As noted in Figure 5-2-9, this alternative is estimated to have the highest amount of population and employment that could be located adjacent to the urban growth area boundary, with about 1,025,000 (an increase of about 170 percent over the base year 2000). This is about 300,000 more than Growth Targets Extended and nearly 400,000 more than the Metropolitan Cities Alternative. Similar to small cities, planned land uses might need to be revisited to ensure that the allocated levels of growth could be accommodated.

**Rural Land**

The amount of growth assigned to the rural area in the Smaller Cities Alternative is closest to the amount in Growth Targets Extended, although it contains less residential growth and more commercial growth. Because of the more balanced mix of uses, the impacts to the rural areas under the Smaller Cities Alternative are likely to be similar or less than the impacts under Growth Targets Extended. There is the potential that there would be less commuting to urban areas for employment and services than was estimated under the Growth Targets Extended Alternative. However, the amount of growth in the small cities (which includes freestanding cities that are surrounded by rural areas) could markedly increase urban pressure on these lands, with a potential for re-designation of these lands to urban. This amount of growth might conflict with and diminish rural character; however, it also has the potential to increase opportunities for economic and land development. In addition, more growth in these areas may be less likely to be served by transit. This growth pressure in rural areas might be inconsistent with the Growth Management Act and to policies and programs in some county comprehensive plans.

**Natural Resource Land**

The Smaller Cities Alternative assigns the most amount of growth to those urban and rural areas that are near natural resource lands. This growth could likely lead to annexations, incorporations, and re-designations. Each of these actions moves land from less urban characteristics to more urban characteristics, both increasing the pressure for conversion of natural resource lands and increasing potential conflicts with natural resource land uses and industries. As noted in Figure 5-2-10, this alternative is estimated to have the highest amount of population and employment that could be located adjacent to natural resource lands, with almost 350,000 (an increase of about 100 percent over the base year 2000). This is about 45,000 more than Growth Targets Extended, and over 90,000 more than the other alternatives. The Smaller Cities Alternative has the highest potential to negatively impact natural resource lands.

**Critical Areas**

Similar to natural resource land, the Smaller Cities Alternative assigns the most amount of growth to those urban and rural areas that are close to critical areas, increasing the likelihood for conversion and the potential for land use conflicts. The Smaller Cities Alternative has the highest potential to negatively impact critical areas.

**5.2.3 Cumulative Effects**

Depending on the alternative, cumulative effects may vary. Planned growth, with its associated land development, as expressed in the alternatives, is the most substantial action affecting the magnitude and severity of cumulative effects to land use in the region. However, the actions of local jurisdictions and other infrastructure/transportation projects could also affect land use. Densities could increase within areas already designated for residential and/or employment-related land uses, and vacant land may also be utilized under existing plans for each of these broad uses. Transit might be provided to connect employment and housing centers and serve future high-density population centers.
Cumulative impacts have been incorporated into the analysis of land use, population, employment, and housing by basing growth on PSRC’s model. This model forecasts future land use pattern changes at the local and regional levels and includes programmed future transportation improvements.

Local jurisdictions in the region are facing serious transportation and other infrastructure facility adequacy problems. If these issues are not addressed adequately by 2040, local jurisdictions may not be able (or willing) to accommodate planned growth. If this occurs, growth could be expected to disperse elsewhere in the region, such as the rural areas. If allowed to occur, this growth pattern could have potential for cumulative effects typically associated with urban sprawl, such as increased demand on the transportation and other infrastructure, demand on public services, adverse impacts on the environment, and long-term increases in the cost of providing public services.

Additionally, several major military bases exist throughout the region, and their expansion or contraction could affect the areas near them. These effects could relate to economic conditions, the use of nearby lands, and activities within the bases. This has the potential to impact the growth patterns under any of the alternatives, although it would likely have a greater impact under alternatives that disperse growth through the region.

Another issue that could affect the location and character of development would be the recent listing of Orca whales under the Endangered Species Act. This might affect both shoreline and upland development activities.

### 5.2.4 Potential Mitigation Measures

The alternatives are intended to provide an assessment of regional policy and describe potential impacts associated with growth from a regional perspective. The Growth Management Act identifies available options for addressing imbalances between growth, infrastructure needs, and available funding. Comprehensive plans and/or capital facility plans must be revised to identify additional revenues, modify levels of service, or change land use. At the local level, jurisdictions with land use and planning responsibilities would identify discrete actions to mitigate the direct impacts of urbanization.

**General strategies that could be pursued to address land use issues include:**

- Evaluating the effects of Endangered Species Act listings and the resulting changes in development regulations on the regional land use pattern.
- Encouraging sustainable or "green" building practices and integrated design approaches through all geographies in the region.

**Strategies for urban lands:**

- Maintaining a centers concept that emphasizes regional growth centers, while recognizing the importance of other types of subregional centers and redevelopment areas.
- Each of the region’s municipalities should work to implement centers development in at least one town center to help accommodate growth while minimizing impacts on existing neighborhoods.
- Using existing urban areas more efficiently by promoting more density, where appropriate.
- Encouraging regional efforts to retain and increase the supply of industrial lands.
- Incorporating design standards into planning and development to make dense development more attractive and more compatible with existing development.
- Working with local jurisdictions to discuss and develop strategies for phasing growth, using centers and transportation improvements to determine the location and timing of growth.
- Improving long-range planning for unincorporated areas inside the urban growth area to address fully the transition of these areas to municipalities (through annexation or incorporation).
- Siting schools and other institutions in a manner that reinforces overall growth management objectives.
- Promoting transportation investments that can help mitigate congestion and provide viable transportation alternatives to serve increased amounts of population and employment in these areas.
Strategies for rural lands:

- Promoting programs that support rural-based economic development and prosperity that are consistent with rural activity and rural character.
- Increasing development densities or clustering to help reduce the conversion of rural land. This may also be effective for reducing the loss of farmland. In addition, this could create more centralized areas of employment to reduce longer-distance commuting and potentially make more jobs accessible by transit.
- Recognizing sub-categories within the rural area to provide flexibility in addressing differences that exist within and among lands designated as rural throughout the four-county region. Provide regional guidance for allocating growth in rural subareas.
- Where growth occurs, encouraging compact, clustered development combined with the use of tools such as Transfer of Development Rights programs.
- Establishing regional criteria for urban growth area expansion. Providing some level of regional guidance in decisions of counties and countywide planning organizations regarding movement of urban growth area boundaries.
- Designing facilities and infrastructure according to rural standards that neither negatively impact rural character nor provide new opportunities for increased development.
- Addressing level-of-service standards for all services in rural areas, including sewage disposal, water, and transportation.
- Providing regional guidance on siting special purpose district facilities within rural areas.
- Establishing rural population and employment targets to maintain appropriate limits on allowable rural development.

Strategies for resource lands and critical areas:

- Increasing the use of innovative programs for preserving certain lands, including prime agricultural land or critical areas, through efforts such as the Transfer of Development Rights programs, to help provide economic benefit to land owners.
- Developing new or enhanced revenue sources to conserve lands, through tools such as mitigation banking, or enhancing the use of tools such as current use taxation.
- Providing for agricultural-related accessory uses on agricultural lands to keep the land in agricultural use while allowing for supplemental income.
- Promoting programs such as farmer’s markets to increase consumption of locally-grown products.
- Providing for programs to acquire as public lands areas that have been designated as critical areas.

5.2.5 Significant Unavoidable Adverse Impacts

Depending on the alternative, significant unavoidable adverse impacts may vary. Adopted plans, policies and regulations might need to change to accommodate any of the future growth alternatives. There could be an intensification of development throughout the region, but local jurisdictions would determine the actual permitted densities and types of land uses.

- **Urban Land.** The region’s urbanized area is likely to become denser as an additional 1.6 million people populate the region between today and 2040. With compact growth, development could occur at increased densities.
- **Rural Land.** Growth and development of rural land could occur. Counties might need to adopt policies designed to direct new development in unincorporated areas near existing city boundaries or within city spheres-of-influence and consider tools to minimize the impacts of rural development, while still supporting appropriate rural economic and land development.
- **Natural Resource Land.** Growth could occur close to natural resource lands, creating pressure for conversion of these lands to other land use types, making it important to implement tools to keep these lands economically viable.
Supporting Figures

A. EXISTING LAND USE MAP

The following figure shows the existing land use in the base year (2000), based on the INDEX land use classification system.

FIGURE 5-2-16: BASE YEAR EXISTING LAND USE (2000)

Source: Puget Sound Regional Council, 2006
B. SIDE-BY-SIDE MAPS SHOWING DENSITY OF THE ALTERNATIVES

FIGURE 5-2-17: SIDE-BY-SIDE COMPARISON OF ALTERNATIVE CONCEPTUAL MAPS — ADDITIONAL DENSITY OF POPULATION AND EMPLOYMENT (2000-2040)

PREFERRED GROWTH  GROWTH TARGETS EXTENDED  METROPOLITAN CITIES

LARGER CITIES  SMALLER CITIES
FIGURE 5-2-18: SIDE-BY-SIDE COMPARISON OF ALTERNATIVE CONCEPTUAL MAPS — FUTURE DENSITY CONDITION OF POPULATION AND EMPLOYMENT (2040)

PREFERRED GROWTH

GROWTH TARGETS EXTENDED

METROPOLITAN CITIES

LARGER CITIES

SMALLER CITIES