

UCLA
Working Paper Series

Title

Job Accessibility and Welfare Usage: Evidence from Los Angeles

Permalink

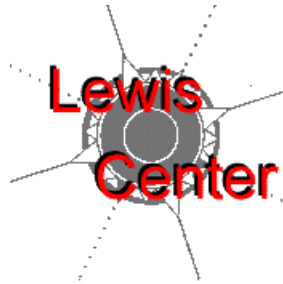
<https://escholarship.org/uc/item/6d897664>

Authors

Ong, Paul M.
Blumenberg, Evelyn

Publication Date

1997-03-01



Lewis Center for Regional Policy Studies

Working Paper Series

Job Accessibility and Welfare Usage: Evidence from Los Angeles

By: Paul Ong and Evelyn Blumenberg

This research was supported by The Urban Institute's Transition from Welfare to Work Small Grants Program. We thank individuals in the California Department of Social Services, the California Employment Development Department, the Los Angeles County Department of Social Services, and UC Data who provided us with access to welfare and firm data for Los Angeles. Finally, we owe thanks to Anthony Rizzo for his diligent research assistance on this project. Although we received support from many places and individuals, responsibility for all errors lies with the authors.

Working Paper #19 in the series

The Lewis Center for Regional Policy Studies

School of Public Policy and Social Research
3250 Public Policy Building
Los Angeles CA 90095-1656

Director: Paul Ong

Phone: (310)206-4417

Fax: (310) 825-1575

<http://www.sppsr.ucla.edu/lewis>

March 1997

**Job Accessibility and Welfare Usage:
Evidence from Los Angeles**

**Paul Ong, Professor
Department of Urban Planning
School of Public Policy and Social Research
University of California, Los Angeles**

**Evelyn Blumenberg, Postdoctoral Fellow
Department of Policy Studies
School of Public Policy and Social Research
University of California, Los Angeles**

This research was supported by The Urban Institute's Transition from Welfare to Work Small Grants Program. We thank individuals in the California Department of Social Services, the California Employment Development Department, the Los Angeles County Department of Social Services, and UC Data who provided us with access to welfare and firm data for Los Angeles. Finally, we owe thanks to Anthony Rizzo for his diligent research assistance on this project. Although we received support from many places and individuals, responsibility for all errors lies with the authors.

Job Accessibility and Welfare Usage: Evidence from Los Angeles

ABSTRACT

Previous scholars have explored the effects of local labor market conditions on welfare usage. However, none of these studies use direct measures of geographic access to nearby jobs. Responding to this limitation, our research combines data from the 1990 Census with three administrative data sets to examine the effect of *geographic job access* -- defined as the relative supply of low-wage jobs located within a 3-mile radius of a census tract -- on welfare usage rates in Los Angeles. After controlling for other characteristics likely to affect welfare behavior, we find that welfare usage declines as geographic job access increases. This relationship holds not only among poor African Americans, the subject of much of the scholarship on job access and economic opportunity, but also among Whites, Asians, and Hispanics.

1. Introduction

Over the last few years, culminating in the enactment of Temporary Assistance to Needy Families (TANF), there has been a broad shift in U.S. welfare policy from one of federal guaranteed assistance to state block grants and from one of income support to that of time-limited assistance. While Aid to Families with Dependent Children (AFDC) was designed originally as an entitlement program intended to keep women with children at home, today's welfare system limits the number of years the poor can receive public assistance. The success of this dramatic reform in the welfare system rests on programs and policies that facilitate recipients' transitions from welfare to work. Academic scholarship on welfare largely has examined the supply-side determinants of welfare usage, in other words, the individual characteristics of recipients that influence welfare participation. While such factors as education, family obligations, and work motivation clearly influence welfare usage, welfare dynamics also are affected by the urban spatial structure of cities -- the geographic location of jobs and residences. Specifically, this research examines the effects of neighborhood job opportunities on welfare usage rates.

Previous scholars have explored the relationship between local labor market conditions and welfare dynamics by including in their analyses labor market characteristics (Fitzgerald, 1995; Hoynes, 1996), as well as proxies for recipients' relative access to jobs (Rosenbaum and Popkin, 1991; Osterman, 1991; Rosenbaum, 1995; Ong, 1996a; Ong, 1996b). None of these approaches, however, precisely measures the relative access welfare recipients have to nearby jobs that meet their particular skills and experience. Responding to the limitations in previous studies, we combine data from the 1990 U.S. Census, the Los Angeles County Department of Social Services, and the California Employment Development Department to examine the effect of *geographic job access* -- defined as the relative supply of low-wage jobs located within a 3-mile radius of a census tract -- on welfare usage rates.

The relationship between the geographic location of jobs and measures of economic status has been emphasized in studies of the spatial mismatch hypothesis and centered around waning economic opportunities for African Americans who live in job-poor, inner-city neighborhoods (Holzer, 1991; Kain, 1992). In this study, we find that access to jobs reduces welfare usage rates among not only African Americans but also among Non-Hispanic Whites, Asians, and Latinos. The relationship between welfare usage rates and access to neighborhood jobs underscores the importance of linking two, somewhat separate, areas of public policy -- welfare and urban policy. The concluding section of this paper discusses particular policy mechanisms, such as local economic development, housing, and transportation policies, that can potentially increase job access among welfare recipients and, ultimately, reduce welfare usage.

2. Job Access and Welfare Usage

Welfare usage is determined not only by personal characteristics, such as education, family structure, and work-related values, but also by labor market conditions. As both economic activity and labor demand increase, employment opportunities expand, creating less competition for jobs. In an economic environment of growth and vitality, welfare recipients face less employment competition and more easily find jobs (Fitzgerald, 1995; Vartanian, 1995; Hoynes, 1996). Studies show that temporal and spatial variations in the economy affect welfare usage rates. Fitzgerald (1995) finds, for example, that cross-sectional, county-level variations in the unemployment rate or per capita sales affect welfare exits. And combining time-series and cross-sectional data, Hoynes (1996) shows a relationship between the economic characteristics of metropolitan areas and welfare duration.

Extending the relationship between economic opportunities and welfare, a number of scholars assert the importance of local or neighborhood job opportunities in reducing welfare usage. Using the census tract as the unit of analysis, Osterman (1991), for example, finds that job-rich neighborhoods have lower welfare usage rates. However, his analysis is limited by the lack of a demand-side measure of jobs. Instead, Osterman uses the number of employed persons by place of residence as a proxy for the local economy; the obvious flaw to this approach is that most individuals do not work in the same neighborhood in which they live. Nonetheless, there are sound theoretical reasons to believe that the neighborhood economy affects welfare usage rates through three aspects of the employment process -- job search, job matching, and employment stability.

Job search behavior largely can be explained by the three basic factors that influence the search for employment -- the reservation wage, the distribution of likely job offers over an appropriate range of wages, and the costs associated with the job search itself (McCall, 1965; McCall, 1970; Phelps, 1970; Simpson, 1992). The reservation wage is the minimum hourly pay acceptable to individuals; at the bottom of the wage scale, the reservation wage may be determined institutionally through, for example, minimum wage legislation. The reservation wage also is influenced by the costs of work-related expenses, such as child care and transportation. Finally, for welfare recipients, the reservation wage is tied also to the welfare system as recipients weigh the economic gains of employment against their current benefit levels.

The distribution of likely job offers by wage level is affected by both demand and supply factors, such as the relative tightness of the labor market and the skill and education level of the job seeker. Job applicants who have few skills and who are situated in labor markets with an abundance of jobs will likely face a distribution of largely low-wage job offers. Job search itself is costly due to both the direct, out-of-pocket expenses as well as the indirect opportunity costs of looking for work. In standard job search models, individuals search for work when the cost of searching is less than the expected payoff; this decision is determined by both the distribution of wage offers and the reservation wage. A more complex model is developed by relaxing the dichotomous decision -- that of costs versus benefits -- and by allowing individuals to modify both the intensity and extent of their

job search; in this more complex model, job search occurs up to the point where the marginal cost of an additional unit of effort is higher than the expected return.¹

The physical distance between individuals and jobs influences job search behavior because spatial distance creates costs. If there is a large number of potential jobs nearby, then finding, applying and interviewing for positions cost less in terms of both transportation costs and time than if jobs are located far away. Moreover, many low-wage jobs are filled through informal job networks that typically function over limited geographic areas; if jobs are not located close to their residences, job seekers often will not benefit from these networks. Finally, individuals are likely to have lower reservation wages for jobs that are located nearby their homes since they are able to minimize the costs associated with commuting as well as the time spent away from household activities. The distribution of expected wage offers should be even more advantageous if nearby jobs closely match the skills and employment experience of potential job seekers. Greater geographic job access, therefore, should increase not only the probability that individuals look for work but also the extent and intensity of the job search behavior itself.

The above job-search model applies to all potential job seekers; however, the model is particularly relevant to the job search behavior of welfare recipients who face greater barriers to spatial mobility than do higher-income households. Studies show that for most workers commute time and distance are positively correlated with income (U.S. Department of Transportation, 1993:4-56; Taylor and Ong, 1995). In other words, lower-income commuters travel shorter times and distances than higher-income commuters do. They also are more dependent than other income groups on public transportation (U.S. Department of Transportation, 1993:4-57). Women, on average, also are more spatially constrained than men as measured by their shorter commutes to work. Data on gender differences in commuting show that women work closer to their homes than men do. This difference is largely a product of women's lower incomes relative to men's, their use of certain modes of transportation, and their dual responsibilities for domestic and paid labor (Turner and Niemeier, n.d.). Finally, since welfare program eligibility requirements discourage car ownership, welfare recipients themselves face more severe transportation-related barriers than non-recipients do (Ong, 1996a). Consequently, the availability of nearby jobs, particularly the availability of low-wage jobs, should strongly influence the job search behavior of welfare recipients and their probability of finding employment.

The recent literature on improving residential mobility among the poor supports the expected positive relationship between job access and the likelihood of employment. In the now famous Gautreaux housing experiment, researchers find that relocating participants from job-poor, inner-city neighborhoods to job-rich, suburban neighborhoods increases employment levels among welfare

¹This model assumes that costs and benefits are not linearly related; that the second order condition over an appropriate range is positive for costs and negative for benefits; and that individuals are cost-effective in arranging their activities. Within each job search activity, the costs may be lumpy; this factor is incorporated into the expected net benefits of the job search. For example, there is a fixed cost to preparing a resume; however, the cost of sending out each additional resume is variable and relatively small.

recipients (Rosenbaum and Popkin, 1991; Rosenbaum, 1995). Additionally, the location of jobs in relation to residential neighborhoods has been the basis of extensive research on the spatial and skills mismatch between inner-city, non-white residents and jobs. Although controversial, these spatial mismatch studies examine whether the economic fortunes of inner-city residents are affected adversely by two recent employment trends (Ellwood, 1986; Holzer, 1991; Kain, 1992). The first trend is increasing employment growth in the suburban periphery far from low-income, central-city neighborhoods; and the second is the expansion of relatively high-skilled, central-city employment that fails to match the qualifications of local residents. While these studies create tentative associations between urban structure and employment, they are overly simplistic. They largely assume that suburban neighborhoods are necessarily job rich; or that the urban structure of U.S. metropolitan areas has shifted from one in which jobs and residents have been congruent spatially to one in which there is a spatial mismatch. However, both central-city and suburban neighborhoods vary with respect to their proximity to jobs; and welfare recipients live in neighborhoods that differ greatly by their proximity to employment.

In addition to job search behavior, geographic job access also affects employment stability. Employment stability should be higher for employees with nearby jobs relative to those with distant jobs. This is due, in part, to unrealistically low *a priori* estimates of commuting costs. After accepting employment and experiencing the daily commute, individuals with distant jobs may subsequently discover that their real net wage is below their reservation wage, leading to high job turnover as employees quit jobs that require long commutes and search for work in closer proximity to their homes. Even if employees do not experience unforeseen commuting costs, those with distant jobs may be more likely to arrive late to work as they must depend on frequently unreliable public transportation or congested highways. Moreover, employees with long commutes may have difficulty managing unscheduled household responsibilities. While family crises are clearly beyond individuals' control, they can, nevertheless, disrupt work schedules. Individuals with limited financial resources may be forced to attend to these demands personally and find themselves unable to arrange for alternative transportation on short notice. In turn, these disruptions can lead employers to layoff workers who seem undependable. Those with nearby jobs are better able to cope with unexpected events because travel time and distance between home and work are shorter, thus giving individuals greater flexibility. Because individuals who live in job-rich neighborhoods are more likely to have nearby employment (Ong and Blumenberg, forthcoming), we would expect that, in aggregate, greater geographic access would increase employment levels and, consequently, decrease welfare usage.

Finally, access to nearby jobs also can indirectly enhance the economic status of the poor by facilitating upward job mobility. Finding jobs in close proximity to home increases job stability and, therefore, enables low-income individuals to earn incomes that will ultimately begin a dynamic of job mobility and economic improvement. A byproduct of this economic upward mobility may be the opportunity to purchase an automobile, a purchase that enlarges the geographic territory within which individuals seek and hold employment and, once again, improves job access and opportunity.

3. Data and Model

Previous welfare studies show that the probability of welfare reliance varies systematically with demographic and labor market characteristics (Harris, 1993; Bane and Ellwood, 1994). For example, the personal characteristics of welfare recipients, such as their education levels or family structures, affect welfare usage by influencing the jobs for which welfare recipients qualify and, therefore, their wages (Bane and Ellwood, 1994); these characteristics also determine the opportunity costs associated with remaining out of the labor market. Using data on the geographic distribution of jobs in low-wage firms in Los Angeles, this study models welfare usage rates among the population at the census tract level as a function of population and labor market characteristics, including recipients' relative access to neighborhood jobs. The dependent variable in our model is the proportion of the working-age population (ages 18 to 64) in a census tract that receives AFDC. Although the non-AFDC poor may rely on other forms of government assistance, AFDC is by far the largest federal means-tested welfare program. Therefore, for a given tract i , the welfare usage rate R_i is defined as:

$$R_i = W_i/P_i$$

where P_i is the working-age adult population and W_i is the number of working-age adults on AFDC. Population figures by census tract are from the STF3a files of the 1990 U.S. Census; and welfare recipients by census tract are from 1992 Los Angeles County Department of Social Services administrative records.²

The independent variables are as follows and are summarized in Table 1. $LOWED_i$ is the proportion of the adult population over the age of 24 with less than a high school education as a percentage of working-age adults. Because studies show a strong relationship between welfare usage and low levels of education (Bane and Ellwood, 1994), we would expect welfare usage rates to be higher in census tracts in which larger numbers of residents have not completed high school. $SINGLE_i$ is the proportion of working-age adults who are single parents. This variable should be positively related to welfare usage as the largest of the two AFDC programs, AFDC-FG, is targeted toward single-parent families. The model also includes the percentage of female-headed families with children under the age of five ($UNDER5$). The presence of young children increases welfare usage rates; in addition to the responsibilities of raising young children, this relationship occurs because mothers with younger children are more likely to have never been married (Bane and Ellwood, 1994).

²There is a temporal mismatch in the data used for this analysis. While employment and welfare data are for 1992, the population figures are from 1990. We argue here that the 1990 demographic figures can be seen as a proxy for the 1992 counts as the data for the two time periods are likely to be highly correlated; social characteristics of neighborhoods change relatively slowly. To control for the level of neighborhood poverty, we use the census tract poverty rate as an independent variable. These figures may be less reliable proxies for 1992 poverty rates, since California experienced a protracted recession over this time period. However, the recession caused poverty rates to rise throughout Los Angeles. If the relative increase in the poverty rate is uniform across all census tracts, then the estimated coefficient on this variable is likely to be unbiased but scaled by some unknown factor.

Table 1. Determinants of Welfare Usage

VARIABLE	DEFINITION	PREDICTED RELATIONSHIP
LOW_CUM	Ratio between the number of low-wage jobs accessible in a 3-mile radius to the number of working-age adults	-
LOWED	Proportion of 25+ adult population with less than a high school degree as a percentage of the working-age adult population	+
SINGLE	Proportion of working-age adult population that are single parents	+
UNDER5	Percentage of female-headed households with children under the age of 5	+
BLACK	Black working-age population as a percentage of the total working-age adult population	+
HISPANIC	Hispanic working-age population as a percentage of the total working-age adult population	-
ASIAN	Asian working-age population as a percentage of the total working-age adult population	?
NEWIMM	Proportion of working-age adult population that immigrated to the U.S. between 1985 and 1989	+
LANG	Proportion of working-age adult population that is linguistically isolated	+
MHHINC	Median household income	-
POV_POP	Percentage of the working-age population in poverty	+

We include a series of variables to capture the effects of the racial and ethnic composition of census tracts on welfare usage rates. Since AFDC usage among Black families is higher than among most other racial and ethnic groups, we expect a positive relationship between census tracts with high proportions of Black residents ($BLACK_i$) and welfare usage. The opposite relationship is expected with respect to welfare usage among adults of Hispanic origin ($HISP_i$); the figures in Table 2 show that welfare usage rates among Hispanics are lower than those of any other racial group except Whites; welfare usage rates among the Hispanic poor are lower than those of any of the other racial groups. The expected relationship between the proportion of the population that is Asian ($ASIAN_i$) and welfare usage is uncertain. Approximately three percent of the total Asian population relies on welfare, a rate more than twice that of Whites but only a third that of Blacks. However, particular Asian ethnic subgroups, notably Southeast Asians, are more likely to be poor and have welfare usage rates that are higher, on average, than those of any other ethnic or racial category (Bach and Carroll-Seguin, 1986; Ong and Blumenberg, 1994). As a result, at 27 percent, the welfare usage rate among the Asian poor is quite high.

Table 2. Los Angeles AFDC Usage Rates by Race

	AFDC USAGE RATE AMONG THE ADULT POPULATION	AFDC USAGE RATE AMONG THE ADULT POOR	COMPOSITION OF ADULT AFDC RECIPIENTS
White	1.4%	15.0%	25.8%
Black	9.3%	55.8%	32.3%
Hispanic	2.6%	13.1%	29.8%
Asian	3.3%	27.0%	11.7%
Total	3.1%	24.3%	100.0%

Welfare usage rates are affected by the number of new immigrants to Los Angeles, many of whom are likely to live in poverty or depend on welfare until they assimilate more fully into the local economy.³ With respect to Asians, in particular, the Indochina Migration and Refugee Assistance Act of 1975 mandated economic support for Asian refugees primarily through the AFDC system. As a result, almost all foreign-born Southeast Asians receive AFDC (Ong and Blumenberg, 1994). Two variables in the models capture the effects of new immigration on welfare usage. The first is the percentage of the working-age population that migrated to the U.S. between 1985 and 1989 ($NEWIMM_i$). The second variable is the percentage of the working-age population that is linguistically isolated ($LANG_i$); this variable includes adults who speak almost no English. After testing the model, we found the relationship between language ability and welfare usage rates to be non-linear; therefore, we include the square of this variable in our final models.

³The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 prohibits states from using federal funds to support children of legal aliens.

Changes in the independent variables can influence welfare usage rates through their effects on the poverty level as well as their effects on the percentage of the population who relies on welfare. To control for the effects of changes in poverty and/or income on welfare usage rates, the final two models test the relationship between median household income (MHHINC) and the percentage of the working-age population in poverty (POV_POP) on welfare usage rates. Holding other factors constant, we would expect welfare usage rates to be lower in census tracts in which the median household income is relatively high; and we would anticipate rising poverty rates to increase welfare usage.

The last two variables measure access to nearby low-wage jobs. Previous research demonstrates a relationship between access to jobs and employment behavior among welfare recipients (Rosenbaum and Popkin, 1991; Osterman, 1991; Rosenbaum, 1995; Hoynes, 1996; Ong, 1996b). Welfare recipients, however, do not have the skills and experience to qualify for all available jobs; welfare recipients are disproportionately concentrated in low-wage, low-skilled occupations (Harris, 1993; Brandon, 1995).

Table 3 contrasts the industrial distribution of Los Angeles welfare recipients who were employed sometime during 1992 with that of all jobs in Los Angeles and jobs in low-wage Los Angeles firms. Seventy-eight percent of all working welfare recipients find employment in either trades or services, a much larger percentage than the overall proportion of jobs in these sectors (59%). A more detailed distribution of welfare recipients shows that close to 40 percent of all welfare recipients work either in the retail trades or in personnel supply services, another term for temporary agencies. The concentration of welfare recipients in trades and services is predictable considering the parallel distribution of low-wage jobs in Los Angeles; close to 80 percent of all low-wage jobs are in these two sectors of the economy. However, relative to the distribution of jobs in low-wage firms, welfare recipients are concentrated more heavily in personal/ professional services and less concentrated in the trades and nondurable manufacturing.

Therefore, while access to employment encourages work behavior, more important still is access to jobs in which the poor are likely to find employment. Using firm data from the California Employment Development Department for the first quarter of 1992, we measure recipients' access to jobs in what are considered low-wage firms.

Table 3. Industrial Distribution of All Jobs, Jobs in Low-Wage Firms, and Welfare Recipients

Major Industrial Sector	All Jobs	Jobs in Low-Wage Firms	Welfare Recipients
Nondurable	7.9	10.7	5.8
Durable	11.5	1.2	2.4
Trade	22.2	44.3	30.7
Business/Entertainment Services	14.1	25.2	24.7
Personal/Professional Services	23.0	10.4	22.7
Other*	21.3	8.2	13.6
N ‘	3,571,623	441,186	3,683

* The other category includes jobs in (a) agriculture, (b) construction, (c) transportation, communications, and public utilities, (d) finance, insurance, and real estate (FIRE), and (e) public administration.

A low-wage firm is one in which quarterly wages per employee fall in the bottom quartile (less than or equal to \$2,650) of the distribution among all Los Angeles firms. However, the distribution of jobs across industries also may affect welfare usage rates. In later tests of the model, we also examine the relationship between welfare usage and access to jobs in retail firms. Each establishment is geocoded to a census tract using the address of each work site. Job access is calculated in two steps. In the first step, we identify for census tract i all other census tracts whose centroids are within a three-mile radius; this is done for all 1,642 Los Angeles tracts. Given the assumption that welfare recipients are less likely to find jobs the further these jobs are located from their homes, census tracts within one mile are weighted by one; for census tracts beyond one mile, the jobs are weighted by one divided by the square of the distance between the two centroids. Since the relevant measure is the number of available jobs relative to the potential labor supply, we divide the weighted number of jobs by the number of working-age adults in the census tracts (LLW_ACC_i).

If access to nearby jobs increases the probability of working, we would expect welfare rates to decline with greater access to low-wage jobs or jobs in retail industries. To test for the non-linear effects, we also include the squared value of the job access variable (LLW_SQ_i).

Finally, we exclude two types of census tracts from our analysis. We eliminate census tracts adjacent to the border between Los Angeles and other counties; since we do not have employment data for counties outside of Los Angeles, the job access figures for these tracts would be understated. We also exclude sparsely populated census tracts located largely in the periphery of Los Angeles County. The final regression analyses include a maximum of 1,455 of Los Angeles' 1,642 census tracts,

although the number of census tracts may vary across models since some census tracts do not have appropriate subpopulations needed to construct some of the independent variables.

4. Findings

The first model estimates welfare usage among all working-age adults in Los Angeles. The model is then estimated separately for each of the four major racial/ethnic groups -- White, Black, Hispanic, and Asian. Each model is weighted by the working-age population for the racial/ethnic group under examination. Table 4 presents the weighted and unweighted univariate statistics for the dependent and independent variables for our

Table 4. Dependent and Independent Variables

Variables	Weighted Means	Std. Deviation	Unweighted Means	Std.Deviation
WEL_POP	3.33	3.00	3.21	3.16
LOW_CUM	126.61	159.58	214.95	1,853.24
LOWED	30.65	17.41	30.11	17.88
SINGLE	4.94	3.01	4.81	3.34
UNDER5	.05	.05	.05	.05
BLACK	11.80	19.83	12.74	21.38
HISPANIC	37.87	27.41	35.70	27.24
ASIAN	11.38	11.38	11.01	11.31
NEWIMM	16.28	12.08	14.99	12.02
LANG	17.15	14.36	15.85	14.42
MHHINC	\$35,406	\$16,330	\$36,594	\$17,678
POV_POP	13.93	9.78	13.42	10.22

primary model estimating welfare usage among all working-wage adults. The figures are largely self-explanatory, with the exception of the job access variable. The mean number of low-wage jobs per adult located within a 3-mile radius of each census tract is 214; however, this figure has no intuitive meaning. Instead, the variable should be viewed as an index of job access that is a direct function of the number of nearby jobs. If the number of distance-weighted jobs increases two-fold, holding constant the number of potential workers, the index of job access doubles. Map 1 on page 21 shows the relative job richness of census tracts throughout Los Angeles. The dark black and gray areas represent the job richest census tracts; the highest concentration of jobs is in downtown (the

approximate center of the map) and along what is known as the Wilshire Corridor, the major boulevard that extends from downtown through Beverly Hills, West Los Angeles, Santa Monica, and terminates at the coast. Other job-rich Los Angeles neighborhoods include areas to the far south of downtown, such as the Los Angeles Port (at the bottom of the map). The lighter colored census tracts show those areas in which job access is relatively poor. These include neighborhoods in the urban periphery, some of which have sparse populations, as well as census tracts in South Central Los Angeles, the predominantly Black and Hispanic areas adjacent to and south of downtown.

Table 5 presents the results of our model predicting welfare usage rates among the total working-age population. Model 1 includes only our variable of interest -- access to low-wage jobs; Model 2 presents the full model; Model 3 is the full model with the addition of median household income; and Model 4 is the full model with the addition of the percentage of the population in poverty. With respect to our variable of interest -- access to low-wage jobs -- we find that access to neighborhood jobs is negatively related to the percentage of the working-wage population who relies on welfare in all four models. With a few exceptions, the control variables operate as predicted. The percentage of the census tract population with less than a high school education is positively related to welfare usage rates. The percentage of single-parent households and the presence of children under the age of five in female-headed households are both positive and significant determinants of welfare usage rates. The racial/ethnic composition of the census tracts also has a significant effect on welfare usage rates. As predicted, a higher Black population is positively associated with higher welfare usage rates. The relationship between the percentage of the population that is Asian and welfare usage rates is also positive, a likely consequence of the concentration of Asian refugees to Los Angeles who receive AFDC as part of their refugee assistance. The relationship between Hispanics and welfare usage rates is in the opposite direction; the percentage of the working-age population that is Hispanic is negatively related to welfare usage rates. The percentage of new immigrants is positively related to welfare usage rates; and combining both the percentage of the population that is linguistically isolated with its square root, linguistic isolation is negatively related to welfare usage rates over most of the range.

Finally, in Model 3 we include the median household income of the census tract. After controlling for all the other determinants of welfare usage, the median income of the census tract does not contribute significantly to predicting welfare usage rates. While there is a negative relationship between welfare usage rates and median income, this variable is not statistically significant. Moreover, the relationship between the other control variables and welfare usage rates is not altered significantly. In Model 4, median household income is replaced by the percentage of the population in poverty; this relationship is positive and statistically significant. However, once again, the addition of this variable does not significantly alter the relationships between the other independent variables and the welfare usage rate.

Table 5. Determinants of Welfare Usage

Independent Variables	Model #1	Model #2	Model #3	Model #4
LOW_CUM	-.0023*** (-4.108)	-.0032*** (-9.172)	-.0032*** (-9.287)	-.0033*** (-9.421)
LLW_SQ	.00043 (1.572)	.0006*** (3.683)	.0006*** (3.772)	.0006*** (3.912)
LOWED	----	.141*** (18.532)	.139*** (17.932)	.139*** (18.050)
SINGLE	----	.293***(9.492)	.288***(9.239)	.289***(9.349)
UNDER5	----	11.369***(6.54 4)	11.235***(6.4 60)	10.342***(5.7 39)
BLACK	----	.008*(2.471)	.008*(2.341)	.007*(2.179)
HISPANIC	----	-.067*** (-13.944)	-.067*** (-13.885)	-.066*** (-13.775)
ASIAN	----	.015***(3.088)	.015***(3.137)	.016***(3.328)
NEWIMM	----	.080***(8.494)	.078***(8.163)	.076***(7.841)
LANG	----	.015(.836)	.012(.691)	.011(.595)
LANGSQ	----	-.002*** (-6.863)	-.001*** (-6.526)	-.001*** (-6.731)
MHHINC	----	----	-.000006 (-1.437)	----
POV_POP	----	----	----	.019*(2.112)
Intercept	3.614***	-1.172***	-.808**	-1.172***
R ²	.012	.698	.698	.699
N	1,448	1,448	1,448	1,448

***p>.001 **p>.01 *p>.05

Studies of the relationship between the geographic location of jobs and measures of economic status have emphasized the waning employment opportunities for African Americans who live in job-poor, inner-city neighborhoods (Holzer, 1991; Kain, 1992). The question here, however, is whether job access significantly lowers welfare usage rates among other racial/ethnic groups. The models in Table 6 predict welfare usage rates among the working-age population by race/ethnicity. In addition to access to low-wage jobs, the full model includes race-specific variables for education, single parenthood, and linguistic isolation.⁴ We include the racial/ethnic composition variable to examine

⁴For example, the education variable is the percentage of working-age Whites, Blacks, Hispanics, or Asians who have less than a high school education; the single parenthood variable is the percentage of working-age Whites, Blacks, Hispanics, or Asians who are in single-family households. The linguistic isolation variable measures the percentage of working-age Hispanics, Asians and Whites who are linguistically isolated. In other words, they are Spanish-language speakers, Asian-language speakers, and other-language speakers

Table 6. Determinants of Welfare Usage Among Working-Age Population by Race

Independent Variables	Model #1White	Model #2Black	Model #3Asian	Model #4Hispanic
LOW_CUM	-.001*** (-5.397)	-.009*** (-10.968)	-.011*** (-10.868)	-.001*** (-6.540)
LLW_SQ	.0002**(2.588)	.008***(6.911)	.007***(6.388)	.0002*** (3.441)
LOWED	.012***(3.824)	.095*** (12.249)	.170*** (19.892)	.005(1.560)
SINGLE	.142***(7.537)	.398***(23.659)	.361***(8.694)	.170*** (14.766)
WHITE	-.002(-.962)	----	----	----
BLACK	----	-.012(-3.601)	----	----
ASIAN	----	----	-.012(-1.880)	----
HISPANIC	----	----	----	.026***(19.11 2)
LANG	.358***(20.311)	----	-.025(-1.152)	.008(1.138)
LANGSQ	.006***(9.527)	----	.001***(3.917)	-.0007***(- 7.740)
POV_POP	-.016**(-2.943)	.13***(11.403)	.121***(11.019)	-.010(-2.439)
Intercept	.228	2.114***	-1.368***	.954***
R ²	.759	.649	.533	.486
N	1,454	1,369	1,398	1,452

***p>.001 **p>.01 *p>.05

whether welfare usage rates of each group are driven, in part, by variations in their percentage of the population. Data on the percentage of female-headed families with children under the age of five and the proportion of recent immigrants are not available by race/ethnicity and, therefore, are not included in these models. Finally, we control for the poverty rate of the racial/ethnic group under consideration. The results show that increased job access is associated with lower welfare usage rates for all four racial/ethnic groups. The effect is strongest among Asians and, secondly, among Blacks; the relationship is weakest among Hispanics and Whites.⁵

who speak relatively little English. This language variable is not included in the model for Blacks.

⁵Without the addition of the poverty rate variable, the relationships between job access and welfare usage rates remain similar.

5. Discussion

Our key finding, therefore, is that access to jobs in close proximity to recipients' homes lowers welfare usage rates. The finding is quite robust and is replicated by using varying measures of job access and eliminating the population weights. We tested three alternative measures of job access. First, we varied the radius by which we measured job access and tested one-mile, two-mile, and three-mile radii. Second, within a 3-mile radius, we tested the effects of access to different types of jobs including all jobs, jobs in retail industries, and jobs in low-wage industries. Finally, we varied the population group by which we standardized our measure of job access. The final job access measure is standardized by the total adult population, although we also tested standardizing by the adult poverty population. In each case, although the estimated coefficients varied and were sometimes not as statistically significant, the same negative relationship between job access and welfare usage rates prevailed. In a final test of our analysis, we ran our models unweighted; our basic finding is, once again, confirmed in the unweighted specification of the model.

To get a better understanding of the potential impact of local employment opportunities on the poor, we use the results from our primary model to simulate the effects of a substantial improvement in job access on welfare usage rates. The first row in Table 7 estimates welfare usage rates with each of the independent variables at the mean. To isolate the effects of job access, the estimates in the second and third rows of the table vary the measure of job access while leaving the other variables at the mean. As the table shows, increasing job access from the 10th percentile to the 90th percentile of the distribution lowers welfare usage rates from as little as less than one percent among Hispanics and Whites to as much as 2.8 percent among Asians. Among all racial and ethnic groups, an increase in job access of such a magnitude lowers welfare usage rates among the poor by just under one percent. Therefore, job access clearly affects welfare usage rates among all racial and ethnic groups; however, even substantial improvements in job access cannot eradicate welfare usage entirely.

Table 7. Estimated Effect of Job Access on Welfare Usage

	Welfare Usage Rates				
	All	White	Black	Asian	Hispanic
Mean of Independent Variables	3.4	1.45	9.43	2.86	2.85
Mean of Independent Variables and Job Access at the 10%	3.9	1.48	10.12	3.85	2.94
Mean of Independent Variables and Job Access at the 90%	3.1	1.27	7.87	1.07	2.69

The finding that neighborhood job opportunities are associated with lower welfare usage rates is likely the product of three different phenomena. The first is the direct effect of job access on lowering welfare usage rates among the poor. In other words, having access to jobs increases the likelihood that the poor choose jobs over welfare. However, the results also may be the consequence of the spatial distribution of welfare recipients across Los Angeles census tracts.

Welfare recipients may be less likely than others in the labor force to live in job-rich neighborhoods. Table 8 shows the geographic distribution of AFDC recipients and the total labor force across census tracts of varying degrees of job richness. Welfare

Table 8. Distribution of AFDC Recipients and Labor Force Across Census Tracts of Varying Job Richness

Census Tracts	Number of Census Tracts	AFDC Recipients	Labor Force
Job Poorest Census Tracts	217	20.8	19.1
	239	22.7	17.9
	244	19.4	16.4
	316	18.2	18.9
	238	11.7	16.4
Job Richest Census Tracts	201	7.3	11.4
Total	1,455	165,702	4,224,119

recipients *are* less likely than the total labor force to live in the very job richest census tracts and slightly more likely to live in the job poorest of census tracts. To differentiate between the direct effects of job access on welfare usage rates and the composition effect, our next step in this research will be to examine the effects of job access on the labor force participation of individual welfare recipients after controlling for other individual and labor market characteristics. Finally, it is also possible, but difficult to test, that the relationship between welfare usage and job access could result from the residential choices of welfare recipients themselves. Those recipients who are most interested in finding jobs may be more likely to move into job-rich neighborhoods; conversely, those welfare recipients who have minimal attachment to the labor market may not select neighborhoods on the basis of their proximity to employment.

6. Conclusion

Although improved job access among the poor cannot eliminate reliance on welfare entirely, evidence from this study shows that it certainly can contribute to reducing welfare usage rates. Therefore, welfare policy would benefit from incorporating elements of traditional urban policies that seek to improve jobs access among the poor. These policies generally fall into three categories -- local economic development, transportation, and housing mobility.

Local economic development is intended to increase economic opportunities in areas of concentrated poverty. These programs have included financial incentives, regulatory relief, and social services targeted toward preserving, attracting, and/or creating jobs to revitalize poor neighborhoods (Eisinger, 1988). Local economic development can improve the economic opportunities for some welfare recipients; however, an equal distribution of firms across all urban neighborhoods would be virtually impossible and economically undesirable. Even in the most job-rich neighborhoods in Los Angeles, a substantial number of AFDC recipients work in establishments that are far from their homes. It is unrealistic, therefore, to eliminate the need for many recipients to travel some distance to work.

Other policies, such as transportation-related policies, also can increase job access among low-wage workers. For example, studies have shown that car ownership is a significant factor in improving the employment status of welfare recipients (Ong, 1996a). Yet current welfare regulations prohibit individuals from receiving welfare benefits if they own cars with values over \$1,500. Other scholars and policy analysts have proposed special transportation programs to ease the burdens associated with distant commutes. Such policies might include efforts to connect inner-city residents to particular suburban employers; the use of extended transit services, vanpools, or rideshare programs to enhance travel to job-rich, suburban destinations; and support services, such as a guaranteed ride home to attend to household emergencies or flexible child care hours to support extended work days (Hughes, 1995). Finally, changes in public transit subsidies and fare structures can improve job access by easing the often regressive financial burden placed on low-income commuters (Cervero and Wachs, 1982; Cervero, 1990; Hodge, 1995).

Finally, policies that contribute to greater housing mobility can enable the poor to find homes outside of traditionally low-income, central-city neighborhoods and potentially offer improved access to housing in job-rich neighborhoods. As the map of relative job access in Los Angeles shows, moves out of the inner-city to the suburban periphery do not necessarily mean an increase in nearby job opportunities; some suburban neighborhoods are also job poor. Moreover, not all urban residents can live in job-rich neighborhoods; there are simply not enough jobs to make all neighborhoods job-rich. However, in as much as housing programs enable the poor to move to neighborhoods with ample employment opportunities, evidence from this study shows that the poor will be less likely to rely on welfare. The most prominent example of this strategy is the Gautreaux Assisted Housing Program in Chicago, in which African-American families receive assistance to move from public, central-city housing to housing in suburban, White neighborhoods (Rosenbaum and Popkin, 1991; Rosenbaum, 1995).

In conclusion, as this study shows, policies that increase neighborhood job opportunities can reduce welfare usage rates. While none of the three policy areas -- local economic development, transportation, and housing mobility -- is a panacea to the mismatch between low-income individuals and jobs, each of them has the potential to improve job access among the poor. The findings from this study also show, however, that even a dramatic increase in job access among the poor -- by whatever policy instruments such change is engendered -- cannot, by itself, eliminate welfare usage. Improving geographic job access among those in poverty must be used as one policy strategy, among others, to lower reliance on public welfare programs and, ultimately, to promote economic mobility among the poor.

Sources

- Bach, Robert and Rita Carroll-Seguín (1986). Labor Force Participation, Household Composition and Sponsorship Among Southeast Asian Refugees, *International Migration Review* 20(2), pp. 381-404.
- Bane, Mary Jo and David T. Ellwood (1994), *Welfare Realities. From Rhetoric to Reform* (Cambridge, MA: Harvard University Press).
- Cervero, Robert (1990), Transit Pricing Research. A Review and Synthesis, *Transportation* 17, pp. 117-139.
- Cervero, Robert and Martin Wachs (1982), An Answer to the Transit Crisis: The Case for Distance-Based Fares, *Journal of Contemporary Studies* Spring, pp. 59-70.
- Brandon, Peter (1995), What Happens to Single Mothers after AFDC? *Focus* 17(2), pp. 13-15.
- Eisinger, Peter K. (1988), *The Rise of the Entrepreneurial State: State and Local Economic Development Policy in the United States* (Madison, WI: University of Wisconsin Press).
- Ellwood, David (1986), The Spatial Mismatch Hypothesis: Are There Teenage Jobs Missing in the Ghetto? in R.B. Freeman and H.J. Holzer (eds.), *The Black Youth Employment Crisis* (Chicago: University of Chicago Press).
- Fitzgerald, John M. (1995), Local Labor Markets and Local Area Effects on Welfare Duration, *Journal of Policy Analysis and Management* 14(1), pp. 43-67.
- Harris, Kathleen Mullan (1993), Work and Welfare Among Single Mothers in Poverty, *American Journal of Sociology* 99(2), pp. 317-52.
- Hodge, David C. (1995), My Fair Share. Equity Issues in Urban Transportation, in Susan Hanson (ed.), *The Geography of Urban Transportation*, 2nd edition (New York: Guilford Press).
- Holzer, Harry J. (1991), The Spatial Mismatch Hypothesis: What Has the Evidence Shown? *Urban Studies* 28(1), pp. 105-22.
- Hoynes, Hilary Williamson (1996), Local Labor Markets and Welfare Spells: Do Demand Conditions Matter? Unpublished Manuscript. Department of Economics, University of California, Berkeley.
- Hughes, Mark Alan (1995), A Mobility Strategy for Improving Opportunity, *Housing Policy Debate* 6(1), pp. 271-297.
- Kain, John F. (1992), The Spatial Mismatch Hypothesis: Three Decades Later, *Housing Policy Debate* 3(2), pp. 371-460.

- McCall, John (1965), The Economics of Information and Optimal Stopping Rules, *Journal of Business* 38, pp. 300-317.
- McCall, John (1970), Economics of Information and Job Search, *Quarterly Journal of Economics* 84, pp. 113-126.
- Ong, Paul (1996a) Work and Car Ownership among Welfare Recipients, *Social Work Research*, 20(4), pp. 255-262.
- Ong, Paul M. (1996b), Subsidized Housing and Work Among Welfare Recipients. Unpublished Manuscript, School of Public Policy and Social Research, University of California, Los Angeles.
- Ong, Paul and Evelyn Blumenberg (forthcoming), Job Access, Commute, and Travel Burden among Welfare Recipients. *Urban Studies*, 35(1).
- Ong, Paul and Evelyn Blumenberg (1994), Welfare and Work Among Southeast Asians, in Paul Ong (ed.), *The State of Asian Pacific America. Economic Diversity, Issues & Policies. A Public Policy Report* (Los Angeles: LEAP Asian Pacific American Public Policy Institute and UCLA Asian American Studies Center).
- Osterman, Paul (1991), Welfare Participation in a Full Employment Economy: The Impact of Neighborhood, *Social Problems* 38(4), pp. 475-491.
- Phelps, Edmund (1970), Money Wage Dynamics and Labour Market Equilibrium, in Edmund Phelps (ed.), *Microeconomic Foundations of Employment and Inflation Theory* (New York: Norton).
- Rosenbaum, James E. (1995), Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program, *Housing Policy Debate* 6(1), pp. 231-269.
- Rosenbaum, James E. and Susan J. Popkin (1991), Employment and Earnings of Low-Income Blacks Who Move to Middle-Class Suburbs, in Christopher Jencks and Paul E. Peterson (eds.), *The Urban Underclass* (Washington, DC: The Brookings Institution).
- Simpson, Wayne (1992), *Urban Structure and the Labour Market. Worker Mobility, Commuting, and Underemployment in Cities* (Oxford: Oxford University Press).
- Taylor, Brian D. and Paul M. Ong (1995), Spatial Mismatch or Automobile Mismatch? An Examination of Race, Residence and Commuting in U.S. Metropolitan Areas, *Urban Studies* 32(9), pp. 1453-1473.
- Turner, Tracy and Debbie Niemeier (n.d.), Journey to Work Travel Patterns of Men and Women: A Critical Review and New Evidence. Working Paper. Departments of Economics and Engineering, University of California, Davis.

U.S. Department of Transportation (1993), *1990 NPTS Databook. Volume I. Federal Highway Administration* (Oak Ridge: Oak Ridge National Laboratory).

Vartanian, Thomas (1995), *Locational Effects on AFDC Spells: Examining Local Labor Markets and the Spatial Mismatch Hypothesis*. Unpublished Manuscript. Graduate School of Social Work and Social Research, Bryn Mawr College.