Escaping Distressed Neighborhoods: Individual, Community, and Metropolitan Influences[1]

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This article links longitudinal data from the Panel Study of Income Dynamics with information on respondents' census tracts to examine patterns of annual residential mobility between poor and nonpoor neighborhoods. Education and marriage increase the likelihood of leaving poor tracts, while age, home ownership, and receiving public assistance reduce it. Blacks are substantially less likely than whites to escape poor tracts and substantially more likely to move into them, even after socioeconomic status is controlled. Residential segregation by race and poverty status and the supply of new housing in the metropolis also influence the likelihood of moving between distressed and nondistressed neighborhoods.

Growing concern over the development of an urban underclass and the apparently increasing geographic concentration of poverty has kindled interest in the ability of persons living in poor or distressed neighborhoods to escape these areas for better environs (Kasarda 1989; Massey, Gross, and Shibuya 1994; Wilson 1987). Residential mobility out of poor neighborhoods and into better ones is believed to enhance employment and educational prospects, to reduce exposure to crime, and to increase access to a variety of valued services and facilities, especially for African-Americans (Alba, Logan, and Bellair 1994; Massey, Condran, and Denton 1987; Rosenbaum and Popkin 1991; Wilson 1979). More generally, even after controlling for the socioeconomic characteristics of individuals and families, neighborhood characteristics have been shown to exert important effects on a variety of social, psychological, and economic outcomes,

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including educational attainment (Crane 1991), marital and nonmarital fertility (Billy and Moore 1992; Hogan and Kitagawa 1985), sexual activity (Brewster, Billy, and Grady 1993; Mosher and McNally 1991), criminal victimization (Miethe and McDowall 1993; Smith and Jarjoura 1989), life satisfaction (Fernandez and Kulik 1981), and children's cognitive development (Brooks-Gunn et al. 1993; Entwisle, Alexander, and Olson 1994). By and large, problematic behaviors and experiences appear to be more common in socioeconomically distressed neighborhoods; thus, it is frequently assumed that migration out of these neighborhoods and into more advantaged environments will prove beneficial for those who can escape poor areas (Jencks and Mayer 1990; Rosenbaum and Popkin 1991; Rosenbaum et al. 1991).

It is surprising, however, that few studies have directly examined factors that impede or facilitate the residential mobility or the locational choices of persons initially residing in impoverished neighborhoods. Perhaps the most popular model of local residential mobility is Speare's (1974; Speare, Goldstein, and Frey 1975) residential satisfaction perspective and the modifications and extensions of that framework (Bach and Smith 1977; Heaton et al. 1979; Landale and Guest 1985; Lee, Oropesa, and Kanan 1994; Newman and Duncan 1979; Rossi [1955] 1980). This model identifies a set of personal and life-cycle factors that influence the decision to move either directly or, by affecting satisfaction with one's current residence, indirectly. Housing characteristics (Deane 1990; McHugh, Gober, and Reid 1990) and neighborhood characteristics (Boehm and Ihlandfeldt 1986; Lee et al. 1994; South and Deane 1993) are also considered to be important initiators of residential mobility. Yet, these studies of intraurban residential mobility rarely disaggregate geographic moves by characteristics of the neighborhood of origin or destination (South and Deane 1993; Speare et al. 1975; cf. Lee et al. 1994; Nelson and Edwards 1993), concentrating instead on factors influencing the decision to move per se without regard to the qualities of either the old or new neighborhood (Long 1988). Many of the residential moves studied by these investigations are likely to be within the same neighborhood or to neighborhoods of similar socioeconomic standing. Thus, these studies shed only limited light on factors influencing residential mobility out of or into poor neighborhoods. Moreover, these studies of local residential mobility rarely focus specifically on the mobility experiences of African-Americans, despite considerable theoretical and policy debate over the apparent inability of poor blacks to escape underclass neighborhoods (Fairchild and Tucker 1982; Galster 1992).

Another area of research that bears on the study of residential mobility out of poor neighborhoods is the vast literature on residential segregation

between minority and majority groups and between different social classes (Farley 1991; Farley and Frey 1994; Lieberson and Carter 1982; Massey and Denton 1993; Massey and Eggers 1990; Simkus 1978). The high levels of segregation between racial and ethnic minorities and the white, non-Hispanic majority have been documented extensively (Massey and Denton 1987, 1988), as have the moderate changes that have occurred at the metropolitan level (Farley and Frey 1994) and within individual census tracts (Lee and Wood 1991; Wood and Lee 1991). High levels of segregation and housing discrimination imply that minorities, especially blacks, are spatially constrained to neighborhoods of relatively low socioeconomic status (Logan and Alba 1993). Implicit in these studies of the aggregate spatial distributions of racial and ethnic groups is that the underlying dynamic shaping patterns of—and changes in—neighborhood residential differentiation is residential mobility. Yet, rarely do these studies examine the characteristics of individuals and households that move from a neighborhood with a known socioeconomic status and/or racial composition to a different neighborhood having different socioeconomic and/or racial characteristics (see Gramlich, Laren, and Sealand 1992; Massey et al. 1994; Nelson and Edwards 1993). As Massey and Denton (1985, p. 104) note, cross-sectional studies of the geographic distributions of racial and economic groups "cannot capture the full dynamics of the mobility process."

The primary purpose of this article is to identify the characteristics of individuals and households as well as neighborhoods and metropolitan areas that impede or facilitate residential mobility between poor and nonpoor neighborhoods. We attach information on the census tract and metropolitan area of residence at each annual interview for respondents in the 1979 to 1985 waves of the Panel Study of Income Dynamics (PSID) to trace the mobility experiences of persons initially residing in poor and nonpoor areas. We estimate binary and multinomial logistic regression models to address four broad questions regarding residential mobility between poor and nonpoor neighborhoods. First, what social and demographic characteristics of individuals and their communities enable some people to escape poor neighborhoods for better areas? Second, how do these same characteristics influence the risk of moving from nonpoor areas into poor ones? Third, to what extent are racial differences in mobility between poor and nonpoor neighborhoods attributable to differences in sociodemographic attributes and locale characteristics? And, fourth, in light of substantial barriers to residential mobility among African-Americans (Massey and Denton 1993), do the factors that influence mobility between poor and nonpoor neighborhoods operate differently for blacks and whites?

THEORETICAL FRAMEWORK

Studies of the geographic location of social and economic groups in the United States have generally been informed by two broad theoretical perspectives. One perspective, with roots in the early ecological studies of the Chicago school (Park, Burgess, and McKenzie 1925), argues in part that cities serve as vast sorting machines that channel persons of similar socioeconomic status, ethnicity, and life-cycle stage into relatively homogeneous (or "natural") areas, often circumscribed by physical boundaries. Patterns of residential differentiation by social class emerge as persons "match" their own socioeconomic status with that of their neighborhood, using, to the extent possible, their human capital and other endowments to purchase residences in the most desirable neighborhood. Residential mobility from less desirable to more desirable neighborhoods is considered to be a natural consequence of social and occupational mobility and, to a somewhat lesser extent, the locational preferences associated with various stages in the life course (e.g., the presence of children). This perspective has most often been used to explain the geographic dispersal of minority and immigrant groups concomitant with their assimilation and acculturation into American society (Massey 1985), as socioeconomic progress made by these groups is converted into residential integration with the white majority and "upgrading from central-city slums to working-class neighborhoods to suburbs" (Logan and Alba 1993, p. 244). But the spatial assimilation of minority-group members is, in large measure, a special case of a more general process in which social and economic advancement by initially disadvantaged persons, including members of the white majority, translates into residential mobility into desirable neighborhoods. Consistent with this perspective, Logan and Alba (1993) show that the median income of suburban communities is positively associated with individual human capital characteristics such as income and education. When applied to the experiences of socioeconomically disadvantaged populations (especially minority or immigrant groups), this perspective is frequently referred to as the spatial assimilation model (Alba and Logan 1991; Guest 1980; Massey 1985). Because in this article we are primarily concerned with the residential mobility patterns of different socioeconomic groups (without regard to ethnic origins), we refer to this perspective as the *human capital/life-cycle model* of mobility.

Neighborhood residential differentiation results largely, of course, from the movements of many individual households from one neighborhood to another as well as from life-course changes among the individuals in those households (White 1987). While research on intraurban residential mobility tends to emphasize life-cycle factors as initiators of mobility (Lee et

al. 1994; Rossi 1980) and to ignore the specific characteristics of the neighborhoods of origin and destination, it, too, suggests that economically mobile persons seek the subjective and concrete advantages conferred by residence in richer neighborhoods. Rossi (1980, pp. 226–27), for example, argues that "families moving up the 'occupational ladder' are particularly sensitive to location and use residential mobility to bring their residences into line with their prestige needs."

Taken together, the human capital/life-cycle mobility model and micro-level studies of residential mobility suggest several salient influences on the probability of moving between poor and nonpoor neighborhoods. First, among residents of poor neighborhoods, *socioeconomic differences* should distinguish those who move to nonpoor areas and those who either remain behind or move to other poor areas. High income and employment stability and the prospects for attaining these, as indicated by high levels of educational attainment, should increase the desire and/or capacity to leave poor neighborhoods. Similarly, among persons initially residing in nonpoor neighborhoods, socioeconomic advantages should buffer the risk of moving into a poor area. In addition to the current level of financial resources, residential mobility between poor and nonpoor neighborhoods might also be caused by recent changes in economic conditions. Sharp increases in income and becoming employed are likely to promote mobility out of poor areas, while reductions in income and job loss are apt to promote mobility from nonpoor into poor neighborhoods. Prior studies have shown that various dimensions of socioeconomic status are only weakly related to thoughts of moving (McHugh et al. 1990) and to the actual probability of local residential mobility without regard to the qualities of the neighborhoods of origin or destination (Deane 1990; Lee et al. 1994). But ignoring these neighborhood characteristics might mask important socioeconomic effects on the probability of moving between poor and nonpoor areas. For example, if high-income or highly educated residents are more likely than others to vacate poor neighborhoods but less likely to move within such areas, or if socioeconomically advantaged persons are more likely to leave poor areas but less likely to leave rich ones, then socioeconomic influences on mobility would not be detected by these studies. It has been shown that income is positively related to migration across states and regions (Long 1988).

Apart from the level of income, the source of income might also influence the likelihood of escaping poor neighborhoods. Kasarda (1988; see also Clark 1990), for example, argues that the receipt of public assistance and public housing mires poor people in poor neighborhoods. By partially substituting for gainful employment, welfare dependence serves to impede residential mobility, as well as long-distance migration, to areas with superior job opportunities. Nelson and Edwards (1993) report that the receipt

of public housing assistance retards mobility in at least some metropolitan areas; unfortunately, because they measure housing assistance at the end rather than at the beginning of a mobility period, their findings are subject to alternative interpretations.

A second set of explanatory variables relevant to this perspective on residential mobility out of poor neighborhoods emphasizes *life-cycle characteristics.* However, while these variables have been linked to the overall probability of moving, it is generally less certain how they might affect the choice of a new location. In the aggregate, age is inversely related to residential mobility (Lee et al. 1994; Long 1988; South and Deane 1993). Rates of mobility tend to peak in the young adult years, as these persons leave the parental home, get jobs, marry, attend college, and experience other life-course transitions that necessitate a change in residence. It seems likely that, for many young people, these moves will be to a neighborhood of different economic status than the neighborhood of origin. The age profile of migration begins to decline sharply at about age 30, generally flattening out or declining only modestly above age 50 (Castro and Rogers 1983; Long 1988). Married persons tend to move less frequently than the never married (South and Deane 1993), but recent changes in marital status might be more relevant than the current marital status to moving between poor and nonpoor areas. Given the higher poverty rates of single than married persons, marriage (or remarriage) is likely a route out of poor neighborhoods, while the deteriorating economic circumstances precipitated by marital disruption may cause the newly divorced or widowed to experience downward neighborhood mobility. While the presence of children in the household increases thoughts of mobility (McHugh et al. 1990), on balance children impede residential mobility, perhaps because they increase families' social ties to—and investments in—the neighborhood. Yet, it seems reasonable to propose that when families with children do move, they will be more likely to choose a nonpoor rather than a poor neighborhood. Neighborhood characteristics such as safety and school quality, which are likely to be correlated with a local community's socioeconomic status, should be particularly salient for families with children. Thus, we anticipate that the presence of children in the household will increase the likelihood of moving from a poor to a nonpoor neighborhood, and to reduce the probability of moving in the reverse direction.

Two features of the housing unit—whether it is owned or rented and how crowded it is—have also been shown to influence the likelihood of moving. Because of greater financial investments in the current dwelling and the greater costs of moving, homeowners exhibit substantially lower rates of residential mobility than do renters (Deane 1990; Lee et al. 1994; Speare et al. 1975). However, for those who are moving from a poor neighborhood, it seems likely that homeowners will be more likely than renters

to select a nonpoor rather than an equally poor location. Home equity provides homeowners greater financial resources to purchase residences in wealthier areas. Given their barriers to mobility, homeowners may be pulled away from their current neighborhood only by attractive alternatives in nonpoor communities; absent these alternatives, they are more likely than renters to remain in their current home. Residential crowding is often given as a reason for moving and is believed to predispose potential movers to seek a new residence (Rossi 1980). The empirical evidence linking crowding to residential mobility is somewhat equivocal, however, with some studies (e.g., South and Deane 1993) but not others (e.g., Deane 1990) observing the expected positive association. We anticipate that residential crowding will influence not only the decision to move but also the choice of a new location. Crowding is likely to differentiate movers to nonpoor neighborhoods from those who do not move or who move to poor areas; persons who move to alleviate household crowding should be especially likely to choose large residences in neighborhoods of low density—characteristics associated with comparatively wealthy neighborhoods.

Finally, with its emphasis on educational and occupational mobility as causes of geographic dispersal, the human capital/life-cycle mobility model implies that differences among racial (and ethnic) groups in their residential patterns are, to a considerable degree, reflections of compositional differences among these groups (Alba and Logan 1991; Logan and Alba 1993). In the context of this study, this feature of the model suggests that differences between blacks and whites in mobility rates between poor and nonpoor neighborhoods are largely attributable to racial differences in socioeconomic and life-cycle characteristics. Although blacks appear to be less likely than whites to move from poor to nonpoor neighborhoods and more likely than whites to move from nonpoor to poor areas (Gramlich et al. 1992; Massey et al. 1994), these differences should, theoretically, disappear after socioeconomic and life-cycle characteristics are held constant. Moreover, there appears to be little, if anything, in this model to suggest that the effects of human capital and life-cycle variables on the probability of moving between poor and nonpoor neighborhoods will differ for blacks and whites.

While the human capital/life-cycle mobility perspective is largely consistent with the cross-sectional locational patterns and residential mobility experiences of whites and nonblack minorities, on several counts it appears incapable of explaining the situation among blacks. Blacks appear less likely than other minority groups and non-Hispanic whites to convert human capital characteristics into desirable neighborhood amenities, such as relative freedom from exposure to crime (Alba et al. 1994), suburban location (Alba and Logan 1991), community wealth (Logan and Alba

1993), and associated areal resources (Massey and Denton 1985; Villemez 1980). Blacks also appear less able than other racial and ethnic groups to translate economic achievements into contact with the white majority (Alba and Logan 1993; Massey and Denton 1987; Massey and Mullan 1984). Moreover, substantial racial differences in residential mobility have also been documented, with blacks less likely than whites to change residences (when income and home ownership are controlled), less likely to convert neighborhood dissatisfaction into a move, and more constrained than whites by the level of residential segregation in the metropolitan area (South and Deane 1993). Blacks are believed to be less able than whites to escape poor neighborhoods, and blacks who move out of nonpoor areas are more likely than their white counterparts to move to poor rather than to other nonpoor neighborhoods (Gramlich et al. 1992; Massey et al. 1994; Nelson and Edwards 1993). Among movers from cities to suburbs, twice as many blacks as whites relocate in low-income neighborhoods (Spain and Long 1981). These discrepancies in the distributional patterns of blacks and whites have led to the development of an alternative theoretical perspective on urban locational attainment—the *place stratification model* (Logan and Molotch 1987). This model supplements the human capital/life-cycle and spatial assimilation perspectives by drawing attention to the barriers to residential mobility faced by black residents, especially in the form of housing discrimination (Farley and Allen 1987; Foley 1973; Galster and Keeney 1988; Massey and Denton 1993). The discriminatory practices of real estate agents (Pearce 1979; Yinger 1995), local governments (Shlay and Rossi 1981), and mortgage lenders (Leahy 1985; Shlay 1988; Squires and Kim 1995) create a racially segmented housing market that obstructs the mobility aspirations of African-Americans, especially for those wishing to move to racially integrated and/or middle-class neighborhoods. White stereotyping of black residents may also impede blacks' residential mobility (Farley et al. 1994). The place stratification model does not deny that human capital and life-cycle factors are important instigators of residential mobility but rather emphasizes the structural constraints under which these mechanisms operate for certain racial groups—blacks, in particular.

Applying the place stratification model to patterns of residential mobility between poor and nonpoor neighborhoods generates several hypotheses. First, in contrast to the human capital/life-cycle model described above, this model implies that, even net of socioeconomic differences, blacks will be significantly less likely than whites to escape poor areas and more likely than whites to move into them. Second, the stratification model suggests that a contextual variable—the degree of housing segregation in the metropolitan area—will impede black mobility out of poor neighborhoods (South and Deane 1993; Massey et al. 1994). High levels

of racial residential segregation are considered by many to be indicative of severe housing discrimination against blacks that limits their housing choices; as such, we hypothesize that the level of segregation in the metropolitan area is inversely related to the probability that black inhabitants of poor neighborhoods will move into nonpoor areas but positively associated with the probability of moving in the opposite direction (i.e., from nonpoor to poor neighborhoods). Conversely, by constraining blacks to relatively few neighborhoods, racial residential segregation may open up more neighborhoods to which whites may desire to move (South and Deane 1993). Whites prefer not to move into areas that are racially mixed or predominantly minority (Clark 1992; Farley and Frey 1994). Because racial segregation is likely to result in a substantial number of predominantly white—and thus racially attractive—neighborhoods for white movers, segregation should facilitate white residential mobility. Hence, we hypothesize that racial segregation is positively associated with the probability that white residents of poor neighborhoods will leave them for wealthier areas.

Finally, the place stratification model implies that the impact of human capital characteristics on the likelihood of leaving poor neighborhoods will vary by race, although the direction of that difference is subject to alternative interpretations. In what Logan and Alba (1993, pp. 244–45) call the "strong version" of the place stratification model, the effects of individual economic resources on locational attainments are weaker for minority groups than for majority groups; housing discrimination reduces the locational "return" minority-group members receive for their human capital, forcing even comparatively advantaged minority-group members to reside in impoverished or otherwise undesirable neighborhoods (Massey 1990). Support for this version of the model is found in the lower levels of social class segregation among blacks than among whites (Massey and Denton 1993). This strong version of the stratification model implies that the effects of human capital factors on out-migration from impoverished neighborhoods will be weaker for blacks than for whites and that, compared to whites, greater human capital endowments are required for blacks to remain in nonpoor neighborhoods. Logan and Alba (1993) also posit a "weak version" of the place stratification model in which valued locational resources "cost" less for minority-group members than for comparable members of the majority group but in which the locational attainments of even the most successful minority-group members barely exceeds that of the least successful members of the majority. This version of the model therefore implies that the influence of human capital factors on the probability of leaving impoverished neighborhoods will be greater for blacks than for whites.

Other Contextual Effects on Escaping Distressed Neighborhoods

Both the human capital/life-cycle model and, to a slightly lesser extent, the place stratification model emphasize the characteristics of individuals and families that impede or facilitate residential mobility. Although the place stratification model implies that the level of housing discrimination in the local area inhibits the residential mobility of African-Americans, neither model stresses the importance of community or metropolitan area features as determinants of residential mobility. Indeed, only recently have studies of locational attainment (Alba and Logan 1991; Logan and Alba 1993), housing turnover (Rosenbaum 1992), and local residential mobility (Lee et al. 1994; South and Deane 1993) begun to consider seriously qualities of the larger social and economic context as determinants of microlevel spatial distribution processes. Such an omission is particularly striking in light of the considerable variation across metropolitan areas in overall rates of residential mobility (Long 1988) and, it appears, in the ability of residents of distressed areas to leave them for preferable localities (Nelson and Edwards 1993).

Studies of local residential mobility recognize two sources of contextual influence: characteristics of the neighborhood of origin that may propel (or retain) potential movers (Lee et al. 1994) and features of the metropolitan area that may attract (or repel) potential movers from their current neighborhood (South and Deane 1993). Several of these contextual factors are likely to impact differentially the likelihood that blacks and whites will move between poor and nonpoor neighborhoods.

At the neighborhood level, both an area's level of poverty and racial composition are likely to affect out-migration. Residents of the very poorest neighborhoods have farther to travel (in an economic, as well as a spatial, sense) in order to move to a nonpoor neighborhood. For residents of the poorest neighborhoods, moving into a nonpoor area requires an even greater upgrading in neighborhood quality. Although the neighborhood poverty rate (among neighborhoods classified as poor) is not apt to influence the probability of moving per se, it is likely to reduce the probability that out-movers will relocate to a nonpoor district rather than another poor district. By the same logic, among residents of nonpoor areas, the neighborhood poverty rate should increase the risk of moving into a poor area.

The racial composition of neighborhoods might also influence the prospect of moving between poor and nonpoor areas, but this effect is likely to differ for whites and blacks. A large minority population is likely to promote the out-migration of the white population. According to classical ecological models of invasion and succession (Frey 1979; Hawley 1950),

whites will attempt to avoid areas with large and growing minority concentrations. Moreover, these residential moves by whites out of racially mixed or predominantly minority areas for predominantly (or exclusively) white neighborhoods are also apt to be moves into nonpoor neighborhoods, given the strong association between neighborhoods' socioeconomic status and their racial composition.

The effect of neighborhood racial composition on the movement of blacks out of impoverished areas is more difficult to anticipate. More so than whites, blacks express a verbal preference for racially integrated neighborhoods (although relatively few black movers actually realize those preferences; see Clark 1992). On the one hand, then, blacks initially residing in largely black (and poor) neighborhoods may be more likely than blacks residing in racially mixed or largely white areas (but also poor) to move out of the neighborhood. To the extent that black movers are able to fulfill their preferences for racially mixed neighborhoods, they would also be more likely to choose nonpoor areas. On the other hand, blacks who reside in predominantly black neighborhoods may live there precisely because they prefer same-race neighbors (Clark 1992); if so, they might be equally (or less) likely to leave their neighborhood than black residents of more integrated areas. Moreover, given racial homogeneity in kin and friendship networks, blacks in predominantly black neighborhoods may experience more extensive social ties to the neighborhood of origin and, therefore, be less likely to move (Madigan and Hogan 1991). In addition, the fusion of high poverty and racial isolation may create "concentration effects" that immobilize minority residents of underclass areas (Wilson 1987).

In addition to neighborhood-of-origin effects, characteristics of the metropolitan area are also likely to influence the probability of moving between poor and nonpoor neighborhoods. As noted above, the place stratification model suggests that housing segregation and discrimination in the metropolis impairs mobility opportunities for blacks. But other properties of metropolitan areas might also inhibit (or expedite) movement out of or into poor neighborhoods, for whites as well as blacks. Because these properties generally reflect the supply of housing available to persons who might desire to leave poor neighborhoods, we refer to this perspective as the *housing availability model.* Perhaps most important, residents of poor neighborhoods will be apt to leave them for wealthier areas when opportunities exist to obtain low-cost housing in nonpoor areas. By this reasoning, the degree to which neighborhoods in the metropolitan area contain a mixture of both poor and nonpoor residents should positively influence the probability of moving from a poor to a nonpoor area. Put another way, we hypothesize a positive association between the extent of residential segregation by social class (specifically, poor vs. nonpoor) in the metropoli-

tan area and the likelihood of leaving an impoverished neighborhood. Opportunities to seek housing in nonpoor areas should also be enhanced by the sheer availability of housing in the metropolis, as indicated by high vacancy rates and new housing construction. The supply of new housing may be particularly important for explaining the mobility patterns of African-Americans because recent housing has operated under antidiscrimination legislation (Farley and Frey 1994). Farley and Frey (1994) show that, across metropolitan areas, new housing construction is inversely related to both levels of and changes in racial residential segregation. This finding suggests that, in rapidly growing urban areas, blacks can more readily find housing in racially mixed (and, presumably, higher-income) neighborhoods, thereby increasing the likelihood of moving from poor into nonpoor areas and reducing the likelihood of moving from nonpoor areas into poor ones. Because discrimination against minorities is believed to increase along with the size of the minority group (Blalock 1967; Lieberson 1980), it also seems likely that the ability of blacks to move into nonpoor neighborhoods will be lower in metropolitan areas having relatively large black populations. Minority group size is likely to exacerbate the racial structuring of the housing market (Stearns and Logan 1986).

Finally, regional differences in the ecological structure and local governmental configuration of metropolitan areas should also influence patterns of residential mobility out of poor areas. Suburban communities in the older metropolitan areas of the Northeast and Midwest regions were historically quick to incorporate, often employing restrictive covenants, land use regulations, and zoning ordinances to impede the in-migration of poor and, especially, black residents. Consequently, people who live in poor neighborhoods in the metropolitan areas of these regions face comparatively restricted housing options. In contrast, political and historical conditions enabled cities in the South and newer cities in the West to annex outlying areas (Farley and Frey 1994), resulting in fewer and smaller suburban enclaves and a correspondingly larger central city population as a proportion of the entire metropolitan population. This relative paucity of economically and racially restrictive suburban communities in metropolitan areas in the South and West, we reason, should expand the housing options for residents of their poor neighborhoods and, hence, should raise the probability that they will leave impoverished neighborhoods for more advantaged areas.

DATA AND METHODS

The Panel Study of Income Dynamics (PSID) is a nationally representative, longitudinal survey of noninstitutionalized U.S. residents and their families (Hill 1992; PSID 1987). Beginning in 1968 with approximately

5,000 families (or about 18,000 individuals), the panel has been interviewed annually. Children who leave home to form new households are followed and their new families are added to the sample. By 1988, the cumulative total of individuals participating in the PSID had grown to about 37,500, representing about 7,000 families. Sample attrition has been relatively modest, especially in recent waves, and has not compromised the representativeness of the sample (Duncan and Hill 1989; Hill 1992). The PSID is a rich source of data for studying residential mobility, providing individual- and family-level information about many of its hypothesized determinants, including demographic background, family structure and composition, and socioeconomic attainment.

The PSID is uniquely suited to the study of residential mobility across "neighborhoods" because of the newly created PSID–Geocode Match Files, which match the addresses of the PSID respondents in each interviewing year to the corresponding 1970 and 1980 census codes for census tracts and metropolitan areas (as well as other geographic aggregations). We use these codes to attach census data from the 1980 Summary Tape Files, which describe both the census tract and the metropolitan area of residence for each PSID respondent at each annual interview (Adams 1991). This procedure allows us to track respondents as they move between poor and nonpoor census tracts. To our knowledge, the PSID is the only nationally representative, longitudinal data set that contains the geographic identifiers necessary to incorporate information on respondents' census tract of residence and thus to track their mobility experiences across tracts of varying socioeconomic status. While prior studies have used this data to describe patterns of mobility between poor and nonpoor tracts (Gramlich et al. 1992; Massey et al. 1994), no study has as yet used these data to examine how individual, tract, and metropolitan area characteristics influence these residential shifts.

We delimit the PSID sample in the following ways. First, we focus on residential moves occurring between 1979 and 1985. Census tract codes for the PSID respondents are not available for years 1975, 1977, and 1978 or for years after 1985, and thus moves occurring during these years cannot be analyzed. We focus on the most recent period of available data so that tracts can be characterized by data from the same census (i.e., 1980). Second, because many of the moves identified in the PSID will be by members of the same family, we include only respondents who were classified as heads of the household either at the beginning *or* at the end of an annual mobility interval (i.e., the period between annual interviews). Many moves, of course, are undertaken by families, and thus a decision to move made by the household head (or made jointly by the family) perforce means a move by other family members. If all respondents were included in the sample, a single move would be counted several times, one for each

family member. Imposing this selection criterion avoids counting as unique and distinct those moves made by members of the same family (e.g., children, spouses) since only moves by the head of the household are included. At the same time, moves by family members who were not the household head at the beginning of the interval but became the head at the end of the interval (e.g., when a child leaves the parental home or when an ex-husband or ex-wife establishes a new residence) will be included in our effective sample.[2] Third, given our focus on metropolitan-level predictors of residential mobility, we include only respondents who began and ended the mobility interval in a metropolitan area.[3] Fourth, we exclude respondents whose race is neither black nor white;[4] these respondents are simply too few in number to support a separate analysis.[5]

Following most prior research, we use census tracts as a geographical representation of neighborhoods. The approximately 43,000 tracts identified in the 1980 census contain an average of about 4,000 persons, although their size varies widely around this figure. Tract boundaries are drawn to encapsulate relatively homogeneous populations in terms of demographic and economic characteristics. While census tracts are imperfect operationalizations of neighborhoods (Tienda 1991), they undoubtedly come the closest of any commonly available spatial entity in approximating the usual conception of a neighborhood (Hill 1992; Rick-

[2] This procedure will, however, omit from our sample persons who move from one family to another without being classified as the head of either family, e.g., when a daughter leaves the parental home to marry and her husband is considered the head of the new family. Unfortunately, we found it impossible to develop a satisfactory categorization of such moves, many of which would be difficult to identify in the PSID in any event.

[3] In additional analyses, we further restricted the sample to persons who began and ended the interval in the same metropolitan area. These intrametropolitan moves account for about 80% of all moves originating in metropolitan areas (South and Deane 1993). The results using this restricted sample were virtually identical to the ones we report.

[4] Because the PSID is representative of the 1968 U.S. population and its descendants, it will underrepresent recent immigrants, which could prove particularly problematic for examining the mobility experiences of Hispanics (Hill 1992). Our sample also omits persons living in institutions at the time of interview. Although the PSID's original sample of families did include some with institutionalized members and others who later entered institutions, rarely are data collected on these family members during their institutionalization.

[5] While we believe that all of these selection criteria make sense on strictly logical grounds, sensitivity analyses suggested that they have little effect on our substantive conclusions. When we included in the models all PSID sample members (rather than only household heads), included all persons in tracted areas, and combined persons of other races along with whites, patterns quite similar to the ones we show here were revealed.

etts and Sawhill 1988), and their use in this capacity is widespread in research on residential mobility (Gramlich et al. 1992; Lee et al. 1994; Massey et al. 1994). At the very least, census tracts would appear to be a closer approximation of neighborhoods than are the "zones" of 100,000 people used by Nelson and Edwards (1993) to study intraurban mobility patterns. Following prior work by Jargowsky and Bane (1991), Massey et al. (1994), and Wilson (1987), we classify census tracts with poverty rates of at least 20% as poor tracts. Tracts of this type are believed to suffer from the myriad effects of concentrated poverty described by Wilson (1987).[6]

Imposing the restrictions described above, 2,326 PSID respondents (1,922 blacks and 404 whites) in our sample began at least one mobility interval (i.e., the period between annual interviews) in a poor tract, while 3,958 respondents (1,157 blacks and 2,801 whites) began an interval in a nonpoor tract. We define residential mobility as a move out of the tract of residence (see Massey et al. [1994] for a similar strategy), and we further differentiate among movers between those who move to poor tracts and those who move to nonpoor tracts.[7] Characteristics of the tracts (as well as of metropolitan areas), including their poverty rate and underclass status, can only be measured with 1980 census data; hence, we assume that there is considerable stability in these characteristics over the period from 1979 to 1985. Such an assumption appears reasonable given substantial

[6] We also classified tracts based on their underclass status, using the criteria proposed by Ricketts and Sawhill (1988). Their approach classifies census tracts as underclass areas if they are at least one standard deviation above the mean on four variables: (1) the percentage of 16 to 19 year olds who are not enrolled in school and have not completed high school; (2) the percentage of males ages 16 and over who worked fewer than 26 weeks in the preceding year; (3) the percentage of households receiving public assistance income; and (4) the percentage of households (with children) that are headed by women. By this definition, Ricketts and Sawhill (1988) estimate that about 1% of the U.S. population resides in underclass areas. Of course, with such a small subpopulation, too few residents of underclass areas would appear in any social survey (even a relatively large one such as the PSID) to sustain analysis. Consequently, we used a slightly less stringent definition, classifying tracts as underclass areas if they are at least one standard deviation above the mean on any two of the four criteria proposed by Ricketts and Sawhill. While underclass areas tend to have high poverty rates, not all poor tracts are underclass tracts, and not all underclass tracts are classified as poor (i.e., have poverty rates of at least 20%). Because the results of these analyses were generally similar to those yielded by the classification of tracts based on the poverty rate, we do not report these analyses here. The few important instances where they differ are described in subsequent notes.

[7] We do not attempt to differentiate between respondents who remain in the same dwelling unit and those who move to a new location within the same census tract. These intratract moves are of little importance for the theories under consideration and are, in any event, difficult to identify in the PSID.

equilibrium in most population and economic structures of geographic areas over short periods of time.

Measuring the Explanatory Variables

The explanatory variables include demographic, socioeconomic, and life-cycle characteristics of the individual respondents and their families, as well as features of the tract of origin and the metropolitan area. Our operationalizations are generally straightforward. Most of the measures are treated as time-varying covariates and refer to characteristics at the beginning of the mobility interval. Socioeconomic variables, which are important for the human capital model of mobility, include *income,* which is the total personal income in the calendar year preceding the interview (in constant 1980 dollars), *years of school completed,* whether the respondent is *currently employed* (0 = no; 1 = yes), and whether the respondent is currently *receiving public assistance* (0 = no; 1 = yes). Dummy variables are also included for respondent's *race* (0 = white; 1 = black) and *sex* (0 = male; 1 = female). Life-cycle and housing characteristics include respondent's *age* and, to capture nonlinear effects, *age squared, marital status* (0 = unmarried; 1 = currently married or cohabiting), *number of children* in the household, whether the head of the household is a *homeowner* (0 = no; 1 = yes), and, as a measure of household crowding, number of *persons per room* in the dwelling unit.

To capture the influence of recent changes in economic conditions, we include the *change in income* in the year preceding the mobility interval. In the models examining mobility out of poor tracts, we also include a dummy variable indicating whether the respondent *became employed* in the year preceding the mobility interval (0 = no; 1 = yes). In addition, in the models examining mobility out of nonpoor tracts, we include a dummy variable indicating whether the respondent *became nonemployed* during the preceding year (0 = no; 1 = yes). Similarly, to capture the theoretically relevant effects of recent changes in marital status, we include a dummy variable indicating whether the respondent *became married* (0 = no; 1 = yes) in the models estimated for respondents originating in poor tracts and a dummy variable indicating whether the respondent *became unmarried* (i.e., widowed or divorced; 0 = no; 1 = yes) in the models based on respondents originating in nonpoor tracts. Because changes in marital status are likely to have a more immediate impact on mobility than changes in economic circumstances and are less likely themselves to be influenced by a change of residence, we measure changes in marital status during the mobility interval. The effects of these recent economic and marital status changes are estimated net of the static values of these variables at the beginning of the interval.

Tract-level characteristics include the percentage of the population in the tract of origin with incomes below the official (1980) poverty line (*%poor*), and the percentage of the population in the tract of origin that is black (*%black*).[8] As argued above, high poverty in the tract of origin is likely to deter mobility into nonpoor and nonunderclass neighborhoods. Among whites, the percentage of the population that is black in the tract of origin is likely to induce mobility into nonpoor areas, while, among blacks, neighborhood racial composition might, theoretically, either facilitate or impede out-migration.

The opportunity for persons initially residing in poor tracts to attain residence in nonpoor neighborhoods is reflected in several characteristics of the Metropolitan Statistical Area (MSA). We measure the degree to which tracts in the MSA exhibit *residential segregation by poverty status* by the well-known index of dissimilarity. This index compares the residential distributions of poor and nonpoor persons across census tracts in the metropolitan area; high values indicate a relative paucity of nonpoor neighborhoods that contain housing for poor persons. Analogously, because the mobility prospects for blacks are thought to be hindered by racially based housing segregation, we include as an explanatory variable *residential segregation by race,* using the index of dissimilarity for black-nonblack residential distributions. High values of this index denote a relative scarcity of racially mixed neighborhoods in the MSA into which blacks might move. Housing availability in the MSA is reflected further by the percentage of housing units that are vacant and by the percentage of the existing (1980) housing stock that was constructed between 1970 and 1980 (*%new housing*). Racial composition of the metropolitan area is measured by the percentage of the population that is black. Finally, regional differences in ecological and political structure are captured by dummy variables for the four major census regions (Northeast, Midwest, South, and West), with the West serving as the reference category.[9]

[8] For the specific census sources of the tract-level and MSA-level variables, see Adams (1991).

[9] Perhaps conspicuous by its absence is a control for duration of residence, an independent variable that commonly appears in models of residential mobility. Unfortunately, for the sample we use here the PSID lacks data on the duration of residence in either the current census tract or the current dwelling unit. However, it seems unlikely that our models are seriously misspecified by the omission of this variable. Lee et al. (1994), in a study of Nashville residents, show that the bivariate effects of most predictors of residential mobility remain largely unaffected when duration of residence (and other predictors) is controlled. Further, we reanalyzed the model of residential mobility derived from Annual Housing Survey data, reported by South and Deane (1993), omitting duration of residence; none of the observed effects of the other 20 explanatory variables were substantially altered by this omission. Neither of these studies focuses on mobility out of distressed neighborhoods, and neither uses the PSID. Thus, we cannot be entirely confident that these findings would apply equally to our study. But

Analytical Strategy

Because the PSID provides information on the census tract of residence at each annual interview, we are able to infer more than one residential move for each respondent over the 1979–85 period. To make maximum use of this information, we structure the data file in a "person-year" format, each observation pertaining to the period between annual interviews. The file includes 8,208 person-year observations originating in poor tracts and 15,014 person-year observations originating in nonpoor tracts. For observations originating in poor tracts, the dependent variable comprises three possible outcomes: remaining in the poor tract of origin between consecutive interviews, moving to another poor tract, and moving to a nonpoor tract. Analogously, for observations originating in nonpoor tracts, the possible outcomes are remaining in the nonpoor tract of origin, moving to another nonpoor tract, and moving to a poor tract. We use multinomial logistic regression to estimate the impact of the explanatory variables on the log-odds of these outcomes (Liao 1994).[10] Because these models can become somewhat unwieldy, especially when examining possible interactions among the explanatory variables, we also estimate simpler binary logistic regression equations that contrast moving into a nonpoor tract (for respondents originating in poor tracts) and into a poor tract (for respondents originating in a nonpoor tract) with the other two outcomes combined. The sequence of analysis corresponds to the four broad questions posed earlier. First, we examine the crude racial differences in the probabilities of moving between poor and nonpoor neighborhoods. Second, we examine the impact of the other explanatory variables on residential mobility out of poor neighborhoods, with a particular focus on those variables that might account for these racial differences. Third, parallel analyses are performed predicting mobility from nonpoor to poor tracts. Finally, we examine whether the effects of the explanatory variables on residential mobility between poor and nonpoor neighborhoods operate similarly for blacks and whites. All analyses use unweighted data, al-

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to the extent that we are able to examine this issue, it does not appear that the lack of data on respondent's duration of residence severely compromises our analysis.

[10] We prefer this estimation strategy over a sequential nested model that treats mobility as a two-step process involving, first, the decision to move and, second, among movers, the choice of destination. Treating the decision to move apart from the choice of destination is particularly questionable for economically disadvantaged and minority groups for whom mobility decisions are inextricably linked to the opportunities to attain a more desirable neighborhood. In other words, these persons may opt *not* to move because there exist few suitable and available alternatives to their current neighborhood. This unitary mobility process is especially likely to hold for groups experiencing housing discrimination because restricted housing options may discourage those who otherwise might wish to move.

TABLE 1

FREQUENCY DISTRIBUTIONS FOR ANNUAL RESIDENTIAL MOBILITY BETWEEN POOR AND NONPOOR CENSUS TRACTS, BY RACE, 1979–85

In Poor Tract at t	% in Same Tract at $t + 1$	% in Different Poor Tract at $t + 1$	% in Nonpoor Tract at $t + 1$	Total Percentage	N of Persons
Blacks	79.7	13.6	6.7	100.0	1,922
	(5,662)	(966)	(477)	(7,105)	
Whites	78.1	5.2	16.7	100.0	404
	(862)	(57)	(184)	(1,103)	
Both	79.5	12.5	8.0	100.0	2,326
	(6,524)	(1,023)	(661)	(8,208)	

NOTE.—No. of person-years is in parentheses.

though results using weighted data lead to substantively similar conclusions.[11]

RESULTS

Tables 1 and 2 present the frequency distributions for annual residential mobility, separately for blacks and whites, disaggregated by the poverty status of the origin tract. Almost 80% of respondents who began an interval in a poor tract resided in the same tract at the end of the interval. Despite differences in samples and how mobility is defined, this estimate of the extent of annual residential mobility—20%—is roughly similar to that observed by Long (1988) using data from the Current Population Survey and by South and Deane (1993) using data from the Annual Housing Survey. Racial differences in the probability of leaving a poor tract are quite small—20.3% for blacks and 21.9% for whites. Rather, what distinguishes the mobility experiences of blacks and whites initially residing in poor neighborhoods is the destination of those who leave the tract. Blacks who move out of poor neighborhoods are substantially more likely to move to another poor tract than they are to move to a nonpoor tract.

[11] A problem arises with the use of weights for PSID respondents who were not members of, or children born into, the original panel families. These "nonsample individuals" receive individual weights of "0" and are therefore excluded from weighted analyses. We prefer the unweighted analyses because they can include these nonsample individuals and thus maximize the effective sample size. Moreover, because the sampling weights are primarily a function of independent variables included in the models, the unweighted regression analyses are preferred (Winship and Radbill 1994). In any event, weighted analyses that exclude individuals with zero weights produce substantively similar results.

TABLE 2

FREQUENCY DISTRIBUTIONS FOR ANNUAL RESIDENTIAL MOBILITY BETWEEN NONPOOR AND POOR CENSUS TRACTS, BY RACE, 1979–85

In Nonpoor Tract at t	% in Same Tract at $t + 1$	% in Different Nonpoor Tract at $t + 1$	% in Poor Tract at $t + 1$	Total Percentage	N of Persons
Blacks	76.4	12.6	11.0	100.0	1,157
	(2,733)	(452)	(392)	(3,577)	
Whites	83.6	15.0	1.4	100.0	2,801
	(9,564)	(1,710)	(163)	(11,437)	
Both	81.9	14.4	3.7	100.0	3,958
	(12,297)	(2,162)	(555)	(15,014)	

NOTE.—No. of person-years is in parentheses.

In contrast, white movers are appreciably more likely to move to a nonpoor tract than they are to move to another poor tract. The result of these different destinations of black and white movers is that whites are more than twice as likely as blacks (16.7% vs. 6.7%) to escape a poor neighborhood for a nonpoor area in a given year.

Among respondents beginning a mobility interval in a nonpoor tract, blacks are somewhat more likely than whites to move to a different tract (23.6% vs. 16.4%). Again, however, the more important racial difference involves the destination of those who move. Almost as many blacks move from a nonpoor to a poor tract (11.0%) as from a nonpoor to another nonpoor tract (12.6%), whereas almost all of the white movers from a nonpoor tract relocate to another nonpoor tract. Notably, only 1.4% of whites originating in a nonpoor tract move to a poor tract within a year. Consequently, the racial differences in mobility flows between poor and nonpoor tracts are pronounced. Blacks are more likely to move from nonpoor to poor tracts than from poor to nonpoor tracts (11.0% vs. 6.7%, respectively), while whites are substantially more likely to move from poor tracts to nonpoor tracts than from nonpoor to poor tracts (16.7% vs. 1.4%).

Table 3 shows descriptive statistics for the explanatory variables used in the models of residential mobility, disaggregated by race and origin tract. Among the respondents residing in poor tracts, the relatively low levels of education, income, and home ownership and the high levels of public assistance receipt are not surprising; these qualities are typically thought to characterize residents of disadvantaged urban communities (Anderson 1990; Wilson 1987). In both the poor and nonpoor tracts, black respondents are more likely than white respondents to be female, unmarried, renting their dwelling, and receiving public assistance. The black

TABLE 3

DESCRIPTIVE STATISTICS FOR PREDICTORS IN MODELS OF MOBILITY BETWEEN POOR AND NONPOOR CENSUS TRACTS, BY RACE, 1979–85

INDEPENDENT VARIABLE	IN POOR TRACT AT t				IN NONPOOR TRACT AT t			
	Blacks		Whites		Blacks		Whites	
	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD
Individual-level characteristic:								
Sex (1 = female)	.51	.50	.40	.49	.40	.49	.23	.42
Age	39.80	16.21	43.00	18.97	37.11	14.31	42.15	16.74
Age^2	1,846.44	1,474.99	2,208.30	1,843.60	1,582.06	1,286.70	2,056.74	1,624.79
Marital status (1 = married)	.34	.47	.47	.50	.49	.50	.67	.47
Became married	.04	.19	.06	.23	.04	.20	.04	.19
Became unmarried	.05	.21	.05	.22	.06	.23	.05	.21
No. of children	1.24	1.43	.71	1.14	1.31	1.44	.82	1.09
Homeowner	.25	.43	.37	.48	.40	.49	.64	.48
Persons per room	.73	.43	.58	.35	.70	.39	.52	.26
Years of school completed	10.47	2.69	11.55	3.14	11.52	2.64	12.88	2.54
Income ($1,000s)	6.64	7.74	8.99	10.39	10.92	9.59	19.29	17.55

Change in income ($1,000s)	.09	4.71	.17	5.15	.52	5.66	.59	9.18
Currently employed	.53	.50	.58	.49	.70	.46	.77	.42
Became employed	.09	.29	.09	.29	.10	.30	.07	.25
Became nonemployed	.08	.27	.07	.26	.07	.26	.05	.22
Receiving public assistance	.16	.36	.08	.27	.08	.28	.01	.11
Tract-level characteristics:								
%poor	34.45	11.59	27.81	7.73	11.86	4.89	6.80	4.23
%black	83.88	20.92	23.72	27.06	49.48	34.09	3.13	7.29
MSA-level characteristics:								
Residential segregation by poverty status (*D*)	39.61	5.42	34.68	7.28	37.99	5.77	34.83	7.58
Residential segregation by race (*D*)	73.94	9.11	67.63	11.61	71.64	9.81	69.16	12.16
%housing units vacant	6.48	2.12	6.31	1.94	6.70	2.67	6.03	2.51
%new housing	25.70	9.86	25.95	10.17	27.65	10.00	25.46	10.96
%black	21.48	8.17	12.85	8.79	20.28	8.25	11.76	8.79
Region:								
Northeast	.11	.31	.22	.42	.06	.25	.23	.42
Midwest	.26	.44	.22	.42	.20	.40	.29	.46
South	.54	.50	.34	.47	.59	.49	.24	.42
West	.09	.29	.22	.41	.14	.34	.24	.43
N	7,105		1,103		3,577		11,437	

respondents are also younger than their white counterparts and have more children in the household, fewer years of school completed, and lower incomes. Even comparing *within* poor and nonpoor tracts, these blacks and whites reside in different types of neighborhoods; blacks live in tracts with higher poverty rates and much larger concentrations of blacks. Among those in poor tracts, the typical black respondent's neighborhood has a population that is 84% black; the corresponding figure for whites in poor tracts is 24%. Substantial differences in tract racial composition are also observed for blacks and whites residing in nonpoor tracts.

Differences in the characteristics of the metropolitan areas inhabited by the blacks and whites in the study are comparatively modest, but, compared to whites, blacks tend to reside in areas having larger black populations and higher levels of residential segregation by poverty status and by race. The black respondents are also more concentrated in metropolitan areas in the South. Also apparent is the much higher levels of residential segregation by race than by poverty status in U.S. metropolitan areas. How these life-cycle, human capital, and geographic variables influence residential mobility between poor and nonpoor neighborhoods and the degree to which racial differences in these variables account for racial differences in mobility are the questions we now address.

Table 4 presents the results of several logistic regression equations examining the determinants of residential mobility out of poor census tracts. In the first two columns are the bivariate logistic coefficients and their standard errors for equations in which the dependent variable contrasts persons who did not leave a poor tract (including those who either remained in the poor tract of origin or moved to another poor tract) with persons who moved to a nonpoor tract.[12] At the bivariate level, hypotheses derived from all three of the theoretical models receive considerable support. Consistent with the life-cycle model of mobility, number of children and home ownership are inversely associated with the (log) odds of leaving a poor neighborhood for a nonpoor area, while marrying increases that risk. Mobility declines with age but at a decreasing rate. Women who begin or end the mobility interval as heads of household are less likely than men to move from a poor to a nonpoor tract. In addition—consistent with the human capital model of mobility—education, income, and employment as well as increases in income and becoming employed all increase the risk of moving to a nonpoor tract, while receiving public assistance reduces that probability. The coefficient for race implies that the

[12] Because person-year observations for the same respondent are not independent, the standard errors of the coefficients may not be accurate (Bye and Riley 1989). For these analyses, however, adjusting the standard errors for nonindependence of observations had no appreciable effect on our substantive conclusions.

odds of blacks moving from a poor to a nonpoor tract are only 36% ($e^{-1.023} = .36$) of the corresponding odds for whites. This difference, which was also apparent in table 1, is consistent with the place stratification model of residential mobility.

Both of the characteristics of the tract of origin—the percentage that is poor and the percentage that is black—significantly reduce the likelihood of moving from a poor to a nonpoor tract. Persons residing in the poorest of the poor tracts and those in tracts with substantial concentrations of blacks are least likely to move to nonpoor neighborhoods.

Characteristics of the metropolitan area are also significantly related at the bivariate level to the probability of moving from a poor to a nonpoor neighborhood. Consistent with the housing availability model, high levels of residential segregation by both poverty status and by race appear to impede mobility into nonpoor tracts. As suggested above, high levels of segregation are likely to indicate a shortage of dwellings in nonpoor areas that are available to residents of poor neighborhoods. The percentage of the metropolitan area's housing stock that was built recently is positively related to the probability of moving to a nonpoor tract, while the percentage of the area's population that is black is inversely associated with this type of mobility. Finally, compared to residents of metropolitan areas in the West, residents of the other three regions are less likely to move from poor to nonpoor neighborhoods, presumably a function of regional differences in ecological and political structures.

The next two columns of table 4 present the coefficients and standard errors for the multiple logistic regression equation. In contrast to the bivariate effects, the partial regression coefficients suggest a more guarded assessment of the hypotheses. Many of the significant bivariate coefficients become nonsignificant in the multivariate model. Of the life-cycle variables, the effects of age and home ownership remain significant, as does the dummy variable for those who marry during the mobility interval. Of the human capital variables, years of school completed, income, and receipt of public assistance remain statistically significant. Controlling for the other independent variables reduces, but by no means eliminates, the effect of race on the probability of escaping poor tracts; net of other variables in the model, the odds of blacks moving to a nonpoor tract increase to 66% ($e^{-.418} = .66$) of the odds for whites. The reduction in the effect of race when other variables are controlled is consistent with the human capital/life-cycle model, but the significant and substantial difference that remains supports the place stratification perspective.

The most pronounced difference between the bivariate and multivariate equations, however, is for the metropolitan area independent variables. In the multivariate model, only the coefficient for residence in the Northeast remains significant. While some of the reduction in the strength

TABLE 4

LOGISTIC COEFFICIENTS FOR THE REGRESSION OF RESIDENTIAL MOBILITY OUT OF POOR CENSUS TRACTS, 1979–85

	BINARY REGRESSION				MULTINOMIAL REGRESSION					
	Bivariate		Multivariate		Move to Poor Tract vs. Remain in Poor Tract		Move to Nonpoor Tract vs. Remain in Poor Tract		Move to Nonpoor Tract vs. Move to Poor Tract	
INDEPENDENT VARIABLE	*b*	SE	*b*	SE	*b*	SE	*b*	SE	*b*	SE
Individual-level characteristics:										
Race (1 = black)	−1.023***	.094	−.418***	.151	.674***	.180	−.337**	.153	−1.011***	.218
Sex (1 = female)	−.181**	.018	.089	.114	.181*	.098	.134	.116	−.048	.139
Age	−.094***	.004	−.086***	.020	−.134***	.014	−.112***	.020	.022	.023
Age^2	.001**	.000	.001**	.000	.001***	.000	.001***	.000	−.000	.000
Marital status (1 = married)	−.127	.086	−.050	.126	.022	.108	−.051	.127	−.073	.154
Became married	1.163***	.144	.629***	.160	.094	.168	.644***	.164	.550***	.208
No. of children	−.053*	.030	.019	.044	−.050	.033	.007	.045	.057	.052
Homeowner	−.865***	.116	−.710***	.131	−.837***	.123	−.766***	.131	.071	.173
Persons per room	−.051	.098	−.145	.137	.363***	.090	−.045	.140	−.408***	.153
Years of school completed	.215***	.017	.092***	.022	−.012	.019	.090***	.023	.102***	.028
Income ($1,000s)	.019***	.004	.013*	.007	−.034***	.009	.011	.007	.045***	.011
Change in income ($1,000s)	.026***	.008	−.003	.009	.014	.009	−.003	.009	−.016	.012

Currently employed	.498***	.085	−.012	.119	.012	.105	−.039	.120	−.051	.148
Became employed	.580***	.119	.187	.142	−.088	.132	.185	.144	.274	.179
Receiving public assistance	−.424***	.132	−.299**	.151	−.107	.103	−.306**	.153	−.200	.172
Tract-level characteristics:										
%poor	−.032***	.004	−.015***	.005	.000	.003	−.015***	.005	−.015***	.005
%black	−.014***	.001	−.007***	.002	−.001	.002	−.007***	.002	−.006**	.003
MSA-level characteristics:										
Residential segregation by poverty status (*D*)	−.051***	.007	−.020	.013	.040***	.013	−.014	.013	−.054***	.017
Residential segregation by race (*D*)	−.019***	.004	.008	.007	−.004	.007	.008	.007	.012	.009
%housing units vacant	.012	.019	.009	.030	−.004	.030	.010	.031	.013	.040
%new housing	.014***	.004	.009	.009	.015*	.009	.011	.009	−.004	.012
%black	−.036***	.005	−.007	.007	−.002	.006	−.007	.007	−.005	.009
Region:[a]										
Northeast	−.932***	.165	−.510**	.208	.173	.197	−.494**	.210	−.667**	.268
Midwest	−.603***	.127	−.130	.173	.166	.178	−.108	.176	−.275	.231
South	−.678***	.114	−.138	.183	−.119	.193	−.165	.185	−.046	.247
Constant			.312	.702	−.588	.640	.770	.708	1.358	.889
χ^2			574				1,295			
df			25				50			

[a] West serves as the reference category.

* $P < .10$ (two-tailed test).

** $P < .05$ (two-tailed test).

*** $P < .01$ (two-tailed test).

and significance of these effects may be due to spuriousness or the mediating effects of other independent variables, we suspect that our ability to estimate these net effects is hampered somewhat by the very high correlations among the metropolitan area variables. As examples, the zero-order correlation between the two measures of residential segregation is .71, the correlation between the vacancy rate and new housing construction is .66, and the multiple correlation between the percentage of new housing and the regional dummies is .73. A problem of multicollinearity is also suggested by sharp increases in the standard errors of some of the coefficients (doubling in the cases of residential segregation by poverty status and the percentage of new housing) and the sign reversal for the coefficient for residential segregation by race.

Although our inferences regarding the net effects of these variables must therefore remain tentative, the potential for multicollinearity led us to explore different model specifications by omitting various explanatory variables having high correlations with the other variables. Three findings were worth noting. First, omitting either one of the segregation indices has little effect on the coefficient for the remaining index, implying that the high correlation between these two variables is not a cause of the sharp reduction from their bivariate effects.[13] Second, omitting the regional dummy variables causes the coefficient for new housing construction to become positive and significant. Finally, the diminution in the significance of the metropolitan area variables is, with one exception, *not* a result of their covariation with the individual-level or tract-level independent variables. The coefficients for each of the metropolitan area variables remain significant (in the case of the vacancy rate, *becomes* significant) when the individual and tract variables are controlled. The exception is residential segregation by race, which drops to nonsignificance as a function of its correlations with respondent's race and the percentage of the tract population that is black.

The remainder of table 4 presents the coefficients from a multinomial logistic regression in which persons who did not move to a nonpoor tract are subdivided into those who remained in the (poor) tract of origin and those who moved to another poor tract. This analysis elaborates the binary logistic regressions by isolating the effect of the explanatory variables on residential mobility per se (as reflected in the contrasts between remaining in a poor tract vs. moving to a different poor tract and between remaining in a poor tract vs. moving to a nonpoor tract) and the destina-

[13] In the multivariate regressions examining mobility out of underclass tracts, the coefficient for segregation by poverty status is negative and significant at the .05 level. Moreover, the coefficients for both of the segregation variables are negative and significant at the .01 level when the other segregation index is omitted from the equation.

tion of movers (as reflected in the contrast between moving to a poor tract vs. moving to a nonpoor tract). Several findings from this analysis are worth highlighting. First, as suggested by table 1, blacks differ significantly from whites on all three contrasts: they are more likely than whites to move to another poor tract than to remain in the (poor) tract of origin; they are less likely than whites to move to a nonpoor tract than to remain in the tract of origin; and, conditional upon moving, they are less likely than whites to move to a nonpoor tract than to another poor tract. Second, age and home ownership decrease the rate of moving from a poor to a nonpoor tract because they decrease the overall risk of moving. Both variables significantly distinguish nonmovers from those who move into poor and nonpoor tracts, but neither variable significantly differentiates those who move to a poor tract from those who move to a nonpoor tract. Contrary to expectations, mobile home owners and households with children are no more likely than renters and childless households to select a nonpoor than a poor neighborhood. Third, although in the multivariate binary logistic regressions household crowding is not significantly related to the risk of moving from a poor to a nonpoor tract, crowding significantly increases the risk of moving to another poor tract (relative to not moving), and, conditional upon moving, significantly decreases the rate of moving to a nonpoor rather than to a poor tract. Fourth, relative to their low segregation counterparts, respondents in metropolitan areas characterized by high levels of residential segregation by poverty status are significantly more likely to move to a nonpoor tract than to remain in the tract of origin. In addition, among movers, residential segregation by poverty significantly decreases the likelihood of moving to a nonpoor than to a poor tract. Hence, the lack of available, low-cost housing in nonpoor areas does not appear to inhibit residential mobility among those residing in poor tracts, but it does reduce the likelihood of choosing a nonpoor neighborhood as a destination. Fifth, originating in a very high poverty or predominantly black tract does not influence the likelihood of moving to another poor tract (relative to not moving), but these tract-of-origin characteristics significantly reduce the probability of moving to a nonpoor tract, relative to both remaining in the origin tract and moving to another poor tract.

Table 5 presents the results of parallel binary and multinomial logistic regression equations for respondents who begin the mobility interval in a nonpoor tract. The binary regressions contrast respondents who either remain in or move to another nonpoor tract with those who move to a poor tract. At the bivariate level, almost all of the individual-level independent variables exhibit significant associations with the risk of moving from a nonpoor to a poor tract. Blacks, female household heads, older persons, those in crowded households and households with children, respondents who recently became unmarried or nonemployed, and those receiving

TABLE 5

LOGISTIC COEFFICIENTS FOR THE REGRESSION OF RESIDENTIAL MOBILITY OUT OF NONPOOR CENSUS TRACTS, 1979–85

	BINARY REGRESSION				MULTINOMIAL REGRESSION					
	Bivariate		Multivariate		Move to Nonpoor Tract vs. Remain in Nonpoor Tract		Move to Poor Tract vs. Remain in Nonpoor Tract		Move to Poor Tract vs. Move to Nonpoor Tract	
INDEPENDENT VARIABLE	*b*	SE	*b*	SE	*b*	SE	*b*	SE	*b*	SE
Individual-level characteristics:										
Race (1 = black)	2.142***	.095	1.438***	.136	−.402***	.091	1.298***	.138	1.700***	.151
Sex (1 = female)	.758***	.088	−.454***	.118	−.325***	.073	−.546***	.120	−.221*	.128
Age	−.180***	.017	−.065***	.021	−.112***	.012	−.097***	.021	.014	.023
Age^2	.001***	.000	.000	.000	.001***	.000	.001**	.000	−.000	.000
Marital status (1 = married)	−1.138***	.090	−.842***	.140	−.733***	.074	−1.008***	.141	−.275*	.149
Became unmarried	1.192***	.130	1.529***	.171	1.688***	.102	2.044***	.175	.356**	.181
No. of children	.125***	.033	.037	.046	−.061**	.031	.017	.047	.078	.051
Homeowner	−1.956***	.113	−.877***	.129	−.864***	.063	−1.046***	.129	−.183	.138
Persons per room	1.073***	.103	.112	.146	.280***	.105	.191	.150	−.088	.160
Years of school completed	−.111***	.015	−.057**	.024	.021*	.013	−.059**	.024	−.080***	.026
Income ($1,000s)	−.074***	.005	−.043***	.009	−.008***	.003	−.046***	.009	−.038***	.009
Change in income ($1,000s)	.002	.005	.013	.010	.014***	.004	.017*	.010	.003	.010

Currently employed	−.573***	.091	.228	.147	−.070	.095	.213	.149	.283*	.162
Became nonemployed	1.007***	.131	.594***	.178	.167	.127	.648***	.183	.480**	.199
Receiving public assistance	1.374***	.152	.017	.181	−.171	.156	−.030	.185	.141	.217
Tract-level characteristics:										
%poor	.135***	.008	.017	.011	−.022***	.006	.010	.011	.033***	.012
%black	.021***	.001	.002	.002	−.001	.002	.002	.002	.003	.002
MSA-level characteristics:										
Residential segregation by poverty status (*D*)	.026***	.006	−.013	.013	.005	.006	−.011	.013	−.016	.014
Residential segregation by race (*D*)	.014***	.004	.004	.008	.011***	.004	.007	.008	−.004	.008
%housing units vacant	.038**	.015	.057**	.028	−.022	.016	.052*	.028	.073**	.030
%new housing	.003	.004	−.021**	.009	.020***	.005	−.015*	.009	−.035***	.010
%black	.037***	.005	−.009	.009	−.007	.005	−.011	.009	−.004	.010
Region:[a]										
Northeast	−.456***	.166	−.184	.208	−.380***	.107	−.301	.210	.080	.222
Midwest	.114	.131	.070	.177	−.196**	.089	−.003	.179	.193	.188
South	.518***	.119	.149	.185	−.196**	.096	.076	.187	.272	.197
Constant			−.210	.710	1.100***	.388	.826	.716	−.274	.763
χ^2			1,145				3,355			
df			25				50			

[a] West serves as the reference category.

* $P < .10$ (two-tailed test).

** $P < .05$ (two-tailed test).

*** $P < .01$ (two-tailed test).

public assistance are more likely than others to move to a poor tract. In addition, homeowners, married persons, the employed, and persons with higher levels of education and income are significantly less likely to move in this direction. Thus, consistent with the human capital model of mobility, higher SES individuals are both more likely to move from poor to nonpoor neighborhoods and less likely to move from nonpoor to poor neighborhoods. Respondents who begin the interval in tracts with comparatively high poverty rates and large black populations are more likely to move to a poor tract.

The risk of moving from a nonpoor to a poor neighborhood also varies significantly with several of the metropolitan area characteristics. High levels of residential segregation by both poverty status and race, which were inversely related to the probability of escaping poor tracts, are significantly and positively associated with the likelihood of moving into poor tracts. This risk is also higher in MSAs with high vacancy rates and large black populations and, compared to western respondents, lower for northeastern but higher for southern residents.

The multivariate regressions tell a generally similar story, although again several of the bivariate effects become nonsignificant. Of the individual-level variables, the coefficients for number of children in the household, persons per room, current employment status, and public assistance receipt drop to nonsignificance. Once other variables are controlled, female household heads are significantly less likely than their male counterparts to move from a nonpoor to a poor tract. As with movement out of poor tracts, controlling for the other explanatory variables reduces but does not eliminate the racial difference in the odds of moving from nonpoor to poor tracts. Absent controls, the odds of blacks moving from nonpoor to poor tracts are 8.5 times the odds for whites ($e^{2.142} = 8.5$); with controls this ratio drops to 4.2 ($e^{1.438} = 4.2$).

In contrast to their bivariate associations, neither the poverty rate nor the racial composition of the origin tract exhibits significant effects in the multivariate regression. In addition, of the metropolitan-level variables, only the vacancy rate and new housing construction exhibit significant effects.[14] While the lower rate of mobility from nonpoor to poor tracts in areas having substantial new housing stock is consistent with the housing availability model, the positive effect of the vacancy rate runs counter to our hypothesis. One possible explanation for this effect is that urban disinvestment and the depopulation of inner-city neighborhoods increases their vacancy rates, thus driving down the cost of housing in relatively

[14] In the regressions examining mobility from nonunderclass to underclass tracts, the coefficient for segregation by race is also positive and statistically significant at the .05 level.

poor tracts and increasing the incentive for moving from nonpoor into poor neighborhoods. Such a scenario is broadly consistent with observed patterns of gentrification in U.S. cities (Nelson 1988). Further research that identifies the precise location of vacant housing within metropolitan areas may help to establish the validity of this explanation.

Several results from the multinomial regression analyses of mobility out of nonpoor tracts are worth noting. As in table 4, blacks are significantly different from whites on all three contrasts, while age and home ownership significantly decrease the overall risk of moving but not the poverty status of the destination tract among those who move. Household crowding increases the risk of moving to a different nonpoor tract relative to not moving but does not affect the risk of moving to a poor tract. Consistent with the life-cycle model, becoming divorced or widowed increases the overall likelihood of moving and, conditional upon moving, also increases the risk of moving to a poor rather than to a nonpoor neighborhood. Becoming nonemployed, in contrast, does not influence the probability of moving to a different nonpoor tract but does significantly increase the risk of moving to a poor tract. Finally, consistent with regional differences in residential mobility (Gober 1993), mobility into other nonpoor tracts is significantly higher in the West than in other regions.

The equations in table 6 disaggregate by race of respondent the multivariate binary logistic regressions in tables 4 and 5.[15] We show here the coefficients for the race-specific equations, as well as the difference between those coefficients.[16] Of particular importance for the theories under consideration are racial differences in the effects of human capital factors, residential segregation by race, and the racial composition of the tract of origin and the metropolitan area. Consistent with the "weak version" of the place stratification model, years of school completed has a significantly more positive effect on the probability of moving from a poor to a nonpoor tract for blacks than for whites. This differential effect suggests that, compared to whites, it "costs" blacks less in years of education to escape poor neighborhoods. Yet, even at comparatively high levels of education, blacks are less likely than whites to leave poor neighborhoods. For example, using the race-specific coefficients from table 6 and assuming the race-specific means for the other explanatory variables, the predicted probability that a black respondent with 16 years of education will move from a poor to a nonpoor tract is .086; the probability for a white with 16 years

[15] Coefficients for race-specific, bivariate logistic equations and for race-specific multinomial logistic regressions are available from the authors upon request.

[16] For both poor and nonpoor origin groups, the improvement to chi-square from adding all race-by-independent variable interactions to the equations containing main effects only (tables 4 and 5) is significant at the .05 level.

TABLE 6

LOGISTIC COEFFICIENTS FOR THE REGRESSION OF RESIDENTIAL MOBILITY BETWEEN POOR AND NONPOOR CENSUS TRACTS, BY RACE, 1979–85

	MOVE FROM POOR TO NONPOOR TRACT					MOVE FROM NONPOOR TO POOR TRACT				
	Blacks		Whites			Blacks		Whites		
INDEPENDENT VARIABLE	*b*	SE	*b*	SE	Difference	*b*	SE	*b*	SE	Difference
Individual-level characteristics:										
Sex (1 = female)	.065	.132	.026	.241	.039	−.518***	.145	−.326*	.210	−.192
Age	−.085***	.025	−.081**	.039	−.004	−.068***	.027	−.073**	.036	.005
Age^2	.001*	.000	.000	.000	.001	.000	.000	.000	.000	.000
Marital status (1 = married)	−.194	.148	.297	.255	−.491*	−1.062***	.180	−.579***	.231	−.483*
Became married	.622***	.185	.652**	.327	−.030					
Became unmarried						1.785***	.219	1.069***	.289	.716**
No. of children	.085*	.048	−.333***	.118	.418***	.022	.053	.116	.093	−.094
Homeowner	−.609***	.153	−1.012***	.252	.403	−.946***	.165	−.816***	.208	−.130
Persons per room	−.140	.153	−.255	.340	.115	.058	.166	.428	.282	−.370
Years of school completed	.123***	.029	.011	.039	.112**	−.080***	.031	−.018	.042	−.062
Income ($1,000s)	.017*	.009	.016	.013	.001	−.025**	.011	−.067***	.014	.042**
Change in income ($1,000s)	−.003	.011	−.012	.018	.009	.015	.012	.009	.015	.006
Currently employed	.023	.137	−.314	.260	.337	.299*	.177	−.071	.267	.370
Became employed	.180	.164	.280	.303	−.100					

Became nonemployed						.760***	.213	.149	.336	.611*
Receiving public assistance	−.267	.164	−.408	.431	.141	.159	.201	−.228	.461	.387
Tract-level characteristics:										
%poor	−.022***	.005	.024**	.012	−.046***	.010	.014	.023	.019	−.013
%black	−.004*	.002	−.011***	.004	.007	.002	.002	.003	.010	−.001
MSA-level characteristics:										
Residential segregation by poverty status (*D*)	−.025	.017	−.005	.021	.020	−.032*	.020	−.007	.019	−.025*
Residential segregation by race (*D*)	−.005	.010	.025**	.012	−.030**	.015	.011	−.002	.011	.017
%housing units vacant	−.004	.038	.038	.058	−.042	.032	.037	.106***	.042	−.074
%new housing	.009	.011	.017	.018	−.008	−.022*	.012	−.025*	.015	.003
%black	−.016*	.009	.015	.017	−.031*	.004	.012	−.019	.017	.023
Region:[a]										
Northeast	−.290	.266	−.909**	.382	.619	.348	.285	−.599*	.335	.947**
Midwest	.092	.208	−.801**	.337	.893***	.134	.247	−.005	.273	.139
South	.007	.234	−.846***	.328	.853**	.137	.251	.248	.286	−.111
Constant	.652	.848	−1.041	1.379		1.404	.936	−.224	1.156	
χ^2	349		173			341		277		
df	24		24			24		24		
N	7,105		1,103			3,577		11,437		

[a] West serves as the reference category.

* $P < .10$ (two-tailed test).

** $P < .05$ (two-tailed test).

*** $P < .01$ (two-tailed test).

of education is .121. In fact, a black with 16 years of schooling is less likely than a white with only eight years of schooling (predicted $P = .112$) to leave a poor for a nonpoor neighborhood.

As anticipated by the place stratification and housing availability models, the effect of residential segregation by race in the metropolitan area is significantly different for blacks and whites. Among whites, residential segregation enhances the probability of mobility out of poor tracts, while among blacks the coefficient is negative but not significant. These findings imply that racial segregation in the housing market opens up opportunities for whites to move from distressed neighborhoods to less disadvantaged areas.[17]

As expected, the percentage of the metropolitan area's population that is black tends to lower the probability that blacks will escape poor tracts, presumably as a consequence of increased discrimination attendant to increases in minority group size. The effect of MSA %black on white mobility is not significant. We also find no evidence, however, that sizable black populations in the tract of origin raise the probability that whites will move from poor to nonpoor tracts; the coefficient is negative for both whites and blacks, and the difference between them is not significant. Perhaps the inverse association between the percentage of the population that is black and the probability that whites will leave a distressed neighborhood results, in part, from a selection effect; whites with strong preferences for avoiding living near blacks may have already left tracts with large black populations, leaving behind whites with less averse preferences.

Another unanticipated finding in table 6 is the positive effect among whites of the percentage of the tract-of-origin population that is in poverty on the likelihood of moving to nonpoor tracts. Among blacks, those living in less poor tracts are more likely than those in the poorest neighborhoods to move to nonpoor tracts, as we hypothesized. But among whites, the likelihood of escaping a distressed tract is higher for those in the poorest of these poor tracts. Thus, not only do whites experience an overall higher probability than blacks of escaping distressed neighborhoods, this racial differential is greatest for residents of the poorest areas.

Finally, regional differences in the ability to escape poor neighborhoods are significantly more marked among whites than among blacks. Among

[17] Among blacks, the coefficient for segregation by poverty status in the regression predicting mobility from poor to nonpoor tracts becomes negative and statistically significant at the .05 level when segregation by race is omitted. Also among blacks, in the underclass equations that include all of the independent variables, the coefficients for both segregation variables are inverse and significant at the .10 level. The coefficients for both variables become significant at the .05 level when the other is deleted.

whites, residents of metropolitan areas in the West are significantly more likely than others to move from poor to nonpoor areas, a pattern predicted (although imperfectly, given the similarity of the South to the Northeast and Midwest regions) from regional differences in the development of economically restrictive suburban communities. Among blacks, however, regional differences are small. We suspect that this difference reflects, in large measure, regional differences in suburbanization patterns that facilitate the movement of whites, but not blacks, out of poor neighborhoods. In particular, the low levels of black suburbanization during the 1980s in the West relative to other regions (Schneider and Phelan 1993) may have reduced the likelihood that blacks would move to a nonpoor neighborhood and thus otherwise offset a tendency for higher escape rates for blacks in this region.

Several significant racial differences in the effects of the explanatory variables on the risk of moving from nonpoor to poor tracts are also observed in table 6. The inverse effect of income on downward residential mobility is significantly stronger for whites than for blacks, implying that a comparatively higher income is needed for blacks to remain in nonpoor neighborhoods. Relatedly, blacks appear more vulnerable than whites to adverse changes in life circumstance; becoming nonemployed and unmarried is more likely to engender a move from a nonpoor to a poor tract for blacks than for whites. Among blacks, becoming nonemployed more than doubles the odds of moving to a poor neighborhood ($e^{.760} = 2.14$), while marital dissolution increases those odds almost sixfold ($e^{1.785} = 5.96$). Overall, then, blacks' residency in nonpoor neighborhoods appears more tenuous than that of whites.

To further illustrate the effects of the explanatory variables, table 7 shows the estimated annual probabilities of moving between poor and nonpoor tracts, by race, for various values of selected independent variables.[18] These probabilities are derived from the equations in table 6, assuming the race- and origin-specific mean values for all but the indicated variable. Two reasonable values are chosen for the continuous, individual-level independent variables (age, education, and income), and the minimum and maximum values are chosen for the continuous, metropolitan-level independent variables. One stark implication of these simulations is the importance of life-cycle factors—especially age—for these mobility flows. For both blacks and whites, the probability of moving either from or to poor tracts declines precipitously from ages 20 to 60. Home owner-

[18] We focus here on those variables that appear most consequential for the theories under consideration; predicted probabilities for other independent variables or for other values of the selected variables can be computed from the information in prior tables (see, e.g., Liao 1994).

TABLE 7

ESTIMATED PROBABILITIES OF MOVING BETWEEN POOR AND NONPOOR CENSUS TRACTS

INDEPENDENT VARIABLE	PROBABILITY OF MOVING FROM POOR TO NONPOOR TRACT		PROBABILITY OF MOVING FROM NONPOOR TO POOR TRACT	
	Blacks	Whites	Blacks	Whites
Sex:				
Male	.0444	.1147	.0871	.0055
Female	.0472	.1174	.0538	.0040
Age:				
20	.2039	.4553	.1999	.0249
60	.0086	.0322	.0598	.0014
Married:				
No	.0488	.1022	.1154	.0075
Yes	.0405	.1329	.0432	.0042
Became married:				
No	.0447	.1118		
Yes	.0802	.1947		
Became unmarried:				
No			.0651	.0048
Yes			.2934	.0139
Homeowner:				
No	.0529	.1599	.1017	.0085
Yes	.0295	.0647	.0421	.0038
Education:				
8 years	.0342	.1118	.0931	.0055
16 years	.0865	.1209	.0515	.0048
Income:				
$5,000	.0446	.1095	.0823	.0131
$30,000	.0659	.1538	.0462	.0025
Became nonemployed:				
No			.0685	.0050
Yes			.1359	.0058
Receiving public assistance:				
No	.0477	.1192	.0711	.0051
Yes	.0369	.0825	.0823	.0041
Residential segregation by poverty status:				
$D = 15$	.0813	.1267	.1398	.0058
$D = 49$	.0366	.1084	.0516	.0046
Residential segregation by race:				
$D = 33$	.0556	.0522	.0421	.0055
$D = 89$	.0426	.1826	.0910	.0049
%housing units vacant:				
2%	.0466	.1001	.0625	.0033
25%	.0425	.2097	.1224	.0365
%new housing:				
8%	.0394	.0883	.1065	.0078
60%	.0611	.1883	.0368	.0022
Region:				
Northeast	.0348	.0929	.0880	.0030
Midwest	.0502	.1024	.0723	.0055
South	.0463	.0984	.0725	.0070
West	.0460	.2027	.0638	.0055

NOTE.—Predicted probabilities derived from equations in table 6, assuming race-specific and origin-specific means for all but the indicated variable.

ship and marital status (including changes in marital status) also appear to influence substantially the likelihood of escaping or drifting into poor neighborhoods, although for whites the predicted probability of moving from nonpoor to poor tracts is quite low for all values of the independent variables. Marrying almost doubles the annual probability of moving from a poor to a nonpoor tract, while the dissolution of a marriage more than doubles the probability of moving from a nonpoor to a poor tract. Clearly, future research on the determinants of residential mobility between neighborhoods of varying socioeconomic status will need to attend closely to life-cycle and related factors that engender a change of residence.

Several of the effects of the metropolitan-level variables are also noteworthy. For example, under the assumptions used for these simulations, whites in metropolitan areas with the highest observed level of racial residential segregation ($D = 89$) are over three times as likely as whites in the least segregated areas ($D = 33$) to move from a poor to a nonpoor tract in a given year (.1826 vs. .0522). Whites in the West are about twice as likely as those in other regions to escape poor tracts. And, both blacks and whites are about three times as likely to move from a nonpoor to a poor tract in metropolitan areas that have the lowest, compared to the highest, rate of new housing construction. Thus, consistent with the housing availability model, several characteristics of metropolitan areas at least moderately influence the probability of moving between poor and nonpoor neighborhoods.

DISCUSSION AND CONCLUSION

Despite the salience of this topic for both sociological theory and social policy, few studies have systematically examined the determinants of residential mobility between poor and nonpoor neighborhoods. We explore this issue here by attaching information on the census tracts of residence to a large, longitudinal, and nationally representative sample of American adults living in metropolitan areas. We derive and test hypotheses from three broad theoretical perspectives on residential mobility—one that emphasizes human capital and life-course determinants of mobility, one that underscores the barriers to mobility faced by racial minorities, and one that stresses the supply of housing in the local metropolitan area that is available to residents of distressed neighborhoods. In general, our analyses reveal at least some support for all three of these theoretical models.

The human capital/life-cycle model of residential mobility stipulates that families and individuals attempt to purchase or rent homes in the most desirable neighborhood available, under current financial constraints, and decide whether and where to move based on the needs and

desires associated with their life-course position. Consistent with this model, most indicators of socioeconomic status and life-course stage evince significant bivariate associations with the likelihood of moving between poor and nonpoor neighborhoods. Of these effects, education, age, home ownership, marriage, and the receipt of public assistance all influence the likelihood of leaving distressed neighborhoods for better environs, net of other influences on residential mobility. Socioeconomic resources also serve to retain those who already reside in nonpoor neighborhoods, while two life events—the disruption of a marriage and the loss of a job—substantially increase the risk of moving from a nonpoor into a poor area.

Yet, our results clearly demonstrate that the likelihood of escaping distressed neighborhoods is not solely a function of these individual attributes. As suggested by the place stratification model, racial differences in mobility are pronounced, with blacks substantially less likely than whites to leave poor areas and substantially more likely to move into them. Moreover, and seemingly contrary to the human capital/life-cycle model, these racial differences persist, although in muted form, even after adjusting for racial differences in socioeconomic and life-course variables. The place stratification model anticipates these net effects of race on the basis of barriers to black mobility in the form of racially segmented and discriminatory housing markets. Consistent with what has been called the "weak version" of this model (Logan and Alba 1993), it "costs" blacks less than whites in educational attainment to leave poor for nonpoor tracts, but even the most educated blacks remain substantially less likely than the least educated whites to escape distressed neighborhoods. Further, downward neighborhood mobility among blacks is more susceptible than that of whites to disruptive life-course events, including marital dissolution and unemployment. That residential segregation between blacks and whites in the local metropolitan area tends to increase the probability that whites will leave distressed neighborhoods and appears to diminish the chance that blacks will leave underclass neighborhoods is also consistent with the place stratification perspective and points to the influence of racially segmented housing markets on residential mobility patterns.

Neither the human capital/life-cycle model nor the place stratification model emphasizes characteristics of local metropolitan areas as determinants of escaping distressed neighborhoods. Our findings relevant to the housing availability model suggest that this neglect may be unwarranted. Although high correlations among the metropolitan-level explanatory variables render our inferences tentative, these results suggest that the likelihood of moving into and out of distressed neighborhoods depends on the supply of housing available in nondistressed areas. Escape rates tend to be higher in metropolitan areas having relatively numerous neigh-

borhoods that contain a mix of poor and nonpoor households and, especially for whites, metropolitan areas in the West. We also find suggestive evidence that residential integration by poverty reduces the risk of moving from poor to nonpoor neighborhoods. Residential integration by poverty status, we argue, raises escape rates by enlarging the supply of housing opportunities in nonpoor neighborhoods that are available to residents of poor areas. We suspect that escape rates are higher in the West because metropolitan areas of this region have comparatively small and few suburban communities that, through land-use regulations and other growth management policies, tend to restrict the in-migration of poor residents. Ample supplies of recently constructed housing help to retain people in nonpoor neighborhoods. Future research on factors affecting the ability to escape or evade distressed neighborhoods might benefit from exploring further other contextual influences on residential mobility.

Beyond these theoretical concerns, our results speak on a general level to several issues in urban policy. One such issue involves how best to facilitate the geographic dispersal of minority residents of low-income and underclass neighborhoods (Hughes 1993; Wilson 1987). Some argue that improving the human capital of underclass families and individuals is the most profitable strategy, since, as Wilson (1987, p. 158) puts it, "social mobility leads to geographic mobility." Others suggest that efforts to combat racial discrimination in the housing market are necessary to expand minority mobility prospects (e.g., Massey and Denton 1993). This view, which provides the impetus for initiatives such as the Gautreaux program (Rosenbaum and Popkin 1991), argues that integrating middle-class neighborhoods by race will improve housing opportunities and enhance residential mobility for underclass residents. A third view also focuses on the housing market but argues for a universalistic rather than a race-based, strategy. This approach implies that integrating neighborhood housing opportunities by social class would best facilitate the movement of minority residents out of distressed neighborhoods. That is, creating a more diverse mixture of low- and middle-income housing units within neighborhoods will, given the intersection of race and class, produce a movement of low-income minorities out of poor areas. Our findings, which admittedly speak somewhat obliquely to these policy concerns, nonetheless suggest that there is merit to all three approaches. High levels of education and income both increase the probability that black residents of poor neighborhoods will leave them for better ones and reduce the probability that they will move from nonpoor to poor areas. At the same time, however, we observe suggestive evidence that black mobility out of distressed (especially underclass) neighborhoods is also facilitated by higher levels of housing integration both by race and by poverty status. Our findings also suggest, however, that integrating neighborhoods by race may

diminish the likelihood that *white* residents of poor neighborhoods will leave them for more advantaged areas.

A second policy issue concerns efforts to empower residents of low-income neighborhoods by increasing their stake in community outcomes. Perhaps the most frequently suggested mechanism for this empowerment involves increasing the rate of home ownership in low-income neighborhoods (Cisneros 1995). While increases in home ownership may very well improve the quality of life and community integration of low-income neighborhoods, our findings reveal that such increases will almost surely have the unintended consequence of reducing the likelihood that residents of these areas will leave them for better neighborhoods. In this sense, policies that aim to disperse minority residents of low-income neighborhoods and policies that attempt to empower them through home ownership may prove to be at cross-purposes.

Finally, our results should serve to encourage further efforts to integrate microlevel research on residential mobility with studies of spatially circumscribed housing opportunities in metropolitan areas. While families and individuals may decide whether and where to move primarily on the basis of their personal characteristics, for blacks as well as whites, the ability to actuate these preferences depends on the distribution of opportunities embedded in the local social structure. Moreover, further research on *microlevel* mobility processes should provide valuable insight into the sources of change in *macrolevel* spatial distributions. In any event, a comprehensive explanation for why some people can—and others cannot—escape distressed neighborhoods will surely require reference both to individual attributes and to the external constraints generated by the social context.

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