

Racial/Ethnic Differences in Housing Outcomes for First-Time, Low-Income Home Buyers: Findings from a National Homeownership Education Program

Shannon Van Zandt

Texas A&M University

Abstract

Federal housing policies aimed at making homeownership more accessible through education and affordable lending have been successful in raising the homeownership rate among minorities. By marketing homeownership to underserved populations and helping them overcome financial and informational obstacles, such programs might be expected to promote equality in housing outcomes, including housing quality, neighborhood composition, and neighborhood conditions, for minority homeowners.

This article examines the experience of participants in a national homeownership education program. While the transition to homeownership has been associated with modest progress, it does not overcome persistent disparities in housing quality. Homeownership appears to lead to poorer neighborhood conditions for all lower-income buyers—not just minorities—and may be exacerbating social and spatial isolation rather than helping to overcome it. Differences in neighborhood outcomes, however, may be due to locational preference rather than discrimination in housing and mortgage markets.

Keywords: Homeownership; Low-income housing; Minorities

Introduction

The face of homeownership is changing. Public policy, coupled with demographic shifts, is altering the composition of U.S. communities. Or is it? *The State of the Nation's Housing 2005* (Joint Center for Housing Studies 2005) predicts that the increase in minority—and particularly second-generation—Americans will drive an increase in demand for starter homes

and affordable lending. Indeed, over the past decade, homeownership rates for minority and low-income populations have experienced an increase that outpaces the rate for white households (Belsky and Duda 2002a). In June 2002, for example, the Bush administration proposed *The Blueprint for the American Dream*, which was designed to reduce barriers to minority homeownership and close the gap between white and minority homeownership rates. The administration aims to increase minority homeownership by 5.5 million families before the end of the decade (U.S. Department of Housing and Urban Development [HUD] 2002).

The push for homeownership among underserved populations stems in part from a belief that it extends a degree of social mobility to these households and helps them take advantage of their piece of the American Dream. In particular, homeownership is believed to lead to increased wealth and better living conditions (Collins 2003). While many of these benefits have stood up to empirical testing, some have only mild or mixed support. Further, evidence suggests that the benefits of homeownership may be elusive for lower-income or disadvantaged households (McCarthy, Van Zandt, and Rohe 2001; Rohe, Van Zandt, and McCarthy 2000). Minority households may be particularly at risk for diminished returns on their housing investment. Flippen, for example, found that even after controlling for sociodemographic characteristics and initial housing investment, black and Hispanic homeowners received less real appreciation of housing prices over time (2004) and a lower payoff in the form of housing equity at pre-retirement age (2001) than their white counterparts.

Benefits from homeownership depend to some extent on the quality of the neighborhood in which the home is located (Belsky and Duda 2002b; Denton 2001; Harkness and Newman 2002). If homes are in distressed or deteriorating neighborhoods, households are likely to experience unhealthy social conditions and homes that are depreciating rather than appreciating in value. Social and financial gains are unlikely to be realized under these conditions. Massey (2001) found that even after controlling for differences in income, minority and immigrant households are more likely to live in older, more urban parts of cities. As a result, they may be particularly at risk for poor housing and neighborhood conditions.

This article examines the experience of minority and lower-income first-time home buyers who participated in a homeownership education and counseling program (NeighborWorks® America's Homeownership Pilot Program). Such programs offer extensive counseling and education as well as financial assistance to minority and lower-income households to help them overcome many of the informational and financial barriers that prevent them

from becoming homeowners. A unique data set collected as part of a three-year study of a nationwide homeownership promotion includes longitudinal primary and secondary data that permit an assessment of living conditions before and after families have purchased a home, as well as a comparison to a group of continuing renters who also participated (Rohe, Quercia, and Van Zandt 2002).

The apparent sensitivity of housing and neighborhood outcomes to race/ethnicity raises important questions about the inequalities in housing outcomes that may be encountered by minorities seeking homeownership (Massey 2001). First, does race/ethnicity or nativity explain differences in whether a household achieves homeownership? It is important to emphasize that the sample of new homeowners and continuing renters comes from participants in a national homeownership promotion program. So although homeownership rates for minorities may lag behind those of native-born whites in the general population, it should not be the case for this population. These households have expressed an interest in becoming homeowners and have access to a program designed to help them overcome any discriminatory barriers they may encounter. An affirmative response to this study question may raise serious questions about the entrenched nature of discrimination in the housing finance and real estate industries. A finding that race/ethnicity does not explain differences in the attainment of homeownership would indicate the success of programmatic efforts to reduce discrimination.

After the role that race and ethnicity play in housing tenure is determined, the question is then whether homeownership allows minority home buyers to improve outcomes related to housing quality, neighborhood conditions, and demographic diversity versus both continuing renters and white home buyers. This question provides a test of whether racial and ethnic minorities can achieve the same housing outcomes as whites with similar incomes and levels of education. Further, the answer to this question may provide an insight into the potential for the promotion of homeownership to be used not only as a tool for achieving social mobility, but as a means of reducing inequality.

Background

The literature suggests that average home buyers may gain access to desirable neighborhoods on the basis of their innate or acquired characteristics, such as race, education, or income. Homeownership may be expected to act as a kind of gatekeeper to control access to desirable communities. As Logan and Alba note, "Homeownership is a virtual prerequisite for living in many high-status communities" (1993, 252). While homeownership may

enable some households to gain access to more desirable neighborhoods, barriers to homeownership might filter out specific types of households (Alba and Logan 1991; Massey and Mullen 1984).

The process by which individuals and households achieve access to neighborhoods on the basis of their innate and acquired characteristics is referred to in the literature as locational attainment—the spatial implications of social mobility. As people become socially mobile, through personal achievements reflected by their education, occupation, and income, those achievements should be reflected in their ability to live in nice houses in nice neighborhoods. Two models are suggested (Massey and Mullen 1984). First, the spatial assimilation model suggests that households achieve housing outcomes that their acquired characteristics—education, occupation, and income—warrant, regardless of race. When subjected to empirical testing, education, occupation, and income do influence the level of housing outcomes achieved; the rates of success, however, vary for different racial and ethnic groups (Friedman and Rosenbaum 2004; Massey and Mullen 1984; Rosenbaum 1996). Although social status is positively related to distance from racial or ethnic neighborhoods, blacks are less able to achieve spatial separation. Researchers attribute these differing rates of success to institutionalized discrimination, particularly within the housing market, claiming that these additional obstacles to mobility constrain blacks' ability to realize locational aspirations (Galster and Keeney 1988).

The inconsistent pattern for blacks calls for the complementary place stratification model (Massey and Mullen 1984). In this theory, locational attainment may be explained by structural stratification, in which groups and places are ordered hierarchically according to advantage (Logan 1978; Logan and Molotch 1987). Structural barriers erected to establish and maintain place stratification include discrimination in the housing market, as manifested in steering by realtors, unequal access to mortgage credit, exclusionary zoning, and neighbors' hostility (Galster and Keeney 1988). These practices impede the residential or spatial mobility of minorities. Further, changes in the distributional structure of income have served to concentrate poor minorities in neighborhoods with poor social conditions (Massey and Eggers 1990; Wilson 1987).

While models of locational attainment may imply that exposure to majority (white) households is intrinsically good, they are interpreted here to suggest that neighborhood choice should not be limited by race or ethnicity and that integration benefits all households. Further, this research conceptualizes locational attainment in terms of housing outcomes—whether racial and ethnic minorities and white households live in houses whose condition is

comparable, whether they are locating in neighborhoods in which racial and ethnic minorities are concentrated, and whether they are locating in neighborhoods whose conditions are comparable to the neighborhoods in which whites are locating.

Like locational attainment, the transition into homeownership depends on the interaction of individual characteristics and structural barriers. Carliner (1973) identifies four factors underlying the potential of a household to own or rent: household income, the relative price of rental and owner-occupied housing, the stability of the household's demand for housing, and the type of housing desired. Consequently, homeowners are likely to share some common characteristics. Age, marital status, income, and family composition are the most salient predictors of who will be a homeowner and who will not.

These individual characteristics do not immediately account for differences in homeownership rates for minorities, which, according to recent census data, are consistently lower than those for whites. Lower homeownership rates among blacks have been primarily attributed to differences in income and wealth (Coulson 1999; Gyourko and Linneman 1996; Painter, Gabriel, and Myers 2001; Wachter and Megbolugbe 1992). In the case of Hispanics and Asian Americans, disparities are largely due to differences in income, education, and immigrant status (Coulson 1999; Painter, Gabriel, and Myers 2001). Remaining disparities are most often attributed to real or perceived racial discrimination in the housing and credit markets, particularly but not exclusively for blacks (Charles and Hurst 2002; Farley and Allen 1987; Galster and Keeney 1988; Molotch 1972).

Discrimination in the housing and credit markets can take many forms, ranging from direct discrimination against minority mortgage applicants, differential treatment by rental or sales agents, and geographic steering to more subtle forms of discrimination, including the avoidance of minority neighborhoods by white residents (Briggs 2005; Turner and Ross 2005). Turner and Ross (2005) estimate that nearly 20 percent of Hispanics and a slightly lower percentage of blacks are subjected to racial discrimination in the housing sales market. Minority households often face further discrimination in the mortgage lending market, either directly in the form of higher denial rates or indirectly through the imposition of higher interest rates and burdensome fees or paperwork (Apgar and Calder 2005; Oliver and Shapiro 1995; Yinger 1995).

Gabriel and Painter (2003) argue that in addition to discrimination in housing and credit markets, locational preferences are also important in black families' decision to own and, further, in where to locate (see also

Schelling 1978). Charles (2005) suggests that minorities often choose to locate in minority neighborhoods. Farley, Fielding, and Krysan (1997) support this contention, finding that while blacks prefer integrated neighborhoods, they also prefer that those neighborhoods have a substantial percentage of blacks.

Both discrimination and locational preference provide strong and mutually reinforcing explanations for the persistence of racial segregation. Yet the hope that integrated communities are possible persists. While discrimination in housing and mortgage markets is more subtle, it is also declining (Turner and Ross 2005). Similarly, discriminatory attitudes have declined over time, and people today generally support the idea of integrated neighborhoods (Charles 2005). Finally, there is enough overlap in the locational preferences of whites and blacks to offer room for coexistence (Farley, Fielding, and Krysan 1997).

Prior studies

Logan and Alba (1993) conceptualize locational attainment as access to suburban location. Using New York–area data to predict suburban socioeconomic status, they found that minority groups—specifically the more racially stigmatized ones—are (1) less likely to attain suburban residence, (2) less likely to live in predominantly owner-occupied areas, and (3) less likely to be in suburban areas in cities where minorities make up a larger proportion of the population. Later work using similar models with a national data set suggests that newer immigrants, especially Asians, are finding more success in achieving suburban locations and that barriers to spatial assimilation are weakening (Alba et al. 1999).

Neither Massey and Mullen (1984) nor Alba and Logan (1991) specifically tested homeownership as an intervening variable (although the latter researchers did use homeownership rate as an indicator of neighborhood quality). Yet by claiming that discrimination keeps this market from serving minorities equally, they suggest that removing such barriers might influence spatial segregation. Indeed, most research indicates that minority benefits from homeownership are constrained by discrimination (Denton 2001; Horton 1992; Myers and Chung 1996).

Studies of housing quality suggest that minority and immigrant renter households are more likely to occupy poorer-quality, overcrowded housing than whites are (Myers, Baer, and Choi 1996; Myers and Lee 1996; Rosenbaum 1996; Schill, Friedman, and Rosenbaum 1998). Few studies have looked at the relationship between homeownership and housing quality. Friedman

and Rosenbaum (2004) find that once blacks and Hispanics have attained homeownership, they occupy lower-quality homes than whites or foreign-born blacks and Asians. They also experience continued overcrowding.

Lower housing quality, even after attaining homeownership, is consistent with research showing that minority households that do become homeowners often do not penetrate desirable neighborhoods (Immergluck 1998; Reid 2007; Wachter and Megbolugbe 1992). A number of studies by South and his colleagues on the relationship between race and residential mobility indicate that low-income and minority households may be particularly susceptible to becoming trapped in poor-quality neighborhoods (South and Crowder 1997, 1998; South and Deane 1993). Both low-income and black households, regardless of tenure, are more likely to find themselves living in distressed or declining neighborhoods. Further, these households are less likely to translate dissatisfaction into a move. As is the case with the general population, homeownership consistently appears as a deterrent to mobility (South and Deane 1993). Further, low-income and minority households that start out in a poor neighborhood are unlikely to move to a better-quality one. Instead, they move into similar or poorer-quality neighborhoods if they move at all (South and Crowder 1997, 1998). Homeownership may trap households in distressed neighborhoods rather than improving the environment for the residents of these neighborhoods.

Homeownership promotion

To respond to disparities among white and minority homeownership rates, governmental, quasi-governmental, and not-for-profit organizations at the federal, state, and local levels have undertaken campaigns to promote and support homeownership among populations traditionally underserved by the housing market (Schwartz 2006). Such programs aim to reduce disparities by helping people overcome both real and perceived barriers to homeownership (Collins 2003). The Homeownership Pilot Program, which I discuss here, was sponsored by the Neighborhood Reinvestment Corporation¹ and carried out by members of its NeighborWorks® Network. It is typical of a high-quality homeownership policy intervention that includes one or more of the following: homeownership education and counseling, assistance with down payments and closing costs, and low-interest loans.

In this program, standardized curricula are presented in eight-hour sessions that are offered over several evenings or on a Saturday. Curricula include

¹The Neighborhood Reinvestment Corporation is now known as NeighborWorks® America.

information about personal budgeting, credit reporting and repairing, mortgage lending practices, and neighborhood selection. They also include information about fair housing laws designed to prevent discrimination in the lending and real estate industries. Typically, although not consistently, potential participants are screened for home buying potential (adequate income and credit) before they matriculate. Those who are screened out are referred to credit counseling programs that are often offered by the same organization. Successful candidates may then go on to participate in homeownership education and counseling.

This study evaluates whether lower-income racial and ethnic minority participants in this homeownership education program achieve housing outcomes equivalent to those of their white counterparts. Specific research questions investigated include the following:

1. Are racial and ethnic minority participants in homeownership education programs as likely as whites to achieve homeownership?
2. Does homeownership allow minority home buyers to improve outcomes related to housing quality, neighborhood conditions, and demographic diversity compared with both continuing renters and white home buyers?

Given that homeownership education is expected to help minorities overcome informational and discriminatory obstacles, it is expected that homeowners created through these programs should realize more equitable housing outcomes.

Data

The Homeownership Pilot Program

This research uses existing primary data on a group of participants in the Homeownership Pilot Program, which provided members of Neighborhood Reinvestment's NeighborWorks® network with both funding and technical assistance to expand homeownership opportunities among lower-income households in the communities they serve. The pilot program gave grants of up to \$500,000 to 35 organizations (all of the organizations represented here received that amount). During the two-year pilot period (1999–2000), participating organizations provided homeownership training or counseling to 86,204 individuals, facilitated \$1.5 billion in investments, and helped 17,367 new home buyers (Rohe, Quercia, and Van Zandt 2002).

Data come from a panel survey conducted as part of an evaluation of the pilot program in eight sites: Chattanooga, TN; Milwaukee, WI; New

Britain, CT; New Orleans, LA; Richmond, VA; Sacramento, CA; Salisbury, MD; and Santa Fe, NM. Respondents were participants in the organization's homeownership education courses. While many of these organizations work in targeted neighborhoods, participants in the homeownership education program are not limited to purchasing homes in a particular area.²

A baseline survey was conducted of all clients who completed homeownership education classes in each of the eight organizations from November 1999 through December 2000, with a 90 percent response rate. A follow-up mail survey was conducted in August 2002. All of the respondents had completed homeownership education at the time of the baseline measurement. Many purchased homes between the baseline and follow-up surveys—they comprise the group of new home buyers that permit the examination of how homeownership affects housing outcomes. Others had not purchased a home during the course of the study. It is not known whether they had tried and failed, whether they had chosen to postpone homeownership, or whether they decided to remain renters. These respondents comprised the comparison group of continuing renters.

Response rate

Of the 1,400 baseline surveys collected, just over 1,200 names and addresses were identified using several sources, most notably the U.S. Postal Service's National Change of Address Database, which provides current addresses for individuals and households that have filed change of address cards.³

A total of 477 follow-up surveys were returned, for a response rate of 39 percent (see table A.1 for response rate by site). To account for differences between those who responded to the baseline survey and those who responded to the follow-up survey, a weight was constructed for each observation using characteristics on which the two samples differed significantly.⁴

²In only one of the sites (Salisbury, MD) were participants offered incentives—lower-interest-rate loans—to purchase homes in the targeted areas. Including a dummy variable for site in the analytical models revealed no statistical differences in housing outcomes between sites.

³Other methods of locating respondents included contacting the organization that originally provided the homeownership education to them—some organizations keep much better records than others—and conducting Internet and paper searches of phone directories.

⁴The weight counts each case differently, adjusting for sample differences in race, education, marital status, and country of origin, as well as whether the respondent had been more than 30 days' late in making a debt payment. While weighting may increase variance, it should decrease sampling bias and bias that is introduced through unequal probabilities of selection and observation (Kish 1965). Because a single case may be weighted more heavily, the total number of weighted cases may differ from the number of unweighted cases. Several analyses were run with both weighted and unweighted data to determine that the results were not substantially different.

This weight was used to make the follow-up sample a proportionate representation of the original sample and has been used in all of the analysis.

The sample was further limited by the extent to which census tracts could be identified for each of the respondent addresses.⁵ Data on both original and subsequent neighborhoods were available for a total of 356 cases (see table A.1 for the number and the percentage of addresses that were missing at each of the eight sites). To help the reader assess the differences between each of the samples, table 1 shows the demographic characteristics of the original sample from the baseline survey, characteristics of both the weighted and unweighted follow-up samples, and the characteristics of the sample for which neighborhood data were obtained. The neighborhood subsample has a slightly lower representation of Hispanic respondents, which is consistent with the high proportion of missing addresses in Santa Fe.⁶ Although I acknowledge that this underrepresentation could introduce a systematic bias, the similarity in the characteristics of the subsamples suggests that they provide an adequate data set to explore the study questions.

Measurement of independent and control variables

This study measures the impact of minority homeownership on housing outcomes: In other words, are minority home buyers able to improve on their housing outcomes versus minority renters and white home buyers? Thus, the independent variables are BUYER, a dummy variable indicating that the respondent purchased a home during the study, and a categorical variable indicating the race or ethnicity of the respondent—white, black, Hispanic, or other. Data on race/ethnicity come from the baseline survey, where respondents were asked to self-identify a single racial or ethnic category.⁷

⁵ The census uses street addresses to identify tract locations. Consequently, for any respondents who used post office box or rural route addresses, tract designations were unavailable. Further, a handful of addresses were not recognized by the census address look-up interface and were eliminated from the sample. In general, the more metropolitan sites had lower ratios of missing addresses, and those sites where organizations serve a more small town population had larger ratios (because of the more frequent use of post offices boxes rather than street addresses).

⁶ A further comparison of respondent characteristics between cases with and without neighborhood data is shown in table A.2. This analysis indicates that the subsamples of cases with and without neighborhood data do not differ significantly, except that Hispanic respondents are underrepresented.

⁷ The white category contains respondents who classified themselves as Caucasian or white, and the black category contains blacks. The Hispanic category contains Hispanics who could be either white or black, while the other category contains any other race or ethnicity, including Asians, Pacific Islanders, American Indians, or a self-described (open-ended) racial identity.

Table 1. Comparison of Demographic Characteristics of Original Sample and Subsamples

	Original Sample and Subsamples			
	Baseline (N = 1,433)	Follow-up (N = 477) Weighted	Follow-Up (N = 474) Unweighted	With Neighborhood Data (N = 356)
Gender				
Male	501 (35.0%)	155 (32.5%)	170 (35.9%)	117 (32.9%)
Female	866 (60.4%)	322 (67.5%)	304 (64.1%)	239 (67.1%)
Race				
Black	580 (40.5%)	205 (43.0%)	190 (40.0%)	159 (44.7%)
White	470 (32.8%)	187 (39.2%)	159 (33.5%)	144 (40.4%)
Hispanic	216 (15.0%)	53 (11.1%)	85 (17.9%)	32 (9.0%)
Other	101 (7.1%)	32 (6.7%)	40 (8.4%)	21 (5.9%)
Marital status				
Married	524 (36.6%)	166 (34.8%)	190 (40.1%)	123 (34.6%)
Formerly married	337 (23.5%)	137 (28.7%)	128 (27.0%)	98 (27.5%)
Never married	513 (35.8%)	174 (36.5%)	156 (32.9%)	135 (37.9%)
Education				
Some high school	115 (8.0%)	36 (7.5%)	40 (8.4%)	22 (6.2%)
High school graduate	345 (24.1%)	95 (19.9%)	120 (25.3%)	72 (20.2%)
Some college	433 (30.2%)	158 (33.1%)	156 (32.9%)	124 (34.8%)
College graduate	281 (19.6%)	116 (24.3%)	93 (19.6%)	87 (24.4%)
Graduate school	179 (12.5%)	72 (15.1%)	65 (13.7%)	51 (14.3%)
Employed				
Full-time	1,154 (80.5%)	395 (81.8%)	390 (82.3%)	292 (82.0%)
Part-time or seasonally	80 (5.6%)	25 (5.2%)	25 (5.3%)	21 (5.9%)
Unemployed	45 (3.2%)	13 (2.9%)	14 (3.0%)	11 (3.1%)
Other	92 (6.4%)	44 (9.2%)	37 (9.4%)	32 (8.0%)
Age				
	36.8	39.6	37.6	38.9
Average income	\$28,039	\$28,499	\$28,528	\$35,133
Average monthly debt payment	\$442	\$586	\$408	\$580
Average savings	\$3,224	\$2,931	\$3,037	\$2,872

Source: Rohe, Quercia, and Van Zandt (2003).

Note: The missing data in column 1 result from calculations of raw data. Imputations of missing data were made only for those who responded to both surveys. Totals may not equal 100 percent because of rounding.

Whether the respondent moved is also included as an independent variable in each of the regression models.⁸ Additional control variables, including age (continuous), marital status (married or not), education (ordinal scale 1 to 7), income (estimated from an ordinal variable), immigrant status (born in the United States or not), and employment (unemployed or not), account for social and demographic differences among respondents. A final control variable accounts for the possibility that many low-income buyers may be restricted in their ability to purchase a home or locate in a good neighborhood because of poor credit.⁹ Descriptive statistics for these variables can be found in table 2.

Pearson correlations were used to assess any potential collinearity problems among variables, as shown in table 3. While many correlations are, as expected, significant, none is higher than 0.400 (income and education). It is worth noting that variable pairs that might be expected to have the potential for collinearity, such as being Hispanic or other and being an immigrant, or being a minority and having poor credit, are significantly but not highly correlated.¹⁰

Measurement of dependent variables

This study conceptualizes locational attainment as an indicator of the extent to which minority households can achieve housing outcomes that are equal to those experienced by white households, when other differences are accounted for. Three dimensions of locational attainment are examined: housing quality, neighborhood demographic characteristics, and neighborhood conditions.

⁸While the reader might suppose that most buyers moved (changed neighborhood) while most continuing renters did not, cross-tabulations of buying and moving (see table A.3) indicate that substantial numbers of buyers did not change neighborhoods, while many continuing renters did. Although moving is significantly correlated with buying across racial and ethnic groups, it does not appear to present a collinearity problem in the models in which it is included (as indicated by low variance inflation factors). In the models that use “dependent variable at T1” as a control, these values would indicate no change for respondents who did not move.

⁹An anonymous reviewer suggested this addition. The POOR CREDIT variable is constructed as a dummy indicating that the respondent answered one or more of the following baseline survey questions affirmatively:

1. In the past year, have you been more than 30 days' late on a rent or utility payment?
2. In the past year, have you been more than 30 days' late on a debt payment?
3. Would debts that will make it difficult to qualify for a mortgage be a major obstacle to becoming a homeowner?
4. Would bad credit or a past bankruptcy be a major obstacle to becoming a homeowner?

¹⁰Additional diagnostic tests included plots to assess the distribution of variables and collinearity statistics (variance inflation factors and tolerances) where appropriate. No problems were discovered.

Table 2. Demographic Characteristics of Home Buyers and Continuing Renters

Personal Characteristics	Baseline (2000)		
	Buyer (N= 254)	Nonbuyer (N = 102)	Total (N = 356)
Average age	38.3	40.1	38.9
Female	166 (69.5%)	73 (30.5%)	239 (67.1%)
Married	98 (79.7%)	25 (20.3%)	123 (34.6%)
Average education (scale of 1 to 6)	3.4	2.9	3.3
Employed (includes part-time)	217 (74.3%)	75 (25.7%)	292 (82.0%)
Unemployed (may include students or retired people)	37 (57.8%)	27 (42.2%)	64 (18.0%)
Average income	\$30,383	\$23,971	\$28,546
Immigrant	23 (9.1%)	7 (6.9%)	30 (8.4%)
Poor credit	55 (21.7%)	57 (55.9%)	112 (31.5%)
Black	97 (61.0%)	62 (39.0%)	159 (44.7%)
White	118 (81.9%)	26 (18.1%)	144 (40.4%)
Hispanic	22 (68.8%)	10 (31.3%)	32 (9.0%)

Note: Percentages indicated for Buyers and Nonbuyers are the percentages of all respondents in that category (they can be added across columns to equal 100%). Percentages in the Total column indicate the percentage of the sample with that characteristic. For example, 69.5 percent of all buyers were female, and 67.1 percent of the sample was female.

Housing quality. To determine whether new homeowners experienced improved housing quality compared with continuing renters, two measures of housing quality are used. First, baseline and follow-up surveys included questions on the number of rooms in the home, as well as the number of people living in it. Using these, a measure of the number of people per room is computed. HUD considers more than one person per room to be crowded. Second, a respondent rating of housing condition as “excellent,” “good,” “fair,” or “poor” is reported. This self-reported measure may not be a reliable indicator of housing condition and may reflect satisfaction rather than condition. The panel design of this research, however, permits the examination of changes in housing outcomes for minorities caused by homeownership. These relative comparisons make this variable worth examining, although admittedly it is not as strong as an objective measure might be.

Neighborhood demographic characteristics. To determine whether racial and ethnic minority buyers were able to locate in neighborhoods that were racially and ethnically more diverse than the ones in which they had been living, the demographic characteristics of the neighborhood are examined.

Table 3. Correlations among Independent Variables (2-Tailed Tests)

	Buyer	Moved	Age	Female	Married	Education	Unemployed	Income	Immigrant	Poor Credit	Race
Buyer	1										
Moved	0.332**	1									
Age	-0.077	-0.043	1								
Female	-0.06	0.041	0.03	1							
Married	0.134*	0.06	-0.006	-0.296**	1						
Education	0.176**	0.031	-0.126*	0.143**	-0.098	1					
Unemployed	-0.066	0.06	0.018	0.125*	0.109*	-0.054	1				
Income	0.370**	0.130*	-0.220**	-0.197**	0.245**	0.400**	-0.043	1			
Immigrant	0.036	0.026	-0.033	-0.068	0.141**	0.120*	0.004	0.071	1		
Poor credit	-0.333**	-0.101	0.016	0.01	-0.034	-0.085	0.019	-0.213**	-0.01	1	
Race	-0.09	-0.120*	0.115*	-0.05	0.094	-0.120*	0.023	-0.167**	0.376**	0.138**	1

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

More specifically, this analysis examines the proportion of respondents of each race/ethnicity who live in neighborhoods with more than 30 percent of a given race or ethnicity. While this proportion is somewhat arbitrary and may not be appropriate for every location, it was chosen because 30 percent represents a level of black integration above which white flight has been seen to occur (Farley et al. 1978). While this tipping point may not hold for other racial and ethnic groups, it is selected to capture a level of concentration of races/ethnicities that may be considered segregated (Massey and Denton 1993). To examine entry into white neighborhoods, 50 percent is used as an indicator of a neighborhood that is majority white. In their study of four metropolitan areas, Farley, Fielding, and Krysan (1997) found that black householders prefer integrated neighborhoods and are comfortable in neighborhoods that are about 50 percent white.

Neighborhood conditions. To gauge the extent to which minority and immigrant buyers were able to attain higher-quality neighborhoods than those in which they had been living, census data were collected for each of the tracts in which respondents lived at the time of the baseline survey and at the follow-up.¹¹ The tract was the smallest geographic unit available and is the standard for studies of neighborhood-level data, although it may not accurately reflect the geographic community identified by the respondent. County-level data were also collected to compute indexes of housing value and area income. The following measures are used to describe neighborhood characteristics:

1. Average household income compared with the county median
2. Proportion of the tract at or below poverty
3. Homeownership rate
4. Unemployment rate
5. Average housing value compared with the county median
6. Proportion of tract households headed by single females

¹¹Tract-level census data on neighborhood quality were extracted for 1990 and 2000 from the Geolytics Neighborhood Change Database (2003). This database allows data from different census years to be compared by normalizing census data to the 2000 geographic boundaries. Data from 2000 are used to describe both neighborhood characteristics and demographics. Data from 1990 were used to establish a pattern to determine how these neighborhoods are changing; these findings are presented elsewhere (Van Zandt and Rohe 2006).

Methodology

Design

The panel design of this research makes comparisons among and between groups an important analytical tool. Bivariate analyses are used to compare housing quality (crowding and condition), as well as neighborhood conditions and demographic characteristics. Group means or percentages are presented for each dependent variable, disaggregated first by race or ethnicity, then by housing tenure, showing values for both T1 (baseline of having had homeownership education) and T2 (after the home-buying group has transitioned into homeownership). Both differences between buyers and renters and changes from T1 to T2 are shown. Independent sample t-tests assess the significance of differences between owners and renters, as well as differences between whites and minority groups, while paired-sample t-tests determine the significance of changes from T1 to T2.

To control for the possibility that something other than homeownership explains observed differences between minority and white buyers and continuing renters, logistic or linear regression models are specified to predict housing outcomes. Logistic regression is used to predict the probability that respondents lived in crowded conditions, in housing that was rated either fair or poor, and in neighborhoods with a specified level of minority residents. These models are explained in detail as the results of each are presented. Linear models are used to predict levels of neighborhood conditions.

While these models account for respondent characteristics and alternative explanations, they do not by themselves isolate the impact of minority homeownership.¹² To help the reader assess the impact of minority homeownership on various housing outcomes, predicted probabilities that indicate the likelihood that an average homeowner or renter of a particular racial or ethnic group would experience the designated housing outcome are calculated. Using coefficients calculated by the logistic regression function, mean values for each control variable are entered into the equation. Then, values (0 or 1) indicating membership in a particular minority group and membership in a

¹²One way to accomplish this would be through the introduction of interaction variables between BUYER and each of the minority groups. Given the difficulty in interpreting coefficients or exponentiated betas of interactions in logistic models (Ai and Norton 2003), this approach was cautiously explored. Ai and Norton (2003) find that most common statistical packages calculate coefficients incorrectly and may lead to misleading estimates in both magnitude and direction of coefficients. They further recommend that insignificant interactions be dropped from the model to avoid misspecified estimates. Interactions were indeed insignificant and thus were dropped from the models. The failure of the interactions between homeownership and minority groups to significantly predict housing outcomes is discussed in the results.

class of housing tenure are set to determine their individual and combined effect on the probability of experiencing a particular housing outcome.

For the linear models predicting neighborhood outcomes, an alternative approach isolating the impact of minority homeownership was taken. Separate models for each racial and ethnic group were run, and standardized coefficients were presented to compare coefficients for each independent and control variable across racial/ethnic groups.

Study limitations

While this study employs a strong research design, it does have some serious limitations. First, it is not a representative sample of low-income homeowners and renters; rather, it is a sample of participants in a particular national homeownership education program. While attempts were made to choose sites with varying geographic locations, community sizes, and program characteristics, the sample is not random. Throughout the analyses, variables indicating site were tested to determine whether any systematic differences appeared; none did. Further, respondents' selection into homeownership and comparison continuing renter groups does not achieve random assignment—some respondents are systematically predisposed to become homeowners because of their age or income, for example. Although these factors are statistically controlled, some characteristics may be unaccounted for.

Unaccounted differences between those who responded to the surveys and those who did not, as well between those cases for which neighborhood data were not obtainable, introduce an additional limitation. And, finally, the size of the sample is quite small, especially for races other than black or white. The size limits not only the generalizability of the study, but may also potentially affect the confidence with which conclusions can be drawn.

Despite these shortcomings, the design permits the experience of low-income minority buyers in a national homeownership education program to be evaluated. By employing a longitudinal panel design with comparison groups, the study can control life cycle, time-based, or area-based impacts, thereby enhancing its ability to isolate the effects of homeownership on housing outcomes.

Results

Before differences in housing and neighborhood outcomes resulting from differences in tenure are explored, a preliminary question must be addressed: Are racial and ethnic minorities as likely as whites to achieve homeowner-

ship? The logistic regression model shown in table 4 estimates the probability of becoming a homeowner. The rightmost column contains the exponentiated betas, interpretable as odds ratios. These are expressed as the likelihood of the outcome for each independent variable. Results indicate that race or ethnicity is not a significant predictor of whether a respondent will become a homeowner. Instead, income and credit appear to be the most important characteristics of those who move into ownership. As income increases, so does the likelihood of becoming a homeowner, although the impact of every thousand dollars of income is minimal. Having poor credit, not surprisingly, has a profoundly negative effect. Respondents with substantial credit problems were only 29 percent as likely as those who did not have such problems to move into homeownership.

Table 4. Logistic Regression Estimating the Probability of Becoming a Homeowner (Weighted)

	β	Standard Error	Significance	Exponentiated (β)
Race/Ethnicity				
Black	-0.211	0.346	0.541	0.809
Hispanic	-0.434	0.556	0.435	0.648
Other	0.590	0.708	0.405	1.804
Respondent characteristics				
Age	0.002	0.013	0.902	1.002
Female	0.265	0.330	0.421	1.304
Married	0.561	0.332	0.091	1.752
Education	0.064	0.127	0.613	1.066
Annual income	0.048***	0.011	0.000	1.049***
Immigrant	0.039	0.636	0.951	1.040
Unemployed	-0.631	0.776	0.416	0.532
Poor credit	-1.248***	0.284	0.000	0.287***
Housing market characteristics				
Housing burden (housing payment as a proportion of income)	-0.003	0.003	0.438	0.997
Median household income	0.000	0.000	0.783	1.000
Constant	0.848	1.317	0.520	2.336
-2 log likelihood	336.74			
Cases classified correctly (%)	76.7			
Nagelkerke R ²	0.320			

* $p < 0.05$. ** $p < 0.01$, *** $p < 0.001$.

Effects on housing quality

In this section, the extent to which homeownership helps racial and ethnic groups improve their housing quality is explored. Disaggregated data for owners and renters at T2 are shown in table 5. Values for crowding indicate the proportion of each racial or ethnic group that experienced crowded conditions, while the values for housing condition indicate an average rating on a scale of 1 to 4, with 1 representing “poor” and 4 representing “excellent.”

Here, as with subsequent groups, three comparisons are made. First, comparisons between values for whites and minority groups are made (ALL rows), followed by comparisons between values for new owners and continuing renters within and across each racial and ethnic group (Difference rows). Finally, changes that occurred from T1 to T2 are assessed within and across racial and ethnic groups (Change columns).

Group comparisons

Crowding. Data comparing minority groups with whites indicate that at both T1 and T2, minority households experienced much higher levels of crowding than whites, regardless of housing tenure. At T2, only 3.3 percent of white respondents lived in overcrowded conditions, versus 12.8 percent of black respondents, 23.1 percent of Hispanic respondents, and 46.4 percent of respondents in the Other Race category. Further, for white, black, and Hispanic respondents, overall levels of crowding decreased over time, a pattern that persists for both those who transitioned into homeownership and those who continued to rent.

Next, comparisons between owners and renters are examined. For each race and ethnicity, owners (those who moved to homeownership during the course of the study) experienced nominally lower levels of crowding than continuing renters. Further, minority owners experienced significantly higher levels of crowding than whites. Hispanic renters also experienced higher levels of crowding than their white counterparts.

To fully assess the impact of homeownership, it is necessary to examine the statistical differences between owners and renters from T1 to T2. As noted earlier, all respondents (except those from the Other Race category) experienced a significant decrease in crowding over time, suggesting a general improvement in living conditions not attributable to homeownership. However, examining the differences between owners and renters from T1 to T2 reveals that differences between owners and renters at T1 were not significant, while they were for white, black, and Hispanic respondents at T2. This indicates that white, black, and Hispanic buyers significantly decreased

Table 5. Housing Quality Outcomes by Race/Ethnicity and Housing Tenure, T2 (Weighted)

Housing Outcome	Tenure	White (N = 123)			Black (N = 147)		
		T1	T2	Change	T1	T2	Change
Percent crowded	ALL	9.8	3.3	-6.5**	24.8***	12.8**	-12.0**
	Owner	8.0	1.0	-7.0	23.9**	6.8*	-17.1
	Renter	17.4	13.6	-3.8	26.7	20	-6.7
	Difference	-9.4	-12.6*		-2.8	-13.2*	
Self-reported condition	ALL	2.84	3.11	0.27***	2.49***	2.88**	0.39***
	Owner	2.85	3.18	0.33*	2.44***	3.05	0.61***
	Renter	2.78	2.78	0.0	2.5	2.55	0.05
	Difference	0.07	0.4**		-0.06	0.50**	
Hispanic (N = 51)							
Housing Outcome	Tenure	Hispanic (N = 51)			Other Race (N = 26)		
		T1	T2	Change	T1	T2	Change
Percent crowded	ALL	38.5***	23.1**	-15.4*	53.6**	46.4**	-7.2
	Owner	31.4**	11.8**	-19.6	52.4***	47.6***	-4.8
	Renter	52.9*	47.1*	-5.8	60	40	-20.0
	Difference	-21.5	-35.3*		-7.6	7.6	
Self-reported condition	ALL	2.71	3.09	0.38	2.71	2.86	0.15
	Owner	2.69	2.95*	0.26	2.78	3.03	0.25
	Renter	2.83	3.2*	0.37	2.6	2.21*	-0.39
	Difference	-0.14	-0.25		0.18	0.82	

Note: In the Owner/Renter rows for each race/ethnicity, *t*-tests indicate whether the minority group is significantly different from whites. In the Difference row, *t*-tests indicate whether the differences in outcomes for owners were significantly different from those of renters within each race/ethnicity. In the Change column, *t*-tests indicate whether the change in outcome from T1 to T2 was significant.

p* < 0.05; *p* < 0.01; ****p* < 0.001.

their levels of crowding compared with continuing renters, suggesting a role for homeownership as a mechanism to reduce crowding. Yet the levels of crowding for black and Hispanic owners are still much higher than they are for whites.

Self-reported housing condition. When all respondents, regardless of housing tenure, are examined, only black respondents report significantly lower levels of housing condition than whites. Both blacks and whites improved their housing condition over time. Disaggregating respondents by housing tenure reveals that at T1, blacks who went on to buy homes had significantly lower levels of housing condition than whites who eventually purchased homes, but by T2, their self-reported housing condition was equivalent to that of white owners. Examining the differences from T1 to T2 indicates that differences between owners and renters were insignificant at T1 and significant at T2, suggesting that both black and white buyers improved their housing condition compared with continuing renters. Although homeownership does not appear to have played a role in the changes in housing condition experienced by Hispanics, it is interesting to note that Hispanics who continued to rent over the course of the study actually reported better housing condition than Hispanic buyers. Further, at T2, Hispanic renters reported better housing condition than white renters.

Multivariate analysis

The observed differences in housing quality shown in table 5 may reflect differences among key socioeconomic and demographic characteristics. To control for these differences, logistic models estimating the probability of living in crowded or severely crowded housing and in housing that was rated either “fair” or “poor” are computed. These results are shown in table 6.

Crowding. To isolate the impact of minority homeownership on housing quality, models were initially run with interaction terms between each racial/ethnic group and housing tenure. These interaction terms were insignificant, so the terms were dropped from the models to avoid misleading estimates (Ai and Norton 2003). The failure of minority homeownership to significantly predict levels of crowding suggests that the transition to homeownership does little to help minorities overcome the observed disparities in crowding.

The final model suggests that observed disparities among some racial and ethnic groups are likely to be due to other differences and are not affected by homeownership. When other respondent characteristics are controlled for, homeowners are no less likely to live in crowded conditions than renters are. Also, blacks and Hispanics are no more likely to live in crowded con-

Table 6. Logistic Regression Estimating the Probability at T2 of Living in Particular Conditions

	Conditions (> 1 person per Room)				Fair or Poor Housing Conditions			
	β	Standard Error	Significance	Exponentiated β	β	Standard Error	Significance	Exponentiated β
Buyer	-0.859	0.494	0.082	0.424	-0.797*	0.332	0.016	0.451*
Moved	-0.607	0.469	0.195	0.545	-0.270	0.300	0.368	0.763
Race/Ethnicity (reference white)								
Black	0.756	0.627	0.228	2.130	0.238	0.342	0.487	1.268
Hispanic	1.533	0.842	0.069	4.634	-0.308	0.623	0.621	0.735
Other race	2.264*	0.921	0.014	9.621*	1.349*	0.598	0.024	3.852*
Dependent variable at T1	2.165***	0.463	0.000	8.711***	0.743*	0.294	0.011	2.102*
Other respondent characteristics								
Age	-0.103***	0.030	0.000	0.902***	0.009	0.013	0.503	1.009
Female	0.041	0.512	0.936	1.042	-0.244	0.324	0.452	0.783
Married	0.753	0.476	0.114	2.124	0.254	0.329	0.442	1.289
Education	-0.136	0.228	0.553	0.873	0.075	0.128	0.558	1.078
Unemployed	1.181	0.954	0.216	3.259	-1.269	1.121	0.258	0.281
Income	-0.029	0.018	0.110	0.971	-0.024	0.011	0.038	0.977
Immigrant	0.295	0.797	0.712	1.343	0.189	0.573	0.741	1.208
Poor credit	0.803	0.460	0.081	2.231	0.154	0.302	0.610	1.166
Constant	1.410	1.479	0.340	4.096	-0.894	0.837	0.286	0.409
-2 log likelihood				151.8				327.25
Cases classified correctly (%)				91.3				79.8
Nagelkerke R ²				0.469				0.199

Note: Income is in thousands of dollars.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

ditions when other respondent differences are accounted for. Respondents in the Other Race category, however, appear to be more than eight times more likely than whites to live in crowded conditions. The perception persists that other cultures have different levels of tolerance for personal space than whites or blacks, but Evans, Lepore, and Allen (2000) find that while Asian Americans and Hispanics do differ in the way they perceive crowding, they suffer similar psychological distress from living in crowded housing. Yet because of the small cell counts in the other race group, these results should be seen as suggestive and perhaps not conclusive.

Rather than race or housing tenure, crowding at T1 is the most important predictor of crowding at T2, independent of whether the respondent

moved or purchased a home. Respondents who lived in crowded conditions at T1 were more than seven times more likely than those who did not to live in crowded conditions at T2. Age is also inversely related to crowding, indicating that older respondents were less likely to experience crowding.

To help interpret the combined impact of homeownership and race/ethnicity on crowding, predicted probabilities were calculated to show the likelihood that the average respondent would experience crowding, given his or her race/ethnicity and housing tenure at T2. These predicted probabilities are reported in table 7.

Table 7. Predicted Probability of Living in Crowded Conditions (> 1 Person per Room) (Weighted)

Race/Ethnicity	Buyers (%)	Continuing Renters (%)
White	0.4	11.9
Black	4.1	12.6
Hispanic	7.2	28.8
Other	47.1	29.7

Consistent with previous findings, buyers are much less likely to live in crowded conditions than continuing renters, and whites are less likely than those in the other category to experience crowding. White buyers are very unlikely to experience crowding, with a predicted probability of less than 1 percent, while black and Hispanic homeowners have a 4.1 percent and 7.2 percent probability of living in crowded conditions, respectively. Owners in the other category have a whopping 47.1 percent probability. Their counterparts who are renters have a lower (29.7 percent) probability, followed closely by Hispanic renters at 28.8 percent. Both black and white renters have a modest probability of experiencing crowding—12.6 and 11.9 percent, respectively.

Housing condition. In the right columns of table 6, the results of the logistic regression on the probability of living in a housing unit of either fair or poor condition are shown (these two outcomes were combined to create a dichotomous dependent variable representing a less-than-satisfactory housing condition). Homeownership in general has a positive effect on housing condition—owners are 45 percent as likely as continuing renters to rate the condition of their home as “fair” or “poor.” As was the case in the crowding model, interaction terms in this model were insignificant, indicating that minority homeownership has little effect on overcoming disparities in self-reported housing condition.

Including control variables in the model also accounts for some of the disparity among racial and ethnic groups. After I control for other respondent characteristics, neither blacks nor Hispanics experience higher levels of unsatisfactory housing condition. Respondents in the Other Race category, however, continue to report unsatisfactory housing condition at a rate more than three times that of whites. Further, membership in that group appears to be a stronger predictor than the housing condition rating at T1. The only other significant variable, as one might expect, is income. Respondents with higher incomes are slightly less likely to experience unsatisfactory housing condition.

Impacts on neighborhood demographic characteristics

To determine whether racial and ethnic minority buyers were able to locate in more diverse neighborhoods than their previous ones, the demographic characteristics of the neighborhood are examined. This analysis helps determine whether homeownership is enabling racial and ethnic minorities to overcome spatial isolation or whether a place stratification model is a better explanation of their locational attainment.

Group comparisons

This analysis examines the proportion of respondents living in neighborhoods with more than 30 percent of a given race or ethnicity. To examine entry into white neighborhoods, 50 percent is used as an indicator of a neighborhood that is majority white. Although the different metropolitan areas represented in the data set vary in racial composition, these values are used to approximate neighborhoods with a high proportion of minorities. Group comparisons between owners and renters and between T1 and T2 are shown in table 8.

In general, respondents were more likely to live in neighborhoods with high levels of their own race or ethnicity. Black and white respondents lived in neighborhoods that had higher levels of blacks or whites, respectively. Hispanics and respondents in the Other Race category most often lived in white neighborhoods, but higher proportions lived in neighborhoods in which their race or ethnicity was concentrated.

Comparison of means tests indicate that black respondents lived in black neighborhoods in higher proportions than whites did and lived in majority-white neighborhoods in significantly lower proportions than whites did. Fewer blacks than whites lived in neighborhoods with higher concentrations of Hispanics. While Hispanic respondents did not live in black or

Table 8. Proportion of Owners and Renters Living in Neighborhoods with a Racial/Ethnic Majority, by the Race/Ethnicity of the Respondent (Weighted)

Neighborhood Characteristic	Tenure	White			Black		
		T1	T2	Change	T1	T2	Change
≥ 50% white	ALL	80.56	81.82	1.26	26.28***	27.85***	1.57
	Owner	80.49	81.68	1.19	29.6***	27.84***	-1.76
	Renter	80.69	84.69	4.00	20.8***	27.60***	6.8
	Difference	-0.2	-3.01		8.8	0.24	
≥ 30% black	ALL	20.28	24.48	4.20	79.25***	77.22***	-2.03
	Owner	20.36	24.32	3.96	75.57***	76.24***	0.67
	Renter	21.04	21.83	0.79	85.75***	80.27***	-5.48
	Difference	-0.68	2.49		-10.18	-4.03	
≥ 30% Hispanic	ALL	13.89	11.81	-2.08	3.14***	2.52***	-0.62
	Owner	10.46	7.68	-2.78	2.38*	3.10	0.72
	Renter	28.04	21.19	-6.85	3.94**	2.00**	-1.94
	Difference	-17.58	-13.51*		-1.56	1.1	
≥ 30% other	ALL	11.11	12.68	1.57	5.03*	6.29	1.26
	Owner	6.64	9.59	2.95	4.35	7.52	3.17
	Renter	27.11	24.36	-2.75	5.37*	5.14*	-0.23
	Difference	20.47	-14.77		-1.02	2.38	
Neighborhood Characteristic	Tenure	Hispanic			Other Race		
		T1	T2	Change	T1	T2	Change
≥ 50% white	ALL	78.13	75.00	-3.13	65.00	60.00*	-5.00
	Owner	76.26	69.37	-6.89	59.33*	53.56**	-5.77
	Renter	68.99	79.54	10.55	79.09*	60.93	-18.16
	Difference	7.27	-10.17		-19.76	-7.37	
≥ 30% black	ALL	12.50	21.88	9.38*	10.53	23.81	13.28
	Owner	9.27	21.84	12.57*	5.17	22.05	16.88
	Renter	20.46	23.26	2.8	0.00	0.00*	0.0
	Difference	-11.19	-1.42		5.17	22.05*	
≥ 30% Hispanic	ALL	40.63***	46.88***	6.25	33.33	28.57	-4.76
	Owner	37.35***	50.10***	12.75*	29.02	23.78	-5.24
	Renter	49.53	38.99	-10.54	40.02	40.02	0.0
	Difference	-12.18	11.11		-11.00	-16.24	
≥ 30% other race	ALL	25.81*	28.13*	2.32	47.62**	52.38***	4.76
	Owner	27.54***	40.29***	12.75*	37.34	48.05***	10.71
	Renter	34.10	14.91	-19.19	76.79**	76.79*	0.0
	Difference	-6.56	25.38*		-39.45	-28.74	

Note: In the Owner/Renter rows for each race/ethnicity, *t*-tests indicate whether the minority group is significantly different from whites. In the Difference row, *t*-tests indicate whether the differences in outcomes for owners were significantly different from those of renters within each race/ethnicity. In the Change column, *t*-tests indicate whether the change in outcome from T1 to T2 was significant.

p* < 0.05. *p* < 0.01. ****p* < 0.001.

white neighborhoods at different rates than white respondents, they lived in neighborhoods with higher levels of Hispanic or other races than whites did. Respondents in the other race category lived in white neighborhoods at lower proportions than whites and lived in neighborhoods with high levels of other races in much higher proportions than whites.

While some apparent differences between owners and renters seem considerable, few of them are statistically significant, suggesting that homeownership has little to do with the demographic composition of the neighborhood in which the respondents located. White renters were locating in neighborhoods with higher concentrations of Hispanic residents than white buyers were at T2, suggesting that homeownership permitted white respondents to avoid neighborhoods with a concentration of Hispanic residents and perhaps indicating a preference on their part. Alternatively, it may indicate a limited number of areas with higher concentrations of Hispanic residents or a limited availability of units for ownership in such neighborhoods.

Similarly, Hispanic buyers were locating in neighborhoods with higher concentrations of people in the other race category than Hispanic renters were. Unfortunately, the data do not allow the question of whether this was a matter of choice or housing availability to be explored. Hispanics also increased the proportion living in neighborhoods with higher levels of blacks and Hispanics over time, but the change does not appear to be related to transitioning to homeownership.

Table 8 reveals that while black and white owners lived in Hispanic neighborhoods at comparable levels, a much smaller proportion of black renters than white renters lived in Hispanic neighborhoods at T2 (2 percent black versus 21 percent white). Likewise, Hispanic owners are more likely to live in Hispanic neighborhoods than Hispanic renters. Similar patterns emerge for residents of neighborhoods with higher levels of other races.

Multivariate analysis

To further explore the relationship between homeownership and locational attainment by racial and ethnic minorities, logistic regressions estimating the probability of living in a neighborhood with high concentrations of racial or ethnic minorities are shown in table 9.¹³

Models estimating the probability of living in a neighborhood with a high concentration of various races and ethnicities indicate that by far,

¹³Models including dummy variables for each location represented in the sample were tested. In none of them was site a significant predictor, so the more parsimonious model is presented.

Table 9. Logistic Regression Estimating the Probability of Living in a Neighborhood with the Specified Racial or Ethnic Concentration, T2 (Weighted)

Respondent Characteristic	Neighborhood Racial/Ethnic Concentration																					
	≥ 50 Percent White				≥ 30 Percent Black				≥ 30 Percent Hispanic				≥ 30 Percent Other Race									
	β	Significance (β)	Exponentiated	β	Significance (β)	Exponentiated	β	Significance (β)	Exponentiated	β	Significance (β)	Exponentiated	β	Significance (β)	Exponentiated							
Buyer Moved	-1.022*	0.019	0.360*	0.786	0.085	2.195	1.124	0.164	3.078	1.062	0.128	2.893	-0.376	0.328	1.456	-0.814	0.226	0.443	-0.083	0.879	0.920	
Black	-1.563***	0.000	0.210***	0.981*	0.020	2.667*	-1.368	0.106	0.254	-0.774	0.205	0.461	-0.262	0.701	0.770	1.566	2.329**	10.265**	0.147	0.856	1.158	
Hispanic	-0.618	0.408	0.539	0.324	0.690	1.382	-0.176	0.878	0.839	0.657	0.447	1.928	-0.618	0.408	0.539	1.382	-0.176	0.878	0.839	0.657	0.447	
Other race	3.364***	0.000	29.494***	3.808***	0.000	45.047***	5.419***	0.000	225.750***	5.174***	0.000	176.657***	3.364***	0.000	29.494***	3.808***	0.000	45.047***	5.419***	0.000	176.657***	
Dependent variable at T1																						
Age	0.009	0.580	1.009	-0.027	0.102	0.973	0.013	0.649	1.013	0.049*	0.026	1.050*	-0.127	0.753	0.880	0.933	0.803	2.232	-0.816	0.167	0.442	
Female	-0.066	0.867	0.936	0.408	0.309	1.503	0.164	0.804	1.178	0.880	0.149	2.412	-0.066	0.867	0.936	1.503	0.164	0.804	1.178	0.880	0.149	
Married	-0.357*	0.025	0.700*	0.198	0.220	1.219	0.042	0.875	1.043	0.261	0.224	1.299	-0.357*	0.025	0.700*	1.219	0.042	0.875	1.043	0.261	0.224	
Education	1.155	0.203	3.174	-1.898*	0.039	0.150*	-1.061	0.743	0.346	2.033*	0.032	7.636*	1.155	0.203	3.174	0.150*	-1.061	0.743	0.346	2.033*	0.032	
Unemployed	0.031*	0.014	1.032*	-0.028*	0.026	0.972*	-0.024	0.298	0.977	-0.015	0.385	0.985	0.031*	0.014	1.032*	0.972*	-0.024	0.298	0.977	-0.015	0.385	
Income	-0.712	0.267	0.491	-0.427	0.550	0.653	-1.270	0.199	0.281	0.461	0.575	1.586	-0.712	0.267	0.491	0.653	-1.270	0.199	0.281	0.461	0.575	
Immigrant	-0.272	0.464	0.762	0.135	0.730	1.145	0.155	0.831	1.167	0.609	0.267	1.838	-0.272	0.464	0.762	1.145	0.155	0.831	1.167	0.609	0.267	
Poor credit	-0.226	0.631	0.798	3.808	0.000	45.047	-4.516	0.010	0.011	-6.208	0.000	0.002	-0.226	0.631	0.798	45.047	-4.516	0.010	0.011	-6.208	0.000	
Constant																						
-2 log likelihood			244.28			240.92			95.74			132.37										
Cases classified correctly (%)			85.8			88.0			95.8			93.5										
Nagelkerke R ²			0.658			0.670			0.711			0.625										

Note: Incomes are in thousands of dollars. *p < 0.05. **p < 0.01. ***p < 0.001.

the most important predictor is neighborhood composition at T1. This is not surprising and likely accounts for the strength of the models. Although Nagelkerke R^2 for logistic models are not directly interpretable as the proportion of variance explained by the model as are R^2 for linear models, these are quite high.

Among the variables describing respondent characteristics, being black was also an important predictor of living in a majority-white neighborhood. Blacks were about 20 percent as likely as whites to live in a majority-white neighborhood. Homeownership was important as well, but not in the expected direction. Buyers were only 36 percent as likely as continuing renters to live in majority-white neighborhoods. Education was unexpectedly associated with a lower likelihood of living in a majority-white neighborhood. Perhaps having higher levels of education indicates a desire for a less homogeneous environment. Income was also positively associated with living in majority-white neighborhoods.

The model estimating the probability of living in a majority-black neighborhood indicates that important respondent characteristics include employment status, income, and race. Black respondents were more than one-and-a-half times more likely to live in a majority-black neighborhood than white respondents. Being a homeowner was insignificant. Unemployed respondents were only 15 percent as likely as employed respondents to live in neighborhoods with high levels of blacks. However, the unemployed category includes students, homemakers, and retirees and thus may be misleading. Income is negatively associated with living in a neighborhood with a high percentage of blacks—for every increase of \$1,000, respondents are slightly less likely to live in such neighborhoods.

Race/ethnicity is also important in estimating the probability that the respondent located in a neighborhood with a high percentage of Hispanics. Hispanics are more than 10 times as likely as whites to locate in predominantly Hispanic neighborhoods. Surprisingly, the income variable was not an important predictor.

Race did not appear to be a factor in predicting whether respondents lived in a neighborhood with a high level of members of “other” races. Age and unemployment are the only significant characteristics. With age, respondents increased their likelihood of living in such a neighborhood. Further, unemployed respondents (including students, homemakers, and retirees) were more than seven times as likely as employed respondents to live in such neighborhoods.

In each of these models, interaction terms were found to be insignificant, indicating that minority homeowners were not able to translate homeowner-

ship into a different neighborhood composition. In other words, they were not able to achieve more or less diversity in their surroundings. To understand the combined effect of homeownership and race on neighborhood demographic composition, predicted probabilities are calculated and shown in table 10. These probabilities indicate the likelihood that an average buyer or renter of the specified race or ethnicity would locate in a neighborhood characterized by a high percentage of minority residents.

Table 10. Predicted Probability of Living in a Neighborhood with a High Level of the Specified Race or Ethnicity

Neighborhood Characteristic	Tenure	Respondent Characteristic			
		White (%)	Black (%)	Hispanic (%)	Other Race (%)
≥ 50 percent white	Owner	82.7	24.3	69.7	54.8
	Renter	90.1	30.4	86.9	67.1
≥ 30 percent black	Owner	79.6	78.4	21.8	26.5
	Renter	71.2	79.5	16.4	4.2
≥ 30 percent Hispanic	Owner	6.8	2.6	52.8	20.8
	Renter	26.9	1.7	32.4	29.5
≥ 30 percent other race	Owner	8.9	7.2	38.3	54.9
	Renter	19.7	4.1	12.7	80.8

Owners, regardless of race/ethnicity, are more likely than renters to live in a neighborhood with a high percentage of blacks and are less likely to live in a majority-white neighborhood. Black owners are very unlikely to live in a neighborhood with a high percentage of Hispanics or residents of other races. They are much more likely to locate in neighborhoods with a high percentage of blacks. White owners are most likely to live in white neighborhoods, but are also likely to live in neighborhoods with high numbers of blacks (it is possible to live in a neighborhood that is both majority white and more than 30 percent black). White renters are more likely than white owners to live in Hispanic neighborhoods or neighborhoods with high levels of other races.

It is worth noting that the measures used here may not capture whether a respondent is living in a highly segregated neighborhood or is spatially isolated. Nor do these measures reflect anything about the neighborhood choices available to respondents or their preferences. The differences between owners and renters of different races and ethnicities do suggest, however, that

homeownership enables whites to live in neighborhoods with fewer minorities, while it lessens the likelihood that nonwhite respondents will live in majority-white neighborhoods.

Neighborhood conditions

Theories of locational attainment suggest that spatial assimilation will enable access to neighborhoods with healthy and stable social and physical conditions. Enduring place stratification would prevent households from gaining entry to such neighborhoods. This analysis of the neighborhood conditions achieved by racial and ethnic minorities helps determine the extent to which they are accessing neighborhoods with healthier socioeconomic conditions by becoming homeowners.

Group comparisons

To determine whether homeownership makes a difference for these racial and ethnic minorities, table 11 presents data on differences among those who bought homes and those who continued to rent. Before data by tenure are compared, however, it is useful to look at general patterns for each race/ethnicity. The differences between neighborhood conditions experienced by whites and racial and ethnic minorities are stark. Blacks in particular experience more negative conditions than whites on every measure. Compared with whites, black respondents lived in neighborhoods that had lower levels of homeownership; higher levels of female headship, unemployment, and poverty; and lower ratios of household income and housing values relative to the area median. Other racial and ethnic minorities experience similar neighborhood conditions. Hispanic respondents lived in neighborhoods with significantly lower house values than whites, while respondents from the other race category lived in neighborhoods with higher levels of unemployment and poverty and lower median incomes than whites.

Relatively few differences between buyers and continuing renters of the same racial or ethnic group can be seen. New black purchasers (at T2) experience higher levels of homeownership in their neighborhoods and lower area housing values than black renters. Hispanic owners, however, live in neighborhoods with higher housing values than Hispanic renters, while owners of other races live in neighborhoods with both higher median incomes and higher housing values.

These findings suggest that being black is a more critical predictor of neighborhood conditions than being a homeowner. A comparison of owners and renters across race/ethnicity bears this out. Black owners live in neigh-

Table 11. Neighborhood Conditions by Race/Ethnicity and Tenure (Weighted)

Neighborhood Characteristic	Tenure	White			Black			Hispanic			Other Race		
		T1	T2	Change	T1	T2	Change	T1	T2	Change	T1	T2	Change
Homeownership rate	ALL	49.55	53.04	3.49	39.82***	47.09**	7.27***	48.66	53.18	4.52*	44.15	49.98	5.83*
	Owner	49.58	52.76	3.18	42.10***	49.65	7.55**	49.30	54.10	4.80	44.05	49.49	5.44
	Renter	49.40	54.04	4.64	36.25**	43.23*	6.98**	47.25	46.19	-1.06	44.57	53.94	9.37
	Difference	0.18	-1.28		5.85	6.42*		2.05	7.91		-0.52	-4.45	
Female headship rate	ALL	31.04	30.13	-0.91	50.64***	46.36***	-4.28**	34.60	32.91	-1.69	30.87	32.42	1.55
	Owner	30.77	29.73	-1.04	49.24***	45.88***	-3.36	31.78	31.88	0.10	31.23	32.09	0.86
	Renter	32.25	30.55	-1.70	52.83***	47.47***	-5.36***	40.79	37.06*	-3.73	29.31	33.25	3.94
	Difference	-1.48	-0.82		-3.59	-1.59		-9.01	-5.18		1.92	-1.16	
Unemployment	ALL	6.07	5.91	-0.16	11.02***	9.81***	-1.21*	7.51	6.69	0.82*	8.03*	8.18**	0.15
	Owner	6.14	6.07	-0.07	9.99***	9.39***	-0.6	6.81	6.56	-0.25	8.03*	8.26**	0.23
	Renter	5.76	5.26	-0.50	12.63***	10.57***	-2.06**	9.05*	8.15**	-0.9	8.04	9.89***	1.85
	Difference	0.37	0.81		-2.64*	-1.18		-2.24	-1.59		-0.01	-1.63	
Poverty rate	ALL	13.53	13.63	0.10	26.56***	22.79***	-3.77**	16.90	15.99	-0.91	17.61*	17.59*	-0.02
	Owner	13.32	13.49	0.17	25.35***	22.02***	-3.33	15.40	16.04	0.64	18.01*	18.29*	0.28
	Renter	14.48	13.31	-1.17	28.46***	24.27***	-4.19**	20.19	16.18	-4.01	15.88	17.94	2.06
	Difference	-1.16	0.18		-3.11	-2.25		-4.79	-0.14		2.13	0.35	
Percentage of area median income	ALL	118.53	117.50	-1.03	98.40***	107.89*	9.49**	108.20	106.49	-1.71	98.59*	100.10*	1.51
	Owner	121.02	117.15	-3.87	99.57***	104.26**	4.69	118.20	109.56	-8.64	101.94*	105.27	3.33
	Renter	107.21	116.00	8.79	96.57	110.03	13.46***	86.22	92.43	6.21	84.32	82.18***	-2.14
	Difference	13.81	1.15		3.00	-5.77		31.98*	17.13		17.62	23.09*	
Percentage of area median house value	ALL	106.59	101.42	-5.17	88.00***	88.12**	0.12	90.71*	83.69**	-7.02	85.91*	88.37	2.46
	Owner	108.93	101.32	-7.61	86.97***	82.13***	-4.84	97.90	87.11*	-10.79	89.73*	93.71	3.98
	Renter	95.96	99.75	3.79	89.60	94.58	4.98	74.89	73.19***	-1.7	69.66	69.62***	-0.04
	Difference	12.97	1.57		-2.63	-12.45*		23.01*	13.92**		20.07	24.09*	

Note: In the Owner/Renter rows for each race/ethnicity, *t*-tests indicate whether the minority group is significantly different from whites. In the Difference row, *t*-tests indicate whether from T1 to T2 was significant.
 p* < 0.05. *p* < 0.01. ****p* < 0.001.

borhoods with higher levels of female headship, unemployment, and poverty, as well as lower levels of neighborhood income and housing values than white owners. Black renters also experience poorer neighborhood conditions than white renters.

Other racial and ethnic minorities fare better. Hispanic owners live in neighborhood conditions more similar to those of white owners. The only dimension along which they compare unfavorably to whites is on neighborhood housing values. Compared with whites, owners from the other race category live in neighborhoods with higher levels of unemployment and poverty, but otherwise similar conditions.

Renters of all racial and ethnic minorities continue to face disparities in neighborhood conditions. Black renters live in neighborhoods with lower homeownership rates and higher levels of female headship, unemployment, and poverty than white renters. Hispanic renters live in neighborhoods with higher rates of female headship and unemployment, and lower median incomes and housing values. Renters from the other race category live in neighborhoods with higher levels of unemployment and lower median incomes and housing values.

Homeownership appears to do little to alleviate this disparity. In most cases, before they had the opportunity to transition to homeownership, black respondents lived in neighborhoods with worse conditions, and making the transition did little to help. Black homeowners did improve the homeownership rate of the neighborhood they lived in, but they actually lost ground in terms of housing values compared with renters. By buying homes, blacks moved into neighborhoods with even lower housing values (82 percent of the area median) than the neighborhoods they had lived in as renters, while continuing renters actually increased area housing values to over 94 percent of the area median.

While the differences between owners and renters within racial and ethnic groups are few, they suggest an interesting story. Black buyers appear to be buying in neighborhoods that are perhaps more stable (as indicated by higher levels of homeownership) but may have lower housing values than the neighborhoods in which black renters located. This may suggest that black buyers are relegated to distressed or deteriorating neighborhoods, while Hispanic buyers and those from the other race category are achieving at least some degree of social mobility above that of renters of those races/ethnicities.

Multivariate analysis

To account for other respondent differences, table 12 shows results from linear regressions of respondent characteristics on each of the neighbor-

hood conditions at T2. To help isolate the impact of minority homeownership on neighborhood conditions, separate models for each racial and ethnic group were calculated, and standardized coefficients are presented to allow for comparisons across models. Excluded from this analysis are models for respondents from the other race category. Given the small number of cases (26), results would be unreliable.

The R^2 values indicate that the models vary in their ability to explain the variance, from a low of 19.3 percent for the white homeownership rate to a high of 64.7 percent for area housing values for Hispanic respondents. In general, models predicting outcomes for Hispanics are stronger. Given the magnitude of the coefficients for the values of neighborhood conditions at T1, these variables likely account for a large proportion of the variance explained. The apparent pattern among R^2 values among different racial/ethnic groups indicates that models for whites and blacks have lower proportions of the variance explained than those for Hispanics, suggesting that perhaps few Hispanics moved during the study. A cross-tabulation, however, reveals that this is not the case—roughly the same percentage of Hispanics as other respondents moved. An alternative explanation might be that Hispanics either have or are exercising more limited choices of neighborhoods. In other words, they are choosing neighborhoods very similar to those in which they lived before, regardless of their individual characteristics or whether they own or rent.

Several interesting patterns emerge with respect to the impact of buying and moving. First, when homeownership has an impact, it is usually negative. White buyers live in neighborhoods with higher levels of single female households, higher poverty rates, and lower area incomes than white renters. Black buyers live in neighborhoods with lower area incomes and lower area housing values than black renters. Hispanic buyers live in neighborhoods with higher poverty rates than Hispanic renters.

Second, home buying affects outcomes for whites more often than it does for black or Hispanic respondents, while moving has a stronger influence for black respondents. Further, while buying is negative for whites, moving is positive for blacks. Black movers live in neighborhoods that are better on every measure, with lower levels of female headship, poverty, and unemployment, and higher area incomes, homeownership rates, and housing values.

Other significant predictors include the usual suspects—income and education (in the expected directions) as well as a few other variables of interest. White immigrants experience lower levels of female headship, and black immigrants experience lower area housing values. Having poor credit also appears to affect neighborhood outcomes, but only for whites—they live

Table 12. Linear Regression of Respondent Characteristics on Neighborhood Characteristics at T2 (Standardized Coefficients)

	Female Headship Rate			Poverty Rate		
	White	Black	Hispanic	White	Black	Hispanic
Buyer	0.182*	0.110	0.088	0.201*	0.073	0.444*
Moved	-0.022	-0.192*	-0.176	-0.047	-0.191*	-0.221
Age	-0.041	-0.067	0.098	0.050	-0.056	-0.022
Female	0.038	-0.044	0.177	0.028	-0.109	0.039
Married	0.085	0.029	0.061	0.092	0.027	0.047
Education	0.208**	0.107	0.186	0.183**	0.082	0.051
Unemployed	-0.029	-0.020	-0.228	-0.036	0.071	-0.090
Immigrant	-0.160**	0.073	-0.121	-0.079	0.049	-0.304
Income	-0.333***	-0.274**	-0.254	-0.282***	-0.295***	-0.506*
Poor credit	0.161	-0.039	-0.021	0.130	-0.085	0.081
Dependent variable at T1	0.381***	0.405***	0.546**	0.560***	0.423***	0.393**
R ²	0.327	0.268	0.497	0.493	0.310	0.588
	Unemployment Rate			Income Index		
	White	Black	Hispanic	White	Black	Hispanic
Buyer	0.101	0.049	0.267	-0.199*	-0.223**	-0.221
Moved	0.074	-0.159*	-0.240	-0.069	0.215**	0.014
Age	-0.027	-0.067	-0.078	-0.010	0.097	-0.148
Female	-0.048	0.003	0.009	0.080	0.058	0.183
Married	0.070	0.063	0.058	-0.119	0.016	0.057
Education	0.109	0.062	0.010	-0.212*	-0.040	0.015
Unemployed	-0.063	-0.039	-0.069	0.017	-0.081	0.062
Immigrant	-0.035	0.009	-0.136	0.110	-0.096	0.155
Income	-0.198*	-0.161	-0.309	0.313***	0.187*	0.510*
Poor credit	0.037	-0.034	0.027	-0.184*	0.022	-0.130
Dependent variable at T1	0.532***	0.541***	0.621**	0.393***	0.515***	0.426*
R ²	0.351	0.347	0.625	0.322	0.322	0.629
	Homeownership Rate			Housing Value Index		
	White	Black	Hispanic	White	Black	Hispanic
Buyer	-0.093	0.004	-0.143	-0.125	-0.222**	0.075
Moved	0.059	0.204**	-0.057	-0.101	0.054**	0.046
Age	0.056	-0.003	0.251	0.018	0.005	-0.182
Female	0.016	0.067	0.109	0.009	-0.015	-0.023
Married	-0.139	0.010	0.088	-0.033	-0.061	-0.140
Education	-0.147	-0.128	0.174	-0.148	0.082	-0.114
Unemployed	0.027	-0.103	0.020	0.008	0.011	0.105
Immigrant	3.112	-0.043	0.235	0.036	-0.129*	0.212
Income	0.163	0.312***	0.380	0.149	0.017	0.368
Poor credit	-0.051	0.083	-0.096	-0.187*	-0.056	0.012
Dependent variable at T1	0.403***	0.308***	0.449*	0.352***	0.630***	0.522*
R ²	0.193	0.262	0.551	0.220	0.445	0.647

Note: Incomes are in thousands of dollars.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

in neighborhoods with lower area incomes and lower area housing values. Having poor credit has no impact on neighborhood conditions for black or Hispanic respondents.

Discussion and conclusions

This article set out to assess how homeownership might alter housing-related outcomes for racial and ethnic minorities in the context of homeownership promotion programs. Findings suggest that while homeownership does enable lower-income racial and ethnic minorities to make modest strides toward achieving housing outcomes at levels equal to those of whites, it does not overcome persistent disparities in housing quality, neighborhood demographic composition, and neighborhood conditions. Homeownership may not be a strong mechanism by which racial and ethnic minorities achieve spatial assimilation; rather, in some cases it may serve to reinforce existing and persistent place stratification.

The impact of homeownership was assessed for several variables intended to capture housing quality, including crowding, self-reported housing condition, neighborhood demographic composition, and neighborhood conditions. Of the outcomes tested, homeownership demonstrated an impact only on the level of crowding experienced by respondents. While crowding was reduced for racial and ethnic minorities, disparities still persisted and may be more of an indication of the average size differential between ownership and rental units than some real improvement in housing quality.

Results for neighborhood demographic composition indicate that rather than allowing minority respondents to live in more diverse neighborhoods, homeownership is associated with an increased likelihood that whites will live in neighborhoods with lower levels of minorities and a decreased likelihood that racial and ethnic minorities will live in majority-white neighborhoods. Further, this association does not appear to be causal, but is instead a pre-existing disposition. These findings suggest that homeownership may actually be exacerbating social and spatial isolation instead of helping to overcome it. Available data do not permit an investigation into whether this is due to locational preference or discrimination in housing and mortgage markets.

Locational attainment should help racial and ethnic minorities achieve access to neighborhoods with healthy and stable social conditions. By contrast, homeownership, at least for this sample of low-income buyers, appears to lead to poorer neighborhood conditions, especially for whites. Moving—independent of housing tenure—has a beneficial effect, particularly

for blacks. It appears that lower-income buyers can purchase homes only in neighborhoods that are more distressed than the ones in which they were renting. For white buyers, the effect is particularly pronounced, while for minority buyers, who were already living in more distressed neighborhoods, the decline is not as severe. Instead, those who continued to rent may have been able to take advantage of generally positive economic conditions to move into neighborhoods with better social conditions. These findings suggest that the availability of affordable ownership units is limited in areas with healthy and stable social conditions.¹⁴

Minorities also appear to be buying in neighborhoods with lower median housing values and values that have declined over time. Since a core value of homeownership is predicated on its wealth-building aspects, it is important to note that, by virtue of living in neighborhoods with declining home values, minority buyers appear to have a greater likelihood of seeing values depreciate. This may undermine their ability to achieve greater social mobility through wealth building.

Implications

Programs aimed at reducing the gap in rates by making homeownership more accessible to minorities through education, counseling, and affordable lending programs are an important component of the nation's housing policy. These programs have been successful in raising the homeownership rate among racial and ethnic minorities (Bostic and Surette 2001). In theory, such programs should level the playing field somewhat by marketing homeownership to underserved populations and helping them overcome financial and informational obstacles to achieving it (Collins and Dylla 2000). Further, they may educate potential buyers about fair housing laws and avenues of recourse if they face discrimination in the real estate or lending industries. Respondents in this sample received high-quality training and access to the best loan products and information available (Rohe, Quercia, and Van Zandt 2002). Yet this research indicates that despite these efforts, lower-income minority buyers did not achieve housing outcomes at levels equivalent to those of lower-income white buyers and in many cases did not improve their housing outcomes over the residence they had been renting.

Perhaps minority homeownership does not confer the level of benefits that policies supporting it assume. While some of the persistent disparity may be due to discrimination, locational preference may be at least as likely

¹⁴For a more comprehensive examination of the trajectories of neighborhood conditions over time, see Van Zandt and Rohe (2006).

a reason. A reevaluation and strengthening of antidiscrimination efforts and enforcement are clearly in order (see also Massey 2001). But perhaps more important is the need for an enhanced understanding of locational decision making and its consequences, not only by researchers, but by homeownership promoters and particularly by minority consumers.

Researchers need to expand our understanding of the relationship between housing availability and locational choice (see, for example, Gabriel and Painter 2003). The research presented here suggests that black residents who simply moved improved their neighborhood outcomes, while those who bought experienced a decline in neighborhood conditions in relation to where they had been renting. Charles (2005) finds that because minorities sense negative racial attitudes among whites, they choose to live in neighborhoods with substantial numbers of households of their own race or ethnicity. If minority buyers are inclined to choose such neighborhoods, they are likely to find the quality choices in housing and neighborhood characteristics severely limited. The strong relationship between poverty and race/ethnicity means that many minority neighborhoods are plagued by poorer social and physical conditions. Choices may be further limited by the availability of units for purchase.

While policy is perhaps limited in its ability to enact changes in racial attitudes or perceptions, its potential to influence the availability of housing choice is great. Regional housing plans should address the consistency of local plans in the provision of adequate and affordable units for rental and ownership. Tools like inclusionary zoning and mixed-income developments, along with neighborhood revitalization efforts, can help produce and maintain affordable units in neighborhoods with a variety of social and demographic composition. Blackwell and Bell (2005) further suggest that equitable development practices should

1. Prepare for the dislocation of low-income minority residents that accompanies gentrification and the attitudes of white communities receiving dislocated residents
2. Coordinate with regional transportation services
3. Provide workforce development and asset-building strategies to help minority housing seekers expand their options

A final suggestion involves educating consumers to help them better their locational choices. This research focuses on participants in an exemplary homeownership education program. Homeownership educators are in

an excellent position to help lower-income minority buyers understand the potential consequences of their locational choices. Neighborhood selection and the impact of neighborhood condition on adolescent and adult prospects should be explicitly incorporated into training curricula (see Ellen and Turner 1997). Further, the role that neighborhood conditions play in house price appreciation should be emphasized.

Still, only a relatively small proportion of minority buyers are exposed to excellent training. Although almost all affordable lending initiatives require homeownership education and counseling, there are many more inadequate programs than good ones (McCarthy and Quercia 2000). Mortgage lenders, and particularly those that feature a selection of affordable products, should consider providing literature on neighborhood selection and house price appreciation to help buyers improve their understanding of these dynamics. The past health of the housing market has led buyers to have a false expectation that housing values always increase. The recent cooling of the market may teach a hard but valuable lesson. When consumers can make better choices, the outcomes of their locational decisions should lead to healthier and more integrated communities.

Appendix

Table A.1. Response Rates and Missing Data by Site

Site	Baseline Survey Number	Follow-Up Survey			Neighborhood Match Missing (%)
		No Response (%)	Undeliverable or No Address (%)	Complete (%)	
Chattanooga, TN	179	42.9	20.0	37.1	10.0
Milwaukee, WI	35	44.1	20.6	35.3	7.7
New Britain, CT	97	47.6	23.8	28.6	18.5
New Orleans, LA	319	40.6	15.2	44.2	18.0
Richmond, VA	215	56.3	13.2	30.5	19.2
Sacramento, CA	211	54.2	14.2	31.6	24.2
Salisbury, MD	173	44.4	5.0	50.6	28.4
Santa Fe, NM	204	41.9	18.1	40.0	57.1
Total	1,433	46.4	15.1	38.5	25.4

Table A.2. Comparison of Cases with and without Neighborhood Data

Respondent Characteristic	Variable Means	
	Cases with Neighborhood Data (N = 356)	Cases without Neighborhood Data (N = 121)
Buyer	1.29	1.26
Moved	0.54	0.55
Female	0.67	0.69
Black	0.45	0.38
White	0.40	0.36
Hispanic	0.09	0.17*
Other race	0.06	0.09
Married	0.35	0.36
Unemployed	0.03	0.02
Education	3.29	3.30
Immigrant	0.08	0.12
Income	\$35,133.43	\$35,619.83
Age	38.86	41.12*

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Table A.3. Cross-Tabulations of Buyers and Movers (Weighted Totals)

	White (N = 122)		Black (N = 148)	
	Buyers	Continuing Renters	Buyers	Continuing Renters
Moved	81	10	67	24
Did not move	19	12	21	36
	Hispanic (N = 52)		Other Race (N = 27)	
	Buyers	Continuing Renters	Buyers	Continuing Renters
Moved	25	5	14	3
Did not move	10	12	8	2

Author

Shannon Van Zandt is an assistant professor in the Department of Landscape Architecture and Urban Planning at Texas A&M University.

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