



Jobs and Housing: “Can’t Have One Without the . . .Other”



“A house is where a job goes at night”

The Housing Partnership

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It is said that a house is where a job goes at night. In large metropolitan areas such as Central Puget Sound, employment and housing are linked in complex ways that have a huge impact on economic development, transportation and the overall quality of life. Because regional economies and housing markets are so large and dynamic, the balance between jobs and housing is not something that can be managed in any precise way. But the degree to which employees can find appropriate housing within a reasonable commute, and the degree to which employers can find workers able to travel to their sites, should be a central concern of local and regional planning.

This paper outlines the issues around the balance of jobs and housing. It begins with a discussion of the importance of this balance and the reasons it can tip in the wrong direction. The second section reviews ways to measure balances, in terms of geography, housing type and commute patterns. The third section discusses ways to incorporate the jobs-housing balance into local and regional planning.

A central theme of the paper is choice. Individuals and families face a bewildering array of choices as they arrange their lives in our society. Not only are they finding jobs, they are changing jobs frequently, commuting to two jobs from the same household and choosing schools for their children. Most households face trade-offs among these choices, all of which have different timing in their lives. And to complicate matters further, people tend to change jobs at a much higher rate than they change homes. In the end, the most useful public policies will emphasize a wide range of housing choices, so that households have the highest likelihood of striking their own balances within their lives.

A second important theme is the focus on sub-region, or commute-sheds. These rough geographic designations are built around employment centers and encompass an area that can offer commutes of under a half hour to most of the major employment sites in the sub-region. The commonly-recognized sub-regions in Central Puget Sound are: South Snohomish County, East King County, Seattle/Shoreline, South King County, and Northern Pierce County. While designation of these sub-areas is not new, the solution to maintaining a good balance of jobs and housing demands that jurisdictions within these sub-areas coordinate planning at a much closer level than they to currently.

Why worry?

One look at any of the major freeway choke points— Lake Washington bridges, the Southcenter Hill, Canyon Park, all of SR-167 – at around 8:00 in the morning shows just how out of balance housing and employment are in the region. Each day, hundreds of thousands of people commute long distances from their neighborhood of choice to their jobs. In the 2000 census, nearly 260,000 people in King, Pierce and Snohomish counties reported a commute time of over 45 minutes each way. And 36,000 of those reported a commute time in

excess of 90 minutes. It is safe to say that many, of not most, of those people stuck in traffic would prefer to live a bit closer to work.

But the inability to find appropriate housing near ones job results in more than just irritation. Long commutes have economic, social and environmental costs for both individual households and the region as a whole.

Housing and job creation

Regional economic development strategies, such as the Prosperity Partnership, aim to strengthen the economic base of the region by attracting and retaining employers that export value to other regions. The jobs created by employers in the economic base, in turn, support retailers, homebuilders, and other service businesses. Many of the kinds of businesses that make up the economic base – manufacturers, large service companies, corporate headquarters, federal government installations – can locate in a variety of places. Each employer has its own set of locational criteria, which are a source of great interest to economic development strategists. Housing is one of those criteria.

The exact relationship between housing and job creation has proved elusive. Instinctively, it seems that high prices and low supply would drive away employers. But many of the really booming parts of the country, and even the world, have severe housing shortages at the same time they continue to prosper. Conversely, many really affordable areas see little job growth. In the Puget Sound area, housing prices have increased well above the rate of inflation for the past ten years, through both a boom and a bust, and job growth is picking up in 2005 even as prices increase by over 10 percent per year.

A recent academic paper explains how this can happen. Two economists working through the Harvard Institute for Economic Research sought to define the relationship between a region's housing stock and its population and job growth. They discovered that the housing supply of a region determines the kinds of jobs that will be created there. An area with an abundant and affordable housing supply will support a workforce with a wide range of skills, and therefore will attract a wide range of employers. Conversely, an area with a tight and expensive housing supply will only attract highly skilled people who can command high wages, and therefore, will only attract employers who can pay high wages.

These findings have very significant consequences for strategies such as the Prosperity Partnership. Efforts to recruit employers that pay moderate wages will prove frustrating if those employers feel that the wages they pay will be insufficient to support the kinds of employees they want. But with the permanent downsizing of Boeing employment, it is exactly those moderate-wage manufacturing jobs that are so badly needed.

Housing and employee recruitment and retention

While most jobs in the region are not at risk of disappearing because of the low availability and high cost of housing, many employers will face frustration finding and keeping employees in low and moderate wage jobs. Areas with expensive and scarce housing still require retail and service employees, but those employees will not be able to live anywhere near their job. Stores, hotels and restaurants cannot afford to pay high enough wages to allow

their employees to live in expensive areas, and as a result, suffer from short-staffing, absenteeism and high turnover.

This points to the obvious fact that a balance of jobs and housing within a commute-shed is not just a matter of overall housing units, but also of housing types and price levels. The imbalance with respect to price levels usually means a shortage of low cost housing, but it can also point to a shortage of luxury housing would attracts executive level employees.

Freeway choke points

It is no coincidence that the points at which the sub-areas of the region intersect are the scenes of the Puget Sound region's worst traffic problems. The physical geography of the region, combined with the limited freeway and highway network, has created a series of choke points in the transportation system. Commuters who must travel between sub-areas will almost invariably encounter at least one serious choke point and have no alternative but to travel through it.

These choke points are operating at full capacity for much of the day, so the only way to get more cars through them is to spread out the time during which the section of freeway is completely full and creeping along. This phenomenon of "spreading the peak" has meant that some sections of freeway flow freely for just a few hours a day. This has a major impact not only on commuters, but on commercial traffic that relies on the freeway network.

Even the most optimistic of plans does not envision these choke points gaining significant new capacity in the foreseeable future, and transit cannot absorb all the growth in commuters. So, the only way to alleviate choke-point congestion – or more realistically, to keep it from getting worse – is to allow more people to live in the same sub-area where they work. As will be shown below, most people currently do work in the same sub-area where they live, but in the future, an even higher percentage will need to do so. We cannot allow the lengthening morning peak to meet the afternoon peak, and create continuous gridlock from 5:00 a.m. to 8:00 p.m.

Spillover housing demand

As noted above, an imbalance of jobs and housing does not bring a region to a halt, but it does have powerful distorting effects. One impact is the spillover of housing demand from high-income, job-rich areas to more affordable areas. But because those affordable areas are tied to their own job base, the rising prices caused by spillover demand push workers in a previously affordable area out, and they, in turn spill over to the next most affordable area.

This phenomenon has unfolded in the Puget Sound region over the past decades, as Seattle and East King County have added tens of thousands of jobs, while failing to add enough housing. This pushes prices up, and sends moderate income households up and down the Interstate-5 corridor in search of homes they can afford. And when these people arrive in South Snohomish, or South King County, they push up prices there, and send the people working in those areas to Pierce and northern Snohomish Counties. This patterns has pushed even further south, with Thurston County now having the greatest price appreciation in the Puget Sound area.

The impacts of spillover demand highlight the planning and governance shortcomings under which the state operates. Each county plans for itself, and if one county does not provide housing to accommodate its own job growth, the adjacent counties will feel the demand pressure, and can do nothing about it. The data below will show how King County has consistently failed to balance job growth with housing growth, resulting in price pressure north and south.

Quality of life

A person who works eight hours a day, sleeps eight hours and commutes one hour has another seven hours for personal time, family time, chores and recreation. An added hour of commute time reduces personal time by about 15 percent. And given all the unavoidable things in daily life, that hour will likely come out of personal and family time.

The people most likely to face this problem are young families that would like to have a detached house with a back yard, but cannot afford to be near the employment centers of Seattle and East King County. Long commutes not only mean less time at home, but they also make it harder to deal with family emergencies, sick children or parents in need of care. Because so few choices of moderately-priced family-friendly housing are available in high cost markets, moderate income families face the unattractive choice between long commutes and stacked-flat housing.

Commuting expense

For those who cannot afford appropriate housing near their jobs, the greater affordability of outlying areas is partially offset by higher commute costs. As gasoline gets more expensive, and stop-and-go traffic reduces fuel economy, long commutes become costly. And in many affordable areas, transit service is scarce, and unlikely to offer a point-to-point commute. Many long distance commuters face a choice between an expensive automobile trip and a time-consuming transit trip.

Where imbalances come from

Homebuilding is a mature, highly competitive industry, with a wide array of participants working in all niches, product types and areas. Labor and materials are widely available, and most builders work from proven plans that will sell easily. The cost of construction – materials and labor – has risen very little in recent years, as higher labor costs are offset by improved equipment and techniques, and new materials are substituted for ones becoming scarce. In other words, a shortage of housing cannot be blamed on lack of capacity or enthusiasm on the part of the homebuilding industry. The source of a jobs housing imbalance must be found elsewhere.

The most likely place to begin looking is in the dirt. Literally. Buildings themselves have become almost a commodity. The challenge lies in finding land on which to build them and the permission to do so. The route from raw land to a finished building lot or an approved multifamily project is strewn with obstacles that can prevent housing growth from keeping up with job growth.

Imbalance between zoning and demand

Nearly all the land available for housing construction is within an urban growth boundary and has an existing zoning classification, so it is easy to tell whether there is an adequate supply of land for the various types of housing that the market demands. An inadequate supply of zoned land will result in too few units available for a particular housing type, and, as noted below, those will be higher priced units.

An interesting illustration of this phenomenon is seen in Seattle, where there is abundant zoning for multi-family housing, but very little vacant land available for single family housing. Apartment builders have been able to take advantage of rising demand for rental housing and have brought thousands of units on the market in the last several years. From 1990 through 1998, multi-family permits averaged about 1,800 per year, and from 1999 through 2004, multi-family permits averaged 4,450 units per year. This rapid increase in the supply of apartments caused rents to remain flat or actually fall from their peak in 1998. During the same period, the net gain of market rate, single family housing was quite small, and continued strong demand for single family houses in Seattle caused prices to rise by over 10 percent per year.

So, it is clear from this example that Seattle does not have a jobs-housing imbalance with respect to apartments, but does have a serious imbalance with respect to single family houses. Zoning in Seattle allows for a robust apartment market, such that people accepting jobs in Seattle who wish to live in an apartment can easily find one that meets their needs and price range. At the same time, the stock of single family houses in Seattle is growing very slowly because, although the city is zoned predominantly for detached housing, there is very little vacant land in those zones. Thus, those people accepting new jobs in Seattle who want a single family house will often need to look outside the city to find a house they can afford.

High land cost limits lower priced housing

Homebuilders still operate from the rule of thumb that the final price of a house should be between three and four times the price of the finished building lot. (This rule also holds even when the homebuilder has done the land development, and, in effect, sold the lot to itself.) A shortage of zoned capacity, relative to demand created by job growth, will push up the price of land and building lots. This, in turn, pushes up the price of the finished homes that can be built, creating a shortage of lower-priced homes.

Thus, a jobs-housing imbalance can be confined to the part of the market that seeks moderately-priced, new-construction detached housing. For example, a family with an income of \$70,000 per year can afford a house priced around \$300,000. New construction homes at this price will be nearly impossible to find in East King County, but can be found in South King County. So although there are a lot of jobs in East King County that pay \$70,000 per year, there is little housing affordable to a family with that income. And the difference is land availability and cost.

Lag time between job growth and housing growth

Business cycles can turn around relatively quickly, with a large number of jobs added within a few months, whereas it takes years to bring new housing on the market. As business cycles

slow down, land developers and multi-family builders tend to reduce their activity so they are not left with inventory during a downturn. But when jobs begin to pick up, they have little in the pipeline. This trend affects both single family and multi-family markets.

Compounding this general problem is the trend in in-migration. People move to the Puget Sound area when the economy is doing well, especially compared to the economy in California (where the vast majority of in-migrants come from). During a recession, many fewer people move to the area, so housing demand arises mostly from new households. And during a recession new household formation tends to drop off also, since fewer people can afford to move out on their own. When the economy picks up, local residents move away from parents or roommates and renters think about buying houses and, at the same time, a wave of in-migrants begins to arrive. Meanwhile, the housing industry is just getting geared up.

A surge in the economy not only causes an overall surge in demand for housing, but it also can lead to demand for higher quality housing, as rising incomes and more stable employment allow people to improve their housing. Since it is easier to build multi-family housing than single family housing in the Puget Sound area, an economic surge puts pressure on the single family market more than the multi-family market, forcing moderate income buyers who can now get into the single family market to look well outside their sub-region.

Imbalance between housing and employment capacity

Jobs and housing would tend to stay in balance if a sub-region had the same capacity for employment as it had for housing employees. In other words, if the market for residential land and the market for commercial land moved at the same pace, job creation would bump up against its limits about the same time that housing bumped up against its limits.

Many of the sub-regions, however, have a much larger capacity for jobs than for housing. Part of the imbalance is simply the result of maturing economies, in which more people work in high density office settings than in low density manufacturing or warehousing settings. At the same time, local governments are much more likely to increase employment capacity than to increase housing capacity.

For example, the core of East King County has very little capacity remaining for single family housing. And yet, high-rise office construction in downtown Bellevue and the continued expansion of Microsoft and other employers in the Overlake area are adding tens of thousands of new jobs to the Eastside, with no end in sight. In both areas, older, low density commercial buildings are being redeveloped into higher density office buildings. Underground parking has become economically feasible in downtown Bellevue, and will become feasible in Overlake, signaling even higher densities. The surge in high-rise housing in Bellevue will accommodate some of the demand created by these employment centers, but will not help that part of the workforce that wants detached housing, the supply of which will grow only very slowly.

Inadequate transportation

As has been discussed, and will be amplified on below, the jobs-housing balance is ultimately a question of commute times. A long-standing, and nearly universal standards for acceptable commutes remains one half-hour. This paper argues that the only way to ensure a commute of that length is to ensure that a commuter working in one of the major employment centers stays within the sub-region surrounding that center. As noted above, the most significant choke points in the regional transportation network lie on freeways and highways where the sub-regions intersect.

As traffic congestion worsens, the radius of the half-hour commute shrinks, and the area within which jobs and housing must balance becomes smaller. The severe imbalance of jobs and housing in Seattle would not be a huge problem if commutes from South King County and South Snohomish County were easy. But those commutes can easily exceed a half-hour and stretch into 45 minutes or an hour.

Transit service can help provide shorter commutes, especially with rail or buses in dedicated rights of way. But for transit to provide a commuter with a real advantage, it must provide service directly from home to work. Long drives to park-and-ride lots, transfers, and long walks from the bus or train to work can easily add another half-hour to the trip. Sound Transit's commuter rail line has opened an easy commute from South King County and Snohomish Counties into Downtown Seattle, but the limited number of seats available will not make a significant dent in the substantial imbalance of jobs and housing in Seattle. First phase light rail lines in Tacoma and Seattle provide service within their sub-regions, so do not help add to the housing stock available to people working in those cities.

Geography of the jobs-housing balance

Discussion of jobs-housing balances often refer to a variety of geographic designations, so it is worth looking at them.

Economic region

Jobs and housing will, by definition, balance at the regional level. After all, just about everyone who works within an economic region lives somewhere within that region. If there is unmet demand for housing in a region, builders will find someplace to construct it, even if those new neighborhoods are far from the actual employment centers. The entire Puget Sound region is, therefore, an appropriate level to look for a target for the ratio of jobs to housing, but it is not the level to try to strike a balance, since that will happen naturally.

County

The county level has several advantages in measuring jobs-housing balances. First, data tend to be aggregated at the county level by a number of agencies, so it is easy to set up apples-to-apples comparisons. Second, a focus on jobs-housing balances will drive toward policies that reside at the county level through county-wide planning policies. Third, the commute-sheds that constitute the best analytic level tend to reside exclusively within one county. The data presented below will begin at the county level.

City or Census-designated place

The planning and policy tools needed to achieve a balance of jobs and housing exist primarily at the city and county level (for unincorporated areas), and city and county councilmembers will make most of the relevant decisions. But decisions by a business about locating a facility, and decisions by individuals about where to live are not necessarily based on city boundaries.

Businesses base their location decisions on a wide range of factors, and will likely look at a larger area encompassing many cities before deciding on a particular location. Some cities are known to be “developer friendly,” but even this only affects those employers who plan to build their own facility. More important than the friendliness of a particular city will be the availability of land or leased space, proximity to transportation, proximity to other related businesses, etc.

For individuals, the famous “Tiebout Hypothesis” claims that, in a fragmented metropolitan area, people choose a city to live in that best meets their own preferences for public services, amenities and taxes. So although the city in which an individual works may offer appropriate housing, other cities in the area may offer a more appealing lifestyle or set of public services. The SR-520 bridge provides an excellent illustration of this, as workers commuting westbound to Downtown Seattle from their cul de sacs on the Eastside pass high tech workers commuting to Redmond from their hip urban neighborhoods.

Another problem with focusing on cities is that many smaller cities simply do not have appropriate settings for commercial development, and a few are naturally dominated by commercial activity. Over half of the cities in the Puget Sound region have fewer than 10,000 residents, and while these cities will have some employment base, it makes little sense to try to balance jobs and housing within them.

Neighborhood

Discussion of jobs-housing balance at the neighborhood level usually involves one of two objectives: bringing jobs to low income neighborhoods and bringing housing to major employment centers.

The poverty of inner city neighborhoods is often attributed to the disappearance of employers from those areas, and it is felt that those neighborhood would be significantly improved by moving jobs back into them. While this is probably the case in many of the large, Eastern and Midwestern cities, it is less so in the Puget Sound area. Low income neighborhoods in Seattle, Tacoma, Everett and some inner ring suburbs are not as large and isolated as their Eastern and Midwest counterparts. Moreover, they do not contain large tracts of developable land that could accommodate industry. As seen by the gentrification of some of those areas during the 1990s, their close-in location makes them attractive commuter neighborhoods.

Encouraging housing development adjacent to major employment centers often does make sense. Mid-rise and high-rise development in Seattle, Bellevue and Tacoma provides the opportunity for people working in those areas to walk to work and to access neighborhood retail and services on foot. This type of development is generally confined to multi-family

housing, however, which will tend to attract singles, childless couples and empty-nesters. Furthermore, this housing tends to be relatively expensive. Focusing on housing at the urban center level can make a major contribution to achieving an overall balance of jobs and housing, but will be concentrated in just a few market niches.

Sub-regional level

While the balance of jobs and housing can be addressed at the regional, city or neighborhood level, the sub-regional level makes the most sense. As noted, sub-regions contain significant concentrations of employment and a wide variety of housing types, and, therefore, should offer commuters a choice of lifestyles within a half hour commute of their job. The main challenge is to ensure that housing growth within these sub-regions keeps up with job growth, so the market can offer a wide range of price points and minimize spill-over demand to other sub-regions.

The dilemma of addressing the jobs-housing balance at the sub-regional level is that these geographic areas exist in a market and planning sense, but not in an administrative or policy sense. Data is not often gathered on a sub-regional basis, and there are no planning or regulatory mechanisms at the sub-regional level to correct an imbalance between jobs and housing.

Measuring jobs and housing in the Puget Sound area

While achieving the right balance of jobs and housing is hardly a precise undertaking it is possible to see if certain sub-regions have significant imbalances and/or a trend that will result in future imbalances. This process begins by measuring current ratios of jobs and housing across the region, then at projections for future growth over the next 10 to 20 years. The housing trends are then matched against current and projected commuting patterns.

The basic unit of measure will be the jobs/housing ratio, which is the number of jobs divided by the number of housing units. The data used will vary somewhat, since it comes from different sources. Key data are:

Covered employment. This is the most accessible and reliable data on employment, which comes from the Washington State Department of Employment Security. It counts “covered employees,” that is, workers who are covered under the state’s unemployment insurance program. This excludes some workers, such as the self-employed, but because it is based on mandatory filings by employers, it is the most accurate data.

Total employment. The projections from the Puget Sound Regional Council, which will be discussed below, use an estimate of total employment, which includes all jobs, whether covered by unemployment insurance or not. This will be higher than the figures for covered employment.

Housing units. Counts of housing units will come from the census as well as the Puget Sound Regional Council, which uses modeling techniques to extrapolate from census data. The Census Bureau also tracks building permits.

Households. The PSRC forecasts provide projections of households, a figure which does not count vacant housing units.

Current ratios

Tables 1 and 2 show two alternate methods of calculating the jobs-housing ratio. Table 1 use covered employment and housing unit count. This understates the ratio by counting fewer jobs than exist in the economy.

Table 1: 2004 Jobs-housing ratio for Puget Sound covered employment and housing units

	Covered Employment	Housing Units	Ratio
King	1,093,698	785,995	1.39
Kitsap	80,304	97,928	0.82
Pierce	249,387	300,084	0.83
Snohomish	210,600	256,767	0.82
Total	1,633,989	1,440,774	1.13

Sources: Puget Sound Regional Council, Wash. St. Department of Employment Security

Table 2 measures total employment and households. This provides a more accurate count of jobs, but undercounts housing by eliminating vacant housing units, which can vary between about three and seven percent of the housing stock. The measures in Table 2 will be used later to look at PSRC forecasts for the Puget Sound region.

Table 2: 2000 Jobs-housing ratio for Puget Sound Total employment and households

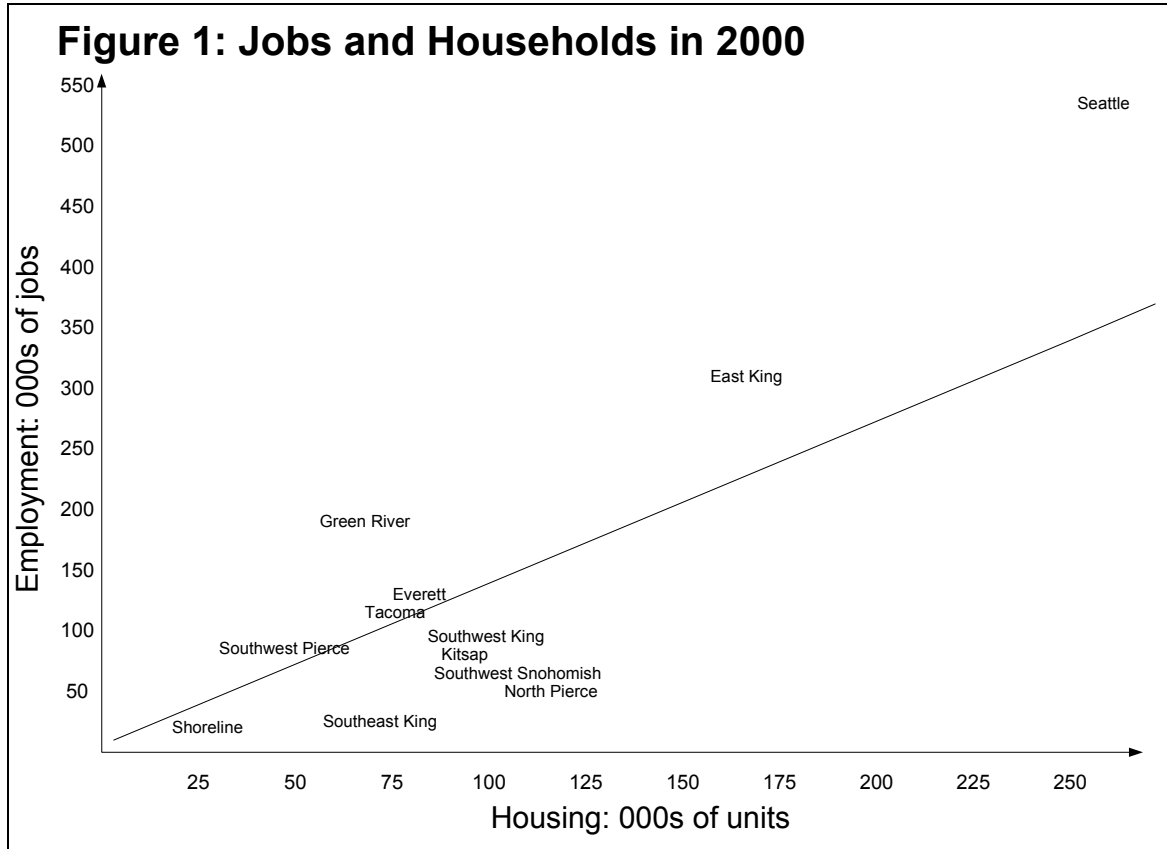
	Total Employment	Households	Ratio
King	1,188,577	710,916	1.67
Kitsap	83,934	86,416	0.97
Pierce	258,991	260,800	0.99
Snohomish	217,291	224,834	0.97
Total	1,748,793	1,282,966	1.36

Source: Puget Sound Regional Council

No matter which data is used, the important thing is to look at how the various areas compare with each other and with the region-wide total. A ratio above the region-wide total indicates a shortage of housing, and a ratio below indicates a shortage of jobs, or a tendency towards long

commutes. With either the Table 1 or the Table 2 method, King County shows up as short on housing, and the other three counties show up as short on jobs.

Figure 1 breaks out the data from Table 2 into sub-regions, and shows which are balanced, and which have a shortage of either jobs or housing. The diagonal line indicates the region-wide ratio of jobs to households. Sub-regions below the line have a surplus of housing over jobs, and sub-regions above the line have a surplus of jobs over housing. (the sub-regions illustrated here are somewhat finer-grained than the six sub-regions named in the introduction. The use of these smaller areas makes it easier to envision commuting patterns)



Trends in job-housing balance

The other measure to pay attention to is the trend in the balance of jobs and housing. Over time, as both employment and housing grow throughout the region, do areas tend to move more toward a balance or away from one? The impacts discussed above, such as employee recruitment and retention, should have self-correcting mechanisms: employers open facilities near a ready workforce, and avoid places with too little housing. Trends in job and housing creation should show whether these mechanisms have a chance to work.

Table 3 shows jobs housing ratios for 1990, 2000 and 2004. 2000 was the peak of employment in the region, just prior to the recession that the region is still climbing out of. By 2000 the jobs-housing ratio had climbed to 1.25 for the region as a whole, and up to 1.57 for King County. Pierce and Snohomish Counties saw their ratios climb, but not nearly as

steeply. The ratios have fallen since 2000, likely for two main reasons. First, the late 1990s saw a building boom in apartments, many of which came into the housing stock after 2000. Second, employment has still not reached its pre-recession peak of nearly 1.7 million covered jobs.

Table 3: Change in Jobs-housing ratios covered employment and housing units

	1990	2000	2004
King	1.42	1.57	1.39
Kitsap	0.86	0.77	0.82
Pierce	0.81	0.85	0.83
Snohomis	0.86	0.89	0.82
Region	1.17	1.25	1.13

Sources: Puget Sound Regional Council,
Wash. St. Department of Employment Security

Table 3 also shows that, while King County is still a net importer of workers from adjacent counties (i.e. its jobs-housing ratio is higher than that of the region as a whole), the source of those workers may be shifting. The jobs-housing ratio in Snohomish County fell more sharply than in King County, indicating that a higher percentage of Snohomish County residents are working in King County. The ratio actually rose in Pierce County, which is surprising, given the degree to which workers in King County have been traveling to Pierce County in search of affordable neighborhoods. One explanation for this may be the sharp rise in prices and development activity in Thurston County. Because King County workers have pushed up Pierce County prices, workers in Pierce County have begun to move to the more affordable areas of Thurston County.

So, as employment picks up and multi-family construction remains flat, the jobs-housing ratio in King County will likely rise again, putting further pressure on housing markets in Snohomish and Pierce Counties.

Projections for the more distant future do not show substantial improvement in jobs-housing ratios. Figure 2 shows the Puget Sound Regional Council forecast for 2020 for jobs and households in the region. It shows the same basic pattern as seen in Figure 1. The major difference is that Southwest Snohomish Counties and Northern Pierce Counties become even more pronounced as bedroom communities. Figure 3 shows the projected growth in households and employment that will establish the pattern shown in Figure 2. Under these projections, Seattle, East King County and the Green River Valley will continue to produce jobs at a much higher rate than housing, and North Pierce, Southwest Snohomish and Kitsap will produce much more housing than jobs.

If these forecasts are accurate, they suggest the perpetuation of patterns of jobs, housing and commutes that have proved unsustainable with the existing transportation network. For example, the balanced growth shown for the Everett area, combined with the higher emphasis

Figure 2: Forecast for Jobs and Households in 2020

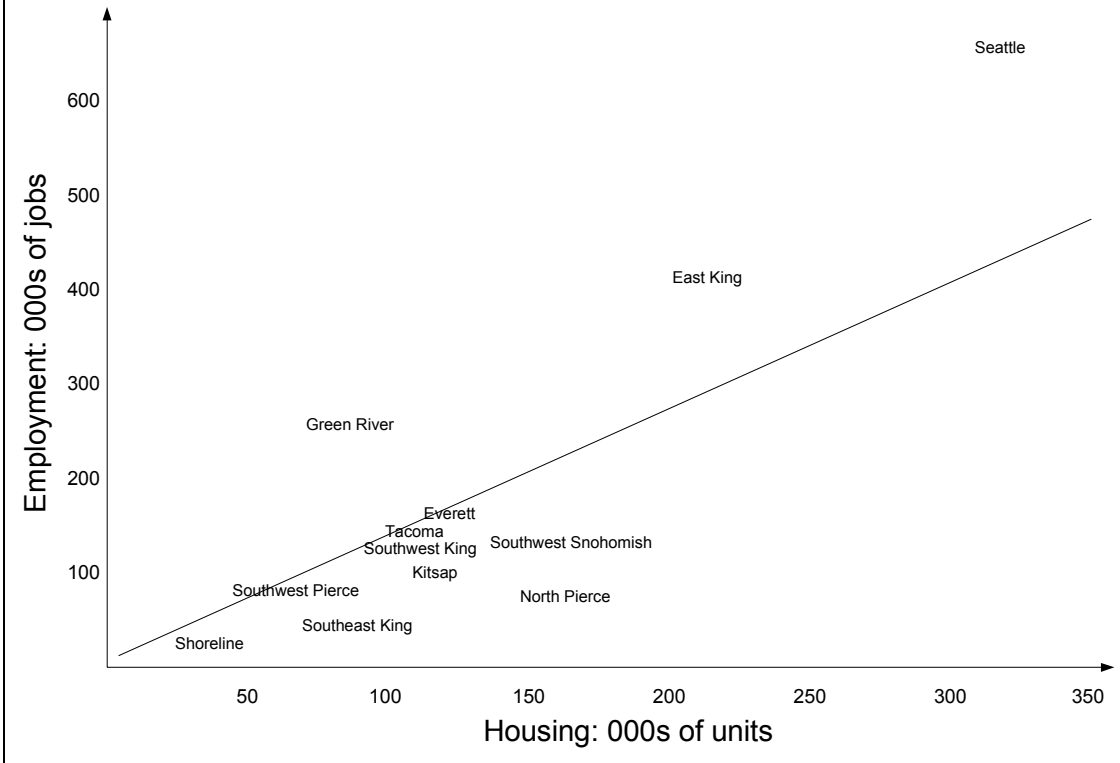
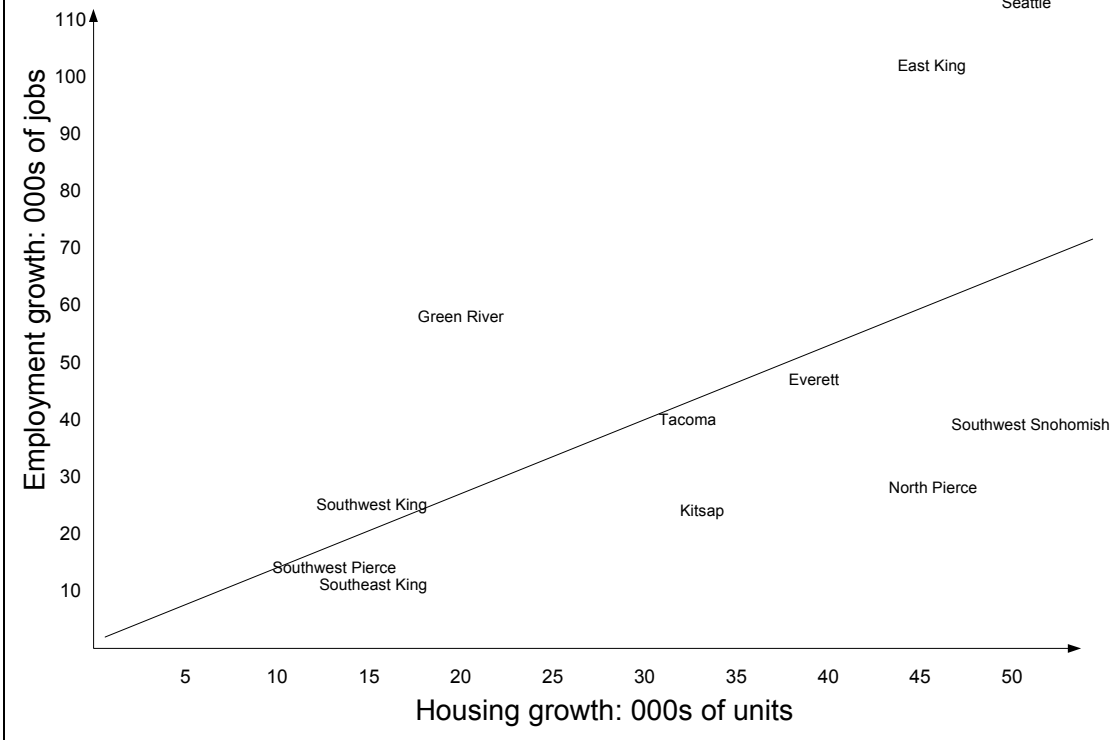


Figure 3: Forecast for Job and Household growth to 2020



on housing growth in Southwest Snohomish County means another 20,000 to 30,000 commuters flowing into King County. Similarly, balanced growth in Southeast and Southwest King County, plus heavy job growth in the Green River Valley and housing-rich growth in North Pierce County means even more strain on the SR-167 corridor.

Jobs-housing balance and housing types

No one lives in a “unit.” Households choose places to live that meet their needs and financial capacity and, to the largest extent possible, that offer a neighborhood and community they find agreeable. Looking at balances of jobs and overall units provides a rough idea of whether balances are being achieved, but to truly understand the dynamics of commutes and employment patterns it is necessary to examine the housing stock by types.

Table 4 shows the distribution of housing by type in the four counties. Throughout the region, nearly two thirds of all housing is either single family detached or common wall (duplex or townhouse). One fourth of the housing units are part of complexes of five or more apartments or condominiums. King County has a higher percentage of units in multi-family complexes, and a much lower percentage in mobile homes.

Table 4: Housing types in 2000

	Single Family/ Townhouse	2 to 4 units	5 or more units	Mobile home, etc	Total
King	60.2%	6.4%	30.7%	2.7%	100.0%
Kitsap	70.0%	6.7%	13.2%	10.1%	100.0%
Pierce	67.2%	7.1%	17.5%	8.3%	100.0%
Snohomish	65.7%	6.5%	20.0%	7.8%	100.0%
Total	63.3%	6.5%	24.9%	5.2%	100.0%

Source: U.S. Census Bureau

Table 5: Housing type share of total permits 2001-2005

	Single Family/ Townhouse	2 to 4 units	5 or more units	Total
King	55.4%	5.0%	39.6%	100.0%
Pierce	79.7%	5.4%	15.0%	100.0%
Snohomish	78.0%	7.8%	14.2%	100.0%
Total	67.5%	5.8%	26.7%	100.0%

Source: U.S. Census Bureau

Table 5 shows the production of housing in the region by these same types. (Census Bureau data does not break out Kitsap County and does not record mobile home permits). Of note in these data is that Pierce and Snohomish Counties have been producing a higher proportion of

single family and common wall housing than their existing housing stock, while King County is seeing a trend toward more multi-family housing. This pattern again suggests that households priced out of the single family and townhouse market in King County are moving to the adjacent counties.

The favorable trend in the jobs-housing ratio for King County seen in Table 2, then, is something of an illusion, since the bias in King County toward multi-family construction means that more units will house single people and retirees, and therefore have fewer jobs per housing unit. In other words, with a higher proportion of its housing stock in multi-family, King County should have a lower than average jobs-housing ratio. Rather, as seen above, King County's ratio is higher than average.

Commute Patterns

Patterns of commuting provide an easy way to identify an imbalance of jobs and housing. Table 6 shows the destination of all morning trips take in King, Pierce and Snohomish Counties. This will include non-work trips, but it can be safely assumed that the vast majority of trips taken from 7:00 to 9:00 involve a commute to work

Table 6: Destination of morning trips in 2000*

Begins in:	Trips staying in subarea	Trips ending in				
		Seattle/Shoreline	East King Co.	South King County	Snohomish County	Pierce County
Seattle/Shoreline	85.4%	-	5.9%	5.0%	2.9%	0.8%
East King Co.	75.9%	15.0%	-	4.4%	3.6%	1.1%
South King Co.	74.8%	15.9%	5.8%	-	0.6%	3.0%
Snohomish Co.	69.8%	16.4%	12.0%	1.3%	-	0.5%
Pierce Co.	80.3%	2.9%	5.0%	11.2%	0.7%	-

* 7:00 to 9:00 a.m. Does not include trips that leave the three-county region

Source: Puget Sound Regional Council

The data in Table 6 show that most trips stay within their sub-region of origin, but that the trips taken outside the various sub-regions are predictable from the data on jobs and housing. The areas with a higher than average ratio of jobs to housing – Seattle, East King County, Green River Valley – are attracting commuters from the areas with more abundant housing – South Snohomish County, North Pierce County.

Table 7 shows how this picture is projected to look in 2020. The forecasters at the Puget Sound Regional Council believe that the pattern will not change substantially. This means that currently overloaded commuting corridors will be expected to absorb growth in the same proportion as their share of trips today.

Table 7: Forecast destination of morning trips in 2020*

Begins in:	Trips staying in subarea	Trips ending in				
		Seattle/Shoreline	East King County	South King County	Snohomish County	Pierce County
Seattle/Shoreline	84.3%	-	6.6%	5.3%	2.9%	0.9%
East King Co.	73.9%	15.8%	-	5.2%	3.8%	1.2%
South King Co.	75.6%	13.8%	6.7%	-	0.8%	3.1%
Snohomish Co.	67.7%	16.1%	13.7%	2.1%	-	0.4%
Pierce Co.	78.1%	5.6%	3.7%	11.7%	0.8%	-

* 7:00 to 9:00 a.m. Does not include trips that leave the three-county region

Source: Puget Sound Regional Council

Table 8 shows the numbers of additional trips forecast for each of the origin-destination pairs. It is difficult to image that the routes across and around Lake Washington will absorb another 20,000 commuters from the Eastside to Seattle, or that Interstate 5 and SR 167 can absorb another 19,000 commuters heading from Pierce County into the Green River Valley. Since the corridors between these sub-regions are currently operating at capacity, a major increase in transit usage or carpooling will be necessary to allow these trips to happen.

Table 8: Forecast increase in morning trips by 2020*

Begins in:	Trips staying in subarea	Trips ending in				
		Seattle/Shoreline	East King County	South King County	Snohomish County	Pierce County
Seattle/Shoreline	75,553	-	8,850	6,231	2,829	1,362
East King Co.	74,266	19,966	-	8,371	4,841	1,858
South King Co.	74,722	5,376	9,876	-	1,677	3,473
Snohomish Co.	111,579	26,864	29,304	6,087	-	749
Pierce Co.	104,463	17,807	883	18,789	1,577	-

* 7:00 to 9:00 a.m. Does not include trips that leave the three-county region

Source: Puget Sound Regional Council

But the real question raised by Table 8 is whether the various sub-regions will build enough housing to allow the commuters forecast to remain in their sub-region to actually do so. Will Seattle/Shoreline see enough housing to generate over 75,000 new morning trips? If there is not enough housing, will the jobs still be there?

The jobs-housing balance and the planning process

At the outset, this paper admitted that the balance of jobs and housing cannot be managed in a precise way: there are too many variables at work and too little information about them. But the paper also discussed the consequences of allowing the ratio of jobs and housing to get too far out of whack. The jobs-housing balance should be seen as an essential benchmark that indicates the degree to which land use planning and regulatory systems are themselves in balance, such that sub-regions can support their own economic growth within their boundaries.

The balance of jobs and housing should take a central place among planning processes of cities, counties and regions. Although much of the data in this paper has centered on counties, the appropriate level to monitor the jobs-housing balance in the Puget Sound area is the six sub-regions: Snohomish, Seattle/Shoreline, East King, South King, Kitsap and Pierce. For King County this represents a new layer of planning, so the recommendation is not made lightly. But we cannot have a strategy in which housing in Enumclaw serves job growth in Ballard, and housing in Federal Way serves job growth in Bellevue. Our transportation system cannot handle that strain, and individuals and families should not have to choose between appropriate housing and excessive commutes.

Integrating the jobs-housing balance into planning will require:

Working together within sub-regions. Focusing on the balance of jobs and housing will require local governments to work together to an extent not yet attempted. The current system of housing targets is not very results-oriented, and does not specify what sorts of housing are needed. Local governments need to focus not just on the population figures from OFM, but on the actual housing needs being generated by employment growth. And they need to decide how best to meet the needs for various housing types, dividing responsibility among themselves for production of them.

Assembling data. The data sources for both jobs and housing are well established, and building and maintaining an accurate picture of both should not be difficult. The important thing is that the data go into some detail about both the types of jobs being created and the types of housing being constructed. The two should match. And the data cannot be just a snapshot, but should use rolling totals over several years, taking into account the year-to-year variability of both job and housing growth.

Understanding markets. Those who track housing markets – builders, realtors, relocation specialists – have real-time information on what is working well in a given market and what is missing. As noted, the types of jobs being created will dictate to a large degree the types of housing that are needed. Local governments should keep in regular contact with market experts so they can track anticipated needs.

Reexamining zoning and regulations. When certain types of housing are found to be lacking in a sub-area, local governments need to find new and creative ways to meet the housing needs generated by job growth. For example, in many areas where detached single

family houses have become very expensive, townhouses have become the new entry-level housing. Many areas lack sufficient zoning for townhouses, duplexes small-lot houses and other alternatives to expensive detached housing.

Provide density bonuses for affordable housing. Voluntary density bonuses are an excellent way to add inexpensive units to the local housing stock. For example, most suburban areas have few studio apartments, making it difficult for low and moderate income singles to find affordable rentals. A bonus program could encourage the inclusion of studios in multi-family complexes.

Conclusion:

The disturbing observation about the housing market of the past several years has been the continued steep rise in prices in the face of flat employment growth and historically low rates of in-migration. The Puget Sound economy has now begun to pick up steam, and with a record year for airplane orders at Boeing, the next decade looks very bright on the job front. In-migration has begun to increase, as the California economy flattens out. All signs point away from a speculative bubble as the cause of the current surge in housing prices, and with job and population growth on the rise, we can expect prices to continue to increase rapidly.

If historic patterns persist, the response of the housing market to the rise in the job market will be to push moderate income workers further and further to the periphery of the region, as well-paid workers drive up prices of scarce housing near job centers. In the current planning regime, no one is in charge of ensuring that housing development matches job development, so while we congratulate ourselves on pulling our economy out of the rut of the past several years, we consign more and more people to punishing commutes.

This needs to change. The Prosperity Partnership has demonstrated that the region can work together to pursue jobs and economic development. The same leaders promoting that program need to understand that their efforts will be in vain if the housing market cannot keep up with job creation. A parallel effort is needed to get local governments working together to ensure that every job create by the Prosperity Partnership has a home to go to at night not too far away.