Appendix B Regional Trends and Forecasts

Appendix B Regional Trends and Forecasts

1 What regulations affect growth?

The current regulations that guide regional and local planning for growth in population, employment, housing, and changes in land use are largely set forth in the Washington State Growth Management Act (Chapter 36.70A, Revised Code of Washington [RCW]).

The Growth Management Act also regulates how local jurisdictions are to plan for future transportation needs. Additional guidance is provided by the portion of state law that authorizes and directs the planning efforts and responsibilities of regional transportation planning organizations (RTPOs)—refer to RCW 47.80. The Puget Sound Regional Council (PSRC) is designated as the RTPO for King, Kitsap, Pierce, and Snohomish counties. This legislation related to the Growth Management Act calls for RTPOs to develop and conduct a program to certify the transportation-related provisions in local comprehensive plans. It mandates the development of regional guidelines and principles to guide both regional and local transportation planning.

Multicounty planning policies serve as PSRC's regional guidelines and principles under RCW 47.80. Certification of transportation-related provisions in local comprehensive plans includes determining conformity with state requirements for transportation planning in local plans, consistency with adopted regional guidelines and principles, and consistency with the regional transportation plan (RCW 36.70A.070 and 47.80.026).

2 What is the overall growth management strategy for the region?

VISION 2040 is an integrated strategy for guiding development, environmental planning, and the provision of transportation and services in the central Puget Sound region. It provides long-range direction for allocating population and employment growth, as well as the overarching policy framework for regional, countywide, and local planning. It emphasizes sustainability and the restoration of the natural environment as the region accommodates new people and jobs. VISION 2040 directs a major portion of new development into communities with regional growth centers, with reduced growth in rural areas and on the urban fringe.

The policies and provisions in VISION 2040 have been developed with attention to social equity and environmental justice. PSRC adopted VISION 2040 in April 2008. VISION 2040 consists of four parts:

- Environmental Framework
- Regional Growth Strategy
- Multicounty Planning Policies
- Actions to Implement and Measures to Track Progress

3 What are multicounty planning policies?

VISION 2040 contains the region's updated multicounty planning policies, which are required by the Washington State Growth Management Act. These policies serve as the regional principles and guidelines for plan review and certification that are required for regional transportation plans under RCW 47.80.026.

These policies provide an integrated framework for addressing land use, economic development, transportation, other infrastructure, and environmental planning. The policies play three key roles: (1) direct implementation of the Regional Growth Strategy; (2) create a common framework for planning at various levels within the four-county region, including

VISION 2040 and Other Regional Plans

Together, VISION 2040, Transportation 2040, and the Regional Economic Strategy are designed to address the region's ability to handle its increasing growth and transportation challenges in compliance with federal and state transportation, environmental, and growth management legislation.

Transportation 2040 serves as a functional plan for regional mobility, implementing the objectives identified in VISION 2040 while identifying priorities and action steps for the region's major transportation investment decisions.

The Regional Economic Strategy is the economic development component of VISION 2040. The strategy was prepared by the Prosperity Partnership, a coalition of government, business, labor, nonprofit, and community leaders from the four counties. The goal set by the partnership is to provide long-term economic prosperity and 100,000 more jobs than forecast for the central Puget Sound region by 2040.

countywide planning, local plans, transit agency plans, and others; and (3) provide the policy structure for PSRC's functional plans (the Metropolitan Transportation Plan and the Regional Economic Strategy). Both the Metropolitan Transportation Plan and the Regional Economic Strategy are guided by the multicounty planning policies in VISION 2040.

VISION 2040 contains policy guidance in six key areas—Environment, Development Patterns, Housing, Economy, Transportation, and Public Services. VISION 2040 provides a comprehensive regional approach to manage growth through the year 2040. Refer to Appendix C for the complete text of the Multicounty Planning Policies.

4 What do the policies say about transportation?

VISION 2040's main transportation goal is for the region to have a safe, cleaner, integrated, sustainable, and highly efficient multimodal transportation system. This system is intended to support the regional growth strategy, promote economic and environmental vitality, and improve public health.

VISION 2040's multicounty planning policies related to transportation are structured around three broad areas:

- Maintenance, Management, and Safety
- Support of the Regional Growth Strategy
- Greater Options and Mobility

The objective of these policies is to obtain optimum benefits from the current systems as well as past and future investments. These advantages would be gained by strengthening the critical link between transportation and land use, enhancing environmental performance, and improving mobility through many travel choices.

5 What else affects regional planning?

In 1992, PSRC and its member jurisdictions, including counties, cities, federally recognized Indian tribes, state agencies, ports, and associate members, adopted an interlocal agreement that provided PSRC with the authority to carry out the functions required under state and federal law. With regard to long-range planning, the interlocal agreement calls for PSRC to “maintain VISION as the adopted regional growth management strategy.”

6 How do regional and local plans work together?

Under the Growth Management Act, multicounty planning policies provide a common regionwide framework for countywide and local planning in the central Puget Sound region. The unified structure established by the multicounty policies has both practical and substantive effects on city and county comprehensive plans. The multicounty policies help achieve consistency among cities and counties on regional planning matters. They also guide a number of regional processes, including PSRC’s policy and plan review process, the evaluation of transportation projects seeking regionally managed funding, and the development of criteria for PSRC programs and projects.

Countywide planning policies complement multicounty policies and provide a more specific level of detail to guide county and local comprehensive planning in each of the four counties. These policies also affect local city, county, and transportation agency transportation plans and work programs. Both multicounty and countywide planning policies address selected issues in a consistent manner, while leaving other issues to local discretion. Much of the implementation of VISION 2040 occurs through local planning and actions.

Together, these layers of state, regional, and county policies provide specific direction to the counties and their cities and towns for designating urban growth areas (UGAs) and preparing their individual comprehensive plans to accommodate population, employment, and housing growth. The county comprehensive plans also provide direction for managing growth in the unincorporated areas within the county. The current state of regional and local land use planning is discussed in greater detail in the Land Use section.

Housing

Transportation 2040 is a non-project action and will not directly cause significant impacts or changes to the number, quality, or characteristics of the region's housing stock. The VISION 2040 Regional Growth Strategy seeks improvement in the balance of job opportunities and available housing within each county, as compared to the regional jobs-population ratio. A jobs-housing ratio closer to the regional ratio would imply that residents have improved access to job locations, minimizing the need to make long work commutes, or to make lengthy trips to meet daily needs. The regional ratio of housing units to employment in the year 2040 is forecast to be 1.40.

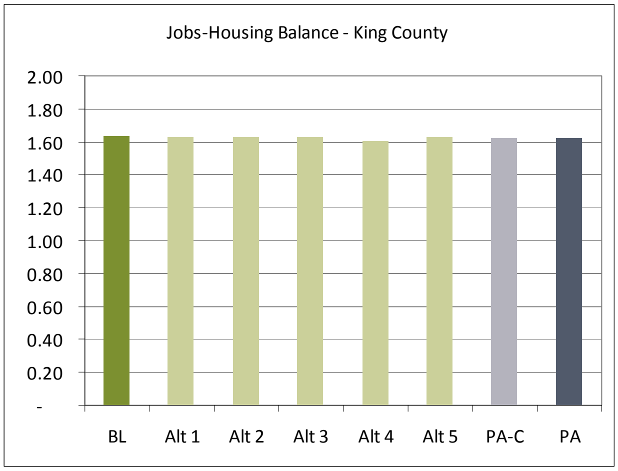
According to guidance contained in the VISION 2040 Regional Growth Strategy, Exhibit B-1 presents county-level comparisons of the ratios of jobs to households. Following the patterns seen in population and employment distribution, very little appreciable difference can be seen between the alternatives in county-level ratios of jobs to housing units. None of the transportation networks in the Baseline Alternative or action alternatives seemed to influence the overall distribution patterns of employment and housing units between counties. That is, no alternative generally improved the ratio of jobs to housing units in each county, compared to the regional average.

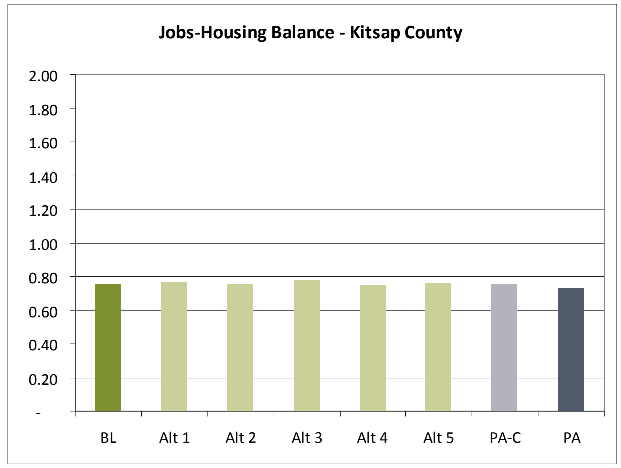
Exhibit B-1

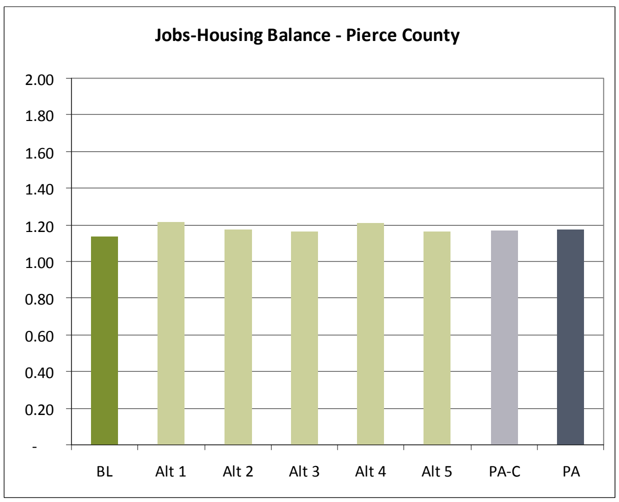
Jobs Housing Balance

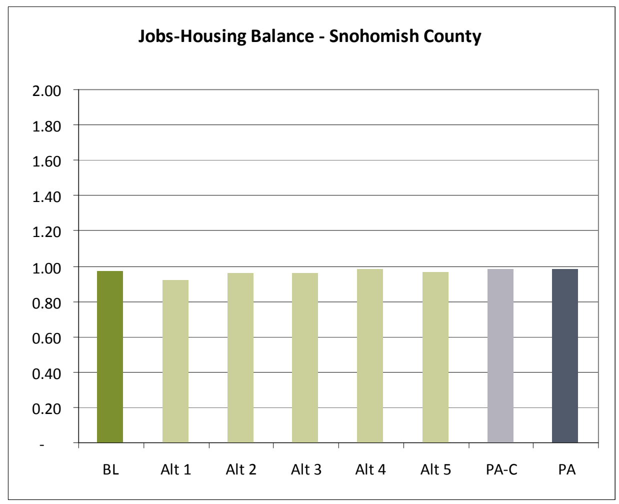
2040 Jobs to Housing Ratio

		BL	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	PA
King	Housing Units	1,208,300	1,206,000	1,212,300	1,205,800	1,216,300	1,216,200	1,211,000	1,208,900
	Employment	1,979,600	1,962,000	1,973,200	1,967,300	1,954,200	1,979,100	1,961,900	1,964,600
	Emp/HU	**1.64**	**1.63**	**1.63**	**1.63**	**1.61**	**1.63**	**1.62**	**1.63**
Kitsap	Housing Units	172,100	168,600	172,400	170,200	169,600	170,700	174,000	172,400
	Employment	130,100	129,600	130,400	132,300	127,800	129,800	131,500	125,800
	Emp/HU	**0.76**	**0.77**	**0.76**	**0.78**	**0.75**	**0.76**	**0.76**	**0.73**
Pierce	Housing Units	456,800	457,200	447,300	458,800	447,400	451,900	455,000	451,600
	Employment	518,500	555,900	524,500	534,000	539,900	525,100	532,900	530,300
	Emp/HU	**1.14**	**1.22**	**1.17**	**1.16**	**1.21**	**1.16**	**1.17**	**1.17**
Snohomish	Housing Units	438,900	443,300	445,700	439,700	440,300	434,000	435,300	441,200
	Employment	427,300	408,400	427,600	422,500	434,000	420,200	429,900	435,500
	Emp/HU	**0.97**	**0.92**	**0.96**	**0.96**	**0.99**	**0.97**	**0.99**	**0.99**









Land Use

Individual transportation project actions are subject to review and assessment of impacts to the environment. Transportation 2040 will, however, provide an important piece of the framework within which local land use and infrastructure planning and decision making will occur. The plan's impacts will be indirect and cumulative and will occur primarily through the actions of local jurisdictions and private property owners.

As described previously, the nature and distribution of the region's future transportation system can indirectly affect which areas of the region develop. The interaction of transportation services and infrastructure with land development regulations and markets results in different distributions of future growth among urban, rural, and natural resource areas. Under the Growth Management Act, local governments must be able to provide transportation and other urban services that are needed to support growth. Indirect impacts discussed below are concerned primarily with the general location of future growth and the incremental change in relative concentration or dispersal of the regional land use pattern. The impacts are described broadly; it is not possible to be site-specific.

The transportation system alone will not automatically result in individual land development decisions that will cumulatively result in a regional land use pattern consistent with the Regional Growth Strategy. Regardless of the Transportation 2040 alternative selected, adopted plans, policies, and regulations will likely need to change in selected areas to accommodate or discourage the local and regional development patterns envisioned by the Regional Growth Strategy.

Areas of mixed-use development, 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 or activity nodes and along certain major redevelopment corridors.

Under any Transportation 2040 alternative, it is likely that growth will be directed to already built areas of the region where there is less vacant developable land. This could result in higher-density infill residential, commercial, and mixed-use development. Growth in the region’s rural areas could add development pressures on nearby agricultural and resource lands and open spaces.

Urban Land

The region’s urbanized area is likely to become denser as an additional 1.5 million people populate the region by 2040. In compact development patterns, transit and nonmotorized transportation modes are often more competitive, convenient, and attractive.

Improved accessibility to outlying areas could create pressure to expand the UGA to accommodate growth at lower densities, as well as at lower levels of transportation service. More land would be consumed to accommodate planned growth. High-capacity and local transit systems could be less feasible or less efficient. Options for nonmotorized travel would be reduced. Inability to accommodate growth within the urban area because of transportation deficiencies could result in a redirection of growth to jurisdictions with existing capacity, either within or outside the region. Cities and counties with the most constrained transportation systems could be compelled to reduce their growth capacity. Growth could also be shifted to adjacent counties along the I-5 corridor, such as Skagit or Thurston counties.

Rural Land

Both the Growth Management Act and regional policy prohibit the extension of urban levels of service into rural areas. Expectations for the performance characteristics for transportation services are lower in rural areas than urban areas. Future growth due to improved accessibility has the potential to affect existing rural character and to increase opportunity for land development. Without proper rural land use controls, these areas would require enhanced transportation services and infrastructure. Existing rural infrastructure would need improvement to meet urban levels of service.

Natural Resource Land

Transportation alternatives that interact with land use policy in a manner that minimizes development adjacent or proximate to natural resource lands are likely to have less impact on water resources (refer to Chapter 9: Water Quality and Hydrology), ecosystem change (refer to Chapter 10: Ecosystems and Endangered Species Act Issues), or infrastructure impacts (refer to Chapter 14: Public Services and Utilities and Chapter 4: Transportation).

All of the action alternatives by design focus the great majority of transportation improvements into existing urban areas, with little capacity expansion outside the designated UGA.

Consequently, accessibility to natural resource and rural areas is not greatly improved.

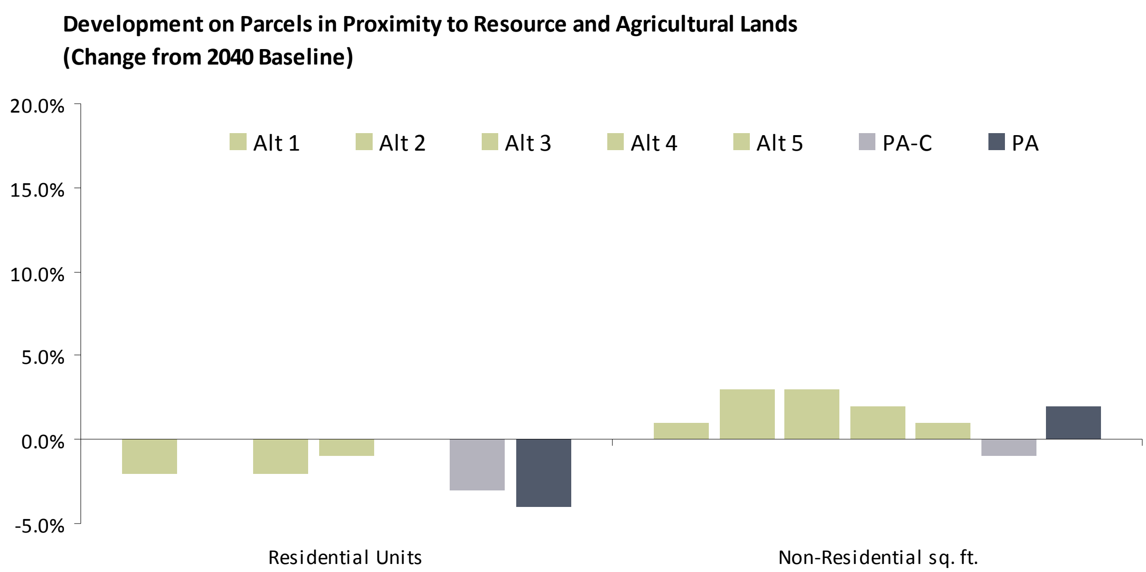
To test whether improvements such as those proposed in the alternatives have any impact on rural and natural resource lands, a set of approximately 11,000 rural parcels adjacent to designated agricultural and forest lands was assembled in the UrbanSim land use forecasting model. Exhibit B-2 compares the increased development activity on these parcels attributable to improved accessibility provided by alternative transportation systems.

Exhibit B-2

Development on Rural Parcels in Proximity to Resource and Agricultural Lands, by Alternative

Changes in Development from 2040 Baseline (Parcels in Proximity to Resource and Agricultural Lands)

Alternative	2006	Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	PA
(Change from 2040 Baseline)									
Residential Units	7,100	11,900	-180	-20	-280	-120	-30	-370	-420
Non-Residential sq. ft.	3,918,000	3,856,000	30,000	114,000	112,000	59,000	32,000	-40,000	71,000
(Percent Difference from 2040 Baseline)									
Residential Units			-2.0%	< 1%	-2.0%	-1.0%	< 1%	-3.0%	-4.0%
Non-Residential sq. ft.			1.0%	3.0%	3.0%	2.0%	1.0%	-1.0%	2.0%



As seen in Exhibit B-2, compared to the base year 2006, approximately 4,800 additional residential units were developed in the Baseline Alternative on rural parcels adjacent to resource lands between 2000 and 2040. While Alternatives 1 through 5 and the Preferred Alternative would all result in somewhat fewer units (ranging from 15 fewer to 420 fewer), overall development levels only decrease between 0.1 percent and 4.0 percent compared to the Baseline Alternative. The Preferred Alternative produces the fewest new residential units on rural parcels adjacent to resource lands.

The scale of change in non-residential square footage on these parcels is similar. The amount of non-residential square footage on parcels adjacent to natural resource lands ranges from a decrease of approximately 60,000 square feet compared to the 2006 base year, to an increase of as much as 114,000 square feet in Alternative 2. The Preferred Alternative ranges from a decrease of approximately 40,000 square feet to an increase of approximately 71,000 square feet of new non-residential development near natural resource lands.

While regionwide the differences between the alternatives aren't significant, they do represent more activity and associated trip making that may affect the character and function of rural and natural resource areas. This has some potential to create pressure for conversion to more intensive uses. It is also important to note that this analysis focused on rural parcels adjacent to designated natural resource lands. It isn't uncommon for rural parcels not designated for exclusive agricultural or forest production uses to nevertheless contain those uses. There is a potential with increased development pressure and activity to lose these areas to more intensive residential or commercial development.

While all of the alternatives focus the great majority of improvements and new capacity within the designated UGA, Alternatives 2, 3, and the Preferred Alternative include rural highway widening projects that have some potential to increase development pressure within the rural area. Alternative 1, with the least amount of additional infrastructure and increased capacity, shows the least increase in non-residential square footage compared to the Baseline Alternative, and the second fewest new residential units. Alternatives 2 and 3 seem to be more supportive of non-residential uses in these areas, increasing non-residential square footage quite similarly by approximately 3 percent over the Baseline Alternative. The Preferred Alternative shows a range of outcomes, from a minor decrease of 1 percent to an increase of 2 percent.

While potential for conversion and loss of rural and natural resource lands exists, analysis of a change in development activity on rural parcels adjacent to designated natural resource lands does not indicate a disproportionately large change in development activity compared to rates of change if no additional capacity or accessibility is provided, as in the Baseline Alternative.

Critical Areas

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, steep slopes, and other environmentally sensitive areas such as wetlands and streams. Refer to Chapter 10: Ecosystems and Endangered Species Act Issues and Chapter 9: Water Quality and Hydrology for a more complete discussion of potential impacts to critical areas attributable to the alternatives.

Population and Employment in Centers

As described in the Land Use section, the distribution of population and employment in all of the alternatives was consistent with the allocations in the adopted Regional Growth Strategy, with little appreciable differences between the alternatives.

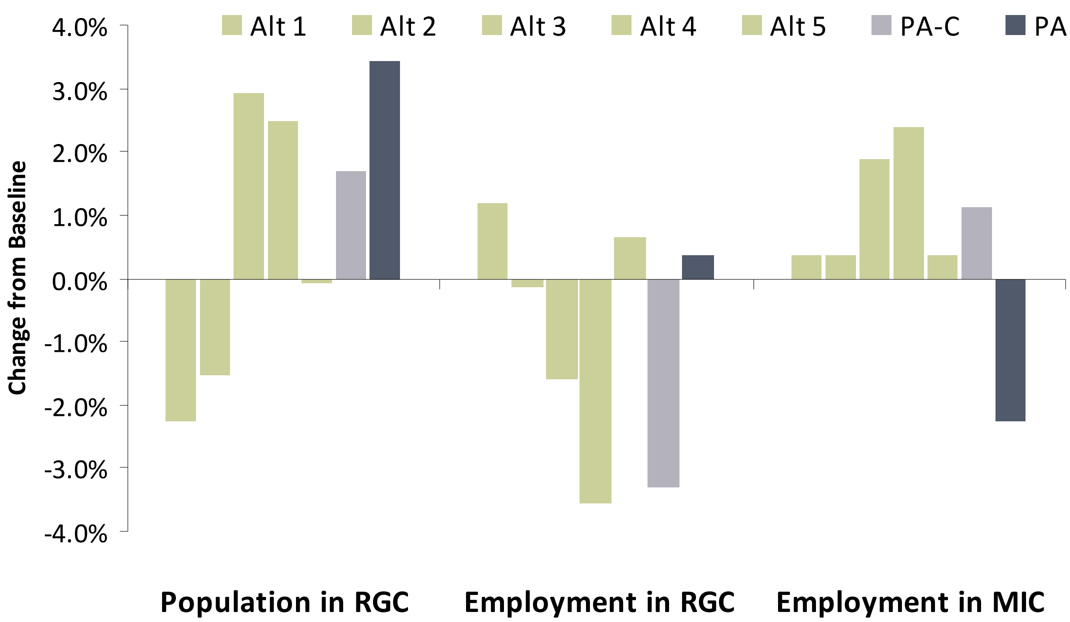
At a finer grain, however, the Regional Growth Strategy identifies the desire to encourage both population and employment growth in designated regional growth centers (RGCs) in metropolitan and core cities. These areas are intended to attract residents and businesses because of their proximity to services and jobs, a variety of housing types, access to regional amenities, high-quality transit service, and other advantages. Manufacturing and industrial centers (MICs) are intended to accommodate employment growth, but not housing or other uses.

Any growth of population in the region's designated RGCs is desirable. Compared to 2006, the Baseline Alternative supported significant population growth of over 170,000 additional people in designated RGCs, which is highly supportive of the objectives of the Regional Growth Strategy. This represents an increase of 139 percent over the year 2006. While the observable differences between the Baseline Alternative and action alternatives are modest, particularly at a regional scale, Alternatives 3 and 4 supported slightly more population growth in RGCs, 5.1 percent and 4.3 percent respectively. Alternatives 1 and 2 supported slightly less population growth in RGCs, -3.9 percent and -2.6 percent respectively. Alternative 5 is virtually identical to the Baseline Alternative. Refer to Exhibit B-3.

Exhibit B-3
Population and Employment in Regional Growth Centers and Manufacturing and Industrial Centers

Population and Employment Growth in Regional Centers
(2040 Baseline and Change from Baseline)

Alternative	2000	Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	PA
Population in Regional Growth Centers	122,800	293,400	-6,600	-4,500	8,600	7,300	-200	5,000	10,100
Employment in Regional Growth Centers	573,600	1,049,900	12,600	-1,600	-16,900	-37,400	6,900	-34,600	3,900
Employment in Man/Ind Centers	172,900	195,700	700	700	3,700	4,700	700	2,200	-4,400



Regional policy also encourages employment growth in designated regional centers in metropolitan and core cities.

Any growth of employment in the region's designated RGCs is desirable, particularly in centers located in core cities. Compared to 2006, the Baseline Alternative supported significant employment growth of over 475,000 jobs in designated RGCs, an increase of 83 percent over 2006 levels. This growth is highly supportive of the objectives of the Regional Growth Strategy.

As with population, the observable differences in employment growth across the alternatives are relatively modest. Alternatives 3 and 4 support somewhat less employment growth in RGCs, -2 percent and -3.5 percent respectively, as does the constrained portion of the Preferred Alternative (-3.3 percent). Alternatives 1 and 5 are somewhat more supportive of employment growth in designated RGCs than the Baseline Alternative, with little to no change in Alternative 2. Alternatives 3, 4, and the constrained portion of the Preferred Alternative in particular, however, produce notable decreases in employment of nearly 17,000, over 37,000, and nearly 35,000 jobs compared to the Baseline Alternative. Refer to Exhibit B-3.

The VISION 2040 Regional Growth Strategy also seeks to bolster the region's designated MICs. Any growth of employment in the region's designated MICs is desirable. Compared to 2006, the Baseline Alternative supported significant employment growth of over 22,000 jobs in designated MICs, which is highly supportive of the objectives of the Regional Growth Strategy.

All alternatives seem to support sustained employment in the region's MICs. Alternatives 1, 2, and 5 showed little variation in employment growth in MICs from the Baseline Alternative. Alternatives 3 and 4 seem to be somewhat more supportive of employment growth in MICs compared to the Baseline Alternative, increasing growth 16.1 percent and 20.7 percent respectively. The Preferred Alternative showed a range of outcomes of a loss of 19.3 percent to a gain of 9.7 percent compared to the Baseline Alternative.

Industry Clusters

The central Puget Sound Regional Economic Strategy identified 15 industry clusters key to supporting and growing the region's economy. Industry clusters are geographically concentrated sets of competing and complementary industries that operate in similar markets.

Metropolitan, core, and large cities are also the locations of many of the region's identified industry clusters. All of the alternatives to varying degrees focus a variety of investments in metropolitan, core, and large cities, designated RGCs, and MICs. All of the alternatives—with the exception of Alternative 1—offer a wide variety of expanded transportation choices and alternatives to, between, and within RGCs and MICs, which would enhance job accessibility. It is assumed

Industry Clusters

The individual clusters have differing distribution patterns. For example, the aerospace cluster is strongly associated with designated MICs, as is the logistics and international trade cluster, to a lesser degree. The life sciences and clean technology clusters are concentrated in designated RGCs, particularly in centers in metropolitan cities. The information technology cluster has a regional center focus and strong concentrations in both metropolitan and core cities, although this cluster is more widely spread than the others throughout the UGA. For more information, refer to http://www.prosperitypartnership.org.

that the increase of jobs discussed previously would benefit the region's industry clusters.

Freight

Support for the region's MICs can be partly assessed through an examination of the distribution of projects and programs relative to regional geographies and MICs.

All of the alternatives include a package of Freight Action Strategy (FAST) freight/general purpose roadway grade separation projects to enhance reliability and efficiency in specific freight corridors. Alternatives 2, 3, and the Preferred Alternative contain freeway widening or extension projects that have been identified as providing particular benefit to freight operators. To varying degrees, all of the alternatives focus a variety of investments in metropolitan, core, and large cities and MICs. Alternatives 2, 5, and the Preferred Alternative offer a wide variety of expanded transportation choices and alternatives in and between MICs. Alternatives 1, 3, and 4 offer more limited transportation choices to MICs.

A relative level of employment growth in MICs is one measure of support for these areas. While additional employment relative to the Baseline Alternative was seen in MICs in all of the alternatives, Alternatives 3 and 4 seemed to encourage the most employment growth. Conversely, these alternatives yielded the poorest employment growth for designated RGCs. It is assumed that the increase of jobs discussed previously would benefit the region's freight-related activity. The Preferred Alternative seemed to have mixed results for supporting jobs within MICs, from some growth in the constrained portion of the plan, to some losses in the full plan.

7 How could our region be affected by Transportation 2040?

Transportation 2040 has the potential to affect how and where the people of the region live and work, and how they travel. The materials in the following sections draw from earlier analyses and provide updated background information and forecasts for population, employment, housing, and land use.

Population

The central Puget Sound region continues to be one of the faster-growing metropolitan areas in the United States. This section provides an overview of its historical and forecast trends in population, employment, and housing to establish a context for exploring the potential growth impacts of the Baseline Alternative and the six action alternatives.

The Region's Population Today

The region was home to a population of over 3.5 million residents in 2006 and is forecast to continue to grow as people move here in pursuit of job opportunities and to enjoy the high quality of life offered by the central Puget Sound area. Refer to Exhibit B-4. The region has a relatively young and very well-educated labor force in comparison to the nation.

Increased in-migration from other parts of the country and the world has enriched the region's communities with a growing diversity of cultures, languages, and knowledge.

While the region's population is wealthier on average than the nation, and average wages and incomes made significant gains relative to inflation during the 1990s, poverty levels in the region have not changed appreciably since a decade ago.

Exhibit B-4

Population Trends and Forecast

	Actual					Forecast			
	1970	**1980**	**1990**	**2000**	**2006**	**2010**	**2020**	**2030**	**2040**
Population	1,934,600	2,240,300	2,748,900	3,275,800	3,524,000	3,695,600	4,149,000	4,544,500	4,988,000
	1970–80	1980–90	1990–00	2000–06	2000–10	2010–20	2020–30	2030–40	2000–40
Change	305,600	508,600	527,000	248,200	419,800	453,400	395,500	443,500	1,712,200
	1970–80	1980–90	1990–00	2000–06	2000–10	2010–20	2020–30	2030–40	2000–40
Avg Annual Pct Chg	1.5%	2.1%	1.8%	1.2%	1.2%	1.6%	2.1%	1.9%	1.1%

Source: Census Bureau, 1970, 1980, 1990, 2000; OFM, 2008; PSRC, 2006

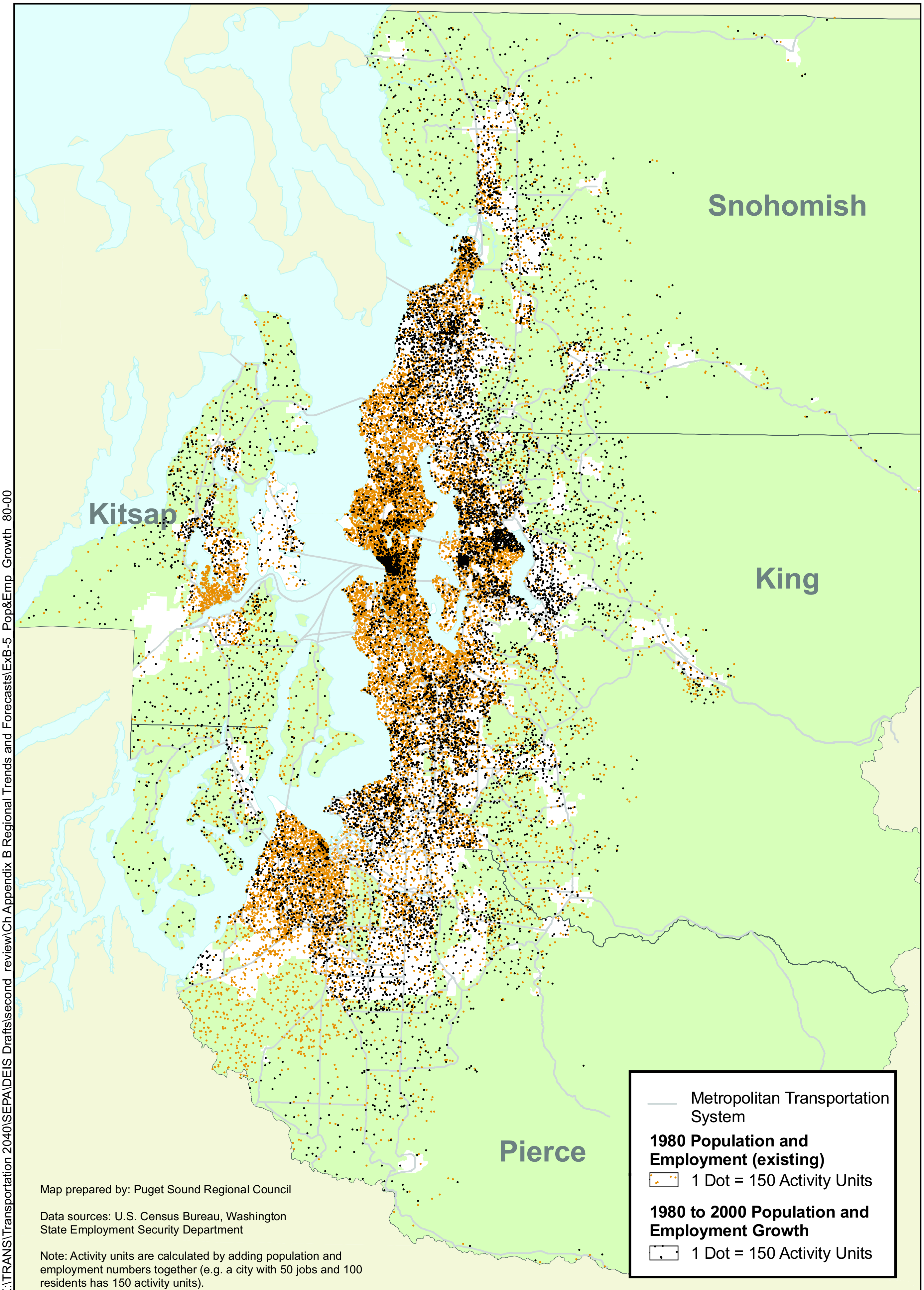
Recent Population Growth (1970 to 2006)

The central Puget Sound region experienced substantial growth over the last three decades, increasing by over 1.3 million persons between 1970 and 2000, and by an additional 248,200 between 2000 and 2006. The region's 2006 average annual growth rate of 1.2 percent compares to a 0.9 percent rate for the nation overall. This rate of growth period has been the region's slowest since the 1970s. The region grew at a particularly rapid pace during the 1980s, adding over half a million people at an average annual rate of 2.1 percent. The region grew at a slightly slower rate in the 1990s. Refer to Exhibit B-4.

Historically, King County has been, and continues to be, the central Puget Sound region's most populous county, with more than half (52 percent) of the region's total population in 2006. Pierce County is the next most populous county, with 22 percent of the region's population, closely followed by Snohomish County with 19 percent. Kitsap County is the region's smallest county, with 7 percent of the total population.

While King County received the largest share of the region's population growth over the last three decades, the region's other three counties grew at significantly faster rates, as growth pressures pushed suburban development farther out from the historic metropolitan cores. The populations of Snohomish and Kitsap counties more than doubled from 1970 to 2000, with both growing by 128 percent, each at an average rate of 2.8 percent per year. Pierce County grew by 71 percent, at a rate of 1.8 percent per year. By comparison, King County grew by 50 percent, at a rate of 1.4 percent per year. All four counties experienced similar rates of growth from 2000 to 2006. Exhibit B-5 illustrates the spatial extent of population growth from 1980 to 2000.

Exhibit B-5 Population & Employment Growth: 1980-2000



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The last 30 years also demonstrated major demographic shifts that substantially affected the average number of persons living per household, both nationally and locally. Average household size declined significantly from the 1970s to the 1980s. The region's average household size dropped from 2.96 persons in 1970, to 2.58 in 1980, and 2.50 in 1990. As household size has declined, the number of single-person households has been increasing in the region. Within King County, for example, 2000 Census data indicate that single-person households increased by 21 percent between 1990 and 2000.

These trends stabilized during the 1990s, with regional household size dropping very slightly to 2.49 in 2000, and remaining constant through 2006. This was due, in part, to the rise in minority and immigrant populations that tend to have higher-than-average family sizes. Average household size can vary considerably from place to place.

Future Population Growth (2006 to 2040)

The region is forecast to grow by an additional 1.5 million persons between 2006 and 2040, increasing 42 percent to reach a population of nearly 5 million by 2040. King County is expected to receive the largest share of the forecast growth, but, consistent with trends over the last 30 years, an increasing share of the growth could likely be absorbed by the region's other counties, with Snohomish County showing the fastest overall growth rate. The 2040 forecasts presented in Exhibit B-4 represent the current modeled[1] estimates of the projected 40-year growth in the region's population, employment, and housing stock.

Will regional demographics change?

Average household size is expected to continue declining, albeit at a much slower pace, due to downward pressure from an aging population, combined with some upward pressure from growing minority populations and the continued arrival of

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[1] The data presented in this section have been drawn from PSRC's 2005 Puget Sound Economic Forecaster (PSEF) model database of historical data inputs and forecast results. The PSEF is an econometric time series regional forecasting model that is driven primarily by national projections of economic growth and performance, the past performance of the region's economy relative to the nation's, and historical economic and demographic trend data for the region.

new immigrant households. The regional average household size is forecast at 2.22 persons in 2040. Smaller household size means that more housing units might be needed to accommodate the forecast growth in population relative to historic growth.

Another significant demographic shift that is anticipated to occur over the next 40 years is the aging of the baby boomer population. The population age 65 and older, which represented 10 percent of the region's population in 2000, is expected to grow by nearly 150 percent over the next 40 years to constitute 17 percent of total population by 2040. The expansion of the senior population is expected to place new and unique demands on the region's services and socio-economic infrastructure. The workforce population age 20 to 64, which represented 63 percent of the region's population in 2000, is forecast to drop to 58 percent of total population by 2040. The population under age 20 is also forecast to show a proportional decline. In the past two decades, efforts to contain growth have had some success. While some level of growth has occurred throughout the region, the great majority of the development occurred inside what is now designated as the region's UGA.

Employment

The Region's Economy Today

While the region has enjoyed strong employment growth over the last several decades, the nature of the region's jobs has changed. Many of the region's traditionally strong employment sectors, such as forestry, fishing, agriculture, manufacturing, and aerospace, have declined in the past years. Forestry and fishing may decline further, while other new industries might emerge. Ongoing efforts to diversify the economic base have borne fruit, however, and have helped the region to better weather economic recessions.

Some new industries, such as biotechnology and life sciences, have grown particularly well in the past few years. New opportunities and markets have been opened with the rise of local companies gaining international prominence, such as Boeing, Microsoft, Amazon, Paccar, and Starbucks.

Major Regional Employers

Each county has a different, albeit similar, set of leading businesses and employers.

Kitsap County's major businesses and employers include the Puget Sound Naval Shipyard and the Navel Base Kitsap; the school districts and Olympic College; private businesses such as Harrison Memorial Hospital, Johnson Controls World Services, and TeleTech; and retail businesses such as Wal-Mart, Safeway, Albertsons, and Fred Meyer.

King County's major business and employers include the University of Washington; local governments such as Seattle, King County, and others; and private sector businesses such as The Boeing Company, Microsoft, and Swedish Hospital. In addition, a number of Fortune 500 companies are located in King County, including Costco, Nordstrom, and Paccar.

Pierce County's major businesses and employers include the U.S. Army Fort Lewis and McChord Air Force Base; school districts and colleges such as University of Puget Sound, University of Washington-Tacoma, and Pacific Lutheran University; local and state governments; and private businesses such as Multicare, Franciscan Health Systems, and Good Samaritan Hospitals; retail establishments such as Fred Meyer and the Emerald Queen Casino; and manufacturing establishments such as Intel-DuPont and Milgard.

Snohomish County's major businesses and employers include Boeing; Premera health systems and Providence medical centers; the Tulalip Tribe's casino and administrative offices; the Naval Station Everett; the local and state governments; and the school districts and community colleges.

The region is also home to a very strong and growing small- and medium-sized business sector. As of 2003, 82 percent of all establishments in the region had 10 or fewer employees (almost 14 percent of total covered employment). Over 16 percent of the remaining establishments fall into the 10 to 99 employees range (almost 35 percent of total covered employment). These percentages are almost exactly the same in each county (CEDS, 2004).

Recent Job Growth (1970 to 2006)

Even with several cycles of economic downturns, employment estimates for 1970 and 2006 reveal that the region's jobs base more than doubled over the last 30 years, rising from about 760,000 jobs to 1.94 million. The regional job growth rate for this period, for all employment, including military, averaged 2.7 percent per year, more than a half percentage point higher than that of the nation, which grew at 2.1 percent per year on average. A strong regional economy acts as a magnet for in-migration job seekers. As such, the growth in jobs was a major reason that the region experienced robust population growth during this period, at 1.7 percent per year compared to 1.1 percent for the nation. Refer to Exhibit B-6.

Consistent with trends in the national economy, the central Puget Sound region made a structural shift away from its traditional manufacturing, industrial, and resources base toward a services base during the latter part of the 20th century. Historically the region relied heavily on its manufacturing sector, most notably on the aerospace industry, which is dominated by Boeing. Historical employment trends are characterized by dramatic fluctuations, brought on by upswings and downturns in manufacturing. While the aerospace industry continues to go through significant hiring and layoff cycles, its impacts on the regional economy have become less severe. The growth and emergence of other industries resulted in the expansion and diversification of the economy, primarily in the services sector, leading to greater overall stability in the region.

Exhibit B-6

Historical and Forecast Regional Employment by Major Sector, Central Puget Sound Region

Total Employment

	Actual						Forecast				
	1970	1980	1990	2000	2006	% of 2006 Total	2010	2020	2030	2040	% of 2040 Total
Const & Resource	40,000	64,300	97,300	130,500	140,300	7%	156,700	197,900	234,000	279,700	9%
FIRE	45,600	69,600	89,300	111,900	120,900	6%	127,100	142,800	151,600	155,500	5%
Manufacturing	145,500	193,900	236,400	217,600	190,000	10%	190,800	178,600	167,300	158,500	5%
Retail	82,100	110,600	161,400	202,100	198,500	10%	213,500	233,300	249,800	267,000	9%
Services	167,500	319,100	526,700	773,900	813,600	42%	920,200	1,151,100	1,387,700	1,644,100	53%
WTU	70,400	97,800	135,700	158,000	153,600	8%	164,300	180,300	192,700	205,400	7%
Govt & Educ	137,200	178,100	218,600	262,300	283,400	15%	299,300	325,100	342,500	361,900	12%
Subtotal:	688,400	1,033,400	1,465,200	1,856,400	1,900,400	98%	2,071,700	2,409,100	2,725,600	3,072,200	99%
Military	51,500	36,300	41,400	37,600	42,800	2%	37,600	37,600	37,600	37,600	1%
Total:	739,900	1,069,700	1,506,700	1,894,000	1,943,200	100%	2,109,300	2,446,700	2,763,200	3,109,800	100%

Change

	1970-80	1980-90	1990-00	2000-06	2000-10	2010-20	2020-30	2030-40	2000-40
Const & Resource	24,300	33,000	33,200	9,800	26,200	41,300	36,000	45,700	149,200
FIRE	24,000	19,600	22,700	9,000	15,200	15,700	8,800	4,000	43,600
Manufacturing	48,300	42,500	-18,700	-27,600	-26,900	-12,100	-11,300	-8,800	-59,100
Retail	28,400	50,800	40,800	-3,600	11,400	19,800	16,500	17,200	64,900
Services	151,600	207,500	247,200	39,800	146,300	230,900	236,600	256,500	870,300
WTU	27,400	37,900	22,300	-4,400	6,200	16,000	12,500	12,600	47,300
Govt & Educ	40,800	40,500	43,700	21,000	36,900	25,800	17,500	19,300	99,500
Subtotal:	345,000	431,800	391,200	43,900	215,300	337,300	316,500	346,500	1,215,700
Military	-15,200	5,100	-3,800	5,200	0	0	0	0	0
Total:	329,800	437,000	387,400	49,200	215,300	337,300	316,500	346,500	1,215,700

*Notes: * FIRE stands for “finance, insurance, and real estate” sectors, and WTCU stands for “wholesale, transportation, communications, and utilities” sectors. Table reports “Total Employment,” which estimates all jobs, including those held by proprietors, self-employed persons, and active enlisted military personnel that are otherwise not included in the Bureau of Labor Statistics’ estimates of covered employment and wage and salary employment.*

Source: Puget Sound Regional Council, 2005 Puget Sound Economic Forecaster (PSEF) Model

Of the 1.2 million jobs added to the region from 1970 to 2006, more than half were added by firms classified under the services sector category. Correspondingly, the proportion of the region's jobs in services grew from 24 to 42 percent. The shift toward services mainly came at the expense of the manufacturing (-10 percent) and military (-4 percent) sectors. It is notable though, that while manufacturing declined in terms of its share of the region's total employment, the sector still added over 44,500 jobs in 36 years, despite a national trend of declining manufacturing jobs.

King County serves as the core of the region's jobs base, with approximately 66 percent of total non-military employment, or nearly 7 out of every 10 of the region's jobs in 2006. Pierce County had 15 percent of the region's non-military employment, followed by Snohomish County with 13 percent, and Kitsap County with 4 percent. (Note: The employment shares for Kitsap and Pierce counties would increase with the inclusion of active enlisted military personnel.)

From 1970 to 2006, the region's growth in total non-military employment averaged 3.0 percent per year. The jobs base in both King and Pierce counties expanded by an average of 2.9 percent per year, in line with the regional average. Snohomish County recorded the highest growth rate at 3.6 percent per year, while Kitsap County also posted above the regional average at 3.3 percent.

The region, along with the nation, experienced a significant economic boom during the late 1990s that was uniquely characterized by the rise of technology industries and firms. "High-tech"[2] industry sectors accounted for roughly one out of every five jobs created in the region from 1995 to 2001, with

[2] The term "high-tech" encompasses those industries that directly advance technology. PSRC's definition of high-tech industries began with the definition developed by the U.S. Department of Labor. This definition compares the proportion of technology-oriented workers and relative amount of research and development expenditures for a given industry, to the average for all industries. PSRC further refined this definition to tailor it to the central Puget Sound economy as including aerospace (non-Boeing), biotechnology, chemicals and allied products, computer-related, electronic equipment, instruments and related products, software, and telecommunications. Although Boeing is clearly a high-tech firm, it is excluded from PSRC's definition to allow for analysis of the high-tech industry independent of Boeing-specific characteristics and trends.

Seattle and east King County emerging as major centers of such activity. A series of economic shocks during 2000 and 2001, including the "dot-com bust," subsequent NASDAQ crash and stock market decline, as well as the September 2001 terrorist attacks, dealt a particularly severe blow to the central Puget Sound economy, sending the region into a recession that was deeper and longer than the nation's. By mid-decade, the region had succeeded in making an economic recovery, with job growth rates surpassing the national average.

That recovery was checked in late 2007 by the onset of a global economic recession with roots in widespread failures in national and international housing and financial industries. Beginning in 2006–2007, increasing mortgage delinquencies—stemming from widespread resetting of adjustable interest rates—began to result in record numbers of home foreclosures. This, in turn, weakened the housing market and mortgage-backed securities, triggering a downward cycle in which falling home values led to more foreclosures, and vice versa.

Securities backed with subprime mortgages—widely held by financial firms—consequently lost most of their value. The resulting large decline in the capital of many banks and other financial institutions tightened credit around the world. Reduced liquidity and falling consumer confidence had ripple effects throughout the economy.

The central Puget Sound region began to feel the effects in mid-2007. The collapse of Washington Mutual and its acquisition by JP Morgan Chase in the fall of 2008 underscored the widespread effects of the financial crisis and its potential to result in local job losses. Some of these losses have already been felt in firms such as Microsoft, Starbucks, the University of Washington, and The Boeing Company. According to the Washington State Employment Security Department, job losses in 2008 were seen in most industries, but the largest declines were in manufacturing, information services, construction, motor vehicles and parts dealers, truck transportation, merchant wholesalers of durable goods, computer-system design and related services, and accommodation and food services.

According to the Washington State Employment Security Department, year over year, Washington had 56,000 fewer jobs in January 2009 compared to the same period the year before, a 1.9 percent decrease. Over 40,000 of these job losses were in the central Puget Sound region, a 2.3 percent decrease. Also in January 2009, over 300,000 people in Washington were unemployed and looking for work—the largest number ever in the state.

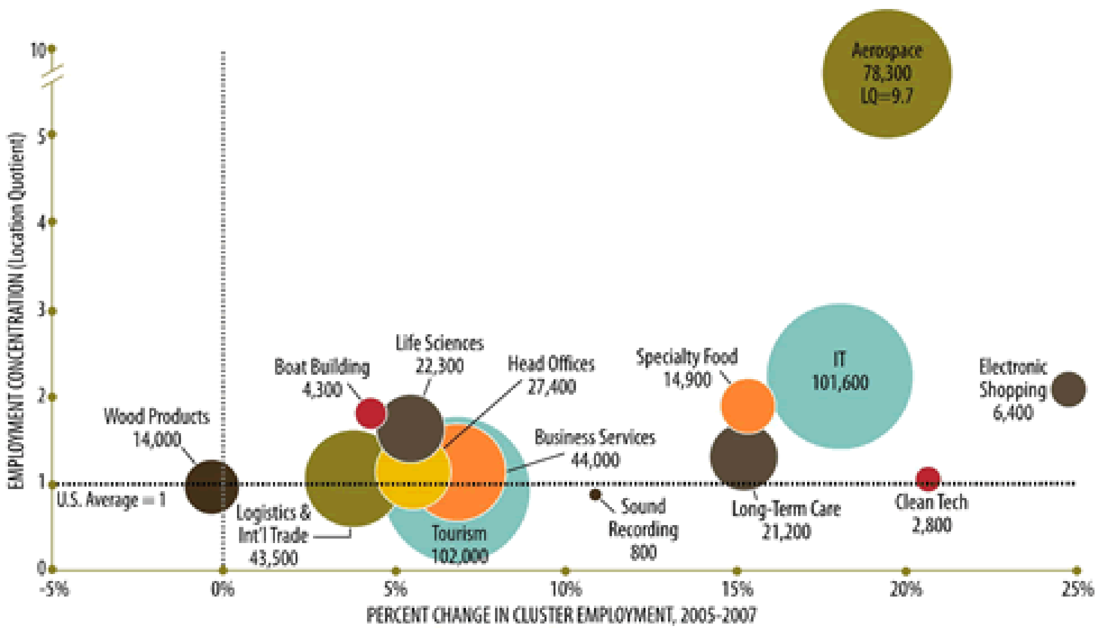
The Regional Economic Strategy – Industry Clusters

In 2004–2005, the central Puget Sound region engaged in a process, called the Prosperity Partnership, to develop a Regional Economic Strategy. The Regional Economic Strategy, which was adopted in September 2005, is meant to guide economic development priorities and efforts and serves as the functional economic plan for VISION 2040. The Regional Economic Strategy focuses on reinforcing six economic foundation areas that are key to the health of the region's economy: education, technology commercialization, new and small businesses, tax structure, transportation, and social capital and quality of life. It also focuses on supporting 15 identified regionally significant industry clusters, with seven currently prioritized for the first phase of activities—aerospace, clean technology, information technology, life sciences, international trade and logistics, tourism, and the military (Exhibit B-7). With the exception of military, Exhibit B-8 presents data on these clusters and the trends for each over an 11-year period.

Exhibit B-7

Industry Clusters 2005-2007

Cluster Portfolio: Employment Change, Concentration and Size, 2007



Source: ESD, PSRC
Note: Covered employment only. Military not included. In this "bubble chart," the size of each bubble symbolizes the size of the cluster in terms of employment. Bubbles above the horizontal line at 1.0 are clusters in which our region has a higher concentration of jobs than the U.S. average. Those below the line are clusters that formerly had higher job concentrations in our region but currently are below the U.S. average. Bubbles to the right of the vertical line are clusters that experienced employment growth from 2005 to 2007. Those to the left experienced declines in employment during those years.

Employment forecast data do not exist for the industry clusters. Over the past decade, these clusters have grown by 21 percent across the region; however, some clusters have grown faster than this rate and others have actually declined. Of all the clusters, at the regional level and during this time period, the fastest-growing cluster has been electronic shopping, and the clusters experiencing the greatest declines seem to be sound recording and aerospace. Data suppression requirements, however, prevent further analysis at the county level.

Future Employment Growth (2000 to 2040)

Current forecasts of regional employment show the central Puget Sound region adding another 1.2 million jobs between 2000 and 2040, bringing the regional jobs base to over 3.1 million, an increase of 64 percent during the period, at an average rate of 1.2 percent per year. The projected rate of job growth is lower than what was recorded between 1970 and 2000, which is consistent with national economic and demographic trends. Causes for the slower growth likely could include increased foreign business competition and a proportional decrease in the available labor force due to the aging of the population and the leveling off of the number of women entering the workforce. Refer to Exhibit B-6.

Exhibit B-8

Employment by Regional Economic Strategy Industry Cluster

	King			Kitsap			Pierce			Snohomish			Regional		
Industry Cluster	**1995**	**2006**	**Change**	**1995**	**2006**	**Change**	**1995**	**2006**	**Change**	**1995**	**2006**	**Change**	**1995**	**2006**	**Change**
Aerospace	58,795	43,061	-27%	*	*	*	*	*	*	30,296	26,214	-13%	90,457	71,269	-21%
Boat Building	2,169	2,023	-7%	*	724	*	469	466	-1%	*	1,378	*	3,693	4,591	24%
Business Services	26,028	30,417	17%	1,518	1,549	2%	2,479	3,879	56%	1,884	5,827	209%	31,909	41,672	31%
Architectural & Engineering	10,043	14,349	43%	1,159	1,067	-8%	1,098	1,434	31%	1,051	1,659	58%	13,351	18,509	39%
Marketing, Advertising & PR	4,123	6,099	48%	66	122	85%	239	225	-6%	148	358	142%	4,576	6,804	49%
Insurance	11,862	9,969	-16%	293	360	23%	1,142	2,220	94%	685	3,810	456%	13,982	16,359	17%
Clean Technology	1,352	1,864	38%	35	201	474%	98	178	82%	68	195	187%	1,553	2,438	57%
Electronic Shopping	502	5,699	1035%	*	46	*	*	162	*	*	82	*	768	5,989	680%
Home Offices	17,646	23,567	34%	113	180	59%	1,884	1,088	-42%	2,149	1,511	-30%	21,792	26,346	21%
Information Technology	43,911	80,478	83%	1,096	1,238	13%	1,923	3,011	57%	4,533	5,511	22%	51,463	90,238	75%
Life Sciences	12,481	14,784	18%	507	295	-42%	502	1,275	154%	2,885	4,886	69%	16,375	21,240	30%
Logistics & International Trade	32,182	31,587	-2%	330	244	-26%	5,169	8,036	55%	1,989	1,867	-6%	39,670	41,734	5%
Long-Term Care	5,458	12,572	130%	664	1,537	131%	2,713	3,292	21%	1,293	2,491	93%	10,128	19,892	96%
Sound Recording	762	550	-28%	*	*	*	*	*	*	347	165	-52%	1,125	756	-33%
Specialty Food	13,316	11,800	-11%	121	165	36%	936	1,234	32%	1,188	1,454	22%	15,561	14,653	-6%
Tourism	50,523	67,280	33%	3,840	4,641	21%	11,722	13,912	19%	9,520	11,904	25%	75,605	97,737	29%
Wood Products	6,458	5,625	-13%	347	342	-1%	4,599	4,696	2%	3,796	4,132	9%	15,200	14,795	-3%
Total	**271,583**	**331,307**	**22%**	**8,676**	**11,175**	**29%**	**34,093**	**43,251**	**27%**	**60,947**	**67,617**	**11%**	**375,299**	**453,350**	**21%**

Note: Asterisks indicate data that is suppressed by the state Economic Security Department. Because of suppression, the figures may differ from the totals.

However, in terms of absolute job growth, the forecast shows between 300,000 and 350,000 jobs being added each decade, a figure comparable to the 324,000 jobs added from 1970 to 1980 and the 386,000 jobs added from 1990 to 2000. (Note: The current regional forecast recognizes the impacts of the economic recession that occurred in the early part of the decade, showing an increase of only 218,000 jobs during that span.) Actual regional job growth from 2000 to 2006 was 49,200 jobs. Recent job losses due to the global recession nearly eliminate that gain. Future rounds of regional job forecasts will account for these recent trends.

Nevertheless, the current employment forecast expects the services sector to play an even more prominent role in regional job growth in the future, compared to the last 30 years. The services sector is projected to produce more than 70 percent, or over 870,000, of the 1.2 million jobs that are forecast to be added to the region over the next 40 years. By 2040, the forecast shows over one of every two jobs in the region belonging in the services sector. It is important to note that the services sector includes a wide variety of industry types—each with differing land use impacts and characteristics—and includes information and communications technology businesses.

Consistent with historical trends, there might be a continued reduction in the proportion of regional employment seen in the manufacturing sector, as the forecast shows a loss of nearly 60,000 manufacturing jobs from 2000 to 2040, lowering its share of regional employment to 5 percent.

Housing

The Region's Housing Today

The economic boom of the late 1990s generated a significant rise in demand for housing across the region, particularly around its major employment centers. Housing demand, buoyed by in-migration, wealth creation, and decreasing mortgage loan rates, intersected with a tight housing supply to produce rapid increases in housing prices. From 1997 to 2003, average rents in the region's four counties rose between 20 and 33 percent, and median home resale prices increased between 36 and 55 percent. However, rent increases have slowed in recent years.

In the 2000s, historically low mortgage and refinancing rates helped to mitigate rising prices and resulted in expanded homeownership opportunities for many households. On the other hand, low- and medium-income renters and potential first-time home buyers whose salaries and wages have lagged behind the market have found it increasingly difficult to find affordable housing near their jobs.

Construction of affordable housing involves the use of many tools. Increasing the number of units built on existing lots, near employment centers and transit, could likely be important to meet the region's housing needs. Options like townhouses, apartment buildings, small lot single-family homes, as well as shared lot cottage- or cluster-housing developments, can offer affordable homeownership opportunities. Many local land use regulations also allow for accessory (mother-in-law) dwelling units. Transit-oriented development provides housing in walkable neighborhoods near transit, which encourages residents to give up one or more motor vehicles, further reducing the cost of living. While many of these tools are currently being used in the region, few data exist to assess the extent to which these tools are being used and whether they are having an impact on generating housing units that are affordable.

Recent Housing Growth (1970 to 2006)

In 2006, the region's housing stock consisted of 1.48 million units, roughly 32 percent of which were multifamily housing (e.g., condominiums and apartments) and the other 68 percent of which were single-family housing (e.g., detached single-family homes, attached townhouse units, and mobile homes). In 1970, by comparison, the ratio of multifamily to single-family housing was substantially lower. Refer to Exhibit B-9.

Exhibit B-9

Historical and Forecast Regional Housing Stock by Structure Type, Central Puget Sound Region

	Estimated					Forecast			
	1970	**1980**	**1990**	**2000**	**2006**	**2010**	**2020**	**2030**	**2040**
Housing Units	682,600	901,500	1,134,200	1,348,800	1,483,800	1,547,400	1,796,800	2,036,500	2,310,300
- % Single Family	75%	77%	69%	69%	68%	68%	67%	65%	63%
- % Multifamily	25%	23%	31%	31%	32%	32%	33%	35%	37%

	1970-80	**1980-90**	**1990-00**	**2000-06**	**2000-10**	**2010-20**	**2020-30**	**2030-40**	**2000-40**
Change	219,000	232,600	214,000	135,700	199,300	249,300	239,700	273,900	962,200
- % Single Family	85%	39%	64%	64%	65%	57%	52%	51 %	56%
- % Multifamily	15%	61%	36%	36%	35%	43%	48%	49%	44%

	1970-80	**1980-90**	**1990-00**	**2000-06**	**2000-10**	**2010-20**	**2020-30**	**2030-40**	**2000-40**
Avg Annual Pct Chg	2.8%	2.3%	1.7%	1.6%	1.4%	1.5%	1.3%	1.3%	1.4%

Source: Census Bureau, OFM, PSRC-2005 Puget Sound Economic and Demographic Forecasts

Notes: Forecast housing units estimated from the 2005 PSEF model forecasts of households by structure type

Over the last 30 years, a significant share of the new construction built to accommodate the region's growing population consisted of multifamily development, roughly 4 out of every 10 units built. In King County, the region's most heavily developed county, multifamily housing represented about half of all new construction during this period. This is in part because of market factors (i.e., demographic trends such as the increase in the number of senior citizens, the baby boom echo and their demands on starter homes, and trends to stay single longer and marry later—all of which have increased demand for smaller, more urban housing units) and also because of regulatory efforts to concentrate growth and curb sprawl.

The adoption of Washington's Growth Management Act in 1990 and its policy direction to provide a diversity of housing types and opportunities affordable to all economic segments of the population has further encouraged many local governments to adopt ordinances and regulations allowing for multifamily housing and mixed-use and infill development in more places. Various other innovative housing approaches that promote the efficient use of land, such as accessory dwelling units, small lot single-family housing, and cluster housing, are also being used.

In recent years, housing affordability has emerged as a growing issue of concern in many metropolitan areas across the United States, particularly in the western states. A surge in demand for housing, spurred by population growth and wealth increases during the late 1990s, historically low mortgage rates, growing interest from first-time home buyers, and an increase in real estate investment and some speculation, led to rapidly rising home prices in the central Puget Sound region and many other metropolitan areas. Average rents also increased rapidly in response to heightened demand during the late 1990s, although they have stabilized in recent years as a result of the 2001 recession.

For many, the increase in home prices and rents exceeded income gains, raising housing cost burdens, particularly for low-income households and first-time homebuyers. Affordable housing initiatives by local governments are seen by many as being critical to meeting the housing needs of the region's low- and even moderate-income households.

A Changing Housing Market

Several economists have argued that the stock market crash in 2001, especially in the dot-com and technology sectors, resulted in a shift from investment in the stock market to the purchase of real estate, which many believed to be a more reliable investment.

Another important consequence of the dot-com crash and the subsequent 2001–2002 recession was that the Federal Reserve cut short-term interest rates from about 6.5 percent to just 1 percent, resulting in historically low interest rates for home buyers.

At the same time, lenders popularized the use of new instruments to finance home purchases, such as subprime mortgages, adjustable-rate mortgages, interest-only mortgages, and stated income loans.

In March 2007, the United States' subprime mortgage industry collapsed due to higher-than-expected home foreclosure rates, with more than 25 subprime lenders declaring bankruptcy, announcing significant losses, or putting themselves up for sale.

After more than a decade and a half of steadily rising home values, the central Puget Sound housing market began to respond to national trends in the financial sector and the larger economy. In 2008 the year-over-year median price of a single-family home in King, Snohomish, and Pierce counties fell for the first time since 1991. One result of this decline is that house prices are becoming more balanced with household income, increasing affordability.

As in other parts of the country, foreclosures are on the rise, with Pierce County the hardest hit locally. One in 457 homes was in the foreclosure process in December 2008, nearly triple the number from 2006 (RealtyTrac, 2009).

Nevertheless, the region is seen as one of the healthier housing markets in the country, largely due to less speculative building and real estate investment activities during the boom, and a relatively strong job market compared to the national average. Despite the recent dip, median home prices in King, Pierce, Snohomish, and Kitsap counties still have climbed by more than 50 percent since 2002.

Future Housing Growth (2000 to 2040)

Despite these uncertainties, forecasts still suggest that construction of nearly 1 million net new housing units might be needed between 2000 and 2040 to house the region's projected population increase of 1.7 million additional persons, an increase of 71 percent during this period. Refer to Exhibit B-9. Given the expected decline in average household size (with a regional average expected to be 2.22 in the year 2040), more housing units could be needed to accommodate future population growth, 1 unit per 1.77 additional persons, relative to the last 30 years, when 1 unit was built per 2.02 persons. Future housing construction is expected to consist of a greater share of multifamily housing than during the past. In 2040 it is estimated that 63 percent of the overall regional housing stock will consist of detached single-family structures, compared to 68 percent in 2006. Of the new units built between 2000 and 2040, forecasts estimate that 56 percent will be detached single-family structures. In comparison, 64 percent of new units built between 2000 and 2006 were detached single-family structures.

Depending on where the region's population growth from 2000 to 2040 actually occurs, as directed by both public policy and the development market, the ratio of multifamily to single-family new housing construction would likely vary. If development is directed to the region's more heavily built-out urban areas, higher land prices and the lack of vacant developable land could likely result in more multifamily housing. In contrast, if development were directed to outlying areas, where more vacant developable land is available, more single-family housing could likely be constructed.

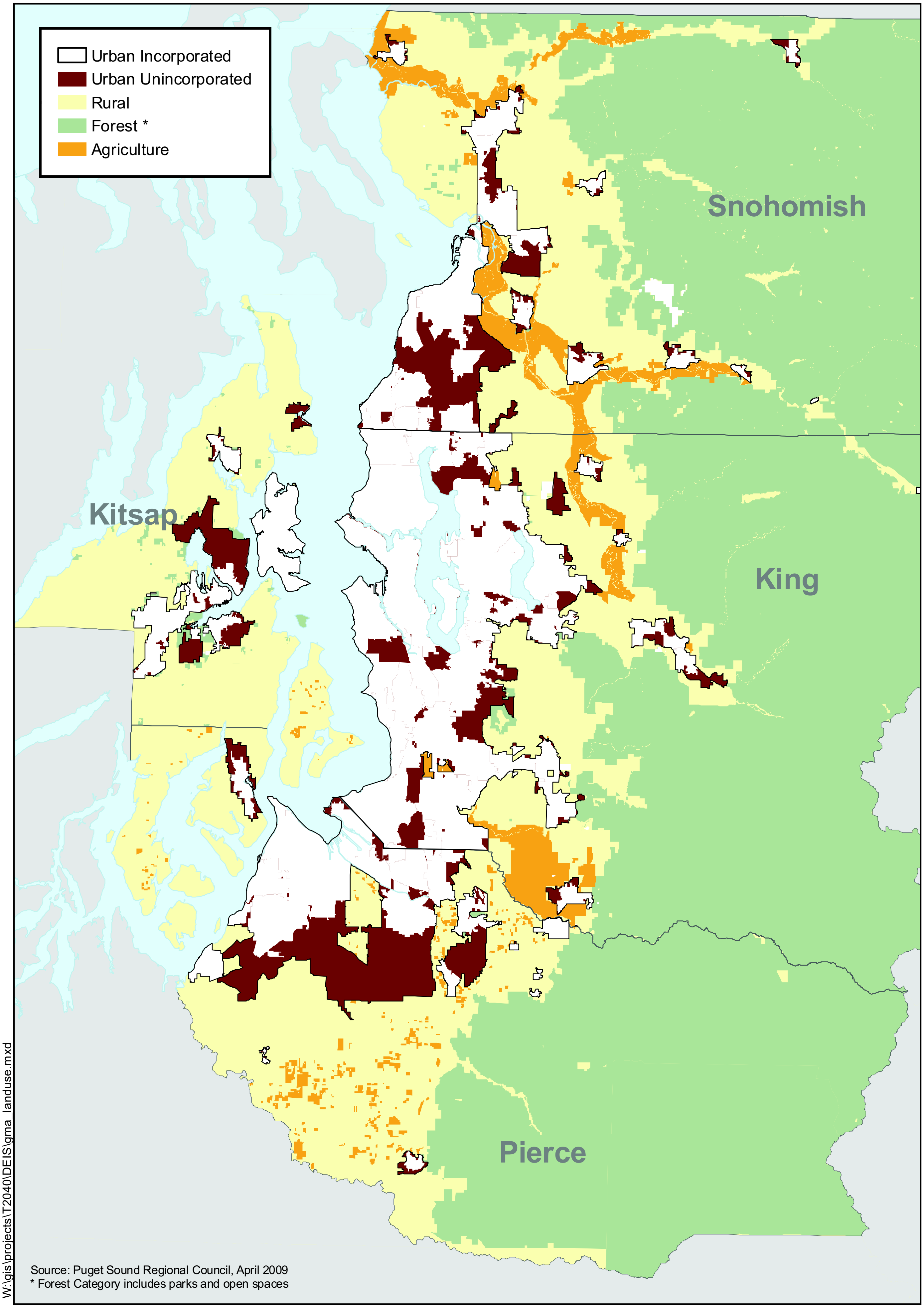
What is "Urban Growth"?

Urban growth on urban land refers to growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of land for the production of food, other agricultural products, fiber, or the extraction of mineral resources. Urban intensities of land uses are also deemed incompatible with rural land uses, intensities of development, and character.

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 UGA. Within each of the three land use categories, there are different land use types. Exhibits B-10 and B-11 illustrate and quantify these land use categories.

Exhibit B-10. GMA Land Use Catagories



Source: Puget Sound Regional Council, April 2009
* Forest Category includes parks and open spaces

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Exhibit B-11

Amount of Land in GMA Land Use Categories in Square Miles

	Total Land Area				Resource Land By Type		
Area Name	Total	Urban	Rural Non Resource	Resource	Agriculture	Forest and Open Space	Mineral and Other Resource
King	2,150	460	320	1,365	65	1,290	7
Kitsap	400	95	290	10	0	5	4
Pierce	1,680	255	515	910	25	885	0
Snohomish	2,100	180	400	1,525	100	1,425	0
Region	**6,330**	**990**	**1,525**	**3,810**	**190**	**3,605**	**11**

Source: PSRC, 2005

Urban Land

Counties and cities are required to designate UGAs under 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 UGAs in King, Kitsap, Pierce, and Snohomish counties and their respective cities and towns compose about 16 percent of the region's total land area.

Part of the intent of designating UGAs is to help channel investments in infrastructure within the already built areas (especially cities) and to discourage growth in rural areas. Within the urban area, there are incorporated lands (cities), and unincorporated UGAs. Portions of the region's unincorporated urban lands are designated as "potential annexation areas."[3]

As of 2005, urban areas contained the vast majority of the region's population, employment, and housing. As shown in Exhibit B-12, variations exist among the four counties in terms of how much of each activity is contained within each county's designated UGA.

[3] 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, refer to the *VISION 2020+20 Issue Paper on Growth Targets* ("*Growth Management by the Numbers*"), available through the PSRC Information Center.

Exhibit B-12

Population, Employment, and Housing Within Designated Urban Growth Areas

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

Rural Land

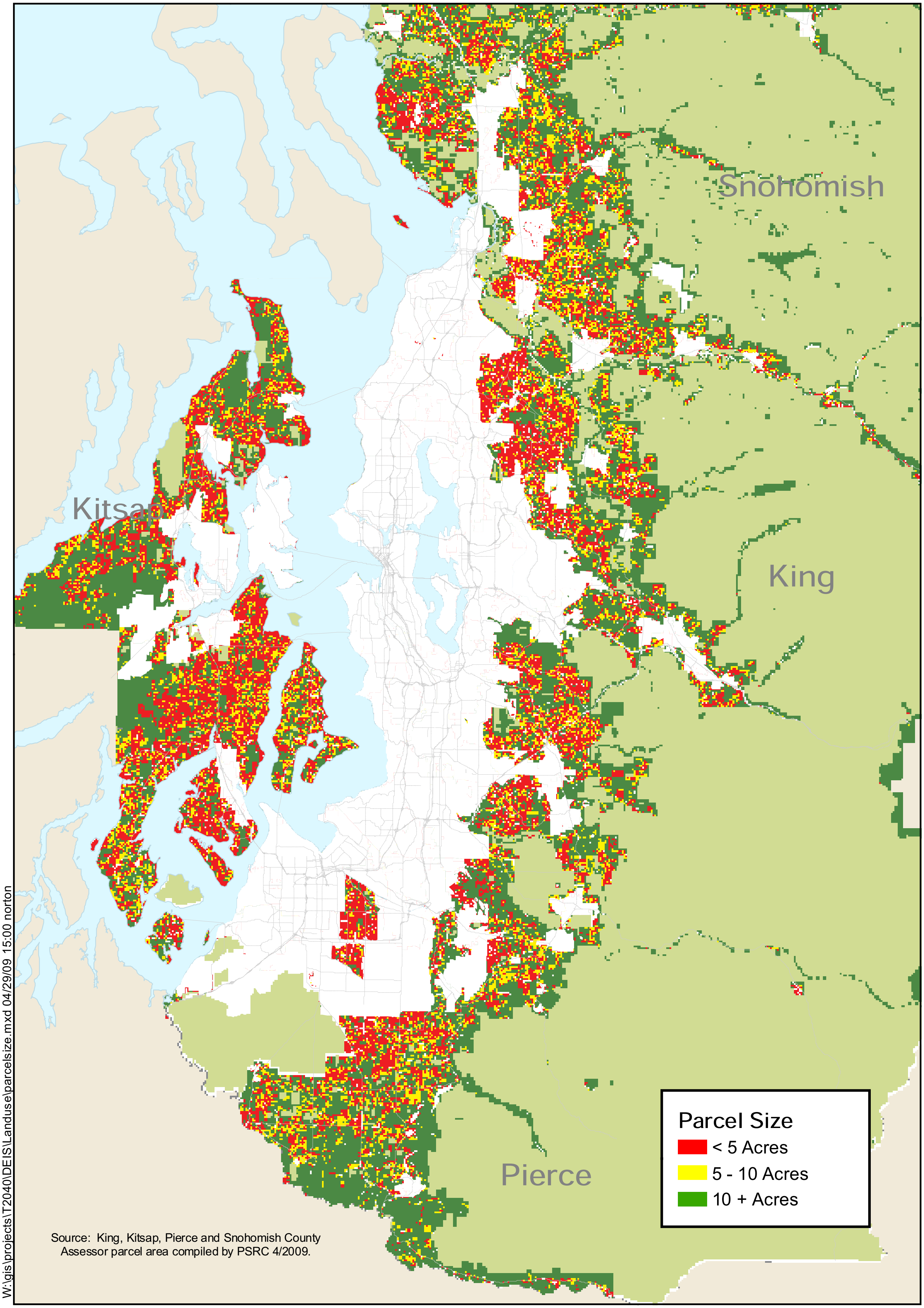
Counties are required to designate rural lands. This is done primarily through the development of county comprehensive plans, and the requirement for a "rural element" of a county comprehensive plan under RCW 36.70A.070(5). Rural lands are those lands that are not designated for urban growth, agriculture, 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 also may be conducted in rural areas. Composing 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. A wide variety of established rural parcel sizes contributes to this variety of uses. Refer to Exhibit B-13.

Rural Parcel Sizes

Exhibit B-13 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 5 and 10 acres in size. Therefore, 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 almost half (45 percent) of the land area.

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 2007, the amount of land within the region's rural area has remained relatively stable. However, about 24 square miles of additional land has been added to the urban area since it was originally designated in 1995, with the majority coming from the region's rural area. There is some concern that small rural lot sizes adjacent to UGA boundaries may encourage expansion of UGAs.

Exhibit B-13. Parcel Size in the Rural Area



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Natural Resource Land

Counties and cities are required under RCW 36.70A.170 to designate natural resource lands. Composing 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 that are resident within the other three categories (refer to the next section). The vast majority of these natural resource lands, 95 percent, fall under the forest lands designation, and much of this is protected under federal, state, and local regulations.

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.

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 (refer to Chapter 12: Earth), and environmentally sensitive areas like wetlands and streams (refer to Chapter 9: Water Quality and Hydrology and Chapter 10: Ecosystems and Endangered Species Act Issues). 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

Natural 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, 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 forest lands 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.

Mineral Resource Land. Mineral resource industries—primarily sand and gravel operations—take a very small percentage of the region's land, much less than 1 percent.

areas. Examples of wetland functions are filtration of pollutants, wildlife habitat, flood control, and groundwater recharge.

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 land.

Shorelines

Shorelines are governed under the Washington 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 and Kitsap counties. 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.

Critical Areas

The importance of designating and protecting these areas is made apparent in the Growth Management Act, which specifies this designation as a top priority.

Critical areas are present on the other three categories of land (urban, rural, and natural resource), 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, refer to Chapter 10 – Ecosystems and Endangered Species Act Issues).

Critical areas are managed through development regulations (RCW 36.70A.060), have defined guidelines for classification (RCW 36.70A.170), and require that the "best available science" be used in their designation and protection (RCW 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 the Growth Management Act.

Some Shoreline Issues

Puget Sound has experienced significant physical changes to its nearshore habitat:

- Development has modified one-third of the Puget Sound shoreline.
- 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 near shore.

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