

**EFFECTS OF THE WASHINGTON STATE GROWTH MANAGEMENT ACT
ON HOUSING DEVELOPMENT IN THE GREATER SEATTLE AREA**

by
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B.A. English, 1994
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Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the
Degree of Master of Science in Real Estate Development

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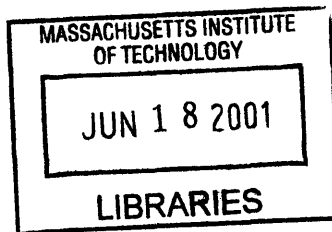
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Abstract

This paper explores housing development in the Greater Seattle area in the context of the Washington State Growth Management Act. To establish an accurate picture of the workings of the Greater Seattle housing market, recent trends in regional employment growth, housing production, and home price movements are analyzed. Because the GMA imposes restrictions on development at portions of the region's urban/rural fringe, close attention is paid to the probable effects of constricting the region's supply of developable land, and to identification of development costs associated with denser housing typologies. Because the GMA envisions a network of Greater Seattle "Urban Centers" having high employment and household densities together with good access to roads, high levels of infrastructure and community resources, and good access to mass transit, two specific urban centers are reviewed: the Uptown Queen Anne Urban Center near downtown Seattle, and the Downtown Redmond Urban Center in Seattle's eastern suburbs.

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*Things change, he says. I don't know how they do.
But they do without your realizing it or wanting them to.*

from "Distance" by Raymond Carver

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Introduction

Thesis Question:

What are the ways in which the Growth Management Act will affect housing development in the central Puget Sound region?

The Washington State Growth Management Act came into existence in 1990. Its purpose was to alter sprawl-type development patterns associated with the urbanized areas of Washington state. This paper is a study of how this growth management legislation has so far affected housing development in the greater Seattle metropolitan area, most specifically in King County, as well as how it will affect housing development in the future.

The Question's Significance

The GMA contained a requirement that rapidly-growing counties in the state of Washington (this includes all counties in the greater Seattle area) develop detailed comprehensive plans specifying how future growth will be accommodated. The Act also mandated the establishment of Urban Growth Areas (UGAs), outside of which land development is to be primarily rural in nature. The intended result of these requirements is that local jurisdictions adequately plan for future growth, and that that growth be directed into already-urbanized areas rather than to areas at the urban fringe. It is hoped that denser land use patterns will be the result.

It is important to attempt to clarify the actual effects of the GMA, as well as likely future effects. Because the Act restricts the amount of developable land and therefore development capacity, it may lead to higher overall housing prices and higher commercial real estate prices. Higher prices have a direct effect on residents' quality of life, as well on a region's overall economic competitiveness. Higher home prices raise the barriers to entry to homeownership. As prices rise, low- and moderate-wage workers find it increasingly difficult to meet the down payment and monthly mortgage requirements

that are prerequisites to homeownership. While those who are already homeowners benefit from rising home prices, prospective buyers do not. If they hope to achieve homeownership, they may be forced to compromise on issues such as housing unit size and typology.

Higher home prices also mandate higher wages, which in turn affect a region's competitiveness. As home prices and rents rise, businesses wanting to retain employees must pay higher wages to enable those employees to afford housing. If businesses are unable to pay these higher wages, employees may choose to relocate to other regions or to seek higher-paying work at a different firm. Steep home prices also detrimentally affect employers' ability to recruit employees from other regions.

The urban growth boundary and rising housing prices may also contribute to higher commercial real estate rents. Differing uses – housing, industrial, retail, office – compete with each other in the same land market. As future growth of all of these activities is concentrated within the UGA, overall land prices may rise. As the overall price of housing rises, the price that housing developers can pay for land will increase. If this restricts the amount of land available to alternative uses, the price of land and real estate associated with these alternative uses can be expected to rise as well. Conversely, if industrial, retail, or office developers find themselves able to pay more for land than housing developers, land available for housing development will be further restricted, and the price of housing can be expected to increase.

Because the GMA mandates infrastructure and capital spending in areas that are targeted to receive the most growth, it is also important to identify where growth is taking place and how well these areas match with regional planners' predicted growth areas. Assigning infrastructure to areas without density carries the danger of leaving truly dense areas underserved while lowering the efficiency of public investment.

Thesis Methodology

In order to determine the effects of the GMA on housing development, research was conducted in several areas. First, to get an accurate picture of the workings of the central Puget Sound

region housing market, historical data¹ on average single family home prices, employment growth, population growth, single family and multifamily housing permits, average rents and household growth was reviewed. Because the greater Seattle area has been experiencing an economic boom in the late 1990's, this historical data was especially useful in putting increases in housing prices in perspective.

Second, it was necessary to review government reports related to the GMA. These included the GMA itself, the King County Comprehensive Plan, the City of Seattle Comprehensive Plan, the Redmond Comprehensive Plan, and many other local and regional publications that together shape the central Puget Sound region's strategy for accommodating future growth. Of special significance were employment and housing growth targets developed by the Washington State Office of Financial Management, and the progress that various jurisdictions have made in meeting these goals.

Third, to understand predicted and observed effects of growth management policies, literature on growth management was reviewed. A significant portion of readily available growth management literature referenced the State of Oregon's Land Conservation Act and its effects on the Portland metropolitan area. While distinct differences do exist between the Washington and Oregon legislation and between the respective characteristics of the Portland and Seattle UGAs, the Oregon-related literature was useful in determining the general benefits and drawbacks of an urban growth boundary. Growth management literature pertaining to California and to Vancouver, B.C. was also consulted.

Fourth, two specific King County "Urban Centers" were analyzed to determine the effects that the GMA may be having on development patterns and therefore on the physical landscape. Focus areas for this study were the Uptown Queen Anne Urban Center in Seattle and the Redmond Urban Center in King County's eastern suburbs. These areas have different patterns of existing development and varying intensities and typologies of current development. Because the GMA envisions a network of greater Seattle Urban Centers having high employment and household densities together with good access to roads, high levels of infrastructure and community resources, and good access to mass transit, it was useful to analyze these areas to determine the challenges and opportunities associated with the GMA's Urban Center strategy.

¹Data on employment growth, population growth, housing permits, and average home prices were available annually 1980-1999; data on average rents and household growth was available from 1990-1999; historical data for employment, population, permits and average home prices was available from census data at ten-year intervals prior to 1980.

Thesis Findings

The regional residential real estate market has experienced increases in average single family home prices in recent years, most notably a dramatic increase of nearly 20% in King County in 1999. Because increased costs of homeownership affect residents and, more indirectly, businesses and regional competitiveness, much speculation has resulted about factors contributing to home price increases. Factors cited include rising land costs, the effects of construction and permitting lags on supply, higher demand due to substantial increases in regional income and wealth, and constriction of the supply of available land due to the Growth Management Act and various environmental regulations including the placement of several varieties of Pacific Northwest salmon on the Endangered Species list.

The late 1990's rise in residential real estate values has coincided with an economic boom in the region. This upturn in the regional economy began in earnest in 1995 and continued through 1998; job growth in 1999 and 2000 was significantly lower. Over 1995-1998 roughly 240,000 jobs were created in the greater Seattle area (defined here as King, Pierce and Snohomish Counties). Since 1997 unemployment in King and Snohomish counties has remained under 4%. The current economic boom is different from a similar economic boom in the late 1980's in that there has been smaller addition to the greater Seattle area population as a result of job growth. From 1985-1990 more than 348,800 jobs were created and the regional population increased by 334,000 new residents. From 1995-1998 roughly 240,000 jobs were created but the regional population gain was only 156,800.

As time passes and if the legislation is not modified, the GMA will increasingly constrict the supply of developable land in King County. If demand for housing remains strong and if the supply of land available for development of low-density single family homes is reduced, higher intensity development and redevelopment can be expected. Housing developers will need to evolve their skills to include the housing typologies that will be successful as the region becomes denser: multifamily rather than single family; infill development rather than "greenfield" development; mixed-use projects rather than single-purpose projects; and luxury single family homes.

As land becomes scarcer, land-intensive uses such as typical suburban tract-home developments will likely become less common. Multifamily forms such as cluster housing (2-, 3-, and 4-plexes made to look like single family housing), rowhouses, townhouses, and low- and high-rise apartment buildings will house a greater proportion of the population than they do now. In areas with

substantial development capacities (i.e. intensive zoning) and strong market demand structured parking will eventually replace surface parking lots. As buildings become taller, concrete and steel construction will replace wood-frame construction and development costs will rise.

Because the GMA restricts high-intensity development outside of the urban growth boundary, a declining percentage of King County's future housing production will be "greenfield" development. Instead, remaining undeveloped parcels within the UGA will be developed, and parcels with high land values in relation to improvement values will be redeveloped more intensively. This infill development and redevelopment will require more advanced skills than those required in "greenfield" development, among them the ability to work with separate ownerships to assemble small land parcels into feasible project sites, the ability to work with architects and engineers to create unique, site-specific structures, and the ability to quantify the risks associated with environmentally-hazardous "brownfield" redevelopment sites.

Developers in highly urbanized areas will increasingly need to be familiar with mixed-use development. Because the price paid for land generally reflects the highest and best use of that land, only developers that best understand how to maximize the program value of a structure will be successful. For example, in a given location the most profitable use of ground-level space may be retail, while the most profitable use of upper level space may be office or housing. In such an example, a developer familiar with all of these uses will be able to offer a higher value for the land than can a single-use developer. Particularly in downtown Seattle, where commercial uses count against allowable floor area ratio (FAR) limits but residential uses do not, it will be developers who can produce well-functioning mixed-use structures that will be most successful in bidding for land and producing profitable projects.

Given the GMA objective of restricting development outside the UGA it is likely that land-intensive single family housing development as a percentage of overall King County housing development will decline. As land prices increase, the price of single family home ownership will increase as well. Increasingly, those who can afford the price of land that comes with a single family home will expect a high level of amenity in that home. Especially in regions immediately outside developed areas of the UGA where minimum lot size is five acres (for example, east of Redmond and Issaquah), the continued development of luxury estate-type homes can be anticipated.

Implications

Restriction of land supply and increases in overall construction costs will result in higher average housing prices in King County. Given this, jurisdictions would do well to focus on counteracting these rising prices through more efficient regulatory processes, better housing market information, redevelopment-friendly property tax schemes, jurisdiction-led land assembly schemes, and adequate planning for such amenities as open space and urban trails which make denser development patterns more acceptable to residents accustomed to living at suburban densities.

Regulatory processes can be made smoother by reducing the number of discretionary reviews that builders must go through to get project entitlements. Discretionary reviews to a developer mean additional project risk, which reduces the chance of a project's taking place. In a similar vein, jurisdictions should attempt to try to reduce overall permitting timetables and to streamline reviews. Shortening permitting timetables allows a developer to better time a project to market demand, thus reducing overall project risk and commensurate return.

Better information on local housing markets would also serve to make the development industry more efficient. If jurisdictions were to consistently make up-to-date job, permit, and construction start information available to industry participants, projects could be better timed and better located, and thus more successful.

One of the suggestions often made to ensure a more liquid land market is a property tax weighted more heavily toward land than toward improvements. This would increase the cost of holding land on a speculative basis, and therefore would make landowners less willing to do so. Higher costs associated with land ownership would eventually lead to timelier redevelopment of underutilized sites.

Jurisdictions should consider establishing land trusts to assemble sites for redevelopment in underdeveloped, areas characterized by many small lots. Oftentimes these areas remain stagnant for long periods of time because the challenges and costs of negotiating with different ownerships render redevelopment unfeasible. Jurisdictions willing to establish land trusts for the purpose of acquiring sites in specified "redevelopment zones" could then offer larger parcel assemblages to builders for redevelopment.

Lastly, it is important to recognize that the GMA mandates a change in the way that many greater Seattle residents have traditionally lived. As the land supply within the UGA is diminished, ownership of the typical detached, single family home will likely become more elusive, especially for those who do not have high incomes. It becomes especially important, then, that residents realize a net benefit from growth management, either in the form of higher quality of life or better economic prospects.

A region's economic fortunes are strongly correlated to the competitiveness of its industries and the quality of its workforce. Workers in the greater Seattle area have the option of relocating to more attractive regions if escalating housing prices prove too onerous. In the same vein, Seattle-area firms have the option of relocating if wages required for worker retention become uneconomical. It may be, however, that the GMA will confer more long-term benefits (higher quality of life, better quality of environment) than drawbacks (less affordable housing). If this is the case, it may well have the dual effects of making Seattle attractive to well-paid professionals who value the environment and are able to pay for it, and at the same inaccessible to those less well-paid who cannot afford quality housing.

The Greater Seattle Housing Market

1.1 Regional Overview

The greater Seattle metropolitan area is the largest population (2,960,000¹) and job center in the Pacific Northwest. It is located on Puget Sound, a large saltwater body that is an extension of the Pacific Ocean. Seattle is located between and roughly equidistant from the two other major Northwest population centers – Portland, Oregon and the Canadian city of Vancouver, British Columbia.

The greater Seattle area – here defined as King, Snohomish and Pierce counties -- totals 6,014 square miles. This tri-county region is bordered by Puget Sound to the west and the Cascade mountain range to the east. Of these counties, King County has the largest population, followed by Pierce County and Snohomish County (Table 1.1). Major population centers within King County are Seattle as well as the suburbs of Bellevue, Federal Way, Kent, Shoreline, Renton, Kirkland, and Redmond. Major population centers in Pierce County are Tacoma and Lakewood. Major population centers in Snohomish County are Everett, Edmonds, and Lynnwood. In Pierce County and Snohomish County population in unincorporated areas is a large component of overall county population (45 percent and 49 percent, respectively), whereas in King County this component is much lower (21%). This reflects both lower-density development patterns in Pierce and Snohomish counties as compared to King, and a conscious policy decision on the part of King County to over time eliminate unincorporated areas within the UGA.

King, Pierce, and Snohomish counties are situated between Puget Sound to the west and the Cascade Mountains to the east. Though there are a fairly large number of commuters who cross Puget Sound daily via ferry, for the most part this large body of water has served as a barrier to western suburban growth on the Olympic Peninsula. Limited ferry terminal parking, restricted vehicle capacity on vessels, and long sailing times have combined to limit major urban development economically linked to Seattle. Since the completion of the first Lake Washington floating bridge in 1941, suburban growth has spread steadily east from Seattle toward the Cascades. Though the mountains serve as

¹ Washington State Office of Financial Management (1999)

something of a psychological barrier to development, growth has not yet spread so far east that the Cascades form a physical barrier. The GMA-mandated urban growth boundary actually limits development more than does mountainous terrain. Outside this boundary development is limited to 5-10 acres per dwelling, a restriction intended to maintain the predominantly rural nature of outlying areas. Interestingly, in places near the boundary where large numbers of high-income jobs have been created this restriction has had the unintended effect of producing large areas of expensive estate-type homes.

Table 1.1 Puget Sound Area Population Distribution

King County	1,677,000
Seattle	540,900
Bellevue	106,400
Federal Way	77,010
Kent	73,140
Shoreline	53,140
Renton	48,270
Kirkland	45,090
Redmond	44,020
Pierce County	700,000
Tacoma	187,200
Lakewood	63,790
Snohomish County	583,000
Everett	87,520
Edmonds	38,600
Lynnwood	32,990

Source: Washington State Office of Financial Mgt., 1999

Suburban development to the north and south of Seattle has encountered fewer physical obstacles than has growth to the east. This has resulted in a long, relatively narrow north-south oriented development pattern. Everett in the north and Tacoma in the south can be thought of as bookends to the greater Seattle metropolitan area. Because of the north-south orientation of the region's transportation networks, most principally I-5 and I-405, it is fairly easy for residents to live in either the northern or southern suburbs and still access the large Seattle and east King County employment centers.

Though the center cities of Seattle, Tacoma, and Everett all date to the late 1800's and therefore have fairly compact street grids and housing patterns, much of the region's recent population growth has been more land-intensive. As with many other U.S. cities that experienced significant growth post-World War II, this has resulted in low-density suburban development patterns and a widespread primary dependence on the automobile. While many suburban communities in the Puget Sound region have small, compact urban centers, prevalent growth patterns over the last half of the twentieth century have been much more land-intensive.

Major interstate transportation corridors in the region are I-5 (north-south), I-90 (east-west), and I-405 (north-south ring road through eastern suburbs). Important non-interstate transportation corridors include state highways 520 (east-west; Seattle-Bellevue-Redmond), 167 (north-south; Tukwila-Kent-Auburn), and 99 (north-south; Sea-Tac-Seattle-Lynnwood). Because of increasing pressure on these transportation corridors and because little roadway capacity has been added over the past three decades, the level of traffic congestion in the greater Seattle area ranks among the highest in the country². The two floating bridges that link Seattle to its eastern suburbs across Lake Washington are particularly notorious for high levels of congestion, as are I-405 between Renton and Bellevue, and state highway 167 between Auburn and Tukwila. Though not expected to ease traffic congestion, beginning in 2001 commuter rail will link Everett, Seattle, Tacoma, and several smaller suburbs. A regional light rail system that will connect Seattle with the Sea-Tac airport is currently in the planning stages but is not expected to be operational until at least 2009.

Major job centers in the region are Seattle (downtown, Lake Union, the University District, Northgate), Seattle's eastern suburbs (downtown Bellevue, junction of I-405 and I-90, Redmond, Renton, Tukwila), Tacoma, and south Everett. The Seattle area's economic mix includes a large aerospace component (Boeing), some limited heavy manufacturing (PACCAR), international trade (Port of Seattle, Port of Tacoma), a large software industry (Microsoft, Nintendo of America), medical services and research (Fred Hutchison Cancer Research Institute, University of Washington Medical Center, Immunex), and retail (Nordstrom, Starbucks, Amazon.com). Though the Puget Sound economy has diversified considerably over the past two decades, the region's health is still strongly influenced by the cycles of the commercial aerospace industry.

² Texas Transportation Institute 1999 Annual Mobility Report

1.2 The Greater Seattle Housing Market 1980-2000

Puget Sound housing creation is linked to population increases within the region. Over the past 20 years, 55 percent of the region's population gains have come from in-migration, and the remaining 45 percent from natural population increase³. The pattern of the region's population gains has been irregular, with much of the increase coming in the mid- to late- 1980's and surprisingly little in the mid- to late- 1990's despite a regional economic boom. From 1980 to 1990 the region added 465,851 new residents to its population; over the past ten years the increase was 425,964 new residents.

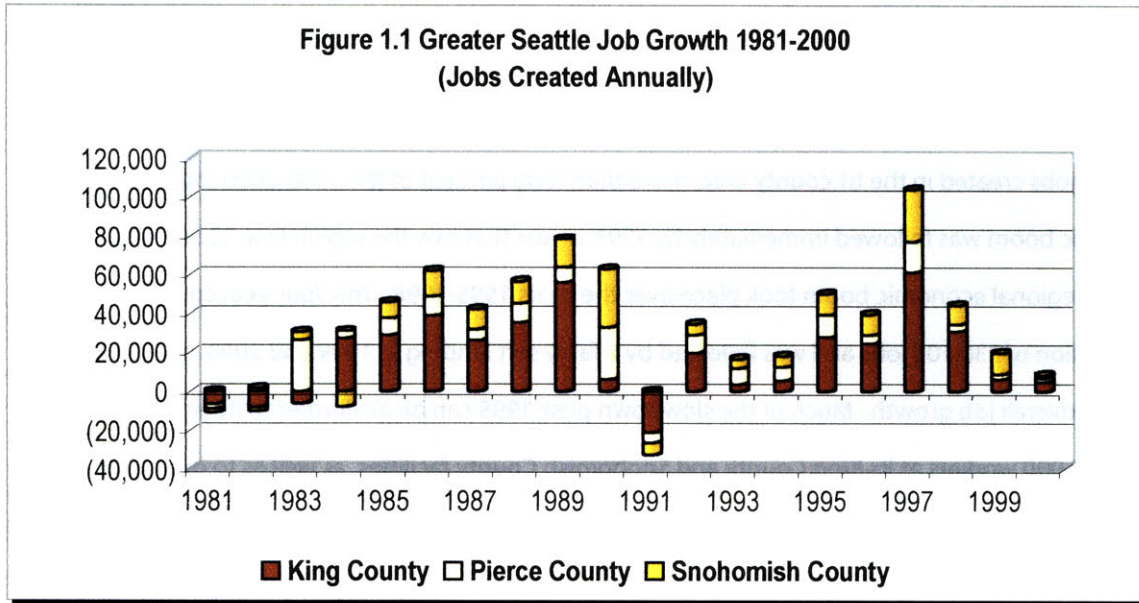
Puget Sound area population changes are largely tied to local job creation and resultant in-migration, and to natural increase (births and deaths). Over the past two decades the population gain from natural increase has been fairly stable, resulting in a gain of between 17,000 and 24,000 additional residents per year. In-migration to the greater Seattle region over the past 20 years has been strongly linked to favorable economic conditions, and has reflected the status of the Puget Sound region's economy relative to other, competing regions of the country. Many of the Pacific Northwest's newcomers have historically come from California. From 1985 to 1990, a period when the Puget Sound economy was booming and the California economy was struggling, in-migration to the region totaled 212,644. Even in the post-boom years of 1991-1993, in-migration continued to average more than 35,000 additional residents per year. In comparison, even though the years 1995-1998 were boom years for the Puget Sound economy and much more dynamic than the early 1990's, in-migration over that four-year period averaged just over 18,000 additional residents per year. The fact that the economy of the United States as a whole and of California in particular was doing well in the late 1990's dramatically affected the in-migration patterns of the Puget Sound region, and thus the overall demand for housing.

Job growth, the "pull" factor behind in-migration, has been strong in the greater Seattle area over the past two decades. In general, the region's economy has grown faster than the economy of the United States as a whole and faster than the rest of the state of Washington. While there has been significant high-tech job growth in the region, particularly over the past decade, the cycles of the commercial aerospace industry (Boeing) have continued to strongly influence the region's economic peaks and troughs.

³ Washington State Office of Financial Management

Between 1980 and 2000 there have been two sustained hiring booms in the Puget Sound region, both largely due to increases in commercial jet aircraft production. The first occurred from 1985-1990, and terminated abruptly in the recession year of 1991. In the years 1985-1990 there were 302,700 jobs created in the tri-county area, more than forty percent of the 1980-2000 total. The 1980's economic boom was followed immediately by 1991, a year that saw the region lose 32,500 jobs. The second regional economic boom took place over the years 1995-1998. This four-year span witnessed the creation of 238,100 jobs and was followed by a fairly soft landing in 1999 and 2000, both years of positive overall job growth. Much of the slowdown post-1998 can be attributed to Boeing's decision to lay off 30,000 workers at its King County and Snohomish County facilities, as well as to decreased levels of trade with Asia in the wake of the Asian financial crisis of 1997. The late-1980's and late-1990's economic booms accounted for 87% of job growth in the Puget Sound region over the past 19 years. Despite economic diversification, the Puget Sound economy remains tied to cyclical industries.

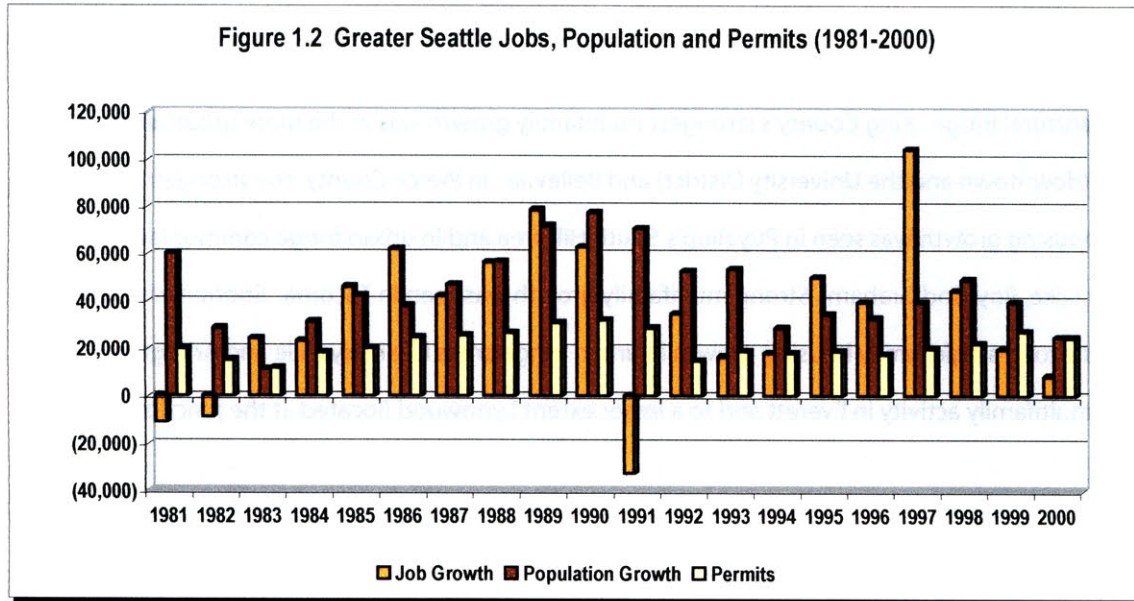
From 1981-2000 the greater Seattle economy added 679,400 jobs (Figure 1.1). Of these jobs, 53% were added in King County, 23% were added in Pierce County, and 24% were added in Snohomish County. Percentage-wise, Pierce County and Snohomish County saw almost identical job gains – 94% over the 20 year period. King County, the region's economic hub and the location of more than 60% of regional jobs as of year-end 2000, saw jobs increase over that same period by 55% to 1,002,400. This data indicates that there has been some decentralization of job creation from King County to neighboring Pierce and Snohomish counties over the past 19 years, but also that King County has retained its central role in the region. It is expected that this trend toward decentralization will continue as land and office costs continue to rise in King County and as the number of suburban residents in Pierce and Snohomish counties increases.



Source: Washington State Employment Security Department

In King County, jobs are concentrated in various parts of Seattle (most prominently downtown, the area around the University of Washington, and Northgate), in the Renton-to-Auburn corridor, and in the Bellevue-to-Bothell corridor (including Redmond). Recent job gains have been mostly in Seattle and in the east King County suburbs of Factoria (the intersection of I-90 and I-405), downtown Bellevue, Redmond and Issaquah. Pierce County jobs are concentrated in Auburn and Tacoma. Snohomish County jobs are concentrated in Everett, which is a primary center of Boeing aircraft production, and in Lynnwood.

Building permit data for the greater Seattle area for the years 1980-2000 corresponds fairly closely to regional job trends in job growth (Figure 1.2). Because the construction entitlement process can take up to a year or more depending on the size and complexity of a given project, and because actual construction can range from six months for a single family home to one and half years for a large multifamily project, there are significant lags between the demand for housing and its delivery. In general, the process for delivering a single family dwelling to market includes the recording of a new lot, procurement of a construction permit, and actual construction of the home. Delivering a multifamily dwelling to market is usually more complicated, involving an initial design approval (including an environmental review), a financing period, a construction permit, and then actual construction. The above figure illustrates the delay between strong job generation (1997, for example), and significant increases in the level of building permits issued (1999).



Sources: Washington State Employment Security Department; Seattle-Everett Real Estate Research Report; U.S. Department of Housing and Urban Development; Washington State Office of Financial Management

Permit data also shows that levels of multifamily construction are more volatile than levels of single family construction. In the years 1980-1999 the smallest number of single family homes permitted in any one year was 7,163 (1983), and the largest number permitted was 15,337. For multifamily housing the smallest number of permitted units was 4,589 (1982) and the largest number was 17,901 (1988). Multifamily growth has also been strongly correlated with periods of economic growth and resultant population inflow.

Geographically, housing growth has continued to be mostly in the suburban and ex-urban (outlying suburban) regions as opposed to older, more built up areas. From 1980-1998 the census tracts that experienced the largest numerical population gains were almost exclusively in these areas. There are, however, signs of a renewed interest in urban living. Recent (1996-1998) data shows that census tracts corresponding to downtown Bellevue (#6), Belltown (Seattle; #10) and downtown Seattle (#13) are among the fastest growing residential areas in the region. Household sizes in denser, urban areas are on average much smaller than household sizes in more rural areas. Downtown Tacoma, Bellevue, Everett and much of Seattle between downtown and the University of Washington are all areas with household sizes below 2; at the urban fringe places like Woodinville, Covington, and parts of South Hill in Kent are areas with household sizes above 3.

In King County, the strongest single family residential growth was in East Sammamish (adjacent to Redmond and Bellevue), Covington (south King County), and other areas on the east and southeast suburban/rural fringe. King County's strongest multifamily growth was in the more urban areas of Seattle (downtown and the University District) and Bellevue. In Pierce County, the strongest single family housing growth was seen in Puyallup's South Hill area and in urban fringe communities like Bonney Lake, Roy, and Graham. Strong multifamily growth was seen in Tacoma. Snohomish County showed strong single family housing growth in urban fringe areas like Marysville and Arlington, and strong multifamily activity in Everett and to a lesser extent Lynnwood (located at the junction of I-5 and I-405).

1.3 Existing King County Housing Patterns

King County is Washington's most populous county and contains Seattle, the region's largest city. The county is bordered by Snohomish County to the north and Pierce County to the south. The county's defining geographical features are Puget Sound; Lake Washington, a large lake separating Seattle from its eastern suburbs; Lake Sammamish, a smaller lake between Lake Washington and the Cascades; and the Cascade mountain range in the east. In general the western portion of the county is urban and suburban, the central portion is exurban and rural in character, and the eastern portion is largely government-owned and undeveloped.

The majority of King County's existing housing stock is single family construction. Estimates for year-end 2000 show that 63% of the county's existing housing stock is single family construction (467,213 units out of 746,293 total), and just 37% is multifamily construction⁴. That situation is changing, however. Of the housing units permitted in King County over 1990-2000, slightly less than half (49.1%⁵) was single family construction. Notably, there were higher levels of multifamily construction over 1980-1990 than there were over 1990-1999 (Table 1.4). As compared to the distribution of its existing housing stock, King County is becoming denser.

⁴ Ibid. (2000)

⁵ Seattle-Everett Real Estate Research Report

Table 1.2 Greater Seattle Permit Distribution 1980-2000

	1980-1990		1990-2000		Total
	SF	MF	SF	MF	
King County	61,253	78,789	49,191	50,859	240,092
Pierce County	24,136	18,511	38,771	11,689	93,107
Snohomish County	27,239	23,789	37,243	16,246	104,517
Greater Seattle Total	112,628	121,089	125,205	78,794	437,716

Source: Seattle-Everett Real Estate Research Report

The highest-density residential areas in King County are found in Seattle's older neighborhoods⁶. The Capitol Hill and First Hill/Downtown neighborhoods of the city have densities above 11,000 households per square mile, or more than 17 housing units per acre. Several other Seattle close-in neighborhoods (Belltown, Queen Anne, Fremont/Wallingford, the University District) have population densities approaching 10 housing units per acre. Most of Seattle and portions of the denser suburbs (Bellevue, Redmond, Kirkland, Renton, Kent, Burien, Federal Way) have densities of around 5 households per acre. More typical suburban population densities in the county are between 1.5 and 3 households per acre. Household size in the region ranges from under 2 persons per household in Seattle and Tacoma to close to 3 persons per household in outlying suburban areas, reflecting a general preference on the part of families for lower-cost suburban style housing.

Areas of dense residential concentration correspond closely to areas of greatest job density. In recent years the highest levels of concentrated multifamily construction in King County have been in downtown Seattle and its close-in neighborhoods, downtown Bellevue, Redmond, Kirkland, Issaquah and Kent⁷. Of these, all but Kent are areas of substantial jobs concentration. Tacoma in Pierce County and Bothell, Lynnwood and south Everett in Snohomish County are also substantial job centers within the greater Seattle region.

It is significant that several of these concentrations of multifamily development are in Seattle's eastern suburbs. This is a reflection of decentralization of King County job growth over the past two decades. While job growth in Seattle proper has been strong, especially compared to many other U.S. central cities, the most rapid job growth has been in the east King County suburbs, especially Bellevue

⁶ King County Department of Development and Environmental Services and King County Office of Regional Policy of Planning; King County Annual Growth Report 2000

⁷ Puget Sound Regional Council 1998 REGIONAL REVIEW: Monitoring Change in the Central Puget Sound Region, December 1998

and Redmond. As job growth has shifted east, the desirability of housing in close proximity to those job concentrations has increased. This has resulted in high levels of housing development in the east King County suburbs, but also significant housing development at locations in Pierce and Snohomish counties that offer good proximity these new east King County jobs. This trend is especially pronounced in south Snohomish County, a location that features direct access to I-405, the main north-south transportation artery of the east King County suburbs.

As the greater Seattle population expands single family homes on inexpensive land at the urban border are increasingly found in Pierce and Snohomish counties. In Pierce County, 76% of new housing units permitted from 1990-1999 were single family homes; in Snohomish County, 67% of new housing was single family. If the three counties are taken together, more than 60 percent of the housing permitted from 1990-1999 was in single family structures. King County, in comparison, shows a fairly even split between multifamily and single family units over 1980-1999. Plat and permit data seem to indicate that the development of single family homes in King County may be becoming more difficult. Despite substantial job growth in the years 1995-1998, single family permit issuance in King County for the past eight years has been relatively flat. In no year since 1990 have single family home permits topped 5,500, whereas single family permits for every year between 1983 and 1990 exceeded that figure.

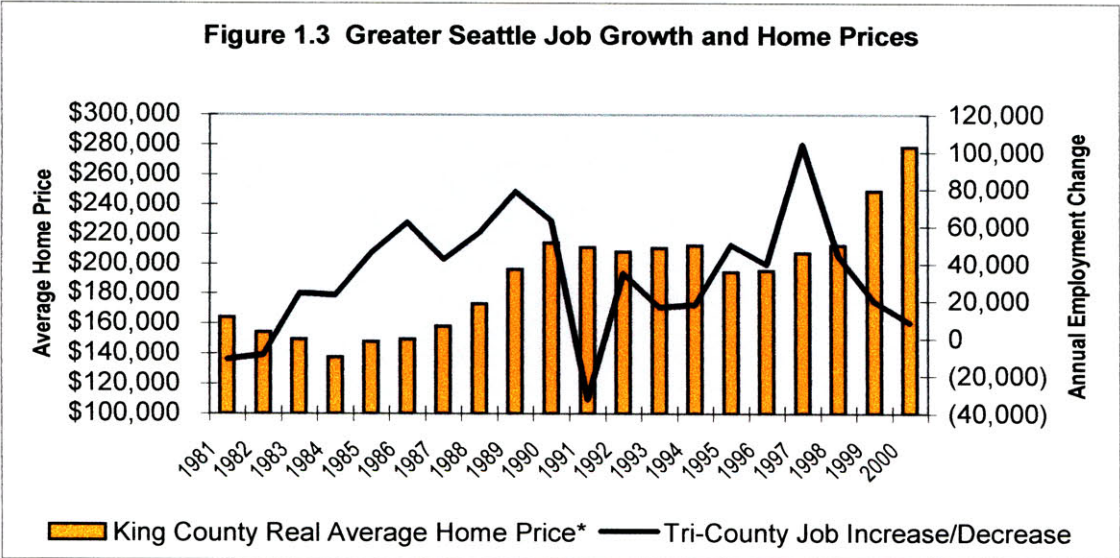
Formal plat recordings reflect a similar trend, exceeding 2,800 in every year between 1980 and 1991 but meeting that threshold only one year since, in 1993. That King County single family permits increasingly exceed formal plat recordings seems to indicate rising levels of infill development and redevelopment and commensurately lower levels of the more traditional "greenfield" development associated with formal plats. By this measure King County seems to be getting denser. King County is also getting more expensive. Like most places in the United States, the price of housing in King County – and in the region overall – has risen over the past two decades. In 1980 the average nominal price of a single family home in King County was \$82,439. By 2000 that number had risen to \$287,851. In comparison, the average 2000 Snohomish County single family home was \$212,097 and the average 1999 Pierce County single family home was \$173,036. In real dollar terms⁸, home prices rose 30.1% in King County over the 1990's but only 7.7% in Snohomish County over the same time period. In King County

⁸ Deflated by U.S. CPI; 1999 dollars

this rate of housing price increase was similar to that seen over the 1980's. In Snohomish County, the rate of real home price increase over the 1990's was only a quarter of that in the 1980's.

Real (inflation-adjusted) housing price increases have generally corresponded with periods of economic boom and in-migration (Figure 1.3). From 1980 through year-end real 1984 housing prices in King County fell 17.6%. From the beginning of 1985 through the end of 1990 – the period of the first economic boom – the real average King County single family home price rose 55.8%. From the end of 1990 through the end of 1994, a period of relatively stagnant job growth but high levels of in-migration, real home prices fell 1%. From year-end 1994 to year-end 2000, a period of job creation but also lower levels of in-migration than those seen in the late 1980's and early 1990's, real home prices rose 31.3%.

So far the sharp reduction in regional job creation seen in 1999-2000 does not appear to have tempered King County single family home price increases in the same manner that a similar contraction in regional employment did in 1991. Though regional job creation has fallen dramatically from a high of 104,100 new jobs in 1997 to just 8,400 additional jobs in 2000, King County home prices increased 17.3% and 11.9% in 1999 and 2000, respectively.



Sources: Washington State Employment Security Department; Seattle-Everett Real Estate Research Report; Northwest Multiple Listing Service
 King County average home price deflated by U.S. CPI using 1999 dollars

The Washington State Growth Management Act

2.1 Growth Management Legislation

The first modern comprehensive statewide growth management legislation was passed in Oregon and Florida in the early 1970's. The Oregon legislation, referred to as the Land Conservation Act (LCA), was a reaction to explosive suburban growth in the Willamette Valley during 1960's and early 1970's. The LCA required each county in Oregon to develop a Comprehensive Plan describing current and future land uses. Additionally, the act created an urban growth boundary ringing the Portland metropolitan area, beyond which land use was to remain primarily rural. Florida's growth management legislation was similar in intent – three separate laws governing rural land conservation, mandatory comprehensive planning, and deployment of infrastructure (specifically water resources) had the intent of better directing development to regions of the state best equipped to deal with it. Since Oregon and Florida passed their laws, several other states have enacted similar statewide growth management legislation, among them Vermont, New Jersey, Maryland, Maine (later rescinded), Georgia, and Washington.

The principal motivations for these statewide growth management acts are usually twofold: first, to promote compact and accessible development with efficient public services; and second, to slow land-intensive suburban development by limiting developable area and preserving open space, agricultural land and environmentally sensitive areas. Oftentimes the legislation contains provisions for an "urban containment" boundary similar to that found in Oregon. When this is the case, a line is drawn around already-urbanized areas to denote a physical boundary between urban development areas and rural development areas (agriculture, conservation, and resource lands). Land outside the containment area is usually limited to very low-density residential uses or agriculture, resource, or open space uses. Large-scale residential and commercial development is limited, because typically the legislation restricts the provision of utilities in these areas.

2.2 The Washington State Growth Management Act

The Washington State Growth Management Act (GMA) is legislation passed by the Washington State Legislature in 1990/1991. It was modeled indirectly on the state of Oregon's LCA, which limited development of rural and resource lands and established an urban growth boundary around Oregon's major cities, most notably Portland. The GMA established a requirement for comprehensive planning on state, county, and municipal levels that had not previously existed in Washington State.

Though the Washington State GMA was modeled on the Oregon legislation, there are significant differences between the laws and their application. The LCA is administered on a statewide level by a panel with significant authority. The GMA is less far-reaching, and in some ways less authoritative. While the LCA contains a mechanism for expanding its urban containment boundary in response to development pressures, the GMA is less specific in addressing this issue. And whereas the greater Portland growth area has a "release valve" in Clark County (neighboring Washington state's fastest-growing county in the 1990's and not subject to the LCA), the central Puget Sound UGA has no such growth outlet.

The impetus for the passage of the GMA was rapid population growth in the 1980's driven by strong economic growth. This was particularly pronounced in the central Puget Sound area. Because this growth for the most part took the form of low-density suburban development, much of it not adequately planned for, high infrastructure costs were the result. Land-intensive development patterns were also perceived by planners to be unattractive and harmful to the environment. The intent of the GMA was to concentrate future residential and commercial growth within areas served by existing infrastructure, thus mitigating the expense of servicing that growth and at the same time encouraging development with more desirable visual and environmental consequences. The intent of the multiple-level comprehensive planning requirement was to force jurisdictions to map out how and where growth would occur. Growth targets for each county were derived from projections by the Washington State Office of Financial Management, and the 29 fastest-growing counties (of 39 in the state) were required to allocate that growth to the municipalities and unincorporated areas within their borders through their comprehensive plans.

One of the principal tools that the GMA uses to limit low-density development is the designation of "urban growth areas" (UGAs), within which development is to be predominantly urban in form, and

beyond which development is to be primarily rural. Demarcation lines have been drawn around already urbanized areas, and the majority of future growth is intended to be within the UGAs. Inside each UGA, growth is to be compact in form at medium- (defined as 1-2 units per acre) to high-densities (greater than 12 units per acre). To put this in perspective, a tract home with a half-acre lot would be considered medium density, while a townhome with a 3,000 square foot lot would be considered high-density. Outside of the UGA, lot sizes are to be a minimum of five acres.

By far the largest UGA in Washington State is that encompassing Seattle, Tacoma, Everett, and those cities' suburbs. The area of this UGA (985 square miles) is approximately equivalent to the area of the state of Rhode Island. The collective area of the four counties across which it stretches (6,298 square miles), is roughly equivalent to the size of the state of New Jersey. While encompassing less than 16% of the four-county area, the central Puget Sound UGA is home to more than 85% of the four-county population. This area is not for the most part densely settled. As of year-end 2000, the central Puget Sound UGA included roughly 1,277,000 households, resulting in a density of just over two households per acre.

The GMA also mandated that counties examine their existing capacities for growth. This involved an identification of vacant and "developable lands" (the definition of this varies from jurisdiction to jurisdiction; most often it refers to parcels of land with values more than twice that of their existing improvements), and an analysis of the development capacities associated with those parcels. This was done by multiplying parcel areas by the floor area ratio (FAR) multiple allowed by the associated zoning, and subtracting for a margin of error (usually 25%). Depending on the jurisdiction and the complexity of its analysis, that capacity was further diminished by the identification of parcels as being topographically difficult, in environmentally sensitive areas, having development-limiting easements, etc. Not analyzed were specific areas' likelihood of development based on market demand.

Capacities, according to the GMA, are to be kept at a 10-to-20 year supply of developable land. If capacities fall below a 10-year supply (i.e. when the 10-year capacity for a given jurisdiction is less than the growth projected for that jurisdiction by the Office of Financial Management), capacities must be increased, either through upzoning or through outward extension of the UGA. As of 2000, all counties and municipalities required to plan show adequate capacity to absorb future (20-year) growth. This is not surprising, as Seattle's outer suburbs are relatively young and low-density, and as such contain a good deal of land available for infill development. As time passes, however, unless UGA is expanded, a greater share

of housing and commercial development must necessarily come through redevelopment, which is generally more costly and difficult. This may have the end effect of higher overall housing prices.

2.3 The GMA's Sticks and Carrots

The GMA works mostly through a large stick: the withholding of state transportation funds to counties that do not comply with its requirements. Counties in turn are responsible for their cities, and can withhold county funds if municipalities fail to comply. To date, only one county (Chelan, in eastern Washington) has had state funds withheld as a result of failure to meet the requirements of the GMA.

The case of Chelan had much to do with politics, and in some ways is indicative of the often polarized politics of Washington state. Communities outside the central Puget Sound region have tended to see the GMA as land use conservation policy controlled by environmental interests in Seattle. Because the GMA limits the uses of land outside UGAs, non-Puget Sound communities have tended to see the Act as restrictive and limiting to economic growth. These concerns have resulted in legislation that, while stronger and more comprehensive than many other states' planning measures, is less reaching than Oregon's Land Conservation Act, the legislation on which it was modeled.

First and foremost the GMA requires most counties and some cities to establish comprehensive plans. These plans must spell out how and where growth (as determined by the OFM) will be accommodated, how that growth will be serviced by transportation and utility infrastructure and capital facilities, and which critical environmental areas will be protected. Within a year of ratification of comprehensive plans, jurisdictions are required (if necessary) to pass zoning laws that ensure capacities commensurate with predicted growth. All jurisdictions so far required to take these steps have done so.

Significantly, the state of Washington does not have a body that systematically ratifies county or city comprehensive plans. Three appeals boards exist to make rulings when aspects of comprehensive plans are challenged (usually by landowners or interest groups), but for the most part cities and counties have primary responsibility for the workability of their plans, and state agencies must abide by them. If comprehensive plans are not supportive of the stated objectives of the GMA, appeals can be lodged and a ruling will determine the validity of the plan. This has occurred, and comprehensive plans have been altered or, in many cases, upheld.

The central Puget Sound region – King, Pierce, Snohomish, and Kitsap counties – is recognized as a special region under the GMA and is required to plan accordingly. Comprehensive plans of jurisdictions in this region are required to coordinate with one another. Transportation, environmental, and land use planning in the central Puget Sound area is to be regional in nature. It is this requirement that has resulted in the designation of twenty-one “Urban Centers” throughout the four-county area. Twelve of these are located within King County; five are located within the City of Seattle. The purpose of the Urban Center designation is to establish concentrations of commercial and residential use that can support high levels of urban amenity and be easily linked by roads and mass transportation.

In support of the Urban Center concept, the GMA has recently established a 10-year tax abatement for housing development, provided that the Urban Center “lacks, as determined by the governing authority, sufficient available, desirable, and convenient residential housing to meet the needs of the public who would be likely to live in the Urban Center, if the desirable, attractive, and livable places to live were available”. This tax break aims to assist to Urban Centers that are currently without a critical mass of housing, while avoiding subsidizing housing in Urban Centers that are already desirable to live in.

This Urban Center tax-break, coupled with the benefits of focused capital spending (i.e. infrastructure improvements and capital facilities sited within Urban Centers), are the carrots that the state and counties hope will lure housing development to the Urban Centers, and keep it within the UGA. There are few sticks associated with development of housing stock outside of the UGA aside from large-parcel zoning (minimum five acres per dwelling unit) and a long-term commitment to low levels of infrastructure spending in those areas.

2.4 The GMA’s Staying Power

The GMA came into effect in the early 1990’s in response to what was then perceived by planners and environmentalists to be runaway growth and urban/suburban development. At roughly the same time, height and development limits were put into place in Seattle and some of its eastern suburbs. In the early 1990’s, in response to a slowing local economy, the Seattle development restrictions were relaxed in an effort to spur economic growth. Not so the GMA.

It has been nearly 10 years since the enactment of the GMA, and the legislation has become part of the political, planning, and development landscape, though a highly political one. Like Oregon’s Land

Conservation Act, the GMA is often a lightning rod for discontent, especially discontent having to do with higher home prices. This dissatisfaction does not come from all sectors equally, of course, as those who own homes benefit from home price increases while renters do not. There is concern about the affordability of housing in the Puget Sound Region for renters and first time homebuyers, as the inflation-adjusted average King County single family home price rose 30% between 1990 and 2000. Exacerbating these concerns is the fact that while real home prices actually decreased slightly between 1990 and 1998, over the past two years (1999 and 2000) they have increased more than 31%, this despite the fact that regional job growth for the years 1999 and 2000 was less than 1.2% annually.

The comprehensive planning mandated by the GMA has become entrenched in many counties and cities, especially the more densely populated jurisdictions included within the central Puget Sound UGA. The GMA required the establishment on a county basis of numerical targets for employment and housing stock growth based on the state's best projections, and jurisdictions are to make efforts to accommodate their allocated share of that development within their boundaries. Progress reviews on these targets are required, though there are not yet negative consequences to jurisdictions for failing to meet them.

Because there is a substantial amount of land within the UGA that is still undeveloped, it remains to be seen how well the GMA is received when development is restricted on a regional (tri-county) basis. Only in parts of King County does relatively intensive development abut the border of the UGA; Snohomish, Pierce, and parts of southeast King County still contain large areas of developable land. It is only when the UGA's boundaries begin to significantly alter development patterns (in King County's eastern suburbs, for example) that the prickly prospect of upzoning, extending the boundaries of the UGA, or some combination of the two will become impossible to ignore. Through the first six years of the GMA's restrictions there have been few instances where predominantly single family neighborhoods have been forced to become more dense, or where rural and resource land has been forced to become urban. Coming years may necessitate both, and public reaction may differ from what has been voiced so far.

The GMA remains somewhat unpopular outside of the central Puget Sound region, as outlying regions see it as compromising their potential for growth, as well as a response to issues only seriously confronting one region (greater Seattle) in Washington state. Within the central Puget Sound region, however, outreach by the planning and political community, rising home values, and favorable economic conditions have resulted in relatively low levels of discontent by constituents. This public acceptance of

the GMA and its restrictions may well change as the more easily-developable land at the edges of the central Puget Sound UGA are built out and housing development comes more and more through redevelopment in already urbanized areas, likely in the form of multifamily development and at higher development costs.

The GMA's Effects on Housing Development and Prices

3.1 Growth Management vs. Growth Controls

Before discussing the fiscal effects of growth management, it is first necessary to draw a distinction between the often interchangeably used terms "growth management" and "growth controls". Growth management programs seek to redistribute growth and development in ways that minimize the negative environmental, social and fiscal impacts of development. Growth controls seek to limit population growth, housing construction, and/or economic growth below levels that would otherwise be achieved in an unconstrained real estate market.

While conceptually distinct, the line between growth management policies and growth controls is in practice fairly vague. Growth management programs can be administered in such a way as to become de facto growth controls – this is sometimes the case in areas where development is heavily regulated and subject to numerous discretionary reviews – and growth controls can be so loosely drawn and enforced that they function poorly or not at all.

In a recent study of growth controls in California John Landis observed that over the medium term (10 years) local growth control programs did not necessarily affect the price of local housing. This was partly because the housing caps instituted in the communities studied were fairly well in keeping with historical growth rates, but also because the programs were not regional and therefore porous: overflow growth could take place in neighboring communities.

Landis also found that throughout the 1980's in California there were "systematic, region-wide housing shortfalls as compared to job growth". Testing the assumption that housing growth should lag but eventually balance with job creation on a metropolitan area-wide basis, Landis found that in almost all of California throughout the 1980's this did not happen. Over that same time period home prices throughout California rose substantially. Landis posits that local and regional growth management programs functioning as ad hoc growth controls were at least partly to blame for these price increases. He

observes that, “to the extent that (growth controls) contribute to regional housing shortfalls, they directly contribute to rising housing prices and declining affordability.”¹

There is much debate about whether growth management policies raise the price of housing. To the extent that they function as ad hoc growth controls, most observers agree that they do. But when they succeed in efficiently redirecting growth to minimize its negative impacts, it is not so clear that housing prices must rise.

3.2 The Effects of the GMA on Housing Development

The GMA, if successful at redirecting the growth that would otherwise have occurred at the urban border inwards, will over the long-term result in alterations to current physical development patterns. The central Puget Sound area is at present fairly low density. Only in the city of Seattle do population concentrations consistently exceed 5 households per acre, and those densities are seen mostly in close-in neighborhoods that include multifamily zoning. The majority of residential land in Seattle is zoned for single family development, and is to remain at that level of intensity per the Seattle Comprehensive Plan. Though there are parts of the King County suburbs that approach Seattle’s levels of density, most prominently in the north and the east, suburban densities typically range between 1.5 and 3 households per acre and decrease toward the border of the UGA.

Because urban development in the central Puget Sound region has taken place fairly recently, especially in comparison to major cities located in the eastern United States, the region’s development patterns – especially suburban development patterns – have been largely shaped by the automobile. It is no accident that the oldest cities in the region (Seattle, Everett and Tacoma) are also the densest. This is because significant platting and development of these cities occurred in the 19th century, when walking (and later the streetcar) was the principal means of transportation. As automobiles replaced streetcars in the 1920’s and 30’s, development began to spread north and south of Seattle. With the completion of the first Mercer Island floating bridge in 1941, suburban growth occurred in significant amounts to the east as well. Much of this suburban growth, especially that which followed World War II, has been at very low densities.

Over time, thanks to the automobile and a lack of alternative means of transportation (the region currently has no rail system, though it does have a fairly good bus system) suburban development has

¹ Landis (1992)

stretched farther and farther away from Seattle proper. As population growth patterns shifted housing development away from the central city to the suburbs, commercial development found its way to the suburbs as well. Currently, of 63 million square feet of office space in the Puget Sound area, less than half is located in Seattle. Nearly a third (and much of the region's high-growth technology workforce) is scattered among the eastern King County suburbs of Bellevue, Redmond, Kirkland and Issaquah. This land-intensive low-density housing development and multi-nodal employment growth has resulted in high levels of land consumption, inefficient infrastructure investments, and congested and inadequate road systems, all of which helped to inspire the GMA.

Regional planning authorities hope that the GMA, by constricting land supply (though not necessarily capacity) will facilitate infill and higher-intensity redevelopment. The highest-concentration growth is to take place in the designated Urban Centers, which over time are to become urban in character. If the GMA restricts overall land supply and if there is continued demand for new single family and multifamily housing units, land zoned for higher-capacity development will become more valuable as low-capacity (single family) zoned land is developed. This is because higher-capacity zoning allows a larger number of units to be constructed on a given parcel of land. In this scenario where low-intensity development is discouraged, higher-intensity development encouraged, and housing consumers display a willingness to live in multifamily housing, the greater Seattle area's built environment will eventually become higher-density. Instead of single family homes on half-acre lots, new housing development will be more likely to take the form of single family homes on smaller lots, clustered housing, townhouses, row houses, or larger-scale apartment and condominium projects. Single family homes will still be built, but higher overall land prices will likely result in a product that is priced toward the upper end of the market – toward those that can afford the high cost of the land included with the house. The region's starter home will have a higher probability of being found in a multifamily structure, in other words a condominium. To the extent that the GMA restricts land supply and raises land prices, development patterns will adjust to accommodate more people at higher densities on the same amount of land, the caveat being that greater Seattle residents are willing to live in (and pay for) denser housing typologies

Planning authorities are also optimistic that increased density will bring about mixed-use neighborhoods. The belief is that this will allow residents to have better access to employment, shopping, and other amenities within a geographically compact area, and therefore will reduce automobile use on a per capita basis. Partly driving this strategy is the increase in levels of traffic congestion in the Puget

Sound area over the past two decades. This congestion has resulted from an increase in per capita miles driven as settlement and employment patterns have become more dispersed, and also from the fact that only a small amount of new roadway capacity has been added over the past three decades..

It is difficult to draw conclusions about the effectiveness of the GMA from the data on housing stock in the central Puget Sound region. In the decade 1980-1989 52 percent of housing units permitted in King, Pierce, and Snohomish Counties was in multifamily structures. In the decade following, from 1990 through 1999, that percentage fell to 40 percent. So by this measure at least, development patterns have become less compact over the past 10 years, not more compact. It is possible that the physical projects themselves have become more compact over the past decade, meaning that perhaps the average single family lot size has become smaller even though single family dwellings as a percentage of total dwellings have increased. Also it should be noted that the drop in the percentage of multifamily units may be partly attributable to the fact that the 1980's multifamily production may have been artificially high due to relatively easy availability of funds from savings and loan institutions. Those funds were strongly curtailed in 1989 with the passage of the FIRREA legislation, and this undoubtedly has negatively affected the ease with which capital is raised for multifamily development.

It seems to have become more difficult to produce housing stock of any kind in the Puget Sound region over the past ten years (Table 3.1). From 1980-1990, one housing unit was permitted for each 2.0 newcomers to the area (both natural increase and immigration). Over 1990-1999, that number fell to one unit produced for each 2.2 additional residents. Both of these numbers are lower than the region's overall average household size (2.33 persons per household before factoring in vacancy), and thus seem to indicate that housing is being produced at close to historical levels. On a county-level basis, there is some indication that over the 1990's King County and Pierce County became more difficult places to produce housing, while Snohomish County remained consistent with 1980's levels. Complicating this analysis, however, are three important observations: permit numbers do not reflect the scrappage (demolition or functional obsolescence) that occurs in any given year; there are no sound estimates of what percentage of permitted units actually are constructed; and as the Puget Sound population ages, household size is shrinking. Thus it is very difficult to determine whether the current level of development activity on a tri-county basis is adequate to serve region's needs.

**Table 3.1 Housing Development in Greater Seattle
Additional Population per Building Permit 1980-1999**

	1980-1990	1990-2000
King County	1.70	1.93
Pierce County	2.36	2.49
Snohomish County	2.51	2.50
Greater Seattle Area	1.99	2.22

Source: Compiled from Seattle-Everett Real Estate Research Report; US Census

All of this points to the fact that it is difficult to isolate the effects of the GMA on housing development. It is possible that enough land inventory has been included within the borders of the UGA to support current intensities of development for some time, in which case the UGA would currently have little effect on land development patterns at all. The effects of the UGA will be most felt when the supply of developable land is constrained, land values rise, and development capacities associated with higher intensity zoning must be tapped.

3.3 The Effects of the GMA on Development Costs

The GMA and the King County Comprehensive Plan place substantial emphasis on the idea of increasing housing density in already urbanized areas rather than encouraging development at the urban fringe. Given this emphasis, it is important to examine the effects that greater urban density has on overall development costs and, by extension, on housing prices. It is also important to identify the major tradeoffs that residents must make as a result of this decision to pursue more dense settlement patterns.

Suburban development patterns became widespread in the post World War II years because increased road construction and automobile ownership made it possible to easily access cheap land at the edge of an urban area. Land at the urban border is generally cheaper than land within an urbanized area because the land's alternative use is typically low. The land at the border usually has some agricultural or natural resource value, but when this drops below housing development's residual to the land (sales price less development expense excluding land), a site is logically developed, provided that it offers transportation access and basic utilities.

Drawing an urban containment boundary around an urbanized area such as the central Puget Sound region, is meant to combat this land-intensive development pattern. By restricting the

development of land outside the boundary to a minimum of five acres per dwelling unit, the incentive to develop it intensively for housing is partially removed. Consequently, the region's housing development becomes focused within the boundary. Because the supply of cheap land at the urban border is no longer limitless, though, land values within the border rise to higher levels. These higher land prices and the indirect higher costs associated with more intensive development are reflected in the price of housing.

Though the imposition of an urban containment boundary removes land that would eventually be developed from a given community's stock of land, it is possible to compensate by creating more capacity within the urban containment boundary through higher-density zoning. This often means the substitution of multifamily housing for what otherwise would be single-family housing, but if the issue of buyer preference is ignored, it is possible to see that the same amount of housing can be built at higher densities, thus spreading the higher cost of land over more units. It is important to note, however, that higher densities result in higher development costs, which are ultimately reflected in the price of housing.

There are numerous factors in addition to high land values that cause housing development costs to rise with density. Among them are the design and construction challenges that come with large, often mixed use structures, the complications that arise from infill and redevelopment as opposed to "greenfield" development, the difficulties that stem from capitalizing larger, higher-risk projects with long construction and entitlement periods, and the lower-efficiency net housing unit production that comes with redevelopment².

Increasing Production Costs

There is a number of different housing construction typologies found regularly in King County. Very generally, developments up to three stories in height are of wood frame construction with on-grade parking. In less urbanized areas, this parking is typically located in an exterior surface lot; in more urbanized areas, parking is located beneath the housing units. Projects up to six stories in height, unless they are targeted toward the luxury end of the market, typically include a subgrade parking structure, a concrete "podium" for the building's first level, and a maximum of five levels of wood frame construction above. Higher-end projects may substitute light gauge (steel) framing for the upper level wood frame construction. Above six levels in height, buildings are constructed of either structural steel or reinforced

² According to City of Seattle data, new housing units-to-permitted units in Seattle in 1999 was below .9 ratio

concrete. There are substantial cost differences between these methods of construction. Wood frame construction is the cheapest, followed by gauge frame construction; heavy steel and reinforced concrete have similar construction costs that are significantly higher (30 to 35 percent on a per square foot basis³) than the first two alternatives.

Aside from land price and physical construction cost differences, the most significant readily identifiable cost increase to a homebuyer that comes with urban density is the cost of structured parking. While surface parking stalls typically cost from \$500 to \$1,000 to construct, including subsurface preparation, structured parking stalls typically cost from \$22,000 to \$25,000 to construct. While some argue that one of the advantages of density is that higher population concentrations facilitate better transit service, thus obviating the need for an automobile, the experience so far in the greater Seattle area has been that condominium and apartment owners in even the densest urban settings are reluctant to purchase units that have no accompanying parking stalls. With very few exceptions, market rate multifamily stock constructed in King County includes at least one parking space with each dwelling unit. In the case of low-income, subsidized housing, this trend is less pronounced. When structured parking is necessary, it means a significant increase in the cost of housing production.

Another contributor to high housing production costs in urban areas is the cost of site-specific design. To justify the price of costly urban land, higher-density infill and redevelopment projects must be architect-designed to maximize utilization of a given site according to its zoning. This is in contrast to the more standardized design and production of single-family tract homes and manufactured homes. While some very large scale projects may realize design efficiencies by spreading architectural and engineering costs over such a substantial number of units, in King County projects of this scale are typically required to produce a detailed Environmental Impact Statement, a process that adds considerable delay to the entitlement process.

Increasing Assemblage and Entitlement Costs

There are several other factors in addition to construction and design that add up to higher overall development expense for high-density projects. Large infill projects are more likely than suburban, low-density projects to encounter difficulties in the entitlement process, though this may change over the

³ Interview with Jerry Surdyk, McCarthy Construction, David Hewitt of Hewitt Architects

coming years as the inclusion of several types of local salmon on the federal endangered species list makes rural development more difficult. Large-scale projects are often vulnerable to organized neighborhood opposition and special interests, especially in areas that have previously been predominantly single-family in character. This can mean longer development timeframes and higher development risk. While there have been instances of neighborhood interests in wealthy outlying municipalities opposing development of any kind, in general it is less costly and less risky to obtain entitlements for lower-density residential developments at the undeveloped urban fringe of King County than it is to design and obtain entitlements for higher-density infill residential developments.

It can also be very difficult to assemble large parcels of land in already developed areas. In many cases, assembling a viable project site means joining smaller parcels of land. This requirement is most often driven by layout efficiency considerations, for example the inflexible minimum space requirements for elevators, stairwells, and parking garage ramping. Unless a project site is a certain minimum size and configuration and these infrastructure space requirements can be distributed over a larger building, it can be impractical to redevelop. Because the development process is frequently long and complicated, and often involves a developer optioning land for a period of time sufficient to determine the regulatory and design feasibility of a project, it can be difficult to find adjacent landowners whose immediate interest in redevelopment coincides. In situations where the land or structure is leased to third-party tenants, lease expirations may not coincide. Even if these details can be worked out, the choice for landowners between holding land as an investment or selling out can be very complicated, driven by such factors as tax considerations, the availability of alternative investments, unwieldy ownership structures (trusts, for example), environmental cleanup liabilities, unrealistic “windfall” expectations, and emotional attachment to a particular asset. In fact, an urban growth boundary may make it more difficult for developers to obtain developable land as landowners may come to see their holdings as better long-term investments.

Much of the land in the King County Urban Centers is zoned to allow varying combinations of office, residential, and commercial use. Because the value of specific uses can vary throughout a building (e.g. retail is valuable on the ground floor, but not on the second), in dense urban environments a mixed-use structure is often the most profitable way to develop a piece of land. Dense residential and mixed-use projects can be considerably more complicated to develop than single family home subdivisions or low-density multifamily projects. While there are many single-family homebuilders capable of building and selling homes on speculation at the urban boundary, there are comparatively fewer developers with the

time, resources, and understanding of urban development processes to create housing within an urbanized area. Development tends to be done by larger, better-capitalized developers who can better wait out housing cycles and can access substantial private or institutional development capital. Because the risk in large projects is higher than the risk involved in developing single-family homes due to longer construction timeframes and extended absorption periods, developers demand higher profits to compensate. In the case of mixed-use projects, incorporation of retail or other commercial uses into a residential structure or vice versa is not simple, and the process requires a sophisticated developer. Barriers to entry to this type of development are fairly high. Though evidence is not readily available, it is likely that developers of dense multifamily and mixed-use projects demand more compensation than do developers of, for example, single family homes. If this is true, developer profit requirements increase with density and complexity.

Increasing Costs of Financing

Another complication in high-density projects is financing. Large projects tend to have longer entitlement and construction timeframes than do single family homes or small scale multifamily projects. In King County, it is unusual for large (more than 3 story) multifamily projects to be permitted and constructed in less than three years. This lengthy development period limits a housing developer's ability to predict market demand. Many demand factors – the rate of population in-migration, the state of the local economy, home mortgage interest rates, the level of competing supply – may change substantially from the time a project is conceived to the time that the actual housing units are delivered to market. And unlike construction of a large suburban subdivision of single family homes, construction of a single large building cannot be slowed or temporarily halted in response to changing market conditions. Thus, the developer of large multifamily projects takes on more market risk than does a developer of single family homes or low-density multifamily stock. This risk is ultimately reflected in financing terms.

There is also more construction interest expense associated with dense multifamily projects than with their smaller scale counterparts. Because it takes longer to build a larger structure, and therefore there is a longer lag between construction start and sale or lease-up, more interest accrues to the construction lender, increasing costs to the developer. This is especially relevant to high-rise projects,

which can take up to two years to construct. When large-scale projects experience substantial construction delays, the added interest expense can be significant.

Larger-scale projects require larger amounts of money to construct. This translates to bigger construction loans, which narrows the field of would-be financiers. These financiers tend to be large institutions with diversified investments. Such institutions can be prone to investment criteria beyond simply the merits of specific real estate projects, resulting in situations where money is sometimes unavailable for good projects and sometimes too available for questionable ones. Ultimately these lending practices can add volatility to the multifamily residential market and therefore increase risk in large projects.

Large lenders often tend to be skeptical of mixed-use projects, which are more likely to occur in dense urban areas. These projects are more complicated than single-use structures, which means that there is greater potential for problems over the development period, and potential for conflicts between the uses. Market risk for these mixed-use projects also tends to be difficult to quantify. Because the asset is relatively liquid and the credit history of a borrower easily accessible, construction lending for a single family home is known to be fairly safe. Construction lending on a multifamily apartment or condominium building is known to be somewhat riskier. Construction lending on a mixed-use retail and residential project, for example, involves not just the risk associated with multifamily construction, but the risks involved in retail construction as well. Financiers often specialize in lending for a particular type of product with a known risk quotient. Mixed-use projects make the same risk analysis more difficult. This leads to fewer lenders, and a less competitive financing environment.

Another financing factor that adds expense specifically to large condominium projects is the presale requirement, which in the state of Washington is almost always required by construction lenders. This means that in order to secure a construction loan for a large condominium project, a developer typically has to obtain reservations (with deposit) from prospective buyers for 30 to 50 percent of the units in the structure. The lender requires this because it is an indication of the depth of the market, and therefore mitigates lending risk. In order to secure presales, however, the developer must discount the future market value of the units by some amount. Washington state law ensures that presale buyers retain the right to inspect their units upon completion of frame-out, and at that point can withdraw from the transaction for any reason with no penalty. What this means is that developers are required by construction lenders to give prospective condominium buyers a valuable option at a price that is virtually

free. This is a real expense to condominium developers; one that results in higher overall development costs.

3.4 The Effects of the GMA on Housing Prices

Developers make decisions about the profitability of developments based on the margin between predicted housing selling price and total predicted development costs. These decisions affect the future supply of housing in any given market. In other words, the housing supply delivered to market at any given time is a product of development decisions made some time well in advance. Because the development period for dense urban housing and mixed-use projects in King County can be as long as two or three years, there have often been situations where supply has not matched well with demand. This mismatch adds to housing price volatility, where increases and decreases in prices have varied significantly from the regional housing market's long-term trends.

As part of project feasibility analysis, developers take into account expectations about future housing prices, current land prices, current construction costs and development costs, as well as the prevailing real rate of interest. If, upon consideration of these variables, a developer predicts a profit commensurate with perceived project risk, a decision is made to go forward with the project. As best he or she can, the developer also considers competing supply, which can ultimately have a significant effect on predicted housing selling price. This analysis tends to be somewhat problematic, however, as information is often not publicly available until a project enters the entitlement process, which may follow a lengthy "pre-development" phase during which due diligence is performed. Thus it is difficult for a developer to predict what the competition will be, and ultimately what the market for the housing units will be like at the time of delivery.

Demand for housing units in a given area is determined fundamentally by housing prices, household income, access to employment, public utility costs, the real mortgage interest rate, and is also tied to job growth and resultant population increases. Over a two- to three-year development process, public utility costs and access to employment associated with a given project likely won't change a great deal in a manner that cannot be anticipated. Household income and the real mortgage interest rate, on the other hand, may change substantially, thus altering the price that a developer can expect to receive for housing units. Household income is closely tied to regional economic activity, whereas real mortgage

interest rates are linked to federal monetary policy. For-sale housing production of any type is subject to these risks, but because of their longer development timeframes for-sale large scale multifamily projects are exposed to these risks to a greater degree. It should also be noted that for owner-occupied housing, demand is also based in part on buyers' expectations of future prices. The anticipation of capital gains through rising home prices stimulates demand. It is possible that buyers form their expectations of future home prices (and potential capital gains) at least in part from recent housing market trends. If this is true, buyer behavior itself exacerbates both home price increases and decreases, further adding to housing market volatility.

To the extent that the GMA mandates greater density and thus higher construction and development costs, it will contribute to higher overall housing prices. In order for the housing stock to increase, prices must rise to the level that makes additional development profitable. Offsetting benefits may ultimately accrue to residents in the form of lower utility costs and property taxes, but it is unclear whether these benefits will outweigh the drawback of higher-priced housing. Clearly there are multiple factors outside of a developer's (or municipality's) control that can affect housing prices, and therefore the profitability of housing production, so it is difficult to draw hard conclusions about the immediate effects of the GMA on housing prices. What is consistently true, however, is that a project that adds to the housing stock must generate enough profit to justify an investor's risk. New housing units in denser, more urban projects typically sell at a higher price per square foot than do new housing units in projects at the urban boundary. This is a reflection of their higher development costs, including the cost of land with high locational value

3.5 The Effects of the GMA on Quality of Life

Those who advocate for growth management through the implementation of urban growth boundaries see the benefits of density as an acceptable tradeoff for higher home prices. Theoretically, the benefits of increasing levels and variety of neighborhood amenities (grocery and drug stores, restaurants, entertainment options, etc.), better mass transportation options, and lower utility costs will accompany higher density use of land. Infrastructure savings accruing to local jurisdictions as a result of increased density can be passed on to homeowners in the form of lower taxes. The implication is that though people may live in closer proximity and in smaller spaces, they will live better. It's important to note

however, that this tradeoff will likely benefit some segments of society more than others, namely those who value increased urban amenity over the loss of privacy and open space that comes from more intensive land use development patterns. Singles, the elderly, and other small households are generally more receptive to occupying multifamily and smaller single family units than are larger families.

3.6 Regional Economic Tradeoffs

One of the most significant effects of higher home prices are the higher average wages necessary to support them. If companies cannot pay workers a wage adequate to meet the expense of housing, workers will choose to relocate to other regions offering wages that do enable them to afford housing. To retain workers in regions with high housing costs, companies must pay wages sufficient to meet the cost of that housing.

Rising wages and real estate costs hurt firms' competitive positions within their industries. A lessened competitive position may lead a firm to reconsider its commitment and contemplate moving elsewhere. If the same quality of workers and real estate can be found in another location at lower wages and rents, all things being equal an employer may choose to relocate. Companies choosing to leave a particular region or choosing not to locate within a region directly affect the employment opportunities of that region's citizens, and therefore the region's economic prospects. Because the level of a region's economic production is directly affected by the cost of its labor and real estate, it is important that the expense of those factors be kept to a reasonable level in order to be nationally and internationally competitive.

A homebuyer considers not just the price of a dwelling unit but also its utility. Similarly, a company considers not just the cost of a region's wages and real estate, but also the range of other amenities that a region can provide (geographical location, quality of life, quality of environment, access to a highly trained labor force, access to research institutions, etc.). Different industries value amenities differently. A firm in an industry that pays low-wages for low-skill work may value low real estate costs and a large pool of low-wage workers. Alternatively, a firm in a high-wage industry may value a region's quality of life and environment, as these attributes may make it particularly attractive to highly-skilled employees. It may be that the GMA, while raising the overall cost of housing and wages, will preserve the central Puget Sound region's quality of life and quality of environment, thus having the effect of making

itself more attractive to high-wage industries but decreasing the accessibility of housing for those without high-wage jobs.

It is also important to note that not all segments of society benefit equally from growth management. Typically those who are less well off but who wish to live in single family housing substitute commuting time for capital in order to make this possible. By restricting development of land with the lowest locational value, growth management as practiced in the central Puget Sound region diminishes the accessibility of single family home ownership for those in lower income brackets. Further, by requiring residential lot sizes outside the UGA's boundaries to be five acres or more the GMA is to some extent perpetuating a form of exclusionary minimum lot size requirements so common in the nation's affluent suburbs.

King County Targets, Capacities and Urban Centers

4.1 King County Targets and Capacities

In response to the passage of the Washington State GMA, in 1994 King County updated its Comprehensive Plan to include growth targets for housing units and employment. Twenty-year targets were developed for each jurisdiction within King County for both low-growth and high-growth scenarios (Exhibit A)¹. Over an initial 20-year time period (1994 through 2014) the King County Comprehensive Plan anticipated the addition of between 171,816 and 222,558 net new housing units and between 288,700 and 370,620 new jobs. These targets are based on employment and housing projections prepared by the Washington State Office of Financial Management and represent housing and employment growth of 25-32 percent and 37-46 percent, respectively, from a 1994 baseline. Given that the greater King County jobs-to-households ratio is currently 1.36² and the new jobs-to-new households ratio reflected in the targets is around 1.67, it is clear that King County expects to house a substantial share of its new workers in neighboring Pierce County and Snohomish County. This is a reasonable expectation, as existing transportation networks facilitate access to the job centers of Seattle and east King County from portions of Pierce and Snohomish counties.

The Comprehensive Plan also specified that the majority of these new housing units (77%) and jobs (93%) be located within the boundaries of existing cities, which roughly correspond with the contours of the UGA. The cities designated to absorb the bulk of the new housing units in King County were Seattle, Federal Way (7.7%), Redmond (5.9%), Bellevue (4.3%), Renton (4.5%) and Auburn (4.0%). The cities that were designated to absorb the largest shares of job growth were Seattle (38.2%), Redmond (8.5%), Bellevue, (8.1%), Renton (6.6%), and Tukwila (6.4%). It is significant that Seattle was targeted for such a high percentage of both jobs and housing. Because the city is largely built out and few “greenfield” sites remain, the majority of these new workplaces and housing units must come through redevelopment.

¹ Growth Management Planning Council May 14, 1994

² 1999 data

**Table 4.1 Comprehensive Plan 20-Year Housing Targets
King County**

Jurisdiction	Housing Units Permitted 1995-1999	20-Year Housing Unit Target	Actual Annual Rate	Targeted Annual Rate
Seattle	13,098	55,000	2,620	2,750
Federal Way	1,493	14,991	299	750
Redmond	2,104	9,878	421	494
Bellevue	4,246	8,600	849	430
Renton	2,786	7,925	557	396
Kent	3,365	7,520	673	376
Auburn	1,745	7,030	349	352
Kirkland	2,242	5,837	448	292
Tukwila	182	5,403	36	270
Rural King County	4,382	7,000	876	350
Total King County	55,902	198,531	11,180	9,927

Source: King County Dept. of Development and Environmental Services

For the most part, the housing targets correspond fairly well with the amount of housing unit growth that has taken place since 1994. Total building permits issued in King County for the six years 1994-1999 came to 63,609, more than half of which were for multifamily units³. Over the same time period, the King County Comprehensive Plan targets anticipated production of 51,545 to 66,767 units. Job growth in King County, on the other hand, has outpaced even the “high” job creation target included in the county’s Comprehensive Plan. During the years 1994 through 1999 156,000 jobs were created in King County. This significantly outpaced the Comprehensive Plan’s predicted job growth of between 93,600 and 119,796 new jobs over the initial six year time period. The mid- and late-1990’s were a period of high job growth but limited population increase in the greater Seattle area, a trend that was especially pronounced in King County. As regional and national economic conditions change, population inflow and housing production may regain their historical balance with job creation on a region-wide basis.

While the Comprehensive Plan has been relatively accurate in predicting the amount of housing that would be built in King County, it has been less successful in predicting the location of that growth. The east King County suburbs of Bellevue, Kirkland, Bothell, Issaquah, Renton, and the south King County suburb of Kent all saw housing growth in excess of their “high” targets as defined by the Comprehensive

³ Seattle-Everett Real Estate Report

Plan. Seattle and the south King County suburb of Auburn had housing growth that fell within their predicted target range. Falling short of their targeted growth were Federal Way, Tukwila, SeaTac, and Redmond. Redmond notwithstanding, in general housing growth in the east and southeast King County suburbs exceeded predictions while housing growth in the southwest King County suburbs lagged behind.

These results can be traced to the fact that job growth throughout the county has been uneven. Between 1990 and 1999, the city that registered the largest employment gain was Seattle (78,993 jobs⁴). Following Seattle were the two east King County suburbs of Bellevue (35,811) and Redmond (29,364). Other cities showing substantial job growth were Kent (13,883), Auburn (10,851), Kirkland (9,705), and Federal Way (8,357). Job growth in the 1990's has been strongest in Seattle and in its eastern suburbs, while employment growth has been less pronounced in the other regions of King County.

The disparity between the location of actual housing growth and the housing growth predicted in the King County Comprehensive Plan partly stems from the fact that the Plan targets were derived from the relative size (in existing housing units) of the various King County cities, as well as from their calculated capacities for housing growth. To determine whether the Comprehensive Plan targets were feasible given the existing land supply, development capacities were surveyed for all cities and unincorporated regions in the county. Using a formula that eliminated public- and institutionally-owned lands and assumed vacant and high property- to structure-value land collectively represents development capacity, total household unit capacities were calculated for each of the King County jurisdictions. This was done by multiplying parcel size by maximum housing density and discounting by some factor associated with the status of the land (vacant, physically constrained, redevelopment, etc.)⁵. Once it was established that growth targets could be supported by available capacities even after discounting for a 25% cushion, the growth targets were finalized. King County estimates countywide housing unit growth capacity at 304,750 units⁶. Significantly, of these units, nearly half (and 70% of the Seattle total) are expected to come through redevelopment.

The initial growth capacities calculated for the 1994 Comprehensive Plan were revised in 1997. These more recent calculations show Seattle having the most capacity for new housing units (124,418),

⁴ Washington State Employment Security Department, 1997; compiled by Puget Sound Regional Council, May 1999; King County Annual Growth Report 2000

⁵ King County Countywide Planning Policies; Land Capacity Task Force: 1995 p. D5-D6

⁶ Ibid. p. 4

followed by Bellevue (18,800), Renton (15,606), Federal Way (13,968), Kent (12,990), Redmond (10,087) Auburn (7,109), SeaTac (5,890), Tukwila (5,697), and Kirkland (5,609). Of these cities, Redmond, Bellevue, Kirkland, Kent and Auburn have seen housing growth over the 1994-1999 time period exceed 25 percent of total capacity.

Despite the Comprehensive Plan's efforts to direct the dispersal of housing growth throughout King County, the location of job growth has to a large degree determined the location of housing development through the first six years of the 1994-2014 planning period. Because the cities of King County have varying employment mixes, job growth has not been uniform. Specifically the high technology-oriented cities of Seattle's eastern suburbs have added substantial numbers of new jobs, while the rest of the county has grown more slowly. If job growth continues in east King County at a pace comparable to that of the 1990's it will be important for local jurisdictions to increase their levels of housing development if housing affordability is to be maintained.

4.2 King County Urban Centers

In its 1994 Comprehensive Plan, King County made a further effort to concentrate growth not just in its cities and already urbanized areas, but also in 12 geographically compact Urban Centers within its various jurisdictions. Five of these Urban Centers are located within Seattle (three of them in its broadly defined downtown), and the remaining seven are located in Redmond, Bellevue, Kent, Federal Way, Tukwila, Renton, and SeaTac. In all, there are 21 designated urban centers in the King, Pierce, and Snohomish Counties.

The purpose of these urban centers is to co-locate housing, employment, shopping, and entertainment and recreational activities in areas that are geographically compact. The hope is that this will: 1) promote the use of transit, walking and cycling, and will cut down on trips made outside of the immediate vicinity; 2) improve efficiency of transit service between the centers; 3) allow infrastructure-related savings to accrue to service providers and thus ultimately to residents and workers; and 4) facilitate a dense matrix of mixed-uses that will ultimately result in a more livable urban environment.

An analysis of the 21 designated urban centers was carried out in 1996 by the Puget Sound Regional Council (PSRC)⁷. This analysis showed that as of 1996, a third of the 12 designated Urban

⁷ "Urban Centers in the Puget Sound Region; A Baseline Summary and Comparison"; 1996-1997

Centers in King County had jobs at or above the county's target density of 50 per acre: Downtown Seattle, Downtown Bellevue, Downtown Renton, and Uptown Queen Anne (formerly Seattle Center). Of the Urban Centers that did not achieve this level of density, three exceeded the lower PSRC-established target of 25 jobs per acre: Capitol Hill/First Hill, Northgate and Seattle's University District. The remaining five Urban Centers had job densities ranging from a low of 7.2 jobs per acre (Redmond) to 17 jobs per acre (Tukwila). In general, jobs were most concentrated within the Seattle Urban Centers and eastern suburbs (the exception being Redmond), and jobs in the southern region of King County were more spread out.

The story of housing density is very similar: all five Seattle Urban Centers in 1996 had densities above the PSRC minimum goal of 10 dwelling units per acre. Two – Capitol Hill/First Hill and the University District – had concentrations exceeding 15 households per acre, the King County minimum density target for Urban Centers. Of the seven suburban Urban Centers, none had housing concentrations above 4 units per acre. Federal Way and Tukwila both had housing densities below one unit per acre.

There is wide variance in the density of the 12 designated King County Urban Centers there is also wide variance in their form. Suburban Urban Centers as a whole have larger block sizes, fewer sidewalks, poorer transit service, larger areas of surface parking and more vacant, developable land than do the Seattle Urban Centers. The suburban Urban Centers are also less likely to contain housing as a major component of their land use makeup. The Seattle Urban Centers also offer generally better transit service and a richer array of neighborhood amenities.

Taken as a whole, the 21 Urban Centers in 1996 were home to 119,377 residents, or 4.2% of the 1996 regional population. They were also the location of 428,190 jobs, or 28.9% of the regional total. Of those jobs, more than half were located in the three downtown Seattle Urban Centers. Significantly, these 12 King County Urban Centers were collectively designated for a housing unit increase of more than 100% and an employment increase of 55% over the initial 20-year planning period of the King County Comprehensive Plan⁸. Though the Urban Centers currently house just 4.2% of regional residents, they are expected to absorb roughly 16 percent of regional housing growth and nearly 30 percent of regional job growth through the year 2020⁹. These aggressive Urban Center targets assume substantial departures from recent development trends.

⁸ Ibid. p.5

⁹ Ibid. p.5

Briefly, the King County Urban Centers are described as follows¹⁰:

Seattle Urban Centers

NORTHGATE

The Northgate Urban Center is 410 acres in size and is focused around the Northgate Mall. This regional mall is ringed by auto-oriented commercial superblocks, large apartment complexes, and low-density single family neighborhoods. A major hospital is located within the boundaries of the Northgate Urban Center, and a community college is located immediately adjacent. The Northgate Urban Center is bisected by the Interstate 5 freeway. It will not be connected to the initial phase of the regional light rail system. As of 1996, the Urban Center included 4,150 housing units and as of 1993, 11,366 jobs. Twenty year growth targets as defined by the Seattle Comprehensive Plan are 3,000 additional housing units and 9,300 additional jobs.

UNIVERSITY DISTRICT

The University District Urban Center is 773 acres in size and includes the University of Washington campus. The Urban Center also includes a relatively small business district, significant areas of multifamily development, a small amount of single family housing, and a large neighborhood shopping center. The University District Urban Center in the future will feature two light rail stations, and the Interstate 5 freeway serves as its western boundary. As of 1996, the Urban Center included 12,159 households and as of 1990, 31,427 jobs. Twenty year growth targets as defined by the Seattle Comprehensive Plan are 2,110 additional housing units and 8,500 additional jobs.

UPTOWN QUEEN ANNE URBAN CENTER

The Uptown Queen Anne Urban Center is 297 acres in size and includes the 77-acre campus of Seattle Center, Seattle's primary arts and entertainment complex. Beyond the Seattle Center campus, the area consists of a strong neighborhood retail district, numerous commercial office buildings, a substantial number of high-density apartment buildings, and a few remaining pockets of single family homes. The

¹⁰ Jobs and Housing Unit data taken from "Urban Centers in the Puget Sound Region; A Baseline Summary and Comparison"; 1996-1997

Uptown Queen Anne Urban Center is located to the northwest of the main downtown Seattle office and retail districts. Access to Interstate 5 (and thus the regional transportation grid) from the Urban Center is sometimes problematic, and though the Urban Center is connected to downtown Seattle via the Seattle Center monorail it will not be connected to the regional light rail system. As of 1996, the Urban Center included 3,538 housing units and as of 1994, roughly 19,000 jobs. Twenty year growth targets as defined by the Seattle Comprehensive Plan are 1,312 additional housing units and 3,300 additional jobs.

FIRST HILL/CAPITOL HILL URBAN CENTER

The First Hill/Capitol Hill Urban Center is 903 acres in size and is made up of four distinct areas: First Hill, Capitol Hill, the Pike/Pine corridor, and South Capitol Hill. The Urban Center is large and its land uses and their intensity vary significantly. It contains a major regional university, a community college, a large concentration of medical and office facilities, a retail district, and some of the region's highest density housing concentrations. Its northeastern portion features mainly historic neighborhoods of single family homes. The First Hill/Capitol Hill Urban Center is bounded by Interstate 5 to the west and has access to state highway 520 to the north. The initial phase of the regional light rail system will include two stations in this Urban Center. As of 1996, the Urban Center included 20,726 housing units and 33,393 jobs. Twenty year growth targets as defined by the Seattle Comprehensive Plan are 5,540 additional housing units and 11,700 additional jobs.

DOWNTOWN URBAN CENTER

The Downtown Urban Center is 947 acres in size and includes the region's major commercial office space concentration, a major retail district, and areas of dense multifamily development. It contains numerous civic and cultural facilities as well as one of the region's principal historic districts. Downtown Seattle is the region's major transportation hub, signified by the confluence of Interstate 90, Interstate 5, an Amtrak passenger rail station, regional commuter rail service, a large state ferry complex, and an underground express bus tunnel which in the future will be converted to house four light rail stations. As of 1996, the Urban Center included 12,442 housing units and 165,199 jobs. Twenty year growth targets for the Downtown Urban Center as defined by the Seattle Comprehensive Plan are 14,700 additional housing units and 62,700 additional jobs.

Suburban King County Urban Centers

DOWNTOWN REDMOND URBAN CENTER

Redmond is one of Seattle's eastern suburbs. The Downtown Redmond Urban Center is 511 acres in size and includes a 1.6 million square foot regional shopping and office complex as well as several parks, civic buildings and low-rise suburban office complexes. In addition, there are numerous single-level strip retail centers, several large apartment and condominium complexes, and large areas comprised of single family homes. Overall density in the urban center is low, but job and housing growth have been strong over the past decade. The Downtown Redmond Urban Center is connected to the surrounding region via state highway 520. As of 1990, the Urban Center included 335 housing units and as of 1994, 3,654 jobs. Twenty year growth targets for the Downtown Redmond Urban Center as defined by the Redmond Comprehensive Plan are 3,245 additional housing units and 2,910 additional jobs.

DOWNTOWN BELLEVUE URBAN CENTER

Bellevue is a suburb immediately east of Lake Washington. The Downtown Bellevue Urban Center is 410 acres in size and includes a super-regional shopping mall, an intensively developed office core, several large multifamily developments, several civic structures, and a large downtown park. Though there has been much recent growth within the boundaries of the Urban Center, numerous low-rise retail buildings with surface parking lots remain. The Downtown Bellevue Urban Center, immediately adjacent to Interstate 405, is well-connected to the regional transportation system. As of 1996, the Urban Center included 1,000 housing units and 24,527 jobs, the majority of which were in services and retail. Twenty year growth targets for the Downtown Bellevue Urban Center as defined by the Bellevue Comprehensive Plan are 2,500 additional housing units and 17,937 additional jobs.

TUKWILA URBAN CENTER

Tukwila is a linear, suburban city located immediately south of Seattle. The Tukwila Urban Center is 864 acres in size and includes a major regional shopping mall, a surrounding retail district, and a number of industrial/warehouse complexes. There is very little housing currently located in the Urban Center. The Tukwila Urban Center is located at the southern confluence of Interstate 5 and Interstate 405, and is also

the location of a local commuter rail station. It will not be served by the initial phase of the LINK regional light rail system. As of 1996, the Urban Center included just 11 housing units and 14,817 jobs, the majority of which were in retail and manufacturing.

DOWNTOWN RENTON URBAN CENTER

Renton is a suburb located south of Bellevue along the southeastern shoreline of Lake Washington. The Downtown Renton Urban Center is 494 acres in size and includes a large industrial area, some civic structures, some multifamily projects, and the city's historic downtown. State highway 167 and Interstate 405 serve the Urban Center, which will not receive a commuter rail station or light rail station. As of 1996, the Downtown Renton Urban Center included 996 housing units and 24,132 jobs, 72% of which were in manufacturing. Twenty year growth targets for the Downtown Renton Urban Center as defined by the Renton Comprehensive Plan are 3,504 additional housing units and an employment decrease of 4,932 jobs.

SEATAC URBAN CENTER

SeaTac is a suburb located midway between Seattle and Tacoma that contains the region's principal domestic and international airport. The SeaTac Urban Center is 943 acres in size and is laid out in linearly along SeaTac's main transportation artery, International Boulevard (state highway 99). The Urban Center includes a mix of hotels, office buildings, civic buildings, apartment complexes, and large surface parking lots. It does not feature a strong retail core. The Urban Center is located along state highway 99, and has good access to Interstate 5 via state highway 518. As of 1996, the Urban Center included 3,238 housing units and 7,313 jobs. Twenty year growth targets for the SeaTac Urban Center as defined by the SeaTac Comprehensive Plan are 4,491 additional housing units and 17,141 additional jobs.

FEDERAL WAY URBAN CENTER

Federal Way is a suburb located at the southwestern edge of King County. The Federal Way "core" Urban Center is just 209 acres in size, and includes a large mall. An additional area 205 acres in size has been designated a "frame" that adjoins this "core". Current uses in the combined areas include large suburban-style retail complexes, low-rise offices, and some limited multifamily development. The Federal Way Urban Center is adjacent to Interstate 5. It will not have access to commuter rail or to the initial phase of

the LINK light rail system. As of 1996, the Urban Center “core” included no housing units and 3,516 jobs. The “frame” included 352 housing units. Twenty year growth targets for the “core” as defined by Federal Way’s Comprehensive Plan are 3,135 additional housing units and 6,934 additional jobs.

DOWNTOWN KENT URBAN CENTER

Kent is a suburb in southwestern King County. The Downtown Kent Urban Center is 285 acres in size and includes a historic downtown, some large civic developments, and a community shopping district. The Urban Center is located adjacent to state highway 167, which eventually links with Interstate 405. Though the Urban Center will not have access to the initial phase of the regional light rail system, a commuter rail station is currently being constructed. As of 1996, the Downtown Kent Urban Center included just 306 housing units and 2,431 jobs. Twenty year growth targets for the Urban Center as defined by Kent’s Comprehensive Plan are 4,686 additional housing units and 16,441 additional jobs.

Many of these targets -- especially those established for the more suburban Urban Centers -- seem very ambitious. In light of the fact that there currently exist almost no direct incentives to private developers to spur projects specifically within Urban Centers, it seems unlikely that, for example, the Downtown Kent Urban Center will multiply its housing stock fifteen times over during 1994-2014 or that the Federal Way Urban Center will see housing units jump from zero to more than 3,000 over the same duration. Data from 1995-1999 bears this out (Table 4.2). The more intensively developed Urban Centers, especially those possessing strong existing residential and employment components and mixed-use characteristics (Bellevue and most of the Seattle Urban Centers), have been reasonably successful in adding jobs and housing and building on amenities already in place. The lowest-density, least developed Urban Centers (Kent, Renton, SeaTac, Federal Way) have had considerable difficulty in meeting their targets.

**Table 4.2 Urban Center Housing Targets
King County Urban Centers**

Urban Center	Housing Units Permitted 1995-1999	20-Year Housing Unit Target	Actual Annual Rate	Targeted Annual Rate
Bellevue	1,691	2,500	338	125
Federal Way	0	3,135	0	157
Kent	213	4,686	43	234
Redmond	264	3,000	53	150
Renton	130	3,500	26	175
SeaTac	59	4,491	12	225
Seattle				
Downtown	2,545	14,700	509	735
First Hill/Capitol Hill	1,391	5,540	278	277
University District	550	3,000	110	150
Northgate	289	2,110	58	106
Seattle Center	575	1,312	115	66
Tukwila	0	N/A	0	N/A
All Urban Centers	7,707	47,974	1,541	2,399

Source: City of Seattle Strategic Planning Office; Puget Sound Regional Council

Urban Focus: Uptown Queen Anne Urban Center

Because the King County Comprehensive Plan so clearly designates the twelve Urban Centers as focal points of growth, it is useful to examine Urban Centers representative of Seattle and its suburbs more closely. The Uptown Queen Anne Urban Center has been selected for analysis because thanks to its location adjacent to downtown Seattle and its historic and neighborhood attributes, it offers true urban amenities to potential new workers and residents. In this regard, the Uptown Queen Anne Urban Center may be considered more “advanced” than many of the suburban Urban Centers – especially with regards to level of housing-oriented amenities – and in this sense a leading indicator of the ease or difficulty with which Urban Center development as a whole will proceed according to the Comprehensive Plan. An attempt is made in this chapter to examine recent physical development patterns in the Uptown Queen Anne Urban Center and to identify some of the challenges encountered in producing jobs and housing.

The question of whether or not growth can be effectively directed to Urban Centers is an important one because substantial public sector investments are being made based on an assumption of the Plan’s success in this regard. The Comprehensive Plan mandates that most new major public facilities be constructed within the bounds of Urban Centers, predicated on an assumption that new employment and residential growth will make these facilities central to large numbers of people. If established growth targets are impractical under existing market conditions, questions are raised about the wisdom of basing major public sector investments on unrealistic expectations. The danger in assigning infrastructure to places that may or may not add enough density to justify the investment is there exists the possibility that truly dense areas may be underserved as a result.

5.1 An Overview

The Uptown Queen Anne Urban Center is approximately 292 acres in size and is located to the north of the Downtown Seattle Urban Center. Its most prominent feature is the 77-acre Seattle Center campus, originally the site of the 1962 World’s Fair and now a large regional arts and entertainment

complex. Located at Seattle Center are the Space Needle, Key Arena (home to the NBA's Seattle Supersonics), the Pacific Northwest Ballet, the Seattle Opera House, an IMAX theater, the Pacific Science Center, the Fun Forest amusement park, and the Experience Music Project.

Uptown Queen Anne has considerable historic character. Many apartment and retail buildings are constructed of brick (or in the case of modern buildings, given a brick façade) and help make up an inviting, pedestrian-scaled urban environment. Amenities for neighborhood residents are numerous, and include a large variety of restaurants and coffee shops, multiple grocery stores, several theater companies, a local cinema, and a small, successful retail district. Though not within the boundaries of the Urban Center, Seattle's largest downtown waterfront park is located just five blocks away. This environment, coupled with good access to the employment opportunities of downtown Seattle and the South Lake Union area, has resulted in high overall neighborhood rents and housing prices.

5.2 Employment

Uptown Queen Anne's employment density is 64 jobs per acre, the second-densest employment level among the Seattle Urban Centers. Of its 297 acres, almost half are used primarily for commercial activities. These commercial uses consist mainly of service and entertainment (Seattle Center), office (there is a fairly small low-rise office district in the western portion of the Urban Center), and neighborhood retail. A large percentage of jobs within the Uptown Queen Anne Urban Center are located on the Seattle Center campus and after downtown Seattle, it is the most heavily commercialized of the Seattle Urban Centers at 5.4 jobs per dwelling unit. As of 1996, Uptown Queen Anne had an employment base of 19,000 workers. According to the Seattle Comprehensive Plan, that number is to rise to 22,300 by 2014, which translates to an annual gain of 150-175 jobs per year. Through 1998, the Urban Center had actually lost 458 jobs, though that is a trend that has likely reversed itself with the construction of new office space and the addition of the Experience Music Project.

It is interesting that Uptown Queen Anne's employment growth has been stagnant to negative while the nearby Downtown Seattle Urban Center and South Lake Union Hub Urban Village have substantially exceeded their prorated growth targets. This may be attributable to a number of factors, among them lack of industry growth and lack of suitable commercial space. As was stated earlier, job growth in a specific geographic area is closely tied to industry mix. In contrast to Downtown Seattle,

which has large numbers of jobs in software development, internet technology, and financial services, and South Lake Union which has a large employment base of biotechnology and software development workers, Uptown Queen Anne does not have a significant number of employees in high-growth fields. Recently this employment mix has begun to change as the area has become more developed, but Uptown Queen Anne still is not a workplace with a large proportion of “knowledge workers” and thus is less attractive to the firms that employ these types of workers.

If new industries are to locate in the Uptown Queen Anne neighborhood, adequate space must be made available for these growth industries to occupy. Currently, much of the office stock in the Uptown Queen Anne neighborhood is in older and smaller buildings; it may be that these buildings do not function well for the type of growth industries that would otherwise want to locate in Queen Anne. It is also true that property in the Urban Center is highly segregated, which makes commercial development particularly difficult given that office tenants, especially high technology firms, usually prefer larger floorplates. There is also the issue of scale: even if small office projects were being built in the Uptown Queen Anne Urban Center, they might not have the scale necessary to justify the inclusion of the modern amenities that firms (especially technology and biotech companies) often prefer: backup generators, advanced fire-protection systems, and multiple levels of building security. In a larger building the per square foot cost of including these amenities is substantially lower than it would be in a smaller building, due to the fact that most of these systems have high upfront design and implementation costs.

5.3 Housing

The vast majority of housing within the Uptown Queen Anne Urban Center is multifamily, though many single-family homes populate Queen Anne Hill to the north and several single-family homes fall within the boundaries of the Urban Center. As of 1996 the Urban Center had 3,538 residential units and a population of 4,461. According to the Seattle Comprehensive Plan, the Uptown Queen Anne Urban Center is targeted to receive 1,312 net new housing units through the year 2014, an increase of approximately 65 net new units per year. Through June of 2000, nearly six years into this 20-year planning period, 301 units have been added, 23 percent of the 20-year goal. As a reference point, over the past ten years (1990-1999), 495 net residential units were constructed within the boundaries of the Uptown Queen Anne Urban Center (Table 5.1), which translates to a yearly net new unit count of around 50 units per year.

So post-1994 housing growth has not yet significantly expanded beyond the Urban Center’s recent historic rate of growth. Active building permits currently exist for 150 net new units. Because the number of targeted units for the Uptown Queen Anne Urban Center is fairly low, growth can seem sporadic. From 1994 through September of 1999 only 130 units were constructed, but between September of 1999 and June of 2000 an additional 171 units were delivered to the market. And of the 495 net residential units constructed between 1990-1999, one building included a unit count of 146 units – around 30% of the ten year total.

**Table 5.1 Targets and Development
Uptown Queen Anne Urban Center**

Housing	Units	Units Per Year
1992-2012 HH Target (Seattle)	9,878	494
1990-1999 HH Growth (Seattle)	4,211	468
1992-2012 HH Target (Uptown Queen Anne Urban Center)	3,000*	150
1995-1999 HH Growth (Uptown Queen Anne Urban Center)	264	53
Employment	Jobs	Jobs Per Year
1992-2012 Job Target (Seattle)	27,500	1,375
1990-2000 Job Growth (Seattle)	26,945	2,695
1992-2012 Job Target (Uptown Queen Anne Urban Center)	3,500*	175
1994-1999 Job Growth (Uptown Queen Anne Urban Center)	2,946	491

Source: City of Seattle Strategic Planning Office
*estimate

Part of the reason that Uptown Queen Anne has not seen a large number of new units may be the fractured nature of its stock of land available for redevelopment (See Table 5.2). Of 278 available parcels identified in a survey of the neighborhood, 80% were smaller than 10,000 square feet (roughly a quarter of an acre) and only four parcels were larger than 30,000 square feet (roughly half of one of Seattle’s city blocks). While this is not as dramatic as it may seem (adjacent parcels are sometimes held by one ownership group under multiple company names) it nonetheless represents significant development challenges. High land prices and relatively high-capacity zoning (large portions of the area have height

limits of 40-65 feet) make only relatively high-density development feasible throughout most of the Urban Center. Unless a large plot of land can be assembled, high-density development is usually impractical, oftentimes because it is difficult to provide subgrade parking within a small project footprint. Assembling highly segregated tracts of land is speculative and often complicated and expensive. The end result of this combination of factors is that small parcels often remain underutilized until land values become extremely high.

**Table 5.2 Developable Parcels
Uptown Queen Anne Urban Center**

Size in SF	Number of Parcels	Percentage Share
< 10,000	223	80%
10,000-20,000	39	14%
20,000-30,000	12	4%
> 30,000	4	1%
	278	100%

Source: City of Seattle Strategic Planning Office 1996

An additional consideration in many of the commercial zones in the Urban Center is a requirement for storefront or transparent façades at street level. The intent of the regulation is to ensure that a lively, pedestrian-friendly atmosphere is maintained through redevelopment, but in many cases it also has the consequence of forcing parking underground. This means that projects that might have been residential-only with housing units above street level parking are forced to submerge their parking and provide some use (usually commercial, though occasionally loft-style residential) at street level. The addition of a de facto commercial space requirement to a residential project increases its level of complexity and reduces the number of developers interested in developing a site. Developable land will lay undeveloped indefinitely until until someone with the right range of experience and risk-analysis skills can make a project financially viable.

In general, Uptown Queen Anne has made good progress toward meeting its housing target under the Seattle Comprehensive Plan. Among the Seattle Urban Centers, only the University District Urban Center had met a higher percentage of its housing target through mid-2000. That said, Seattle Urban Center housing development has so far had trouble meeting Comprehensive Plan goals. Through June of 2000 only 3,889 housing units had been constructed in these Urban Centers, while prorated 20-

year targets indicate that 7,665 units should have been built over that time. This means that housing units have so far been constructed in Seattle Urban Centers at just over half the targeted rate.

5.4 Development Capacity

Much of the Uptown Queen Anne Urban Center is zoned for commercial use. The two most common designations are NC3-65 and NC 3-40, both of which allow exclusive commercial use, exclusive residential use, or a mixture of these two uses within the same structure. Height limits for these designations are 65 feet and 40 feet, respectively. Both of these zonings require new projects to incorporate a transparent façade at street level, which in most cases means that parking must be located underground. Essentially all of the developable land in the southern half of the Urban Center has one of these two designations.

Another common zoning in the Uptown Queen Anne Urban Center is midrise residential (MR), which permits construction of single-purpose residential structures up to 60 feet in height but does not permit any commercial uses. This designation has no transparency requirement at street level. All of the land zoned midrise is found in the northwest area of the Urban Center.

The only other common zoning within the Urban Center is lowrise residential (L-3). This designation permits construction of residential structures up to 30 feet in height and does not allow commercial uses. This designation, like the midrise designation, has no requirement for transparent facades at street level. L-3 zoning is found mostly in the northeast corner of the Urban Center.

In order to determine whether the targets established for the Uptown Queen Anne Urban Center in the Seattle Comprehensive plan were feasible, a capacity study was carried out by the City of Seattle's Strategic Planning Office in 1996. This study identified parcels with assessed improvement values less than one half of assessed land value and projected the number of residential units these parcels would contain if developed. These parcels are identified by pink shading in Figures 6.1-6.3. In projecting the number of units that would be developed, the study assumed that all residential-zoned land would be developed to capacity as housing, and that half of all commercial-zoned land would be developed to capacity as housing. The study did not attempt to identify which exact parcels might redevelop, but it did attempt to quantify how much total capacity for development that there was in the urban center. The assumption that commercially-zoned areas will be 50% developed as housing is important given that 73%

of all new housing in the Urban Center is to be located in commercial zones. This compares to a current Urban Center housing distribution of 40% in commercial zones, 32% in midrise zones, and 29% in lowrise zones.

Figures 6.1-6.3 show the Urban Center capacities for redevelopment¹ as well as housing development that took place over 1996-1999. Figures 6.1 and 6.2 reveal that over that period of time there was a concentration of medium-scale, high-density projects in the western portion of the Urban Center (7 projects; average net units: 13) while Figure 6.3 shows a cluster of much smaller-scale redevelopment in the eastern portion of the Urban Center (6 projects; average net units: 3). It's interesting to note that only one of the 13 projects included street-level commercial space, and only 4 were constructed within commercial zones. The distribution of housing units over 1996-1999 was 48% in commercial zones, 36% in midrise zones, and 16% in L-3 zones.

That only one of four projects constructed in commercial-zoned areas contained a commercial component seems to suggest that housing developers currently active in the Uptown Queen Anne market, given a choice, would prefer to construct single-purpose structures. If housing developers view the inclusion of commercial space as a liability rather than as an asset, this could affect the rate of housing unit delivery in the Urban Center. Presumably, developable land in the commercial zoning areas is priced to reflect the development value of the most lucrative combination of uses within a project, or its highest and best use. If retail is the most lucrative ground level use and housing is the most lucrative upper level use, the land will be priced to reflect the development profits associated with that particular type of structure. If a developer feels comfortable only in constructing a single-purpose building, he or she forgoes the profits that would be associated with developing a project with a mix of uses. This means lower margins, and thus less likelihood overall of the site being developed.

5.5 Developing in the Uptown Queen Anne Urban Center

The development process in Seattle is lengthy and complicated, as it is in many other large North American cities. There are two major permits that each project must be awarded: a Master Use Permit, which establishes the right to develop a certain program according to an approved design, and a Building Permit, which establishes that the proposed project meets the City of Seattle building codes. Both of

¹ City of Seattle Strategic Planning Office, 1996

these permits can be expected to take from 4-6 months to obtain, and are usually applied for sequentially. In addition, certain projects that are large-scale or abut neighboring properties with lower-intensity zoning (i.e. single family) are first required to go through the city's 4-6 month Design Review process, whereby neighborhood residents and a Design Review panel made up of planners, community activists, developers, and architects give input on the suitability of a project's design. Overall permit time for a large multifamily project in Seattle is often 18 months or more. If other reviews are required, such as the Shoreline Development Permit for waterfront projects, entitlement timeframes can stretch even longer.

There are two other pre-construction components that can lengthen the duration of a project. The first is the window of time that it takes the project architect to prepare Design Review or Master Use Permit drawings, usually no less than 90 days. The second is the interval between Building Permit issuance and actual construction start when construction financing is usually sought. In condominium projects, this interval can be longer due to a 30-50% presale requirement that is usually attached to construction financing.

Construction is the final component of the project delivery timetable. All of the housing developments built in midrise and commercial zones in the Uptown Queen Anne Urban Center from 1996-1999 are of the same construction type: wood-frame housing over a subgrade concrete garage structure. It appears that this may change in the future, however, as two different proposed large-scale mixed-use projects plan to use gauge frame (light steel) construction over a concrete base. A typical construction timeframe either of these types of construction at this scale is 12 months or longer. So in total, the time required to deliver a medium- to large-scale housing development in the Uptown Queen Anne Urban Center (and in Seattle) ranges from a best-case 21 months (assuming no Design Review, minimum permit times, and no financing lag) to a worst-case 33 months (assuming mandatory Design Review, maximum permit times, and no financing lag).

As has been mentioned previously, there can be a great deal of risk in undertaking a project that will be delivered to market 2-3 years after its inception. Financing costs and market conditions can change, altering the feasibility of the project. Condominium projects are especially risky because home prices are more volatile than rents. If a project is abandoned prior to construction, there can still be significant costs to the developer in the form of sunk architectural and permit fees, and the opportunity cost of his or her time. In the Uptown Queen Anne Urban Center, with its high land costs, long development timeframes, relatively high-intensity zoning, and highly segmented parcels, there so far

appears to be a limited number of developers who are willing to undertake projects. This may change, however, as larger-capacity sites in nearby Belltown are redeveloped and major downtown developers look elsewhere for sites with development potential.

Suburban Focus: Downtown Redmond Urban Center

Redmond is a fast growing suburb located east of Lake Washington. In 1960, the city had a residential population of only 1,426. By 2000, that number had risen to 44,020. Equally dramatic has been the city's transformation from bedroom community to major employment center. Over the 1990's Redmond added nearly 27,000 jobs, bringing total employment within city boundaries to more than 62,000. Redmond is now the third largest employment center in King County, trailing only Seattle and Bellevue, and is home to such nationally known corporations as Microsoft, Nintendo of America, AT&T Wireless, and Eddie Bauer.

Though Redmond was incorporated in 1912, the vast majority of its urban development has occurred over the past forty years. Aside from a small, compact, historic area (located within the Urban Center), the city's physical layout is typical of post-World War II suburbia. Residential development has been fairly low-density, single family homes have traditionally made up the bulk of the housing stock, and commercial development has been mostly in the form of low-rise office parks.

The past two decades, however -- especially the past ten years -- have brought major changes. Development patterns have become more intensive. Over the 1990's nearly four times as many multifamily housing units were constructed as single family homes, a continuation of a trend toward multifamily housing that began in the early 1980s. As land prices have risen, office development has changed as well; structured parking is now as common as surface parking lots. Redmond is becoming denser.

This rapid employment growth in Redmond makes the Downtown Redmond Urban Center unique among other low-density suburban King County Urban Centers. Redmond anticipates that its Urban Center will absorb a substantial share of the city's housing growth (30%) and a smaller share of its employment growth (12%) over the initial 20-year comprehensive planning period. The housing number is especially significant, as the Urban Center boundaries contained only 335 housing units in 1994. In this regard Redmond is something of a bellwether: if Redmond is experiencing difficulties in directing growth

to its Urban Center, then Urban Centers located in less dynamic cities like Kent, Federal Way, or SeaTac can be expected to face formidable challenges.

6.1 An Overview

The Downtown Redmond Urban Center is 511 acres in size (4.4% of Redmond's total land area) and is planned to eventually expand to 540 acres. It is comprised of an historical shopping district, newer strip retail centers, low-rise suburban office complexes, and a large mixed-use shopping center. This area was chosen as Redmond's Urban Center because of its link to the city's past (the "Old Town" historical area), its proximity to the existing civic campus, and its inclusion of the Redmond Town Center, a 1.4 million square foot regional mall, entertainment destination, and office district.

The Urban Center has a regular street grid comprised of larger-than-normal blocks. The average block size within the Urban Center is almost 12 acres, considerably larger than the typical downtown Seattle block (2 acres). This is important in terms of pedestrian scale; larger block sizes mean that residents are less likely to walk to shopping and services and therefore less likely to perceive value in dense Urban Center housing configurations. Aside from the Redmond Town Center complex, however, there are currently few street-oriented commercial establishments for pedestrians to walk to.

Redmond planners have attempted to make the Urban Center attractive to prospective residents and workers. Five major open space areas have been designated, and construction of an urban trail network for bicyclists and pedestrians is underway. Efforts are also being made to reconnect the area with the Sammamish River, which defines part of the border of the Urban Center. In keeping with its Comprehensive Plan policies, Redmond has also made major capital investments within the boundaries of the Urban Center. Major public facilities include police and fire stations, a new Redmond library, extensive sidewalk and landscape improvements, City Hall, and a new skateboard park. The Urban Center also features a large Park and Ride lot, which provides bus service to other suburban communities as well as to Seattle.

6.2 Employment

Most of Redmond's jobs are not located in the Downtown Redmond Urban Center. As of 2000, around 11% of the city's workforce was based in the Urban Center. The bulk of Redmond's jobs are located along state highway 520 in the city's Overlake area, which includes Microsoft's corporate campus. Redmond's Comprehensive Plan does anticipate shifting some anticipated job growth from the office park developments along state highway 520 to locations within the Downtown Redmond Urban Center. Of the additional 29,500 Redmond jobs anticipated over the initial 20-year planning period, 6,600 (22.4%) are to be located in the Urban Center.

Job growth in Redmond over the past decade has been much higher than was anticipated in the Comprehensive Plan. From 1990-2000 the city added jobs at a rate of 2,695 jobs per year. This is substantially higher than the rate of 1,475 jobs per year called for in the Comprehensive Plan. Employment growth in the Downtown Redmond Urban Center has kept pace as well. Over 1994-1999 jobs were added in the Urban Center at a rate of 491 per year, much higher than the Comprehensive Plan target of 350 jobs per year. That said, employment density in the Urban Center (11 jobs per acre) is still considerably lower than the target density for Urban Centers (50 jobs per acre) called for in the King County Comprehensive Plan. Even if the Urban Center growth targets are met, job density will still not exceed 20 jobs per acre. In comparison, the Uptown Queen Anne Urban Center has an employment density of around 67 jobs per acre.

Table 6.1 illustrates the makeup of the Redmond workforce. The "Services" category includes firms with employees primarily engaged in the computer software industry, most significantly Microsoft. The fact that over 70% of Redmond's workforce is employed by businesses categorized as "Service" or "Manufacturing" is indicative of the high-technology orientation of the city's economic mix. Because firms engaged in high-technology industries typically grow faster than those in more traditional industries, Redmond can expect strong job growth in the future. It's important to note, however, that in this regard Redmond's economic health is inextricably tied to Microsoft. As of 1998, Microsoft had 12,000 full-time employees and occupied more than two million square feet of office space at its Redmond corporate campus. The company's employees represent almost half of all of the "Services"-categorized jobs in Redmond.

Table 6.1 Redmond Employment Mix

Industry	Employees	Percentage Share
Retail Trade	5,956	11.7%
Services	27,403	53.9%
Contracting	1,717	3.4%
Manufacturing	9,849	19.4%
Transportation/Communications/Utilities	1,216	2.4%
Wholesaling	2,735	5.4%
Finance/Insurance/Real Estate	1,010	2.0%
Other	927	1.8%

Source: City of Redmond Business License Database (1999)

Significant non-residential real estate investments are being made in the Downtown Redmond Urban Center. In future years these investments should pay dividends in the form of new jobs. Construction activity permitted in 1999 included 171,047 square feet of new retail space, 171,118 square feet of new office space, and 94,936 square feet of “special” and institutional space.

6.3 Housing

Because much of the area within the Downtown Redmond Urban Center has not yet been intensively redeveloped, it still contains a number of single family homes. Recent development trends in Redmond as a whole have been toward larger condominium and apartment complexes. Several of these complexes have been planned and developed by large, nationally-active residential real estate development firms including Trammel Crow and Avalon Bay. Significantly, a few of these projects have been constructed within the boundaries of the Urban Center and have incorporated subgrade parking. This is an important indication that the building typologies mandated by the Urban Center zoning requirements are financially viable.

Redmond’s location at the eastern boundary of the UGA has also resulted in some interesting development patterns on adjacent rural and resource lands. Because land outside the UGA enjoys good access to Redmond’s jobs yet is limited to low-intensity development (minimum five- and ten-acre zoning), this land is increasingly being used for the development of very high-end single family homes. Because the minimum lot size is large, those who can afford to purchase the land are typically very well off.

This has resulted in an agglomeration of large, very expensive “estates” just outside the UGA and outside of Redmond city limits.

Redmond’s 20-year housing target under the Redmond Comprehensive Plan is for 9,878 new units. According to the Comprehensive Plan, the majority of this housing (56%) will be delivered in the form of multifamily units. In actuality, the percentage of multifamily units has been much higher; of the new housing stock delivered from 1990-1999 just under 80% was in multifamily structures. This is an amplification of a trend that Redmond has been experiencing for some time. In 1980 Redmond’s housing stock was predominantly single family homes (67%). From 1980-1990, however, 60% of new housing was multifamily. By 1999, multifamily housing units outnumbered single family homes.

Housing is being delivered in Redmond at levels close to the rate targeted in the Redmond Comprehensive Plan (Table 6.2). On a prorated basis, the Comprehensive Plan assumes that housing will be delivered at 494 units per year. New housing construction from 1990-1999 resulted in the delivery of 468 units per year. Housing in the Downtown Redmond Urban Center, however, is a different story. The Redmond Comprehensive Plan assumes that on a prorated basis, 150 units per year will be constructed in the Urban Center. Data from 1995-1999 indicates that housing is being constructed in the Urban Center at a rate of just 53 units per year. While this rate is likely to increase given the city’s strong job growth, the city’s policy of redirecting job growth from the Overlake area to the Downtown Redmond Urban Center the limited development options outside the UGA, and the increasing traffic congestion between Redmond and competing residential alternatives, so far the Urban Center has not succeeded in attracting growth at the levels specified in the city’s Comprehensive Plan.

Housing density in the Downtown Redmond Urban Center remains quite low. As of 1999 there were an estimated 800 housing units within the boundaries of the Urban Center, a density of less than 1.5 units per acre. King County’s target density for Urban Centers is 15 housing units per acre. Even if Redmond achieves its 20-year additional housing target for its Downtown Urban Center, density will be only 6.5 units per acre. The Uptown Queen Anne Urban Center, by way of comparison, has a current household density of around 12 units per acre and a targeted density of 17 units per acre. That housing density in the Downtown Redmond Urban Center will be at such a low level even if Comprehensive Plan targets are achieved is significant in light of the substantial infrastructure investments being made on behalf of current and future Urban Center residents.

**Table 6.2 Targets and Development
Redmond and Downtown Redmond Urban Center**

Housing	Units	Units Per Year
1992-2012 HH Target (Redmond)	9,878	494
1990-1999 HH Growth (Redmond)	4,211	468
1992-2012 HH Target (Redmond Urban Center)	3,000*	150
1995-1999 HH Growth (Redmond Urban Center)	264	53
Employment	Jobs	Jobs Per Year
1992-2012 Job Target (Redmond)	29,500	1,475
1990-2000 Job Growth (Redmond)	26,945	2,695
1992-2012 Job Target (Redmond Urban Center)	7,000*	350
1994-1999 Job Growth (Redmond Urban Center)	2,946	491

Source: City of Redmond Planning Office 1999

*estimate

Though housing development in Redmond has been delivered at rates close to those specified by its Comprehensive Plan, there remains an imbalance between housing and employment growth. By 2002, the midpoint of the initial Comprehensive Plan's 20-year planning window, Redmond will likely have surpassed its 20-year target for job growth. At the same time, housing growth has so far been below the targets in the Redmond Comprehensive Plan and well below the "high-growth" target assigned to Redmond in the King County Comprehensive Plan (650 units per year). From 1990-1999, 5.4 jobs were generated in Redmond for every housing unit that was constructed in the city, while the Comprehensive Plan's employment and housing unit targets indicate a planned ratio of 3 to 1 (the national average is around 1.2). Unless this trend reverses, a substantial majority of Redmond's workforce will continue to be housed elsewhere.

Table 6.3 illustrates where Redmond's workforce currently resides. Only 21.4% of Redmond workers actually live in Redmond, and nearly as many workers commute from Seattle. This is not particularly surprising, as Seattle's housing stock is quite large in comparison to Redmond's. Because of the considerable inconvenience of commuting between the two cities, this may suggest that at least a portion of Redmond workers see Seattle as a preferable place to live, lending credence to the argument that

density is an amenity to certain segments of the population. This is also illustrative of the increase in the greater Seattle area of “reverse commuting”, whereby employees engaged in technology-related jobs in Seattle’s eastern suburbs live in Seattle proper and commute to work in the suburbs. Because the vast majority of these trips take place via automobile, if jobs are added in Redmond but workers continue to live elsewhere, roadway congestion between Redmond and its neighbors can be expected to rise.

Table 6.3 Where Redmond Workers Live

City/County	Percentage Share
Redmond	21.4%
Seattle	20.5%
Bellevue	14.2%
Kirkland	9.2%
Woodinville	4.7%
King County	87.5%
Snohomish County	10.4%
Pierce County	1.1%
Other Counties	1.0%

Source: City of Redmond Planning Office 1998; Based on data from Commute Trip Reduction Law Employers

6.4 Capacity

The Downtown Redmond Urban Center contains 190 vacant or developable plots of land within its 540 acres. Of these, 44% are below 10,000 square feet in size (See Table 6.4) and 30% are larger than 20,000 square feet. This is a very different distribution than that of the Uptown Queen Anne Urban Center, where fully 80% of developable parcels are smaller than 10,000 square feet. The larger parcel sizes in Redmond are a vestige of land-intensive suburban development patterns centered on the automobile and its parking requirements. Large parcels mean that assembling a plot of adequate size in Redmond is a considerably easier task than it is in Uptown Queen Anne.

The Redmond Urban Center is divided into several different planning areas with FAR restrictions between 3 and 8, and height limits between 30 and 100 feet. The 190 parcels identified as vacant or developable represent around 104 acres, or around 20 percent of the Urban Center’s stock of land. Assuming an average net FAR of 3, that land area represents capacity for 13.5 million built square feet.

This is well beyond the capacity required for meeting the Redmond Comprehensive Plan’s 20-year targets, estimated at between 6 and 7 million built square feet¹.

The different planning areas within the Downtown Redmond Urban Center allow varying mixes of uses. Housing is permitted in every subarea, but in most cases is restricted to the 2nd level or above in order to permit the inclusion of street front retail and commercial uses. Two primarily residential subareas do permit single-use residential structures and exclude non-professional commercial activities such as retail. Of note, one particularly large housing project developed in the Urban Center by Trammel Crow Residential responded to the commercial storefront requirement by creating live/work spaces linked to apartments above. This may be an indicator of a strong market for live/work spaces, but is more likely an indicator of the difficulties associated with including storefront retail served only by on-street parking in an environment with little pedestrian traffic.

**Table 6.4 Vacant and Developable Parcels
Downtown Redmond Urban Center**

Size in SF	Number of Parcels	Percentage Share
< 10,000	83	44%
10,000-20,000	50	26%
20,000-30,000	26	14%
> 30,000	31	16%
	190	100%

Source: City of Redmond Planning Office 1999

6.5 Developing in the Downtown Redmond Urban Center

Because land parcels are generally larger, assembling a viable development site in the Downtown Redmond Urban Center is simpler than it is in any of the Seattle Urban Centers. The largest 31 vacant or developable parcels in Downtown Redmond collectively total more than 2.5 million square feet of land area, and all of the vacant and developable parcels taken together total more than 4.5 million square feet.

Redmond’s entitlement processes are similar to those of Seattle. They include two basic permits, the first signifying approval of a proposed use and design envelope and the second signifying approval of the building’s construction drawings. The first process, called the Site Plan Review, generally takes a minimum of six months processing time for buildings proposed for the Downtown Redmond Urban

¹ Calculated assuming 400 net square feet of commercial space per employee and 1000 net square feet per housing unit.

Center. The second process, called the Building Permit Review, generally takes an additional six months to obtain. For very large projects, an Environmental Impact Statement is required in accordance with the State Environmental Protection Act (SEPA), a process that can add several additional months to a project timeline. Environmental Impact Statements are generally not required for buildings of the scale that is permitted in the Downtown Redmond Urban Center.

An additional entitlement that Redmond mandates for commercial developments is a certificate of transportation concurrency. This certificate verifies that a developer is constructing or contributing to mitigation measures adequate to offset adverse transportation impacts associated with his or her project. This requirement has the potential to be more onerous than it might at first seem: In 1998 the rapid development of Redmond's Overlake area coupled with the unavailability of city-approved transportation mitigation projects led to a temporary building moratorium.

Once a site is selected, predevelopment work is done, and entitlements have been obtained, construction is the remaining component of project delivery. Residential projects recently constructed in the Downtown Redmond Urban Center share the same building typologies as those in the Uptown Queen Anne Urban Center: wood frame residential units over a concrete "podium" that includes structured parking. No residential structures in Downtown Redmond have yet made use of gauge frame (light steel) construction in lieu of wood frame construction. A typical construction schedule for these concrete and wood frame combinations at the observed scale is 12 months or longer. The time required to deliver a medium- to large-scale housing development in the Downtown Redmond Urban Center is very similar to that associated with a similar project in Seattle – between two and three years.

Conclusions

7.1 Redirecting Growth

There is an efficiency cost to establishing an urban growth boundary and turning growth inward. A project is generally constructed where economic tendencies make it most practical to do so, given a site's locational attributes, regulatory constraints, and the region's historical development patterns. Central Puget Sound's job growth plays a central role in determining where new residential growth takes place. Because job growth has over the last decade been particularly strong in Seattle, Bellevue, and Redmond, housing growth has been strong in areas with good access to those locations. Much of the new multifamily growth in Seattle and Bellevue has been located in those two cities' respective CBDs, both of which have experienced strong job growth and are classified as Urban Centers. Redmond and other suburban Urban Centers experienced a very different pattern of job growth, with more than 80% of the city's new jobs coming outside the boundaries of the historical center (Downtown Redmond Urban Center). Not coincidentally, housing growth in Redmond's Urban Center has fallen far short of projections.

There is an opportunity cost to redirecting growth. Redmond's decision to encourage jobs and multifamily growth in the Urban Center through investment in capital projects and infrastructure improvements means that those same capital projects and infrastructure investments will not be made in alternative locations where they might have larger benefit. The city's decision to restrict employment growth outside of the Urban Center through transportation concurrency requirements and zoning means that growth will not continue in the places where commercial development receives the most synergistic value. This is important, as firms (especially highly specialized firms) derive very real benefits from clustering together.

This same dynamic is at work in the larger region. By restricting housing and commercial development at the urban boundary and concentrating capital improvement and infrastructure expenditures within the urban boundary, regional planners interrupt existing growth patterns. Restricting large portions of land from development ensures that at least some housing will not be built in a location where it provides the best access to employment and amenities at the lowest price. While it is possible to increase the level of amenity available to occupants of denser housing (improved transit service, access to retail, pedestrian environment, access to

employment, etc.), it is not clear that this provides an overall level of benefit to residents superior to that conferred by low density housing at the urban border.

7.2 The Costs of Density

While it is difficult to determine what effects (if any) the imposition of the GMA has so far had on regional housing prices, the fact that inflation-adjusted King County single family home prices have increased 31% over the past two years is noteworthy. This is especially true in light of the fact that in the greater Seattle area 1999 and 2000 were years characterized by declining job growth and lower than usual population increases. Combined with data showing the 1990's to be a decade of declining formal plat recordings (an indicator of "greenfield development) and stable single family home production, this may be an indication that developable land in King County is becoming a scarce commodity, perhaps in part due to development restrictions associated with the GMA. Neighboring Pierce and Snohomish counties, both of which contain more developable land than King County, saw real home price increases of 16% and 11%, respectively, over the same 2-year time period.

The affordability of housing is determined by a number of factors, some of which are only tangentially related to local market supply and demand conditions. The dense development patterns encouraged by the GMA, especially the high-density patterns specified for the Urban Centers, may well result in overall construction and development costs higher than those associated with single family homes. Land in highly-developed areas is generally expensive, and there are limits to the number of units that can be cost-effectively accommodated on a given parcel. The physical construction cost of mid-rise and high-rise steel and concrete construction combined with the construction cost of structured parking mean that denser housing typologies do not necessarily translate into lower overall housing prices. This type of high-density housing will be developed only if consumers value it enough to pay for it, a set of circumstances that is so far clearly lacking in many of the lower-density Urban Centers. It may be that augmenting the region's Urban Center strategy with measures such as reduced minimum lot size requirements for single family homes would more effectively further the objective of creating housing for those with low or moderate income levels.

7.3 Challenges Ahead

There are currently significant undeveloped areas of land included within the borders of the UGA. It may be that the land pressures that lead to denser housing typologies will not be felt for several years. It seems

inevitable, however, that those pressures will eventually be felt, and it is important that a carefully defined mechanism for increasing development capacity is established. Expanding the UGA into urban and rural lands may well prove to be politically difficult, especially when those lands contain expensive luxury homes. Upzoning areas within the UGA from single family housing to multifamily housing will likely be politically difficult as well. Expanding capacity within areas already designated for high-intensity development may be politically feasible, but given the additional construction and development costs associated with steel and concrete buildings it is questionable whether this will result in the production of housing affordable to the majority of residents.

There are steps that can be taken to increase the efficiency of the development process, and thus reducing development costs and mitigating home price increases. An adjustment between the share of property tax attributable to land and the share of property tax attributable to improvements could help to make developable land more available. Increasing the share of taxes attributable to the land itself would result in higher carrying costs for underdeveloped sites, and encourage the sites' redevelopment at a higher intensity of use.

Shortening development timeframes and reducing discretionary entitlement reviews to a minimum would help developers mitigate risk, and thus would result in more efficient and less costly development processes. Because real estate competes for capital with alternative investments, complicated projects with long and risky development timelines require high returns. If market demand adequate to support the profits these investments require does not exist, development does not make sense and will not take place. Establishment of a central source for information on underutilized properties and competing supply, and government assemblage of small-parcel sites are other measures that would increase the efficiency of the development process and thus reduce the cost of producing housing.

Viable regional transportation alternatives need to be found. The UGA serves as an eastern barrier to development at the same time that Seattle's eastern suburbs are proving themselves the area's most dynamic job engine. Lake Washington serves as a western development barrier. Affordable single family homes will increasingly be found either north or south of the Seattle and "Eastside" job centers. This will put further pressure on the region's already overloaded north-south roadways, especially I-5 and I-405. Given the limited success so far of the suburban Urban Centers, it seems questionable whether suburban residents will really choose to "live, work, and play" in one convenient location. If they don't, and if no substantial transportation improvements are implemented, traffic congestion could increasingly stymie economic growth.

7.4 Winners and Losers

Inherent in the GMA is the assumption that residents of the central Puget Sound region can and will live more densely than they currently do. It is important to recognize that current suburban development patterns exist because they have been seen as the development pattern of choice. In general, people who can afford them – especially families – have shown a preference for large lot sizes and single family homes. The GMA may well result in higher overall home prices than would otherwise be the case. This will likely mean that people will live in smaller spaces in closer proximity to one another. While this may be acceptable to some segments of society, for example those without children and the elderly, it may prove to be less popular with those who need and value additional physical space. If the GMA is to remain politically viable, it is important that higher-density development be accompanied by amenities providing value to offset potentially higher prices, such as well thought out public and private open spaces and opportunities for recreation.

It is unclear what benefits low- and moderate-income residents derive from the GMA. Though growth management is often portrayed as being in the interest of the common good, it seems questionable whether the GMA benefits socioeconomic segments equally. By restricting development of low-cost land at the urban/rural boundary, the legislation also restricts lower-income residents' accessibility to single family home ownership, a side effect particularly damaging to large, low-income families. Because the boundary is for the most part located in low-density areas characterized by single family homes, benefits derived from the rural land that it protects will largely accrue to single family homeowners just inside the UGA boundary and to occupants of the rural lands themselves, few of whom are likely to be poor due to mandatory large lot sizes.

The industries that will benefit from the GMA will likely be those employing specialized, highly-paid workers. These workers will value the lifestyle that the greater Seattle area offers, and will be willing to pay for it in the form of higher housing prices. Firms employing workers at moderate wages may choose to relocate rather than pay the wages necessary to enable employees to afford adequate housing. In geographical terms, lower-wage industries currently operating in Seattle or its eastern suburbs may find it more practical to relocate to more affordable locations such as Tacoma, Everett, Lynnwood, or Federal Way. Alternatively, these firms may find it more practical to relocate outside of the central Puget Sound region altogether.

Sources

Time Series Data

Average Single Family Home Prices King, Pierce, and Snohomish Counties	Seattle-Everett Real Estate Research Report and John L. Scott Real Estate Advisors courtesy of Northwest Multiple Listing Services
Building Permit Data King, Pierce and Snohomish Counties	Seattle-Everett Real Estate Research Report and Seattle HUD Office
Wages	WS Employment Security Department
Population Data	WS Office of Financial Management
Households	WS Office of Financial Management
Jobs	WS Employment Security Department
Urban Center Housing Units	King County Annual Growth Report (2000)

Other Data

King County Growth Targets	King County Comprehensive Plan 1994-2000
Greater Seattle Urban Center Data	PSRC Urban Center Profiles 1996
Uptown Queen Anne Urban Center Land Use Data	City of Seattle Comprehensive Plan
Uptown Queen Anne Urban Center Data	City of Seattle Strategic Planning Office
Redmond Urban Center Land Use Data	City of Redmond Comprehensive Plan
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Appendix

Table A.1 Real and Nominal Home Prices -- King County and Snohomish County (1980-2000)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
King County																					
Average Home Price	\$82,439	\$89,373	\$89,379	\$89,274	\$85,642	\$95,418	\$98,301	\$107,840	\$122,814	\$145,898	\$167,840	\$172,347	\$174,986	\$182,637	\$188,711	\$177,792	\$183,598	\$199,472	\$207,675	\$248,916	\$287,851
Year-upon-year increase		8.4%	0.0%	-0.1%	-4.1%	11.4%	3.0%	9.7%	13.9%	18.8%	15.0%	2.7%	1.5%	4.4%	3.3%	-5.8%	3.3%	8.6%	4.1%	19.9%	15.6%
Real Average Home Price*	\$163,801	\$154,306	\$149,328	\$137,324	\$147,738	\$149,425	\$158,153	\$172,957	\$196,021	\$213,941	\$210,815	\$207,788	\$210,570	\$212,141	\$194,358	\$194,949	\$207,053	\$212,262	\$248,916	\$278,490	\$167,161
Year-upon-year increase		-1.7%	-5.8%	-3.2%	-8.0%	7.6%	1.1%	5.8%	9.4%	13.3%	9.1%	-1.5%	-1.4%	1.3%	0.7%	-8.4%	0.3%	6.2%	2.5%	17.3%	11.9%
Snohomish County																					
Average Home Price	\$73,863	\$75,946	\$73,260	\$74,141	\$75,629	\$80,393	\$84,174	\$88,921	\$95,225	\$124,639	\$149,422	\$147,602	\$153,512	\$158,082	\$163,746	\$155,396	\$158,626	\$168,843	\$181,065	\$196,310	\$212,097
Year-upon-year increase		2.8%	-3.5%	1.2%	2.0%	6.3%	4.7%	5.6%	7.1%	30.9%	19.9%	-1.2%	4.0%	3.0%	3.6%	-5.1%	2.1%	7.1%	6.6%	8.4%	8.0%
Real Average Home Price*	\$149,340	\$139,193	\$126,478	\$124,015	\$121,268	\$124,475	\$127,951	\$130,407	\$134,104	\$167,459	\$190,464	\$180,547	\$182,289	\$182,259	\$184,076	\$169,875	\$168,433	\$176,298	\$185,064	\$196,310	\$205,200
Year-upon-year increase		-6.8%	-9.1%	-1.9%	-2.2%	2.6%	2.8%	1.9%	2.8%	24.9%	13.7%	-5.2%	1.0%	0.0%	1.0%	-7.7%	-0.8%	4.7%	5.0%	6.1%	4.5%

Sources: Seattle-Everett Real Estate Research Report; Northwest Multiple Listing Service; Bureau of Labor Statistics

*1999 dollars, deflated by U.S. Consumer Price Index minus shelter component

Table A.2 Jobs -- King, Pierce, and Snohomish Counties (1980-2000)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
King County																					
Employed	642,100	635,400	627,200	621,000	648,100	676,900	715,800	741,800	777,200	833,400	839,500	818,500	838,100	841,600	847,200	874,800	899,300	960,700	991,400	997,600	1,002,400
Unemployed	41,700	51,600	68,800	66,000	52,900	45,900	47,500	45,800	38,500	39,300	30,200	42,600	57,000	57,600	49,200	47,900	46,100	32,900	31,200	32,800	32,800
Jobs Created		(6,700)	(8,200)	(6,200)	27,100	28,800	38,900	26,000	35,400	56,200	6,100	(21,000)	19,600	3,500	5,600	27,600	24,500	61,400	30,700	6,200	4,800
Pierce County																					
Employed	164,600	162,200	163,900	190,200	194,000	202,700	212,500	218,400	228,200	235,800	262,700	257,500	266,700	275,000	281,800	293,500	297,700	313,700	317,400	320,100	322,300
Unemployed	14,200	18,200	23,200	23,500	19,700	17,300	19,100	19,700	15,300	15,900	12,700	16,800	21,500	22,400	19,500	19,400	19,900	14,800	15,100	15,200	16,300
Jobs Created		(2,400)	1,700	26,300	3,800	8,700	9,800	5,900	9,800	7,600	26,900	(5,200)	9,200	8,300	6,800	11,700	4,200	16,000	3,700	2,700	2,200
Snohomish County																					
Employed	170,400	168,600	166,500	170,600	182,700	171,300	184,700	195,100	206,500	221,400	251,400	245,100	251,000	255,800	261,400	272,200	283,100	309,800	319,700	330,400	331,800
Unemployed	13,100	16,200	22,200	20,900	16,900	14,200	14,900	13,700	11,400	11,300	10,100	14,600	18,800	19,300	17,900	16,600	15,900	10,900	10,500	13,500	13,100
Jobs Created		(1,800)	(2,100)	4,100	(7,900)	8,600	13,400	10,400	11,400	14,900	30,000	(6,300)	5,900	4,800	5,600	10,800	10,900	26,700	9,900	10,700	1,400
Greater Seattle Region																					
Employed	977,100	966,200	957,600	981,800	1,004,800	1,050,900	1,113,000	1,155,300	1,211,900	1,290,600	1,353,600	1,321,100	1,355,800	1,372,400	1,390,400	1,440,500	1,480,100	1,584,200	1,628,500	1,648,100	1,656,500
Unemployed	69,000	86,000	114,200	110,400	89,500	77,400	81,500	79,200	65,200	66,500	53,000	74,000	97,300	99,300	86,600	83,900	81,900	58,600	56,800	61,500	62,200
Jobs Created		(10,900)	(8,600)	24,200	23,000	46,100	62,100	42,300	56,600	78,700	63,000	(32,500)	34,700	16,600	18,000	50,100	39,600	104,100	44,300	19,600	8,400
Percent Change		-1.1%	-0.9%	2.5%	2.3%	4.6%	5.9%	3.8%	4.9%	6.5%	4.9%	-2.4%	2.6%	1.2%	1.3%	3.6%	2.7%	7.0%	2.8%	1.2%	0.5%

Source: Washington State Employment Security Department

Table A.3 Population -- King, Pierce, and Snohomish Counties (1980-2000)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
King County																					
Total Population	1,269,898	1,301,900	1,318,700	1,317,500	1,333,900	1,356,600	1,376,100	1,400,200	1,428,600	1,463,300	1,507,305	1,542,286	1,564,486	1,587,700	1,599,500	1,613,600	1,628,800	1,646,200	1,665,800	1,677,000	1,685,600
Net Migration	34,424	23,815	7,537	(10,315)	7,957	13,646	9,729	14,434	18,192	23,592	32,130	23,607	9,155	10,616	1,604	3,798	4,263	7,151	4,806	182	
Natural Increase	8,187	9,263	9,115	8,443	9,054	9,771	9,666	10,208	11,108	11,875	11,374	13,045	12,598	10,196	10,302	10,937	10,249	14,794	11,018		
Year-upon-year increase		32,002	16,800	(1,200)	16,400	22,700	19,500	24,100	28,400	34,700	44,005	34,981	22,200	23,214	11,800	14,100	15,200	17,400	19,600	11,200	8,600
Pierce County																					
Total Population	485,667	502,200	505,900	512,600	520,500	529,800	536,300	546,300	558,300	573,600	586,203	603,800	624,000	640,700	648,900	660,200	665,200	674,300	686,800	700,000	706,000
Net Migration	11,500	11,043	(2,130)	905	2,507	3,820	811	4,445	6,400	9,630	6,731	11,850	13,616	10,948	2,770	5,679	1,284	4,842	6,083	8,806	
Natural Increase		5,490	5,830	5,795	5,393	5,480	5,689	5,555	5,600	5,670	5,872	5,747	6,584	5,752	5,430	5,621	3,716	4,258	6,417	4,394	
Year-upon-year increase		16,533	3,700	6,700	7,900	9,300	6,500	10,000	12,000	15,300	12,603	17,597	20,200	16,700	8,200	11,300	5,000	9,100	12,500	13,200	6,000
Snohomish County																					
Total Population	337,720	349,600	357,700	363,600	370,600	381,100	393,100	406,100	422,400	444,500	465,628	483,986	494,286	507,900	516,500	525,600	538,100	551,200	568,100	583,300	593,500
Net Migration	15,769	8,286	4,286	2,012	3,310	6,691	8,009	8,931	12,069	17,435	15,949	13,340	4,620	8,908	3,943	4,001	8,330	8,830	14,139	6,349	
Natural Increase	3,151	3,594	3,814	3,888	3,690	3,809	3,991	4,069	4,231	4,665	5,179	5,018	5,680	4,706	4,657	5,099	4,170	4,270	2,761	8,851	
Year-upon-year increase	18,920	11,880	8,100	5,900	7,000	10,500	12,000	13,000	16,300	22,100	21,128	18,358	10,300	13,614	8,600	9,100	12,500	13,100	16,900	15,200	10,200
Greater Seattle Region																					
Total Population	2,093,285	2,153,700	2,182,300	2,193,700	2,225,000	2,267,500	2,305,500	2,352,600	2,409,300	2,481,400	2,559,136	2,630,072	2,682,772	2,736,300	2,764,900	2,799,400	2,832,100	2,871,700	2,920,700	2,960,300	2,985,100
Net Migration		43,144	9,693	(7,396)	13,774	24,157	18,549	27,810	36,661	50,657	54,810	48,797	27,391	30,472	8,317	13,478	13,877	20,823	25,028	15,337	
Natural Increase		17,271	18,907	18,798	17,526	18,343	19,451	19,290	20,039	21,443	22,926	22,139	25,309	23,056	20,283	21,022	18,823	18,777	23,972	24,263	
Year-upon-year increase		60,415	28,600	11,400	31,300	42,500	38,000	47,100	56,700	72,100	77,736	70,936	52,700	53,528	28,600	34,500	32,700	39,600	49,000	39,600	24,800
Percentage Increase		2.9%	1.3%	0.5%	1.4%	1.9%	1.7%	2.0%	2.4%	3.0%	3.1%	2.8%	2.0%	2.0%	1.0%	1.2%	1.2%	1.4%	1.7%	1.4%	0.8%

Source: Washington State Employment Security Department

Table A.4 Permits -- King, Pierce, and Snohomish Counties (1980-2000); Plats -- King County (1980-2000)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
King County																					
Single Family	4,716	4,274	4,274	5,977	5,731	5,514	6,726	6,621	6,999	8,331	6,806	4,509	5,484	4,706	5,474	4,750	4,496	5,322	5,326	4,687	4,437
Multifamily	8,280	5,079	3,389	4,813	7,415	8,830	8,171	10,669	11,466	9,983	8,974	2,814	3,797	3,191	2,841	3,393	5,741	6,369	8,144	7,066	7,503
Total	12,996	9,353	7,663	10,790	13,146	14,344	14,897	17,290	18,465	18,314	15,780	7,323	9,281	7,897	8,315	8,143	10,237	11,691	13,470	11,753	11,940
Pierce County																					
Single Family	2,192	1,830	1,671	2,444	2,024	1,907	2,203	2,536	2,487	3,109	3,925	2,945	3,910	4,292	4,062	3,180	3,785	3,931	4,419	4,515	3,732
Multifamily	1,318	760	480	850	1,360	3,317	3,045	1,982	2,484	2,628	1,605	1,270	1,471	1,130	1,389	1,233	1,003	995	1,294	966	938
Total	3,510	2,590	2,151	3,294	3,384	5,224	5,248	4,518	4,971	5,737	5,530	4,215	5,381	5,422	5,451	4,413	4,788	4,926	5,713	5,481	4,670
Snohomish County																					
Single Family	1,840	1,828	1,218	3,048	2,172	2,585	2,693	2,965	3,401	3,897	3,432	2,393	3,131	3,578	3,758	3,622	3,939	4,162	4,314	4,384	3,962
Multifamily	1,527	1,370	720	1,131	1,422	2,777	2,625	1,821	3,951	4,007	3,965	670	925	1,076	1,123	1,219	877	1,401	3,553	3,015	2,387
Total	3,367	3,198	1,938	4,179	3,594	5,362	5,318	4,786	7,352	7,904	7,397	3,063	4,056	4,654	4,881	4,841	4,816	5,563	7,867	7,399	6,349
Greater Seattle Region																					
Single Family	8,748	7,932	7,163	11,469	9,927	10,006	11,622	12,122	12,887	15,337	14,163	9,847	12,525	12,576	13,294	11,552	12,220	13,415	14,059	13,586	12,131
Multifamily	11,125	7,209	4,589	6,794	10,197	14,924	13,841	14,472	17,901	16,518	14,544	4,754	6,193	5,397	5,353	5,845	7,621	8,765	12,991	11,047	10,828
Total	19,873	15,141	11,752	18,263	20,124	24,930	25,463	26,594	30,788	31,955	28,707	14,601	18,718	17,973	18,647	17,397	19,841	22,180	27,050	24,633	22,959
Percent Single Family	44.0%	52.4%	61.0%	62.8%	49.3%	40.1%	45.6%	45.6%	41.9%	48.0%	49.3%	67.4%	66.9%	70.0%	71.3%	66.4%	61.6%	60.5%	52.0%	55.2%	52.8%
Percent Multifamily	56.0%	47.6%	39.0%	37.2%	50.7%	59.9%	54.4%	54.4%	58.1%	52.0%	50.7%	32.6%	33.1%	30.0%	28.7%	33.6%	38.4%	39.5%	48.0%	44.8%	47.2%

Source: Seattle-Everett Real Estate Research Report, U.S. Department of Housing and Urban Development

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
King County Plats																					
Filings	4,254	7,541	2,282	5,060	2,918	3,444	6,519	6,431	9,803	9,251	7,215	1,497	1,401	1,205	2,322	2,265	1,901	2,948	3,042	1,796	3,308
Recordings	4,457	4,031	2,889	3,204	3,776	4,232	3,005	3,384	4,149	5,275	4,240	3,684	2,198	2,885	2,730	1,595	1,734	2,311	1,210	1,932	2,399
Recordings as % of SF Permits	94.5%	94.3%	67.6%	53.6%	65.9%	76.8%	44.7%	51.1%	59.3%	63.3%	62.3%	81.7%	40.1%	61.3%	49.9%	33.6%	38.6%	43.4%	22.7%	41.2%	54.1%

Source: King County Department of Development and Environmental Services

Table A.5 Wages -- King, Pierce, and Snohomish Counties (1980-1999)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
King County																				
Nominal Wage	\$17,105	\$18,895	\$19,664	\$19,964	\$20,426	\$21,171	\$22,204	\$22,880	\$23,750	\$24,590	\$26,106	\$27,754	\$30,055	\$29,869	\$30,720	\$32,210	\$34,346	\$37,299	\$41,274	\$46,053
Annual Increase/Decrease		9.3%	5.2%	1.5%	2.3%	3.6%	4.9%	3.0%	3.8%	3.5%	6.2%	6.3%	8.3%	-0.6%	2.8%	4.9%	6.6%	8.6%	10.7%	11.6%
Pierce County																				
Nominal Wage	\$14,706	\$16,017	\$16,688	\$16,799	\$17,011	\$17,390	\$17,764	\$18,079	\$18,628	\$19,284	\$20,370	\$21,433	\$22,648	\$23,425	\$23,841	\$24,687	\$25,545	\$26,442	\$27,502	\$28,650
Annual Increase/Decrease		8.9%	4.2%	0.7%	1.3%	2.2%	2.2%	1.8%	3.0%	3.5%	5.6%	5.2%	5.7%	3.4%	1.8%	3.5%	3.5%	3.5%	4.0%	4.2%
Snohomish County																				
Nominal Wage	\$16,290	\$17,632	\$18,256	\$18,017	\$18,263	\$19,099	\$20,053	\$20,440	\$21,425	\$22,780	\$23,847	\$24,987	\$26,924	\$27,643	\$28,143	\$28,879	\$30,471	\$32,243	\$33,589	\$33,899
Annual Increase/Decrease		8.2%	3.5%	-1.3%	1.4%	4.6%	5.0%	1.9%	4.8%	6.3%	4.7%	4.8%	7.8%	2.7%	1.8%	2.6%	5.5%	5.8%	4.2%	0.9%

Source: Washington State Employment Security Department