

**Fifteen Years Later: Can Residential Mobility Programs Provide A Permanent Escape from Neighborhood Segregation, Crime, and Poverty?**

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**ABSTRACT**

We examine the conditions under which the Gautreaux residential mobility program produced long-run improvements in the neighborhood environments of program participants. We relate participants' "current" neighborhood characteristics, measured an average of 15 years after entry into the program, to the characteristics of the neighborhoods in which program families initially moved. Most families initially moving to suburban neighborhoods continued to reside in the suburbs. Families initially moving to higher-income, mixed-race, and suburban neighborhoods are currently living in the most affluent neighborhoods. Mobility into more integrated, lower-crime and suburban neighborhoods all contributed to the chances that a participant ended up in a lower-crime neighborhood.

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### **INTRODUCTION**

What is the likely long-term result of moving low-income African-American families into mostly-white affluent communities? One view is that these families would not integrate into their new communities because they would feel uncomfortable or would not be welcomed by their new neighbors. Patterson (1997) and Thernstrom and Thernstrom (1997) argue that many African-Americans are choosing to live with their own race—voluntary segregation. Farley and colleagues (1976, 1993) show that African-American families prefer to live in communities in which they already have strong representation.

The experimental Moving to Opportunity (MTO) residential mobility demonstration program has moved thousands of very-low income public-housing families from high to low-poverty communities. But since MTO began placing families only in the mid-1990s, it is far too early to tell whether the program enabled families to reside permanently in safer and more affluent neighborhoods. Our paper draws data from Gautreaux, a non-experimental residential mobility program begun in 1976, to address the crucial issue of long-run neighborhood improvement.

In 1966, Dorothy Gautreaux, a community organizer and activist, sued the Chicago Housing Authority (CHA) and the U.S. Department of Housing and Urban Development (HUD) in the nation's first public housing desegregation lawsuit. One of the desegregation remedies authorized by the Supreme Court was the Gautreaux housing mobility program, which circumvented the typical barriers to suburban moves (i.e. jobs, personal finances, discrimination, and values) and moved families who volunteered for the program (Rosenbaum 1994). Unlike the usual case of African-American suburbanization—working-class African-Americans living in working-class suburbs—Gautreaux permitted low-income African-Americans to live in middle-income white suburbs.

There is precious little evidence on the long-term effectiveness of residential mobility programs. Our research uses data on the origin, initial destination and current location of a random subsample of participants in the Gautreaux program to understand the nature of urban/suburban residential mobility among low-income families who are given an opportunity to move to better neighborhoods. By using Census and FBI-based information about the characteristics of the “current” neighborhoods (measured in the late 1990s) of participating families, we are able to gauge the extent to which the dramatic short-run improvements in neighborhood segregation, safety, and socioeconomic resources were maintained between six and 22 years after their initial moves.

A second objective of our research is to investigate whether the type of neighborhood into which a family initially moves is associated with its long-run success in residing in a safe and prosperous neighborhood. Roughly half of the Gautreaux program participants moved to Chicago neighborhoods; the other half moved to the suburbs. Initial placement neighborhoods varied greatly in terms of racial composition, crime rates and socioeconomic resources. Despite

the program's goals of moving families to census tracts with less than 30% African American, residents, a significant fraction of families moved to highly segregated, high-crime, low resource neighborhoods. At the other end of the spectrum, some families moved to overwhelming white, low-crime and high-resource neighborhoods. The initial neighborhoods of the remaining families are spread fairly evenly between these two extremes.

Although we find some evidence of nonrandom program placement (e.g., significant correlations between origin and initial destination neighborhood characteristics) the correlations are modest. Given our ability to control for differences in both the demographic composition of families and the characteristics of the neighborhoods from which they came, we argue that our data provide guidance for residential mobility programs in determining the best kinds of placement neighborhoods for achieving the goal of long-run improvements in the neighborhood safety and resources of participating families.

The organization of this paper is as follows. In the next section we present theoretical issues and empirical results from prior studies. We then describe the sources of data used in the analyses. Our discussion of results begins with an overview of the neighborhoods from which families were drawn, the neighborhoods into which they moved, and the neighborhoods in which they are currently residing. We next present regression results on the association between placement and current neighborhood characteristics. We conclude the paper with a discussion of the implications of our results for residential mobility programs.

## **BACKGROUND**

The 1968 Kerner Commission Report suggested that the United States was “moving toward two societies, one black, one white—separate and unequal.” Since that time residential integration has increased dramatically, with some now saying “there has been impressive racial progress in the past three decades (Clark 2002, p. 83).” More than 30% of African-Americans now live in suburban communities and many middle-class African-Americans reside in highly integrated neighborhoods (Lewis Mumford Center 2001). Hansen (1996) found that in Oakland, California and its surrounding county, very-high income African-Americans “had achieved full integration with whites (p. 369).” At the same time, residential segregation persists. African-American suburbanization may not mean integration, particularly if it is met with white flight. In major cities in which the minority population is mostly African-American, the index of dissimilarity, which ranges from 0 (random racial distribution) to 100 (total segregation), has only dropped from 87 in 1960 to 79 in 1990 (Armor & Clark 1995), leading Massey and Denton (1993) to call this continued segregation “American apartheid.” Between 1990 and 2000 housing segregation remained largely unchanged (Lewis Mumford Center 2001).

Debate continues on the extent to which continuing residential segregation, particularly among lower-income minority households, is due to preferences for living with members of their own group. Farley, Schuman, Bianchi, Colasano, and Hatchett (1976) conducted the pioneering Detroit area study of preferences in explaining the causes of racial residential segregation. Farley, Steeh, Jackson, Krysan, and Reeves (1993) replicated this work and found that Detroit area African-American residents' preferences for living in predominantly African-American communities remained stable from 1976-1992.

Some researchers focusing on the preferences of African-Americans believe that cities would remain segregated even if real-estate professionals treated African-Americans and whites the same (Clark 1991, 1989). Krysan and Farley (2002) have since qualified these findings with a more detailed look at minority residential preferences. They confirm that African-Americans prefer to live in neighborhoods that have at least 50% African American but also show a willingness to consider moving into neighborhoods in which there are only a handful of African-Americans. They argue that African-Americans believe that whites in mostly white neighborhoods will be “hostile, blame them for any troubles that arise, and treat them as unwelcome intruders (p. 77).”

Although residential mobility among poor urban families is high, relatively few poor urban families manage to escape from poor neighborhoods altogether. Using data from the Panel Study of Income Dynamics, Gramlich, Laren, and Sealand (1992) found that poor whites were much more likely than blacks to move out of poor tracts. African-American families with children were the least likely to leave poor urban tracts and the most likely to enter them.

South and Crowder (1997) examined the factors that impede or facilitate residential mobility out of impoverished neighborhoods. They found that even after controlling for racial differences in socioeconomic and life-course variables, African-Americans were much less likely than whites to leave poor areas and more likely to move into them. In fact, the most educated blacks in their study were less likely than the least educated whites to escape distressed neighborhoods. Disruptive lifecourse events including marital dissolution and unemployment were much more prevalent among blacks than whites and contributed to the racial difference in neighborhood mobility.

U.S. federal housing policy has shifted from unit-based programs to tenant-based vouchers and certificates. Between 1976 and the end of the 1980s, vouchers and certificates as a share of new assisted housing units grew from 52% to over 80% (Nenno 1998). Tenant-based assistance programs, such as Section 8, now called the Housing Choice Voucher, assists very low-income families to find private-market housing. In comparison to public housing residents, tenant-based assistance recipients are much less likely to reside in high-poverty, racially-segregated, and high-crime communities (Newman & Schnare 1997). Additionally, the demolition of severely distressed public housing projects and the expiration of subsidy contracts with private developers are rapidly increasing the shift from project-based to tenant-based assistance (Turner, Popkin, & Cunningham 1999).

Varady and Walker (1998 & 2000) reported on the mobility of families moving out of distressed, soon-to-be demolished properties in four cities. The program assisting these families provided them with Section 8 certificates and attempted to move tenants out of the properties and into better housing as quickly and efficiently as possible. Most voucher recipients made short distance moves into neighboring communities. However, the majority of participants improved their median neighborhood income substantially – by about 34%. However, post-move neighborhoods averaged only about \$19,400 per household, far less than the 1990 US average of \$32,086. Whether these immediate gains persisted once these families were able to experience their new community and make subsequent mobility decisions is uncertain. Additionally, most families continued to live in racially segregated areas; post-move neighborhoods (measured at the block group level) had only marginally lower percentages of African-Americans than the original neighborhoods.

Popkin and Cunningham (2001) surveyed families living in Chicago CHA developments who were attempting to relocate using Section 8. They found that of the 156 residents surveyed, only 23% were able to relocate within one year. The families who did move continued to live in racially and economically segregated inner-city communities. Among the 36 families who did move only three were able to move to a census tract that was less than 20% poor and only two moved to a tract that was less than 90% African-American. However, they also found that simply by moving out of distressed public housing developments families perceive substantial improvements in housing conditions and feelings of safety.

Turner et al. (1999) discuss two potential explanations for the current segregated geographic clustering of urban Section 8 families. One is that Section 8 recipients are effectively excluded from living in many desirable areas because few landlords are willing to accept these families and their housing subsidies. The other explanation for geographic clustering is that since the Section 8 program leaves the final decision about residential location up to the participating families, families simply prefer to live in largely-segregated communities. Remaining in these segregated inner-city communities allows them to be close to friends and relatives and other community supports. Our research addresses the issue of residential preference of housing vouchers recipients by showing the long-run neighborhood choices of Gautreaux program participants.

Information from housing mobility programs such as Gautreaux and MTO show that public-housing residents express great enthusiasm for moving to low-black, low-poverty, and even suburban communities. Some three-quarters of MTO participants said that escaping the drug, gang and crime problems in their old neighborhoods was their first or second most important reason for wanting to move. More than half mentioned better housing, and over a third wanted to find a better school for their children (Goering, Feins, & Richardson forthcoming).

We do not know how subsequent mobility affects families' long-term residential outcomes. In the Gautreaux program families were required to reside in their new communities for at least one year, after which time families were allowed to move to any community and retain their housing voucher. Given the enormous changes between origin and placement neighborhoods for most families in programs such as Gautreaux, it is not surprising that participating families often encountered problems settling into their new neighborhoods (Rosenbaum and Rubinowitz, 2001). Some of the problems were housing-related, as when apartment buildings were sold and new landlords were no longer willing to rent to program participants. Some families encountered racial animosity from their new neighbors; others had more general problems establishing new social and job networks. Children sometimes had problems adjusting to new schools, many of which had much higher academic standards than they were accustomed to. Although the discouraging experiences appeared more than matched by stories of helpful neighbors and teachers, the temptation to move back to more familiar surroundings was often strong. We are now able to look long-term and see the persistence of mobility out of racially and economically segregated inner-city neighborhoods.

## **DATA**

We investigate the long-run consequences of residential mobility programs using data from the Gautreaux program. Between 1976 and 1998 the Leadership Council for Metropolitan Open Communities<sup>1</sup> moved more than 7,000 families to communities throughout the six-county Chicago metropolitan area. The program gave participants rent subsidies that allowed them to

live in suburban or city apartments for the same cost as public housing, but did not provide employment or transportation assistance to participating families. The program began by moving families participating in the program into Section 8 set asides -- new privately-owned buildings of developers who received financing from the Illinois Housing Development Authority. The Leadership Council also employed full-time real-estate staff who recruited landlords willing to participate in the program. Beginning in the mid 1980s, families were also given the opportunity to search for their own units. The rental market was strong enough by 1990 to allow the Leadership Council to eliminate its real-estate staff. Given this, and the fact that housing choices offered to participating families were limited to only suburban addresses beginning in the 1990s, we confine our analysis to families moving between 1976 and 1989 (Rosenbaum & Rubinowitz 2001).

The Gautreaux program provided extensive housing services<sup>2</sup>. Placement counselors notified families as apartments become available, counseled them about the advantages and disadvantages of these moves, and took them to visit the units and communities. Counselors generally offered clients units based on their order of enrollment into the program. The consent decree mandated that all participants were entitled to a lifetime offer of three units. Based on interviews with program staff, it appears that the high quality of the units led most families to accept their first housing offer. Although clients could refuse an offer, very few did so, since they were unlikely to get another.

In general, Gautreaux participants are demographically similar to public housing residents, Section 8 participants, and other low-income samples that were living in Chicago during the years in which the program operated. Rosenbaum, Popkin, Kaufman, and Rusin (1991) compared Gautreaux families with a more general sample of Chicago AFDC recipients and found many more similarities than differences.<sup>3</sup> Rusin-White (1993) found that Gautreaux families were similar to families living in public housing, families with Section 8 certificates, and samples of African-American families living in ghetto areas of Chicago.<sup>4</sup> Finally, in comparison to families currently living in Chicago's distressed public housing developments Gautreaux families are demographically somewhat more advantaged (Popkin & Cunningham 2001).<sup>5</sup>

Despite demographic similarities, Gautreaux families clearly differ from other low-income families because they volunteered for the program. Thus, our findings generalize most readily to families choosing to participate in future residential mobility programs in which, as with Gautreaux, the final decision to move to a new more integrated more affluent community is left up to the family.

An important element of a program like Gautreaux is take-up – the fraction of families offered housing who in fact took up the offer and moved. Calculating take-up rates for Gautreaux is difficult since the Leadership Council intentionally enrolled more families than necessary to allow for attrition and the likelihood that larger families would not be able to find a unit<sup>6</sup>. It appears that an average of 1,700 eligible families were enrolled each year but only an average of 325 families actually moved (Peterson & Williams 1995). Interviews with Leadership Council staff indicated there were only about 350-400 annually available vouchers or certificates<sup>7</sup>. Thus, only about 20% of the eligible families who enrolled each year actually used their Section 8 certificates and moved.<sup>8</sup> Concern about the differential nature of take-up leads us to control for as many baseline characteristics of participating families and their origin neighborhoods as possible.

Information on program participants comes from the Gautreaux program records provided to us by the Leadership Council. Owing to research budget constraints, a random half sample of all female-headed families who moved prior to 1990 (n=1506) was selected. Their paper files were cleaned and computerized. Our searches for recent addresses for this sample relied on address information from a credit reporting service through July 2000 and the Illinois Department of Human Services Integrated Client Database Records (AFDC, TANF, Medicaid, Food Stamps), which contain monthly reciprocity record from February 1989 through September 1999. The most recent address from these two sources was used.

We were able to locate a post-1990 address for all but 60 of the 1506 women, all of which we were able to geocode. However, the address was from 1994 or before for 145 of the cases<sup>9</sup>, which we judged to be too old for use in our analysis. We are left with a sample of 1301 cases, 130 of whom are out of state and 16 resided in Illinois but outside the greater Chicago metropolitan area. We focus on the Current address characteristics of the 1171 families currently in Illinois utilizing census 2000 data. Sixty-five percent of the current addresses of our final sample were found in a credit reporting database and 36% were found in the Illinois client database.

Gautreaux program records provide the participant's "origin" address just before entering the program as well as the address and date of placement. The age and AFDC reciprocity status of the participant as well as the number of children residing with her were also recorded on the intake form and are used in our analyses. As described below, the participants' preferences for city vs. suburban placements were also recorded for some families.

We hypothesize that older (more mature) mothers, mothers with fewer children and mothers not receiving public assistance at the time of placement will be better able to adjust to their new placement neighborhoods and most likely to remain in advantaged neighborhoods. This is due to the belief that more mature mothers will have more psychological resources to adjust to the stress and new challenges associated with the move. Mothers not on welfare will likely have more work experience and therefore be more attractive to employers. Finally mothers with fewer children will have fewer barriers to employment and lower economic needs which should make adjustment to the new community easier.

To characterize the socioeconomic conditions in origin and placement neighborhoods, we geocoded the addresses into census tracts and then matched the census tracts to data from both the 1980 and 1990 US Census, interpolated for year of relocation. All of the "current" addresses were matched to 2000 Census tract data.

Information regarding monthly crime rates per 1,000 residents in the origin, placement and current addresses was obtained from the FBI's Uniform Crime Reporting (UCR) records. Crime information for all addresses within the city of Chicago (obtained from the Chicago Police Department yearly reports) is based on the police district<sup>10</sup> in which the address is located. Crime data for addresses outside of Chicago (obtained from the Federal Bureau of Investigation) is based on the "reporting agency"<sup>11</sup> in which the address is located.

We used several aspects of participants' census tracts to characterize origin, placement and current communities. The Census tract racial composition is characterized by the percent of residents who designated themselves as African-American on the Census form and the percent designating themselves as white. Tract mean income<sup>12</sup> (in 1999 dollars), the percentage of

households with wage income, and the percentage of adults with 16 or more years of education represent neighborhood socioeconomic status.

In some cases, programs records note participants' preferences for a city or suburban placement, which we use as additional controls for selection bias. It is important to note that this information is a very imperfect indicator of preferences.<sup>13</sup> We created seven dummy variables combining data on both preference and actual placement location. Some 57% of families' records did not indicate a specific city or suburban placement preference; of these, 45% moved within Chicago and 55% moved to the suburbs. Twenty percent of families indicated a preference for city placement location; of these families 90% moved within Chicago and 10% moved to the suburbs. Nineteen percent of families stated a preference for suburban placement location; of these families 84% moved to the suburbs and 16% moved within Chicago.

Key dependent variables in our regression analysis are the median income<sup>14</sup> (in 1999 dollars) and the violent crime rate in the current neighborhoods. We chose these to measure the long-run neighborhood-based success of program participants, most of whom likely resembled MTO families in their desire to escape crime and enjoy the amenities of more affluent neighborhoods.<sup>15</sup>

Key independent variables are the conditions in the neighborhoods in which families initially moved with the assistance of the Gautreaux program. There are several aspects of the initial neighborhood that may determine the racial composition, affluence, and crime rates of participants' current address. Families initially moving to higher SES communities may be more likely to reside currently in higher SES neighborhoods because they have established more productive contacts with neighbors, and have more access to employment opportunities that help bolster the families' long-term economic standing. Inertia may also be at work; if equal numbers of families stay in affluent and less affluent placement neighborhoods, then the former will show higher long-run levels of neighborhood affluence. On the other hand, the greater social distance between origin and higher vs. lower SES placement neighborhoods may cause greater discomfort, more mobility out of the higher SES neighborhoods and lower levels of current neighborhood socioeconomic resources.

City versus suburban placement captures the strength of the suburban job market and the possible spatial mismatch between low-skilled urban residents and suburban job opportunities. In addition to placement neighborhood income, we experimented with the male unemployment rate to reflect the extent to which the placement neighborhoods contained role models and possibly marriage partners who demonstrated employment as a way to economic success, and the percentage of families receiving public assistance as a measure of the social norms regarding public assistance and the importance of self-sufficiency.

Social distance considerations may also influence the association between the racial composition of placement neighborhood and the socioeconomic level and crime rate in current neighborhoods. All else equal, families moving to communities with higher percentages of African-American families may adjust more easily and form stronger bonds with their new neighbors. Indeed, the optimal placement neighborhoods in terms of long-run neighborhood-based success may be those with relative high levels of income but also relatively higher numbers of African-Americans. Although the most affluent neighborhoods in Chicago and elsewhere are almost exclusively white, there is considerable variation in the affluence of mixed-race neighborhoods. Part of our analysis will explore interactions between placement

neighborhood racial composition and income in leading to long-run improvements in our neighborhood-based outcomes.

Male unemployment, percentage of families receiving public assistance, and household income proved so highly correlated that it was impossible to estimate their separate effects. We opted to use mean household income to represent neighborhood socioeconomic resources, realizing that the estimated “impacts” of placement neighborhood income on current neighborhood income and crime could be reflecting the set of resource and role model factors associated with these correlated measures.

Crime rates in the placement neighborhood are included in our analyses to reflect the fact that safety concerns affect families’ mental health, safety, and use of community resources (Kling et al., 2001). In safe communities families are likely to adjust more easily to the move, and to be more willing to initiate and develop contact with neighbors and community institutions. As a result, family members may have more opportunities to meet employed individuals and develop contacts that may provide referrals, references, or jobs. Our descriptive look at placement neighborhoods examines rates of both violent and property crime.

## RESULTS

Our concerns about nonrandom placement lead us to check the correlations between preprogram characteristics and placement neighborhood characteristics; the absolute value of these correlations range from .01 to .20 (Table 1).<sup>16</sup> Some of the correlation appears to be related to the fact that families without a car or access to a car were more likely to be placed or encouraged to move within the city or in a suburb that was just outside the city limits. Program officials stated that this was because, in the early years of the program, public transportation in many suburban communities was limited or nonexistent. This is particularly true of families moving before the mid 1980’s. Despite these program administration requirements we find that roughly half of the correlations between origin and placement neighborhood characteristics are insignificant. And when we regressed placement neighborhood characteristics with the demographic and origin neighborhood characteristics only the origin neighborhood racial composition attained statistical significant at conventional levels.

We opted for city/suburban status, income, racial composition and violent-crime rates to characterize placement neighborhoods. Table 2 shows that correlations among these variables are high, but regression analyses established that the correlations are not so high as to render estimation of their separate effects impossible.

**Baseline characteristics.** Table 3 presents descriptive statistics for family and origin neighborhood characteristics, both for the overall sample and separately for families moving to city and suburban locations. If assignment into city and suburban placement locations were truly beyond the influence of program participants and discretionary actions on the part of program counselors, we would expect the family and origin neighborhood characteristics of city and suburban-movers to be similar. But as we know program staff steered families without a car or access to a car to stay close to the city to have access to the well developed public transportation system. This probably means that in general families with fewer resources moved within Chicago and the close in suburbs.

Statistical tests recorded in the right-most column indicate that families successfully moving to the suburbs differed in several ways with respect to origin neighborhood from families

moving to a city addresses. As for demographic characteristics, younger mothers were more likely to move to the suburbs. Suburban and city movers were similar with respect to number of children and likelihood of AFDC receipt at the time of move.

Families living in public housing were more likely to move within the city compared to those who were on the waiting list or were no longer living in public housing. Families from origin neighborhoods that differed in terms of racial composition or crime did not appear to be differentially likely to move to a city vs. suburban addresses. Consistent with the fact that families not living in public housing at the time of enrollment into the program were more likely to move to the suburbs, families moving to the suburbs originated in neighborhoods that had somewhat better socioeconomic and social characteristics than did families moving within the city (i.e., higher neighborhood income, more employed individuals, a higher level of education and fewer female-headed families).

**Placement neighborhood characteristics.** In most cases, the Gautreaux program was successful in meeting its court-ordered goal of placing families in neighborhoods with 30% or fewer African-Americans. Nearly all families (96%) making suburban moves moved to such neighborhoods. On the other hand, only about half (49%) of city placements met this goal. City placements tended to follow a bimodal distribution, with 40% moving to tracts with 60% or more African Americans and 47% of city movers moving to tracts with 25% or fewer African Americans.

As shown in Table 4, placement neighborhoods differed dramatically on average from origin neighborhoods in terms of ethnic composition, socioeconomic status, social context, and crime. On all of these measures, Gautreaux families moved to placement communities that were significantly less isolating and crime-ridden, and more affluent, on average, than their origin communities. As shown by the standard deviations in the “All” column of Table 4, these averages mask considerable diversity in placement characteristics. As detailed below, a significant number of families moved to segregated, poor and crime-ridden neighborhoods, while others moved to suburban communities with virtually all white, uniform affluence and very little crime. Variability in placement characteristics enables us to examine links between placement and current neighborhood conditions.

Owing to the high crime rates of the origin communities of these families (22.4 violent and 79.9 property crimes per 1,000) and the devastating effects of crime on family functioning (Kling et al., 2001), improvement in neighborhood safety is an important issue. As a point of reference, in 1996 the city of Chicago averaged 21 violent and 60 property monthly incidents per 1,000. In 1996 suburban cook county averaged 3 violent and 34 property monthly incidents per 1,000. On average, Gautreaux participants moved to areas with substantially fewer crimes, approximately 15.6 violent and 59.7 property incidents per 1,000. Most of this improvement occurred among suburban movers. The city neighborhoods in which families moved averaged 18.6 violent and 72.9 property crimes per 1,000. Suburban placement neighborhoods averaged 12.6 monthly violent and 45.5 property crimes per 1,000.

The magnitude of gains in socioeconomic status from origin to placement neighborhood also differed based on whether families moved to city or suburban locations. Participants' origin tracts had a mean income of \$30,000<sup>17</sup> and only 62% of families in the origin tracts reported wage income. Families moving within the city increased their tract mean family income by \$13,399 and the percentage of families with wage income by 11 percentage points. This is

significantly less than the corresponding increases for suburban placements (respective increments of \$38,184 and 24 percentage points).

It is also important to note that for all placement neighborhood measures the standard deviation for the city placement group is significantly larger than for the suburban placement group. This indicates that there is more variability in the characteristics of city than suburban placement neighborhoods.

**“Current” neighborhoods.** Among participants whose current neighborhoods were determined in 1995 or later, none resided in the same apartments or houses into which they initially moved. But where did they move? If the majority moved back to neighborhoods like their original ones, then the Gautreaux program would have failed to meet its ambitious goals of permanently improving the neighborhood conditions in which these families live and raise their children.

Table 5 provides a summary of the characteristics of the communities in which suburban- and city- movers currently reside. As detailed below, conditions, particularly economic conditions, were much better than in origin neighborhoods, and only slightly worse than in placement neighborhoods.

In general, families have made significant residential changes in the years since their initial move through the program. Families initially moving within Chicago moved an average of 7 miles between their origin and initial address, they have since moved an average of 9 miles from their initial destination address to their current location. However they did not move closer to their origin communities because their current addresses are about 8 miles, on average, from their origin communities. Suburban movers show more regression to the mean. Suburban movers were placed 25 miles, on average, from their initial addresses and now reside 18 miles, on average, from their origin addresses. Their current addresses are 15 miles, on average, from their initial placement address.

As shown in Table 6, among families originally moving to suburban communities only about one-quarter to one-third moved back to the city. The most common situation is for the family to remain in the general suburban area in which it initially moved. Moves from Western to Southern suburbs were not uncommon. Some 11%-14% of all movers moved out of the state of Illinois altogether.

More than three-quarters of families initially moving within Chicago continue to reside within the city. If we divide Chicago into its 77 community areas<sup>18</sup> (data not shown in Table 6), we find that roughly half (41%) of families who stayed in the city remained in their placement Chicago community area. If we divide Chicago into Census-based tract and block-group neighborhood areas, we find that only 3% returned to their origin tract and 2% returned to their origin block groups (data not shown in Table 6). Among families initially moving within the city who are currently residing in the suburbs, the North and, especially, South suburbs were most popular.

**Origin vs. placement vs. current neighborhoods.** Figures 1 through 4 summarize average origin, placement and current neighborhood conditions, and also show the current conditions in the origin neighborhoods. For this latter comparison we matched 1990 census and 1997 crime characteristics to the origin address. Of course, not all Gautreaux families would have remained in their origin neighborhoods had the program not helped them move. All

Gautreaux families volunteered for the program, were highly motivated to improve their neighborhood conditions and stood a good chance of improving their neighborhood conditions even in the absence of Gautreaux. But a look at the current conditions of their origin neighborhoods provides a useful benchmark to gauge progress and regress over the 6-22-year period following the moves.

Mean incomes in current neighborhoods were much higher (\$52,000 vs. \$39,000, both in 1999 dollars) than the current income levels of the origin neighborhoods (Figure 1). Surprisingly, there is no regression to the mean in neighborhood incomes following placement, with current neighborhood incomes (also in 1999 dollars) about \$4,000 higher than placement neighborhood incomes. The magnitude of this gain differed slightly depending on whether families moved early or late in the program's operation (\$127 and \$8,000, respectively). Poverty rates followed a similar pattern, with origin neighborhood poverty rates more than twice those of either placement or current neighborhood rates (Figure 2).

In contrast to the stagnation of inflation-adjusted incomes, crime rates generally increased over the 1980s and 1990s in both the city and its suburbs. In 1997 the communities from which these families originated experienced about 35 violent crimes per 1,000 compared with about 20 violent crimes per 1,000 for the communities in which participants are currently residing (Figure 3).

Only with respect to race was there substantial regression to the mean, with the fraction of neighbors who were African-American increasing from 28% in placement neighborhood tracts to 51% in current neighborhoods (Figure 4). Both of these fractions are much lower than the 83%-85% average rates in the origin neighborhoods. The racial composition of the current neighborhoods is the sole focus of a paper by DeLuca and Rosenbaum (forthcoming).

When we look at current neighborhood income and racial composition together we find that families are currently living in four distinct types of communities (Table 7). Thirty three percent are in low-black high-income communities, 9% are in low-black low-income communities, 35% are in high-black low-income communities, and 23% are in high-black high-income communities. Of the families initially moving to low-black high-income communities 46% are currently residing in similar communities, 23% are in high-black low-income communities, and 21% are in high-black high-income communities. Of those initially moving to high-black low-income communities, 67% are currently living in similar communities, 6% are currently in low-black high-income communities, and 23% are in high-black high-income communities.

**Regression models of neighborhood income.** We turn now to our regression-based analyses of the links between placement neighborhoods and the economic and safety conditions in the current neighborhoods. To control for nonrandom placement, all of our regressions include the baseline family and neighborhood conditions listed at the bottom of Tables 8 and 9. By and large, these family and origin neighborhood variables are fairly orthogonal to our key placement neighborhood variables. Their inclusion in the regression models produces only marginal changes in the coefficients of the placement variables.

We also control for baseline measures of participants' preferences for city vs. suburban placement. Preliminary analyses established that participants' preferences for a city or suburban placement location were not consistently important in regression models predicting conditions of the neighborhoods into which participants moved. However, our regressions focusing on current

neighborhood African-American, income, and crime include these preference measures since they might provide some measure of control for otherwise unmeasured selection factors. Comparable regressions run without the preference controls produced virtually identical coefficients on our key placement measures.

Our analyses begin with "bivariate" associations between our four placement neighborhood characteristics and current neighborhood income (first column of Table 8). These coefficients and their standard errors come from four separate regressions, each of which includes the given placement characteristic and baseline variables, but not other placement characteristics.<sup>19</sup> All four placement measures have significant associations in the expected direction; families currently residing in more affluent neighborhoods were more likely to have initially moved to more integrated, affluent and safer neighborhoods and were more likely to have initially moved to the suburbs.

Preliminary analyses of models that included various combinations of the placement measures listed in Model 1 of Table 8 revealed that suburban placement, placement income, and race accounted for the bulk of the association between placement neighborhood location and current neighborhood income. As shown in the "Model 1" column of Table 8, placement neighborhood crime becomes unimportant in the presence of controls for the other placement neighborhood characteristics.

Accordingly, we conducted the rest of our analysis of current neighborhood income using only the income and race of placement neighborhoods, with city/suburban placement included implicitly with our set of preference measures. In the case of both income and race, we allowed for possible nonlinear or threshold effects by forming five (in the case of income) and six (in the case of race) dummy variables for each measure.<sup>20</sup>

Families initially moving to suburban communities, after controlling for placement neighborhood race and income, are currently living in communities with \$10,500 higher median income per family than those initially moving within Chicago. This value is almost identical to the bivariate coefficient for suburban placement.

Without controlling for placement neighborhood income, there is a roughly linear relationship between placement neighborhood race and current neighborhood income (Model 2 in Table 8). However, once placement neighborhood income is included in the model (Model 4 in Table 8), more of a threshold effect emerges. Current neighborhood income is lowest for families initially moving to neighborhoods that were 95% or more African-American. There is significant benefit to moving out of highly segregated neighborhoods. There is also some evidence of continuing benefit in current neighborhood income with placement into neighborhoods with lower percentages of African-Americans (Model 4 Table 8).

Without controls for race, the results from Model 3 suggest a roughly linear association between placement and current neighborhood income. In the presence of controls for racial composition, the effect of placement neighborhood income displays a strong threshold pattern: it is not until families are placed in the most affluent neighborhoods (average income \$84,100) that we see a significant difference relative to placement in the neighborhoods with the lowest income (average income \$27,033). Only families initially moving to the most affluent fifth of placement neighborhoods enjoy current neighborhoods with significantly more income per family (\$9,400 more per family) than families initially moving to the poorest fifth of placement neighborhoods.

Finally, we note the relatively few significant coefficients for family and origin characteristics, which collectively account for only about 2% of the variance in current neighborhood income<sup>21</sup>. There were no significant family variables. With respect to origin neighborhood characteristics, we observe somewhat higher current neighborhood incomes of families who lived in neighborhoods with lower percent of African-American prior to their moves. None of the other origin neighborhood characteristics has significant associations with current neighborhood median income.

**Regression models of neighborhood crime.** We conducted a parallel set of regression models predicting violent crime rates in the current neighborhoods (Table 9). All four placement characteristics had significant “bivariate” associations with current crime rates, and only income fell to insignificance when all four were included at the same time. Our more complete models of placement characteristics include sets of dummy variables for race and crime, with city/suburban placement differences controlled implicitly by our set of preference dummies.

Nonlinearities appear in the bivariate associations between current crime rates and placement racial composition, income, and crime rates (Models 2-3 in Table 9). Moving from the bottom to next-to-bottom categories, for both of these variables, was associated with a significant drop in current neighborhood crime. Moving up one more category on these scales produced further drops. But further improvement in any of the placement characteristics failed to produce noteworthy reductions in current neighborhood crime conditions.

When all placement neighborhood measures are included in the same model (Model 4 in Table 9), thresholds continue to be apparent for both racial composition and crime rates. Placement in all but the most segregated neighborhoods was associated with a 6-10-point (nearly half a standard deviation) drop in current rates of violent crime. For placement neighborhood crime we see a more pronounced threshold effect. It is not until placement into neighborhoods falling into the third or higher quintile (going from high to low crime) occurs that we see an average 3.9-point reduction in current neighborhood violent crime exposure. As with the model using linear versions of these variables, after controlling for race and crime, placement neighborhood income has no significant association with current crime (data not included). And finally the coefficients on the preference categories list at the bottom of the table show 7- 12-point lower current crime rates for suburban as opposed to city placements.

There are no significant associations between the family characteristics and current neighborhood crime.<sup>22</sup> With respect to origin neighborhood characteristics, there is a small, but significant association between origin neighborhood percent African-American and current neighborhood crime. Altogether the family and origin neighborhood variables account for only about 1% of the variance in current neighborhood crime.

## DISCUSSION

Our research has relevance for residential relocation policies directed at families living in high-rise public housing projects. As HUD continues to close current projects and build fewer new units in favor of voucher- and certificate-based assistance, two key policy decisions must be addressed. Should voucher and certificate holders be provided with counseling and housing search assistance to enable them to relocate in communities that are significantly different from the neighborhoods where they currently reside? And should there be restrictions on the neighborhoods in which vouchers and certificates can be used? To address these policy concerns, we have examined the long-term outcomes of families participating in a residential mobility

program that included housing search assistance and restrictions on the ethnic composition of destination neighborhoods.

When current and origin neighborhood conditions are compared, our evidence suggests that the Gautreaux program caused long-term reductions in the socioeconomic segregation of poor urban families. All but a handful of families in the program were able to escape permanently from their low-income origin neighborhoods, and most of those initially moving to the suburbs continue to live in the suburbs some 6 to 22 years after their moves. This speaks to the current geographic clustering of urban minority families using Section 8 vouchers in showing that the current clustering of these families in racially and economically segregated inner-city communities is not inevitable.

Gautreaux's success in moving low-income African-Americans into higher SES and lower crime neighborhoods is particularly striking. When compared to conditions in their origin neighborhoods, participating families enjoyed large and persistent improvements in neighborhood family income and the fractions of households with wage income, adults with college degrees, and families headed by two parents. There was surprisingly little regression to the mean in these characteristics during the 15-year period after program placement. Families, particularly suburban movers, moved to areas that were much safer than the ones they were leaving. We find no support for the argument that the geographic segregation of low-income households in racially and economically isolated inner-city neighborhoods is due to their preferences for those neighborhoods, since almost no families returned to the communities that they left. Here it is important to point out that our results apply to families that volunteered to participate in a residential mobility program.

Our findings regarding the racial composition of mothers' current neighborhoods are in line with previous research indicating that African-American families prefer to reside in 50-50 neighborhoods. There is a strong tendency for families initially moving to neighborhoods at both ends of the spectrum (mostly African-American and mostly white) to move closer to the 50-50 ideal. However, this is racial "resegregation" observed is not associated with economic "resegregation." In general, families maintained their neighborhood affluence. For example families initially moving to mostly white high-income neighborhoods subsequently moved to neighborhoods that were less white but still affluent. So while families may prefer mixed-race neighborhoods, they appear unwilling to move to them if they are associated with a lower neighborhood income.

What do our results imply for placement neighborhoods for voucher and certificate programs seeking to produce long-run improvements in neighborhood conditions of poor urban families? To investigate this, we combined our many placement neighborhood measures into six categories based on an additive index of percent African-American, mean income, and, for our analysis of current neighborhood income, violent crime.<sup>23</sup> Families in the first category were placed in neighborhoods that were racially isolated (95% to 100% African-American), poor (mean income ranged from \$15,000 to \$35,000) and violent (21 to 78 incidents per 1,000). Families in the second set of categories were placed into relatively more integrated communities (30% to 95% African-American), were somewhat more prosperous (neighborhood incomes ranged from \$35,000 to \$47,000), and exposed to moderate rates of violent crimes (15-20 incidents per 1,000). Our most advantaged category consisted of families placed in almost exclusively white (2% or less African-American), affluent (average household income of \$84,100) and safe (an average of 5 violent incident per 1,000) neighborhoods.

Applying the regression coefficients from our most comprehensive model (Model 4 in Table 8), we see in Figure 5 a roughly linear improvement in current neighborhood income as placement conditions improved. Thus, for programs seeking to place families permanently in more affluent neighborhood, most incremental improvements in placement neighborhood conditions appear to help.

Thresholds are somewhat more apparent in the relationship between placement neighborhood conditions and current crime (Figure 6). Again this is based on our most comprehensive model (Model 4 in Table 9). Placing families in the second from lowest as opposed to lowest SES neighborhoods is associated with a 6.7-point drop in violent crime. Additional improvements in placement neighborhood conditions appear to matter less. In fact, the drop in crime in moving from the lowest to second lowest category is only two points less than the drop in going from the second lowest to most advantaged placement neighborhood category. Thus, in terms of long-run reductions in neighborhood crime, avoiding placements in the worst neighborhoods appears key.

Helping families to relocate into communities that are less racially isolated, more socioeconomically prosperous, and less plagued by crime thus appears beneficial to them in both the short and long run. Gautreaux and MTO accomplished this by hiring and training staff, some of whom assisted families in learning about new communities and others of whom developed relationships with landlords. Our results suggest the importance of careful consideration of the socioeconomic and ethnic mix of communities into which voucher and certificate holders would move, with particular priority on mobility into neighborhoods that are significantly better than the original neighborhoods of participating families.

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## ENDNOTES

<sup>1</sup> The Leadership Council was founded as the result of a campaign for open housing led by Dr. Martin Luther King, Jr. in 1966. The Leadership Council's mission is to eliminate discrimination and segregation in metropolitan Chicago housing markets.

<sup>2</sup> The program had three selection criteria that were intended to assure landlords that they would get good tenants and increase the likelihood that participants would be able to continue renting these apartments. The program tried to avoid enrolling families that would potentially be making late rent payments or cause building damage by not admitting families with more than four children, large debts, or unacceptable housekeeping. Due to social stigma concerns the Leadership Council also tried to limit the number of families moving to any one area or any one building within an apartment complex. None of these criteria was extremely selective. Because 95% of AFDC families have four or fewer children, the overcrowding restriction eliminated only a few eligible families. Moreover, Gautreaux administrators estimate that about 12% of applicants were rejected by the credit check or rental records and only 13% were rejected by counselors' home visits to look for property damage (Rosenbaum 1994). Thus, all three criteria reduced the eligible pool by less than 30 percent.

<sup>3</sup> Gautreaux participants were similar to the Chicago AFDC sample in their time on public assistance (more than 7 years) and their marital status (about 45% never married and 10% currently married). However, Gautreaux participants were less likely to be high school dropouts (39% vs. 50%), tended to be older (median age 34 vs. 31), and had fewer children (mean 2.5 vs. 3.0). On the other hand, they were also more likely to be second-generation AFDC recipients (44% vs. 32%).

<sup>4</sup> Rusin-White (1993) compared families participating in the Gautreaux program to families living in public housing, families with Section 8 certificates, and the African-American segment of Wilson and Wacquant's (1989) survey of inner-city residents of Chicago. In general, Gautreaux participants are similar to the housing project and the Section 8 samples. In comparison to African-American families living in ghetto areas of Chicago, Gautreaux participants are not as well off as families living in low-poverty areas (20%-30% poverty) but somewhat better off than residents of extreme poverty areas (greater than 40% poverty).

<sup>5</sup> Current CHA residents are in many ways a very disadvantaged population (Popkin & Cunningham 2001). The majority are poor (annual income of less than \$10,000) long-term public housing residents; 62% have been living in public housing for more than 10 years. Current CHA residents also have low human capital resources (63% do not have a high school diploma, 32% report being employed, and only 13% have a drivers license).

<sup>6</sup> Self-selection and housing availability are believed to account for the majority of the pre-move attrition. Many families ran out of time and some families opted out of the process before their 6 month search time-period expired as they tried to secure a unit (Rosenbaum & Rubinowitz 2000).

<sup>7</sup> The program received an annual allotment of approximately 150 certificates. Any unused certificates were rolled-over at the end of the year. They also received a small share of all newly developed buildings that utilized HUD funding.

<sup>8</sup> We do not know how many units the program found that went unfilled. Since the program promised to provide housing units until 1990, unused housing would indicate evidence of participants' failure to "take-up" a program offer. It is program staff's impression that there was very little, if any, of this. It is possible that much of the failure to "take-up" really indicates the programs failure to find enough housing units.

<sup>9</sup> We compared the characteristics of the 145 families with older current addresses to those included in our final analysis sample and found statistically significant differences only on mothers' age at the time of the move and origin address violent crime rate. Mothers with older current addresses were three years older (33 versus 30) at the time of move than mothers with newer current addresses. There were no statistical differences in mothers' placement

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and current address characteristics except origin and current neighborhood violent crime level. Mothers with older current addresses originated from neighborhoods that were slightly less violent (19 versus 22 monthly violent incidents per 1,000) and are currently living in areas that are substantially more violent (30 versus 20 monthly violent incidents per 1,000).

<sup>10</sup> Chicago is divided into 25 police districts. We used the census tract boundaries of each district to match addresses to police district.

<sup>11</sup> Each reporting agency roughly corresponds to a town/city; the city/town names were matched to Gautreaux participant addresses on the basis of zip codes.

<sup>12</sup> We used mean income because initial move neighborhood characteristics are interpolated values based on the 1980 and 1990 census and we only had mean income from the 1980 census.

<sup>13</sup> Interviews with some of the housing counselors revealed that nearly all participants preferred city placements, and that housing counselors encouraged applicants to express a willingness for suburban placements during times when there were many suburban units available. However, at any given time there were several different counselors, and individual counselors may have varied in how much they encouraged participants to express a willingness for suburban placements.

<sup>14</sup> Median income data were available in the 2000 census data and are used in our regression analyses because they provide a better fit to the data. Current neighborhood mean instead of median income is used in table 5 and Figure 1 to facilitate comparisons among origin, placement and current neighborhood conditions.

<sup>15</sup> Separate papers focus on the racial composition of current neighborhoods (DeLuca and Rosenbaum, 2003) and the individual successes of participants (Mendenhall et al., 2003) and their children (Keels et al., 2003) in gaining high earnings and less dependence on welfare.

<sup>16</sup> The .31 correlation between year of move and violent crime reflects the general increase in crime rates that occurred in the city and suburbs during the 1980s and 1990s.

<sup>17</sup> Forty one percent of the sample lived in public housing developments when they enrolled in the Gautreaux program. Families living in public housing developments had origin tract mean income that was much lower than the families who were on the waiting list for public housing (\$19,583 and \$37,948 respectively).

<sup>18</sup> Community Areas in Chicago were first delineated in the late 1920s by the Social Science Research Committee at the University of Chicago. At that time they defined 75 Community Areas, using criteria designed to identify areas with separate histories and community awareness. The boundaries have not been revised to reflect change in these areas, but instead have been kept relatively stable to allow comparisons of the areas over time.

<sup>19</sup> Since the “Placed in Suburbs” measure is incorporated into the coding of our preference measures, the preference measures are not included in the regressions that produced the estimates reported in the first column of Tables 8 and 9. All other baseline characteristics were included in these regressions.

<sup>20</sup> In the case of race, the second quintile spanned such a large range (15.1% to 95% Black), that we subdivided it into two categories of roughly equal sample size.

<sup>21</sup> It is also the case that none of our family variables (mother's age at move, number of children, whether receiving AFDC at move, and whether residing in public housing at move) show a significant interaction with our placement neighborhood variables in predicting current neighborhood income.

<sup>22</sup> Again, none of our family variables (mother's age at move, number of children, whether receiving AFDC at move, and whether residing in public housing at move) show a significant interaction with our placement neighborhood variables in predicting current neighborhood violent crime level

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<sup>23</sup> The categories constitute the horizontal axes of Figures 5 and 6. Figure 5 represents predicted values of current neighborhood household income by placement neighborhood SES category based on Model 4 in Table 8. In Figure 5, category 1 is the prediction for placement into a neighborhood with the highest fractions of African-American and low-income neighbors. Category 6 is the prediction for placement in neighborhoods with the highest SES. The other categories fall in between these extremes. Figure 6 represents predicted values of current neighborhood violent crime by placement neighborhood SES based on Model 4 in Table 9. For Figure 6 category 1 is the prediction for placement in neighborhoods with the highest fraction of African-Americans and highest crime rates. Category 6 is the impact of placement in neighborhoods with the lowest percentages of African-Americans and lowest crime rates.

**TABLE 1. ZERO ORDER CORRELATIONS AMONG DEMOGRAPHIC, ORIGIN NEIGHBORHOOD, AND PLACEMENT NEIGHBORHOOD MEASURES**

	PLACEMENT NEIGHBORHOOD VARIABLES			
	Zero Order Correlations			
	Percent African-American	Mean Family Income /10,000	Violent Crime Level	City/Suburban Placement
<b>DEMOGRAPHIC VARIABLES</b>				
Year of Move	-.010	.113**	.308**	.051
Mother's Age at Move	.059*	-.061*	.020	.066**
Number of Children	.089**	-.108**	.041	-.044
AFDC Receipt at Time of Move	-.027	.013	.046	-.033
<b>ORIGIN NEIGHBORHOOD VARIABLES</b>				
Living in Public Housing	.033	-.097**	.056*	.062*
Percent African-American	.132**	-.066*	.133**	.040
Mean Family Income /10,000	-.045	.156**	-.154**	-.132**
Level of Violent Crime per 1,000	-.009	.001	.200**	-.026

\*p<.05 level; \*\*p<.01 level

**TABLE 2. ZERO ORDER CORRELATIONS AMONG PLACEMENT AND CURRENT NEIGHBORHOOD MEASURES**

	Placement Neighborhood Variables				Current Neighborhood Variables	
	Percent African-American	Mean Family Income /10,000	Violent Crime Level	City/Suburban Placement	Median family Income in Current Tract	Current Year Violent Crime per 1000
<b>Placement Neighborhood Variables</b>						
Percent African-American	1.00					
Mean Family Income	-.596**	1.00				
Level of Violent Crime per 1,000	.504**	-.342**	1.00			
City/Suburban Placement	.550**	-.605**	.244**	1.00		
<b>Current Neighborhood Variables</b>						
Median Family Income in Current Tract	-.258**	.331**	-.157**	-.226**	1.00	
Current Year Violent Crime per 1000	.387**	-.316**	.260**	.343**	-.472**	1.00

\*\*p<.001 level

**TABLE 3. MEAN AND STANDARD DEVIATIONS OF ORIGIN MEASURES FOR FULL, CITY, AND SUBURBAN MOVE SAMPLES**

	Variable	Data Source	All n=1172	City n=574	Suburb n=597	p level of city suburb difference
<b>DEMOGRAPHIC VARIABLES</b>						
	Placed in the City	Program Records	0.49 (0.50)	1.00 (0.00)	0.00 (0.00)	na
	Year of Move	Program Records	1983.15 (3.35)	1983.33 (2.85)	1982.99 (3.75)	0.065
	Mother's Age at Move	Program Records	30.21 (9.01)	30.82 (9.36)	29.63 (8.65)	0.019
	Number of Children	Program Records	1.80 (1.20)	1.74 (1.20)	1.85 (1.21)	0.116
	On AFDC at Time of Move	Program Records	0.70 (0.46)	0.68 (0.47)	0.71 (0.45)	0.235
<b>ORIGIN NEIGHBORHOOD VARIABLES</b>						
	Percent Living in Public Housing	Program Records	0.41 (0.49)	0.44 (0.50)	0.38 (0.49)	0.032
<b>Ethnic Composition</b>	Percent African-American	1980/1990 Census	82.51 (28.58)	83.67 (28.81)	81.40 (28.34)	0.186
	Percent White	1980/1990 Census	12.77 (21.93)	10.15 (19.15)	15.29 (24.05)	0.000
<b>Socioeconomic Status</b>	Mean Family Income /10,000	1980/1990 Census	30,010 (15,359)	27,935 (13,705)	31,988 (16,556)	0.000
	Percent Households With Wage Income	1980/1990 Census	62.28 (19.12)	60.00 (19.33)	64.46 (18.68)	0.000
	Percent Adults With 16+ Years of School	1980/1990 Census	10.20 (14.67)	8.37 (11.16)	11.94 (17.19)	0.000
<b>Crime</b>	Level of Violent Crime per 1,000	Annual Uniform Crime Reports	22.43 (15.79)	21.99 (14.65)	22.83 (16.74)	0.367
	Level of Property Crime per 1,000	Annual Uniform Crime Reports	79.92 (76.25)	81.36 (76.10)	78.62 (76.42)	0.540

**TABLE 4. MEAN AND STANDARD DEVIATIONS OF INITIAL MOVE NEIGHBORHOOD MEASURES FOR FULL, CITY, AND SUBURBAN MOVE SAMPLES**

Variable		Data Source	All n=1172	City n=574	Suburb n=597	p level of city suburb difference
<b>PLACEMENT NEIGHBORHOOD VARIABLES</b>						
<b>Ethnic Composition</b>	Percent African-American	1980/1990 Census	28.25 (36.84)	47.56 (40.01)	6.96 (15.03)	0.000
	Percent White	1980/1990 Census	57.02 (34.97)	32.40 (28.43)	84.15 (16.56)	0.000
<b>Socioeconomic Status</b>	Mean Family Income /10,000	1980/1990 Census	56,252 (22,980)	41,334 (16,849)	70,172 (18,832)	0.000
	Percent Households With Wage Income	1980/1990 Census	79.26 (13.64)	70.93 (13.26)	88.45 (5.99)	0.000
	Percent Adults With 16+ Years of School	1980/1990 Census	21.51 (15.11)	19.08 (15.46)	24.19 (14.26)	0.000
<b>Crime</b>	Level of Violent Crime per 1,000	Annual Uniform Crime Reports	15.60 (12.19)	18.64 (13.63)	12.57 (9.65)	0.000
	Level of Property Crime per 1,000	Annual Uniform Crime Reports	59.70 (28.03)	72.98 (25.54)	46.45 (23.82)	0.000

**TABLE 5. MEAN AND STANDARD DEVIATIONS OF CURRENT NEIGHBORHOOD MEASURES FOR FULL, CITY, AND SUBURBAN MOVE SAMPLES**

			All n=1172	City n=574	Suburb n=597	p level of city suburb difference
CURRENT NEIGHBORHOOD VARIABLES		Variable	Data Source			
<b>Ethnic Composition</b>	Percent African-American	2000 Census	51.04 (39.54)	62.77 (37.26)	40.15 (38.48)	0.000
	Percent White	2000 Census	29.55 (29.45)	18.63 (23.52)	39.68 (30.76)	0.000
<b>Socioeconomic Status</b>	Mean Family Income /10,000	2000 Census	58,251 (25,406)	52,288 (25,369)	63,782 (24,179)	0.000
	Percent Households With Wage Income	2000 Census	74.44 (11.74)	70.71 (11.12)	77.89 (11.24)	0.000
	Percent Adults With 16+ Years of School	2000 Census	21.95 (15.76)	21.08 (16.82)	22.76 (14.69)	0.072
<b>Crime</b>	Level of Violent Crime per 1,000	Annual Uniform Crime Reports	19.56 (17.60)	25.72 (17.45)	13.65 (15.63)	0.000
	Level of Property Crime per 1,000	Annual Uniform Crime Reports	64.76 (46.51)	76.67 (54.37)	53.33 (33.74)	0.000

**TABLE 6. PLACEMENT AND CURRENT CHICAGO AND SUBURBAN LOCATION OF PARTICIPANTS**

Placement City/Suburban Location	Current City/Suburban Location						Total	Sample Count
	Chicago	North Suburbs	Western Suburbs	South Suburbs	Other Illinois City	Out of State		
Chicago	78%	5%	1%	7%	1%	9%	100%	633
North suburbs	28%	46%	5%	8%	2%	11%	100%	419
West suburbs	36%	9%	27%	19%	0%	9%	100%	114
South suburbs	30%	8%	4%	44%	2%	11%	100%	135
Total	53%	19%	5%	12%	1%	10%	100%	
Sample Count	692	244	63	156	16	130		1301

**TABLE 7. PLACEMENT AND CURRENT CHICAGO AND SUBURBAN LOCATION OF PARTICIPANTS**

Placement Neighborhood Categorization	Current Neighborhood Categorization				Total	Sample Count
	High Black Low Income	Low Black Low Income	Low Black High Income	High Black High Income		
High Black Low Income	68%	3%	6%	23%	100%	218
Low Black Low Income	30%	26%	18%	26%	100%	103
Low Black High Income	23%	10%	46%	21%	100%	655
High Black High Income	42%	7%	12%	40%	100%	76
Total	34%	10%	32%	24%	100%	
Sample Count	362	102	341	247		

**TABLE 8. REGRESSION MODELS OF MEDIAN INCOME OF CURRENT NEIGHBORHOOD USING PLACEMENT NEIGHBORHOOD MEASURES**

	Bivariate				
	Regressions <sup>a</sup>	Model 1	Model 2	Model 3	Model 4
<b>Placement Variables</b>					
% African-American	-169*** (17)	-37+ (23)			
Income/10,000	3,724*** (315)	1,720*** (427)			
Violent Crime Level	-293*** (53)	-19 (60)			
Placed in Suburbs	10,064*** (1,182)				
Black: Group 1 (95.1%-100%)			Omitted		Omitted
Black: Group 2 (30.1%-95%)			4,068+ (2,323)		3,437+ (2,363)
Black: Group 3 (15.1%-30%)			6,111*** (2,307)		4,920* (2,435)
Black: Group 4 (5.1%-15%)			6,554** (2,174)		4,944* (2,308)
Black: Group 5 (2.1%-5%)			8,090*** (2,315)		5,946** (2,507)
Black: Group 6 (0%-2%)			10,947*** (2,537)		6,334* (2,801)
Income: Quintile 1 (\$14,699-\$34,243)				Omitted	Omitted
Income: Quintile 2 (\$34,579-\$46,794)				425 1896	-849 (1,970)
Income: Quintile 3 (\$46,819-\$56,077)				4,095* 2118	1,849 (2,304)
Income: Quintile 4 (\$56,201-\$67,314)				6,419** 2376	3,915+ (2,571)
Income: Quintile 5 (\$67,620-\$95,000)				12,254*** (2,402)	9,381*** (2,679)
<b>Family &amp; Child Variables</b>					
Years Since Move		27 211	94 (205)	36 (204)	12 (205)
Mother's Age at Move		44 66	43 (67)	37 66	40 (67)
Number of Children		390 506	-515 (509)	497 (505)	-378 (508)
Receiving AFDC at Move		-1,859+ (1,322)	-1,830+ (1,329)	-1,778 (1,320)	-1,893+ (1,320)
Pre-move Address Public Housing		1,254 1,544	1,161 (1,556)	1,402 1548	1,319 (1,548)
<b>Origin Variables</b>					
% African-American		-47* 23	-47* (23)	-54** (23)	-48* (23)
Income/10,000		661 (536)	840+ (541)	654 (532)	788+ (538)
Violent Crime Level		-35 (45)	-26 (45)	-40 (45)	-35 (45)
<b>Placement Preferences</b>					
No Preference: City Placement		Omitted	Omitted	Omitted	Omitted
City Preference: City Placement		2,384 (1,827)	2,237 (1,848)	2,268 (1,823)	2,365+ (1,834)
Suburban Preference: City Placement		-984 (3,617)	-880 (3,672)	-1,253 (3,620)	-1,125 (3,646)
No Preference: Suburban Placement		10,915*** (1,928)	12,295*** (1,981)	11,212*** (2,011)	10,100*** (2,178)
City Preference: Suburban Placement		12,592** (4,061)	14,167*** (4,076)	12,497** (4,143)	11,655** (4,173)
Suburban Preference: Suburban Placement		10,765*** (2,234)	12,045*** (2,267)	10,815*** (2,298)	9,971*** (2,425)
Other		6,112+ (3,324)	6,332* (3,348)	6,473* (3,322)	6,552* (3,338)
Adjusted R-square		.164	.176	.189	.190
n	1,171				

+p<.10, \*p<.05 level, \*\*p<.01 level, \*\*\*p<.001 level

<sup>a</sup> Bivariate regressions include the given placement measure and all family and child and origin variables listed in the table.

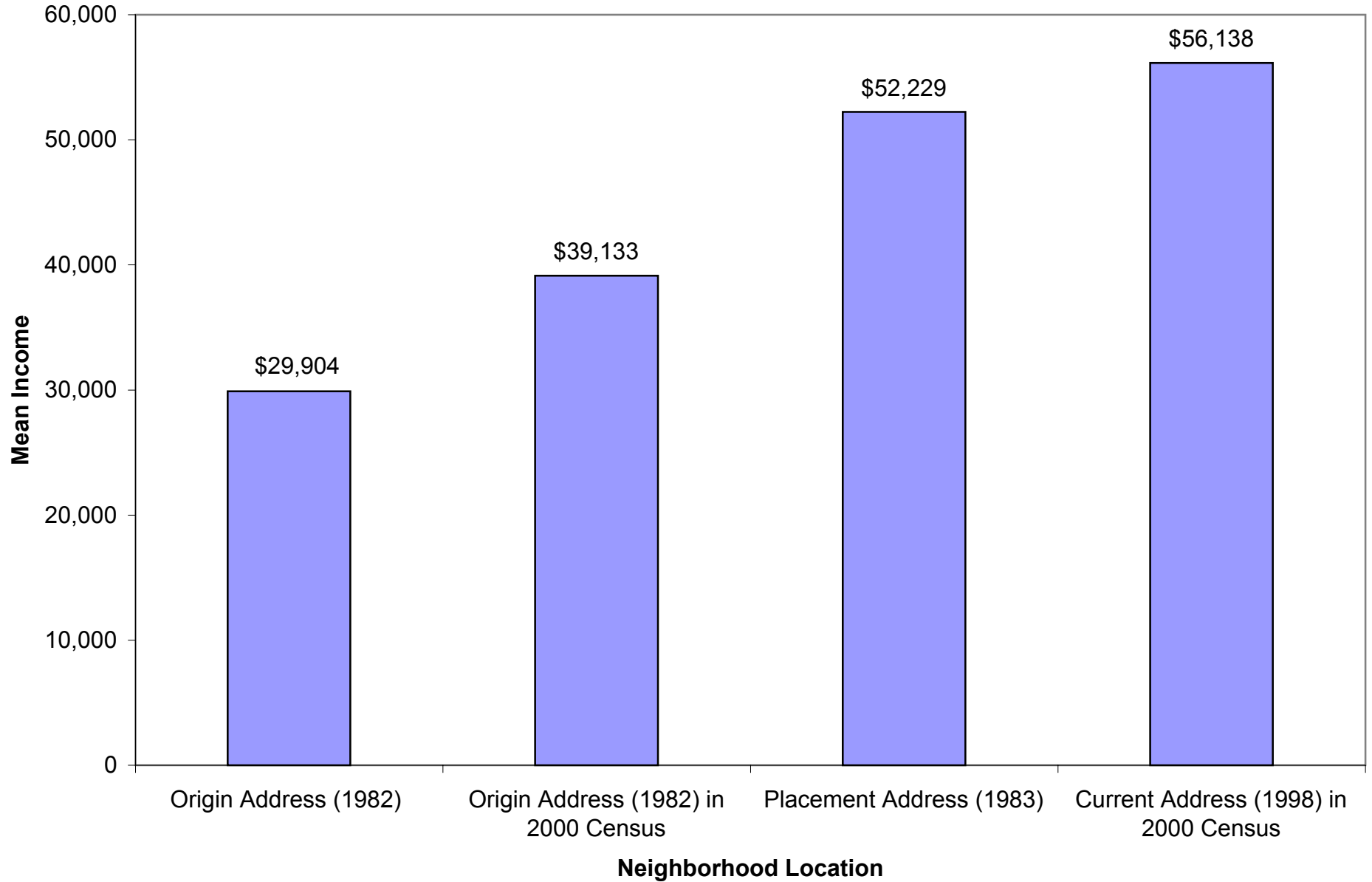
**TABLE 9. REGRESSION MODELS OF VIOLENT CRIME LEVEL OF CURRENT NEIGHBORHOOD USING PLACEMENT NEIGHBORHOOD MEASURES**

	Bivariate				
	Regressions <sup>a</sup>	Model 1	Model 2	Model 3	Model 4
<b>Placement Variables</b>					
% African-American	0.18*** (0.02)	0.09*** (0.02)			
Income/10,000	-2.85*** (0.28)	-0.56+ (0.38)			
Violent Crime Level	0.38*** (0.05)	0.12* (0.05)			
Placed in Suburbs	-12.29*** (1.07)				
Black: Group 1 (95.1%-100%)			Omitted		Omitted
Black: Group 2 (30.1%-95%)			-7.39*** (2.06)		-5.94** (2.14)
Black: Group 3 (15.1%-30%)			-11.18*** (2.05)		-8.92*** (2.24)
Black: Group 4 (5.1%-15%)			-11.14*** (1.93)		-9.24*** (2.11)
Black: Group 5 (2.1%-5%)			-13.06*** (2.06)		-10.43*** (2.33)
Black: Group 6 (0%-2%)			-13.27*** (2.25)		-10.31*** (2.55)
Crime: Quintile 1 (21.2-78.0)				Omitted	Omitted
Crime: Quintile 2 (14.5-21.1)				-3.47* (1.69)	-0.78 (1.78)
Crime: Quintile 3 (10.3-14.4)				-7.51*** (1.69)	-3.64* (1.89)
Crime: Quintile 4 (6.8-10.2)				-7.79*** (1.75)	-3.57+ (1.98)
Crime: Quintile 5 (1.4-6.7)				-9.09*** (1.75)	-4.59* (2.01)
<b>Family &amp; Child Variables</b>					
Years Since Move		-0.13 (0.19)	0.08 (0.18)	0.29+ (0.18)	0.21 (0.19)
Mother's Age at Move		-0.09+ (0.06)	-0.08+ (0.06)	-0.11+ (0.06)	-0.09+ (0.06)
Number of Children		0.21 (0.45)	0.24 (0.45)	0.55 (0.44)	-0.28 (0.45)
Receiving AFDC at Move		0.63 (1.17)	0.63 (1.18)	-0.16 (1.17)	0.49 (1.18)
Pre-move Address Public Housing		-1.30 (1.37)	-1.18 (1.38)	-1.35 (1.36)	-1.26 (1.38)
<b>Origin Variables</b>					
% African-American		0.06** (0.02)	0.06** (0.02)	0.07*** (0.02)	0.06** (0.02)
Income/10,000		-0.04 (0.48)	-0.09 (0.48)	0.13 (0.47)	-0.07 (0.48)
Violent Crime Level		0.03 (0.04)	0.03 (0.04)	0.02 (0.04)	0.03 (0.04)
<b>Placement Preferences</b>					
No Preference: City Placement		Omitted	Omitted	Omitted	Omitted
City Preference: City Placement		0.22 (1.98)	0.01 (1.64)	0.49 (1.61)	0.06 (1.64)
Suburban Preference: City Placement		-3.40 (3.21)	-3.91 (3.26)	-3.52 (3.19)	-3.72 (3.25)
No Preference: Suburban Placement		-6.09*** (1.71)	-7.35*** (1.76)	-10.43*** (1.45)	7.42*** (1.76)
City Preference: Suburban Placement		-11.02** (3.61)	-12.17*** (3.62)	-15.07*** (3.49)	-12.27** (3.62)
Suburban Preference: Suburban Placement		-5.40** (1.98)	-6.41** (2.01)	-9.43*** (1.77)	-6.63** (2.02)
Other		-4.36+ (2.95)	-5.06+ (2.97)	-4.66+ (2.95)	-4.87+ (2.99)
Adjusted R-square		.180	.168	.154	.171
n	1,171				

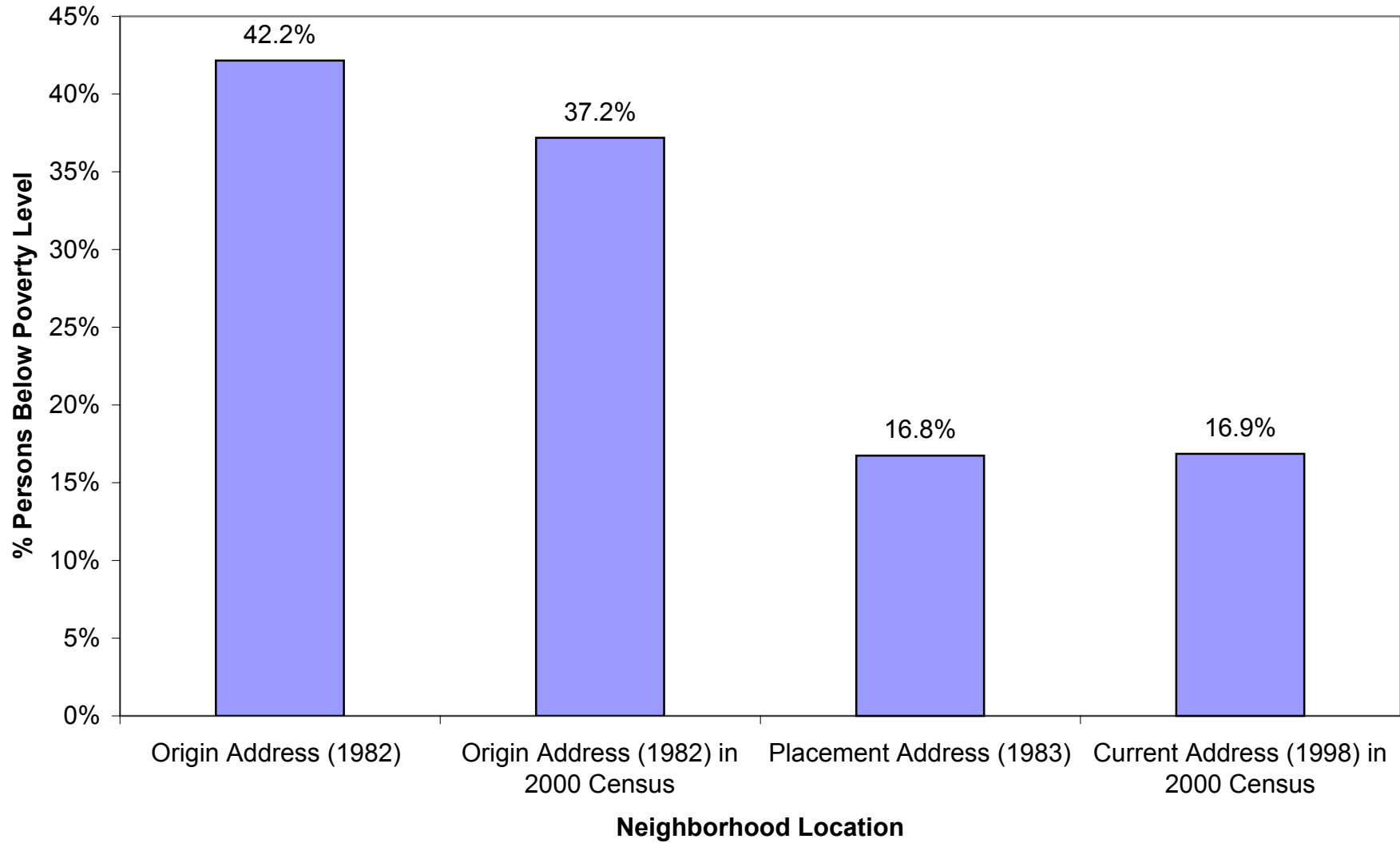
+p<.10, \*p<.05 level, \*\*p<.01 level, \*\*\*p<.001 level

<sup>a</sup> Bivariate regressions include the given placement measure and all family and child and origin variables listed in

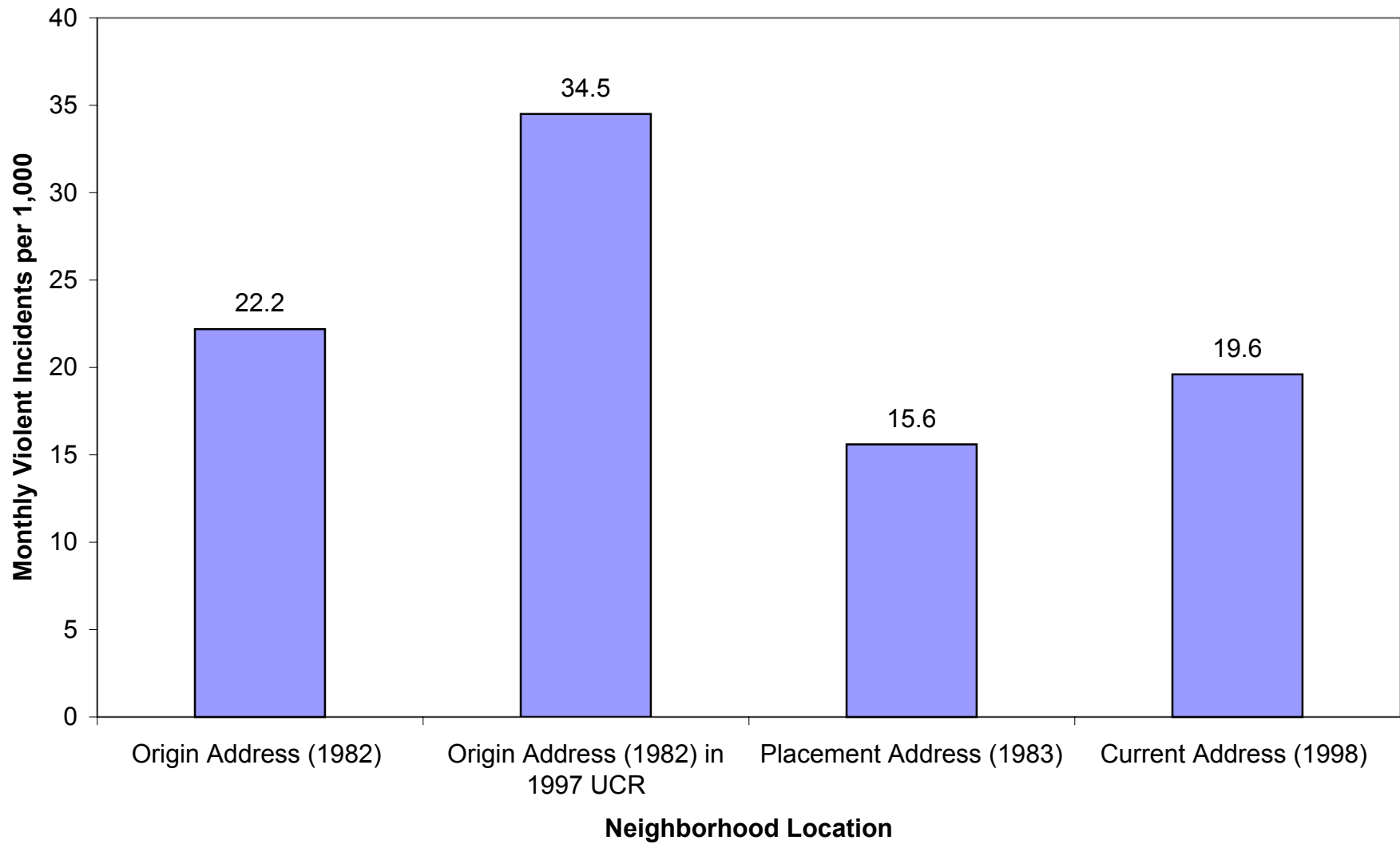
**FIGURE 1. CENSUS TRACT MEAN INCOME IN 1999\$ BASED ON RESIDENTIAL LOCATION**



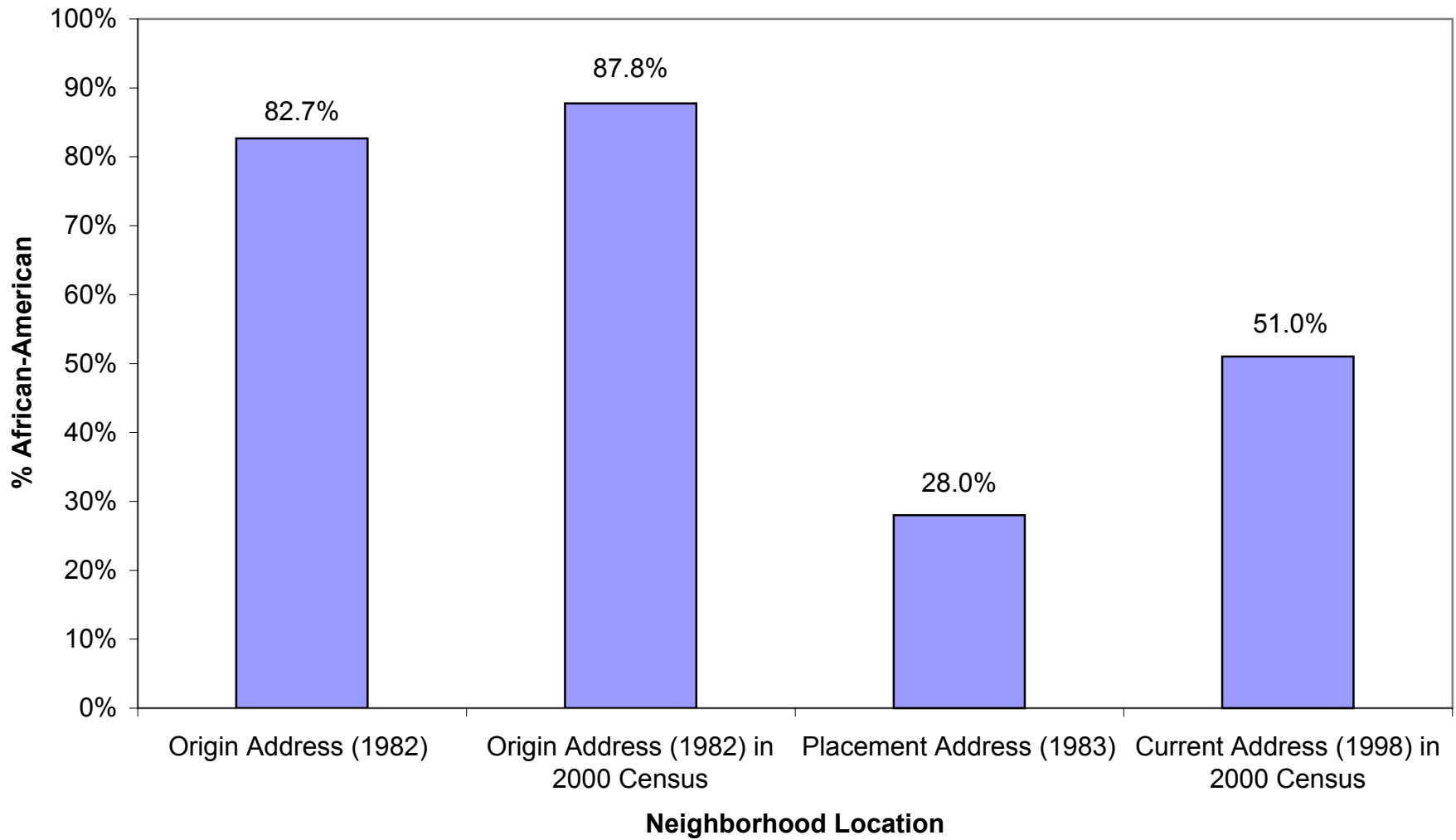
**FIGURE 2. CENSUS TRACT POVERTY RATE BASED ON RESIDENTIAL LOCATION**



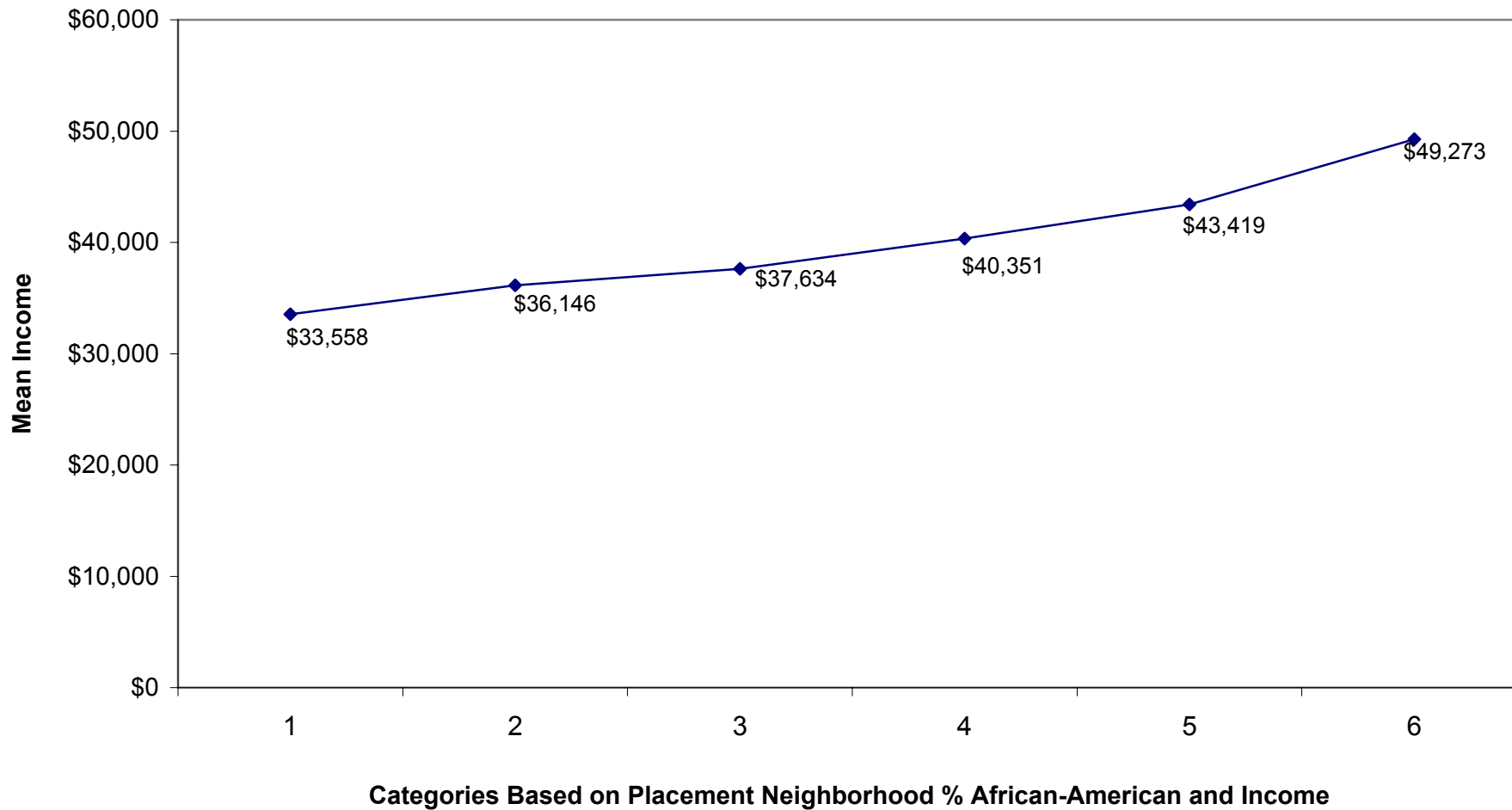
**FIGURE 3. LEVEL OF VIOLENT CRIME BASED ON RESIDENTIAL LOCATION**



**FIGURE 4. CENSUS TRACT PERCENT AFRICAN-AMERICAN BASED ON RESIDENTIAL LOCATION**



**FIGURE 5. PREDICTED CURRENT NEIGHBORHOOD MEDIAN INCOME IN 1999\$ BASED ON PLACEMENT ADDRESS CHARACTERISTICS**



**FIGURE 6. PREDICTED CURRENT NEIGHBORHOOD CRIME BASED ON PLACEMENT ADDRESS CHARACTERISTICS**

