

# **Housing Affordability in the Puget Sound Metropolitan Area**

a report to

**The Housing Partnership**

by the



**Washington  
Research  
Council**

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***Washington Research Council***

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### Overview

*Housing Affordability in the Puget Sound Metropolitan Area* examines the region's housing challenge, focusing on four areas of concern:

1. the relationship between the business cycle and the supply and price of housing, including rental housing;
2. the relative affordability of housing, with particular attention to the buying opportunities for households earning below the median income level in the region;
3. an assessment of the progress made toward meeting the housing goals established in the metropolitan counties' comprehensive plans; and,
4. a comparison of the Seattle area with five metropolitan areas on the basis of housing affordability and several selected quality-of-life measures.

***Housing and the Business Cycle.*** Recently escalating housing prices and rents mirror the pattern of the past two business cycles, during which employment and population growth exerted strong demand in a supply-constrained housing market. Based on this experience, housing costs are likely to continue to rise for the next several years, stabilizing (or dropping) only when the economy slows.

The current escalation in prices builds on a high plateau. In the Seattle metropolitan area, housing costs have risen steadily for three decades. While there have been consecutive years with little market movement, prices have rarely declined. Since 1970, real (inflation-adjusted) housing prices have increased 138 percent. (Quality improvements may account for about one-quarter of the increase.)

Rents, too, are increasing rapidly as vacancy rates decline. The current run-up in rents parallels the rise in housing prices in the later stages of past business cycles. Potentially exacerbating problems in the rental market is the relatively low level of recent construction activity, a marked contrast to the pattern in the late 1980s.

***Housing Affordability.*** The housing market is increasingly closed to buyers earning less than the median household income. In the last year, fewer than a fifth of the homes in the four-county area were sold at prices that could be afforded by a household earning 95 percent of the region's median household income. This marketplace test is superior to most of the usual "affordability indexes," which tend to understate the magnitude of the problem by focusing on households with greater incomes.

Interest rates have a profound effect on measured affordability. The current low interest rates mitigate the affect of recent price increases on affordability. Low interest rates, however, are a national phenomenon. Seattle's relative ranking among metropolitan areas suggests the magnitude of the problem. Of 191 regions monitored by the National Association of Home Builders, 155 were more affordable. A review by E&Y Kenneth Leventhal, looking at "mid-management" quality housing ranked Seattle 59th in affordability among the 75 markets studied.

A common measure of the "affordability gap" is the difference between the median price of a home and the price of a home that a household earning the median income could afford. In Seattle, late last year, the median priced home sold for \$186,100; a household earning the median income of \$45,266 could afford a house costing \$132,732.

**Comprehensive Plan Goals.** Although the Growth Management Act requires each county to address affordable housing in its comprehensive plan, counties are not required to adopt a common definition of "affordability."

The four counties in the metropolitan region based their housing targets on population forecasts. King and Snohomish have experienced growth at the high end of the projections, while Pierce and Kitsap have fallen short of growth expectations. It is likely that the housing targets understate demand, particularly in the two rapidly-growing counties.

Monitoring is uneven at this stage of Comprehensive Plan implementation. Kitsap County's plan has yet to be validated. For the majority of Pierce County's jurisdictions there are not monitoring mechanisms. Snohomish County is working with a comprehensive database of home sales which should be a valuable source of monitoring information. King County's annual benchmarking report includes a section on the distribution of new housing across various jurisdictions, but information on affordability is lacking.

Generally, monitoring mechanisms are inadequate to provide current information on the regional performance toward achieving housing goals. Equally, at this stage of implementation, evaluation is premature. Regular monitoring, however, would permit the policy and programmatic adjustments necessary to assure long-term success.

**Intercity Comparisons.** Five metropolitan areas were selected for comparison with Seattle: Denver, the Twin Cities (Minnesota), Phoenix, Portland (Oregon), and San Jose. Seattle represented the third largest region, behind the Twin Cities and Phoenix. With population growth of 35 percent since 1980, its growth rate ranked second, behind Phoenix's stunning 72 percent growth. With a median family income of \$59,000, the Seattle metropolitan area ranked third, below San Jose (\$77,200) and the Twin Cities (\$60,800). On one common measure of housing prices, Seattle, with a median house price of \$177,000, ranked second among the cities reviewed, well behind the \$292,000 price level in San Jose.

Each of the cities struggles with housing affordability, growth, and congestion.

# I. Housing and the Regional Business Cycle

The housing market moves with the regional economy. The recent escalation of housing prices replays the pattern of the previous two business cycles. Based on that experience, accelerating demand pressure resulting from continued job and population growth will push prices higher over the next several years, exacerbating the existing affordability challenges. This pressure will result in higher prices for single-family homes and condominiums, as well as higher rents.

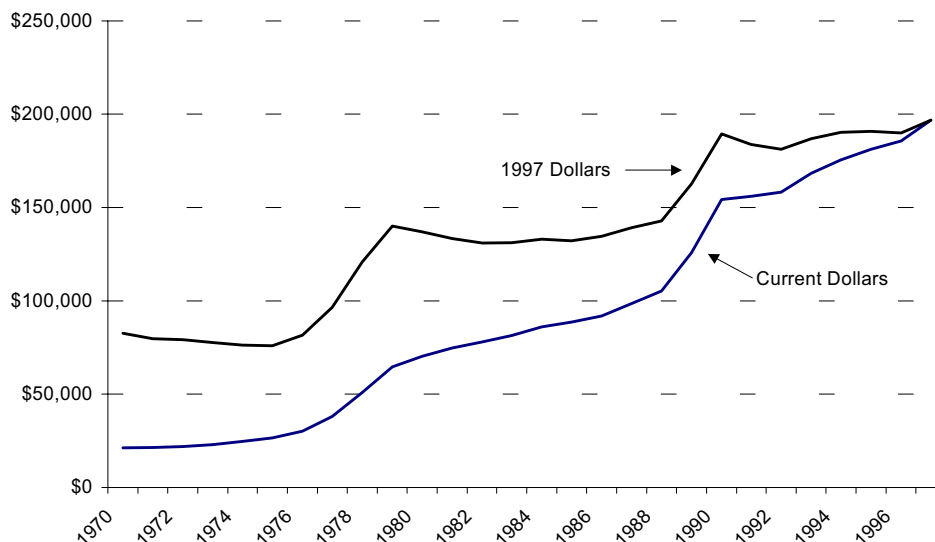
## A. House prices have risen steadily for three decades.

Housing prices have risen, sometimes dramatically, in recent years. Focusing on average sales prices, however, can distort the market picture. No two houses are exactly alike, and this makes it difficult to derive a simple statistic (like that average sales price) to summarize the marketplace.

Most indexes of house prices are based on real estate transactions; selling price is, after all, the best measure of market value. For example, the Northwest Multiple Listing Service (“MLS”) each month reports median and average (mean)<sup>1</sup> sales prices for single family homes for counties in the region. MLS recently reported that for July 1998 the median sales price<sup>2</sup> for a single-family home in King County was \$203,500; the average sale price was \$252,277. The average, particularly when the number of transactions is small, is greatly influenced by extreme values; with respect to housing, typically, the extreme will be represented by very expensive homes, causing the average price to be well-above the median price. For this reason many observers feel that the median is a better measure of the mid-priced house.

Unlike the prices collected, say, by the U. S. Department of Labor to construct the Consumer Price Index, the MLS transactions data do not represent a random sample of home prices. In addition, there is no reason to suppose that the attributes of the average or median home sold is constant over time. Nevertheless, mean and average transactions prices are generally the best data available for tracking market trends over longer periods of time.

**Figure I-A** Since 1970 Average House Prices in the Seattle Area Have Risen

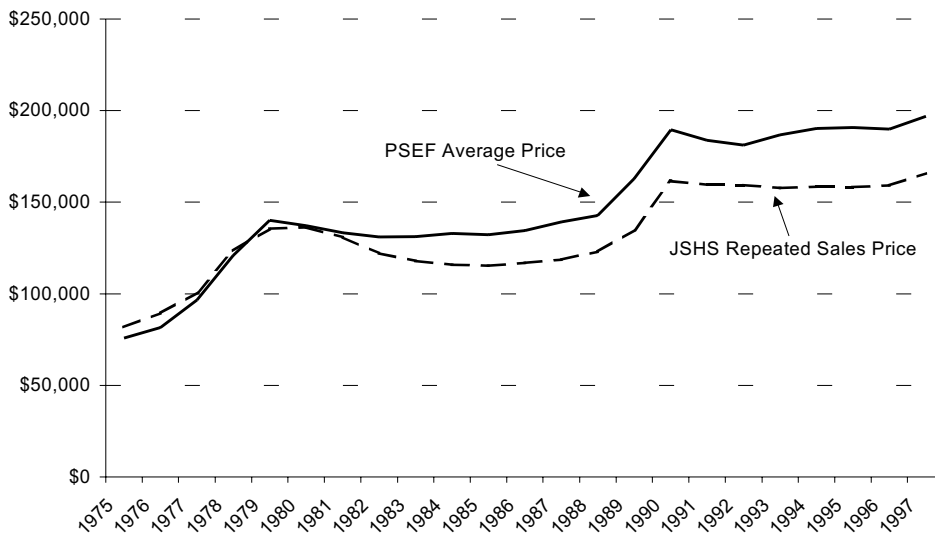


Source: Housing prices for King, Pierce, & Snohomish Counties from Puget Sound Economic Forecaster

Figure I-A shows an index of Seattle area house prices for the period 1970 to 1997, derived by the Puget Sound Economic Forecaster (“PSEF”) and based on the average sales price of single family homes. Over the period, the average price increased from \$21,300 to \$196,800, an increase of 825 percent. Much of this represents general inflation, however. Adjusted to constant 1997 dollars with the Consumer Price Index, the 1970 price becomes \$82,700 and the increase between 1970 and 1997 is reduced to 138 percent.

Still this 138 percent may overstate the increase in house prices over the period because it does not factor out the improvement in house quality. Harvard University’s Joint Center for Housing Studies (“JCHS”) has constructed an alternative price series for the period 1975-1997. The JCHS price for 1990 is the median house price. Prices for other years are then keyed off of the 1990 price using the price index for the Seattle metro area constructed by Fannie Mae. The Fannie Mae Weighted Repeat Sales Index uses data on homes that have sold more than once to finesse the problem of changing home quality. Each pair of transactions gives information on the change in the level of home prices between the two transactions’ dates.

**Figure I-B** Part of the Increase in Average Price Reflects Quality Increases



Source: Puget Sound Economic Forecaster and Harvard University Joint Center for Housing Studies

In Figure I-B, the PSEF and JCHS price series are compared. The two series match up very well. For 1990 the JCHS price is about 15 percent below PSEF, demonstrating, in part, the effect of high-value sales on averages. The PSEF price grows by 3.6 percent a year over the period, while the JCHS price grows by 2.7 percent. The difference between these two growth rates, 0.9 percent per year is a measure of the rate of quality improvement in the average house. Thus perhaps one quarter of the 138 percent increase in the real price of the average house between 1970 and 1997 reflects quality improvements.

Price series of comparable length are not available for condominiums or apartment rents. Recently, condominium activity has represented a growing share of the King County housing market (half of all new construction sales in the past two years), but the data are not available to document separately the effect of this trend. (See *Booming Condominium Market*.) Rents, as will be shown later, have followed a pattern of price escalation not unlike that of the housing market generally.

## **Booming Condominium Market**

In recent years, condominiums have grown to be an important part of the local housing supply. Suzanne Britsch of Real Vision Research reports that over the last two years condominiums have represented one half of new construction sales in King County. Unfortunately, the available data do not provide as complete a picture of the condo market as is available for the single family house market.

In August 1998 MLS reported 6,131 houses listed in King County and 1,525 condos. The median asking price for a house in the county was \$259,990, while the median asking price for a condo was a third less, \$169,950. At that price, still, the median condo was not affordable to the median income household. Condos were a smaller share of the inventory in Snohomish, Pierce and Kitsap counties.

Real Vision Research provided a listing of 64 condominiums developments currently selling in King County, representing unsold inventory of 1,609 units. The listing includes a price range for each development but not the prices of individual units.

In 29 of the 64 developments the cheapest unit offered was priced at over \$200,000. In only 13 of the developments was the cheapest unit priced below \$140,000, the price that the median income household could afford to pay. The median income household could not afford the least expensive unit in the majority of developments.

The most affordable units seem to be quite small. For example, at the least expensive development in Seattle, prices ranged between \$69,000 and \$136,000, while areas ranged between 319 square feet and 486 square feet.

### **B. Construction activity in housing responds to the business cycle.**

Building permits provide the most widely used measure of housing construction activity. Figure I-C presents the total number of new housing units authorized in the four county area for the years 1968 to 1997. The correlation with the business cycle is clear, with more than 27,000 units authorized in the expansion years of 1968, 1978, and 1989. The downside is apparent as well. Fewer than 7,000 units were authorized in 1971; fewer than 9,000 in 1982; and a bit more than 10,000 in 1991. Multi-family construction (apartments and condominiums) varies more over the cycle than single-family. Multi-family units represented a particularly high share of permits between 1985 and 1990.

Employment growth explains much of the dynamic. As shown below in Figure I-D, non-agricultural employment for the Seattle metropolitan area (defined here as King and Snohomish counties) grew from fewer than 360,000 in 1958 to 1,275,000 in 1997.

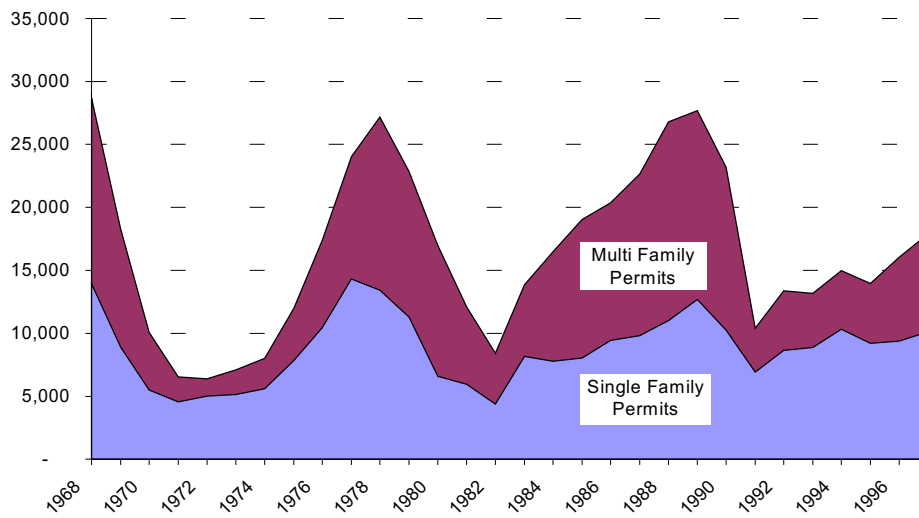
### **C. Employment drives population growth.**

Over these 40 years the annual increase in employment averaged 3.2 percent, while the annual average increase in population averaged 1.8 percent. There was, however, significant annual variation in growth, as shown in the following bar graph (Figure I-E). Employment tended to contract or grow slowly in the first half of each decade and boom in the second half. Population followed a similar pattern, which lagged a bit behind employment. This strongly suggests that it is the job market that drives in-migration to the Seattle area.

In the current cycle, the regional economy has entered the phase of brisk job growth. Accelerated population growth will follow.

**Figure I-C**

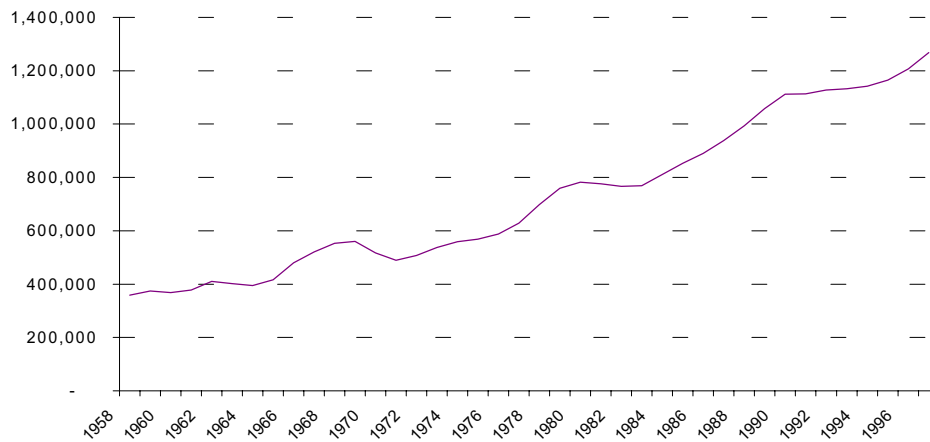
**Home Construction is Cyclic**



Source: Puget Sound Economic Forecaster: Permits for King, Pierce, Snohomish, and Kitsap Counties

**Figure I-D**

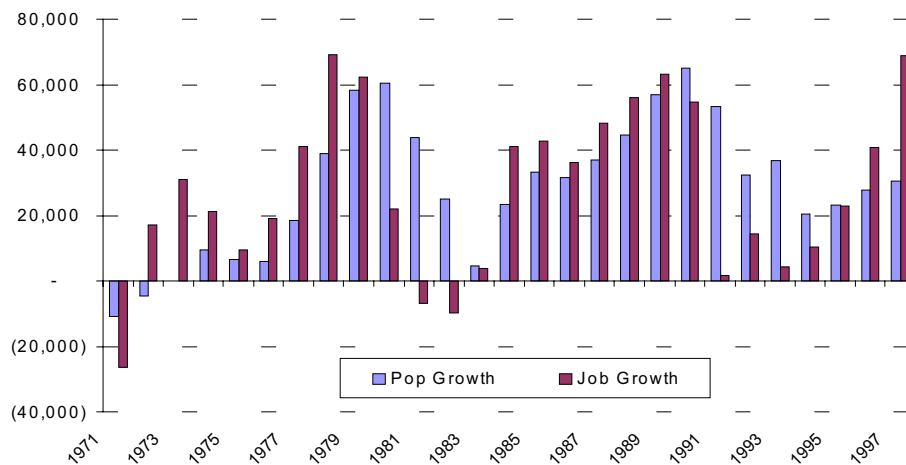
**The Number of Jobs in the Seattle Area Grew by More than 250% Between 1958 and 1997**



Source: Employment Security Department: Non-agricultural Employment for King and Snohomish Counties

**Figure I-E**

**Jobs Growth Leads Population Growth**



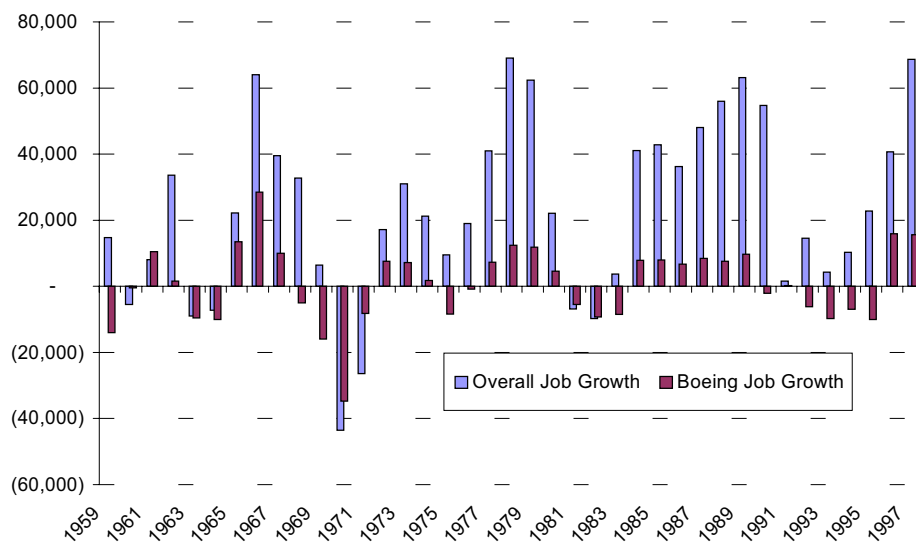
Source: Employment Security Department Population and Non-agricultural Employment for King and Snohomish Counties



Economic theory gives a special role to the firms that export from the region in explaining patterns of growth. Sales of locally-produced goods and services to other regions of the U. S. or to foreign markets drive the local economy. Employment expansion by the exporting firms, through the “multiplier effect,” creates additional jobs in other firms that sell only in the local market.

For a number of years The Boeing Company has been the Seattle area’s most prominent exporting firm. Figure I-F compares changes in metropolitan and Boeing employment over the 1958-1997 period. The recessions in the local economy in the 1960s, 1970s and 1980s were clearly related to job losses at Boeing. As the economy has grown, however, its base of exporting firms has become more diversified. As a result, the downturn in Boeing employment in the early 1990s, while slowing job growth, did not push the Seattle area all the way into recession.

**Figure I-F The Local Economy is Less Dependent on Boeing**



Source: Employment Security Department Population and Non-agricultural Employment in King and Snohomish Counties, Boeing Employment in Washington State

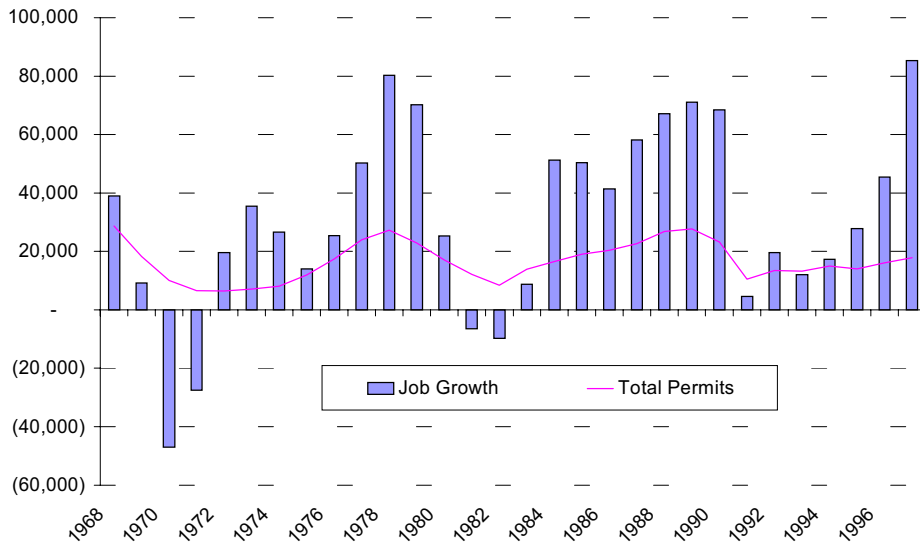
**D. With continued employment and population growth, housing demand will increase.**

Looking to the future, the local economy will continue to diversify. Job gains and losses at exporting firms will continue to drive the local economy, but Boeing will represent a decreasing share of these jobs. The ability of the local economy to avoid a recession during the last Boeing downturn was due, in large part, to the strength of Microsoft.

Employment at Boeing is at its peak for this aerospace cycle and will decrease over the next several years. The open question is how the local economy will respond. Software is a much greater presence in the local economy than it was in the early 1990s. With profit margins as high as they are in software, and with most of the jobs in research, the industry may continue to grow briskly even if the national economy goes into recession.

Figure I-G plots employment growth and new housing units (single and multi-family) authorized for the four county area. There is a cycle in housing construction that is coupled closely with the cycle in overall employment. As population growth is so strongly correlated with employment growth, it is not surprising that employment growth is highly correlated with new home construction. (And of course, home construction by itself creates jobs, which reinforces the correlation.)

**Figure I-G** **New Housing is Linked to Job Growth**



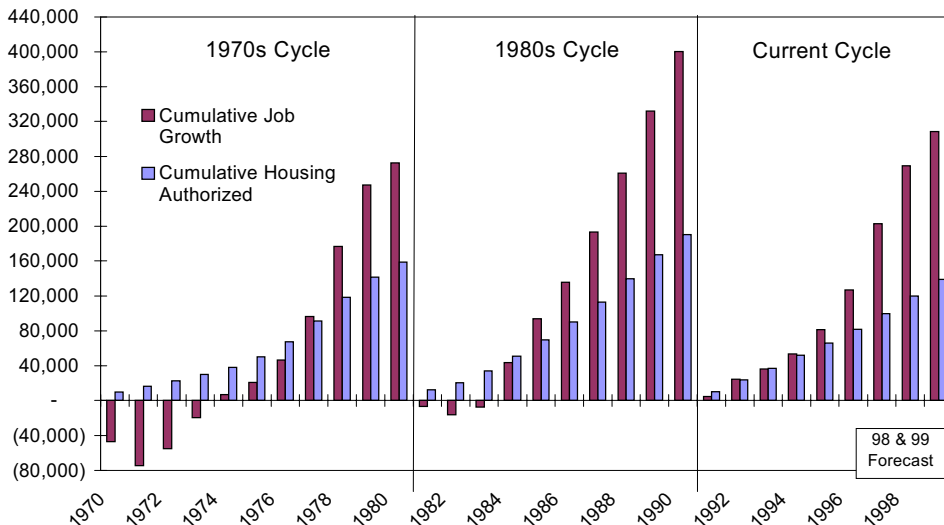
Source: Employment Security Department Non-agricultural Employment in King, Snohomish, Pierce and Kitsap Counties; Puget Sound Economic Forecaster

**E. Putting it all together, housing prices will continue to rise.**

It is revealing to look at job growth and additions to the housing stock cumulatively over the business cycle. Figure I-H presents data from the last three cycles: the first began in 1970 and ended in 1980; the second began in 1981 and ended in 1990; the third began in 1991 and continues today. The first two cycles begin with several years of negative growth in employment; the current cycle began with a year of virtually no growth in employment.

During the 1970—1980 cycle, the area added 33 houses and 25 multi-family units for every 100 jobs added; during the 1981—1990 cycle, it added 22 houses and 26 multi-family units for every 100 jobs. Through 1997 the area added 31 houses and 18 multi family units for every 100 jobs. (Because many households have more than one member in the labor force, the number of housing units added will be less than the number of new jobs.)

**Figure I-H** **The Three Cycles Compared**



Source: Employment Security Department Non-agricultural Employment in King, Snohomish, Pierce and Kitsap Counties; Puget Sound Economic Forecaster

Early in each cycle the rate of home construction is relatively high compared to the rate of job growth. As shown earlier (Figure I-B), housing prices are consequently stable or declining at this stage of the cycle. Later, when job growth accelerates ahead of home construction, prices rise.

Through 1997, the current business cycle looks quite mild when compared to the cycles of the 1970s and 1980s. But, of course the current cycle has not yet ended. Although Boeing employment has peaked, most regional economists predict continued economic growth, albeit at a slightly slower pace.

Figure I-H shows forecasts for cumulative job growth and total housing permits for 1998 and 1999. By the end of 1999, it is forecast that the area will have added 27 houses and 18 multi-family units for every 100 jobs added over the cycle. This would be mid-way between the figure for the two previous cycles.

House prices increased sharply in the latter stages of each of these two cycles. In both cases the upward pressure on prices broke only when the economy stopped adding jobs. Prices are now rising again. History suggests that they will not stop rising until the economy ceases to grow.

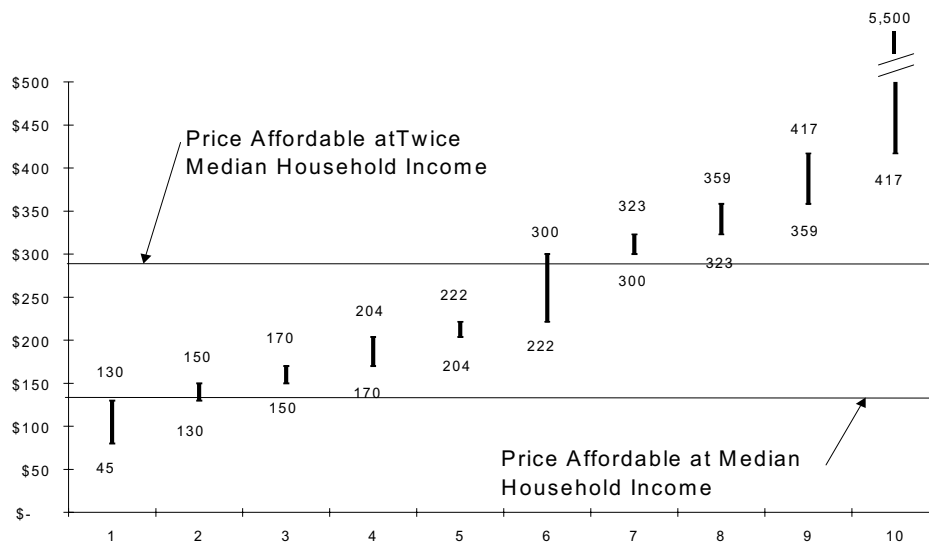
Annual job growth in the local economy in the current cycle is well within the range experienced in the 1970s and 1980s. The local home building industry was able to supply sufficient numbers of new houses in those years with average prices well below current levels. Going forward, the constraint on meeting demand lies in the supply of developable sites.

## II. Affordability Indexes

### A. Most housing is being sold at prices well above those affordable to households earning the median income.

Perhaps the best measure of housing affordability is the real estate market itself. Although there are a variety of affordability measures, several of which are discussed below, the experience of home buyers is best reflected in current transactions data. Figure II-A shows the distribution of resale prices, by decile, as recorded in the MLS data base for King County through mid-August of 1998. The median price over this time period was \$222,000. The least expensive 10 percent of homes sold at prices below \$130,000; the most expensive tenth at prices between \$417,000 and \$5,500,000.

**Figure II-A** **Most Houses Selling At High End of Market**  
(Dollars in thousands)



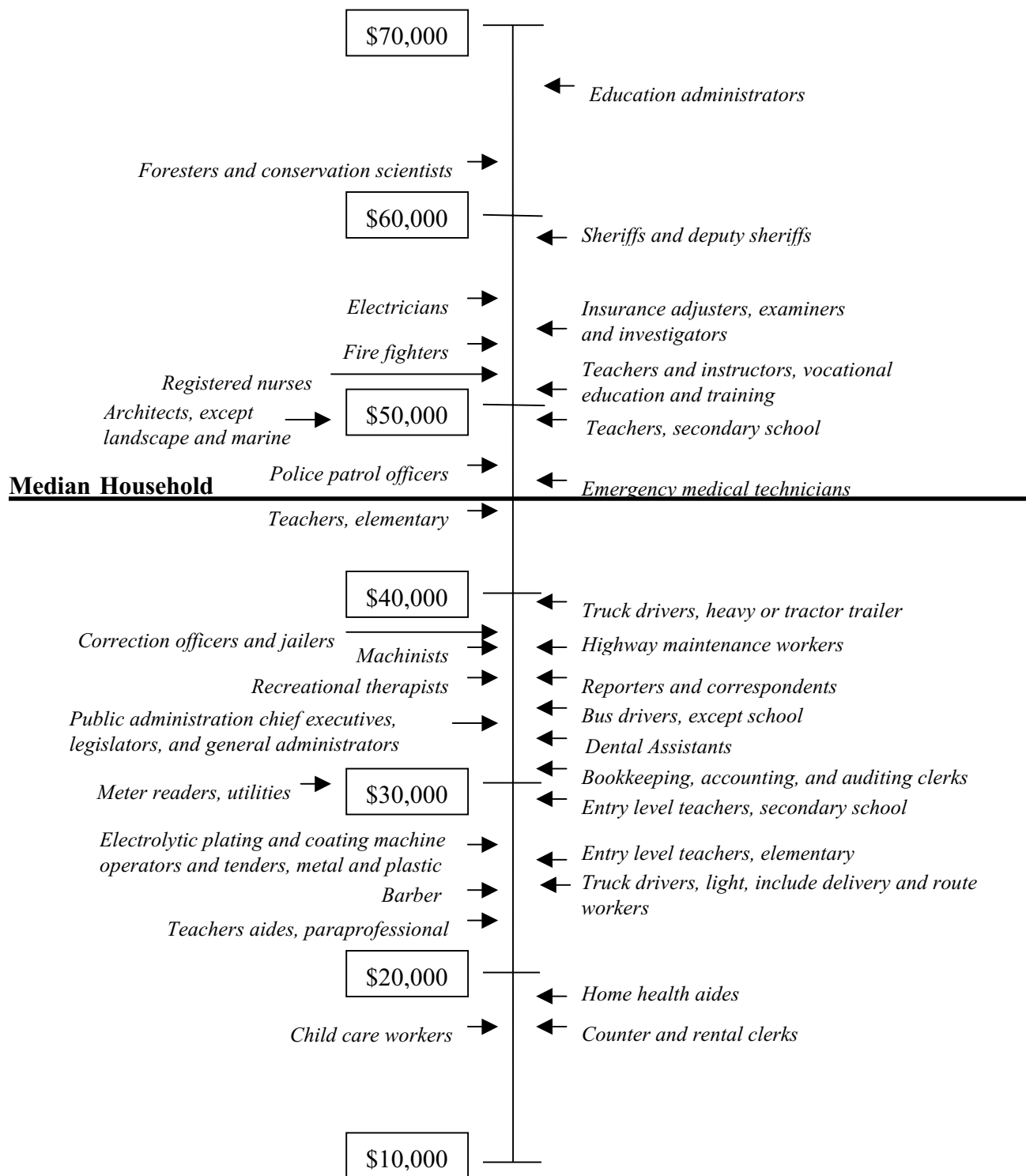
Source: Northwest Multiple Listing Service

What is striking about these figures is the lack of market activity below the price affordable to a household earning at the median income level. More than 80 percent of the homes sold were sold at prices beyond the reach of the median household; more than 40 percent were sold at prices outside the reach of households earning at twice the median.

To put these figures in perspective, Figure II-B presents an array of occupational incomes as estimated by the Employment Security Department, many of which fall below the median household income line. For individuals in these occupations, the housing market is increasingly unaffordable. Home ownership for these people will often require two incomes. Many — including teachers, child care workers, clerks and bus drivers — will find themselves buying homes further from their workplace, or not buying at all. And for them, as is shown later, the rental market affords limited relief.

Figure II-B

# Occupational Income Levels as of 1998



Source: Employment Security Department extended to 1998 by Washington Research Council

**B. The most common measures of housing affordability tend to understate the problem.**

There is no single measure of affordable housing. As shown later, each of the four counties in the metropolitan region adopt slightly different standards. For purchasers, of course, the concept can be quite subjective. The focus here will generally be on first-time buyers or households at or below the median income level. Problems arise when people in these categories cannot find affordable housing near their workplace.

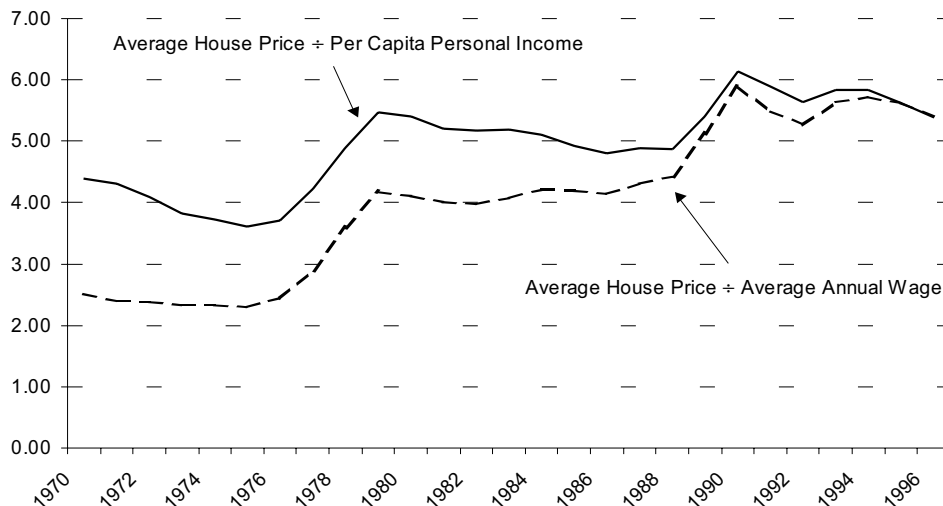
Analysts often attempt to determine housing affordability within a region using a variety of indicators. Some are sophisticated; others, simply formalized “rules of thumb.” These measures will vary, sometimes considerably. Often, they will understate the problems of affordability by examining the “average” household’s ability to buy a median-priced home. When they do so, they fail to capture the affordability challenges faced by potential buyers with incomes below the median. And, as shown above, the market tends to skew in the opposite direction, toward higher-priced housing.

Nonetheless, these indexes provide useful comparative information. Several alternative measures are discussed below.

**C. Housing affordability has decreased when measured against average wages and incomes.**

A simple index of housing affordability can be constructed by dividing the price of an average house by a measure of average income, shown in Figure II-C. The first divides the PSEF average house price series by the per capita personal income for King County. The second divides average price by the average annual wage paid to workers in the county. For either index, a higher value indicates that housing is less affordable. Overall, both of these indexes trended upwards over the 1970-1996 period. Both reached peaks in 1990. County level personal income and annual wage data are only available through 1996 at the present time. Therefore the indexes, while the most recent data available, do not reflect the hot real estate markets of the last 18 months.

**Figure II-C** Between 1970 and 1996 House Prices Trended Upwards Relative to Income



Source: Puget Sound Economic Forecaster; Employment Security Department Personal Income Per Capita and Average Annual Wage for King County

Movements in the average prices of houses, as shown earlier, dominate both of these indexes. The trend in affordability looks worst when measured against the annual average wage. Over the 1979-1996 period, real (inflation adjusted) per capita personal income increased by 87 percent while the real annual average wage increased by only 7 percent. Per capita income was able to increase despite static annual wages because of the growth in the labor force participation rate, in particular the growth in labor force participation of women. In addition, non-wage income has grown.

**D. Interest rates affect affordability indexes.**

A house is a capital asset, and more sophisticated indexes of affordability look to the cost of financing the purchase of the asset. A typical approach is to compare the cost of owning the area’s median priced home (principal and interest payments on a mortgage as well as property taxes and insurance) to the area’s median income.

With indexes of this sort, swings in interest rates can have a profound effect on measured affordability. This is illustrated in the table below, which shows the monthly payment on a \$100,000 mortgage (it should be noted that the payment covers only principal and interest) at various interest rates.

6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%
\$600	\$632	\$665	\$699	\$734	\$769	\$805	\$841

**E. Lower income buyers most affected by the rise in housing prices.**

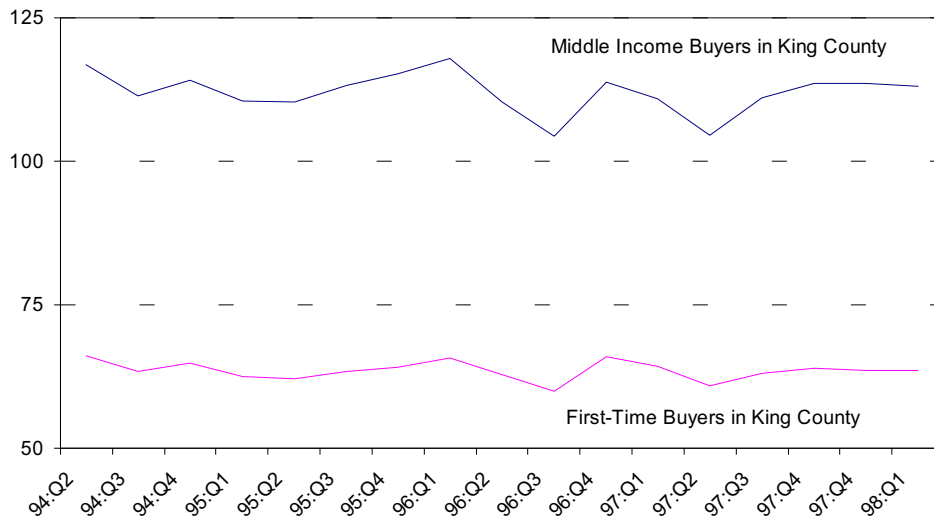
While these indexes provide useful information on changes in affordability over time, they do not directly measure the ability of low-income buyers to purchase homes. Housing affordability is particularly an issue at the lower end of the market. For upper income buyers, rising prices affect the quality of the home they can afford, the location, size and amenities. Lower income buyers are often simply priced out of the market.

The Washington Center for Real Estate Research (“WCRER”) at Washington State University quarterly produces two measures of housing affordability for each county in the state. WCRER’s *Housing Affordability Index* (“HAI”) is equal to 25 times the median *family* income for the county divided by the annual payment on a mortgage loan for 80 percent of the value of the median priced home in the county. Thus if the HAI is 100, the mortgage payment due on the median priced home purchased with 20 percent down would equal 25 percent of the median family income.

If HAI equals 100 the median income family can just afford the median priced house based on the rule of thumb that principal, interest, taxes and insurance (“PITI”) should total no more than 28 percent<sup>3</sup> of income allowing 3 percent for taxes and insurance.

WCRER’s *First Time Buyer Housing Affordability Index* (“First Time HAI”) similarly relates the ability of a buyer with income equal to 70 percent of the median *household* income to carry a house priced at 85 percent of the median putting 10 percent down.

**Figure II-D A Value Greater than 100 on the WCRER Affordable Housing Indexes Signifies that Housing is Affordable**

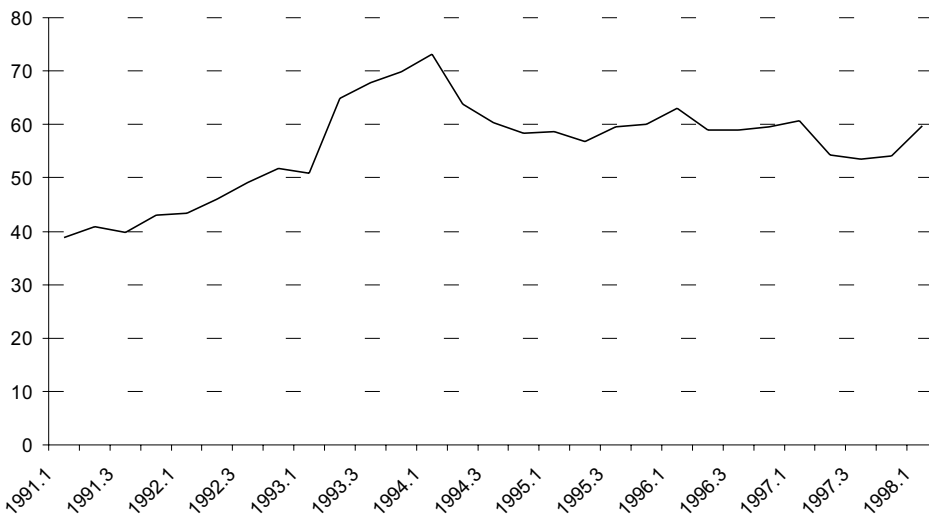


Source: Washington Center for Real Estate Research

Figure II-D shows both HAI and First Time HAI for King County. Over these five years HAI has fluctuated between 104 and 118, while the First Time HAI has fluctuated between 60 and 66. That is, at the median family income, the HAI finds housing has been affordable (although just barely) over the past several years. First-time buyers, however, have faced a daunting housing market.

The National Association of Home Builders (“NAHB”) calculates the *Housing Opportunity Index* (“HOI”) quarterly for 191 metropolitan areas nationally. The HOI measures the percentage of homes sold in the quarter that could have been purchased at 10 percent down with a mortgage payment of no more than 28 percent of median family income. Thus the HOI gives a measure of the selection available to the median income buyer. Figure II-E shows HOI for the Seattle area from the first quarter of 1991 through the first quarter of 1998.

**Figure II-E Housing Affordability Index's 1994 Peak Reflected Declining Interest Rates**



Source: National Association of Home Builders



By this measure, affordability increased greatly from 39 early in 1991 to 73 early in 1994 as mortgage rates fell from around 9.5 percent to 7 percent. In the first quarter of 1998 HOI for Seattle was 59.8. That is, just under sixty percent of the homes sold would have been affordable to a buyer at the median family income level. Of the 190 other cities studied by NAHB, 155 were more affordable.

#### **F. Affordability challenges also faced by middle managers.**

E&Y Kenneth Leventhal, which is the real estate group of Ernst & Young LLP, has for the past eight years prepared a study comparing the affordability of housing in local markets across the U.S. This study focuses on “mid-management” quality housing. Thus its focus is “up-market” from the median income households that targeted by WCRER and NAHB.

The E&YKL study does have one major advantage compared to the other two: It attempts to hold constant the quality of housing units when comparing across markets.

E&YKL looks at the costs of both single family house ownership and apartment rental. Single family house prices are taken from Coldwell Banker’s *Home Price Comparison Index* and represent the cost of an “amenitized” 2,200 square foot detached house with four bedrooms, two and one-half baths, and a two car garage in an appealing neighborhood. The annual cost associated with the house includes mortgage on 80 percent of market value and local property taxes, with adjustments for the income tax deductibility of these expenses. The apartment rental costs are taken from the CB Richard Ellis National Real Estate Index for luxury apartments of approximately 1,200 square feet.

These costs are then divided by HUD’s median family incomes to calculate three affordability indexes, a single family house index, an apartment rental index, and a composite index which is the average of the first two. For the 1998 study, Seattle ranks 59<sup>th</sup> in affordability by the composite index; that is in 58 markets of 75 markets studied, housing was more affordable than in Seattle, while in 16 markets it was less affordable. For 1997 Seattle ranked 57<sup>th</sup>. Seattle’s 1998 ranking for single family house affordability is 61<sup>st</sup>; for apartment rental affordability, 39<sup>th</sup>.

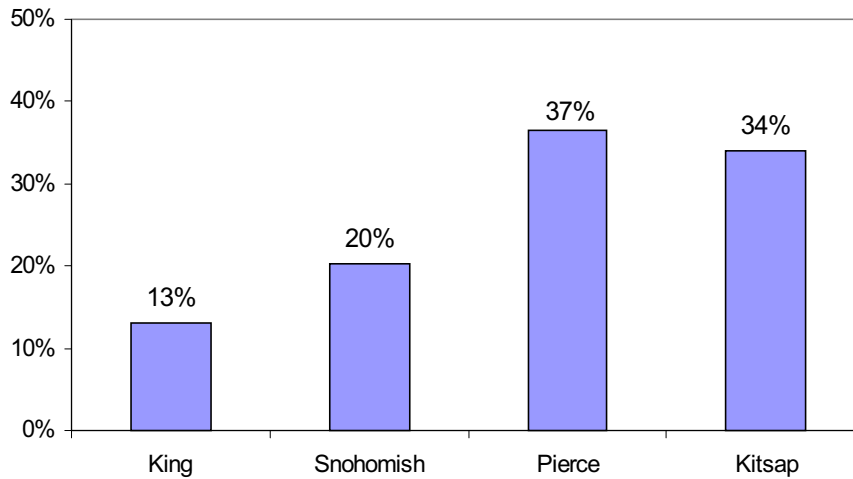
#### **G. Either housing is too expensive or wages are too low.**

In addition to the several indexed of housing affordability, a commonly-used indicator focuses on the gap between the median price of a home and the home that a household earning the median income (or 95 percent of median income, or 80 percent of median income) can reasonably afford. Using this measure, there is an “affordability gap.” Whenever housing prices outpace incomes, this gap will grow. Using the \$186,100 median home price reported for King County for the third quarter of 1997, a household income of \$63,467 would be required to afford the median priced house, compared to the median household income of \$45,266 for the Seattle Metropolitan Area for 1997. Similarly, the prospective buyer with a \$45,266 household income could reasonably afford a house that cost \$132,732.<sup>4</sup> So, the affordability gap is clear: Either housing is \$53,368 too expensive or household incomes are \$18,201 too low.

Comparing averages, however, provides only a rough and incomplete picture of housing affordability. While indicating an affordability gap, such comparisons fail to capture the experience at the lower end of the income distribution, those at or below the median income level for whom housing affordability is not simply an abstract public policy problem. Looking at the number of homes sold at prices considered “affordable” to families at the targeted income levels yields a better indicator of housing affordability. By tracking the number (or percentage) of houses available to households earning a given income over time, a more accurate picture of the housing “affordability gap” comes into focus.

**Figure II-F**

**Few Homes Sold at "Affordable" Price**



Source: Northwest Multiple Listing Service; New Home Trends

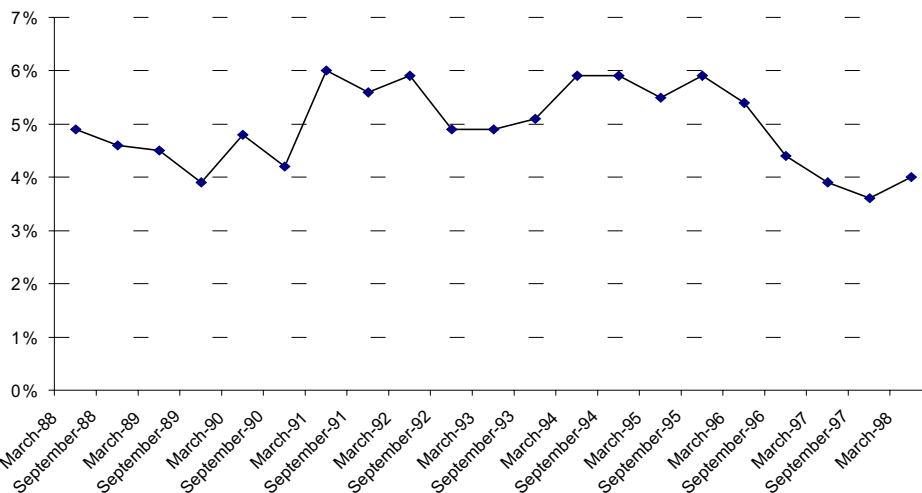
Figure II-F shows the percentage of total home sales (both new and resale) occurring at a price affordable to a household earning 95 percent of median county income.<sup>5</sup> The price was established using median county income (which varied by county), a ten percent down payment, standard mortgage insurance, prevailing county property tax assessment, 30 year terms, and an interest rate of 7.05 percent. The database used for this information combines the information on new home sales by builders of five or more units with the resale data collected by MLS.

**H. The rental market provides little relief.**

Data collected by Dupre + Scott Apartment Advisors provides the most comprehensive picture available on the Seattle area market for apartments. Dupre + Scott semiannually survey the owners and managers of larger apartment properties in the region. For King, Kitsap, Pierce, and Snohomish counties properties with 20 or more units are covered.

**Figure II-G**

**The Vacancy Rate Has Fallen Recently**

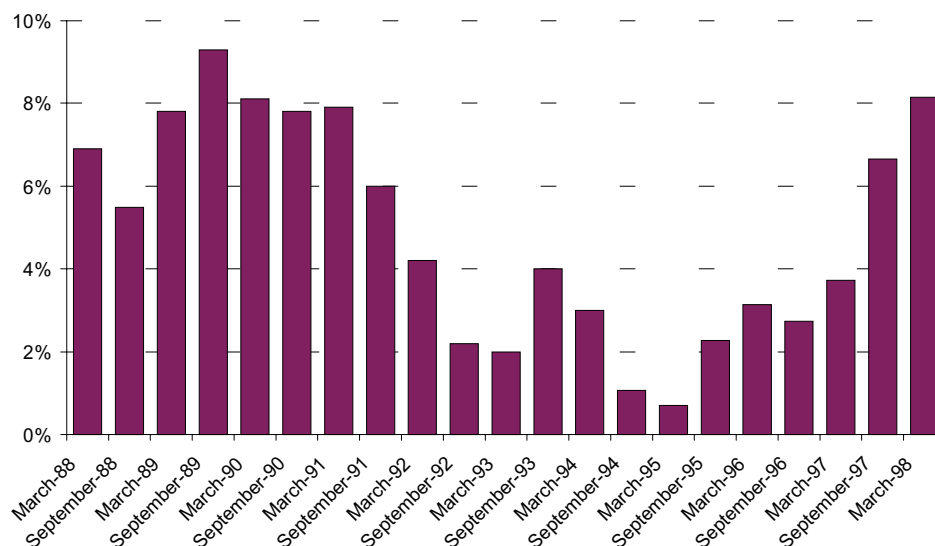


Source: Dupre + Scott Apartment Advisors, Inc.

Figure II-G shows the vacancy rate at six-month intervals for the region over the last ten years. An unusually high percentage of the housing units approved over the 1981-1990 cycle were in multifamily buildings. As a result, large numbers of units were added to the supply in 1988-1991. For the first three years, job growth in the region was very strong. As a result vacancy rates did not rise significantly. In 1991, however, job growth was much weaker, and the increased supply of apartment units pushed the vacancy rate up from 4.2 percent in September 1990 to 6.0 percent in March 1991. Vacancy rates fluctuated between roughly 5 and 6 percent for five years. Recently, with the strong economy, demand has grown more rapidly than supply. From 6 percent in September 1995, the vacancy rate fell to 3.5 percent in September of 1997, before turning up.

Figure II-H, shows the rates of change in the average monthly rents over the period. During the late stages of the last business cycle, the rapid growth in demand pushed rents up. From 1992 to 1996, the rate of increase slackened. In the last year, the rate of increase has again accelerated. Note that changes in average rents tend to lag behind changes in vacancy rates because landlords do not immediately adjust the rents of existing tenants to reflect current market conditions.

**Figure II-H Annual Rent Increases Have Recently Accelerated**



Source: Dupre + Scott Apartment Advisors, Inc.

Currently, vacancy rates are at the levels seen at the peak of the last cycle. These vacancy levels have brought nowhere near the level of new construction that was seen in the late 1980s. As Dupre + Scott’s April 1998 *Apartment Vacancy Bulletin* notes:

*“This year will be the first year that more than 4,000 units will open in the tri-county market (King, Pierce, and Snohomish Counties) since 1991. ... The average has been a meager 2,400 per year over the past six years. By comparison, the market added an average of 12,700 units per year, from 1986 through 1991.*

*“. . . In spite of low vacancies and rising rent, developers continue to have a difficult time getting apartments built. . . .*

*“We now forecast that only 4,900 new units will open in 1998 in the tri-county market.*

*“Continuing rent increases seen inevitable unless the local economy falls into recession.”*

The Dupre + Scott report gives average rents by neighborhood for five types of apartments (for example, 2 bedroom/1 bath) and six vintages of construction. To give a sense of how rents vary across the region, the following table shows the average monthly rent for the most common apartment, 1 bedroom constructed between 1985 and 1991.

The highest rents are found in the downtown neighborhoods of Seattle and in Bellevue and Kirkland near the eastern shore of Lake Washington. Generally, the further one moves from these prime areas, the lower the rent.

**Figure II-I**

<b>Average Monthly Rent for a One Bedroom Apartment</b>			
<b>(1985-1991 Construction)</b>			
<b>King County</b>		<b>Kitsap County</b>	
Bellevue-West	\$ 881	Silver Lake	\$ 591
Downtown Seattle	\$ 853	Silverdale	\$ 528
First Hill	\$ 849	Port Orchard	\$ 520
Queen Anne	\$ 812	Bremerton	\$ 519
Kirkland	\$ 800		
Capital Hill/Eastlake	\$ 787	<b>Snohomish County</b>	
Issaquah	\$ 787	Mill Creek	\$ 645
Bellevue-East	\$ 757	Mountlake Terrace	\$ 622
Renton	\$ 748	Edmonds	\$ 621
Redmond	\$ 732	Lynnwood	\$ 620
Factoria	\$ 718	Paine Field	\$ 579
Greenlake	\$ 715	N Snohomish County	\$ 493
University	\$ 692	E Snohomish County	\$ 488
Woodinville/Totem Lake	\$ 688	Central Everett	\$ 467
Magnolia	\$ 674	<b>Pierce County</b>	
Shoreline	\$ 671	Puyallup/Sumner	\$ 521
Central	\$ 668	Fife/Milton	\$ 508
West Seattle	\$ 640	Fircrest/University Place	\$ 499
Juanita	\$ 629	Lakewood	\$ 489
North Seattle	\$ 625	North Tacoma	\$ 472
Bothell	\$ 604	Parkland/Spanaway	\$ 463
Kent	\$ 603	South Tacoma	\$ 458
Ballard	\$ 600		
Riverton/Tukwila	\$ 599		
White Center	\$ 590		
Federal Way	\$ 571		
Burien	\$ 568		
Auburn	\$ 550		
Enumclaw	\$ 549		
Des Moines	\$ 522		

Source: Dupre + Scott Apartment Advisors, Inc.

## **I. Traffic congestion is one of the prices paid for want of affordable housing.**

Traffic congestion should be considered in this discussion of housing affordability. As affordable housing is increasingly found at greater distances from centers of employment and commerce, home buyers are apt to spend more of their time stuck in traffic. That time, plus automotive or transit expenses, can be considered a direct financial trade-off associated with housing.

There are two principal sources of data available to use in quantifying this impact. The Puget Sound Regional Council ("PSRC") has conducted a study of the region's historical congestion, current status, and forecast future. Also, the Texas Transportation Institute ("TTI") conducted a ten-year study (1982-1994) of the congestion levels and costs of each of the major metropolitan areas nationwide.

The TTI mobility study found that the Seattle-Everett PMSA had the sixth worst congestion in the country in 1994, with freeways and principal arterials roughly twenty-five percent above levels associated with undesirable levels of congestion. While congestion is not growing as fast locally as in other regions, this is primarily due to the high levels of congestion present initially. The area ranks fourth nationally with 51 hours of congestion delay per person. By combining time lost due to congestion and fuel costs, a cost of congestion is calculated. An annual cost of nearly \$1.5 billion was estimated for 1994 and is increasing. The annual per-capita costs (the equivalent of a congestion "tax") were \$740, fourth highest in the nation.

In preparing the 1995 Metropolitan Transportation Plan, the staff of the Puget Sound Regional Council conducted computer simulations of the region's road network in 2020. Even under optimistic scenarios on the level of investment in additional capacity, congestion gets much worse over time and average commute speeds decrease. Under the investment scenario that now appears most likely, average rush hour speeds would drop by 23 percent, from 26.2 miles per hour in the baseline simulation to 20.2 miles per hour. Fifty percent of the freeway network would be congested in rush hour, up from 27 percent. The share of the arterial network experiencing congestion grows from 8 percent to 23 percent. The increases in congestion will be most noticeable in the suburbs.

### III. Fair Share Allocations and County Plans

The Growth Management Act (“GMA”) requires each county to address affordable housing in its Comprehensive Plan. Counties define “affordability” and allocate a “fair share” of the housing goal among their various jurisdictions. The counties are to implement housing policies consistent with the comprehensive plans of each of their jurisdictions.

Two factors influence the counties’ approach to affordable housing: the population projections for the county and the definition of affordability. Each of these will be examined below.

#### A. Population growth has mirrored projections for the region, but varied significantly among the four counties.

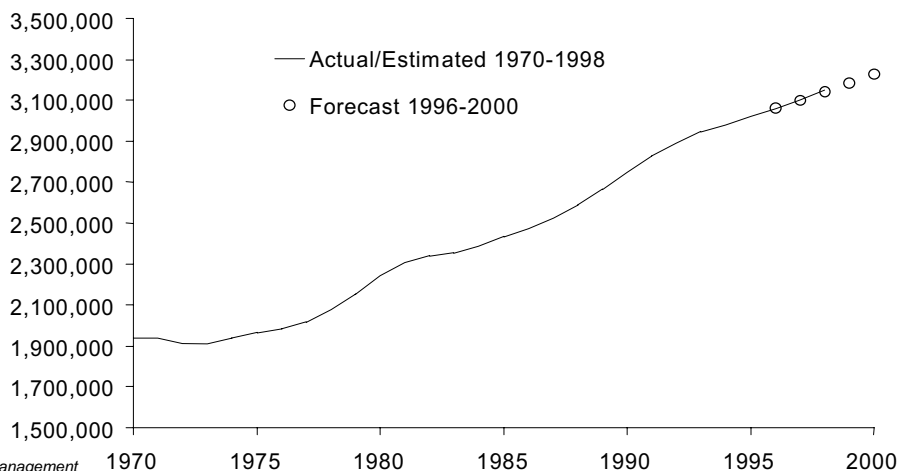
Because population forecasts are integral to the development of planning targets, it will be useful to examine the accuracy of the estimates made early in the development of the various county plans. Under the GMA, the state Office of Financial Management (“OFM”) prepares periodic county population projections. The most recent projections were issued in 1995. OFM projected county populations for 2000, 2005, and 2010 through 2020, forecasting a median (most likely) figure bounded by high and low estimates.

At 10-year intervals, the U.S. Census counts the state’s “actual” population. Annually, between census years, OFM estimates the state’s population. Figure III-A shows the actual and estimated population for the PSRC region (King, Kitsap, Snohomish and Pierce counties) for the years 1970-1998 and forecast population for the years 1996-2000. The 2000 forecast is the sum of the OFM median forecasts for the four counties for the year. The 1996-1999 forecasts are a straight-line interpolation between the 1995 estimate and the 2000 forecast.

From 1995 to 1998, the four-county population is estimated to have grown to reach 3,149,700, an increase of 129,700. The forecast increase of 124,300 is just 5,400 below the current estimate.

As might be expected — it is easier to forecast population growth for large areas than for small areas — there is a greater divergence between estimates and forecasts on the county level. The following graphs show population estimates together with the high, median, and low forecasts for

**Figure III-A**                      **Regional Population Growth has Tracked the 1995 Forecast Well**



Source: Office of Financial Management

the four counties. For King County estimated population growth 1995-1998 exceeded the median forecast by 12,900 and nearly equaled the high forecast. For Kitsap County estimated growth fell 5,700 short of forecast; for Pierce County, 10,200 short of forecast; for Snohomish, 8,400 above.

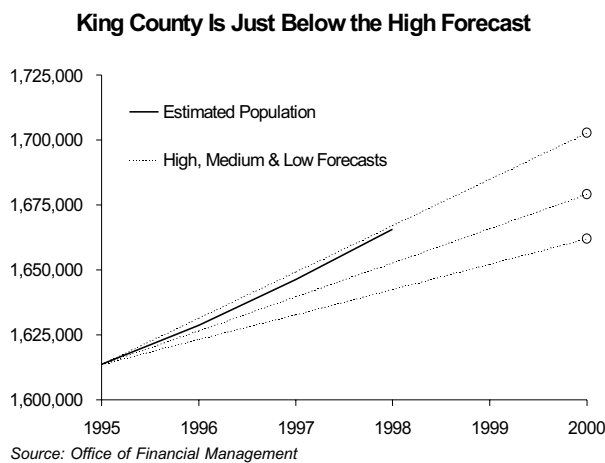
**B. Definitions of housing affordability differ among the four counties.**

King County begins with an estimate of total additional housing needed by 2012. It then differentiates between affordable housing for low-income households (making between 50 and 80 percent of the median household income for the county) and affordable housing for very low-income households (those making less than 50 percent of the median household income for the county).

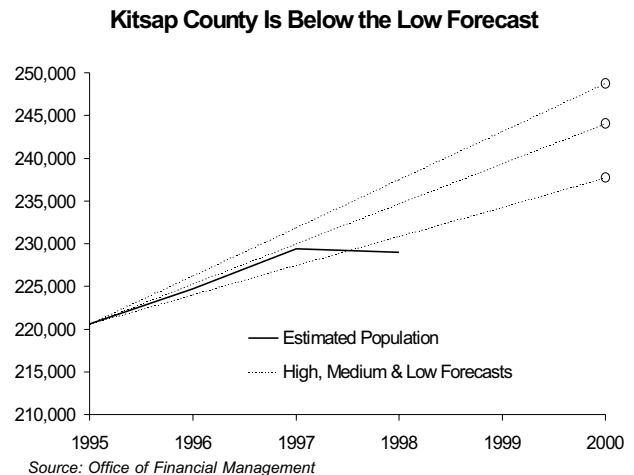
Pierce and Snohomish counties define affordable housing as accessible for households earning less than 95 percent of the median household income for the county.

While Kitsap County’s Comprehensive Plan has yet to be validated, it currently defines affordable housing as that housing accessible to households making less than 80 percent of the median household income for the county.

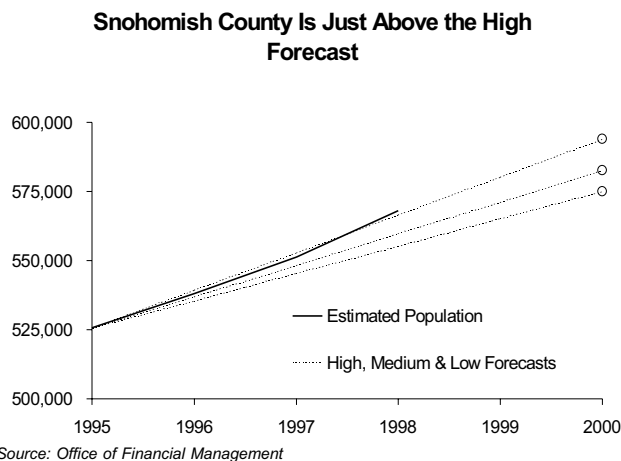
**Figure III-A1**



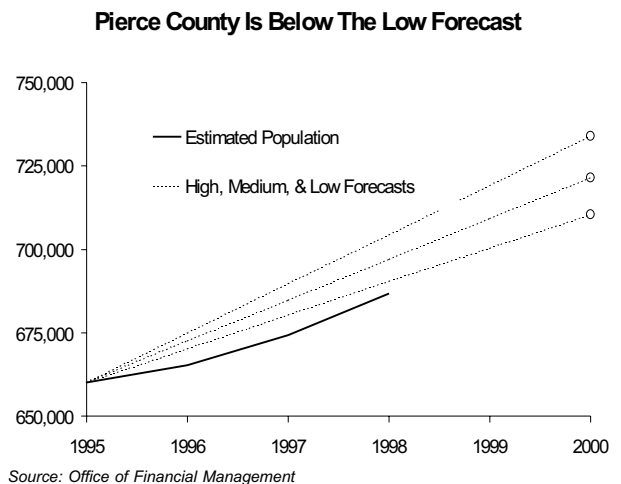
**Figure III-A2**



**Figure III-A4**



**Figure III-A3**



In each of these cases it is assumed that housing expenses account for no more than 30 percent of household income, with typically no more than 28 percent going to principal, interest, taxes, and insurance (“PITI”).

**C. Variation in measures of median income further complicate evaluation.**

Each of the four counties has adopted a different measure of median income. While the variation is not great, a standardized measure would make it much easier to compare the housing situation between counties. One distinction that must be made is between the median income of all households and the income of the median family. The median family measure fails to include single-person households, and will therefore arrive at a larger income estimate because single person households generally have lower incomes. The Department of Housing and Urban Development (“HUD”) produces an annual estimate of the income for a median family for metropolitan and non-metropolitan counties. The Puget Sound Regional Council (“PSRC”) also releases an annual estimate of median household income for each county in the Puget Sound Region. The Washington State Office of Fiscal Management (“OFM”) produces annual estimates for median household incomes by county. Strategic Mapping, Inc. (formally Donnelly) produces an annual estimate of median household income broken down by both Primary Metropolitan Statistical Area (“PMSA”) and by county within each PMSA. Prior to 1992, the Seattle-Bellevue-Everett PMSA included only King and Snohomish Counties. In 1992, it expanded to include Island County as well. Finally, the decennial national census quantifies median household income by county.

The accuracy of the census is greater than the other measures (since the others are only estimates), however the 1990 data are no longer current. The methodology and sample of each of the estimates differs, yielding sometimes very different results. A chart showing the different estimates for 1996 (the most recent year showing each of the estimates) for each of the four counties in the Puget Sound region (Figure III-B) shows the range available. It is followed by a brief discussion of the measure used by each county.

King County uses the MPA estimate for the Seattle-Bellevue-Everett PMSA. This represents an estimate over King, Snohomish and Island Counties. Snohomish County uses the MPA estimate for only Snohomish County. Kitsap County uses the OFM county estimate. Pierce County last updated their median income estimate in 1996 by repeating their 1993 estimate of \$28,891 (representing 95 percent of \$30,412, the median income reported for Pierce County in the 1990 census).

**Figure III-B**

<b>Median Income for 1996</b>					
	MPA	OFM	PSRC	HUD	1990 Census
SBE PMSA	\$44,344	N/A	\$ 48,067	\$ 52,800	\$ 35,544
King County	\$44,650	\$ 50,137	\$ 51,103	\$ 52,800	\$ 36,179
Snohomish County	\$45,687	\$ 46,926	\$ 48,798	\$ 52,800	\$ 36,847
Pierce County	\$37,375	\$ 37,961	\$ 42,394	\$ 43,300	\$ 30,412
Kitsap County	N/A	\$ 37,669	\$ 41,918	\$ 44,900	\$ 32,043
MPA: Market Profile Analysis, by Strategic Mapping Inc. (formally Donnelly)					
OFM: Office of Financial Management					
PSRC: Puget Sound Regional Council					
HUD: US Department of Housing and Urban Development					
SBE - Seattle-Bellevue-Everett					



#### **D. Established housing targets may underestimate future demand.**

Affordable housing targets are based primarily on twenty-year population forecasts. Once the estimated increase in population for a county is established, straight-line projections are used to forecast the affordable housing needed by that increase in population. The counties then allocate the additional housing targets among their jurisdictions. A listing of the jurisdictional breakdown of each county (as well as the fair-share housing targets discussed below) appears in Figures III-C, III-D, III-E and III-F.

As shown previously (pages 22-23), population growth in King and Snohomish counties is at the high end of official forecasts. A continuation of the growth trend in these counties may further intensify demand for housing.

As well, each county bases its population-housing translation on the current estimates of average household size (about 2.5 persons per household for Snohomish, Pierce and Kitsap Counties and 2.4 persons for King County). This average has been trending downward for many years. To recognize the decline in household size, King County has used the PSRC estimate of 2.2 persons per household in 2012 when estimating total housing needs. If the decline in household size continues, static estimates of 2.5 will understate demand.

King County differentiates between its jurisdictions based on a jobs/housing index. If a jurisdiction is found to have an acceptable balance between jobs and housing, very low-income housing must account for 20 percent of the housing needs of the area, with low-income housing accounting for 17 percent of additional housing. If a jurisdiction is found to have an “imbalance” between jobs and housing (i.e., more jobs than housing adjusted using a county formula), very low-income housing must account for 24 percent of additional housing (low-income housing is again 17 percent of additional housing). Appendix 3 of the Countywide Planning Policies lists a jobs/housing index for each jurisdiction. Figure III-C shows the jurisdictional breakdown for King County and the Fair-Share allocations for each of those jurisdictions. The range of the targets for several of the jurisdictions arises from the original countywide planning policy’s use of a high and a low population forecast (and accompanying housing targets). Most cities adopted a comprehensive plan that incorporated a specific housing target that fell somewhere within these ranges, while some retained the original range (further, a few cities adopted forecasts outside of the original bounds). The targets are 20-year goals.

In Snohomish County, the unincorporated areas near larger municipalities are dealt with separately. The 1990 census determined 36,888 households in Snohomish County had “housing needs” (that is, they make less than 95 percent of median county income and spend more than 30 percent of their gross household income on gross housing costs). While some jurisdictions accommodated more than their proportionate share of these households, others accommodated less. By the year 2012, a projected 21,613 additional households with housing needs will need to be accommodated in Snohomish County. A housing factor is used to allocate a larger share of future affordable housing to cities that currently have a smaller proportion of low-income housing. This is done to discourage clustering of low-income housing in a few areas. Figure III-D lists the recognized jurisdictions of Snohomish County, the existing stock of households that had housing needs in 1990 in each jurisdiction, the fair share of the total number of households with housing needs in each jurisdiction, their fair share of the projected increase in households with housing needs, and the total share of households with housing needs in 2012.

As noted above, Kitsap County’s Comprehensive Plan has yet to be validated. The current plan accounts for an increase in population of 71,624 by 2012. This increase represents 28,650 new housing units (assuming 2.5 persons per household). Assuming historical income distributions for the county remain consistent, Figure III-E depicts housing needs by income distribution.

Figure III-C

<b>King County Fair Share Housing Allocations and Jurisdictional Breakdown</b>				
<b>Jurisdiction</b>	<b>Overall Household Target</b>	<b>Affordable Housing Target</b>	<b>Low Income Target</b>	<b>Very Low Income Target</b>
		<i>0%-80% of median income</i>	<i>50%-80% of median income</i>	<i>0%-50% of median income</i>
Algona	450	167	77	90
Auburn	7,030	2,601	1,195	1,406
Beaux Arts	-	-	-	-
Bellevue	8,600	3,182	1,462	1,720
Black Diamond	2,045	757	348	409
Bothell	1,700	629	289	340
Burien	1,596-1,995	591-738	271-339	319-399
Carnation	404	149	69	81
Clyde Hill	13	5	2	3
Des Moines	2,335	864	397	467
Duvall	2,044	756	347	409
Enumclaw	2,700	999	459	540
Federal Way	13,425-16,556	4,967-6,126	2,282-2,815	2,685-3,311
Hunts Point	4	1	-	1
Issaquah	2,940	1,088	500	588
Kent	7,520	2,782	1,278	1,504
Kirkland	5,328-6,346	1,971-2,348	906-1,079	1,066-1,269
Lake Forest Park	153	57	26	31
Medina	17	6	2	2
Mercer Island	1,610	596	274	322
Milton	18	7	3	4
Newcastle	-	-	-	-
Normandy Park	181	67	31	36
North Bend	1,527	565	260	305
Pacific	606-1,818	224-673	103-309	121-364
Redmond	9,878	3,655	1,679	1,976
SeaTac	5,789	2,142	984	1,158
Seattle	50,000-60,000	18,500-22,200	8,500-10,200	10,000-12,000
Skykomish	17	6	3	3
Snoqualmie	2,450-3,100	907-1,147	417-527	490-620
Shoreline	-	-	-	-
Tukwila	4,791-6,014	1,773-2,225	814-1,022	958-1,203
Woodinville	1,800	666	306	360
Yarrow Point	18	7	3	4
<b>Unincorporated King County</b>				
Urban	34,200-41,800	12,654-15,466	5,814-7,106	6,840-8,360
Rural	5,800-8,200	2,146-3,034	986-1,394	1,160-1,640
<b>TOTAL</b>	<b>184,914-212,547</b>	<b>68,418-78,642</b>	<b>31,435-36,133</b>	<b>36,983-42,509</b>

Source: King County Countywide Planning Policies Benchmark Report

Figure III-D

<b>Snohomish County Fair Share Housing Allocations and Jurisdictional Breakdown</b>				
	<b>Existing (1990) Households w/Housing Needs (Unadjusted)</b>	<b>Fair Share of Existing (1990) Households w/ Housing Needs (Adjusted)</b>	<b>Fair Share of Projected (1990- 2012) Households w/ Housing Needs (adjusted)</b>	<b>Fair Share Housing Total</b>
<b><i>Combine Planning Areas</i></b>				
Arlington	388	245	360	605
Arlington (U)	292	218	117	335
Lake Stevens	258	298	198	496
Lake Stevens (U)	797	694	484	1,178
Marysville	1,482	1,287	730	2,017
Marysville (U)	1,118	1,479	879	2,158
Monroe	513	374	470	844
Monroe (U)	108	170	165	335
Snohomish	591	549	124	673
Snohomish (U)	149	213	86	299
Stanwood	196	135	260	395
Stanwood (U)	165	181	141	322
<b><i>Southwest Planning Area</i></b>				
Bothell	513	786	808	1,594
Brier	230	598	124	722
Edmonds	2,601	3,797	570	4,367
Everett	8,071	4,987	3,078	8,065
Lynnwood	3,428	3,439	1,319	4,758
Mill Creek	414	834	525	1,359
Mountlake Terrace	1,734	1,609	462	2,071
Mukilteo	488	761	683	1,444
Woodway	41	102	8	110
Unincorporated	7,865	8,988	7,205	16,193
<b><i>NE Rural Planning Area</i></b>				
Darrington	84	54	15	69
Granite Falls	110	55	77	132
Unincorporated	1,155	1,060	806	1,866
<b><i>SE Rural Planning Area</i></b>				
Gold Bar	125	76	17	93
Index	20	14	7	21
Sultan	232	155	253	408
Unincorporated	2,001	2,979	957	3,936
<b><i>NW Rural, Unincorporated</i></b>	1,051	973	684	1,657
<b>Total, (U)</b>	14,702	16,753	11,524	28,277
<b>TOTAL, Countywide</b>	36,888	36,888	21,613	58,521

Note: (U) indicated unincorporated area.

Source: SnohomishCounty

Figure III-E

New Housing Units Needed by Income Classification	
<b>Kitsap County</b>	
Low Income (80% or below)	9,740
Moderate Income (120% or below)	6,590
High Income (above 120%)	12,320
<b>Total New Housing Units</b>	<b>28,650</b>

Source: Kitsap County

Figure III-F

NEW HOUSING UNITS NEEDED BY SUBAREA & CITY			
LOW INCOME HOUSEHOLD DISTRIBUTION IN 2012			
		Historical Income Distribution	Equal Shares Distribution (34% for each location)
North Kitsap	8,002	2,246	2,727
Central Kitsap	3,725	820	1,267
South Kitsap	6,876	2,407	2,338
Bainbridge Island	2,292	527	779
Bremerton	6,303	3,152	2,143
Port Orchard	573	287	195
Poulsbo	859	404	292
<b>Total New Housing Units</b>	<b>28,650</b>	<b>9,843</b>	<b>9,741</b>

Source: Kitsap County

Low-income housing has been allocated among the urban and unincorporated areas of Kitsap County. The four urban areas (Bainbridge Island, Bremerton, Port Orchard, and Poulsbo) as well as the unincorporated areas (divided among the three commissioner districts; North, Central, and South) have been allocated two separate levels of fair share of low-income housing. Figure III-F shows the allocations by jurisdiction. The historical income distribution share determines the low-income allocation for a jurisdiction by projecting the future percentage of low-income needed to be the same percentage as current low-income housing. The equal shares distribution dictates that 34 percent of all new housing in each jurisdiction be low-income housing. The difference in aggregate low-income housing units needed under each plan shows that the current level of low-income housing is not exactly 34 percent.

Pierce County bases its fair share allocations of “special needs” (i.e., low-income) housing on population projections from the Pierce County Regional Council (“PCRC”) for the period of 1990-2010. While these estimates are readily available, they fail to cover the entire time period mandated by the GMA (1992-2012). Snohomish County had similar problems with the population forecasts that they had available, and to alleviate the problem, extended their forecasts two years, to 2012. For Pierce County, a household size of roughly 2.5 persons was used to achieve an estimate of housing need by 2010, given the population forecasts. Figure III-G shows the jurisdictional breakdown for Pierce County, existing (as of 1990) affordable housing needs, and projected affordable housing needs for 2010.

Note that household “need” in this case projects the number of households that earn at most 95 percent of the median county income level, spend at most 30 percent of their income on housing, and are unable to achieve or maintain their housing.

Figure III-G

Pierce County Fair Share Allocations and Jurisdictional Breakdowns				
Jurisdiction	1990 Unadjusted Existing Need	1990 Adjusted Existing Need	2010 Projected Housing Need	2010 Adjusted Projected Need
Bonney Lake	412	607	183	231
Buckley	185	180	293	330
Carbonado	11	10	8	9
Dupont	59	61	741	909
Eatonville	137	116	34	32
Fife	358	274	299	246
Fircrest	312	334	109	125
Gig Harbor	327	545	240	287
Milton	294	300	54	54
Orting	165	139	142	157
Puyallup	1,873	2,240	906	1,019
Roy	23	23	32	40
Ruston	61	50	22	20
South Prairie	8	6	35	38
Steilacoom	444	471	80	82
Sumner	670	513	473	410
Tacoma	19,893	18,430	3,312	2,007
Wilkeson	14	14	18	21
<b>Pierce Co. Unincorporated</b>	24,816	25,749	12,222	13,184
<b>Pierce Co. Total</b>	50,062	50,062	19,203	19,203

Source: Pierce County

**E. Early in the implementation stage, monitoring is uneven and progress slow.**

The fair-share targets represent long-term, twenty-year goals. If 2012 marks the end of the twenty-year span, then only about thirty percent of the allotted time has elapsed. King County planners consider 1995, the year after the Countywide Planning Policies were amended to include the housing goals, as the first year of the plan. Regardless, it is premature to pass judgment on the effectiveness of regional efforts. The early indications, however, are not good. Monitoring, necessary to inform policy makers, is sporadic, with some jurisdictions lacking any consistent monitoring program. Where monitoring has occurred, the results are mixed.

Until Kitsap County has its fair share targets validated, any discussion of the county’s progress relative to those targets is moot.

Earlier this year, Pierce County surveyed its jurisdictions on this topic. The results were as follows:

- ◆ Of twenty-three jurisdictions surveyed, sixteen responded.
- ◆ Two (Tacoma and Steilacoom) indicated that they currently had a monitoring program for affordable housing goals.
- ◆ Of ten “tools” or strategies listed in the survey, manufactured housing and accessory dwellings were mentioned most (11 jurisdictions apiece).

- ◆ When asked to describe their participation in affordable housing programs, only a few indicated that they participate (Tacoma and Pierce County participate most extensively).
- ◆ When comments were solicited, they generally indicated that programs have had limited success to date.

Overall, limited participation and success with affordable housing programs was indicated. Further, monitoring mechanisms do not currently exist in the majority of Pierce County's jurisdictions.

Snohomish County planners are currently attempting to quantify how well the county's jurisdictions are progressing toward their fair-share targets. Their ongoing work involves the creation of an empirical database of housing sales. This database is derived from county assessor records. The database and methodology were established in 1997 and at the time included sales from 1994 and 1995. In 1998, the database is being extended to include sales for 1996 and 1997. Additionally, a breakdown of sales by income level (i.e. 0-30 percent of median county income, 30-54 percent, 54-95 percent, etc.) is in progress. Snohomish County Planners project a final draft of their current annual report to be available in mid-to-late September. A workable data base for the rental (specifically the apartment) market is unavailable at this time, and planners suggest that this may be a project for early next year.

In their 1997 report titled, "King County's Housing Supply Crisis: A Commitment to Action," the Seattle-King County Association of Realtors ("SKCAR") addressed the question: "How are Local Jurisdictions Doing in Meeting These (housing) Targets?" To answer this question, SKCAR sent Public Records Requests to all jurisdictions in King County. Nineteen cities did not respond to the request. Six cities indicated that they had some or all of the monitoring information available. Thirteen cities showed a surplus in meeting housing targets through 1996, while nineteen showed a deficit. Overall, the report identifies a countywide deficiency of over 7,500 units (unincorporated King County's surplus of over 5,000 units kept that number from being much larger). The Realtors counted units built, as opposed to units permitted. SKCAR is currently updating their findings.

Using more detailed data that was unavailable to the Realtors, King County reports that the number of new permits issued is keeping pace with projected population increases in seventeen of thirty-eight jurisdictions, (Detailed breakdowns of the types of new housing units permitted remains limited.) The overall number of housing units permitted in 1997 approximated one-twentieth of the number required to meet the twenty-year housing targets.

In the 1998 King County Benchmark Report, the county further addresses the distribution of new housing. The county's goals involved increasing urban densities, particularly in cities. Seattle was targeted to accommodate 28 percent of growth; suburban cities, nearly half. Growth targets in unincorporated King County were set at levels below past trends: 19 percent in the unincorporated urban area, 4 percent in the rural area.

On this measure, which does not address affordability, the county reports progress. Growth in unincorporated King County has fallen below the levels experienced prior to 1995. Suburban cities accommodated their 49 percent share of permitted growth, and Seattle took 21 percent of such growth.

While the distribution of growth in King County can, and has been, monitored, the mechanisms required to track affordability are currently weak. County officials have been working to develop a system to monitor affordability and expect to have data available beginning with 1998.

## **IV. Intercity comparisons of the affordable housing issue**

Housing affordability cannot be separated from location. With an increasingly mobile labor force, housing affordability becomes a critical issue as communities work to maintain their competitiveness. With this in mind, several snapshots of various regions are provided here. The communities are: Denver, Colorado; the Twin Cities, Minneapolis and Saint Paul, Minnesota; Phoenix, Arizona; Portland, Oregon; and San Jose, California.

While housing affordability is the primary focus, livability is also critical. Nobody wants to breathe unhealthy air or spend an excessive amount of time commuting to and from work. However the basic economic tenets of scarcity and market economies dictate that when there is not enough of a commodity to go around (for example, large four-bedroom houses in an affluent neighborhood with excellent schools and clean air), the commodity will go to those most willing and able to pay for it.

The specific issues addressed include population (both in absolute terms and growth rates), median income, housing prices and affordability, air quality, traffic congestion, and educational attainment.

### **Population**

Each city's metropolitan area population as counted in 1990 by the decennial census and as estimated by the Bureau of the Census for 1991-1996 is given. If the city is part of a Primary Metropolitan Statistical Area ("PMSA"), this defines its metro area; otherwise the Metropolitan Statistical Area ("MSA") is used. The Seattle-Bellevue-Everett PMSA includes King, Island, and Snohomish Counties. The Bureau of the Census estimates that the PMSA population was 2,234,700 in 1996, a 9.9 percent increase from 1990. The state Office of Financial Management, whose population estimates are used elsewhere in this report, places PMSA population at 2,237,707 for 1996. The Census estimates for Seattle are used here for consistency with the other cities.

### **Median Income**

As discussed elsewhere in this report, there are many different measures and estimates of income. In the interest of comparability, the HUD measure of median family income was chosen over possibly more accurate local estimates that would not have been consistent across regions. Median income for the Seattle area has been consistently above national levels and that gap is widening.

### **Median Home Price and Housing Affordability Index (HOI)**

In comparing median home prices across geographic regions, it is critical to use comparable data sources for each region. For this reason, the data series created by the National Association of Homebuilders ("NAHB") was used. NAHB tracks prices for homes in every major metropolitan area on a quarterly basis. Using median prices as opposed to mean or average prices eliminates the tendency of a few multimillion-dollar outliers to bias the results upward. The graphs of home prices also include an affordability measure, the HOI discussed earlier.

## **Air Quality**

Air quality is one indicator of the quality of life, albeit one largely dependent on the geographical characteristics of a region. Changes in air quality over time can suggest the effects of growth on the local environment. The central measure of air quality is the Pollutant Standards Index (“PSI”), an index created by the United States Environmental Protection Agency (“EPA”) that tracks how well a series of pollutants concentrations fares against National Ambient Air Quality Standards (“NAAQS”). The index ranges from a minimum of zero to a maximum of 500. A higher level is increasingly dangerous to health. The levels are determined by finding the index for each of six pollutants and the pollutant with the highest index value is reported as the PSI for that day. Critical points for the PSI are as follows (with numerical values followed by the “health effect descriptor”): 0-50, “good”; 50-100, “moderate”; 100-200, “unhealthful”, 200-300, “very unhealthful”; and 300-500, “hazardous”. Reports are taken daily for all metropolitan areas with populations over 200,000. The percentage of time that an area spends in each category is generally agreed to be a useful indicator of aggregate air quality.

## **Congestion**

The relationship between housing affordability and traffic congestion was discussed earlier. The Texas Transportation Institute (“TTI”) created a Roadway Congestion Index (“RCI”) in order to measure the level of congestion in a region. The RCI combines the daily vehicle-miles of travel per lane-mile for freeways and principal arterial street systems in a ratio comparing the existing value to values identified with congested conditions. An RCI value of 1.0 or greater indicates that congested conditions exist areawide. Regions with values of less than 1.0 may have sections of roadway that experience periods of heavy congestion, but the average mobility level within the region is defined as uncongested. The ten-year study conducted by TTI concluded with the data collected for 1994; there is no more recent study available.

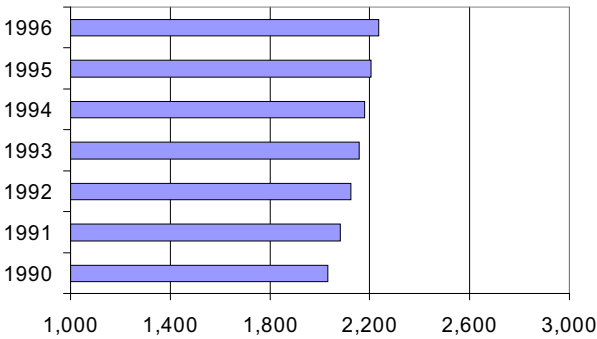
## **Educational Attainment**

Education is an increasingly important commodity in the modern information economy. The premiums paid in the job market to educated workers have risen in recent years, even as the workforce has become more highly educated. Educational attainment of the population is an important determinant of the attractiveness of a metropolitan area as a place to live or to locate a business. The best data on educational attainment on the metropolitan level come from the 1990 Census. (Although Census Bureau’s annual Current Population Survey measures educational attainment for the nation as a whole, metropolitan level measures are not currently available from this source.) On average Seattle area residents have more education than is the norm nationally. Only 12 percent of local residents have failed to graduate from high school, compared to 18 percent nationally. At the other end of the scale, 30 percent of Seattle area residents have graduated from college, compared with 23 percent nationally.



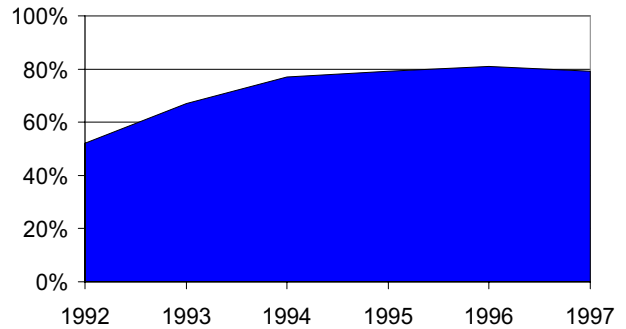
# Seattle, Washington

♦ Population in the Seattle metropolitan area reached 2.2 million in 1996, a 9.9 percent increase since 1990 and a 35 percent increase since 1980.



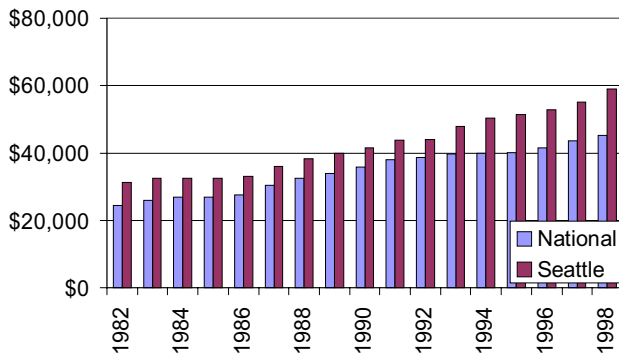
♦ Air quality for King County steadily increased in the early 1990's, leveling at its current 80 percent "good" days.

Seattle (King County) Air Quality (percentage of "good" days per year)



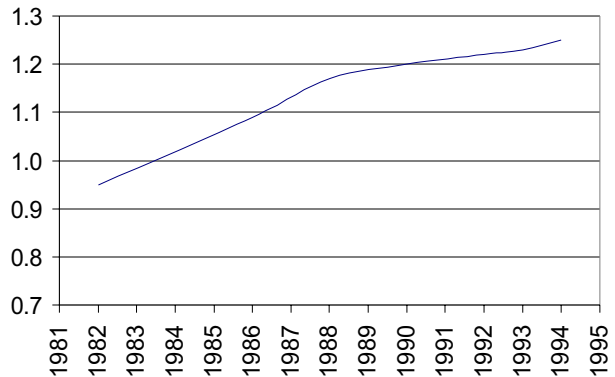
♦ Nominal median family income for the Seattle-Bellevue-Everett PMSA was \$59,000 in 1998, according to HUD estimates, well above national estimates of \$45,300.

Seattle/National Median Income



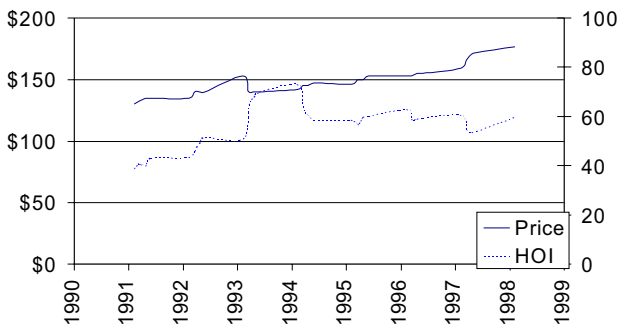
♦ Congestion has steadily increased, to its current level more than 25 percent above a level consistent with "general congestion."

Seattle Congestion Index



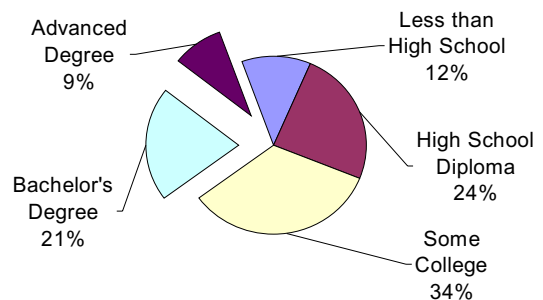
♦ Median home prices have increased by 36 percent to \$177,000. Currently ranks 156<sup>th</sup> out of 191 ranked cities in housing affordability.

Seattle Median Home Price (in thousands)/HOI



♦ Thirty percent of the population over the age of 25 holds at least a Bachelor's degree.

Seattle Educational Attainment



## Denver, Colorado

The Denver metropolitan population is currently growing at a faster rate than at any time since 1970 (when growth rates for the greater Denver area began to be estimated), and is now slightly over 2.1 million people. This represents a growth rate of 3.1 percent per year and forecasts predict that over three-quarters of a million additional people will enter the region by 2020. Housing stock is not keeping pace with population increases and increasing housing prices are the result.

Housing affordability for the region has been declining steadily since 1993, when the Denver market was the most affordable in the Western United States (and ranked 12th out of 181 ranked regions). That ranking is now down to 117th (of 191 ranked regions). While incomes have risen steadily in the 1990's (to a median level of nearly \$56,000), the increase in home prices has outpaced them. Home prices have increased by 70 percent since 1991 (to a median price of \$143,000).

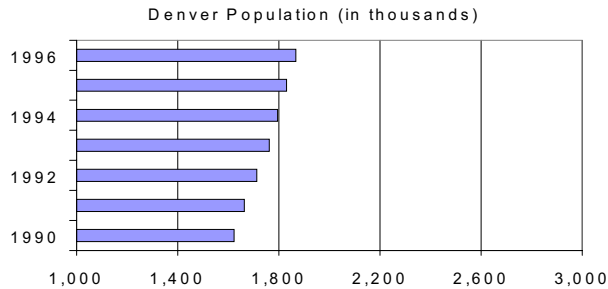
Though air quality has shown a marked improvement in the past five years (with the percentage of days classified as "good" rising from 60 percent to nearly 80 percent), it still lags behind most of the areas discussed here. Additionally, the percentage of days classified as "bad" declined from 2 percent in 1992 and 1 percent in 1993, 1994, and 1995 to 0 percent in the years since. After substantially worsening in the 1980's, traffic congestion is currently leveling out (at a level roughly 10 percent above what is considered to be generally congested). The Denver area has generally higher educational attainment than the nation as a whole, with nearly 30 percent of the adult population holding at least a Bachelor's degree.

In response to growth projections, and the implications that accompany them, the Denver Regional Council of Governments (DRCOG) recently adopted the Metro Vision 2020 Regional Development Plan. MV2020 is a comprehensive long-run growth strategy for the future development of the region similar both to the Puget Sound Regional Council's Vision 2020 and to Washington State's Growth Management Act. Metro Vision discusses growth, development, transportation and water quality. While the plan includes guidelines on the extent of urban development, open spaces, free-standing communities, a balanced, multimodal transportation system, urban centers and environmental quality, it is voluntary and does not include enforcement tools.

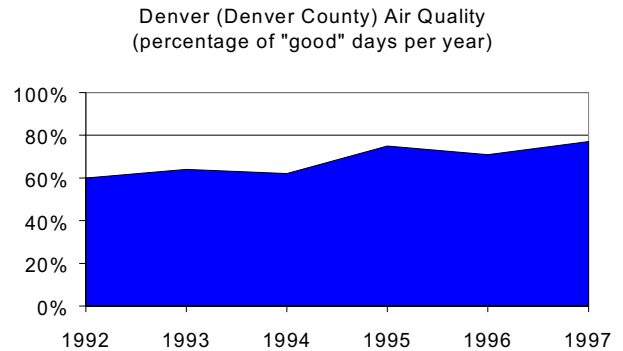
"The cost of housing is increasing. It won't be long before people can't afford to bring first-year college grads into Denver, because they can't afford housing here. Transportation is horrible. Wages are going up at an astronomical pace."

-Doug Hanson, CEO Rocky Mountain Internet after recounting how he moved his company from the Bay Area three years earlier to escape a similar situation.

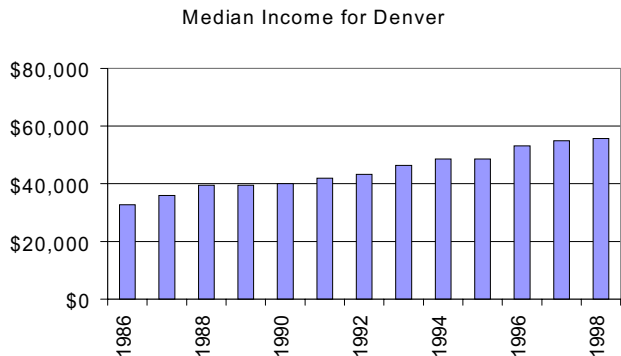
♦ Population in the Denver Metropolitan area reached 1,867,000 in 1996. This represents a 15 percent increase since 1990 and a 31 percent increase since 1980.



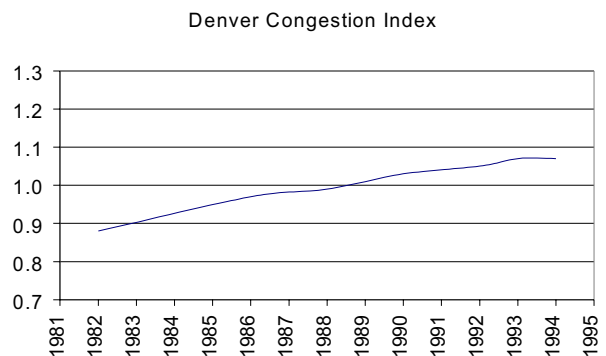
♦ Air quality has improved since 1992 when 60 percent of days were classified as “good” to the present level of 77 percent.



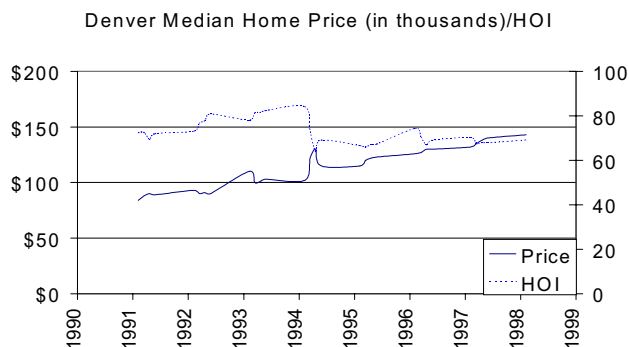
♦ Nominal median family income for the Denver MSA was \$55,700 in 1998 according to HUD estimates.



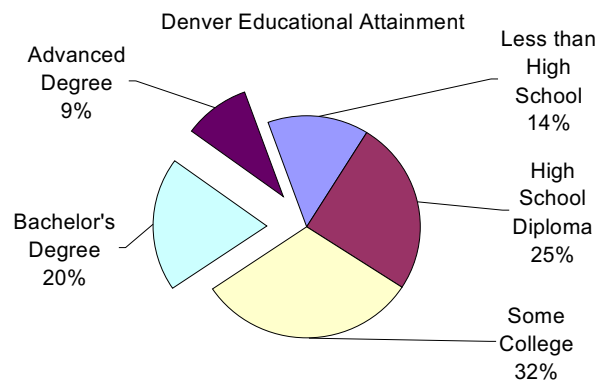
♦ Congestion steadily increased since 1982 before leveling out at its present level nearly 10 percent above a level consistent with “general congestion.”



♦ Median home prices have increased by 70 percent since 1991 to \$143,000. Currently ranks 117<sup>th</sup> out of 191 ranked cities for housing affordability.



♦ Nearly 30 percent of the population over the age of 25 holds at least a bachelor’s degree.



## Minneapolis-Saint Paul, Minnesota

Currently, the Twin Cities are enjoying a moderate growth rate. Population is approaching 3 million people. Economically the area is doing well, with median income slightly higher than that of the Seattle metropolitan area. Tens of thousand of new jobs have been created in the past two years, bringing the unemployment rate below four percent. Air quality in the region is exceptionally good, mostly due to prevailing winds. Overall, educational attainment for the region exceeds national averages, and traffic congestion is relatively light when compared with similar regions. Housing affordability in the region ranks 17<sup>th</sup> out of 191 cities nationwide. There are, however, some warning signs.

Between 1974 and 1993, rents rose an estimated 13 percent in real (inflation adjusted) terms while renters' real wages declined by eight percent. Since 1990, vacancy rates for apartments in the Twin Cities have fallen from over seven percent to just two percent. Falling vacancies and rising rents are due in part to scarce and scattered new construction of low-income and moderately priced apartments. The increase in housing prices is driving rents upward and increasing urban sprawl as workers move farther from their place of employment to find affordable housing. Congestion has recently surpassed the level of general congestion, and is steadily increasing. While air quality is superior to the vast majority of comparable regions, downwind of Minneapolis air quality is worsening.

"The situation that we're facing in today's tight rental market is that owners are increasingly forgoing low-income renters."

-Chip Halbach, executive director of the Minnesota Housing Partnership

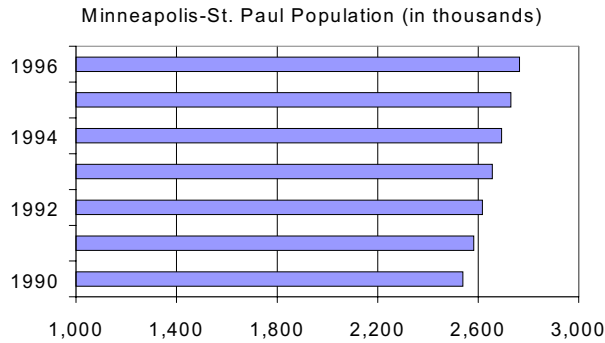
"If you ask any legislator who moves around a lot . . . what's the one thing they hear most often, I'd be willing to bet lack of affordable housing is one of the biggest issues."

-Roger Moe, DFL-Erskine, Senate Majority Leader.

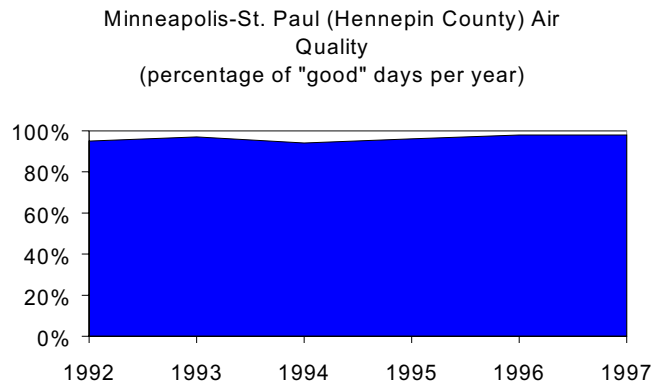
While the Twin Cities compares favorably with similar regions on housing affordability, that advantage is also decreasing, as recent price surges combined with a shortage of low-income and moderately priced apartments is causing affordability in the region to steadily decline. A shortage of construction labor due to a booming construction market is becoming a crisis for many developers and driving construction (and housing) prices even higher.

The issue of affordable housing is seen as a potential crisis and is being given a priority status in the current legislative session. Regional authorities are planning for 13,000 new affordable rental units in the Twin Cities metro area by 2010 as part of the Livable Communities program, created by the Legislature in 1995 to deal with affordable housing, jobs and economic development. The Livable Communities Act attempts to create a regional response to the need for affordable suburban housing. Compliance with the act is voluntary.

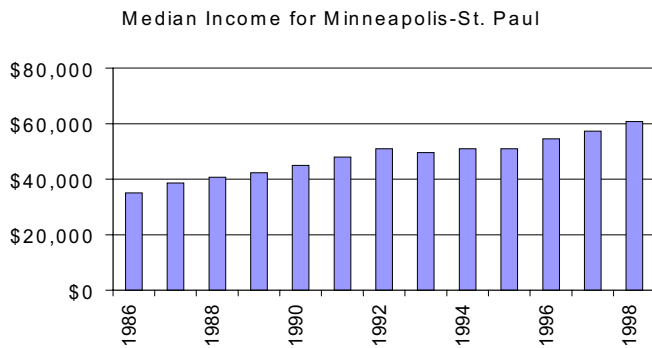
◆ Population in the Minneapolis-St. Paul Metropolitan area reached 2,765,000 in 1996. This represents an increase of 9 percent since 1990 and a 26 percent increase since 1980.



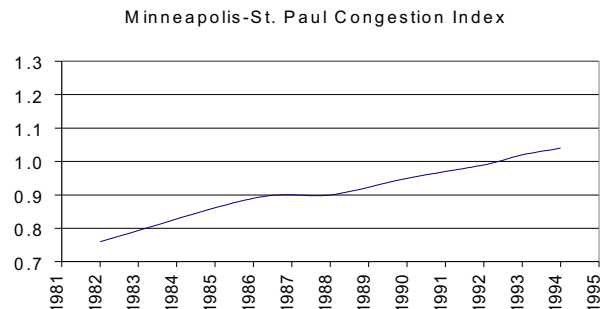
◆ Air quality has been consistently “good” since 1992.



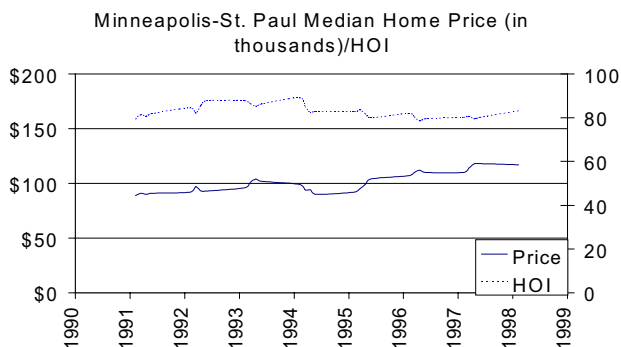
◆ Nominal median family income for the Minneapolis-St. Paul PMSA was \$60,800 in 1998 according to HUD estimates.



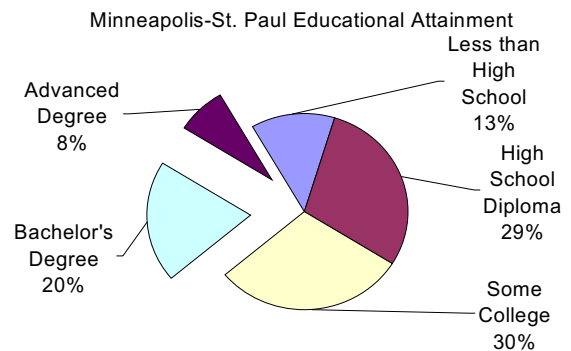
◆ Congestion has steadily worsened since 1982, and is now roughly 5 percent above the level considered “generally congested”.



◆ Median home prices have increased by 31 percent since 1991 to \$117,000. Currently ranks 17<sup>th</sup> out of 191 ranked cities on housing affordability.



◆ Nearly 28 percent of the population over the age of 25 holds at least a Bachelor’s degree.



## Phoenix, Arizona

The greater Phoenix area is currently experiencing exceptionally strong growth. Maricopa County (which includes Phoenix) added a nation-leading 82,000 people in 1997 according to the U.S. Bureau of the Census. It is expected to grow beyond 6.5 million by 2035, more than double its current 2.8 million. The unemployment rate in Phoenix is running at about 3 percent, even with the population expanding by several thousand people per month. The Phoenix metropolitan area issued a record-breaking number of building permits for single-family homes in each of the past three years, and most agree that 1998 will continue that trend. Both the positive and negative effects of such growth are currently being felt in the region. Positive effects range from major league sports teams to greater job opportunities. Negative effects include: traffic jams, the disappearance of farmland, the brown cloud of pollution, and the loss of desert scenery and wildlife habitat. Maricopa County lost 55 square miles of farmland between 1990 and 1995, nearly 8 percent of the total acreage.

Air quality in the Phoenix area suffers from the topography of the region. Even without population growth and the often-accompanying increase in vehicle-miles traveled, the air quality is not good due to the lay of the land and the prevailing winds. With growth, air quality is deteriorating at an alarming rate. The only U.S. city with a worse pollution problem is Los Angeles. When measuring daily air quality, since 1992 an average of five percent of days were "bad." Urban sprawl and the associated traffic problems are reaching the levels of the mid-1980's (prior to completion of many of the primary freeways and arterials of the region).

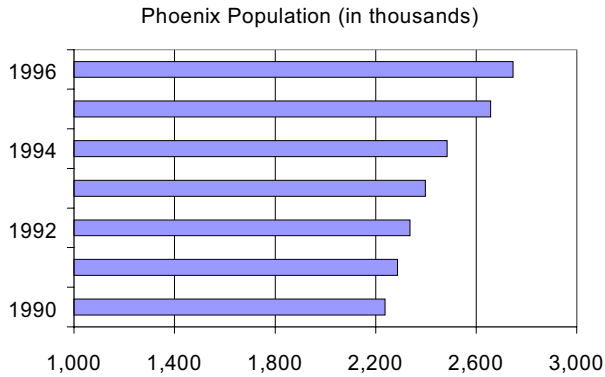
"We've got a long way to go before it approaches 'Seattle-ification' where housing prices rose quickly and began to deter relocation."

-Jay Pulis, real estate specialist with E&Y Kenneth Leventhal, referring to annual report which showed Metropolitan Phoenix falling to 33<sup>rd</sup> place among nations top 75 metropolitan areas for housing affordability

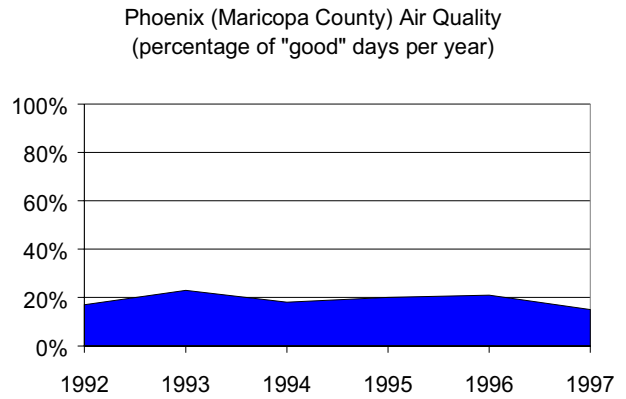
Though incomes are rising, they are not keeping pace with rising prices in the housing market. Since 1991, the median home price in the greater Phoenix area has increased by 43 percent. Affordability of housing has steadily been declining, both in absolute terms and in comparison to comparable metropolitan areas. There are several reasons for the housing crunch. With houses currently going up at a rate of 90 per day, there is a general labor shortage (which not coincidentally drives up the cost of construction labor). Geography also plays a part. As land for development becomes scarce, lot prices have risen and developers are forced further from the urban center.

Phoenix, generally a region which has resisted governmental regulation of the economy, has recently considered both a "Citizens Growth Management Act" and a "Growing Smarter" proposal for the November ballot. The CGMA was formatted similarly to Washington's GMA, in that it established a boundary for growth around the urban areas of the region outside of which new development and services would be limited. It also would have required the enactment of enforceable growth plans much like the Comprehensive Plans of Washington. The Growing Smarter proposal would provide money to preserve lands, while prohibiting the state from requiring many types of growth controls. Only the Growing Smarter proposal will be put to a vote, as the CGMA failed to garner the requisite 112,000 signatures for placement on the ballot.

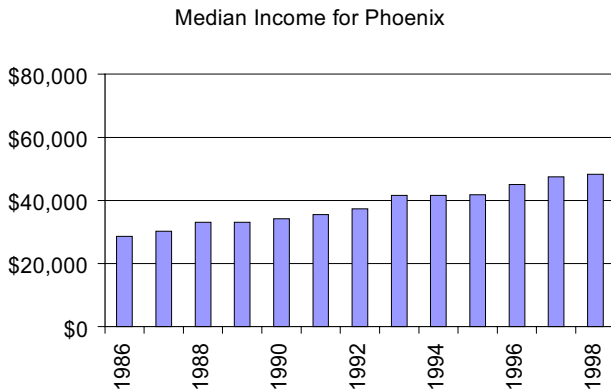
◆ Population in the Phoenix Metropolitan area reached 2.75 million in 1996. This represents a 23 percent increase since 1990 and a 72 percent increase since 1980.



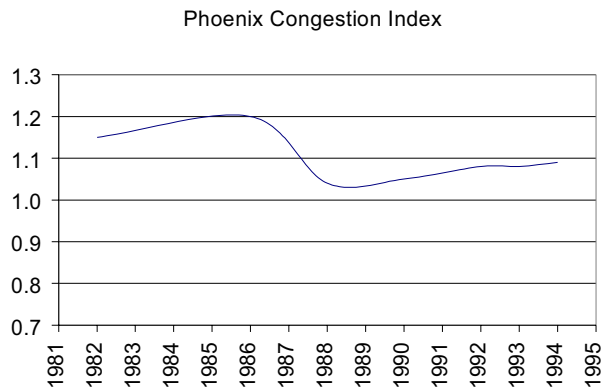
◆ Air quality fluctuated since 1992, with the percentage of “good” days ranging between 23 percent and 15 percent. Currently, air quality is decreasing.



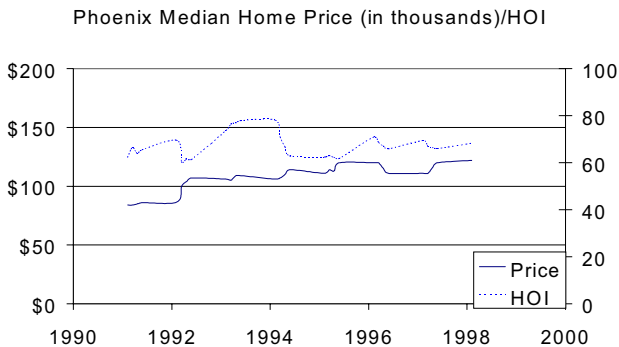
◆ Nominal median family income for the Phoenix MSA was \$48,300 in 1998 according to HUD estimates.



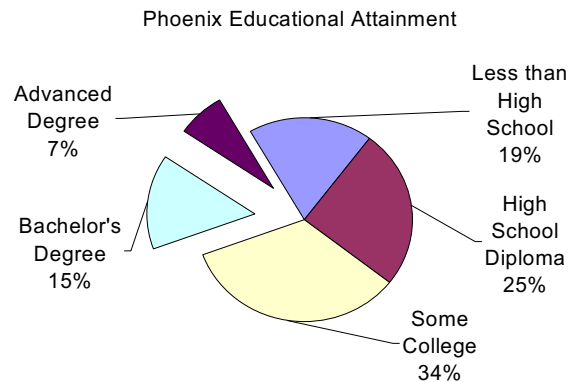
◆ Congestion showed marked improvement between 1986 and 1988, before increasing to its current level roughly 10 percent above a level associated with “generally congested” conditions.



◆ Median home prices have increased by 45 percent since 1991 to \$122,000. Currently ranks 122<sup>nd</sup> out of 191 ranked cities in housing affordability.



◆ Slightly more than 22 percent of the population over the age of 25 holds at least a bachelor’s degree.



## Portland, Oregon

Portland has been described as one of the most environmentally conscious communities in the country's most environmentally conscious state. This environmental awareness, combined with a desire to avoid the stark urban sprawl on display in California, immediately to the South, led Oregon to be the first state to initiate Urban Growth boundaries nearly two decades ago. With 500,000 people expected to enter the region in the next 20 years, addressing growth is critical to the region's continued prosperity. The boundary, established in 1979, encompasses 232,000 acres, 24 cities and parts of three counties. State law requires a twenty-year supply of land to be available within the boundary for housing. Currently, both benefits and costs of this boundary are manifesting themselves.

Air quality in the region is significantly improving. Congestion went through a period of somewhat rapid advance before settling at its current level (roughly ten percent above a level consistent with general congestion). Incomes are rising. Overall, the region has attained a slightly higher level of education than the national average. All told the region is doing well, with the exception of affordable housing.

"The median household income cannot buy a median-priced home. The gap continues to escalate. While wages are going up . . . the market is leaping beyond wage increases."

-Erin Keller, housing program coordinator for the Department of Community Services

The Portland metropolitan area has the 187<sup>th</sup> most affordable housing in the country (out of 191 ranked cities), with less than 26 percent of houses selling at a price "affordable" to a family earning the median income. The median home price is now \$155,000, roughly twice what it was just seven years ago. The Urban Growth Boundaries designed to prevent urban sprawl have also severely limited the supply of land on which to build. Many creative solutions have been attempted. Builders are currently building on lots as small as 2400 square feet (roughly twice the size of the footprint of an average *house*). However, with the limited supply of land driving up its price, builders are building more expensive houses, to maintain the historical ratios of lot price to home price.

"Either you go to greater density, or you go to urban sprawl. There really is not a third option."

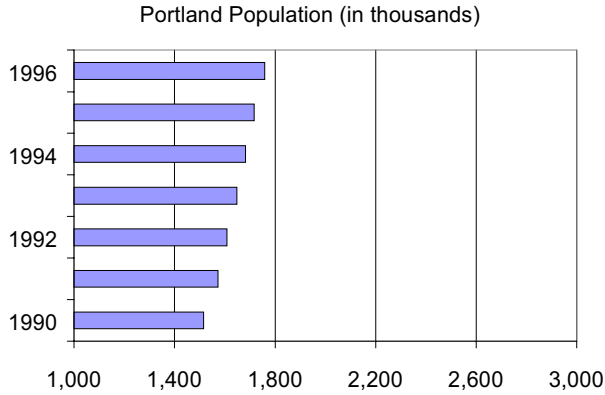
-Gordon Farber, Suburban mayor

Many argue that the recent surge in home prices has merely brought the Portland area into step with national housing prices, contending that the market was severely depressed in the late 70's and 80's. Most housing indexes fail to give credence to this claim.

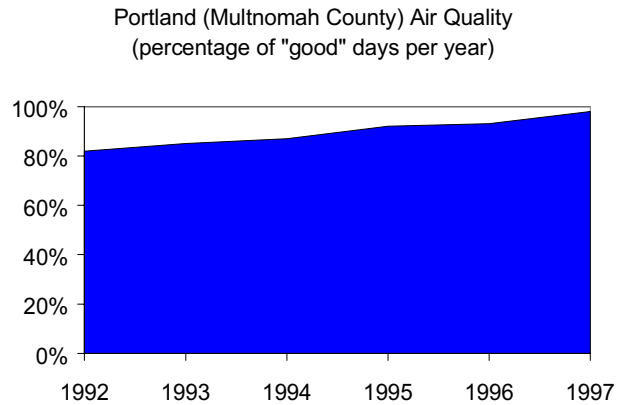
The metro regional government, the multi-jurisdictional agency in charge of enforcing the boundaries, earlier this year voted to expand the boundary by some 3,500 acres in an effort to accommodate expected growth and alleviate some of the current housing problems. Until recently, the urban growth boundary around the Portland metropolitan area had been considered overly broad, too large to ensure efficient use of land within the boundary.



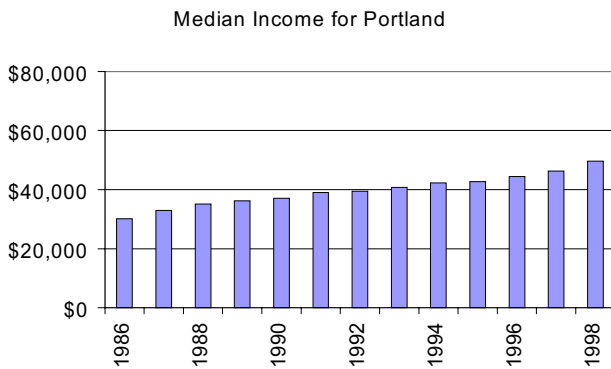
◆ Population in the Portland Metropolitan area reached 1,759,000 in 1996. This represents a 16 percent increase since 1990 and a 32 percent increase since 1980.



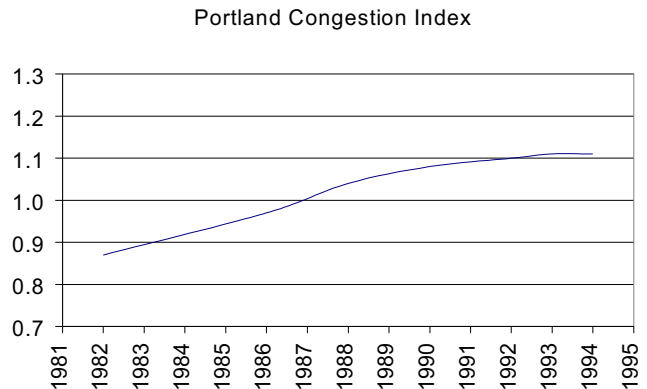
◆ Air quality has steadily increased since 1992 level of 82 percent of days being classified as “good” to 1997 level of 98 percent.



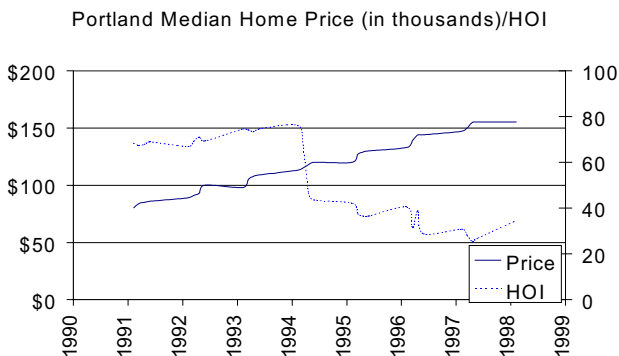
◆ Median nominal family income for the Portland PMSA reached \$49,600 in 1998 according to HUD estimates.



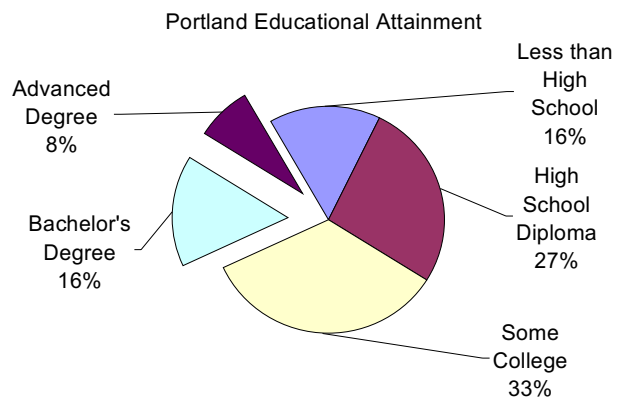
◆ Congestion increased rapidly from 1982 to 1990, when it leveled out at roughly 10 percent above a level consistent with “general congestion.”



◆ Median home prices have nearly doubled since 1991, rising from \$80,000 to \$155,000. Currently ranks 187<sup>th</sup> out of 191 ranked cities in housing affordability.



◆ Nearly one quarter of the population aged 25 and over hold at least a Bachelor’s degree.



## San Jose, California

San Jose is the 11<sup>th</sup> largest city in America. Silicon Valley has added more than 200,000 jobs since 1992 (53,000 in 1997). With its core of high-technology industry jobs, the median income for the region is nearly \$80,000. Air quality is slowly improving (from a level of 65 percent of days being classified as “good” to a level of 75 percent), given the area’s inherent topological disadvantages. The level of educational attainment is far above national averages. The region is booming.

However, the economy has generated only 38,000 new homes during that same five-year span. After four and a half years of no noticeable price increases, housing prices began rising rapidly late in 1994. Currently, the median home price is nearly \$290,000. When combined with income estimates, these steep prices place the region 185<sup>th</sup> (out of 191 ranked cities) in housing affordability. Many new homes are sold by lottery, often before the foundation is poured. The inability to afford to buy housing is forcing many workers into the rental market, however with vacancy rates holding at less than two percent, even that is not an option for many workers.

“Only in California can you say ‘affordable housing’ with a straight face and price it at \$300,000.”

- Rick Denman, vice president of land acquisition for Summerhill Homes

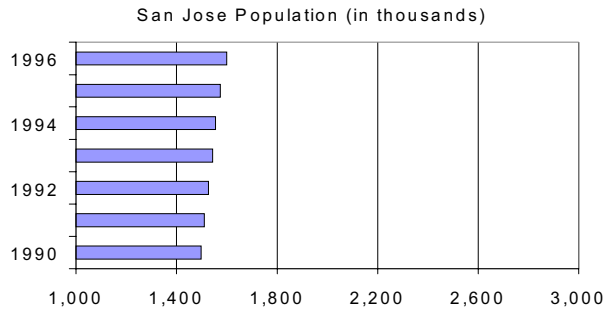
“You can’t have productive employees who are spending three, four and five hours on the road. And you can’t have people involved in the community if they don’t live here. Ultimately, if we don’t solve the housing shortage, it’s going to affect how companies prosper and grow.”

-Carl Guardino, president and chief executive officer of the Silicon Valley Manufacturing Group

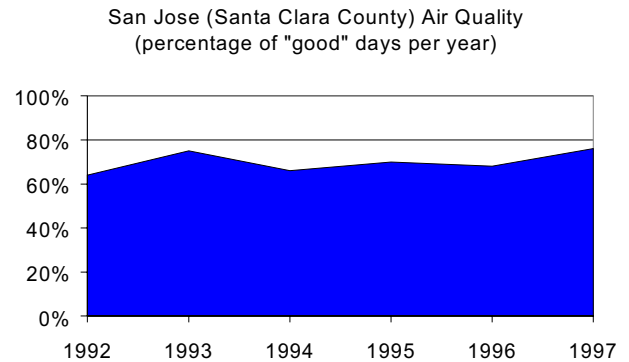
The alternative is to live somewhere other than where one works and commute. Congestion has steadily worsened since 1980, with the average vehicle hours of delay more than doubling since 1994, to an average of 20,500 hours each day. Rush-hour speeds are as low as ten miles per hour over many of the area freeways. Programs are in place to encourage commuters to stagger their travel times to relieve some of the traffic burden. Additionally, work is being done to build mass transit trains and nearly all of the current freeway expansion is in the form of carpool lanes.

In November 1996, the City of San Jose and the County of Santa Clara adopted amendments to their respective General Plans establishing an Urban Growth Boundary (UGB), referred to as the Greenline Initiative. The goal of both the General Plans and Greenline Initiative is to promote “compact development” using mass transit in conjunction with increased densities to promote growth near employment centers as opposed to sprawling outward into the hillsides and the rural countryside. It is too early to analyze the effects of the boundary.

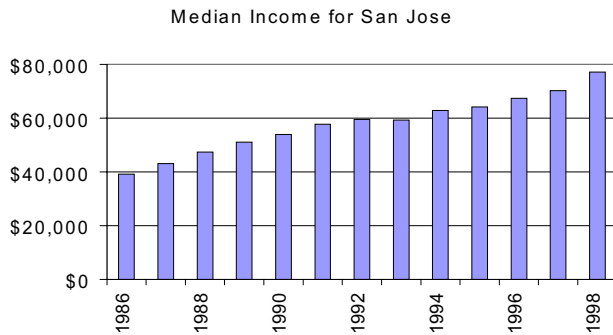
♦ Population in the San Jose Metropolitan area reached 1.6 million in 1996. This represents a 7 percent increase since 1990 and a 24 percent increase since 1980.



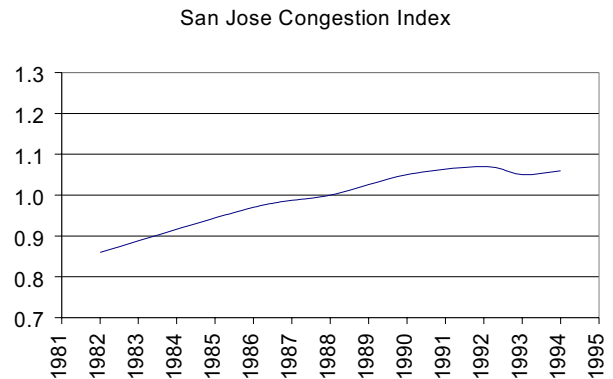
♦ Air quality has fluctuated since 1992, with the percentage of “good” days ranging between 65 percent and 75 percent.



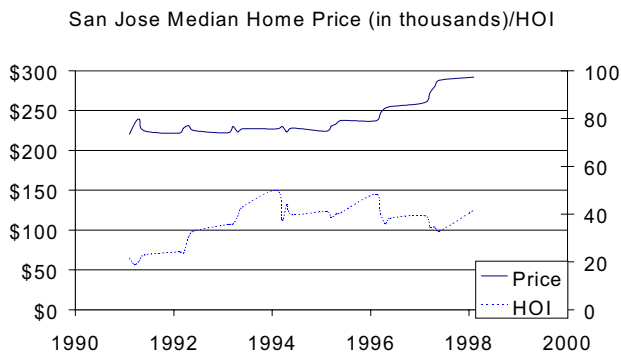
♦ Nominal median family income for the San Jose MSA was \$77,200 in 1998 according to HUD estimates.



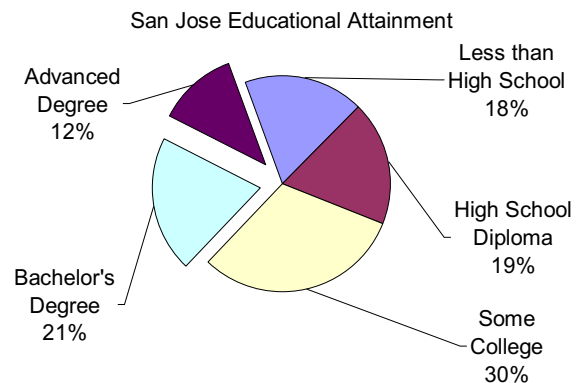
♦ Congestion increased rapidly between 1982 and 1990, when it leveled out nearly 6 percent above a level consistent with “general congestion.”



♦ Median home prices have increased by 33 percent since 1991 to \$292,000. Currently ranks 185<sup>th</sup> out of 191 ranked cities in housing affordability.



♦ One third of the population aged 25 and over hold at least a Bachelor’s degree.



## Footnotes

<sup>1</sup> The average (mean) is calculated by dividing the total value of home sales by the number of sales. The median represents the midpoint of the range of values (half above, half below).

<sup>2</sup> Based on 2,841 transactions, houses and condominiums combined.

<sup>3</sup> Fannie Mae reports that standard industry guidelines for lenders limit PITI to 28 percent for borrowers who pay 10 percent down.

<sup>4</sup> These calculations assume a 10 percent down payment, standard mortgage insurance, standard 30-year terms, and a fixed interest rate of 7.6 percent.

<sup>5</sup> See Appendix for detailed jurisdictional breakdowns.

## **Appendix: Affordable Housing Availability**

The appendix tables illustrate the availability of affordable housing in the Puget Sound Region. Each table shows the jurisdiction that it is describing, the county within which that jurisdiction falls (in the case where a jurisdiction is shared by more than one county, an attempt was made to properly allocate housing), the total number of sales for each of ten quarters (all of 1996, 1997, and the initial two quarters of 1998), and the percentage of these sales that occurred at each of four price points. These price points are based on prices accessible to varying percentages of median county income. It is assumed that households will spend no more than 28 percent of income on housing. A ten percent down payment and normal mortgage insurance are also assumed. Prevailing interest rates and county specific property tax levies are used. Property Taxes and incomes vary by county by year. Interest rates vary by year. (Price point 1: accessible to households earning less than 50 percent of median County income; Price point 2: accessible to households earning between 50 and 80 percent of median County income; Price point 3: accessible to households earning between 80 and 95 percent of median County income; Price point 4: accessible to households earning more than 95 percent of median County income) Therefore, for Algona (in King County), of the nine sales that occurred in the second quarter of 1998, 33 percent occurred at a price accessible to a household earning more than 95 percent of median county income, 44 percent of the sales occurred at a price accessible to a household earning between 80 and 95 percent of median county income, 22 percent occurred at a price accessible to a household earning between 50 and 80 percent of median county income, and none occurred at a price accessible to a household earning less than 50 percent of median county income. Note: “U” denotes unincorporated.

**PRICE  
POINT**

		<u>1996</u>				<u>1997</u>				<u>1998</u>	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Algona</b>	# of Sales	1	8	5	5	3	4	8	6	6	9
(King)		4	0%	25%	0%	0%	0%	50%	17%	17%	33%
		3	0%	50%	100%	60%	33%	25%	38%	17%	44%
		2	100%	25%	0%	40%	67%	75%	13%	67%	22%
		1	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Auburn</b>	# of Sales	153	205	214	199	206	247	275	210	171	264
(King)		4	76%	71%	76%	75%	73%	69%	71%	76%	67%
		3	15%	20%	15%	18%	14%	19%	17%	17%	19%
		2	8%	9%	8%	7%	14%	11%	10%	7%	11%
		1	1%	0%	0%	0%	0%	1%	1%	0%	2%
<b>Bellevue</b>	# of Sales	252	398	400	286	268	412	459	387	295	367
(King)		4	100%	100%	100%	100%	100%	100%	100%	100%	100%
		3	0%	0%	0%	0%	0%	0%	0%	0%	0%
		2	0%	0%	0%	0%	0%	0%	0%	0%	0%
		1	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Black Diamond</b>	# of Sales	6	15	9	16	17	18	20	19	9	12
(King)		4	83%	73%	67%	81%	71%	89%	75%	84%	100%
		3	17%	20%	22%	13%	29%	6%	20%	11%	0%
		2	0%	7%	0%	6%	0%	6%	0%	5%	0%
		1	0%	0%	11%	0%	0%	0%	5%	0%	0%
<b>Bothell</b>	# of Sales	78	112	115	95	107	150	121	102	87	124
(King)		4	96%	97%	97%	94%	93%	99%	98%	98%	100%
		3	3%	3%	3%	4%	4%	1%	2%	2%	0%
		2	1%	0%	0%	2%	3%	0%	0%	0%	0%
		1	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Burien</b>	# of Sales	35	43	34	28	38	39	56	53	38	44
(King)		4	54%	53%	56%	57%	61%	67%	64%	66%	42%
		3	26%	28%	35%	21%	16%	21%	20%	23%	32%
		2	20%	19%	9%	21%	24%	13%	16%	11%	24%
		1	0%	0%	0%	0%	0%	0%	0%	0%	3%
<b>Carnation</b>	# of Sales	8	23	18	24	27	31	33	20	19	20
(King)		4	100%	91%	94%	92%	93%	94%	100%	85%	95%
		3	0%	4%	0%	8%	4%	3%	0%	15%	0%
		2	0%	4%	0%	0%	4%	3%	0%	0%	5%
		1	0%	0%	6%	0%	0%	0%	0%	0%	0%
<b>Clyde Hill</b>	# of Sales	1	6	4	3	3	5	5	2	5	7
(King)		4	100%	100%	100%	100%	100%	100%	100%	100%	100%
		3	0%	0%	0%	0%	0%	0%	0%	0%	0%
		2	0%	0%	0%	0%	0%	0%	0%	0%	0%
		1	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>U King County</b>	# of Sales	318	540	474	472	455	572	509	528	283	374
(King)		4	94%	86%	95%	95%	93%	94%	97%	94%	93%
		3	4%	12%	3%	4%	5%	4%	2%	4%	5%
		2	1%	1%	2%	1%	2%	2%	1%	2%	1%
		1	1%	0%	0%	0%	0%	0%	0%	0%	0%

		<u>PRICE POINT</u>		<u>1996</u>				<u>1997</u>				<u>1998</u>	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Des Moines</b>	# of Sales	44	59	51	63	56	89	102	78	46	92		
(King)	4	68%	68%	55%	76%	54%	64%	80%	78%	78%	76%		
	3	18%	20%	35%	17%	29%	29%	19%	21%	15%	15%		
	2	14%	12%	10%	6%	16%	7%	1%	1%	7%	9%		
	1	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%		
<b>Duvall</b>	# of Sales	21	38	29	37	30	53	64	49	20	42		
(King)	4	100%	92%	100%	97%	93%	98%	98%	100%	95%	95%		
	3	0%	5%	0%	3%	0%	0%	0%	0%	0%	5%		
	2	0%	3%	0%	0%	3%	2%	0%	0%	0%	0%		
	1	0%	0%	0%	0%	3%	0%	2%	0%	5%	0%		
<b>Enumclaw</b>	# of Sales	29	51	45	52	44	52	76	60	52	67		
(King)	4	66%	73%	73%	69%	77%	83%	80%	85%	75%	75%		
	3	24%	25%	13%	25%	14%	12%	12%	10%	19%	13%		
	2	10%	2%	11%	6%	9%	6%	8%	5%	6%	12%		
	1	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%		
<b>Federal Way</b>	# of Sales	224	289	265	243	254	313	337	265	209	328		
(King)	4	78%	87%	77%	79%	75%	78%	78%	78%	77%	78%		
	3	16%	5%	18%	15%	16%	15%	16%	14%	18%	17%		
	2	5%	8%	5%	5%	9%	7%	5%	7%	5%	5%		
	1	1%	0%	0%	0%	0%	0%	1%	0%	0%	1%		
<b>Hunts Point</b>	# of Sales	1	-	1	-	1	-	1	-	-	-		
(King)	4	100%	-	100%	-	100%	-	100%	-	-	-		
	3	0%	-	0%	-	0%	-	0%	-	-	-		
	2	0%	-	0%	-	0%	-	0%	-	-	-		
	1	0%	-	0%	-	0%	-	0%	-	-	-		
<b>Issaquah</b>	# of Sales	123	197	212	151	157	190	244	186	143	188		
(King)	4	100%	100%	100%	99%	99%	100%	100%	100%	100%	100%		
	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
	2	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Kent</b>	# of Sales	358	537	428	384	372	477	356	378	335	428		
(King)	4	77%	80%	83%	82%	79%	80%	75%	84%	80%	80%		
	3	16%	12%	11%	11%	13%	14%	18%	9%	13%	13%		
	2	7%	8%	7%	6%	7%	6%	7%	7%	6%	7%		
	1	0%	0%	0%	1%	1%	0%	0%	0%	1%	0%		
<b>Kirkland</b>	# of Sales	151	217	214	182	178	231	224	196	151	223		
(King)	4	98%	100%	98%	99%	99%	99%	99%	99%	99%	100%		
	3	2%	0%	2%	1%	1%	1%	1%	1%	0%	0%		
	2	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Lake Forest Park</b>	# of Sales	17	20	22	19	20	33	30	28	33	33		
(King)	4	100%	95%	100%	100%	80%	100%	100%	100%	94%	100%		
	3	0%	0%	0%	0%	15%	0%	0%	0%	3%	0%		
	2	0%	5%	0%	0%	5%	0%	0%	0%	3%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		

		<u>PRICE POINT</u>		<u>1996</u>				<u>1997</u>				<u>1998</u>	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Medina</b>	# of Sales	5	13	14	4	14	16	13	18	6	22		
(King)	4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Mercer Island</b>	# of Sales	36	71	97	49	52	74	95	63	65	93		
(King)	4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Maple Valley</b>	# of Sales	20	15	8	4	6	-	-	-	-	-		
(King)	4	100%	100%	100%	100%	100%	-	-	-	-	-		
	3	0%	0%	0%	0%	0%	-	-	-	-	-		
	2	0%	0%	0%	0%	0%	-	-	-	-	-		
	1	0%	0%	0%	0%	0%	-	-	-	-	-		
<b>Milton</b>	# of Sales	1	3	1	-	-	2	2	1	1	5		
(King)	4	100%	67%	100%	-	-	100%	100%	100%	100%	80%		
	3	0%	33%	0%	-	-	0%	0%	0%	0%	0%		
	2	0%	0%	0%	-	-	0%	0%	0%	0%	20%		
	1	0%	0%	0%	-	-	0%	0%	0%	0%	0%		
<b>Newcastle</b>	# of Sales	-	1	-	-	4	4	9	1	1	5		
(King)	4	-	100%	-	-	100%	100%	100%	100%	100%	100%		
	3	-	0%	-	-	0%	0%	0%	0%	0%	0%		
	2	-	0%	-	-	0%	0%	0%	0%	0%	0%		
	1	-	0%	-	-	0%	0%	0%	0%	0%	0%		
<b>Normandy Park</b>	# of Sales	10	22	24	7	10	22	23	15	10	25		
(King)	4	100%	95%	96%	100%	100%	100%	100%	100%	100%	100%		
	3	0%	5%	4%	0%	0%	0%	0%	0%	0%	0%		
	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>North Bend</b>	# of Sales	51	62	59	57	45	61	74	61	47	60		
(King)	4	96%	95%	95%	96%	96%	97%	100%	95%	98%	95%		
	3	4%	5%	3%	4%	4%	3%	0%	3%	2%	2%		
	2	0%	0%	2%	0%	0%	0%	0%	2%	0%	3%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Pacific</b>	# of Sales	4	7	15	12	10	22	16	12	3	8		
(King)	4	100%	86%	53%	75%	50%	45%	63%	67%	67%	38%		
	3	0%	0%	7%	8%	30%	32%	25%	17%	33%	50%		
	2	0%	14%	40%	17%	20%	23%	13%	17%	0%	13%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Redmond</b>	# of Sales	214	287	311	249	245	306	349	256	229	320		
(King)	4	100%	99%	99%	100%	100%	100%	100%	100%	99%	99%		
	3	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%		
	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		



		<u>PRICE</u>											
		<u>POINT</u>											
				<u>1996</u>				<u>1997</u>				<u>1998</u>	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2		
<b>Renton</b>	# of Sales	248	329	325	271	271	322	357	305	226	321		
(King)	4	78%	82%	82%	77%	78%	80%	87%	87%	87%	82%		
	3	15%	12%	12%	13%	13%	12%	8%	9%	10%	14%		
	2	8%	5%	5%	10%	9%	7%	5%	4%	3%	4%		
	1	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Seatac</b>	# of Sales	26	42	41	38	46	53	54	36	34	41		
(King)	4	15%	21%	27%	24%	26%	34%	37%	44%	32%	41%		
	3	15%	24%	22%	21%	20%	19%	20%	31%	26%	24%		
	2	12%	19%	29%	21%	20%	6%	17%	6%	18%	7%		
	1	58%	36%	22%	34%	35%	42%	26%	19%	24%	27%		
<b>Seattle</b>	# of Sales	1389	1898	1681	1512	1446	2012	1883	1729	1469	2010		
(King)	4	75%	81%	80%	79%	79%	82%	84%	86%	85%	85%		
	3	12%	10%	11%	10%	11%	9%	8%	8%	8%	9%		
	2	12%	8%	9%	10%	9%	8%	7%	6%	6%	6%		
	1	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%		
<b>Skykomish</b>	# of Sales	1	3	-	-	-	-	6	1	-	3		
(King)	4	0%	33%	-	-	-	-	33%	0%	-	0%		
	3	0%	0%	-	-	-	-	17%	0%	-	33%		
	2	100%	33%	-	-	-	-	17%	100%	-	33%		
	1	0%	33%	-	-	-	-	33%	0%	-	33%		
<b>Snoqualmie</b>	# of Sales	5	11	13	15	4	16	10	14	10	10		
(King)	4	80%	45%	85%	80%	100%	63%	140%	86%	100%	60%		
	3	20%	45%	15%	13%	0%	19%	0%	0%	20%	40%		
	2	0%	9%	0%	0%	0%	19%	0%	14%	0%	0%		
	1	0%	0%	0%	7%	0%	0%	0%	0%	0%	0%		
<b>Tukwila</b>	# of Sales	9	32	23	17	23	22	28	27	16	35		
(King)	4	56%	50%	65%	41%	26%	41%	39%	52%	44%	51%		
	3	11%	25%	17%	24%	30%	23%	21%	22%	25%	23%		
	2	33%	22%	13%	29%	43%	36%	39%	19%	31%	26%		
	1	0%	3%	4%	6%	0%	0%	0%	7%	0%	0%		
<b>Woodinville</b>	# of Sales	103	143	135	118	113	145	165	131	104	125		
(King)	4	100%	99%	100%	100%	100%	100%	100%	100%	100%	99%		
	3	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%		
	2	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Bonney Lake</b>	# of Sales	26	57	35	67	61	93	110	68	26	43		
(Pierce)	4	92%	96%	86%	96%	84%	92%	95%	93%	62%	84%		
	3	8%	2%	11%	4%	15%	5%	5%	6%	31%	12%		
	2	0%	2%	3%	0%	2%	2%	1%	1%	8%	5%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>Buckley</b>	# of Sales	12	19	21	22	10	14	27	30	20	34		
(Pierce)	4	83%	79%	95%	86%	50%	79%	81%	90%	85%	79%		
	3	17%	21%	0%	9%	30%	0%	15%	10%	5%	15%		
	2	0%	0%	5%	0%	20%	21%	4%	0%	10%	6%		
	1	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%		

		<u>PRICE POINT</u>		<u>1996</u>				<u>1997</u>				<u>1998</u>	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Carbonado</b>	# of Sales	-	-	-	1	-	1	1	1	1	1	1	
(Pierce)		4	-	-	100%	-	100%	0%	100%	0%	0%	0%	
		3	-	-	0%	-	0%	0%	0%	0%	0%	0%	
		2	-	-	0%	-	0%	100%	0%	0%	100%	0%	
		1	-	-	0%	-	0%	0%	0%	100%	0%	0%	
<b>U Pierce County</b>	# of Sales	281	375	327	646	644	835	984	906	315	380		
(Pierce)		4	95%	98%	85%	83%	85%	89%	78%	72%	72%		
		3	5%	1%	2%	9%	9%	5%	6%	16%	19%		
		2	0%	0%	9%	8%	5%	4%	6%	11%	8%		
		1	0%	0%	0%	0%	1%	1%	10%	1%	2%		
<b>Dupont</b>	# of Sales	9	17	16	20	31	21	23	13	2	-		
(Pierce)		4	100%	100%	100%	100%	100%	100%	100%	100%	-		
		3	0%	0%	0%	0%	0%	0%	0%	0%	-		
		2	0%	0%	0%	0%	0%	0%	0%	0%	-		
		1	0%	0%	0%	0%	0%	0%	0%	0%	-		
<b>Eatonville</b>	# of Sales	1	4	9	14	23	25	40	22	11	11		
(Pierce)		4	100%	100%	89%	71%	60%	73%	59%	55%	91%		
		3	0%	0%	0%	7%	24%	8%	18%	18%	0%		
		2	0%	0%	0%	7%	8%	15%	14%	27%	9%		
		1	0%	0%	11%	14%	8%	5%	9%	0%	0%		
<b>Fife</b>	# of Sales	-	5	4	6	3	5	2	5	2	5		
(Pierce)		4	-	100%	75%	100%	40%	50%	60%	100%	40%		
		3	-	0%	0%	0%	40%	0%	0%	0%	40%		
		2	-	0%	25%	0%	20%	50%	40%	0%	0%		
		1	-	0%	0%	0%	0%	0%	0%	0%	20%		
<b>Fircrest</b>	# of Sales	-	-	-	-	-	5	6	8	8	9		
(Pierce)		4	-	-	-	-	80%	100%	88%	75%	89%		
		3	-	-	-	-	20%	0%	13%	13%	11%		
		2	-	-	-	-	0%	0%	0%	13%	0%		
		1	-	-	-	-	0%	0%	0%	0%	0%		
<b>Gig Harbor</b>	# of Sales	13	22	273	96	166	159	160	124	208	17		
(Pierce)		4	100%	91%	100%	93%	96%	94%	92%	96%	0%		
		3	0%	9%	0%	1%	1%	1%	1%	0%	18%		
		2	0%	0%	0%	6%	3%	4%	5%	3%	65%		
		1	0%	0%	0%	1%	0%	1%	2%	0%	18%		
<b>Graham</b>	# of Sales	12	1	1	3	-	5	4	-	-	-		
(Pierce)		4	100%	100%	100%	-	100%	100%	-	-	-		
		3	0%	0%	0%	-	0%	0%	-	-	-		
		2	0%	0%	0%	-	0%	0%	-	-	-		
		1	0%	0%	0%	-	0%	0%	-	-	-		
<b>Milton</b>	# of Sales	9	11	4	26	20	27	19	36	9	12		
(Pierce)		4	100%	64%	100%	92%	85%	84%	92%	78%	67%		
		3	0%	18%	0%	4%	7%	11%	3%	11%	25%		
		2	0%	18%	0%	4%	7%	5%	6%	11%	8%		
		1	0%	0%	0%	0%	0%	0%	0%	0%	0%		

		<u>PRICE POINT</u>		<u>1996</u>				<u>1997</u>				<u>1998</u>	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Orting</b>	# of Sales	10	8	6	13	16	13	16	17	12	25		
(Pierce)	4	88%	86%	79%	88%	77%	71%	68%	64%	87%	72%		
	3	8%	14%	19%	6%	16%	29%	16%	23%	13%	28%		
	2	4%	0%	2%	6%	7%	0%	16%	5%	0%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%		
<b>Puyallup</b>	# of Sales	91	150	115	201	249	275	334	284	200	316		
(Pierce)	4	96%	92%	94%	90%	86%	86%	86%	87%	80%	76%		
	3	3%	7%	4%	5%	9%	9%	11%	11%	13%	18%		
	2	1%	1%	2%	3%	5%	4%	3%	3%	7%	5%		
	1	0%	0%	0%	1%	0%	1%	0%	0%	0%	1%		
<b>Roy</b>	# of Sales	-	2	-	8	12	17	18	8	4	9		
(Pierce)	4	-	100%	-	88%	83%	100%	89%	88%	75%	56%		
	3	-	0%	-	13%	8%	0%	6%	0%	0%	44%		
	2	-	0%	-	0%	0%	0%	0%	0%	0%	0%		
	1	-	0%	-	0%	8%	0%	6%	13%	25%	0%		
<b>Ruston</b>	# of Sales	1	2	2	-	-	1	2	-	1	-		
(Pierce)	4	0%	100%	100%	-	-	100%	50%	-	100%	-		
	3	0%	0%	0%	-	-	0%	0%	-	0%	-		
	2	100%	0%	0%	-	-	0%	50%	-	0%	-		
	1	0%	0%	0%	-	-	0%	0%	-	0%	-		
<b>South Prairie</b>	# of Sales	2	3	1	1	1	2	3	-	-	3		
(Pierce)	4	0%	100%	100%	100%	100%	50%	67%	-	-	67%		
	3	50%	0%	0%	0%	0%	50%	0%	-	-	33%		
	2	50%	0%	0%	0%	0%	0%	33%	-	-	0%		
	1	0%	0%	0%	0%	0%	0%	0%	-	-	0%		
<b>Steilacoom</b>	# of Sales	1	2	4	8	13	21	22	25	12	17		
(Pierce)	4	100%	100%	100%	100%	92%	71%	82%	100%	67%	88%		
	3	0%	0%	0%	0%	8%	5%	9%	0%	17%	6%		
	2	0%	0%	0%	0%	0%	14%	5%	0%	17%	6%		
	1	0%	0%	0%	0%	0%	10%	5%	0%	0%	0%		
<b>Sumner</b>	# of Sales	38	82	61	56	59	84	121	96	65	117		
(Pierce)	4	92%	85%	87%	89%	76%	83%	86%	88%	88%	82%		
	3	8%	12%	10%	9%	17%	11%	7%	11%	9%	14%		
	2	0%	2%	3%	2%	7%	5%	7%	1%	3%	4%		
	1	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%		
<b>Tacoma</b>	# of Sales	112	173	164	313	413	605	688	651	592	790		
(Pierce)	4	83%	72%	82%	54%	46%	47%	52%	50%	40%	43%		
	3	5%	9%	7%	18%	12%	15%	15%	14%	21%	18%		
	2	10%	13%	10%	24%	34%	31%	26%	29%	30%	32%		
	1	2%	6%	1%	4%	8%	7%	6%	7%	9%	6%		
<b>Wilkeson</b>	# of Sales	1	-	-	-	1	2	1	-	-	1		
(Pierce)	4	0%	-	-	-	100%	50%	0%	-	-	100%		
	3	0%	-	-	-	0%	0%	100%	-	-	0%		
	2	100%	-	-	-	0%	50%	0%	-	-	0%		
	1	0%	-	-	-	0%	0%	0%	-	-	0%		

		<u>PRICE POINT</u>		<u>1996</u>				<u>1997</u>				<u>1998</u>	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Arlington</b> (Snohomish)	# of Sales	61	83	89	88	93	109	102	123	84	86		
	4	82%	82%	79%	76%	77%	80%	86%	91%	82%	70%		
	3	10%	13%	11%	9%	11%	12%	10%	3%	8%	19%		
	2	8%	4%	9%	14%	12%	8%	2%	6%	8%	10%		
	1	0%	1%	1%	1%	0%	0%	2%	0%	1%	1%		
<b>Bothell</b> (Snohomish)	# of Sales	134	169	154	106	117	147	173	139	121	178		
	4	93%	95%	94%	94%	96%	92%	99%	99%	94%	98%		
	3	7%	5%	6%	5%	4%	8%	1%	1%	3%	1%		
	2	1%	0%	0%	1%	0%	0%	0%	0%	2%	1%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%		
<b>Brier</b> (Snohomish)	# of Sales	12	20	12	12	18	33	30	29	14	25		
	4	83%	95%	100%	100%	100%	100%	97%	100%	93%	88%		
	3	17%	0%	0%	0%	0%	0%	0%	0%	7%	12%		
	2	0%	5%	0%	0%	0%	0%	3%	0%	0%	0%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<b>U Snohomish Cour</b> (Snohomish)	# of Sales	217	206	202	202	171	252	285	264	58	60		
	4	94%	93%	89%	94%	99%	97%	99%	98%	98%	75%		
	3	5%	4%	9%	5%	1%	2%	1%	2%	2%	18%		
	2	1%	2%	2%	1%	1%	0%	0%	0%	0%	3%		
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%		
<b>Darrington</b> (Snohomish)	# of Sales	5	7	4	6	2	3	2	2	2	3		
	4	0%	14%	25%	17%	0%	67%	0%	0%	50%	33%		
	3	20%	14%	25%	0%	0%	0%	50%	50%	0%	0%		
	2	40%	71%	50%	83%	100%	33%	50%	50%	50%	0%		
	1	40%	0%	0%	0%	0%	0%	0%	0%	0%	67%		
<b>Edmonds</b> (Snohomish)	# of Sales	94	183	134	138	115	184	167	152	127	180		
	4	91%	93%	96%	93%	95%	94%	98%	96%	95%	97%		
	3	9%	5%	3%	6%	4%	6%	1%	4%	3%	2%		
	2	0%	2%	1%	1%	0%	0%	1%	0%	2%	1%		
	1	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%		
<b>Everett</b> (Snohomish)	# of Sales	295	369	348	319	322	433	389	381	334	479		
	4	67%	67%	62%	61%	61%	66%	71%	66%	66%	67%		
	3	21%	19%	25%	22%	24%	20%	14%	20%	18%	22%		
	2	11%	13%	12%	17%	15%	13%	13%	14%	15%	11%		
	1	2%	1%	1%	0%	1%	0%	2%	0%	1%	0%		
<b>Gold Bar</b> (Snohomish)	# of Sales	8	9	14	12	8	19	26	20	11	14		
	4	38%	44%	14%	8%	0%	26%	35%	25%	18%	36%		
	3	38%	56%	64%	67%	75%	47%	23%	55%	27%	36%		
	2	25%	0%	21%	25%	25%	26%	38%	15%	55%	29%		
	1	0%	0%	0%	0%	0%	0%	4%	5%	0%	0%		
<b>Granite Falls</b> (Snohomish)	# of Sales	43	36	19	19	12	15	24	8	17	10		
	4	40%	53%	42%	47%	42%	33%	46%	38%	65%	60%		
	3	44%	28%	26%	16%	33%	40%	38%	50%	12%	20%		
	2	12%	17%	21%	21%	25%	27%	13%	13%	12%	20%		
	1	5%	3%	11%	16%	0%	0%	4%	0%	12%	0%		

		<u>PRICE POINT</u>									
		<u>1996</u>				<u>1997</u>				<u>1998</u>	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Index</b>	# of Sales	-	2	4	3	1	-	5	5	2	-
(Snohomish)	4	-	0%	0%	0%	0%	-	0%	40%	0%	-
	3	-	0%	0%	0%	0%	-	0%	20%	0%	-
	2	-	50%	25%	67%	0%	-	40%	0%	0%	-
	1	-	50%	75%	33%	100%	-	60%	40%	100%	-
<b>Lake Stevens</b>	# of Sales	43	67	65	57	54	84	71	67	43	67
(Snohomish)	4	65%	75%	91%	88%	76%	85%	87%	96%	81%	88%
	3	33%	25%	8%	9%	19%	10%	8%	3%	9%	9%
	2	0%	0%	2%	4%	6%	6%	3%	1%	7%	3%
	1	2%	0%	0%	0%	0%	0%	1%	0%	2%	0%
<b>Lynwood</b>	# of Sales	110	160	143	114	105	142	177	152	116	164
(Snohomish)	4	83%	81%	83%	79%	84%	92%	86%	91%	90%	96%
	3	15%	17%	14%	19%	11%	6%	14%	7%	9%	2%
	2	3%	3%	3%	2%	5%	1%	1%	2%	1%	1%
	1	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
<b>Maltby</b>	# of Sales	3	2	3	1	-	-	-	-	-	-
(Snohomish)	4	100%	100%	100%	100%	-	-	-	-	-	-
	3	0%	0%	0%	0%	-	-	-	-	-	-
	2	0%	0%	0%	0%	-	-	-	-	-	-
	1	0%	0%	0%	0%	-	-	-	-	-	-
<b>Marysville</b>	# of Sales	114	163	169	132	129	221	212	200	144	204
(Snohomish)	4	58%	63%	56%	66%	61%	65%	73%	76%	58%	70%
	3	31%	30%	34%	24%	23%	28%	20%	18%	28%	22%
	2	11%	5%	8%	8%	15%	6%	5%	6%	14%	7%
	1	1%	2%	2%	2%	1%	1%	2%	1%	1%	1%
<b>Mill Creek</b>	# of Sales	36	46	52	52	58	86	99	70	43	58
(Snohomish)	4	100%	100%	98%	100%	100%	100%	100%	99%	100%	100%
	3	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
	2	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Monroe</b>	# of Sales	56	74	72	50	83	132	174	141	65	68
(Snohomish)	4	79%	82%	89%	92%	75%	89%	91%	88%	69%	85%
	3	18%	9%	7%	2%	19%	8%	6%	10%	20%	10%
	2	4%	8%	4%	4%	6%	3%	3%	2%	11%	4%
	1	0%	0%	0%	2%	0%	1%	0%	0%	0%	0%
<b>Mountlake Terrace</b>	# of Sales	33	54	42	43	38	56	64	39	39	72
(Snohomish)	4	45%	54%	45%	49%	47%	52%	48%	67%	69%	65%
	3	33%	26%	38%	42%	39%	34%	34%	28%	26%	31%
	2	21%	20%	17%	9%	13%	14%	17%	5%	5%	4%
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Mukilteo</b>	# of Sales	39	74	64	49	44	64	87	64	59	76
(Snohomish)	4	100%	100%	98%	98%	100%	98%	99%	98%	100%	100%
	3	0%	0%	2%	2%	0%	2%	0%	2%	0%	0%
	2	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		<u>PRICE POINT</u>		<u>1996</u>				<u>1997</u>				<u>1998</u>	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Snohomish</b> (Snohomish)	# of Sales		83	137	111	101	106	153	170	132	108	158	
		4	90%	93%	86%	86%	84%	90%	91%	93%	82%	92%	
		3	5%	2%	10%	8%	10%	8%	6%	5%	12%	7%	
		2	5%	4%	4%	6%	3%	2%	3%	2%	5%	1%	
		1	0%	0%	0%	0%	3%	1%	0%	0%	1%	0%	
<b>Stanwood</b> (Snohomish)	# of Sales		30	33	38	33	27	49	58	40	37	58	
		4	70%	88%	66%	85%	44%	67%	84%	70%	65%	72%	
		3	10%	9%	18%	12%	33%	27%	12%	23%	16%	12%	
		2	10%	3%	13%	3%	22%	4%	3%	5%	16%	12%	
		1	10%	0%	3%	0%	0%	2%	0%	3%	3%	3%	
<b>Sultan</b> (Snohomish)	# of Sales		10	12	20	17	20	22	30	22	10	11	
		4	40%	33%	25%	35%	20%	45%	63%	55%	50%	82%	
		3	40%	42%	50%	41%	60%	55%	30%	32%	40%	18%	
		2	10%	17%	15%	18%	20%	0%	3%	14%	0%	0%	
		1	10%	8%	10%	6%	0%	0%	3%	0%	10%	0%	
<b>Woodway</b> (Snohomish)	# of Sales		1	1	4	2	-	3	2	4	3	3	
		4	100%	100%	100%	100%	-	100%	100%	100%	100%	100%	
		3	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	
		2	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	
		1	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	
<b>Bainbridge Island</b> (Kitsap)	# of Sales		41	80	61	59	43	78	62	57	63	102	
		4	100%	99%	98%	97%	95%	100%	97%	100%	98%	98%	
		3	0%	1%	2%	3%	5%	0%	3%	0%	0%	0%	
		2	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	
		1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Bremerton</b> (Kitsap)	# of Sales		145	156	168	161	145	154	161	150	161	211	
		4	55%	44%	53%	53%	52%	42%	50%	50%	40%	41%	
		3	14%	20%	15%	17%	16%	20%	16%	17%	14%	21%	
		2	24%	29%	28%	22%	23%	29%	27%	26%	35%	31%	
		1	6%	8%	4%	7%	9%	10%	6%	7%	11%	7%	
<b>Poulsbo</b> (Kitsap)	# of Sales		48	59	52	47	49	67	56	45	49	77	
		4	88%	81%	85%	87%	82%	69%	75%	84%	78%	79%	
		3	10%	7%	10%	4%	10%	18%	7%	11%	14%	12%	
		2	2%	10%	6%	6%	6%	9%	18%	4%	8%	6%	
		1	0%	2%	0%	2%	2%	4%	0%	0%	0%	3%	
<b>Port Orchard</b> (Kitsap)	# of Sales		84	116	123	93	80	115	118	118	115	153	
		4	65%	64%	65%	70%	65%	60%	66%	55%	63%	63%	
		3	19%	21%	19%	16%	14%	15%	16%	19%	16%	20%	
		2	14%	14%	15%	12%	20%	19%	14%	23%	18%	16%	
		1	1%	2%	2%	2%	1%	6%	3%	3%	3%	1%	
<b>U Kitsap County</b> (Kitsap)	# of Sales		72	72	107	77	71	71	100	87	87	148	
		4	88%	82%	88%	86%	85%	82%	91%	70%	82%	80%	
		3	10%	13%	7%	9%	8%	14%	6%	15%	10%	10%	
		2	3%	4%	5%	5%	7%	4%	3%	13%	6%	9%	
		1	0%	1%	1%	0%	0%	0%	0%	2%	2%	1%	