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Does Jobs Proximity Matter in the Housing Choice Voucher Program?

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Abstract

The Housing Choice Voucher Program is the centerpiece of a housing strategy that attempts to influence neighborhood opportunity while making housing more affordable for low-income families. A key neighborhood opportunity is proximity to jobs. This study uses a household-level, longitudinal dataset from the U.S. Department of Housing and Urban Development (HUD) to examine whether households with people in the workforce are more likely to locate closer to jobs than are households without people in the workforce. We then look at whether being closer to jobs is associated with greater likelihood of employment or greater earned incomes. We find no evidence that households attached to the labor force are more likely to locate closer to jobs, and we find no associations between earned income and greater proximity to jobs. We take those findings as evidence that, although locational advantages may be achieved with help from housing vouchers, jobs proximity does not seem to be one of those advantages. Given that jobs proximity is not correlated to higher earned incomes, however, we question the importance of jobs proximity when weighed against other neighborhood opportunities.

Background and Motivation

The Housing Choice Voucher (HCV) program is the primary way that the U.S. government delivers housing subsidies to very low-income renters in the United States. The program serves more than 2 million families per year. The HCV program augments the income of poor households, giving them the buying power to consume rental housing that they would otherwise be unable to afford. The program also gives poor households the freedom to locate in any neighborhood as long as the

housing is reasonably priced and passes a physical inspection, although these families still face acute financial constraints and commonly encounter landlord resistance.

Given the high levels of segregation by income and race in U.S. metropolitan areas, a goal of the voucher program is to improve neighborhood opportunity for participants through the enhanced choice that households are able to make using vouchers on the private rental market. Further, the very low work rates among HCV households (our 2014 data suggest that only 51 percent of households with working-age members that are not disabled or full-time students have earned income) mean it is particularly vital to understand the effect of job proximity on earned income. Once more, policymakers place a high importance on improving employment outcomes for workers in households receiving housing assistance, as emphasized by the Jobs Plus, Welfare to Work Voucher, and Moving to Work demonstration programs.

More recently, HUD's Affirmatively Furthering Fair Housing (AFFH) rule ("Affirmatively Furthering Fair Housing," 2015) is designed to facilitate location in high-amenity neighborhoods for low-income households, with the hopes that it will result in better outcomes for these households, including better employment and schooling. Accordingly, the accompanying data and mapping tool that HUD released includes data on job proximity and the rule mentions the importance of access to employment in several areas (HUD, 2015; "Affirmatively Furthering Fair Housing," 2015).

One existing study (Lens, 2014) looks at the proximity of assisted housing to job opportunities for U.S. low-income rental housing programs, including housing vouchers, public housing, and low-income housing tax credits (LIHTC). The study found that public housing households live in closer proximity to jobs than any type of assisted household and the general population. However, public housing also tends to locate near the competition for such jobs, namely the low-skilled unemployed. Research on the Moving to Opportunity (MTO) demonstration program finds that changing locations based on poverty rates did not have a significant effect on employment or earnings for adult households (Sanbonmatsu et al., 2011), and recent research using MTO data further questions whether enhanced job proximity could have played a vital role in improving those outcomes (Blumenberg and Pierce, 2014; Lens and Gabbe, 2017).

This article focuses in-depth on the HCV population using a special household-level, longitudinal dataset from HUD. These data permit examination of the residential locations of HCV households potentially in and out of the workforce ("work-able")[1] and allow us to identify moves and corresponding changes in income over time. Specifically, we ask the following questions: Do work-able HCV households move more often than other HCV households? When work-able voucher households move, do they move to more job-rich neighborhoods? If they move to more job-rich neighborhoods, do they realize greater employment and earnings from that employment?

We anticipate that work-able HCV households should be more likely than those not in the workforce to make moves to higher employment areas to reduce job search and commuting costs.

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1 Note: Throughout the text, we treat the attributes of the household head and the household as the same. Therefore, a "work-able" household is one in which the household has members ages 18 to 65 who do not have disabilities and are not full-time students. An employed household means that at least one member of the household is working. The racial attributes of the household head determine the racial attributes of the household. We do not have data on the rest of the household that would allow us to be more precise.

We also expect that if they do make these moves, we might find sharper increases in rates of employment and earned income for these movers than for those that do not make such moves to more job-rich block groups.

We find little support for these hypotheses. We do find that work-able households are more likely to move to different block groups in a given year than do other households. However, we also find that work-able households that did move were not likely to move to areas with more jobs. We further find that when we do observe moves to more job-rich block groups, increases in job proximity and increases in earnings are not correlated. If anything, those with increases in earned income were less likely to move and more likely to move away from jobs if they did move.

These findings contradict the conventional wisdom on job proximity and low-income households. Work-able HCV households are not using vouchers to move closer to jobs any more often than are households that are not likely to be in the workforce. Further, being housed closer to jobs does not seem to make a difference in employment outcomes. Earned income increases were not found for households that moved closer to jobs. We find that these results hold for several racial/ethnic groups and for households with and without children.

The HCV program is the centerpiece of a housing strategy that attempts to influence neighborhood opportunity while making housing more affordable for low-income families. As we refine these policy tools, weighing neighborhood attributes according to their relative import is essential, and we are reaching the point at which we must reconsider whether job proximity is as crucial as some other attributes. Although work-able households do not disproportionately make moves toward job-rich areas, that finding is perhaps indicative of trade-offs made in residential location decisions. Because those moves do not even correlate to higher earned incomes, job proximity may be potentially oversold as a factor in employment outcomes.

Previous Research

Spatial Mismatch

This article straddles two important areas of research—that on the spatial mismatch between low-income households and employment opportunities, and the literature that assesses location outcomes for assisted households. A full review of each of those areas of research is not appropriate for this article,[2] but some details of the literature are worth summarizing. The literature on spatial mismatch is concerned with evaluating the extent to which low-income and minority households are spatially isolated from employment opportunities and whether that isolation negatively affects employment outcomes. John Kain (1968) developed the spatial mismatch hypothesis at a time when jobs and higher income and White households were fleeing central cities for suburban destinations. One cause of the high levels of joblessness that Kain observed in central cities was that low-income and minority households were increasingly finding themselves isolated in central cities away from job growth in suburban areas. William Julius Wilson, in the highly influential book *The Truly Disadvantaged*, further connected the role of central city job loss to the very high

2 For a full review of the literature on spatial mismatch, see Ihlanfeldt and Sjoquist, 1998; Kain, 1992, 2004.

rates of joblessness among Black males in particular and the wide-reaching social ramifications for low-income communities of color (Wilson, 1987).

In the decades that followed, substantial empirical work has evaluated the strength of the spatial mismatch hypothesis. Although evidence on the extent to which low-income and minority households are spatially isolated from employment is somewhat inconsistent, compelling evidence exists that in many U.S. metropolitan areas, employment growth on the suburban fringe at the expense of the urban core meant that those households were less likely to be near areas of that growth. Scholars have found strong evidence for spatial mismatch in areas such as Los Angeles (Ong and Blumenberg, 1998; Stoll, 1999), Washington, D.C. (Stoll, 2006), the San Francisco Bay Area (Raphael, 1998), and Atlanta, Boston, Los Angeles, and Detroit (Johnson, 2006). That research finds that low-income and minority households generally live farther away from employment opportunities and job destinations than do White and higher income households and in turn, spend more time searching for work over greater geographic space. Further, using strong empirical techniques that tackle the thorny issue of selection bias in terms of spatial location and employable attributes, those authors concluded that spatial proximity matters a great deal in terms of actual employment and earnings outcomes.

Recent research in the planning field has used cutting-edge spatial analysis techniques and come to a somewhat different conclusion. Shen (2001; 1998) found that job accessibility is better among central city households in the Boston Metropolitan Area. Further, Cervero, Sandoval, and Landis (2002) found no relationship between regional job accessibility and employment outcomes for welfare recipients in Alameda County, California. Sanchez, Shen, and Peng (2004) found no effect from increased transit access on employment outcomes for Temporary Assistance to Needy Families (TANF) participants in the Atlanta, Baltimore, Dallas, Denver, Milwaukee, and Portland metropolitan areas. The techniques that Shen pioneered are used in this paper.

Assessing the Neighborhood Characteristics of Subsidized Households

Research on the neighborhood context of subsidized housing has grown substantially in recent years as the HCV program has increasingly been viewed by some policymakers, analysts, and advocates as a potential vehicle for improving neighborhood quality for assisted households. Much of the research has focused on poverty rates as the main indicator of neighborhood quality. General conclusions from that research are that public housing has long been concentrated in high-poverty neighborhoods, and housing vouchers and LIHTCs are in less impoverished areas (although more impoverished than the general population). For voucher households, Pendall (2000) found that neighborhoods with voucher holders had a 1990 poverty rate of 20 percent on average, compared with the nationwide average of 15 percent. In more recent research, McClure (2006) found that in 2002, about 30 percent of LIHTC households and 26 percent of voucher households lived in low-poverty census tracts. In an updated paper, McClure, Schwartz, and Taghavi (2015) found that only about 21 percent of HCV households live in low-poverty census tracts. That figure is much higher in the suburbs (39 percent) and much lower in central cities (10.5 percent).

A growing area of research has looked at neighborhood characteristics other than poverty. Metzger (2014) used data from HUD and the American Community Survey to look at HCV concentration

in low-income and high-minority census tracts. She found that housing voucher households are more concentrated in census tracts with high proportions of non-White persons and households in lower income deciles than is the larger population of very low-income households. Thus, Metzger concludes that the housing voucher program reinforces existing concentrations of poverty and race.

Additional research looks at the exposure of subsidized households to characteristics such as neighborhood crime, school quality, job accessibility, and indicators constructed from several variables. Looking at crime, Lens, Ellen, and O'Regan (2011) found that voucher households occupy much safer neighborhoods than do LIHTC and public housing residents. The findings echo those from the Gautreaux, MTO, and HOPE VI studies, which tells us that participants were in very high-crime areas when living in their original public housing developments and chose to move to lower crime (yet still relatively unsafe) areas after receiving their vouchers (Goering, Kamely, and Richardson, 1997; Keels et al., 2005; Kingsley and Pettit, 2008; Popkin and Cove, 2007; Rubinowitz and Rosenbaum, 2000;).

In the area of school quality, Horn, Ellen, and Schwartz (2014) linked data on housing subsidy recipients to school location and performance data to estimate the extent to which these households live in areas with high-quality schools. The authors found that voucher households with children live in areas near schools with math proficiency rates that are 3 percent higher than they are in schools in public housing households with children. On the other hand, voucher households live near worse-performing schools than do LIHTC, poor renters, all renters, and households in units priced at or below the area fair market rent.

Finally, papers have examined job accessibility specifically as it pertains to assisted households. Bania, Coulton, and Leete (2003) used data on those exiting TANF in Cleveland to compare the employment proximity and commuting outcomes for welfare leavers in public housing, Section 8 housing, and with housing vouchers and certificates. They found that the voucher and certificate TANF leavers were employed closer to their homes, spent less time commuting to work, had better access to public transit, and were more spatially proximate to job openings.

In two papers that study the role of transportation in employment outcomes, Blumenberg and Pierce (2017, 2014) used data on the MTO program to identify the effects of auto ownership and neighborhood transit access on an MTO participant's likelihood of gaining or maintaining employment. Although the authors do not find that spatial proximity to jobs is a factor in gaining or keeping employment, they do find that owning a car or procuring one is such a factor. In addition, they find that better access to transit is tied to keeping employment, although it is not significantly related to gaining employment.

Lens (2014) found contrasting results to Bania et al. (2003) in a paper that used data on a larger set of metropolitan areas (Metropolitan Statistical Areas with 100,000 people or more, as of the 2000 Census). Lens found that public housing households tend to live in census tracts with the greatest proximity to jobs, but they are also very highly concentrated among the competition for jobs—namely the low-skilled (those without a college degree) unemployed. HCV households, on the other hand, were very similar to the overall population of renters—they are spread around metropolitan areas more than in public housing and are therefore not as clustered near central city employment

growth, yet they are not as near the low-skilled unemployed as are those households. In a follow-up work, Lens and Gabbe (2017) used MTO data to measure the extent to which program participants moved to job-rich areas and whether it had an effect on employment outcomes. The authors found that job proximity declined for the treatment and control groups but most dramatically for the two treatment groups. The authors also found, however, that job proximity did not explain the lack of an employment effect for program participants; moving closer to (or farther from) jobs had essentially no effect on earned income or the probability of obtaining work.

Recent research looks at neighborhood quality in a broader way by pulling several features of neighborhoods into a larger index. McClure (2011) and Turner et al. (2011) are early examples of attempts to construct neighborhood opportunity indices that influenced the current AFFH framework. McClure was interested in assessing the capacity in America's metropolitan areas for housing-assisted households to locate to higher opportunity neighborhoods. He defines neighborhood opportunity as a combination of a set of attributes, including employment accessibility, the incidence and level of poverty, educational attainment, employment rates, race, and the presence of other assisted households. Turner et al. (2011) examined the extent to which MTO participants were able to access higher opportunity neighborhoods and included an indicator for high-job-density neighborhoods (tracts with more than 200,000 low-wage jobs within 5 miles). Notably, the authors found that the MTO program did not noticeably increase participants' occupancy in higher opportunity neighborhoods. Although considerable debate remains about how to define and measure neighborhood opportunity, localized estimates of employment prospects are consistently in the conversation, along with school quality, poverty, racial concentration, and crime.

Previous scholarship is ambiguous about the importance of spatial mismatch on employment outcomes, yet it is a key feature of measurements and evaluations of neighborhood opportunity, particularly when considering the housing voucher program. It is unclear, however, whether those job accessibility indices are strongly associated with employment outcomes. For those reasons, we look specifically at job proximity locations and employment outcomes of housing voucher recipients in and out of the workforce.

Data and Methods

The goal of this article is to determine whether work-able HCV households move closer to jobs, and if they do, whether those moves are associated with gains in earned income. To do that, we linked longitudinal data on HCV households to block group-level job accessibility estimates and estimated changes in job proximity for work-able and non-work-able HCV households. This exercise offers an implicit test for whether employed HCV households use their vouchers to locate closer to jobs and whether that proximity allows them more success in the labor market. Longitudinal, household-level data on HCV households that HUD provided included information on employment and earnings, the presence of children, block group of residence, and race and gender of the householder.[3] The

3 We acknowledge that these data may be imperfect. Particularly with respect to the employment and earnings data, households may have an incentive to underreport if they think it will help protect their subsidy value. Note, however, that HUD uses the Enterprise Income Verification system to verify income.

block group-level employment data were from the U.S. Census Longitudinal Employer-Household Dynamics (LEHD) database (U.S. Census Bureau, 2013), which includes data on jobs and workers per block group. The LEHD data identify the number of jobs with workers who have not earned a bachelor's degree. We used LEHD counts of workers without bachelor's degrees and jobs not currently held by an incumbent with a bachelor's degree from 2009 to 2014.

Exhibit 1 displays descriptive statistics for the key variables in years 2009 and 2014 for the HCV household data. More than 2 million HCV households were in the sample, and we considered about 1.2 million of those to be work-able, defined as households with at least one member between 18 and 65 years old who is not listed as disabled or as a full-time student. We acknowledge that many individuals with disabilities or who are in school can and do work, but this is the closest we could come to isolating a sample of those HCV households potentially in the workforce. Work-able households constitute 55 to 57 percent of the total number of HCV households.

Exhibit 1

Descriptive Statistics in 2009 and 2014

	2009		2014	
All HCV Households	2,072,425		2,152,219	
Not work-able	883,821	(42.6%)	975,691	(45.3%)
Work-able	1,188,604	(57.4%)	1,176,528	(54.7%)
Asian	48,926	(2.4%)	49,370	(2.3%)
Black	888,928	(42.9%)	970,664	(45.1%)
Hawaiian/Pacific Islander	6,240	(0.3%)	7,550	(0.4%)
Hispanic	355,671	(16.2%)	323,270	(15.0%)
Native American	14,926	(0.7%)	15,036	(0.7%)
White	711,958	(34.4%)	716,200	(33.3%)
Households without children	1,052,982	(50.8%)	1,215,135	(56.5%)
Households with children	1,019,443	(49.2%)	937,084	(43.5%)
No earned income	1,366,643	(65.9%)	1,417,497	(65.9%)
Earned income	640,097	(30.9%)	666,027	(30.9%)

Sources: Inventory Management System (IMS)/ Public and Indian Housing (PIH) Information Center (PIC) data 2009 and 2014.

The racial and ethnic composition of the HCV population is majority non-White. Between 2009 and 2014, the proportion of households who self-identify as Black rose from 44 to 47 percent, but the second most common racial/ethnic group among households was White (roughly 34 percent), followed by Hispanics (which declined from 17 to 16 percent). The biggest change between 2009 and 2014 was an increase of nearly 200,000 in the number of households without children. Roughly one-half of the sample were households with children, and about 31 percent of households in the sample reported earned income in each year.

In each block group in a Core-Based Statistical Area (CBSA),[4] and for each year, we calculated employment accessibility estimates using a distance-decay function that weights jobs inversely according to their distance from the home block group. We used the same method HUD used in its

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4 We treat all counties not in CBSAs in the state as pseudo-CBSAs for calculation purposes.

AFFH data and mapping tool, which builds on work by Shen (2001; 1998). To begin, we drew a straight line between the centroid of each block group and the centroid of every other block group within a CBSA and measured the distance (*d*) of that line. We then assumed that job proximity decays according to the inverse of distance.[5] We then aggregated the jobs for each block group, weighted by the decay function, thus creating a distance-weighted job index for each block group. We limited the jobs to those that were currently held by incumbents with educational attainment lower than a bachelor's degree, to capture the relatively low-skilled jobs that HCV holders are more likely to seek and hold.

Because job seekers have competition, we also controlled for other potential job seekers near their residential block group. We did so by constructing a denominator for our jobs index that was a distance-decayed estimate of the number of low-skilled job incumbents that were located near each block group. Thus, as with jobs, we used a distance-decay function that measured not only how many residents in the labor force may be in the same block group as various types of HCV households but also those who are in surrounding block groups. The farther those households were from the residential locations of interest, the less weight they carried in the job index denominator. The equation for that measure is as follows:

$$A_i = \frac{\sum_{j=1}^{N} \dfrac{E_j}{d_{ij}}}{\sum_{j=1}^{N} \dfrac{W_j}{d_{ij}}}$$

where E_j is the number of jobs in block group *j*, W_j is the number of workers in block group *j*. $d_{i,j}$ is the distance between block groups *i* and *j*; where distances less than 1 mile are set to 1 mile; and where A_j is the job index calculated for block group *i*. To account for job market differences between CBSAs, we percentile-rank-order each block group jobs index within CBSAs. The jobs index captures both cross-sectional and temporal variation in jobs proximity within CBSAs.
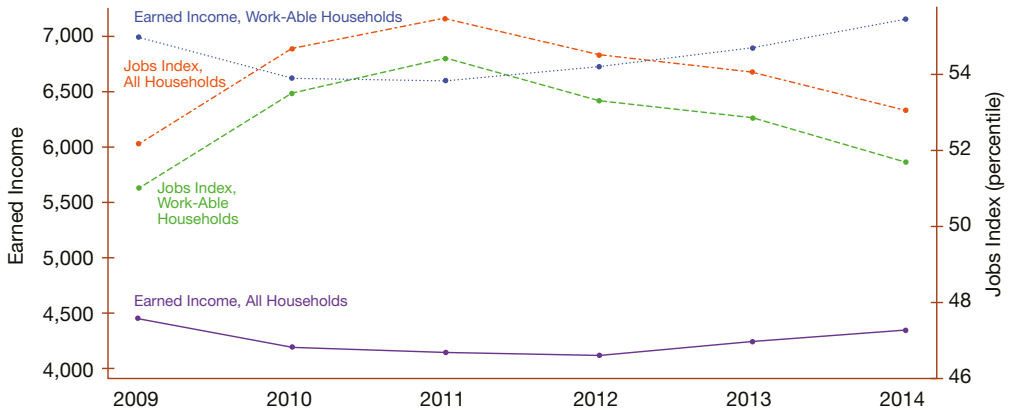
Results

In exhibits 2, 3, and 4, we describe basic annual trends and changes in inflation-adjusted earned income (measured in 2014 dollars) and jobs proximity. We report trends for all households and for work-able households. Exhibit 2 illustrates that earned income slowly rose for work-able households starting in 2012 after declining through the tail end of the Great Recession, but jobs proximity declined through 2014 after increasing in 2010 and 2011. Important to recall is that in all the job proximity analyses, those measures include a denominator that controls for competition for those jobs by other workers. This approach can wash out annual trends, which is why the results did not vary with the strong job growth through 2014. Although earned income for work-able households was much higher than for all households, the jobs index for work-able households was virtually identical to that for all other households.

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5 Note that the analysis was also performed using a job proximity decay function of the inverse of distance squared; the results were no different and were not sensitive to the form of the decay function. We also analyzed a tract-level jobs index using unemployed workers without bachelor's degrees in the denominator, with similar results.

Exhibit 2

Annual Mean Earned Income and Jobs Proximity Over Time

Sources: IMS/PIC data 2009–2014; LEHD data 2009–2014.

Exhibit 3

Percent of Households that Changed Block Group in Past Year

Group	Percent
All HCV Households	14.4
Not work-able	11.3
Work-able	16.7
Asian	8.7
Black	17.3
Hawaiian/Pacific Islander	10.2
Hispanic	12.6
Native American	14.6
White	11.4
Households without children	10.6
Households with children	18.6

Sources: IMS/PIC data 2009–2014.

Exhibit 4

Annual Changes in Jobs Index and Earned Income

Annual Changes in Jobs Index					
	N	**Mean**	**StdDev**	**Min**	**Max**
All HCV Households	8,581,534	− 0.035	12.283	− 99	99
Not work-able	3,723,300	0.012	11.381	− 99	99
Work-able	4,858,234	− 0.071	12.931	− 99	99
Asian	222,561	0.056	8.921	− 98	97
Black	3,980,459	− 0.035	12.420	− 99	99
Hawaiian/Pacific Islander	20,948	0.073	11.876	− 97	93
Hispanic	1,299,919	− 0.144	12.511	− 99	99
Native American	59,917	0.374	12.902	− 95	98
White	2,988,158	0.005	12.208	− 99	99
Households without children	4,523,321	0.021	10.983	− 99	99
Households with children	4,058,213	− 0.097	13.585	− 99	99
Annual Changes in Earned Income					
	N	**Mean**	**StdDev**	**Min**	**Max**
All HCV Households	9,012,747	140.2	3585.4	− 15,000	15,000
Not work-able	3,881,022	15.2	1531.8	− 14,999.1	15,000
Work-able	5,131,725	234.8	4558.7	− 15,000	15,000
Asian	227,893	69.7	3395.2	− 14,999.8	15,000
Black	4,103,111	184.2	3996.9	− 15,000	15,000
Hawaiian/Pacific Islander	31,020	207.4	4228.5	− 14,991.7	14,995.85
Hispanic	1,445,983	158.5	3642.1	− 15,000	15,000
Native American	62,750	119.9	3482.9	− 14,998.1	14,996.1
White	3,117,003	66.9	2929.6	− 15,000	15,000
Households without children	4,731,708	17.4	2542.8	− 14,999.9	15,000
Households with children	4,281,039	276.0	4459.0	− 15,000	15,000

Notes: Max = maximum. Min = minimum. N = number. StdDev = standard deviation.
Sources: IMS/PIC data 2009–2014; LEHD data 2009–2014.

In exhibit 3, we provide context for the changes in jobs proximity and earnings that we report in exhibit 4. Exhibit 3 shows that work-able households (16.7 percent) were more likely than not-work-able households (11.3 percent) to change block groups in the past year. Black households and households with children were the other two groups with somewhat larger mobility rates than other households. Whereas about 14 percent of households changed block groups each year, roughly 17 percent of Black households and 18.6 percent of households with children moved to different block-groups in a given year.

In exhibit 4, we report annual changes in the jobs proximity index and in inflation-adjusted earned income for work-able and not work-able households, and we also split those by race/ethnicity and for households with and without children. Given that the typical household does not move in a year (as seen in exhibit 3), annual job index changes are small—all those index changes hover close to zero. Perhaps more surprising is that work-able households were less likely to experience
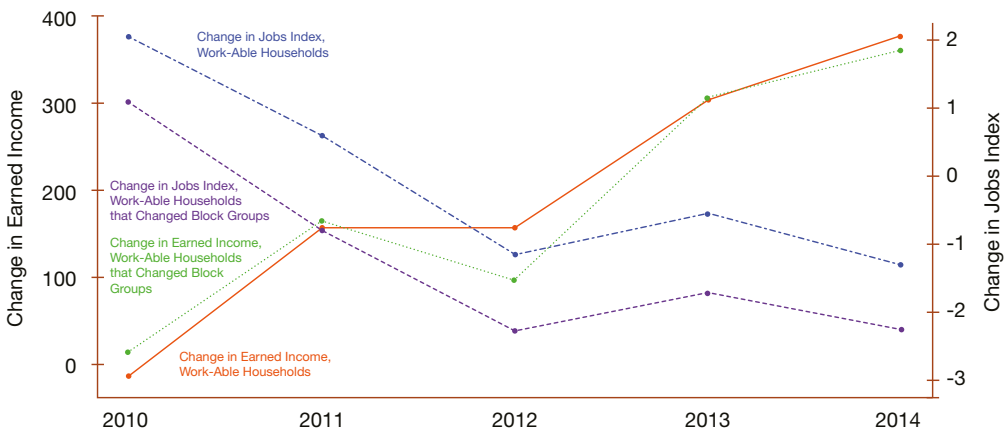
increases in jobs proximity than not work-able households. The differences between the two groups were small—much less than a standard deviation. On average, work-able households had a small negative change in jobs proximity, whereas not work-able households had a small positive change; work-able HCV households moved away from jobs, whereas not work-able households moved toward jobs, but those movements and the differences between the two groups are very small. Looking at demographic groups, households without children and Asian and White households experienced small increases in jobs proximity, whereas Hispanic and Black households, and households with children experienced small decreases.

For changes in earned income, those results are essentially flipped. The average household saw an annual increase in inflation-adjusted earned income of roughly $140, measured in 2014 dollars. Although mean earned income changes from year to year were all positive, they were larger for work-able households, Black households, Hispanic households, and households with children.

In exhibit 5, we more closely examine the changes for the minority of households that changed block groups. The exhibit reports four trend lines: annual mean within-household changes in real earned income and the jobs index for all work-able households and for work-able households that changed block groups in the past year. In general, the trend lines are identical for the two types of households—those that did and did not change block groups. In other words, those that changed block groups experienced the same trends in jobs proximity and earned income changes. Annual changes in earned income are virtually identical between the two types of households. For changes in the jobs index, households that changed block groups saw larger declines in their localized job index than the entire sample of work-able households in each year. In other words, work-able households were more likely to make moves that lowered their jobs index.

Exhibit 5

Annual Changes in Earned Income and Jobs Proximity for Work-Able Households and Work-able Households that Changed Block Groups

Sources: IMS/PIC data 2009–2014; LEHD data 2009–2014.

Over time, work-able households experienced a small negative change in earned income in 2010, followed by increases of about $157 in both 2011 and 2012. During those years, mean within-household changes in jobs proximity for work-able households were steadily decreasing, from 2.04 in 2010 to -1.15 in 2012 (to put those numbers in context, the standard deviation of within-household changes in jobs proximity is 12.93). Mean changes in earned income for work-able households were more than $300 in both 2013 and 2014, whereas mean changes in jobs proximity were negative in both years.

We can conclude from the analyses mentioned earlier that moving from one block group to another is rare, but that such moves by work-able households have more typically accompanied lower jobs proximity but without observed effects on earned income. Thus, we would expect that the basic correlation between the jobs proximity index and earned income for work-able households would be relatively low. We provide these correlations in exhibit 6, with breakdowns by race/ethnicity and presence of children. These are baseline correlations that are just as likely to capture the effect of income on jobs proximity as vice versa, but for that reason in particular, the lack of correlation between jobs proximity and earned income is quite remarkable. In the first column of correlations, we report the biserial correlation (biserial correlations are more appropriate when one variable is dichotomous) between jobs proximity and receipt or nonreceipt of earned income in that year. Here, the correlation is -0.01 for all work-able households. The P values for many of the correlations in this exhibit are very small, indicating statistical significance, but that is largely due to the very large sample sizes. The correlations are still substantively very close to zero. As a practical matter, the findings suggest that work-able HCV households that locate in neighborhoods with better access to jobs are not experiencing measurable increases in earned income. The largest positive correlation is 0.02 for work-able Hawaiian/Pacific Islander households, which is a relatively small group. No correlation is larger, in absolute value terms, than 0.05. The correlations were calculated again for total earned income in real, inflation-adjusted terms. For real earned income, the Pearson correlations are very similar to the correlations with the binary measure of earned income. Again, not a single group of work-able households has a correlation higher than 0.05 in absolute value terms, and most of the correlations are negative.

Exhibit 6

Correlations Between Jobs Index and Earned Income

		Variable = Any earned income		Variable = Real earned income	
Sample	N	Biserial Correlation	P value*	Pearson Correlation	P value
All work-able households	6,857,462	– 0.013	0.000	– 0.020	0.000
Asian	150,192	– 0.036	0.000	– 0.010	0.000
Black	3,801,631	0.003	0.000	– 0.011	0.000
Hawaiian/Pacific Islander	19,616	0.016	0.072	0.005	0.461
Hispanic	1,092,161	– 0.042	0.000	– 0.035	0.000
Native American	53,190	– 0.033	0.000	– 0.033	0.000
White	1,740,339	– 0.011	0.000	– 0.023	0.000
Households without children	1,894,132	– 0.044	0.000	– 0.045	0.000
Households with children	4,963,330	0.001	0.032	– 0.007	0.000

Although many of these P values are very small, indicating statistical significance, the correlations are typically still very close to zero.
Sources: IMS/PIC data 2009–2014; LEHD data 2009–2014.

Again, because the entire sample moves infrequently from year to year (14 percent for all HCV households), we replicated those same correlations for the households within each category that moved within the past year, displayed in exhibit 7. In the first set of columns, we display the polyserial correlations between numerical changes in the jobs index and changes in earned income, which can occur in three ways: the variable has a value of 1 if the household went from no earned income to some earned income; 0 if they had no earned income in both years or had some earned income in both years; and -1 if they went from having some earned income to having none. The polyserial correlations are appropriate here because only three discrete options exist for changes in earned income. The second set of columns provides Pearson correlations between changes in the jobs index and changes in real earned income. Again, the correlations are very close to zero regardless of how we measure. The polyserial correlation is -0.001 for all work-able households that change block groups, and the largest correlation in absolute value is -0.016 for work-able households without children that changed block groups.

Exhibit 7

Correlations Between Jobs Index and Earned Income

Sample	N	Variable = change in any earned income		Variable = change in real earned income	
		Polyserial Correlation	P value*	Pearson Correlation	P value
All work-able households that changed block-groups	733,613	– 0.001	0.578	0.000	0.975
Asian	9,955	0.010	0.488	0.011	0.289
Black	462,016	– 0.001	0.716	0.000	0.921
Hawaiian/Pacific Islander	1,747	– 0.013	0.671	– 0.023	0.329
Hispanic	104,348	– 0.003	0.415	0.000	0.933
Native American	5,014	0.016	0.383	0.007	0.612
White	150,504	0.000	0.960	– 0.001	0.675
Households without children	138,464	– 0.016	0.000	– 0.007	0.014
Households with children	595,149	0.003	0.118	0.002	0.242

Sources: IMS/PIC data 2009–2014; LEHD data 2009–2014.

In exhibit 8, we isolate the population that not only changed block groups in the past year but also increased inflation-adjusted earned income. Our purpose is to see if we can detect positive changes in jobs proximity for this group. We list average changes in earned income and jobs proximity and also provide those measures for households in the top quartile of changes in jobs proximity. We also provide the percentage of households in the upper quartile of change in jobs proximity for those that changed block groups and increased earned income. Average increases in earned income were substantial, ranging from $4,826 to $5,818; however, the average change in jobs proximity was small and negative: -1.259, or about 5 percent of 1 standard deviation for all work-able households that changed block groups and increased income. Further, the percentage of households in the upper quartile of change in jobs proximity is less than 25 percent for all groups other than Native Americans. In other words, households that have an increase in earned income are less likely to have had large improvements in job proximity in that year. Further, the average increase in income for those in the upper quartile of change in jobs proximity is virtually identical

to those that are not in the upper quartile of change in jobs proximity. Regardless of how we slice the data, jobs proximity does not seem to matter for baseline levels of earned income or changes in earned income.

Exhibit 8

Changes in Earned Income and Jobs Proximity for Work-able HCV Households Who Changed Block Groups and Increased Earned Income

	N	Mean increase in earned income ($)	Mean change in jobs proximity	Percentage of households in upper quartile of change in jobs proximity	Mean increase in income for households in upper quartile of change in jobs proximity ($)	Mean change in jobs proximity for households in upper quartile of change in jobs proximity
All work-able households that changed block-groups and increased income	213,431	5,562.6	– 1.259	21.7	5,686.6	31.9
Asian	3,321	4,826.5	– 1.609	20.2	5,079.9	29.9
Black	133,957	5,694.1	– 1.408	22.1	5,797.3	31.6
Hawaiian/Pacific Islander	679	5,590.8	– 2.465	18.0	5,593.3	32.2
Hispanic	31,821	5,331.5	– 1.009	20.4	5,417.2	33.0
Native American	1,294	5,818.9	0.081	25.6	5,965.2	33.5
White	42,355	5,370.1	– 0.961	21.5	5,556.5	32.2
Households without children	34,624	5,220.2	– 0.840	20.0	5,341.5	31.6
Households with children	178,807	5,628.9	– 1.337	22.0	5,747.3	32.0

HCV = housing choice voucher.

Summary

In this article, we observe that work-able housing choice voucher households in the United States are not likely to be any closer to jobs than are not work-able HCV households, which suggests that being near job centers is not a high priority when HCV households in the workforce consider where to locate. Further, we do not find any evidence that an increase in earned income results when HCV households use their vouchers to locate closer to job centers. Although those bivariate estimates are surely biased, the most likely bias would occur if higher earned incomes enabled households to locate closer to jobs. That bias would make us more likely to observe findings that simply do not materialize. These results clearly indicate that earned incomes and job proximity are not strongly related for voucher households.

The findings suggest that job proximity is perhaps an overrated concern in policy and research on neighborhood opportunity. Housing policymakers commonly evaluate and try to influence neighborhood opportunity through such mechanisms as the Affirmatively Furthering Fair Housing process. At present, job proximity is very much emphasized in policies designed to address

locational outcomes and fair housing, but the evidence here and elsewhere calls into question whether that emphasis is warranted.

Given that enhanced jobs proximity is not likely to actively hinder employment outcomes, we conclude that these findings are indicative of the several tradeoffs that households make when trying to obtain housing. Those tradeoffs are particularly difficult to navigate for HCV households that are acutely income constrained and often subject to landlord discrimination. HCV households with more earned income (or greater increases in earned income each year) could be moving away from job-rich areas but into more traditionally residential areas, potentially with lower crime and poverty rates, higher quality schools, and better housing options. We have also not accounted for auto ownership, which is known to be key to employment outcomes, particularly for HCV participants and other low-income households (Blumenberg and Pierce, 2014). Households with access to automobiles may be more likely to both earn income and live far away from job clusters.

Ultimately, we think that the rational policy response to these findings should be to keep the importance of job proximity in perspective. Evidence of the importance of job proximity for HCV households is simply not sufficient to warrant that it be as high a priority as are safe neighborhoods and access to high-quality schools. HCV households are a diverse group, however, and for households in the workforce and without access to reliable transportation, proximity to jobs is worth paying attention to without allowing it to override concerns that evidence suggests may be more important.

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