

**The Impact of Housing Vouchers on Renters' Neighborhood Satisfaction: Understanding the Perceptions and Constraints among Assisted and Unassisted Renters**

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Since the 1970's, the Department of Housing and Urban Development (HUD) has fundamentally shifted its approach to providing subsidized housing. Initial efforts to provide housing to extremely low-income groups largely consisted of project-based subsidized units often isolated from other communities. HUD's more recent approaches seek to integrate subsidized housing into existing neighborhoods.

To decrease poverty and racial concentration, HUD began providing rental certificates to eligible Section 8 households that cover a set percentage of rent payments to subsidize housing in the private market. To be eligible, housing under this program must meet standards for physical quality and to be managed by landlords willing to accept government rental subsidy payments. This market-based approach rests on the premise that vouchers (demand side subsidies) will provide better living environments than place-based housing assistance (supply side subsidies) by offering recipients choice over where they live. Today, the program now known as the Housing Choice Voucher Program (HCVP), is the largest housing subsidy program for low income individuals. HCVP households comprise of 40% of all HUD-assisted households – an increase from 34% in 1993 (Schwartz 2006).

Although vouchers are intended to provide a choice of housing and neighborhood to low-income renters while hopefully promoting racial and economic desegregation (Schwartz 2006), a growing body of research suggests voucher holders, particularly minority households, often live in neighborhoods with higher levels of poverty and racial concentration and are more likely to live in inadequate housing compared to non-subsidized renters (Devine et. al 2003; Koebel 1997; Popkin 2010; Comey 2007; Popkin et al. 2009; Pendall 2000). To understand these disparate outcomes, research has begun to examine the constraints voucher households face when they search for housing in the private rental market. More than ever, research now focuses on the

possible race and class based discriminatory mechanisms that voucher holders may experience that limit residential choice.

Important to social scientists is whether the program improves overall residential satisfaction of subsidized households. Yet, findings on the success and effectiveness are inconsistent. For example, while research finds improved living conditions of those relocating from public housing projects, they also find that voucher holders remain spatially concentrated in poorer neighborhoods compared to other renters (Popkin and Cunningham 2000; Devine et al. 2003; Galvez forthcoming). This paper continues to look at spatial outcomes of publicly assisted renters by examining perceptions of neighborhoods among unassisted and assisted renters to determine if housing assistance affects neighborhood satisfaction. It also examines the effects of their housing search process (e.g., number of homes looked at before relocating and reason(s) for selecting their current unit) on renters' neighborhood satisfaction. That is, does housing assistance, independent of other individual/household and neighborhood characteristics, affect neighborhood satisfaction and how do aspects of the housing search process affect this relationship?

Using data from the 2009 National American Housing Survey (AHS), this research examines neighborhood satisfaction among assisted and unassisted renters. This paper will also examine a sample of recent movers to look at how characteristics of the search process may impact neighborhood satisfaction among renters. Studying the effect of housing assistance on neighborhood satisfaction will allow us to assess whether housing vouchers promote residential satisfaction for low income families. The following sections will provide an overview of the literature on residential satisfaction and outcomes of voucher holders. This discussion provides a background and context for the study.

## **Why Neighborhood Satisfaction?**

According to HUD's mission statement, one of its primary goals is for housing to improve families' quality of life (HUD.gov 2011). These principles are also embodied in the goals of the housing choice voucher program – to assist very low-income families, the elderly, and the disabled to afford decent, safe, and sanitary housing in the private market. This program, unlike previous approaches to housing, offers individuals and families the ability to find and choose their own housing, including single-family homes, townhouses and apartments.

Neighborhood satisfaction is recognized as a significant component of individuals' overall quality of life. In many cases, neighborhood satisfaction is also believed to proxy for status (Lu 1999; Adams 1984; Rossi 1980). Conceptually housing choice is intended to help people realize and acquire their desired housing or neighborhood. In this sense, "housing choice" and/or one's decision to move is often predicated on their evaluation of their neighborhood (Rossi 1980; Spear 1974; Lu 1999). Understanding people's evaluation of their neighborhood or housing situation may indicate the extent that their choices are maximized and is important for evaluating the success of housing and mobility programs.

Determinants of residential satisfaction are varied (Lu 1999; Bruin and Cook 1997; Glaster 1987). They are often influenced by a household's needs, aspirations and also factors likely to hinder mobility. Research has examined the effects of a number of housing and neighborhood conditions, household characteristics, and environmental perceptions on neighborhood satisfaction. This includes indicators of crime, poverty, and social disorder (Ahlbrandt 1984; Marans and Rodgers 1975) and also individual and housing characteristics, such as housing assistance, income, tenure, life cycle stage, housing quality, etc (Ahlbrandt

1984; Lu 1999; Jargun et al. 1990). Yet, research also suggests the importance of attitudinal variables on individuals' residential satisfaction. Perceptions appear to play a major role in addition to actual configuration of residential and household characteristics, particularly those on crime, social order, and social ties (Hipp 2010; Markowitz et al. 2001; Greenberg 1999; Adams 1992; Marans and Rodgers 1975). Research has shown close correlation between resident's dwelling satisfaction and neighborhood satisfaction, yet the direction of the causality remains inconclusive (Lu 1999; James 2008; Glaster 1987; Basolo and Strong 2002). Moreover, both objective and self-reported measures have been found useful in explaining neighborhood satisfaction.

### **Neighborhood Outcomes among Voucher Holders**

Much of the recent research on voucher households' housing and neighborhood outcomes comes out of studies that have examined participants of the Moving to Opportunity mobility program and HOPE VI relocatees as they move from severely distressed public housing to the private rental market via housing vouchers<sup>1</sup>. When comparing housing and neighborhood outcomes of these groups compared to baseline studies which occurred while renters will still living in public housing, most studies find that voucher households relocated to areas of better quality housing and to lower poverty, safer neighborhoods (Popkin 2010; Popkin and Cove 2007; Buron et al. 2007). The same is true for those who engaged in portability moves (i.e., moves across housing jurisdiction), although when looked at from 1998-2005 comprised of only 9% of

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<sup>1</sup> MTO is a randomized housing mobility experiment sponsored by the U.S. Department of Housing and Urban Development (HUD). MTO provided 4,600 low-income families with children living in public housing within some of the nation's most disadvantaged urban neighborhoods the chance to move to private-market housing in much less distressed communities. HOPE VI is a HUD sponsored program that replaces severely distressed public housing projects, occupied exclusively by poor families, with redesigned mixed-income housing and provides housing vouchers to enable some of the original residents to rent apartments in the private market.

all HCVP recipients (Climaco et al. 2008). Those who relocate from severely distressed public housing appear to be experiencing improvements in feelings of neighborhood satisfaction, especially in terms of safety (Kingsley and Petit 2008; Gubits et al. 2009; Popkin 2010; Popkin et al. 2009; Comey 2007).

Other research on the satisfaction of those who relocated via housing vouchers suggests families faced additional burdens following their relocation to the private rental market. Voucher households report a number of social and economic burdens when they chose to relocate to the private rental market (Rasinski et al. 2010; Rosenbaum, DeLuca, and Tuck 2005; Buron et al. 2007; Popkin 2010; Wood, Turnham, and Mills 2008; Pokin et al. 2009). Major hardships remain that make their living situation extremely precarious. Many reported facing much difficulty keeping up with additional expenses of private rental housing and dealing with pre-existing hardships such as health and unemployment (Rasinski et al. 2010; Rosenbaum, DeLuca, and Tuck 2005; Buron et al. 2007; Popkin 2010; Wood, Turnham, and Mills 2008; Pokin et al. 2009).

The majority of this research, as mentioned, focuses on longitudinal data of voucher households, particularly as they relocate from severely distressed housing to the private rental market. Where this is an issue of time, other research compares outcomes of voucher holders and unsubsidized renters. When compared to unsubsidized renters within the same MSA, voucher holders seem to fare worse in terms of neighborhood poverty level, safety, and racial concentration (Cunningham and Droesch 2005; Comey 2007; Devine et al. 2003). There remains a strong racial dimension. Research finds that voucher holders are moving into areas with a high concentration of African Americans (Popkin 2010; Comey 2007; Popkin et al. 2009) and that African American voucher holders are more likely to live in impoverished

neighborhoods than other racial groups (Cunningham and Sawyer 2005; Basolo and Nguyen 2005).

### **A Closer look at Housing Choice among Voucher Holders**

Research has identified several constraints that prevent moves to better neighborhoods for voucher holders. Two major barriers to entering areas of lower poverty concentration are landlord discrimination and conditions of the private, affordable rental housing market.

Several authors identified landlord discrimination against voucher holders and African Americans in particular as major barriers in the search for private rental housing with vouchers (Cunningham and Sawyer 2005; Basolo and Nguyen 2005; New Orleans Fair Housing Action Center 2009). Stone (1993) has showed that lower income groups, particularly those receiving housing assistance, are more vulnerable to discrimination among landlords based on their receipt of public assistance including housing vouchers and welfare. Turner et al. (1999) suggest that source of income requirements may serve as a proxy for racial or voucher discrimination. Others note that the lack of affordable rental housing available to those with housing vouchers served as a major barrier to relocating in new, healthier neighborhoods (Basolo and Nguyen 2005; Comey 2007; Ma 2009).

Households with members who have developmental problems or other special needs face an even more constrained choice when utilizing housing vouchers. Snell and Duncan (2006) find child's health, behavioral, and educational problems have a significant effect on a family's decision to move with the assistance from the HCVP. Those with children who have learning disabilities and require special needs were less likely to relocate via housing vouchers than families without these problems. Popkin, Cunningham and Burt (2005) studied the transition

from distressed public housing and identified a population that was “hard to house.” These residents typically have personal or family circumstances which make it difficult for them to be adequately served by standard relocation options (e.g., substance abuse, physical and mental health problems, and poor education and work history). The special needs of such households make it difficult for these public housing residents to successfully transition to mixed-income or private market housing. Most housing voucher programs, in their current form, do not address the additional needs of these extremely vulnerable populations (Popkin, Cunningham and Burt 2005).

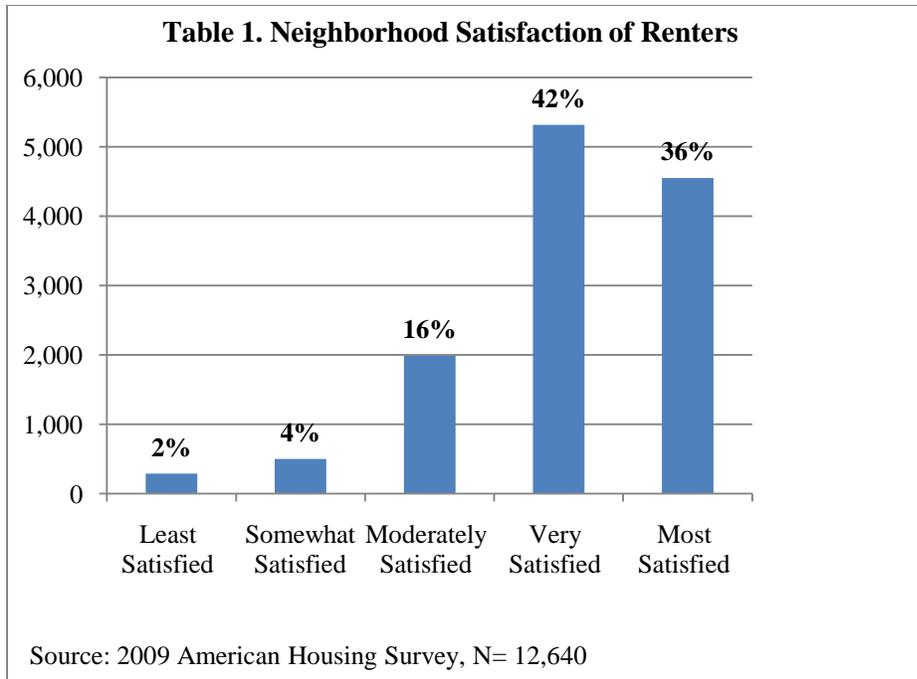
Research in general finds that voucher recipients are often discouraged and overwhelmed by the housing search process, and have difficulty finding housing in particularly tight affordable housing markets (Kennedy and Finkel 1994; Finkel and Buron 2001; Galvez 2010; Basolo and Nguyen 2005). The intersection of these challenges, in addition to individual-level hardships, complicates the search and moving processes for voucher holders and ultimately undermines the major policy goals behind the HCVP.

## **Data and Methods**

The data for this study is from the American Housing Survey (AHS), a nationally representative sample of housing units and householders. The AHS, sponsored by the Department of Housing and Urban Development, is a nationally representative longitudinal sample of housing units. The survey has been conducted biannually by the Census Bureau since 1973. It includes a national sample and samples of selected metropolitan areas. The AHS is appropriate for this research because it includes data on individual, household, and neighborhood characteristics as well as households’ assessment of their neighborhood and housing quality.

This analysis used data from the 2009 national sample. Focusing solely on renters who responded to the question on receiving government housing assistance the sample was reduced. The effective sample consists of 12,862 households who reported receiving no form of government housing assistance, receiving housing vouchers which could be used to move, or living in a building owned by a public housing authority. The subsample of recent movers consisted of 6,653 households.

Neighborhood satisfaction is measured by a respondent's answer to the question: "On a scale 1 to 10, how would you rate the neighborhood as a place to live? 10 is the best and 1 is worst." Within this question the AHS does not define neighborhood, respondents are free to consider what they find to be most meaningful or relevant. As in most self-reported satisfaction measures, the distribution was positively skewed with most of the sample rating the neighborhood around 6 and above. Due to the small number of observations in the satisfaction levels of 1 through 4, for the empirical analysis the neighborhood satisfaction measures were regrouped into five ordered categories: least satisfied (1-2), somewhat satisfied(3-4), moderately satisfied (5-6), very satisfied (7-8), most satisfied (9-10). Table 1 shows the distribution of neighborhood satisfaction in the sample.



Descriptions of the variables used in the analyses, as well as their statistics, are shown in Table 2. The selection of these variables is largely guided by past research that has found them significant in explaining neighborhood satisfaction. Explanatory variables used in this analysis can be grouped in three distinct ways: *perceptual variables* (housing satisfaction<sup>2</sup>, exposure to crime, and availability of community services), *individual/household attributes* (race, income, sex, age, marital status, education, duration of residence, number of children, welfare receipt, and disabled householders), and lastly, *neighborhood/locational variables* (form of government assistance and urbanicity).

<sup>2</sup> Housing satisfaction and neighborhood satisfaction have been found to be closely related. Given the close relationship between individuals' perceptions of their dwelling and neighborhood, one type of satisfaction is often used to explain the other (Lu 1999) and thus, housing satisfaction is included in the final model.

**Table 2. Variable Descriptions and Summary Statistics**

<b>Variable</b>	<b>Description</b>	<b>Mean</b>	<b>Standard Deviation</b>
Housing Assistance	1 = Unassisted; 2=Housing vouchers; 3 = PHA-owned housing	1.19	0.663
Neighborhood/Housing Satisfaction	Rating of neighborhood/housing unit as place to live: 1 = Least Satisfied 2 = Somewhat Satisfied 3 = Moderately Satisfied 4 = Very Satisfied 5 = Most Satisfied	4.05/ 4.07	0.942/ 0.869
Crime	0 = No incidence of serious neighborhood crime in past year; 1 = Incidence of serious neighborhood crime in past year	0.22	0.416
Community Services	0 = No community services provided; 1 = Community services provided	0.23	0.422
Race	1 = White; 2 = Hispanic; 3 = African American	1.63	0.821
Sex	0 = Male; 1 = Female	0.54	0.498
Marital Status	0 = Single; 1 = Married, living with spouse	0.27	0.444
Age	Age of respondent	43.92	17.741
Welfare Recipient	0 = Not receiving welfare assistance or Food Stamps 1 = Receives welfare assistance or Food Stamps	0.16	0.364
Education	1 = <High School 2 = High School Grad 3 = Tech/Assoc Degree 4 = Bachelor's or higher	2.37	1.023
Children	Number of children under 18 in household	0.68	1.126
Disabled householder	0 = No disabled householder; 1 = Disabled householder	0.19	0.391
Income (log)	Log of respondent's family income	\$35,870	\$37,917
Move	Year householder moved in 1 = Moved in 2005 or earlier 2 = Moved in 2006 3 = Moved in 2007 4 = Moved in 2008 5 = Moved in 2009	2.82	1.529
Urbanicity	1 = Central City of MSA; 2 = Urban, not central city of MSA; 3 = Rural	1.68	0.680

To demonstrate and test these relationships this study will present both bivariate and multivariate analyses. To examine the variation in neighborhood satisfaction, an ordered

dependent variable, this study employs an ordered logit model to indicate the likelihood that an individual will be in a higher, rather than lower, neighborhood satisfaction category. Although multinomial logit or probit models are typically most appropriate for discrete outcome variables, an ordered logit model is most appropriate in this case because it takes into account the ordinal nature of the outcomes (Lu 1999; Greene 1997). Under this ordered logit model the cumulative probability of an individual ( $i$ ) being in a particular category of neighborhood satisfaction ( $j$ ) or higher is indicated as

$$F_{ij} = \sum_{m=j}^J P_{im}$$

where  $P_{im}$  is the probability that individual  $i$  falls into category  $m$  and  $J$  is equal to the highest neighborhood satisfaction category (in this case, a rating of 9 or 10). Each  $F_{ij}$  then relates to a separate division of the dependent variable. The model is then  $J-1$  set of equations

$$\log\left(\frac{F_{ij}}{1 - F_{ij}}\right) = \alpha_j + Bx_i, \quad j = 1, \dots, J - 1$$

where  $Bx_i = \beta_1 x_{i1} + \dots + \beta_k x_{ik}$  with  $k$  being equal to the number of independent variables in the model. These formulas create a single set of coefficients, but a different intercept/break for each equation that represent the probability of being in any higher category (Allison 1999).

I first present significant bivariate relationships between assisted renters and those with vouchers that allow for mobility to highlight the primary variables of interest in this study and the distribution across assisted and unassisted renters.

## Results

### *Unassisted and Subsidized Renters: Comparative Analysis*

Table 3 summarizes significant bivariate relationships between explanatory and control variables and housing assistance. There are several differences among unassisted renters and voucher households that are worth noting<sup>3</sup>. In terms of individual or household demographics, voucher holders are much more likely to be female, African American, without a spouse, and receive welfare assistance such as AFDC or Food Stamps than those renters receiving no government assistance. In all these cases, differences between these two groups were ranged from 20 to 30 percentage points or greater. Voucher holders also have a considerably lower median income compared to unassisted renters – a difference of \$28,000. Based on these numbers, we can also assume that the majority of voucher households are living below the poverty line as they report earnings below \$10,000 a year. In addition to being poorer and more likely to be on welfare assistance, voucher holders were also more likely to have a disabled member of the household and have children present.

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<sup>3</sup> The differences between these two groups (unassisted renters and voucher holders) are all significant at the  $p < .00$  level.

**Table 3. Household and Neighborhood Characteristics by Housing Assistance**

<i>Individual Characteristics</i>	Unassisted Renters	Voucher Holders	<i>Neighborhood Conditions</i>	Unassisted Renters	Voucher Holders
<b>Sex</b>			<b>Neighborhood Satisfaction</b>		
Female	51% (11,738)	80% (544)	Least Satisfied	2%	5%
<b>Race</b>			Somewhat Satisfied	4%	6%
African American	19%	49%	Moderately Satisfied	15%	21%
Hispanic	19% (10,773)	15% (513)	Very Satisfied	43%	30%
<b>Marital Status</b>			Most Satisfied	36% (11,529)	38% (541)
Single	71% (11,738)	90% (544)	<b>Housing Satisfaction</b>		
<b>Welfare/Food Stamps</b>			Least Satisfied	2%	2%
Yes	11% (11,738)	48% (544)	Somewhat Satisfied	3%	4%
<b>Children Present</b>			Moderately Satisfied	16%	16%
Yes	34% (11,738)	47% (544)	Very Satisfied	47%	38%
<b>Education</b>			Most Satisfied	32% (11,561)	40% (540)
< High School	16%	31%	<b>Presence of Serious Crime</b>		
High School Grad	48%	53%	Yes	21% (11,580)	31% (539)
Beyond High School	36% (11,738)	16% (544)	<b>Community Services Available</b>		
<b>Family Income</b>			Yes	22% (11,738)	29% (544)
Mean	39,334.42	12,138.28	<b>Urbanicity</b>		
Standard Deviation	39,189.48 (11,738)	10,890.26 (544)	Central City of MSA	43%	52%
<b>Disabled Householder</b>			Urban, not Central City of MSA	44%	38%
Yes	15% (11,701)	42% (543)	Rural	13% (11,738)	10% (544)

Source: 2009 American Housing Survey

Based on these comparisons, we know that voucher holders, in a number of ways, are worse off than unassisted renters. Besides the obvious racial dimension, the eligibility of vouchers stipulates many of these conditions for recipients so these relationships are not particularly surprising. More interesting are the discrepancies in living conditions and residential satisfaction for both of these groups.

In terms of neighborhood satisfaction, our main variable of interest, voucher holders were less likely to be satisfied with their neighborhood than unassisted renters. Yet, for housing satisfaction both groups report nearly equal levels of satisfaction. Differences did exist for incidence of crime and the availability of community services. Voucher holders report a greater incidence of serious neighborhood crime and also availability of community services than unassisted renters. The majority of both types of renters live in urban areas, but voucher holders were also more likely to reside in central cities of a MSA compared to unassisted renters.

While we see an initial relationship here between housing assistance and neighborhood satisfaction –particularly, voucher holders being less satisfied with their neighborhood than unassisted– we do not yet know how this relationship alters when characteristics or perceptions of neighborhood and household attributes are introduced. The following multivariate analysis will see if these relationships remain significant in explaining the variance in neighborhood satisfaction.

#### *Effect of Government Housing Assistance on Neighborhood Satisfaction*

Table 4 presents coefficients from an ordered logit analysis modeling the effects of various individual, household, and neighborhood characteristics on self-reported neighborhood satisfaction. In this initial model the variable on housing satisfaction was excluded. This shows a negative, yet not statistically significant relationship between housing voucher assistance and neighborhood satisfaction. In this case, only those residing in Public Housing Authority (PHA) owned buildings are significantly less likely to feel satisfied with their neighborhood than are unassisted renters. The model is also showing some significant effects of the perceptual variables and individual/household attributes on neighborhood satisfaction. Those who do not experience

crime, have community services available, and reside outside of major central cities have a stronger probability of expressing higher neighborhood satisfaction. In addition, to these effects, being African American, older, on welfare assistance, or having a disabled householder, increases the probability of expressing lower neighborhood satisfaction.

**Table 4. Neighborhood Satisfaction by Household and Neighborhood Characteristics (Excluding Housing Satisfaction)**

	Model I	
	Log Odds	
<i>Housing Assistance</i> (Ref. group=Unassisted)		
Housing Vouchers	-0.004	(0.109)
PHA Housing	-0.207*	(0.099)
<i>Perceptual Variables</i>		
Crime (1=Experienced crime)	-1.169***	(0.047)
Community Services (1= Services are available)	0.185***	(0.044)
<i>Ind./Household Variables</i>		
Hispanic (Ref. group=White)	0.080	(0.052)
African American	-0.165**	(0.048)
Sex (1=Female)	0.068 <sup>a</sup>	(0.037)
Marital Status (1=Married, living w/ spouse)	0.156***	(0.044)
Age	-0.016**	(0.006)
Age <sup>2</sup>	0.000***	(0.000)
Welfare Receipt (1=Welfare recipient)	-0.204**	(0.063)
High School Grad (Ref. group= <High School)	0.008	(0.054)
Tech/Assoc Degree	-0.026	(0.072)
Bachelor's or higher	0.102	(0.063)
Number of children	-0.001	(0.020)
Special Needs (1=Disabled householder)	-0.159**	(0.056)
Income (log)	0.024*	(0.010)
Moved in 2006 (Ref. group=Moved in 2005 or earlier)	0.039	(0.066)
Moved in 2007	0.014	(0.057)
Moved in 2008	0.004	(0.051)
Moved in 2009	0.002	(0.057)
<i>Locational Variables</i>		
Urban, not central city(Ref. group=Central City of MSA)	0.149***	(0.038)
Rural	0.455***	(0.059)
Mean Dependent Variable	4.054	
N. Observations	11456	
Wald Chi2 (23)	1144.51	

\*\*\* p <.001; \*\* p<.01; \* p<.05; <sup>a</sup>p<.10

Source: 2009 American Housing Survey National Sample

Housing satisfaction was originally excluded from this model because of its strong association with neighborhood satisfaction. However, research suggests that neighborhood satisfaction can be partially explained by housing satisfaction and thus, should be included in such models. In order to test this relationship, the same specification is used against housing satisfaction to see if the variable warrants inclusion into the initial model explaining neighborhood satisfaction. Table 5 presents the coefficients for this model. Results indicate an opposite effect of housing assistance on housing satisfaction where receiving a voucher is significant and positive in explaining the latter.

**Table 5. Housing Satisfaction by Household and Neighborhood Characteristics**

	Model I	
	Log Odds	
<i>Housing Assistance</i> (Ref. group=Unassisted)		
Housing Vouchers	0.378***	(0.103)
PHA Housing	0.309**	(0.099)
<i>Perceptual Variables</i>		
Crime (1=Experienced crime)	-0.615***	(0.045)
Community Services (1= Services are available)	0.172***	(0.044)
<i>Ind./Household Variables</i>		
Hispanic (Ref. group=White)	0.141**	(0.052)
African American	-0.135**	(0.049)
Sex (1=Female)	0.122**	(0.037)
Marital Status (1=Married, living w/ spouse)	0.087*	(0.044)
Age	-0.018**	(0.006)
Age^2	0.000***	(0.000)
Welfare Receipt (1=Welfare recipient)	-0.186**	(0.063)
High School Grad (Ref. group= <High School)	0.006	(0.054)
Tech/Assoc Degree	-0.070	(0.074)
Bachelor's or higher	0.002	(0.062)
Number of children	-0.032 <sup>a</sup>	(0.019)
Special Needs (1=Disabled householder)	-0.299***	(0.057)
Income (log)	0.024*	(0.010)
Moved in 2006 (Ref. group=Moved in 2005 or earlier)	0.173**	(0.066)
Moved in 2007	0.088	(0.057)
Moved in 2008	0.120*	(0.050)
Moved in 2009	0.246***	(0.058)
<i>Locational Variables</i>		
Urban, not central city(Ref. group=Central City of MSA)	-0.008	(0.038)
Rural	0.038	(0.060)

Mean Dependent Variable

4.070

N. Observations

11488

Wald Chi2 (23)

662.44

\*\*\* p <.001; \*\* p<.01; \* p<.05; <sup>a</sup> p<.10

Source: 2009 American Housing Survey National Sample

Given the opposite effect that housing assistance has on housing satisfaction (compared to neighborhood satisfaction), the variable is included in the final model on neighborhood satisfaction. The coefficients of this model presented in Table 6 indicate that voucher assistance has a highly significant negative relationship with neighborhood satisfaction.

**Table 6. Neighborhood Satisfaction by Household and Neighborhood Characteristics (Housing Satisfaction Included)**

	Model I	
	Log Odds	
<i>Housing Assistance</i> (Ref. group=Unassisted)		
Housing Vouchers	-0.218*	(0.105)
PHA Housing	-0.429***	(0.096)
<i>Perceptual Variables</i>		
Crime (1=Experienced crime)	-0.972***	(0.048)
Community Services (1= Services are available)	0.139**	(0.046)
Housing Satisfaction	0.776***	(0.017)
<i>Ind./Household Variables</i>		
Hispanic (Ref. group=White)	0.001	(0.053)
African American	-0.128**	(0.049)
Sex (1=Female)	-0.008	(0.037)
Marital Status (1=Married, living w/ spouse)	0.122**	(0.045)
Age	-0.006	(0.006)
Age^2	0.000*	(0.000)
Welfare Receipt (1=Welfare recipient)	-0.109 <sup>a</sup>	(0.063)
High School Grad (Ref. group= <High School)	0.007	(0.055)
Tech/Assoc Degree	0.014	(0.074)
Bachelor's or higher	0.126*	(0.064)
Number of children	0.014	(0.021)
Special Needs (1=Disabled householder)	-0.009	(0.057)
Income (log)	0.016	(0.011)
Moved in 2006 (Ref. group=Moved in 2005 or earlier)	-0.047	(0.068)
Moved in 2007	-0.018	(0.059)
Moved in 2008	-0.090 <sup>a</sup>	(0.052)
Moved in 2009	-0.136*	(0.058)
<i>Locational Variables</i>		
Urban, not central city(Ref. group=Central City of MSA)	0.176***	(0.039)
Rural	0.522***	(0.063)
Mean Dependent Variable	4.054	
N. Observations	11449	
Wald Chi2 (24)	3195.22	

\*\*\* p <.001; \*\* p<.01; \* p<.05; <sup>a</sup> p<.10

Source: 2009 American Housing Survey National Sample

It appears that the effect of vouchers on neighborhood satisfaction is transmitted through housing satisfaction. That is, as vouchers are used to improve dwelling satisfaction, this does not necessarily translate to higher satisfaction with one's neighborhood. This explain why levels of housing satisfaction seem to be as high or higher for housing voucher recipients than unassisted renters and why the opposite is true for neighborhood satisfaction. While there is a positive

relationship among housing and neighborhood satisfaction, we would expect housing vouchers to have a similar effect on both types of satisfaction; however, this is not the case. Changing neighborhood compared to changing housing are likely to separate phenomena with varying challenges and complications that might explain the negative (direct) relationship between vouchers and neighborhood satisfaction.

### *Heterogeneous Effects among Recent Movers*

In light of evidence that many vouchers have a constrained choice for housing and face a number of barriers throughout the search process, variables describing critical aspects of the search process were introduced into the model: whether or not the recent mover household looked at other neighborhoods before choosing current unit/neighborhood, the number of housing units they looked at before choosing their current unit, and if they chose the unit for financial reasons. Bivariate analysis of these variables on housing assistance shows a statistically significant difference between housing assistance and having looked at other neighborhoods. See Table 7 for comparisons.

**Table 7. Search Variables by Housing Assistance**

	Unassisted Renters		Housing Vouchers	
	Number	Percent	Number	Percent
Looked at Other Neighborhoods*				
Yes	3,295	54%	141	62%
No	2,807	46%	87	38%
Total	6,102	100%	228	100%
Like Unit for Financial Reason				
Yes	2,287	37%	74	32%
No	3,967	63%	157	68%
Total	6,254	100%	231	100%
Number of Housing Units Looked at (Mean/Standard deviation)				
	5.68	8.518	6.53	11.058

\*\*\* p <.001; \*\* p<.01; \* p<.05; <sup>a</sup> p<.10

Source: 2009 American Housing Survey National Sample

Voucher holders were more likely to look at other neighborhoods before settling on their current housing unit. Having looked at other units and settling for financial reasons did not significantly differ across voucher holders and unassisted renters. How moving behaviors mediate the relationship between neighborhood satisfaction and housing assistance will now be explored. The parameter estimates of the ordered logit models for neighborhood satisfaction among recent movers are summarized in Table 8.

**Table 8. Neighborhood Satisfaction Among Recent Movers (Including Housing Search Variables)**

	Model I	
	Log Odds	
<i>Housing Assistance</i> (Ref. group=Unassisted)		
Housing Vouchers	-0.334*	(0.170)
PHA Housing	-0.630**	(0.213)
<i>Perceptual Variables</i>		
Crime (1=Experienced crime)	-0.989***	(0.073)
Community Services (1= Services are available)	0.163*	(0.076)
Housing Satisfaction	0.785***	(0.021)
<i>Ind./Household Variables</i>		
Hispanic (Ref. group=White)	0.103	(0.086)
African American	-0.016	(0.079)
Sex (1=Female)	-0.064	(0.061)
Marital Status (1=Married, living w/ spouse)	0.111	(0.071)
Age	-0.015	(0.010)
Age^2	0.000*	(0.000)
Welfare Receipt (1=Welfare recipient)	-0.116	(0.095)
High School Grad (Ref. group= <High School)	0.029	(0.095)
Tech/Assoc Degree	0.009	(0.123)
Bachelor's or higher	0.191 <sup>a</sup>	(0.111)
Number of children	0.036	(0.029)
Special Needs (1=Disabled householder)	-0.129	(0.092)
Income (log)	0.026	(0.016)
<i>Locational Variables</i>		
Urban, not central city(Ref. group=Central City of MSA)	0.153*	(0.063)
Rural	0.454***	(0.097)
<i>Search Variables</i>		
Looked at other neighborhoods (1=Yes)	-0.051	(0.063)
Number of Housing Units Looked At	-0.000	(0.003)
Chose neighborhood for financial reason (1=Yes)	-0.157**	(0.060)
Mean Dependent Variable	4.36	
N. Observations	4664	
Wald Chi2 (23)	2263.02	

\*\*\* p <.001; \*\* p<.01; \* p<.05; <sup>a</sup> p<.10

Source: 2009 American Housing Survey National Sample

Table 8 shows that when search variables are introduced into the model, housing assistance continues to have a significant, negative effect on neighborhood satisfaction among recent movers. This was true for recent movers that receive housing vouchers and those that live in PHA owned buildings as they continue to have an increased probability of expressing lower neighborhood satisfaction than unassisted renters.

In this model for recent movers, three aspects of the house search/selection process were introduced: whether or not the household looked at other neighborhoods before choosing their current unit; how many units the household looked at before they chose their current unit; and whether or not the household chose the unit for financial reasons. Having looked at other neighborhoods or units other than the one in which they currently reside, appears not to be a significant factor in the formation of neighborhood satisfaction. However, having chose your current neighborhood due to financial reasons turns out to have a significant negative effect on neighborhood satisfaction. Those who chose their neighborhood for financial reasons are less likely to report high neighborhood satisfaction than those who chose their neighborhood for other reasons. These results also support previous findings that suggest due to tighter budgets and the limited availability of affordable housing, lower income families are likely to reside in neighborhoods in which they are not fully satisfied and thus, choice may not be fully realized.

### **Discussion and Policy Implications**

The results answer the primary research question of whether or not renters' housing assistance (or lack thereof) matters for neighborhood satisfaction. The analysis shows that after holding perceptual indicators of one's living environment, individual/household attributes, and neighborhood conditions equal, voucher holders are less satisfied with their neighborhoods than unassisted renters. As reported, renters' perceptions of safety and community services available as well as their satisfaction with their dwelling also significantly influence formation of neighborhood satisfaction for renters, when all else is equal. In addition, while we may assume that extending one's housing search to multiple neighborhoods to have a positive effect on neighborhood satisfaction, these results show that these actions have no effect on the satisfaction of the neighborhood in which renters reside. Instead, the role of one's financial situation or the

cost-of-living in determining the neighborhood in which one resides was found to have a significant negative effect on neighborhood satisfaction.

In sum, the importance of housing assistance in the private rental market suggests that voucher assistance may have a negative impact on neighborhood satisfaction for renters and therefore, may not meet its operating goal of the program which is, through choice, for very low-income families to consider several housing choices to secure the best housing for the family needs. The fact that more intensive housing searches do not increase the likelihood of higher neighborhood satisfaction or outweigh the effect of housing assistance may indicate choice is not being maximized in today's rental market, particularly among subsidized households.

To place the results of this study in context, it is important to revisit the elements and major goals behind the Housing Choice Voucher Program (HCVP). Over the years, the program has adopted measures to encourage and better facilitate mobility across neighborhoods and even housing authority jurisdictions. In addition to allowing for portability, the voucher program also raised the ceiling on the amount of rent that can be paid by the recipients. These modifications to the program were in large response to the continued concentration of poverty and lack of mobility among voucher households. Through these changes the main aim of the HCVP remains that of providing greater housing choice to low-income, subsidized voucher holders for which a host of social problems and disadvantages are undeniably clustered and who often lack the resources to escape.

The assumption that choice will maximize neighborhood satisfaction is not strongly supported by this data – although we can argue the opposite for housing choice. This highlights the need for greater attention to neighborhood conditions of rental housing, especially that which is made available to voucher holders. For voucher holders, we cannot assume satisfaction in

dwelling will lead to neighborhood satisfaction. While housing assistance may be sufficient for voucher holders to choose a suitable or even desired dwelling, it may not be sufficient in helping them reach their desired neighborhoods.

We cannot argue the strength of housing vouchers over many of the project-based approaches to public housing in the past. Many of those projects were located in poor neighborhoods and consisted of inadequate housing. In those cases, low-income renters could accept the subsidy and deal with the poor location or try to make it in the private rental market where a better location was not necessarily guaranteed. The HCVP's tenant-based approach certainly grants greater freedom or choice, but, as substantial research suggests, choice is still constrained and renters do not have access to the entire rental marketplace. If the premise behind choice is to find adequate housing in a good neighborhood, these findings suggest voucher holders may still be constrained to particular neighborhoods as they search for better housing.

These findings also highlight racial and locational dimensions of neighborhood satisfaction as African Americans and those living in central cities were less likely to report high neighborhood satisfaction than their counterparts holding all else equal. It appears that rental markets are still highly segmented by race and urbanicity as these factors, even when controlling for housing assistance and family income, remain highly significant indicators of neighborhood satisfaction. While this data is largely based on outcome data, these findings call for greater attention to the conditions and processes that voucher holders, African Americans, and those residing in central cities face in their search for housing. While numerous efforts on behalf of the federal government have been aimed at improving living conditions for all groups and localities, these factors cannot be ignored in efforts for greater mobility.

## Conclusion

Over 25 years ago Chester Hartman, a national advocate for low-income housing, stated in his seminal book *Housing and Social Policy* that housing vouchers

...foster the principle of individual choice in the housing market, which is a critical component of housing satisfaction but it takes no steps to ensure that market conditions will be such that the low-income consumer can truly have free choice or satisfaction. With the present realities of housing conditions and the housing market, freedom of choice can only be enhanced by more government intervention, not less (1975:159).

This present study indicates that Hartman's greatest concern may still exist as we have reason to suspect that vouchers alone may not offer absolute "choice" to all of its recipients. Voucher holders, although satisfied with their housing, are not residing in their desired neighborhoods when compared to unassisted renters. This points to the argument that market-based mechanisms often fail to correct for market failure – in this case, concentration of affordable rental housing, discrimination, transactions, and transportation costs which we could argue all limit choices one has as they look for housing.

While this is an extremely important shortfall of the program, these findings are not meant to deny important gains in neighborhood and housing satisfaction across all groups. Rather, it serves as a strong indication that the broader policy or societal goals such as equality in neighborhood choice and quality are not being met. Taken at face value, vouchers do indeed offer more choice at the very least compared to project-based subsidized housing. However, what remains suspect is the extent to which vouchers provide a choice of neighborhood to all its recipients.

## References

- Adams, John S. 1984. "The Meaning of Housing in America." *Annals of the Association of American Geographers* 74(4): 515-526.
- Adams, Richard E. 1992. "Is Happiness a Home in the Suburbs? The Influence of Urban versus Suburban Neighborhoods on Psychological Health." *Journal of Community Psychology* 20:353-371.
- Ahlbrandt, Roger S. Jr. 1984. *Neighborhoods, People, and Community*. New York: Plenum.
- Allison, Paul D. 1999. *Logistic Regression Using the SAS System: Theory and Application*. Cary, NC: SAS Institute, Inc.
- Basolo, Victor and Mai Thi Nguyen. 2005. "Does Mobility Matter? An Analysis of Housing Voucher Holders' Neighborhood Conditions by Race and Ethnicity." *Housing Policy Debate* 16(3/4): 297-324.
- Basolo, Victor and Denise Strong. 2002. "Understanding the Neighborhood: From Residents' Perceptions and Needs to Action." *Housing Policy Debate* 13(1): 83-105.
- Buron, Larry, Diane K. Levy, and Megan Gallagher. 2007. *Housing Choice Vouchers: How HOPE VI Families Fared in the Private Market*. Urban Institute, Washington, D.C.
- Bruin Marilyn J. and Christine Cook. 1997. "Understanding Constraints and Residential Satisfaction among Low-Income Single-Parent Families." *Environment and Behavior* 23(5): 531-552.
- Climaco, Carissa G., Christopher Rodger, N., Judith D. Feins, and Ken Lam. 2008. "Portability Moves in the Housing Choice Voucher Program, 1998–2005." *Cityscape* 10(1): 5-40.
- Comey, Jennifer. 2007. *HOPE VI'd and on the move*. Urban Institute, Washington, D.C. Retrieved from [http://www.urban.org/UploadedPDF/311485\\_HOPEVI\\_Mobility.pdf](http://www.urban.org/UploadedPDF/311485_HOPEVI_Mobility.pdf).
- Cunningham, Mary K., and Audrey Droesch. 2005. "Neighborhood Quality and Racial Segregation." Washington, DC: The Urban Institute.
- Cunningham, Mary K. and Noah Sawyer. 2005. *Moving to Better Neighborhoods with Mobility Counseling*. 2005. Urban Institute, Washington, D.C. Retrieved from <http://www.urban.org/publications/311146.html>
- Devine, Deborah J., Robert W. Gray, Lester Rubin, and Lydia B. Taghavi. 2003. *Housing Choice Voucher Location Patterns: Implication for Participant and Neighborhood Welfare*. U.S. Department of Housing and Urban Development, Washington, D.C. Retrieved from [http://www.huduser.org/Publications/pdf/Location\\_Paper.pdf](http://www.huduser.org/Publications/pdf/Location_Paper.pdf).

- Finkel, Meryl, and Larry Buron. 2001. "Study on Section 8 Voucher Success Rates: Volume I Quantitative Study of Success Rates In Metropolitan Areas." Cambridge, MA: Abt Associates.
- Galvez, Martha A. 2010. *What Do We Know About Housing Choice Voucher Program Location Outcomes? A Review of Recent Literature*. Urban Institute, Washington, D.C.
- Galvez, Martha M. Forthcoming. "Defining 'Choice' in the Housing Choice Voucher Program." Unpublished dissertation. New York University Wagner School of Public Service.
- Glaster, George. 1987. "Identifying the Correlates of Dwelling Satisfaction: An Empirical Critique." *Environment and Behavior* 19(5): 539-568.
- Greenberg, Michael. 1999. "Improving Neighborhood Quality: A Hierarchy of Needs." *Housing Policy Debate* 10:601-624.
- Greene, William H. 1997. *Econometric Analysis, 3<sup>rd</sup> Edition*. Upper Saddle River, NJ: Prentice Hall.
- Gubits, Daniel, Jill Khadduri and Jennifer Turnham. 2009. "Housing Patterns of Low Income Families with Children: Further Analysis of Data from the Study of the Effects of Housing Vouchers on Welfare Families (W097). Joint Center for Housing Studies at Harvard University. Retrieved from <http://www.jchs.harvard.edu/publications/governmentprograms/w097.pdf>
- Hartman, Chester. 1975. *Housing and Social Policy*. Englewood Cliffs, NJ: Prentice Hall.
- Hipp, John. 2010. "What is the 'Neighborhood' in Neighborhood Satisfaction? Comparing the Effects of Structural Characteristics at the Micro-neighborhood and Tract levels." *Urban Studies* 47(12): 2517-2536.
- HUD.gov. 2011. U.S. Department of Housing and Urban Development Mission. Retrieved on Feb 2, 2011 at <http://portal.hud.gov/hudportal/HUD?src=/about/mission>.
- Jagun, Adedokun, Diane Brown, Norweeta Millburn, and Lawrence Gary. 1990. "Residential Satisfaction and Socioeconomic and Housing Characteristics of Urban Black Adults." *Journal of Black Studies* 21:40-51.
- James, Russell N. III. 2008. "Impact of Subsidized Rental Housing Characteristics on Metropolitan Residential Satisfaction." *Journal of Urban Planning and Development* 134(4):166-172.
- Kennedy, Stephen D., and Meryl Finkel. 1994. "Section 8 Rental Voucher and Rental Certificate Utilization Study: Final Report." Cambridge, MA: Abt Associates.

- Kingsley, Tom and Kathryn Pettit. 2008. "*Have MTO families Lost Access to Opportunity Neighborhoods Over Time?*" Urban Institute, Washington, D.C.
- Koebel, C. Theodore. 1997. "Housing Conditions of Low-Income Families in the Private, Unassisted Housing Market in the United States." *Housing Studies* 12(2): 209-213.
- Lu, Max. 1999. "Determinants of Residential Satisfaction: Ordered Logit vs. Regression Models." *Growth and Change* 30: 264-287.
- Ma, Fontane. 2009. "Boosting the Portability of Housing Vouchers." *Policy Matters Journal*, Spring 2009. Retrieved from <http://policymatters.net/wordpress/wp-content/uploads/2009/08/sp09-ma.pdf>
- Markowitz, Fred, Paul Bellair, Allen Liska, and Jianhong Liu. 2001. "Extending Social Disorganization Theory: Modeling the Relationships between Cohesion, Disorder, and Fear." *Criminology* 39: 293-319.
- Marans, Robert and Willard Rodgers. 1975. "Toward an Understanding of Community Satisfaction." Pp 299-352 in *Metropolitan America in Contemporary Perspective*, edited by Amos H. Hawley and Vincent P. Rock. New York: Wiley.
- New Orleans Fair Housing Action Center. 2009. *Housing Choice In Crisis: An Audit Report on Discrimination Against Housing Choice Voucher Holders in the Greater New Orleans Rental Market*. Retrieved from <http://www.gnofairhousing.org/news2.html>
- Pendall, Rolf. 2000. "Why Voucher and Certificate Users Live in Distressed Neighborhoods." *Housing Policy Debate* 11(4): 881-910.
- Popkin, Susan. J. 2010. "A Glass Half Empty? New Evidence from the HOPE VI Panel Study." *Housing Policy Debate* 20(1): 43-63.
- Popkin, Susan and Mary Cunningham. 2000. *Searching for Rental Housing With Section 8 in Chicago*. The Urban Institute, Washington, DC.
- Popkin, Susan. J. and Elizabeth Cove. 2007. *Safety is the Most Important Thing: How HOPE VI Helped Families*. Urban Institute, Washington, D.C.
- Popkin, Susan. J., Diane K. Levy, and Larry Buron. 2009. "Has HOPE VI Transformed Residents' Lives: New Evidence from the HOPE VI Panel Study." *Housing Studies* 24: 477-502.
- Popkin, Susan J., Mary K. Cunningham, and Martha Burt. 2005. "Public Housing Transformation and the Hard to House." *Housing Policy Debate* 16 (1): 1-24.

- Rasinski, Kenneth, Lisa Lee, and Catherine Haggerty. 2010. "Functional and Social Neighborhood Integration of Leaseholders Relocated into Public and Private Housing by the Chicago Housing Authority's Plan for Transformation." *Housing Policy Debate*, 20(1): 65-89.
- Rosenbaum, James E., Stefanie DeLuca and Tammy Tuck. 2005. "Crossing Borders and Adapting: How Low-Income Black Families Acquire New Capabilities in Suburban Neighborhoods." In Xavier de Souza Briggs (Ed.), *Metro Dilemma: Race, Housing Choice and Opportunity in America*. Brookings Institution. Pp 150-175.
- Rossi, Peter H. 1980. *Why Families Move, 2<sup>nd</sup> Edition*. Beverly Hills, CA: Sage.
- Schwartz, Alex F. 2006. *Housing Policy in the United States: An Introduction*. New York, NY: Routledge.
- Snell, Emily and Greg Duncan. 2006. "Child Characteristics and Successful use of Housing Vouchers: Estimates from the Moving to Opportunity Demonstration." *Housing Policy Debate*, 17(4): 727-54.
- Speare, Alden Jr. 1974. "Residential Satisfaction as an Intervening Variable in Residential Mobility." *Demography* 11:173-188.
- Stone, Michael E. 1993. *Shelter Poverty: New Ideas on Housing Affordability*. Philadelphia: Temple University.
- Turner, Margery Austin, Susan J. Popkin and Mary K Cunningham. 1999. "Section 8 Mobility and Neighborhood Health: Emerging Issues and Policy Challenges." Washington, DC: The Urban Institute.
- Wood, Michelle, Jennifer Turnham and Gregory Mills. 2008. "Housing Affordability and Family Wellbeing: Results from the Housing Voucher Evaluation." *Housing Policy Debate*, 19(2): 367-412.