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JOBS-HOUSING BALANCE & RESIDENTIAL LOCATION DECISIONS

As American metropolitan areas expand outward, planners and policy-makers are charged with the tasks of decreasing traffic congestion, increasing accessibility to jobs and affordable housing, improving quality of life, and protecting the environment. Policies promoting jobs-housing balance attempt to address these issues by locating housing close to jobs. Proponents of jobs-housing balance contend that locating housing close to jobs alleviates commuter travel, reduces spatial mismatch, and leads to more efficient and sustainable land use patterns. Opponents question whether or not a jobs-housing balance actually leads to a greater proportion of people living closer to their jobs, distinguishing between balance and self-containment, and citing trends indicating an increase in two-wage earner families, a decline in work-related travel, and factors other than job proximity influencing residential choice.

This policy brief, which is divided into two parts, examines the effects of jobs-housing balance policy on residential location decisions. Part I provides of an overview of jobs-housing balance policy, describing what it is, how it works, and the extent to which it has been used in American cities. Part II looks at studies on jobs-housing balance and attempts to answer three key questions. First, does jobs-housing balance policy actually accomplish the objectives it sets out to accomplish? If so, is jobs-housing balance best achieved through public policy or natural market forces? Finally, if public policy is used to promote jobs-housing balance, should it be administered at the local, regional, or state level? It concludes that jobs-housing balance policy is more apt to bring jobs and workers closer together if coupled with policies aimed at self-containment. Whether or not public policy or market forces are appropriate, and the level at which policy should be administered, depends largely on location and circumstances.

Part I: Definition, Motivation, Description and Background

Jobs-housing balance policy emerged in the late eighties following rapid growth of jobs into suburban areas. First proposed by Robert Cervero (1989) to reduce peak-period traffic congestion and air pollution, jobs-housing balance policies and regulations strive to equalize the proportion of jobs to housing in specified areas. The basic idea is that metropolitan areas with separate land uses in which all jobs are located in "Site A" and all housing is located in "Site B" will generate more automobile trips at greater distances than if Sites A and B each had

equal proportions of jobs and housing. In theory, a perfect jobs to housing ratio of one will lead to greater efficiency, equity, quality of life, and environmental viability. Efficiency is promoted by reducing travel times, thus decreasing waste in the form of lost labor and leisure time due to traffic congestion. Greater equity results by increasing housing availability and providing affordable housing to low-income workers near new suburban jobs, thus reducing spatial mismatch. Quality of life is enhanced by greater accessibility to jobs and services, improved health and safety, increased diversity, and more open-space and recreational opportunities. Finally, environmental quality improves due to decreased automobile dependency, resulting in less air pollution and land consumption.

Many American metropolitan areas have enacted jobs-housing balance policies. The Twin Cities' metropolitan land use plan, *Blueprint 2030,* seeks to increase the percentage of households located within two miles of the region's largest employment concentrations. (Met Council, 2003) In 2001, Boulder initiated a "Jobs to Population Balance Project", which called for rewriting zoning ordinances to balance an excess of jobs, provide affordable housing, and decrease the 40,000 commuters coming into the city daily. (Boulder Valley Comprehensive Plan, 2003) The Southern California Association of Governments adopted regional plans to redirect nine percent of job growth to "housing rich" areas and five percent of housing to "jobs-rich" areas. (Cervero, 1996) During the late 1980s, Toronto directed additional housing toward its jobs-rich central core to alleviate traffic congestion. (Nowlan and Stewart, 1991)

PART II: Studies, Evaluation and Conclusion

Jobs-Housing Balance, Self-Containment and Measurement Techniques

While many metropolitan areas have promoted jobs-housing balance, the question remains of whether or not it succeeds in bringing workers closer to their jobs. Before answering this question, it helps to have a better understanding of how jobs-housing balance is measured. Researchers commonly use community-level parcel data to calculate the ratio of jobs to housing units. A variation of this method replaces the "housing" component with "employed residents" to provide a more accurate indication of balance. A second measure of jobs-housing balance calculates the ratio of job accessibility to housing accessibility. Since accessibility is a continuous variable, data for calculating accessibility is generally derived using travel behavior data to multiply origins by destinations and discounting the travel cost between them. (Levinson & Krizek, 2003)

While these techniques provide measures of balance, they do not measure self-containment. The distinction between the two is important. Jobs-housing balance simply refers to housing availability proportionate to the number of jobs in a given area. Self-containment, on the other hand, refers to the share of local jobs held by local residents. (Cervero, 1996) The more local jobs filled by local residents, the more self-contained the area. Of course, self-containment is a matter of scale; large metro regions are by nature more self-contained than small communities. Nevertheless, a balanced community may not be self-contained, and a self-contained community may not be balanced. The bottom-line is that providing housing near jobs doesn't guarantee that workers employed at those jobs will live in that housing.

Thus, we must also be aware of techniques used to measure self-containment. One method computes the amount of "waste" in travel time that occurs by subtracting the minimum required commute to nearby jobs from the actual commute time. The greater the waste, the less self-contained the community. The downside of this measure is that it ignores individual transaction costs involved with moving to be close to jobs. The other measure of self-containment is the "Independence Index". Developed in 1969 by Ray Thomas, the Independence Index is the number of internal work trips divided by the sum of the external work trips. (Cervero, 1996) The higher the index, the more self-contained the community.

Does Jobs-Housing Balance Succeed at Bringing Workers Closer to Their Jobs?

Using both a jobs-employed residents ratio and Independence Index, Cervero (1996) found that even when jobs-housing balance occurred, it did not always bring workers closer to jobs. Using the City of Pleasanton, California as an example, he explained that even though the city was balanced, workers employed in Pleasanton couldn't afford to live there. In fact, Pleasanton residents - who worked in the San Francisco core - and Pleasanton workers - who lived even further out - had some of the longest commutes in the region. A closer look at studies focusing on jobs-housing balance as it pertains to efficiency, equity, quality of life, and environmental viability sheds light on why this is so.

Cervero and Landis (1995) found that commutes in balanced census tracts were, on average, 29 percent shorter than those in unbalanced tracts in the Seattle –Tacoma metropolitan region, leading to greater efficiency in the region. However, recent studies have shown that "subsistence" travel trips –those having to do with getting to and from work – are decreasing in proportion to "maintenance" and "discretionary" travel trips. (Levinson and Krizek, 2003) Thus, even if jobs-housing balance reduces commuting times and distances, it does nothing to

decrease non-work-related trips. Since maintenance trips – those having to do with daily shopping and services – represent the highest proportion of all travel trips, perhaps a services-housing balance may be a more appropriate policy.

Despite increased efficiency for some commuters, the fact remains that many workers are unable to locate in residential areas close to their jobs, which leads us to the issue of equity. Low wage earners often do not have access to employment in suburban job centers and cannot afford to relocate there. This distance between workers and jobs is referred to as "spatial mismatch". Balanced cities that make high-priced housing available do not reduce spatial mismatch, in fact, adding high-end housing often displaces local workers. (Kain, 1992) Self-containment policies stipulating a match between housing stock and the economic profile of an area's workers do a much better job of addressing spatial mismatch (Inter-Regional Partnership, 1998)

Even if people are able to locate in neighborhoods near their jobs, many are unwilling to do so. Wilson (1960) found that people consistently chose "good neighborhoods" over accessibility to jobs. Neighborhood characteristics such as low density, beauty, recreational opportunities, and healthy environments for raising children were far more important determinants than proximity to work. Furthermore, the criteria people use when deciding which neighborhood to reside in changes with stage in life. For example, young singles may choose to live in trendy areas located close to school, work, or friends. Families with young children often choose to live in a good school district. Retirees prefer to live close to health care facilities, recreational opportunities, and areas with high scenic amenities. Increasingly, proximity to jobs plays a smaller role in residential location decisions. Schelling (1977) and Krugman (1998) further contend that individual decisions to live close to people like themselves or to not be the minority drive large-scale urban patterns. Jobs-housing balance does not address this issue. Nor does it address the fact that many households have two-wage earners working in different locations, or that two to five years is considered the average job tenure. (Granovetter, 1972) Given the importance of micro-motives and transaction costs involved with moving, it seems that, once again, self-containment policies might better address quality of life issues as they influence residential choice. Closing bonuses for people purchasing homes close to where they work, distance surcharges, and congestion pricing might reduce transaction costs or give more weight to job proximity in residential decision making. (Maryland Department of Planning, 2003)

Finally, we must look at how jobs-housing balance impacts environmental viability. By reducing commuting times, jobs-housing policy leads to cleaner air, better water quality and less land consumption by reducing auto-dependency and the need for roads. Surprisingly, land use regulations seeking to protect undeveloped land, such as urban growth boundaries and large-lot zoning, often lead to an imbalance of jobs and housing by restricting the amount of homes that can be added to "job-rich" areas or driving up the cost of housing. (Cervero, 1996) Thus, to be effective, planning regulations must mutually benefit the environment, jobs-housing balance, and self-containment. Furthermore, provisions for higher density and mixed-use development should be incorporated into jobs-housing and self-containment policies.

Is Jobs-Housing Balance Best Achieved By Public Policy or Market Forces?

Many communities have achieved jobs-housing balance via natural market processes, particularly those with housing rich" areas where jobs followed labor pools. (Cervero, 1996) Where housing has been added to jobs-rich areas, the results have not been as positive. Failure to attain a jobs-housing balance has been attributed to local planning decisions aimed at controlling growth, phasing infrastructure development, or excluding affordable housing, rather than to regional market conditions. (Cervero, 1996)

At What Level Should Jobs-Housing Policy Be Administered?

Since local planning failure most often contributes to both unbalanced and non-contained communities, regional or state-level intervention through public policy seems appropriate. (Cervero, 1996) Of course, the question of which policies to enact is subject to debate. Disagreements over transportation policy, such as congestion pricing, versus tax base sharing, fair share programs, or numeric quotas will likely rage on well into the future, and the applicability of any policy will vary greatly by location and circumstances.

Conclusion

On a scale of one to four, with one high and four low, I would give jobs-housing balance policy a three for bringing workers closer to jobs and addressing problems associated with efficiency, equity, quality of life, and environmental viability. However, coupled with self-containment policies and administered at a regional or state-level, I would give it an adjusted score of one and a half. By promoting housing availability that matches local workers' income, I believe these two policies together can lead to more responsible urban development.

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