DO FIRST TIME HOME BUYERS IN THE U.S. IMPROVE THEIR NEIGHBORHOOD QUALITY?

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Abstract

This study examines how becoming a home buyer affects the quality of the neighborhood in which lower-income buyers live. Three questions are addressed: Do lower-income buyers buy in higher quality neighborhoods than the ones in which they rented? Are lower-income buyers locating in higher quality neighborhoods than a comparison group of continuing renters? Are the neighborhoods of new buyers improving or deteriorating relative to those of continuing renters?

Results indicate that home buyers located in neighborhoods that were similar in quality to those in which they rented. Continuing renters, however, improved the quality of the neighborhoods between the first and second surveys, while home owners did not. Finally, while the neighborhoods in which new buyers lived are improving, they are doing so at a slower rate than both the neighborhoods from which they moved and those of the continuing renters.

Do First-time Home Buyers in the U.S. Improve Their Neighborhood Quality?

In the United States and many other developed countries considerable recent attention has been paid to expanding homeownership opportunities to lower-income households. In the U.S., the Bush Administration has developed the "Blueprint for the American Dream" with the goal of increasing low-income and minority homeownership by 5.5 million by 2010. This initiative offers support for what are considered to be the four most important steps for achieving homeownership: educating home buyers; increasing the supply of affordable homes; providing assistance with down payment and closing costs; and expanding financing options (HUD 2002). The administration has set aside $200 million annually for down payment assistance to an estimated 40,000 low- and moderate-income households. For its part, the Neighborhood Reinvestment Corporation has been supporting homeownership through its Campaign for Homeownership, which provides millions of dollars to nonprofit organizations to promote first time homeownership through homeownership education and affordable mortgage products (Rohe, Quercia and Van Zandt 2002).

One of the reasons for government involvement in promoting homeownership is its association with social mobility. Achieving homeownership is often seen as taking a step up the social ladder (Rohe and Stegman 1994; Rohe, Van Zandt and McCarthy 2002; DiPasquale and Glaeser 1999). In fact, research indicates that there is a strong association between homeownership rates and neighborhood quality (Galster, 1987; Rohe and

Stewart, 1996; Temkin and Rohe, 1998). The better neighborhoods—those with lower rates of poverty crime and other social problems—typically have high homeownership rates (Galster, Quercia and Cortes, 2000). Moreover, increases in neighborhood homeownership rates have been shown to lead to above-average appreciation in property values (Rohe and Stewart, 1996). Thus, homeownership might be seen as a ticket that allows access to better quality neighborhoods.

The importance of lower-income households improving the quality of the neighborhoods in which they live is underscored by recent research that shows that neighborhood conditions can have important impacts on the social behaviors of both children and adults. Neighborhood characteristics, such as poverty rates, have been shown to have independent impacts on educational attainment, employment, and criminal involvement (Ellen and Turner, 1997; Sampson et al., 1997). Effects on children and adolescents are even more pronounced. Leventhal and Brooks-Gunn (2000) provide a review of research studies examining neighborhood effects on children and adolescent school readiness and achievement; the weight of the evidence strongly suggests an association between neighborhood socioeconomic status and academic achievement and other behavioral outcomes. Similarly, Sampson and his colleagues (1999) find that residential stability and concentrated affluence in the neighborhood strengthen mechanisms that lead to positive outcomes for children, and are even stronger than the influence of poverty and racial/ethnic composition. South and his colleagues (2003) attribute high school dropout and graduation rates to peer socialization, lower educational aspirations and higher rates of residential mobility, all characteristic of epidemic models of neighborhood effects.

Further, the spatial location of homes is an important determinant of access to education, jobs and social and community services (Ihlanfeldt and Sjoquist, 1998; Allard and Danziger 2002). And because house prices vary spatially, their location is critical to determining the financial returns on home purchase (Case and Marchenko, 2002; Smith and Ho, 1996; Li and Rosenblatt, 1997). Taken together, these studies suggest a strong role for neighborhood characteristics in influencing the life opportunities for both adults and their children (see also Galster and Keeney, 1988).

But we actually know very little about the neighborhoods in which first-time, low- and moderate-income households buy homes. Given that these households are purchasing homes at the lower end of the housing market, and that these homes are likely to be clustered in certain sections of cities, it is not at all clear that they will be able to find affordable homes in areas that are significantly better than the ones they lived in as renters. Thus, the purpose of this paper is to assess the extent to which lower-income, first-time home buyers are able to access better quality neighborhoods.

RELATED STUDIES

There have been several prior studies of the neighborhood characteristics of lower-income households. The results of those studies, however, are inconsistent. Denton (2001) studied low-income home owners in Washington, D.C and reports that poor owners lived in slightly better neighborhoods than poor renters. Her data also show, however, that low-income black owners lived in neighborhoods that had higher poverty rates, older and more distressed properties with lower house values than comparable

white owners. She concluded that for low-income blacks, homeownership did not have benefits equal to those conferred on low-income whites.

For their part, Belsky and Duda (2002) studied appreciation and returns to low-income home owners. They report that low-income owners often experience house price depreciation, suggesting that their neighborhoods are becoming less desirable places to live. Using longitudinal data on house sales in Boston, Chicago, Denver and Philadelphia, they found great variation in price appreciation among low-cost homes. While most sellers sold their homes for more than they bought them for, a significant share lost money on the sale of their homes. Belsky and Duda warn that many lower-income borrowers are not fully aware of the risks associated with homeownership and that changes in policy may place them at even higher risk.

Reid (forthcoming) analyzed a national sample of low-income households and found that for low-income minorities, buying a home resulted in improved neighborhood conditions, although their neighborhoods were still not as good as comparable low-income white households. Lower-income whites, however, bought homes in neighborhoods similar to the ones in which they were renting. Based on a series of qualitative interviews, Reid points to several reasons for these patterns including the lack of affordable housing units in better neighborhoods; a desire to stay close to friends, relatives and others of the same ethnic background; and a lack of information about alternative areas in which to buy.

Given the paucity of the research on the neighborhoods in which lower-income households purchase homes, as well as inconsistencies in the findings of that research,

additional study of this issue is needed. The study described below takes advantage of a unique longitudinal data set to shed new light on this issue. More specifically, this study addresses three questions:

1) Do lower-income first time home buyers experience improvements in neighborhood quality compared to when they were renting?

2) How do the neighborhoods of lower-income home buyers compare to a comparison group of continuing renters?

3) Are the neighborhoods of new home buyers improving relative to those of a comparison group of continuing renters?

DATA AND METHODS

Neighborhood Reinvestment's Homeownership Pilot Program

The data set used in this study contains longitudinal data on a sample of lower-income home buyers and continuing renters and the characteristics of the neighborhoods in which they lived. The data on lower-income home buyers and a comparison group of continuing renters come from a panel survey conducted as part of a program evaluation of the Neighborhood Reinvestment Corporation's Homeownership Pilot Program. The program was designed to: (1) leverage additional local public and private dollars for first-time home buyers; (2) expand the capacities of NeighborWorks® organizations to assist new home buyers; and (3) test new strategies for expanding access to home ownership for low-income persons. The Pilot was authorized to run for two years starting in October 1998 and continuing through September 2000.

Once the Pilot funds were appropriated, Neighborhood Reinvestment Home Ownership Campaign staff designed a long-term approach that focused on organizational capacity-building and neighborhood improvement as the primary means to achieving stated goals. Campaign staff developed guidelines for three funding categories: A, B, and C. The three-level funding structure was designed to accommodate the different organizational development cycles and capacities of members of the NeighborWorks® Network.

Grants made under Category A of the Pilot had the primary purpose of assisting NeighborWorks® organizations to "boost their homeownership production, and a secondary purpose of assisting them with their revitalization efforts." Grants made under Category B were designed to "assist those NeighborWorks® organizations that were already high producers to broaden their revitalization impact. Its secondary purpose was to stimulate new homeownership production." Grants made under Category C were designed to assist organizations build their capacities to provide homeownership promotion services, particularly in the areas of market analysis, market outreach and systems improvements. A total of 113 organizations applied to participate in the Pilot program. Overall, 35 Category A sites, 9 Category B sites, and 29 Category C sites were selected.

These Pilot organizations created over 17,000 new home buyers during the Pilot period. Table 1 compares the characteristics of NeighborWorks®clients to other affordable loan programs.

Table 1. Characteristics of NeighborWorks® home buyers and buyers of other affordable products.

Characteristic	NeighborWorks® (1999-2000)	FHA (1999)	Fannie Mae (1999)	Freddie Mac (1999)	Conforming Market (1999)
Race/Ethnicity					
White	49.8%		82.7%	85.1%	
Hispanic	24.2%	19.3%	6.0%	5.5%	7.1%
Black	21.3%	14.6%	3.4%	3.5%	5.4%
Other	4.7%		7.9%	5.9%	
Income*					
Very Low	19%	20%	10.1%	7.5%	16.4%
Low	46%	47%	27.2%	26.1%	39.0%
Moderate	23%	32%	62.7%	66.4%	44.6%
Above-Average	12%				
Gender of buyer					
Single Women	40%		15.7%	14.6%	
Co-buyers	36%				
Single Men	24%				

Source: Except for race/ethnicity figures, Fannie Mae and Freddie Mac data are from Paul B. Manchester, 1996-1997 (tables 5 and 6b). Race and ethnicity figures for Fannie Mae, Freddie Mac, FHA and the conforming market are from Harold Bunce, 2000. Other FHA and conforming market data are from Harold Bunce and Randall M. Scheessele 1998 (table 2). The conforming market consists of loans below the 1997 conforming limit of $214,600.

* Income categories for NeighborWorks® clients are defined as follows: Very low is < 50% MSA Median, Low is >50% and <80%, Moderate is >80% and <115% and Above-Average is >115% MSA Median. Categories for other lenders are defined as follows: Very low is <=60% AMI, Low is 61-100% AMI and Moderate is >100% AMI.

NeighborWorks® serves a very diverse population. Compared to a national database of for-profit affordable mortgage products held by FHA, Fannie Mae and Freddie Mac, as well as the conforming market, these figures indicate that NWOs serve a population with lower percentages of white buyers and higher percentages of black and Hispanic buyers. Further, while the income breakdowns of other lenders of affordable products are not directly comparable, it is evident that NWOs serve a much lower-income population than those served by FHA, Fannie Mae and Freddie Mac. Finally, the data on buyer characteristics also show that the proportion of single women assisted by the NWOs is much higher than those of Fannie Mae and Freddie Mac.

Sample

Eight of these programs were selected by the research team in conjunction with Campaign staff for study based on a desire to achieve variation in geography, city size and program characteristics. Each of the organizations offers home-ownership education, lending and other programs throughout its city or county. Staff members involved in home-ownership activities conduct home-ownership education courses and also provide one-on-one counseling to those interested in buying homes. They also assist clients in securing affordable mortgages and are responsible for any delinquency or foreclosure counseling offered by their organizations. The eight sites chosen were: Chattanooga, TN; Milwaukee, WI; New Britain, CT; New Orleans, LA; Richmond, VA; Sacramento, CA; Salisbury, MD; and Santa Fe, NM (See Table 2).

Table 2. Site Characteristics.

Site	Funding Category	Region	City Size	Year Founded	Staff Size
Salisbury NHS (Maryland)	A	South	21,000	1994	4.5
NHS of Richmond (Virginia)	A	South	200,000	1981	12
NHS of Santa Fe (New Mexico)	A	West	56,000	1992	12
NHS of Milwaukee (Wisconsin)	A	Midwest	630,000	1993	20
Chattanooga Neighborhood Enterprise (Tennessee)	B	South	150,000	1986	44
NHS of New Britain (Connecticut)	B	Northeast	75,000	1980	7
NHS of New Orleans (Louisiana)	B	South	500,000	1977	12
NHS Sacramento (California)	B	West	375,000	1987	17

Source: Rohe, Quercia and Van Zandt, 2003.

Baseline and Follow-up Surveys

In each of the eight sites, a baseline survey was conducted of all clients attending homeownership education classes from November 1999 through December 2000. A follow-up mail survey of respondents was conducted in August of 2002. The sample of

people used in this study may not be representative of the low-income population in general or of all low-income home buyers. The sample was drawn from those who completed homeownership training classes in eight cities. These persons took the initiative to sign up for and complete their courses, which distinguishes them from other lower-income home buyers. While this sample is not a random sample of low-income households, it is a sample of those interested in homeownership, and thus an appropriate sample given the questions being explored. Further, given that our population and sample is likely to be more successful in its pursuit of homeownership, coupled with the education of respondents about the importance of choosing a neighborhood with healthy social characteristics, we might expect that they may have more positive outcomes with regard to neighborhood conditions than an average lower-income buyer.

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 (USPS) National Change of Address Database, which provides current addresses for individuals and households who have filed "change of address" cards with the United States Postal Service[1]. A total of 477 follow-up surveys were returned, for a response rate of 39 percent. While this response rate is relatively low, this population is known to be particularly difficult to locate. First, the population is highly mobile. Respondents either relocated to become home owners during the course of the study, or they continued as members of the renting population, which is known to have high rates of mobility

[1] Other methods of locating respondents included contacting the organization who originally provided homeownership education to them—some organizations keep much better records than do others—and conducting internet and paper searches of phone directories.

(Boehm 1981). Further, the USPS indicates that low-income populations are less likely to file "change of address" cards, making it difficult to locate those who have moved.

To account for differences between those who responded to the baseline survey and those who responded to the follow-up survey, a weight was calculated using characteristics on which the two samples differed significantly, which included race, education, marital status, citizenship and whether the respondent had been more than 30 days late making a debt payment. This weight was used to make the follow-up sample a more proportionate representation of the original sample and has been used in all of the analysis described below (Kish 1995)[2]. To help the reader assess the differences between each of the samples, Appendix A shows the demographic characteristics of the original sample from the baseline survey as well as the characteristics of both the weighted and un-weighted follow-up samples. A comparison of the samples indicates that both the follow-up sample and the sample with neighborhood data are similar in their demographic characteristics, suggesting that they provide a representative sub-sample of the original baseline sample.

Assessing Neighborhood Quality

To gauge neighborhood quality, 1990 and 2000 census data was collected for each of the tracts in which respondents lived at the time of the baseline and follow-up surveys. The tract was the smallest geography available and is a standard geographical unit for neighborhood studies.

[2] We ran several analyses with both weighted and unweighted data and determined that the results were not substantially different.

Tracts were identified using the addresses collected for the administration of the follow-up survey. However, a difficulty arose involving the use of mailing versus street addresses. The Census uses street addresses to identify tract locations. Consequently, for any respondents who used post office box or rural route addresses, we were unable to obtain tract designations. Further, a handful of addresses were not recognized by the census address look-up interface and were eliminated from the sample. Table 3 shows the number and percentage of addresses that were missing at each of the eight sites.

Table 3. Number of Missing Addresses for Census Tract Designation.

Site	Number missing	Percent missing	Buyers	Non-Buyers
Chattanooga	5	10.0%	5	0
Milwaukee	1	7.7%	0	1
New Britain	5	18.5%	3	2
New Orleans	22	18.0%	11	11
Richmond	10	19.2%	7	3
Sacramento	15	24.2%	12	3
Salisbury	23	28.4%	21	2
Santa Fe	40	57.1%	30	10
Total	121	25.4%	89	32

One-quarter of all addresses were missing, with the percentage of missing addresses ranging from seven percent to over 57 percent for each site. In general, the more metropolitan sites had lower ratios of missing addresses and those sites whose organizations serve a more small-town population had larger ratios (due to the more frequent use of post offices boxes rather than street addresses). Because the addresses eliminated are likely to be less urban, their omission may introduce a systematic bias. Appendix A shows the demographic characteristics of the sub-sample resulting from

incomplete availability of tract-level data. While we cannot assess the magnitude or direction of the bias with regard to the nature of the neighborhoods in which omitted respondents may have located, the demographic differences between those we had neighborhood data for and those we did not suggests that the samples are similar.

Census tract designations for both original and subsequent neighborhoods were available for a total of 356 cases. Tract-level census data on neighborhood quality were extracted for years 1990 and 2000 from the Geolytics Neighborhood Change Database. This database allows the comparison of data from different census years by normalizing census data to the 2000 geographic boundaries. Data from 2000 are used to determine neighborhood quality over the course of the study. Data from 1990 are used to establish a pattern to determine whether these neighborhoods are improving or deteriorating. The following measures are used to determine neighborhood quality:

- Proportion of female-headed families;
- Median family income indexed to county median;
- Proportion of persons living below the poverty line;
- Homeownership rate;
- Unemployment rate;
- Median housing value indexed to the county median; and
- Proportion of vacant housing units.

Additional county-level measures provide controls for local economic conditions. These housing market characteristics include vacancy rates of owner-occupied units and housing costs as a proportion of household income. These variables help us to control for issues related to neighborhood choice in different markets. Vacancy rates approximate

the tightness of the market (supply versus demand) while housing costs as a proportion of household income are a measure of affordability.

Together the longitudinal data on the graduates of the homeownership training courses and the neighborhoods in which they lived at the time of the training and approximately two years later, allows us to assess changes in the neighborhood characteristics of home buyers over time and compare those changes to the continuing renters. The inclusion of a comparison group of renters controls for life-cycle and both area- and time-based impacts, which allows better isolation of the causal impacts of homeownership.

Demographic Characteristics of Home Buyers and Continuing Renters

Demographic differences between new home buyers and continuing renters are to be expected due to associations between both income and wealth and other demographic variables such as race and ethnicity. These data are shown in Table 4. Buyers were slightly younger than non-buyers (38 years versus 40 years), which is somewhat surprising, since we would expect older buyers to be better prepared both in terms of finances and stability to become home owners. While men make up a smaller proportion of the sample (33 percent) than do women (67 percent), a greater proportion of men (79 percent) became home owners than did women (70 percent).

More of the respondents were unmarried (single or divorced) than married (35 versus 65 percent), although married respondents were more likely to become buyers than those who were not. Households that became owners had on average, fewer children than those who continued to rent.

Table 4. Demographic Characteristics of Home Buyers and Continuing Renters.

	Baseline (2000)		
Personal Characteristics	Buyer (N=254)	Non-buyer (N=102)	Total (N=356)
Average Age	38.3	40.1	38.9
Male	88 (79.2%)	29 (24.8%)	117 (32.9%)
Female	166 (69.5%)	73 (30.5%)	239 (67.1%)
Married	98 (79.7%)	25 (20.3%)	123 (34.6%)
Not Married	156 (67.0%)	77 (33.0%)	233 (65.4%)
Number of Kids	1.1	1.3	1.2
Average Education (scale of 1-6)	3.4	2.9	3.3
Employed (includes part-time)	217 (74.3%)	75 (25.7%)	292 (82.0%)
Unemployed (may include student or retired)	37 (57.8%)	27 (42.2%)	64 (18.0%)
Average income	$30,383	$23,971	$28,546
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 Non-buyers are the percentages of all respondents in that category (i.e., they can be added across the columns to equal 100%). Percentages in the Total column indicate the percent of the sample that has that characteristic. For example, 79.2 percent of all buyers were male, but only 32.9 percent of the sample was male.

Education is represented by a scale of 1 to 6 and ranges from having no high school diploma (1) to having completed a college degree or better (6). An average level of education of 3.3 indicates that the sample is surprisingly well-educated, with the vast majority having completed high school as well as some college. However, we do see that education appears to make a difference in who becomes a home buyer. Those who went on to buy homes had an average education score of 3.4, while continuing renters had a score of 2.9.

The vast majority of respondents were employed (82 percent). The remaining 18 percent were unemployed, which might include students, homemakers or retirees. While it is not surprising that nearly three-quarters of those employed were able to buy homes, a large proportion of unemployed respondents were also able to buy (58 percent). This suggests that even those technically unemployed had some source of income. The

average income for all respondents at the baseline was $28,546. Those who went on to buy homes had significantly higher incomes ($30,383) than those who did not ($23,971).

Turning to race and ethnicity, 45 percent of the sample is black, followed by 40 percent white, and 9 percent Hispanic (other races make up the remaining 6 percent). However, while more than 80 percent of whites bought homes, only 61 percent of black respondents and 69 percent of Hispanics did so.

It is also useful to note that both home buyers and continuing renters made residential moves during the course of the study. Of the 356 respondents for whom neighborhood data was available, 254 respondents had become home owners between the baseline and follow-up, while 102 had not. During the course of the study, 235 of the respondents had moved to a new neighborhood, while 121 had not. Not surprisingly, more continuing renters (58.8 percent) stayed in the same neighborhood, although a substantial percentage (41.2) did move to new neighborhoods. Of those who bought homes, a large majority (76 percent) moved into new neighborhoods, while 24 percent bought in the neighborhoods in which they had been renting. Analysis of neighborhood characteristics includes all tracts in which respondents lived at the time of the follow-up, whether or not the respondent had changed neighborhoods (so respondents who had not changed neighborhoods would not have experienced any change in their neighborhood characteristics). In the regression analyses presented in the following sections, a variable indicating whether the respondent moved to a new neighborhood is included in the model.

Did the Low- and Moderate-Income Home Buyers Experience an Improvement in Neighborhood Quality?

To evaluate how neighborhood conditions have changed for new home buyers, we look at values for each of the neighborhood indicators before and after they bought homes. The results of our analysis show that on most indicators the neighborhoods in which home buyers purchased homes were very similar to those in which they had been renting (See Table 5). There were only small, non-statistically significant changes in vacancy rates, the percent of female-headed households, unemployment rates, poverty rates and income levels.

There were two neighborhood quality indicators, however, that changed significantly: homeownership rates and house values. On the positive side, the home buyers ended up in neighborhoods with higher homeownership rates. On the negative side, they bought in neighborhoods with lower housing values than the neighborhoods in which they rented. Before purchasing a home, buyers had been living in neighborhoods with house values close to the county's median. The neighborhoods in which they purchased homes, however, had values less than 93 percent of their county's median value. At least in terms of housing values, home buyers took a step down in neighborhood quality.

Table 5. Changes in Neighborhood Conditions for New Buyers.

NEIGHBORHOOD CONDITIONS	Original Neighborhood	New Neighborhood	Change	
VACANCY RATE	11.67%	10.78%	-0.88%	
HOMEOWNERSHIP RATE	46.33%	51.65%	**+5.32%**	***
PERCENT OF FEMALE-HEADED HH	37.94%	36.35%	-1.60%	
UNEMPLOYMENT RATE	7.79%	7.41%	-0.39%	
POVERTY RATE	18.41%	17.31%	-1.09%	
% OF MEDIAN INCOME	111.31%	111.45%	+0.14%	
% OF MEDIAN HOUSE VALUE	98.31%	92.65%	**-5.66%**	*

***p<0.001, **p<0.01, *p<0.05

How Do the Are Neighborhoods of New Buyers Compare to those of Continuing Renters?

To better understand how purchasing a home impacts the neighborhood conditions of buyers we compare the changes in neighborhood indicators for our sample of home buyers with our comparison group of continuing renters (See Table 6). This analysis indicates that *before* becoming owners, the home buyers lived in neighborhoods that were significantly better than those of continuing renters on several indicators of neighborhood quality. The original neighborhoods of the home buyers had higher homeownership rates and lower levels of female-headed households, unemployment, and poverty than the neighborhoods of continuing renters. The original neighborhoods of the home buyers also had higher median incomes and house values. The only indicator on which the new neighborhoods of home buyers did not compare favorably was vacancy rate.

Table 6. Differences and changes in neighborhood quality for those who bought and those who continued to rent.

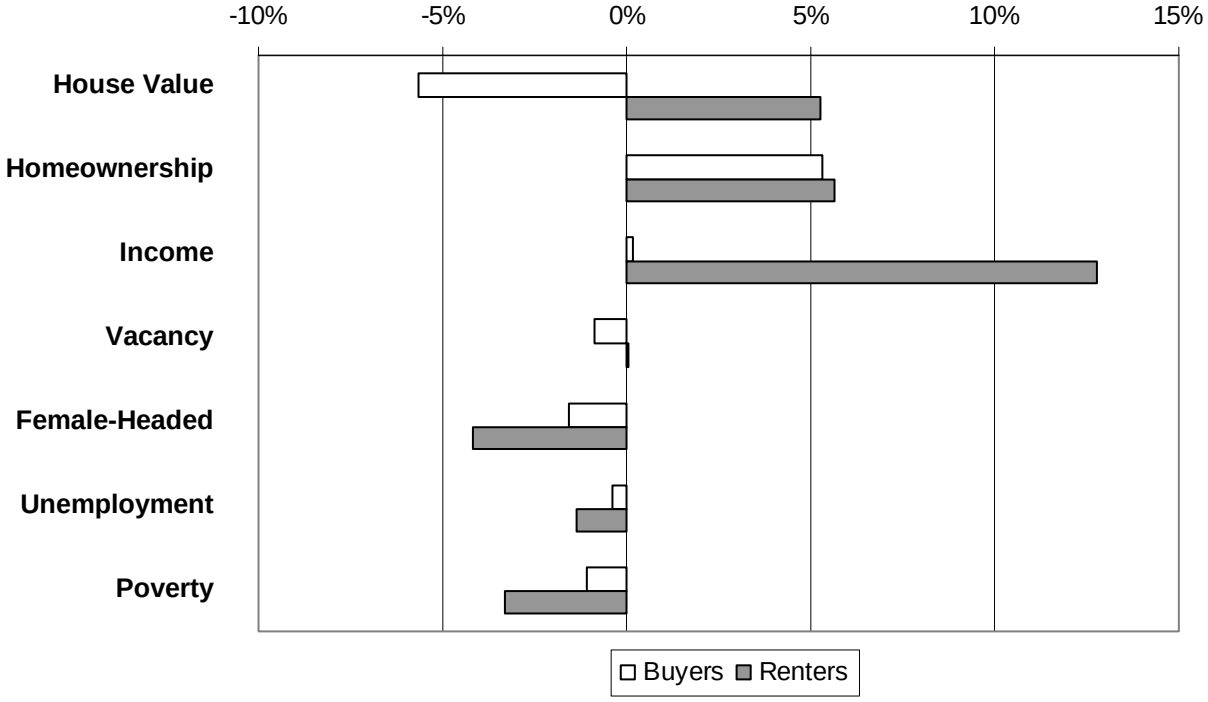
NEIGHBORHOOD CONDITIONS		Original Neighborhood		New Neighborhood		Change	
VACANCY RATE	**Renter**	9.20%		9.24%		0.04%	
	Buyer	11.67%		10.78%		-0.88%	
	Difference	**2.47%**	*	1.54%			
HOMEOWNERSHIP	**Renter**	41.01%		46.65%		**+5.64%**	***
RATE	**Buyer**	46.33%		51.65%		**+5.32%**	***
	Difference	**5.32%**	*	**5.00%**	*		
% FEMALE-HEADED	**Renter**	45.48%		41.29%		**-4.19%**	***
HOUSEHOLD	**Buyer**	37.94%		36.35%		-1.60%	
	Difference	**-7.54%**	***	**-4.94%**	**		
UNEMPLOYMENT	**Renter**	10.35%		8.98%		**-1.37%**	***
RATE	**Buyer**	7.79%		7.41%		-0.39%	
	Difference	**-2.56%**	***	**-1.57%**	*		
POVERTY	**Renter**	23.59%		20.29%		**-3.30%**	***
RATE	**Buyer**	18.41%		17.31%		-1.09%	
	Difference	**-5.18%**	**	**-2.98**	*		
% MEDIAN INCOME	**Renter**	97.79%		110.54%		**+12.75%**	***
	Buyer	111.31%		111.45%		+0.14%	
	Difference	**13.52%**	**	0.91%			
% MEDIAN HOUSE	**Renter**	89.00%		94.28%		**+5.29%**	*
VALUE	**Buyer**	98.31%		92.65%		**-5.66%**	*
	Difference	**9.31%**	*	-1.63%			
NEIGHBORHOOD	**Renter**	139.17%		171.67%		**+32.50%**	***
QUALITY INDEX	**Buyer**	180.13%		183.89%		+3.76%	
	Difference	**40.96%**	***	12.22%			

***p<0.001, **p<0.01, *p<0.05

A comparison of the indicators of neighborhood quality of home buyers and continuing renters at the point of our second contact, however, shows that the continuing renters significantly improved on several indicators of neighborhood quality, while the home buyers did not (See Figure 1). The continuing renters showed significant improvement in the homeownership rates, median incomes and house values of the neighborhoods in which they lived. They also experienced significant decreases in the percent of single-parent households and both unemployment and poverty rates. As mentioned above, the neighborhoods in which the home buyers lived were only better in

terms of homeownership rates, while they were significantly worse in terms of house values.

Figure 1. Change Among Buyers and Renters



One of the more striking indicators along which change occurred was neighborhood income levels. Data presented in Table 6 indicate that those who went on to buy homes were already living in neighborhoods with above-median incomes, while continuing renters were living in neighborhood with just below-median incomes. Seeing the progress that continuing renters made over time raises the question of whether buyers and particularly continuing renters might have started off living in neighborhoods in which the household was relatively better off.

A T-test comparing buyers and renters' household incomes relative to median tract incomes shows that at T1, before buying a home, those who went on to buy and

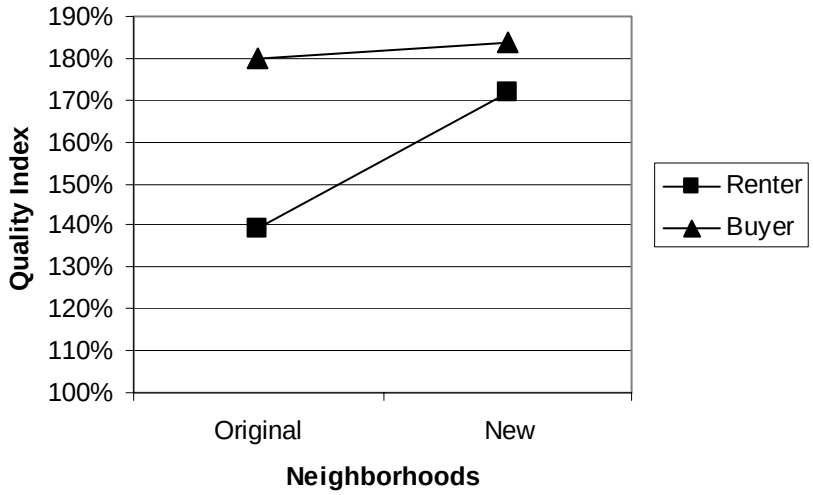
those who were renting lived in neighborhoods in which they were equivalently below the median—both groups were at 80 percent of their tract medians. After some had bought, the groups were no longer equivalent. Buyers had incomes approaching the neighborhood median (97.2 percent of tract median) while continuing renters were at 68.7 percent of the tract median (difference significant at $p<0.001$). While a more relevant comparison would be house value, we do not know the value of the homes of respondents. The relative differences in income, however, suggest that continuing renters were able to locate in neighborhoods that may be beyond their means as buyers, while new buyers located in neighborhoods where they were representative of the average household in terms of income.

Crosstabulations showing the number of participants who had incomes below or above the tract median by buyer/renter indicate that the same proportion (about 70 percent) went on to buy homes, suggesting that initial income relative to the neighborhood income was not a determining factor in who went on to become a homeowner. At the second measurement, however, again we see that a smaller proportion of continuing renters (17.1 percent) has an income above the tract median than the proportion of new buyers (36.3 percent).

To assist the reader in grasping the overall impact of home purchase on indicators of neighborhood quality, we created a summary index of neighborhood quality by summing values for each of the individual neighborhood indicators. This was possible because all neighborhood conditions have been expressed as a percentage or indexed to 100. These index values can be seen in the final row of Table 6 and are graphed in Figure 2. The data indicate that while new home buyers are still better off than their

fellow renters in an absolute sense, buying a home did not substantially improve the overall quality of the neighborhoods in which they lived. The continuing renters, on the other hand, did experience a substantial increase in the overall quality of the neighborhoods in which they lived.

Figure 2. Neighborhood Quality Index



To further refine our analysis, we now introduced control variables to account for the socioeconomic differences between those who become buyers and those who continue to rent. These variables include age, gender, number of children, marital status, education, income, income change, employment, race and ethnicity. We also include controls for the housing market conditions in the areas in which the study participants live. These include a ratio of housing prices to income and vacancy rates. Finally, we add a variable indicating whether the respondents moved to new neighborhoods between the time of the first and second surveys. Although most home buyers moved to new neighborhoods, some bought in the neighborhoods in which they were renting. A large

proportion of renters also moved to new neighborhoods. By introducing these control variables we are better able to isolate the independent effects of buying a home. These control variables are included in a multiple regression analysis predicting each of the neighborhood quality indicators (See Table 7).

The predicted variable in each model is the value of the neighborhood indicator at time 2. The predictor variables in each model are the predicted variable at time 1, buyer versus continuing renter, and control variable for socioeconomic and housing market characteristics. This procedure of including the value of the dependent variable at time 1 in a model to predict that variable at time 2 is suggested by Kessler and Greenberg (1981) and is mathematically equivalent to predicting the change score.

Table 7 also presents standardized regression coefficients and the R-squares for each model. The standardized coefficients indicate the direction and magnitude of the relationship between both respondent characteristics and housing market conditions and each indicator of neighborhood quality. The R-Squares for the models range from a low of 25 percent for homeownership rate to a high of 45 percent for the proportion of female-headed households. Taken together, they indicate that this set of variables does a fairly good job of explaining the variance in neighborhood quality indicators.

The results of the regression analysis indicate that those who bought homes took a step down, relative to the continuing renters, on several indications of neighborhood quality. Compared to the continuing renters, home buyers were significantly more likely to end up in neighborhoods with lower house values, lower median income and higher poverty rates. The analysis also indicates that, beyond the value of each neighborhood

condition at time 1, income, change in income and moving to a new neighborhood were significant predictors of many of the neighborhood quality indicators studied. As might be expected, the income of respondents was positively associated with both the income and housing values of the new neighborhoods and negatively associated with percent of female headed households, and both poverty and unemployment rates. Similarly, change in income was positively associated with neighborhood income and homeownership rates, and negatively associated with percent female headed households and poverty rates of the new neighborhoods.

Moving to a new neighborhood was also associated with increases in positive indicators and decreases in negative indicators of neighborhood quality. Those who moved to different neighborhoods, regardless of whether they were buyers or continuing renters, were more likely to live in neighborhoods with higher income and homeownership rates, and less likely to live in areas with higher rates of female headed households, poverty and unemployment than those who did not change neighborhoods. The other social and housing market variables were not significantly related to changes in the indicators of neighborhood quality.

Table 7. Linear Regression of Respondent Characteristics on the Change in Neighborhood Conditions.

	NEIGHBORHOOD CHARACTERISTICS						
Respondent Characteristic	**Income Index**	**Female Headed Households**	**Poverty Rate**	**Unemployment Rate**	**Homeownership Rate**	**House Value Index**	**Vacancy Rate**
Buyer	**-.173 *****	.079	**.090 ***	.056	-.060	**-.116 ***	-.011
Moved	**.100 ***	**-.110 ****	**-.140 ****	**-.096 ***	**.168 *****	.000	.036
Age	.019	-.050	.025	-.027	.080	-.029	**-.104 ***
Female	.012	.025	.001	-.004	.004	-.018	-.072
# of Kids	.014	-.050	-.012	.033	-.021	-.024	.031
Married	-.046	.042	.082	.061	-.030	-.062	-.059
Education	-.004	.065	.060	.004	-.020	.001	-.002
Income	**.269 *****	**-.206 *****	**-.264 *****	**-.165 ****	.100	**.196 *****	.097
Change in Income	**.193 *****	**-.182 *****	**-.159 *****	-.081	**.226 *****	.042	-.072
Employed	-.077	-.011	.027	.029	-.017	-.023	-.008
Black	-.019	.135	.004	-.001	-.054	-.120	-.070
White	-.049	-.085	-.089	-.105	-.061	-.063	-.052
Hispanic	-.036	-.016	-.052	-.086	.003	-.127	-.040
County-level controls							
House payment to income	**-.158 *****	-.050	-.029	.004	-.027	-.084	-.095
Vacancy Rate	.033	-.049	.015	.006	-.025	.024	.079
Dependent Variable at T1	**.443 *****	**.419 *****	**.458 *****	**.533 *****	**.409 *****	**.483 *****	**.465 *****
F	12.8	17.5	15.8	17.8	7.10	11.1	9.60
R Square	0.38	0.45	0.43	0.43	0.25	0.35	0.30

***p<0.001, **p<0.01, *p<0.05

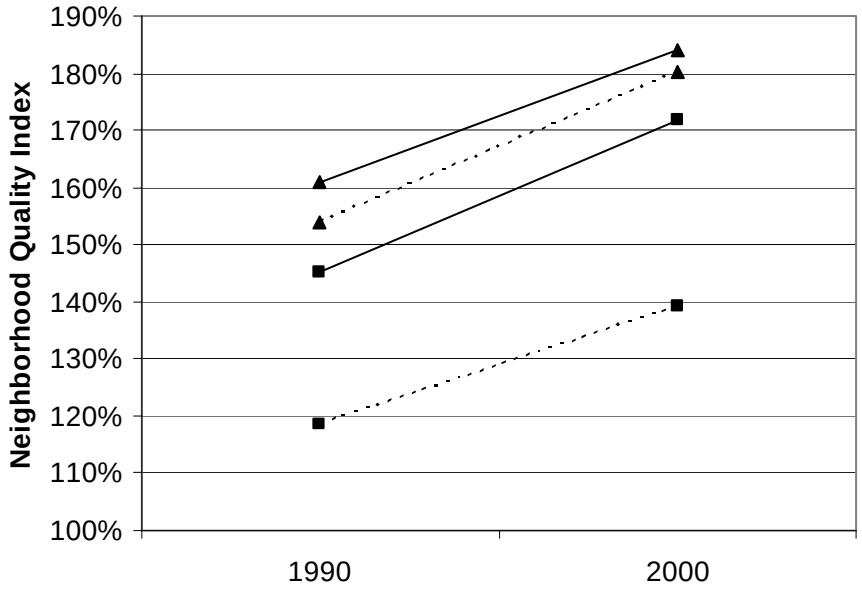
Are the neighborhoods of new home buyers improving relative to those of continuing renters?

The measures of neighborhood quality used in the analyses presented above are snapshots of each neighborhood as of the 2000 Census. There is some possibility, however, that the trajectories of the neighborhoods selected by home buyers and continuing renters are different. Home buyers, for example, may be buying homes in areas that have been improving at a faster pace than those of continuing renters. Thus, we now ask if buyers and continuing renters are locating in neighborhoods with similar or different trajectories.

To establish a direction for neighborhood quality, we compared 1990 and 2000 census data on each neighborhood. These data are graphically summarized in Figure 3. Values for individual neighborhood variables can be found in Appendix B.

These data indicate that both the original and new neighborhoods of both the buyers and continuing renters improved over the decade. The slope of lines representing these neighborhood improvements, however, reveals that the continuing renters attained neighborhoods that were improving at a faster rate than their original neighborhoods—2.65 percent per year compared to 2.06 percent. Home buyers, on the other hand, bought in neighborhoods that are improving at a slower rate compared to their original neighborhoods—2.30 percent per year compared to 2.62 percent. So while new home buyers are not buying in deteriorating neighborhoods, if the past trends continue, their new neighborhoods may not experience the same degree of improvement as their former neighborhoods or of the continuing renters.

Figure 3. Neighborhood Trajectories for Buyers and Continuing Renters



			1990	2000	Percent Change
	Renter	Original Neighborhood	119%	139%	2.06%
		New Neighborhood	145%	172%	2.65%
	Buyer	Original Neighborhood	154%	180%	2.62%
		New Neighborhood	161%	184%	2.30%

Because one of the main benefits of homeownership is building wealth through equity, we are particularly interested in whether house values in original and new neighborhoods are appreciating or depreciating. The data indicate that while house values are not depreciating in the neighborhoods of either buyers or continuing renters, homes in the neighborhoods of buyers are appreciating at a slower rate than those in either their original neighborhoods or the new neighborhoods of continuing renters (See Table 8).

Table 8. Median House Value as a Percentage of the County Median, 1990 and 2000.

	1990	2000	Change
Original Neighborhoods			
Renter	85.67%	89.00%	3.32%
Buyer	95.22%	98.31%	3.09%
Difference	-9.55	**-9.31***	
New Neighborhoods			
Renter	90.55%	94.28%	3.73%
Buyer	90.21%	92.65%	2.43%
Difference	+0.34	+1.63	

***p<0.001, **p<0.01, *p<0.05

DISCUSSION AND CONCLUSIONS

This study examines how buying a home affects the neighborhood quality of low- and moderate-income buyers. We employ a unique database comprised of tract-level and individual-level data for samples of both new buyers and continuing renters who had participated in homeownership education training courses in eight sites. First, we looked at whether the home buyers in our sample bought homes in higher quality neighborhoods compared to those in which they had rented. We found that the home buyer located in neighborhoods that were similar in quality to those in which they rented. Most indicators of neighborhood quality showed little change between the neighborhood in which they rented and bought. The one indicator that showed improvement was the percentage of homeowners in the new neighborhoods, but improvement was offset by a decline in home values.

In comparing the changes in neighborhood quality between home buyers and a comparison group of continuing renters, we found that before buying the home buyers lived in neighborhoods that were significantly better than those of the continuing renters on several indications of neighborhood quality. The comparison of neighborhood conditions at time 2,

however, shows that the neighborhoods in which continuing renters were living were better on several indicators of neighborhood quality while the neighborhoods in which the home buyers were living were similar to those in which they had rented. When comparing an additive index of neighborhood characteristics, the continuing renters ended up in neighborhoods of similar overall quality as home buyers.

The multiple regression model used to control for differences in the social characteristics of home buyers and continuing renters confirm the earlier findings. Compared to the continuing renters, home buyers were significantly more likely to end up in neighborhoods with lower house values, lower median incomes and higher poverty rates. This analysis also shows that the key factors that predict improved neighborhood conditions are income, change in income and moving to a new neighborhood.

We also considered the trajectories of the neighborhoods experienced for both the home buyers and continuing renters. The data indicate that the neighborhoods of both groups improved over the preceding decade, however, the neighborhoods of the continuing renters improved at a faster rate that those of the home buyers.

Taken together, these results suggest that rather than leading to improvement in neighborhood conditions, lower-income home buyers end up in neighborhoods that are similar to, or worse than, the ones in which they lived as renters. Our findings partially support those of Reid (forthcoming) who found that lower-income white, and middle- and high-income minority households bought homes in neighborhoods similar to those in which the had lived as renters. Reid did, however, find some improvement in the neighborhood quality among low-income

minority and, and middle- and higher-income whites. The sample size of this study did not allow us to break down the sample by minority vs. majority households and income.

Our findings suggest that lower-income households are trading off neighborhood quality for homeownership. They seem to be willing to accept slightly worse neighborhood conditions for the advantages of owning a home. The question then becomes: is this a reasonable trade-off?

On the one hand, studies have demonstrated that neighborhood quality impacts a variety of variables including educational and behavioral outcomes for adolescents and the enhancement of employment opportunities for residents (Ellen and Turner 1997). On the other hand, homeownership has been associated with a variety of social and psychological and economic benefits (See Mc Carthy et al. 2001; Rohe et al. 2002). The wealth building potential of homeownership is also great (Stegman et al. Forthcoming).

The only study to address this tradeoff was that by Harkness and Newman (2002). Using a national sample of teens and young adults, they explore whether it makes sense for poor families to buy homes in distressed neighborhoods. Looking primarily at adolescent and young-adult outcomes, including out of wedlock births, idleness, welfare receipt and educational attainment, they find that the effects of homeownership are stronger than the effects of neighborhood conditions. Harkness and Newman conclude that families may be better off owning homes in their current neighborhoods rather than renting in better ones.

The authors acknowledge, however, that although the positive effects of homeownership outweigh the benefits of living in good (or at least better) neighborhoods, those effects are weakened by living in distressed neighborhoods. In fact, they find that homeownership does not

safeguard children against the effects of bad neighborhoods; instead, it appears to amplify them. So, while homeownership may be more important to the outcomes for children than living in a good neighborhood, it will not alleviate the negative impacts of living in a bad neighborhood. Harkness and Newman suggest that helping families to purchase homes in their current neighborhoods is preferable to renting in better neighborhoods, but they do not comment on whether buying in worse neighborhoods is advisable. For this study, it is important to keep in mind that although the neighborhood experienced by home buyers were not improving as quickly were those of the continuing renters, they were improving both overall and in property values. Thus, this tradeoff would seem to be a reasonable one.

The sample of people used in this study may not be representative of the low-income population in general or of all low-income home buyers. The sample was dawn from those who completed homeownership training classes in eight cities. These persons took the initiative to sign up for, and complete their courses, which distinguishes them from other lower-income home buyers. Moreover, the homeownership training courses taken by the study participants typically includes some discussion of the importance of the neighborhood environment in the decision to purchase a home. Thus, they should have been more aware of this consideration than the typical low-income buyer. This suggests that the neighborhoods selected by other low-income home buyers may not be as good as those ones selected by the households in this sample. Given these limitations, however, generalizations to all low-income home buyers should be made with caution.

Policy Implications

Even considering the potential benefits associated with homeownership, it would be better if low-and moderate-income home buyers were able to buy homes in higher quality neighborhoods compared to the ones that they were living in as renters. This would allow them to reap both the benefits of homeownership and of improved neighborhood quality. What can be done to achieve this? First, the supply of affordable homeownership opportunities could be increased and those new units could be sited in better quality neighborhoods. Promoting mixed-income developments (Brophy and Rhonda, 1997) and inclusionary zoning ordinances (Calavita and Grimes, 1998) are one way to expand the opportunities available to lower-income home buyers in neighborhoods with improved social and economic conditions and opportunities.

Second, home buyer education programs, such as those that were part of this study, might focus more attention on assisting new buyers with neighborhood selection, emphasizing the role that neighborhoods play in house price appreciation and creating healthy social conditions. Often, home buyer education programs are provided by organizations that are also involved in revitalization efforts in declining neighborhoods. In fact, the homeownership education programs are often seen as a strategy for raising the homeownership rates in these neighborhoods. Some programs go so far as to offer lower interest rates or other incentives for new home buyers who purchase homes in their targeted neighborhoods. At best, this strategy is an efficient use of resources for the organization; at worst, it is a conflict of interest—encouraging new buyers to locate in neighborhoods of poor quality with questionable prospects for improvement. These organizations must be careful to ensure that their homeownership education clients are equipped to make sound decisions when choosing neighborhoods.

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Appendix A. Comparison of Demographic Characteristics of Original Sample and Sub-samples.

	Original Sample and Sub-samples			
	Baseline (N=1433)	Follow-up Weighted (N=477)	Follow-up (N=474) Un-weighted	With Neighborhood Data (N=356)
Gender	66 (4.6%) missing			
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	66 (4.6%) missing			
Black	580 (40.5%)	205 (43.0%)	190 (40.0%)	159 (44.7%)
White	470 (32.8%)	187 (39.2%)	160 (33.7%)	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	59 (4.1%) missing			
Married	524 (36.6%)	166 (34.8%)	190 (40.1%)	123 (34.6%)
Formerly Married	337 (23.5%)	137 (28.7%)	127 (27.0%)	98 (27.5%)
Never Married	513 (35.8%)	174 (36.5%)	156 (32.9%)	135 (37.9%)
Education	80 (5.6%) missing			
Some HS	115 (8.0%)	36 (7.5%)	40 (8.4%)	22 (6.2%)
HS grad	345 (24.1%)	95 (19.9%)	120 (25.3%)	72 (20.2%)
Some college	433 (30.2%)	158 (33.1%)	156 (32.8%)	124 (34.8%)
College grad	281 (19.6%)	116 (24.3%)	93 (19.6%)	87 (24.4%)
Grad School	179 (12.5%)	72 (15.1%)	66 (13.9%)	51 (14.3%)
Employed	62 (4.3%) missing			
Full-time	1154 (80.5%)	395 (82.8%)	390 (83.7%)	292 (82.0%)
Part-time or seasonally	80 (5.6%)	25 (5.2%)	25 (5.4%)	21 (5.9%)
Unemployed	44 (3.2%)	13 (2.7%)	14 (3.0%)	11 (3.1%)
Other	92 (6.4%)	36 (7.5%)	37 (7.9%)	24 (6.7%)
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: Data collected by Rohe, Quercia and Van Zandt for Neighborhood Reinvestment, 1998-2003.

Notes: Missing data in Column 1 result from calculations of raw data. Imputations of missing data were made only those who responded to both surveys.

Appendix B. Neighborhood Conditions for Original and Attained Neighborhoods for 1990 and 2000.

		Original Neighborhoods						New Neighborhoods			
		1990	2000	Difference	Sig.			1990	2000	Difference	Sig.
Vacancy	Renter	11.08%	9.20%	**-1.88%**	***	Vacancy	Renter	10.59%	9.24%	**-1.35%**	**
	Buyer	13.18%	11.67%	**-1.52%**	***		Buyer	12.54%	10.78%	**-1.76%**	***
Homeownership	Renter	40.17%	41.01%	0.84%		Homeownership	Renter	45.76%	46.65%	0.89%	
	Buyer	45.79%	46.33%	0.54%			Buyer	50.95%	51.65%	0.70%	
Female-Headed HH	Renter	42.34%	45.48%	**3.14%**	***	Female-Headed HH	Renter	39.23%	41.29%	**2.05%**	*
	Buyer	35.82%	37.94%	**2.12%**	***		Buyer	33.64%	36.35%	**2.71%**	***
Unemployment	Renter	10.43%	10.35%	-0.09%		Unemployment	Renter	8.99%	8.98%	-0.01%	
	Buyer	8.46%	7.79%	**-0.67%**	*		Buyer	7.71%	7.41%	-0.30%	
Poverty	Renter	23.65%	23.59%	-0.07%		Poverty	Renter	20.78%	20.29%	-0.48%	
	Buyer	18.03%	18.41%	0.37%			Buyer	16.70%	17.31%	0.61%	
Income	Renter	80.21%	97.79%	**17.58%**	***	Income	Renter	88.46%	110.54%	**22.08%**	***
	Buyer	88.46%	111.31%	**22.85%**	***		Buyer	90.30%	111.45%	**21.15%**	***
House Value	Renter	85.67%	89.00%	3.32%		House Value	Renter	90.55%	94.28%	3.73%	
	Buyer	95.22%	98.31%	3.09%			Buyer	90.21%	92.65%	2.43%	
Index	Renter	118.54%	139.17%	20.63%		Index	Renter	145.17%	171.67%	26.50%	
	Buyer	153.97%	180.13%	26.16%			Buyer	160.88%	183.89%	23.01%	