



## BRIEFLY

Efforts to improve economic development and the business climate in Washington State must recognize that, along with transportation, education and the regulatory environment, the state's housing stock has a great influence on the health of the economic environment.

## GIVE'EM SHELTER

A five-part series examining the availability and affordability of housing in Washington State.

Part 1

# Housing for Economic Development

Housing and economic development are closely linked, in both direct and indirect ways. A strong housing sector and a strong economy reinforce each other. As jobs and rising incomes produce demand for housing, housing construction, in turn, provides jobs and business opportunities. This brief looks at the various ways that housing interacts with the economy and describes ways that the dynamics within the housing market can both help and hurt the economy of the state.

## HOUSING AND THE NATIONAL ECONOMY

Although housing markets are local, the consumption, maintenance, construction and sale of housing adds up to a huge factor in the national economy. For 2004, consumption of housing services (i.e. the implicit rents on owner-occupied housing and the explicit rents on rental housing) exceeded ten percent of GDP, while household operations were another seven percent of GDP. Residential fixed investment was nearly six percent of GDP.

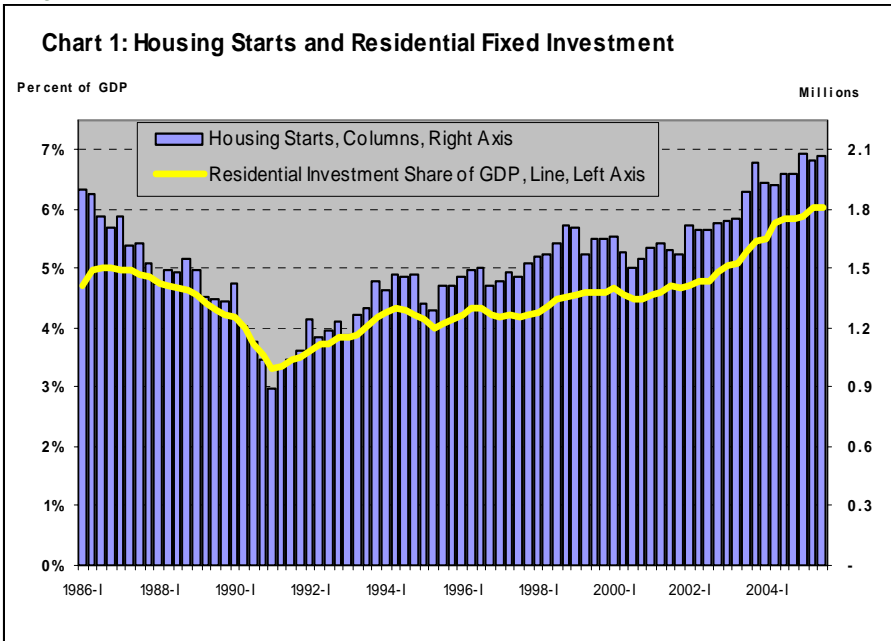
In recent years, housing construction has had an important role in keeping the national economy in recovery mode. During 2003 and 2004, housing construction contributed about 12 percent to the growth of the national economy, versus 4 percent during the 1990s (Council of Economic Advisors 2005). The year 2004 saw construction started on 1.95 million housing units, the most housing starts since 1978. For 2005, starts are forecast to top 2 million. (Council of Economic Advisors 2005, Global Insight).

Chart 1 shows how housing construction continued to expand as the economy as a whole flattened out in 2001. The 1990-91 recession was marked by a fall in construction activity. Not so in 2001. During the 1990s, housing starts averaged about 1.4 million per year. As the economy peaked in 2001 and the country turned into a recession, housing starts grew, keeping the recession from getting worse. Further growth in starts in 2003 and 2004 provided bounce to the recovery. Low interest rates and new mortgage financing tools kept housing demand strong. During the recession year of 2001, the housing industry built 40 percent more units, on a per capita basis, than it did during 1991.

The ever-present threat that climbing interest rates will reduce housing demand makes economic policy-makers very nervous. Looking at the numbers, both in terms of spending and investment, it is easy to see why.



Chart 1: Housing Starts and Residential Fixed Investment



Housing represents a large share of our economy’s investment. Table 1 shows the components of private (business and household) investment in 2000 and 2004. Business investment was actually lower overall in 2004 than in 2000. Residential investment, in contrast, was up 50 percent. Note that in 2004, homeowners and investors put more money into housing than business put into information processing, software and industrial equipment combined.

Investments in housing have had a further impact on economic performance in recent years, as owners take advantage of low interest rates and rising home prices to borrow against the value of their homes. During the past recession, this stream of cash made a dent in otherwise lower consumption nationally. The 2002 Economic Report of the President notes:

According to the Federal Home Loan Mortgage Corporation (Freddie Mac), holders of conventional, conforming mortgages liquefied about \$59 billion in equity in the first three quarters of 2002. . . . Some survey research suggests that about half of this \$59 billion would be allocated toward consumption and home improvements (two sources of aggregate demand), which would have raised GDP by about 0.4 percent above its baseline level through the first three quarters of the year (Council of Economic Advisors 2003)

Federal Reserve Board Chairman Alan Greenspan also took note of the impact of housing and mortgage financing on the nation’s economy:

The lowest home mortgage rates in decades were a major contributor to record sales of existing residences, engendering a large extraction of cash from home equity. A significant part of that cash supported personal consumption expenditures and home improvement. In addition, many households took out cash in the process of refinancing, often using the proceeds to substitute for higher-cost consumer debt. That refinancing also permitted some households to lower the monthly carrying costs for their homes and thus freed up funds for other expenditures. Not least, the low mortgage rates spurred sales and starts of new homes to very high levels. These developments were reflected in household financing patterns. Home mortgage debt increased about 13 percent last year, while consumer credit expanded much more slowly. (Greenspan 2004 )

The willingness of individual households to make large investments in homes, combined with efficient and innovative mortgage financing mechanisms makes the housing market a key piece of the national economy. It provides mechanisms for equity growth, liquidity and financial flexibility for individual households, while also providing relatively safe, productive investments for institutions through secondary mortgage markets.

## HOUSING AND THE STATE AND LOCAL ECONOMY: DIRECT BENEFITS

Discussions of economic development often exclude housing, despite the fact that it is an enormous industry. This exclusion is likely based on a belief that housing is not a part of the economic base of a state or region, that housing, unlike manufacturing, does not bring new money in from outside. But this view is wrong, at least in the short run. The money that funds purchases of new homes is raised on national (even international) capital markets and is new money to the region.

**Table 1: Components of Investment**

	2000		2004	
	\$Billions	Percent	\$Billions	Percent
<b>Business</b>				
Structures	313.2	18.7%	298.4	15.9%
Information processing equipment and software	467.6	27.9%	447.0	23.9%
Industrial equipment	159.2	9.5%	145.3	7.8%
Transportation equipment	160.8	9.6%	151.9	8.1%
Other equipment	131.2	7.8%	156.2	8.3%
<b>Residential</b>				
Structures	439.5	26.2%	665.4	35.5%
Equipment	7.4	0.4%	8.4	0.4%
<b>Total</b>	<b>1,678.9</b>		<b>1,872.6</b>	

Furthermore, no economy can function properly without a robust housing stock. By providing places for employees to live, customers for retail and service businesses and taxes for state and local governments, housing plays a crucial role in making state and regional economies thrive. In this section, the role of housing in the state and local economy will be discussed in terms of direct, measurable benefits, such as overall economic impact, employment and retail sales.

## ECONOMIC IMPACT OF HOMEBUILDING

The overall economic impact of homebuilding on a regional or state economy can be measured using economic input-output modeling tools. The National Association of Homebuilders (NAHB) has developed a model for assessing the economic impact of homebuilding on regional economies that uses local inputs to derive impacts specific to a regional housing market.

The Master Builders Association of King and Snohomish Counties commissioned a report based on this model in 2004 that measures the

**Table 2: Economic impact of building 100 units**

	Local Wages and Salaries	Local business owners' income	Local taxes	Local jobs supported
100 Single family units	\$14,869,000	\$3,242,000	\$2,817,000	311
100 Multi-family units	\$9,124,000	\$2,139,000	\$1,386,000	188

Source: National Association of Homebuilders

impact of homebuilding on the Seattle metropolitan area. The data in the report is presented in terms of impacts of the construction of 100 single family or 100 multi-family units. Table 2 shows the direct (payments to people working on the construction site), indirect (payments to suppliers, off-site contractors and professional service providers) and

induced (cycling incomes through the local economy) impacts on wages and salaries from construction as estimated by the NAHB model.

The two counties for which the model was modified – King and Snohomish – issued permits for nearly 18,000 housing units in 2004. Using the NAHB estimates, the impact of building activity in those two counties is summarized in Table 3



The preceding data is based on homebuilding in King and Snohomish Counties, and reflects market preferences and cost structures in those counties. Extrapolating this data to the rest of the state is difficult be-

cause of wide variation in housing markets. New homes, both single family and multi-family, built in the Central Puget Sound area (and King County in particular) will tend to be larger and more elaborately appointed, and therefore more expensive, than homes built in most of the rest of the state.

The U.S. Census reports that in 2004 for King and Snohomish Counties the value of single-family construction was 39 percent of the statewide total, while multi-family construction was 49 percent of the statewide total. We

**Table 3: Economic impact of 2004 housing construction**

	Local Wages and Salaries	Local business owners' income	Local taxes	Local jobs supported
King Co. single family	\$940,910,320	\$205,153,760	\$178,259,760	19,680
King County multi-family	\$477,002,720	\$111,826,920	\$72,460,080	9,829
Sno. Co. single family	\$732,893,010	\$159,798,180	\$138,849,930	15,329
Sno. Co. multi-family	\$113,411,320	\$26,587,770	\$17,227,980	2,337
Total, all units	\$2,264,217,370	\$503,366,630	\$406,797,750	47,175
			<b>Total impact</b>	<b>\$3,174,381,750</b>

Sources: National Association of Homebuilders, Washington Center for Real Estate Research

can apply these percentages to get ballpark estimates of statewide homebuilding impacts.

First consider wages. The Bureau of Economic Analysis estimates that the total of wages paid to employees in the State of Washington in 2004 was just shy of \$150 billion. Extrapolating from the wages paid in homebuilding in King and Snohomish Counties, a rough estimate of statewide homebuilding wages would be \$5.5 billion, suggesting that homebuilding accounts for about three percent of wages paid in the state. This understates the true impact, since much of the income associated with homebuilding comes in the form of business owner income earned by very small contracting enterprises, and this income is not reflected in wage data. Business owner income is another \$1.2 billion.

### JOBS AND SMALL BUSINESS IN THE HOMEBUILDING SECTOR

A tour through a large subdivision under construction vividly shows the breadth of employment in the homebuilding industry. At one end, painters, appliance installers and landscapers are finishing up houses ready for their new owners. In the middle, framers, roofers, plumbers, electricians and drywall mechanics are trying to keep out of each other's way. At the other end, in the early phases of the development, heavy equipment operators are clearing and grading, while concrete workers are building foundations.

Workers in all these trades are typically employed by independent subcontractors who move around the region from one site to another, and often from one builder to another. Subcontractors and their employees may drift into commercial construction, remodeling or repair work, and workers in the lower-skilled positions may move into other occupations as work varies. As a result of this, employment data for the homebuilding sector is subject to some uncertainty.

Table 4 shows the average employment in various segments of the homebuilding sector and associated trades for 2004.

Many of the trades represented, such as painters, roofers, plumbers and electricians, do a substantial part of their work as repairs or service to



existing homes or commercial buildings, and that work would not be considered part of the homebuilding sector. But since many firms work both in new construction and service, it is very difficult to break out the

**Table 4: Employment in homebuilding and trades, 2003**

	Number of firms	Total wages paid (\$1,000s)	Total employees	Average employees per firm
Land subdivision	348	\$84,852	1,826	5.25
New single-family general contractors	4,097	\$397,136	13,039	3.18
New multifamily general contractors	96	\$24,000	622	6.48
Residential trade contractors total	10,221	1,212,822	42,536	4.16
Dry wall contractors	683	\$117,646	4,492	6.58
Electrical contractors	1,065	\$179,890	5,381	5.05
Finish carpentry contractors	749	\$70,497	2,501	3.34
Flooring contractors	511	\$46,097	1,676	3.28
Framing contractors	768	\$69,064	2,707	3.52
Glass and glazing contractors	104	\$19,086	619	5.95
Masonry contractors	400	\$30,840	1,124	2.81
Painting contractors	1,259	\$87,113	3,840	3.05
Plumbing and HVAC contractors	1,271	\$226,629	6,902	5.43
Poured foundation contractors	576	\$57,367	2,183	3.79
Roofing contractors	542	\$76,917	2,812	5.19
Siding contractors	348	\$24,949	1,057	3.04
Site preparation contractors	767	\$85,540	2,805	3.66
Structural steel contractors	29	\$8,706	221	7.62
Tile and terrazzo contractors	213	\$24,089	759	3.56
Other equipment contractors	28	\$6,723	234	8.36
Other exterior contractors	54	\$5,253	189	3.50
Other finishing contractors	118	\$14,648	513	4.35
All other trade contractors	736	\$61,769	2,521	3.43
Total	14,762	\$3,751,282	58,023	3.93

Source: Washington State Department of Employment Security

data. Offsetting this data discrepancy, to some degree, is the fact that so many of the trade contractors are sole proprietorships, in which the income of the owner is not counted in the data (the data count employees who are “covered” by unemployment insurance, which excludes business owners).

Nevertheless, what is striking is the degree to which the employment structure of the industry is dominated by the specialty trades. As the firm size data show, contractors themselves are very small employers, relying on their network of subcontractors to do the actual work of building homes. And the subcontractors are, in turn, mostly very small businesses.

The homebuilding industry, despite rising barriers to entry and the emergence of more national builders, is still very fragmented. The top 20 builders in the Puget Sound region were responsible for only about one fourth of the single family homes built in King, Pierce, Snohomish and Kitsap counties. The builder holding the number 20 position on the Puget Sound Business Journal list of builders anticipates building about 25 houses a year, meaning the vast majority of the state’s 4,000

homebuilders are working on just a handful of houses at a time. (Puget Sound Business Journal 2004)

The diffuse nature of the homebuilding industry – both the number of builders and their use of subcontractors for nearly all work – has allowed for entrepreneurial opportunities and easy entry of new players. At the same time, consumers have benefited from the intense competition, while being protected by land use and building codes. This industry structure, however, is eroding, due to the high cost of land in many areas of the state, and the complexity of the land development process. It is getting more and more difficult for small builders to find inexpensive lots on which they can build the modest homes that their financial resources allow.

## HOUSING AND RETAIL DEVELOPMENT

A key component of local economies is the retail sector, which provides convenience, services, jobs and tax revenues.

The vast majority of retail development is driven by housing construction. Planning for retail begins with a count of “rooftops” to determine

if there are enough potential customers to justify new retail space and stores. Home ownership rates are another key determinant of a potential retail market, signaling stability and spending power.

The basic measures of a retail customer base are “trade areas.” Beyard and O’Mara define these areas in three tiers that roughly correspond to concentric circles around a store. The primary trade area contains 70 to 80 percent of the customer base, the secondary trade area contains another 15 to 20 percent, and a tertiary area contains scattered customers farther out.

Table 5 shows some basic guidelines for the primary trade area of various sizes of shopping centers, and Table 6 shows guidelines for different types of individual retail outlets. (Beyard and O’Mara 1999, White and Gray 1996)

A trade area will often be able to support more than one competitor in a category, since customer preferences and loyalty are divided within any population. Thus, isolated communities that fall below the thresholds in Table 6 may still support a single store in one category.

Since the trade area is defined in terms of both population and distance, housing density will strongly affect the willingness of retailers to open new locations. As sparsely populated areas fill in, providing more customers within a short distance, they become attractive to retailers. For example, a low-density area may only support a small supermarket, but with significant housing increases, it will support a larger community shopping center, to the benefit of both current and new residents.

Retail also plays a major role in local government finance. Since sales taxes are collected at the point of sale, and do not acknowledge the residence of the purchaser, a jurisdiction with a weak

retail presence surrenders part of its tax base to neighboring jurisdictions if it does not offer its residents opportunities to shop locally.

Table 7 shows the per-capita retail sales tax collected in 2004 for pairs of neighboring jurisdictions in the state, as well as the per-capita collections for the entire county in which those cities lie. Cities with collections higher than the county total have more than their share of retail presence, and those with lower collections than the county-wide total have less than their share of retail presence (note that this may be due to factors in addition to population and housing). These differences –

**Table 5: Primary trade areas for shopping centers**

Type of Center	Minimum population support required	Radius	Driving time
Super regional	300,000 or more	12 miles	30 minutes
Regional	150,000 or more	8 miles	20 minutes
Community	40,000–150,000	3–5 miles	10–20 minutes
Neighborhood	3,000–40,000	1½ miles	5–10 minutes

Source: Beyard and O’Mara, 1999

**Table 6: Primary trade areas for stores**

Type of store	Minimum population support required	Radius
Supermarket w/pharmacy	50,000–70,000	Urban: 1–2 miles Suburban: 3–5 miles
Drugstore (e.g. Bartells, Walgreens)	20,000–25,000	Urban: 1 mile Suburban: 2–3 miles
Discount store (e.g. Fred Meyer)	150,000–200,000	5 miles
Electronics (e.g. Best Buy)	250,000	5–10 miles
Home improvement (e.g. Lowes)	150,000 plus 70,000 single family homes	4–8 miles

Source: White and Gray, 1996



very significant in some cases – show the differences in revenues available to jurisdictions with a strong retail presence and those with a weaker retail presence. This tax revenue will, in turn, have an impact on the ability of a jurisdiction to provide infrastructure and services to support economic development efforts.

**Table 7: Sales tax shifts**

	Per capita sales tax collections
Entiat	\$31
Wenatchee	\$208
Chelan County total	\$172
Port Angeles	\$154
Sequim	\$325
Clallam County total	\$139
Spokane Valley	\$164
Cheney	\$96
Spokane County total	\$151
Bellevue	\$319
Newcastle	\$104
King County total	\$212
Lynnwood	\$463
Mountlake Terrace	\$65
Snohomish County total	\$134

Sources: Dept. of Revenue, Office of Financial Mgmt.

Many factors come into play in retail location decisions, especially in a complex metropolitan area. But those decisions always begin with a count of potential customers, and those customers are found living in the area’s housing stock. This is seen most dramatically in large downtown areas that have a substantial employee presence during the day, but that “roll up the sidewalks at 5:00.” Downtown residents and their retail spending make the difference between a sterile urban core and an “18-hour city.”

**HOUSING AND THE STATE AND LOCAL ECONOMY: SUPPORTING EMPLOYEES**

Aside from its direct benefits, housing enables an economy to function by providing a place for employees to live. The quality, price and convenience of an area’s housing stock have a direct relationship to the ability of businesses to recruit and retain employees and on the quality of life those employees will have. This relationship is difficult to quantify, but very real. Following are some facets of the relationship between housing and employment:

**Commute times and pool of talent.** When looking for a job, people tend to confine their search to what they consider a reasonable commute. Most Americans prefer to commute no

more than a half-hour, or maybe 40 minutes, so that radius will define the bulk of the talent pool from which employers can draw. This works fine if there is a variety of housing – and therefore a broad cross section of potential employees – within a half-hour radius of an employer. But if there is a lack of housing suitable for the income levels offered by an employer, the pool of potential employees shrinks.

The most extreme example of this problem occurs in resort communities, where the bulk of jobs do not pay well and housing is very expensive. But the same problem happens in affluent suburban areas with high housing costs and poor transit service to more affordable areas. Whereas housing costs can vary widely in a region, wage rates cannot vary enough to compensate. When labor markets tighten, businesses like hotels, restaurants and senior citizen care facilities located in high cost areas can have a great deal of trouble filling jobs and serving their customers.

**Commute times and job turnover.** When people are forced to make long commutes to their jobs from more affordable neighborhoods, an extra layer of stress is added to their lives. Commutes can be unpredictable, so extra time needs to be built in to avoid tardiness. Family emergencies become more difficult to attend to when children or aging parents are an hour or more away. If transit is not an option, commute costs can mount, especially with rising gasoline prices.

All these stresses add up to the potential for high job turnover. An individual may accept a job with a long commute just to become employed, but if a new job turns up closer to home, they may take it. This is espe-



cially true in lower skill jobs where it is easy to move from one employer to another. But from an employer point of view, such turnover is very expensive – hiring and training is costly even at the lowest skill levels.

An adequate supply of housing at moderate price levels in all employment markets helps ensure that employers can improve retention by hiring within their commute shed.

**Housing and migration.** Washington State has long benefited from the willingness of talented people to relocate to the state. With a high quality of life and many forward-looking industries, the state attracts people from around the country and the world. Chart 2 shows the two components of population change in Washington for the past 15 years. Natural increase (births minus deaths) is quite stable, while net in-migration (people coming to the state minus people leaving the state) varies from year to year. While the recent recession slowed the rate of net in-migration, the state remains a very attractive place to move. Unlike the recessions of the early 1970s and the early 1980s, when it became negative, net in-migration remained positive through the recent recession and is now rebounding.

But who is moving here and how do they affect the housing market?

According to the Census Bureau, people moving long distances are more likely to have higher education levels and to be moving to accept a new job. Conversely, it is very unlikely that many immigrants to Washington are unemployed people with low education levels and low income potential. (Schachter 2001)

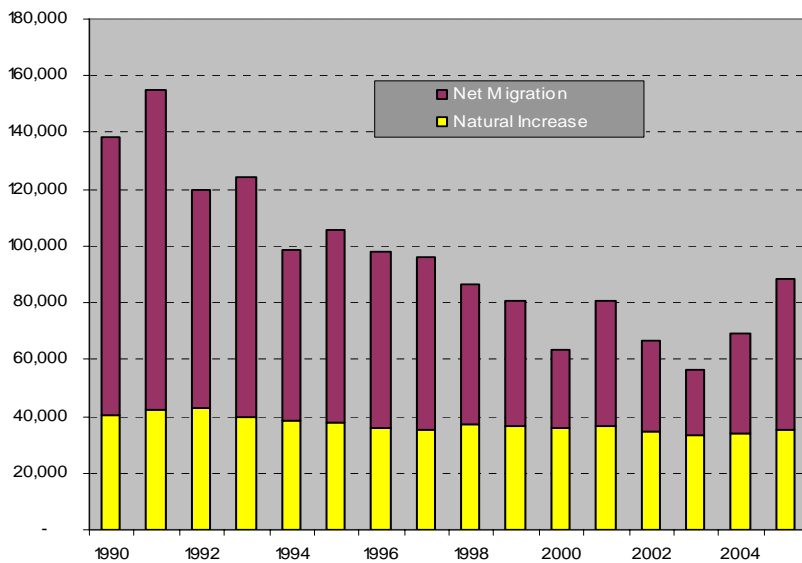
This means two things. First, in-migrants are likely to have higher incomes and therefore add to the pool of people competing in the owner-

occupied housing market, helping to drive up prices in the face of limited supply. Second, they are more likely to bring equity with them from their state of origin. California continues to be far and away the largest source of in-migrants to Washington State. In 2000, 8.3 percent of state residents reported being born in California, up from 7 percent in 1990. An average of 30,000 Californians moved to Washington each year in the late 1990s. That state’s high real estate values mean that many Californians have ample money to put into the Washington market. (U.S. Census Bureau)

So while people moving to the state for jobs can, because of their higher income levels, likely find the housing

they need, these in-migrants add to market pressures that are felt by moderate and lower income people already in the state. The attraction of talented people to the state should be a plus for the economy, but the pressure on the housing market will be felt by those already here.

Chart 2: Washington State Population Growth





## HOUSING AND THE STATE AND LOCAL ECONOMY: IMPACT ON SPENDING

The longstanding rule of thumb has been that expenditures for housing should take up no more than 30 percent of a household’s income. The other 70 percent goes to food, clothing, transportation, healthcare, entertainment etc. When housing supply is constrained and costs rise, lower income families can find themselves spending more than 30 percent of their income for housing, displacing other expenditures. This squeeze on consumption has obvious impacts on the quality of life for these families, but it also has an impact on the economy as a whole.

A significant part of local economic activity is driven by the circulation of wages through the retail sector. Employment in stores, restaurants, gas stations, movie theaters and other establishments depends on discretionary spending by local residents. When expenditures for local retail and services is displaced by high payments for housing, the local economy suffers, since it is much less likely that housing expenditures will end up circulating back through the economy.

The National Housing Conference Center for Housing Policy studied the impact of high housing costs on the expenditure patterns of moderate and low income families. The study found that when families must spend more than 30 percent of their income for housing, they trade off

expenditures in several areas, most notably in transportation. Table 8 shows the spending patterns for three types of households, grouped according to the burden of housing cost. (Lipman 2005)

The data show two notable implications for a regional economy. First, those spending more than 30 percent of their income for housing are spending

significantly less on transportation, which means they are buying fewer cars and spending less on gas and maintenance at the local retail level. Second, with fewer transportation resources, they will be dependent on transit routes and therefore less likely to be part of the larger regional labor pool.

A further impact of high housing expenditures is felt by state and local government. Rents and mortgage payments are not subject to sales tax, whereas the retail sales most likely to be displaced by those payments are taxable. Discretionary spending in the economy is an important source of sales tax revenue, and high housing costs will cut into those tax collections.

### CONCLUSION

Housing does not drive economic development for more than brief periods, but it does enable, stabilize and sustain national, state and local economies. The size of the housing construction and supply sector and its huge employment base is, by itself, enough to swing economies.

The relationship between housing and economic development at the state and regional level is, in many ways quite obvious, but also mad-deningly difficult to quantify. Housing cost, availability and location

**Table 8: Expenditure trade-offs in response to high housing costs**

Family housing burden	Percent of income spent on:				
	Housing	Food	Healthcare	Clothing	Transportation
No housing cost burden	Less than 30%	17%	9%	4%	23%
Moderate housing cost burden	31% to 50%	18%	7%	4%	13%
High housing cost burden	50%	15%	4%	2%	7%

Source: Lipman, 2005



are among a much wider series of variables that individuals and employers consider when making personal and business decisions, and everyone will make trade-offs a little bit differently.

Nonetheless, every employee needs to live somewhere they can afford, preferably in a home that meets their needs within a reasonable commute distance and with convenient retail and other services nearby. A well-housed employee is a more stable employee, and stable employees are a necessity for a strong business climate.

Efforts to improve economic development and the business climate in Washington State must recognize that, along with transportation, education and the regulatory environment, the state's housing stock has a great influence on the health of the economic environment.

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