

## Homeownership and Neighborhood Stability

William M. Rohe  
*University of North Carolina at Chapel Hill*

Leslie S. Stewart  
*Research Triangle Institute*

### *Abstract*

A major objective of many neighborhood revitalization programs is to increase homeownership. Conventional wisdom holds that this is one of the best ways to stabilize areas in decline. This article questions convention by presenting a conceptual model of how homeownership rates might affect various indicators of neighborhood stability and by determining whether there is support for this model in the literature. The article also presents an original analysis of the relationship between homeownership rates and two measures of neighborhood stability.

The literature review finds considerable support for an association between homeownership and both improved property maintenance and longer lengths of tenure. The analysis of census data similarly indicates less residential mobility and greater property value appreciation in areas with greater homeownership. Although initial values and citywide value changes appear to have much stronger effects on changes in property values than the tract homeownership rate, modest changes in homeownership rates are clearly associated with increased property values.

**Keywords:** Community development/revitalization; Homeownership; Neighborhood

### **Introduction**

Overwhelmingly the city dweller is not a homeowner, and since a transitory habit does not generate binding traditions and sentiments, only rarely is he truly a neighbor.  
—Lewis Wirth (1937, 17)

For a man who owns his own home acquires with it a new dignity. He begins to take pride in what is his own, and pride in conserving and improving it for his children. He becomes a more steadfast and concerned citizen of his community. He becomes more self-confident and self-reliant. The mere act of becoming a

homeowner transforms him. It gives him roots, a sense of belonging, a true stake in his community and well being.  
—Senator Charles Percy (1966, 2725B)

Expanding home ownership is vitally important to our country, because home ownership is critical both to individual economic opportunity and also to the building of strong communities.  
—Henry Cisneros (1995, 3)

These three quotes typify the common, long-held belief that, compared with renters, homeowners are better citizens, better neighbors, and even better persons. This belief can be traced to the very beginning of American culture. The dominant view of the colonists was that property ownership was a good indication of a person's moral worth. In fact, tenants were not allowed to participate in federal elections until 1860 (Dreier 1982).

The view that property owners are better has persisted throughout the years. Today, government-supported homeownership programs are often justified on the grounds that they benefit society as well as the individuals involved. Homeowners are believed to be more involved in civic affairs and to maintain their properties at a higher standard. These activities, in turn, are thought to lead to more stable neighborhoods.

The relationship between homeownership and neighborhood stability is taken for granted by housing practitioners and others involved in neighborhood revitalization programs. A major objective of those programs is often to increase the proportion of homeowners to stabilize or upgrade the area.

Because it has been taken for granted, the purported relationship between homeownership rates and neighborhood stability has escaped close scrutiny. Many questions have no clear answers: What empirical support is there for a relationship between homeownership rates and various indicators of neighborhood stability? How does homeownership lead to greater stability? Are any stabilizing influences of increased homeownership a result of the persons who are attracted to that form of tenure, or is there something about homeownership that changes a person's behavior?

In this article, we explore the relationship between homeownership and neighborhood stability by (1) developing a conceptual model of the relationship, (2) reviewing the existing literature for support of the various links in the model, and

(3) presenting an original analysis of the relationship between homeownership and two measures of neighborhood stability.

### **Conceptual model of homeownership and neighborhood stability**

In claims about homeownership and neighborhood stability, the terms *neighborhood* and *stability* are rarely defined; it is not clear what homeownership is supposed to be stabilizing. Studies of neighborhood-level issues have used a variety of definitions for *neighborhood*, and what people consider to be their neighborhood can include the area within a 10-minute walk of home or the area encompassing all of a resident's key nodes of activity (e.g., grocery store, school, bank, church) near home. Studies of specific cities or regions have sometimes used these more fluid definitions of a neighborhood or the definitions established by city planning departments. National studies, however, have usually relied on census tracts or other combinations of blocks as the best available proxy for a neighborhood.

Also, the term *neighborhood stability* is somewhat misleading. When people use this term in the context of the effects of homeownership, they are often referring to what might be more accurately termed *neighborhood health*. Although they may be concerned with stabilizing conditions in relatively problem-free areas, they certainly are not interested in stabilizing conditions in areas that have severe physical and social problems. Rather, they are interested in how increasing the homeownership rate might change these areas for the better. The argument seems to be that increased homeownership rates in areas that are experiencing problems will lead to neighborhood health, defined in terms of improved physical and social conditions and higher property values. For the purpose of this article, however, we will continue to use the term *neighborhood stability* because it is more commonly used.

At least four aspects of neighborhoods might be stabilized by homeownership:

1. Length of tenure of the current residents
2. Property values
3. Physical condition of properties
4. Social conditions in the neighborhood, such as school dropout or crime rates

Although these measures of stability may be positively correlated at the aggregate level, particular neighborhoods can be judged stable on some indicators and unstable on others. A neighborhood may have rapid turnover of residents, for example, but be stable in all other respects.

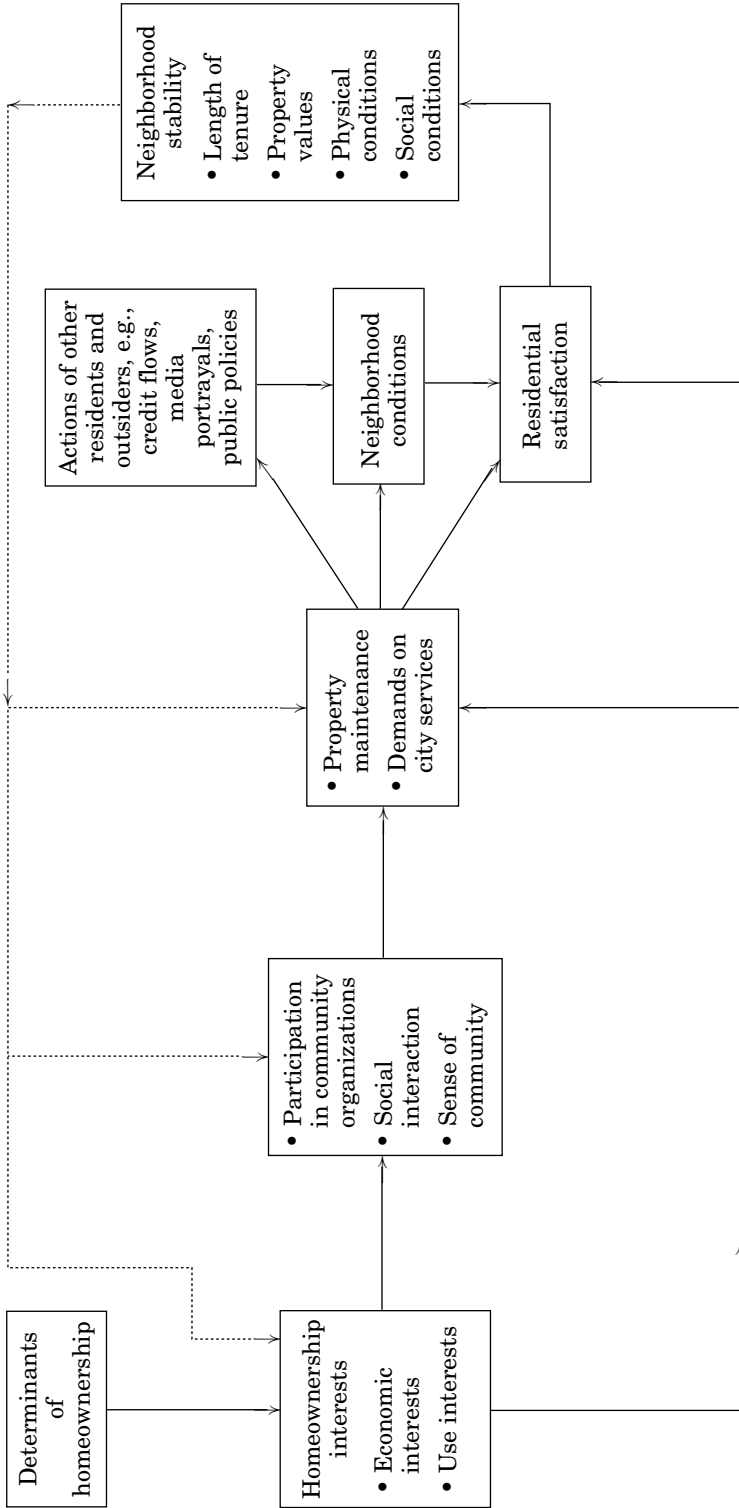
A related issue is that there are no clear criteria for defining stability and instability. Most neighborhoods are changing on at least one of these four indicators. What amount of change is within normal or acceptable limits, and what amount is beyond those limits? Also, should stability or change in a neighborhood be defined relative to some larger geographic unit, such as the city or metropolitan statistical area (MSA), or should it be defined in absolute terms? Finally, should we be as concerned about large positive changes in stability indicators, such as property values, as we are about negative changes? Increasing homeownership may result in displacement and gentrification, which negatively affect at least some of the households in a neighborhood. Most of the claims concerning homeownership and neighborhood stability ignore this possible consequence.

Building on a preliminary literature review, we developed a conceptual model linking homeownership with neighborhood stability (see figure 1). The model starts with the tenure decisions made by households. It is important to understand the factors that influence a household's decision to rent or own its dwelling unit. Those deciding to purchase their homes are different from renters in a number of social characteristics. Thus, any increase in neighborhood stability may be a result of the types of households that are drawn to homeownership rather than the experience of homeownership itself. The model also suggests that homeownership alters the domestic property interests of households. Unlike renters, homeowners have economic (or exchange) interests in their property. They may also have heightened use (or consumption) interests because it is more costly and difficult for homeowners to move.

These additional interests in domestic property, the model suggests, lead to greater social interaction within, and psychological identification with, the neighborhood. Homeowners may be more likely to participate in community organizations designed to protect their interests, more likely to get to know their neighbors, and more likely to develop a strong sense of community.

The additional property interests along with heightened social interaction and sense of community affect both the extent of property maintenance and the demands for public and private

Figure 1. Conceptual Model: Effect of Homeownership on Neighborhood Stability



services. Better maintenance and increased demands on institutions outside the neighborhood—such as city government, financial institutions, and real estate companies—affect neighborhood conditions directly and indirectly through their influence on the actions of outside institutions whose policies affect neighborhood conditions.

The model also suggests that improved neighborhood conditions lead to higher levels of residential satisfaction and ultimately to greater neighborhood stability, as defined by longer lengths of tenure, stable property values, improved property upkeep, and stable social conditions.

### **Testing the conceptual model through a review of the literature**

We used this model to organize our review of the available literature. We searched for theoretical and empirical literature on each of the implied relationships, represented by arrows in figure 1.

#### *Who becomes a homeowner?*

One confounding factor in research on homeownership is the self-selection involved in who owns and who rents. Because households cannot be randomly assigned to one form of tenure or the other, it is difficult to determine whether differences in the behaviors of owners and renters result from their different property interests or from the characteristics that influence tenure decisions. Thus, these characteristics must be understood and taken into account in our consideration of the effects of homeownership on neighborhood stability.

The empirical literature on the determinants of homeownership points to three sets of factors underlying the homeownership decision: socioeconomic characteristics of the household, expectations of household mobility, and local market conditions. Virtually all the studies find that the decision to own is positively associated with household income, family size, marital status, and the age of the head of household, even after controlling for many other variables (Carliner 1974; Chambers and Diamond 1988; Cooperstein 1989; Dreier 1982; Henderson and Ioannides 1987; Linneman and Wachter 1989; Megbolugbe and Linneman 1993; Moore 1991; Ong and Grigsby 1988).

A smaller number of studies suggest that wealth, income tilt (a measure of the upward trend in income), and permanent income (a measure of the longer term stability of income) are also positively associated with the decision to purchase a home (Henderson and Ioannides 1986; Linneman and Wachter 1989; Wachter and Megbolugbe 1992). Age, marital status, and family size are components of the life cycle concept and indicate that families with or expecting children generally *prefer* to own a single-family home.<sup>1</sup> The income and wealth variables, on the other hand, indicate a *capacity* to own.

Race and ethnicity are also important predictors of homeownership, even when income, family status, and other socioeconomic variables are taken into account (Carliner 1974; Dreier 1982; Henderson and Ioannides 1987; Megbolugbe and Linneman 1993). Blacks and Hispanics are less likely to own, probably because of discrimination in the lending and real estate industries, but cultural differences in the importance placed on homeownership may also play a role.

Previous and expected mobility has also been found to influence the decision to purchase. Those who have moved often and those who plan on moving again in the near future are less likely to buy, other things being equal (Brown 1981; Chambers and Diamond 1988; Linneman and Wachter 1989; Shelton 1968; Wachter and Megbolugbe 1992). The most likely reason is the transaction costs associated with both buying and selling real estate. Given a moderately appreciating housing market, it often takes three or more years of residence to reach the break-even point (Shelton 1968).

Finally, local market factors can influence the decision to buy. The availability of units suitable for owner occupancy, the average price of dwelling units, housing price inflation, and the relative cost of owning versus renting all have been found to affect home purchase decisions (Brown 1981; Carliner 1974; Henderson and Ioannides 1987; Linneman and Wachter 1989; Megbolugbe and Linneman 1993). Homeownership is more likely where there is a high proportion of owner-occupied units; greater supply creates a greater opportunity to own. Homeownership is lower in areas with high housing costs; although if an area is

---

<sup>1</sup> This preference is largely due to the amenities typically associated with single-family units—such as more interior space and a yard—and to the high proportion of single-family units that are for sale, not for rent. According to the 1991 American Housing Survey, 84.9 percent of all single-family units were owner-occupied (or vacant and for sale), while only 15.1 percent were renter-occupied (or vacant and for rent).

also experiencing rapid price appreciation, homeownership may be higher because people see an opportunity to make a good investment. Finally, homeownership is higher in areas where there is a smaller gap between the cost of owning and the cost of renting.

Thus, homeowners and renters are clearly different in their socioeconomic characteristics and mobility expectations, and local market conditions are important in determining who owns and who rents. Although many studies on the effects of homeownership statistically control for some of these differences, the influence of self-selection is impossible to rule out. That is to say, causal relationships between homeownership and either individual behaviors or indicators of neighborhood stability are impossible to establish with confidence.

### *Homeownership and property interests*

The potential effects of homeownership on neighborhood stability are influenced by the different interests that owners, landlords, and renters have in residential property. Each of the three groups gains different advantages by owning or occupying residential property.

Property interests can be divided into two general categories: economic interests and use interests. Economic interests relate to the potential for financial gain and wealth accumulation. Use interests relate to the enjoyment, satisfaction, and other noneconomic benefits of residing in a particular house or apartment. These two categories of interests can be divided. Davis (1991), for example, identifies three economic interests (equity, liquidity, and legacy) and three use interests (security, amenity, and autonomy).

Homeowners, landlords, and renters have different combinations of interests in residential property. Unlike either renters or landlords, homeowners are generally interested in both economic and use interests; they hope to build wealth through property appreciation and also to enjoy and socially benefit from their residence. Landlords, particularly nonresident landlords, are generally interested in the economic return through present income or property appreciation. Renters are mainly interested in the use value of property; they are primarily concerned with the enjoyment and other noneconomic benefits of residing in a particular dwelling.



The interests of these three groups suggest and explain differences in the behavior of their members. Homeowners might be expected to be the most active in maintaining or improving neighborhood conditions because they will benefit both economically and socially if these activities are successful. Moreover, the use interests of homeowners mean that they sometimes take actions that are not economically rational. They may, for example, make improvements whose costs will not be recouped at the time of sale. Or they may fight gentrification, even though it is in their economic self-interest.

With fewer interests at stake, both landlords and tenants might be expected to be less active in maintenance and improvement. Landlords have economic interests, but their everyday domestic experiences may not be directly affected by the condition of their properties or the surrounding neighborhoods. Tenants have use interests in their dwelling units, but their economic well-being is not as obviously affected by declining conditions in the dwelling unit or neighborhood. Also, moving is relatively easy for tenants, although the loss of social networks and familiar surroundings should not be undervalued.

In the sections that follow, we assess the empirical support for the behaviors predicted by the domestic property interest analysis.

### *Homeownership, social participation, and sense of community*

One way that homeownership may influence neighborhood stability is through homeowners' social participation in and attachment to the local community. To protect their use and economic interests, homeowners may be more likely to participate in local neighborhood organizations and to associate informally with local residents. Participation in local organizations should bolster their capacity to ward off outside threats by both public and private entities and inside threats such as poor property maintenance by individual property owners. In addition, frequent interaction with neighbors may keep homeowners up to date on threats to neighborhood stability and result in social pressure to maintain property at some minimum standard.

The economic and use interests of homeowners, and their tendency to move less often than renters, may also lead them to feel a greater sense of commitment to their local communities. According to Davis (1991, 87), "the relational advantages of

domestic property link together neighboring parcels and neighboring actors in a 'community of fate'. Those who have a stake in property have a stake in place as well." What evidence is there for these claims of greater social participation and commitment to the community?

The empirical evidence indicates that homeowners are indeed more likely than renters to participate in local organizations, even after controlling for income, education, and other socioeconomic characteristics (Ahlbrandt and Cunningham 1979; Baum and Kingston 1984; Cox 1982; Ditkovsky and van Vliet 1984; Fischer et al. 1977; Hunter 1975; Jeffers and Dobos 1984; Kingston, Thompson, and Eichar 1984; Lyons and Lowery 1989; Rohe and Stegman 1994; Saunders 1990; Steinberger 1981; Taub et al. 1977; Wandersman 1981). Only one of the studies reviewed failed to find a statistically significant association between homeownership and participation (Kingston, Thompson, and Eichar 1984). These studies also suggest that participation increases with age, education, income, and the perception of neighborhood problems (Cox and McCarthy 1980; Hunter 1975; Rohe and Stegman 1994; Taub et al. 1977; Tomeh 1973).

The weight of the evidence also supports an association between homeownership and informal participation, such as frequency of interactions with neighbors, although this evidence is not as extensive or consistent as it is for participation in local organizations. We found five studies that report a positive relationship between homeownership and informal social participation (Baba and Austin 1989; Baum and Kingston 1984; Fischer 1982; Hunter 1975; Jeffers and Dobos 1984), two studies that show no statistically significant relationship (Fischer et al. 1977; Taub et al. 1977), and two studies that show a negative relationship between homeownership and informal social interaction (Rohe and Stegman 1994; Saunders 1990). Of these last two studies, one was conducted in Britain and relied on bivariate analysis only, and the other involved a group of relatively new homeowners in central-city neighborhoods. Over a longer time, their informal social interactions may more closely resemble those found in the majority of studies, since length of residence is associated with the amount of informal interaction (Baba and Austin 1989; Fischer 1982; Jeffers and Dobos 1984; Kasarda and Janowitz 1974).

Also, considerable evidence supports a positive association between participation in local organizations and informal interaction, although the direction of this relationship is not clear

(Ahlbrandt and Cunningham 1979; Greensberg, Rohe, and Williams 1985; Hunter 1975; Jeffers and Dobos 1984; Kasarda and Janowitz 1974). These two activities probably have a reciprocal influence, with one type of involvement leading to increased involvement in the other.

Research on the relationship between homeownership and neighborhood commitment (as measured by questions about effective attachment to the area) is relatively sparse but does indicate that homeowners have a stronger commitment to their local area than renters do (Ahlbrandt and Cunningham 1979; Austin and Baba 1990; Fischer et al. 1977). In addition, participation in local organizations has been found to be associated with higher levels of neighborhood commitment (Ahlbrandt and Cunningham 1979; Babchuk and Edwards 1965; Litwak 1961; Podolefsky and DuBow 1980; Wandersman, Jakubs, and Giamartino 1981).

### *Homeownership, property maintenance, and demands on public and private organizations*

There are a variety of reasons that homeowners might be expected to maintain their dwelling units at a higher standard than landlords and tenants (Galster 1987a). First, the condition and overall attractiveness of a dwelling unit, particularly if it is owned, reflects the householder's social status and personal characteristics. As Downs (1981, 466) notes, "since these [non-housing-related] status symbols are not recognized in our society, a household's place of residence becomes a central manifestation of social status." Renters can blame poor property maintenance on their landlords, but homeowners must assume full responsibility for the condition of their dwelling units.

Second, as noted above, homeowners have stronger social ties to their neighbors than either tenants or landlords do and are more likely to be subject to social pressure to maintain their properties at some minimum level. As noted by Taub, Taylor, and Dunham (1984, 127), "people's actions are not entirely independent of the social context. . . . Many people are socially pressured into upkeep spending because they do not want their home to be one of the worst looking on the block."

Third, homeowners are more likely than landlords to rely on their own labor in making home repairs and improvements. Thus, the out-of-pocket costs of these repairs and improvements are reduced.

Fourth, homeowners can accurately predict the kinds of repairs and improvements that will enhance their enjoyment of the property. Given limited experience with a unit and its occupants, a landlord may have a more difficult time predicting what repairs and improvements will be valued by the tenants.

Finally, for homeowners, the connection between the care of their dwelling unit and financial return upon termination of occupancy is more direct. The financial effect of poor care for tenants is typically limited to the amount of their security deposit; homeowners have no such upper limit.

Research consistently shows that homeowners are more likely than landlords to undertake repairs and that they spend more on them (Galster 1983, 1987a; Grigsby 1963; Mayer 1981; Peterson et al. 1973). The studies by Galster and by Mayer provide the most convincing evidence because they control for the characteristics of the occupants as well as the properties. Some studies also indicate that resident landlords maintain their properties at a higher level than absentee landlords (Mayer 1981; Schafer 1977). These results have led Galster (1987a, 1990), Grigsby (1963), and others to recommend increasing the rate of homeownership to improve housing conditions in lower income areas. Galster (1987a, 296), after considering the evidence from a two-city study, concludes with the following:

If nontrivial numbers of previously rented dwellings are converted to owner-occupancy in a given neighborhood, one can predict that the overall levels of upkeep in that area will be enhanced greatly. The expected impact likely is of a much larger degree than would ensue even from dramatic increases in resident socioeconomic status, optimistic neighborhood expectation, or neighborhood cohesiveness. . . . Indeed, expanding the number of homeowners appears to be the single most potent means for encouraging the upkeep of dwellings in a neighborhood. And the differences are even more dramatic when considering low-income occupants.

The literature on maintenance expenditures among homeowners indicates that they increase with local social involvement, income, family size, and confidence in the future of the neighborhood (Ahlbrandt and Cunningham 1979; Galster 1983, 1987a; Goetze 1979; Pedone, Remch, and Case 1980; Shear 1983; Varady 1986b; Winger 1973). Factors that have been found to decrease maintenance expenditures include longer length of

residence and increased concern about racial change in the neighborhood (Mendelson 1977; Shear 1983; Varady 1986b).

Turning to the relationship between homeownership and demands on public and private organizations, we have already seen that homeowners are more likely to participate in local organizations, which in turn are often involved in lobbying and other activities designed to protect the interests of local property owners (Henig 1982; Lyons and Lowery 1989; O'Brien 1975; Rohe and Gates 1985). Although these lobbying efforts are not always effective, the literature on neighborhood groups contains many examples of successful efforts to ward off proposed projects seen as detrimental to the interests of neighborhood residents (Rohe and Mouw 1991; Taub, Taylor, and Dunham 1984). Neighborhood groups have also banded together to form umbrella organizations at both local and national levels to advocate for changes in government policy and in the practices of financial institutions, real estate firms, insurance companies, and other organizations whose activities affect neighborhood conditions. At the national level, the Home Mortgage Disclosure Act and the Community Reinvestment Act are clear evidence of the effectiveness of low- and moderate-income neighborhood organizations in getting Congress to outlaw practices, such as redlining, that contribute to the decline of neighborhoods. At the local level, many communities have passed laws against blockbusting<sup>2</sup> and other practices that undermine the stability of neighborhoods.

### *Homeownership and residential satisfaction*

Homeownership might also be expected to have both direct and indirect positive effects on residential satisfaction. Homeownership may directly improve satisfaction through the greater control that owners generally have over their dwelling units. They can alter their units to better suit their needs, and as long as they are current on their mortgage and taxes and are not in the way of a new road or other public project, they have security of occupancy. Homeownership may have an indirect effect through its impact on local social involvement and property maintenance. To what extent is there evidence in the empirical literature for a positive relationship between homeownership and residential satisfaction?

---

<sup>2</sup> Blockbusting is the practice of real estate agents' aggressively soliciting the listing of owned units by emphasizing impending racial change in an area and its likely negative impact on housing values. In response, some communities have outlawed door-to-door solicitation of house listings or the placement of "for sale" signs in yards.

Researchers typically distinguish between two types of residential satisfaction: satisfaction with the housing unit and satisfaction with the surrounding neighborhood. We will discuss the findings on each in turn.

The literature on the determinants of housing satisfaction consistently reports that owner-occupants are more satisfied than renters with their dwelling units. Moreover, this relationship holds when the influences of household, dwelling unit, and neighborhood characteristics are controlled for (Danes and Morris 1986; Galster and Hesser 1981; Kinsey and Lane 1983; Lam 1985; Lane and Kinsey 1980; Morris, Crull, and Winter 1976; Rent and Rent 1978; Taub, Taylor, and Dunham 1981; Varady 1983). The other factors that are positively associated with housing satisfaction are education (Danes and Morris 1986; Galster 1987b; Ha and Weber 1991; Lane and Kinsey 1980; Varady 1983), age or life cycle stage (Danes and Morris 1986; Galster 1987a, 1987b; Galster and Hesser 1981; Kinsey and Lane 1983; Lane and Kinsey 1980), the adequacy of space within the unit (Davis and Fine-Davis 1981; Galster 1987a, 1987b; Morris, Crull, and Winter 1976; Varady 1983), the physical condition of the unit (Galster and Hesser 1981; Kinsey and Lane 1983; Morris, Crull, and Winter 1976; Varady 1983), and satisfaction with the surrounding neighborhood (Davis and Fine-Davis 1981; Kinsey and Lane 1983; Morris, Crull, and Winter 1976; Rent and Rent 1978; Varady 1983). Blacks (Galster 1987a; Ha and Weber 1991; Kinsey and Lane 1983; Lane and Kinsey 1980; Varady 1983) and those who live in older units (Galster 1987a; Ha and Weber 1991; Kinsey and Lane 1983; Varady 1983) tend to be less satisfied with their units. The results concerning the effects of income and gender on housing satisfaction have been mixed (Galster 1987a; Kinsey and Lane 1983; Lane and Kinsey 1980; Morris, Crull, and Winter 1976; Varady 1983).

Although the results are not as extensive as they are for housing satisfaction, homeownership has also been found to be positively related to neighborhood satisfaction, even after controlling for a variety of other explanatory variables (Austin and Baba 1990; Baba and Austin 1989; Baldassare 1982; Fried 1982; Galster and Hesser 1981). Other major factors positively associated with neighborhood satisfaction are age or life cycle stage (Austin and Baba 1990; Baba and Austin 1989; Davis and Fine-Davis 1981; Galster 1987a), social interaction in the local area (Ahlbrandt and Cunningham 1979; Davis and Fine-Davis 1981; Galster 1987a; Ha and Weber 1991; Marans and Rodgers 1975; Miller et al. 1980), satisfaction with current house (Fried 1982; Galster and Hesser 1981; Ha and Weber 1991; Marans and Rodgers

1975), and proportion of homeowners in the area (Galster 1987a; Lee and Guest 1983; Varady 1986b). Factors that have been found to lower neighborhood satisfaction are perceived problems in the neighborhood (Ahlbrandt and Cunningham 1979; Davis and Fine-Davis 1981; Fried 1982; Galster and Hesser 1981; Marans and Rodgers 1975; Miller et al. 1980) and a racial mix in the neighborhood (Galster 1987a; Stipak and Hensler 1983). The research results concerning the effects of income, education, race, and length of tenure on neighborhood satisfaction show either no effect or an inconsistent effect (Ahlbrandt and Cunningham 1979; Austin and Baba 1990; Baba and Austin 1989; Davis and Fine-Davis 1981; Galster 1987a; Miller et al. 1980; Stipak and Hensler 1983).

### *Homeownership and residential mobility*

Of all the relationships suggested in our model, the one between homeownership and mobility (length of tenure) has been the most frequently studied. Moreover, the collective findings of these studies are the most consistent and the strongest. All but one of the studies reviewed found that homeowners are much less likely to be planning a move or to have moved recently (Ahlbrandt and Cunningham 1979; Goodman 1974; Hamnett 1991; Hanushek and Quigley 1978; Meyer, Yeager, and Burayidi 1994; Newman and Duncan 1979; Quigley and Weinberg 1977; Roistacher 1974a; Rossi 1955; Speare 1974). This relationship holds even when socioeconomic differences between owners and renters are taken into account. The one study that found homeowners more likely to move than renters involved residents in central-city neighborhoods that were experiencing rapid racial transition (Varady 1986b).

Several factors account for the relative residential stability among homeowners. Because of the greater transaction costs associated with both buying and selling a unit, those who expect to stay in an area for only a short time normally choose to rent. In other words, it is mainly those who plan on staying for an extended period who buy, and in most cases their predictions are correct. As stated by Roistacher (1974a, 50), "the fact that a family owns a home is to a great extent a statement of its commitment to maintaining its present employment and housing for a long period of time; hence, homeownership may be viewed as the result of other forces which discourage mobility." Purchasing a home might be seen as a symbolic act announcing that a household is committed to remaining in a community for a long time. In addition, once a home is purchased, the transaction costs

associated with moving also act to discourage mobility, at least in the short run.

Beyond tenure status, residential mobility or mobility plans are also affected by a variety of socioeconomic, attitudinal, and neighborhood characteristics. Mobility is positively associated with household income (Goodman 1974; Hamnett 1991; Newman and Duncan 1979; Roistacher 1974a), change in income (Quigley and Weinberg 1977; Roistacher 1974a), household size (Roistacher 1974b; Rossi 1955), change in household size (Roistacher 1974a; Rossi 1955), and minority status (Goodman 1974; Varady 1986b). It is negatively associated with the age of the head of household (Ahlbrandt and Cunningham 1979; Goodman 1974; Murie 1991; Roistacher 1974a; Rossi 1955). In addition, dwelling unit crowding (Goodman 1974; Newman and Duncan 1979; Roistacher 1974a), dissatisfaction with the neighborhood (Ahlbrandt and Cunningham 1979; Galster 1987a; Rossi 1955; Varady 1986b), lack of confidence in the future of the neighborhood (Varady 1986a, 1986b), and neighborhood racial change (Varady 1986a, 1986b) have been found to foster mobility, while social involvement has been found to reduce it (Ahlbrandt and Cunningham 1979; Connerly 1986; Rossi 1955; Varady 1986b).

### *Homeownership and other measures of neighborhood stability*

Evidence about the relationship between homeownership and other measures of neighborhood stability—including property values, physical conditions, and social conditions—is less extensive. We have been unable to find, for example, any direct test of the relationship between homeownership and property values. Nor have we found studies of the association between the proportion of owner-occupied units in a neighborhood and property values.

We have, however, presented substantial evidence that owner-occupants are more likely to invest in dwelling unit maintenance and improvements. This investment should be reflected in the values of individual properties. In analyzing Canadian data on maintenance expenditure and housing value, Chinloy (1980, 105) concludes that “[lack of] maintenance represents a large portion of observed gross depreciation.” Moreover, given the interdependence of property values in an area, we should also expect proper maintenance to have some positive cumulative influence on the values of all properties in the immediate vicinity. The effect of the homeownership rate in a neighborhood, however, may be



small compared with other factors that affect property values. The effects of major public projects (such as a new highway or passenger rail system), for example, may overwhelm any change from an increase or decrease in the homeownership rate. Clearly, more research is needed on the full set of factors that affect housing values.

Turning to the relationship between homeownership and physical conditions, we find that homeowners are more likely to invest in the upkeep and improvement of their properties and more likely to participate in neighborhood organizations. Thus, we anticipate that individual owner-occupied units are typically in better condition than rental units and that areas with a higher proportion of homeowners are in better condition overall than areas with a higher proportion of rental units. Two studies that included direct observation of dwelling unit conditions did find that owner-occupied dwellings were 10 to 15 percent less likely to have interior, exterior, or structural problems even after controlling for a host of occupant, structural, and neighborhood characteristics (Jeffers and Dobos 1984; Kasarda and Janowitz 1974). These two studies, however, compared a sample of the owner-occupied units in the study areas with all renter-occupied units in those areas. They did not look specifically at the condition of units owned by low-income households. Thus, these studies tell us little about the relative condition of homes owned by low-income households.

In fact, Doling (1986) studied the condition of housing units owned by low-income persons in Britain and concluded that “owner-occupied houses now account for the major share of the total national cost of outstanding repairs. . . . There are many owner occupiers who, whatever the punitive incentive for maintaining their house, simply do not have sufficient resources to do so” (p. 185). He criticized low-cost ownership initiatives for failing to account for the “running costs” associated with ownership. Great caution should be exercised in assuming that units owned by persons in all income categories are in better condition than those of comparable renters.

We have found no direct evidence, however, of an association between the proportion of homeowners in a neighborhood and the level of property upkeep by owner-occupants. That is, do homeowners who live in neighborhoods with a higher proportion of owner-occupants maintain their properties at a higher level? The two studies that have addressed this issue found no association between the proportion of homeowners in a neighborhood

and investment in property upkeep or property condition (Galster 1987a; Varady 1986b).

Given the greater participation of homeowners in local organizations, one might also expect the public areas to be better maintained in neighborhoods with a high proportion of homeowners. This assumes, however, that these local organizations can influence the actions of city officials; that they can positively affect street maintenance, park maintenance, sanitation, and other services provided by city agencies; or that they sponsor self-help activities that improve neighborhood conditions. Although the evidence is not extensive and is based largely on case studies, many neighborhood organizations do seem to be effective in influencing the quality of service delivery to their areas (Henig 1982; Knoke and Wood 1981; Rohe and Gates 1985; Schoenberg and Rosenbaum 1980).

One might expect that homeownership, by itself, would have little impact on neighborhood social conditions such as crime, teen pregnancy, and the school dropout rate. Studies of these problems have focused on the influence of income, race, family composition, and other socioeconomic variables and have largely ignored the possible influence of homeownership. One recent study, however, suggests that homeownership may affect these behaviors. Green and White (1994) used four different data sets to test the influence of homeownership on dropout rates, arrest rates, and teen pregnancy rates. After controlling for race, sex, income, education, family composition, employment, length of tenure, and housing quality, they found that children of homeowners in each of the samples were less likely than children of renters to drop out of school, be arrested, or become pregnant. The explanation for this, they suggest, is that the homeowners may acquire transferable skills developed through managing their home environments (performing maintenance and becoming involved in the community). Although these results are intriguing, more research is needed to verify and explain these findings.

### *Reciprocal impact of neighborhood stability*

As suggested in our model, the relationship between homeownership and neighborhood stability is likely to be reciprocal. That is, living in a relatively stable neighborhood will further encourage participation in community organizations, local social interaction and attachment, property maintenance, neighborhood

satisfaction, and positive expectations about the future of the neighborhood.

Empirical literature on neighborhood stability and these attitudes and behaviors is scant, primarily because it is difficult to collect data sets that contain both individual and neighborhood variables. Some studies, however, do provide evidence for reciprocal effects of neighborhood stability. Those who live in areas with lower turnover rates, for example, have been found to be more satisfied with their neighborhoods, to have more local friendship ties, and to have greater confidence in the future of the area (Galster 1987a; Sampson 1988; Varady 1986b). They may not, however, be more likely to participate in local community organizations or engage in housing improvement efforts (Sampson 1988; Varady 1986b).

The physical condition of neighborhoods is also associated with important attitudes. With other factors held constant, those who live in areas with better maintained housing units are more likely to be satisfied with their neighborhoods (Galster 1987a). The research findings on the relationship between neighborhood housing conditions and upkeep and repair, however, are mixed. Although one study found a positive relationship between housing conditions and improvement expenditures (Boehm and Ihlenfeldt 1986), three others found no such relationship (Galster 1987a; McConney 1985; Varady 1986b).

Finally, the limited evidence on the relationship between repair activity and perceived positive changes in the market value of properties in the neighborhood is mixed. One study reported a positive relationship between anticipated market value increases and improvement plans (Ahlbrandt and Cunningham 1979), while another found no relationship between the perception of rising market values and actual repair activity (Varady 1986b).

### **Testing the model through an original empirical analysis**

To test the findings from the literature review, we constructed a database on homeownership and neighborhoods using U.S. census data for 1980 and 1990 and developed two original empirical models of neighborhood stability.

*Description of the data set*

Tract-level data from the Census of Population and Housing (Summary Tape File 3A [STF3A]) form the basis of our analysis file. From among the numerous geographic levels of aggregation the Census Bureau computes, the census tract was selected as the best available proxy for a neighborhood because it is the closest in size to a neighborhood. Tracts typically have populations between 1,000 and 7,500.

To examine neighborhood characteristics at a given time (1990) as well as over time (1980 to 1990), we constructed an analysis file using data from both censuses. Problems arose where tract boundaries were altered between 1980 and 1990, because there is no straightforward way to discern the changes in other variables in these tracts. Tracts where boundary changes affected 1990 population counts by more than 2.5 percent were excluded from our sample.<sup>3</sup>

Recognizing that neighborhoods are influenced by the conditions in the cities around them, we also accessed census data for MSAs from Summary Tape File 3C on several of the same measures used at the tract level.

We identified and selected only nonaffluent urban neighborhoods (see figure 2), because these types of neighborhoods are of key policy interest to the U.S. Department of Housing and Urban Development and Fannie Mae. Our resulting analysis file contains 2,569 neighborhoods that (1) are located within the urbanized areas of cities across the United States, (2) are nonaffluent compared with their larger MSAs, (3) had limited growth in new housing stock between 1980 and 1990, and (4) have limited populations in group quarters such as nursing homes or prisons.

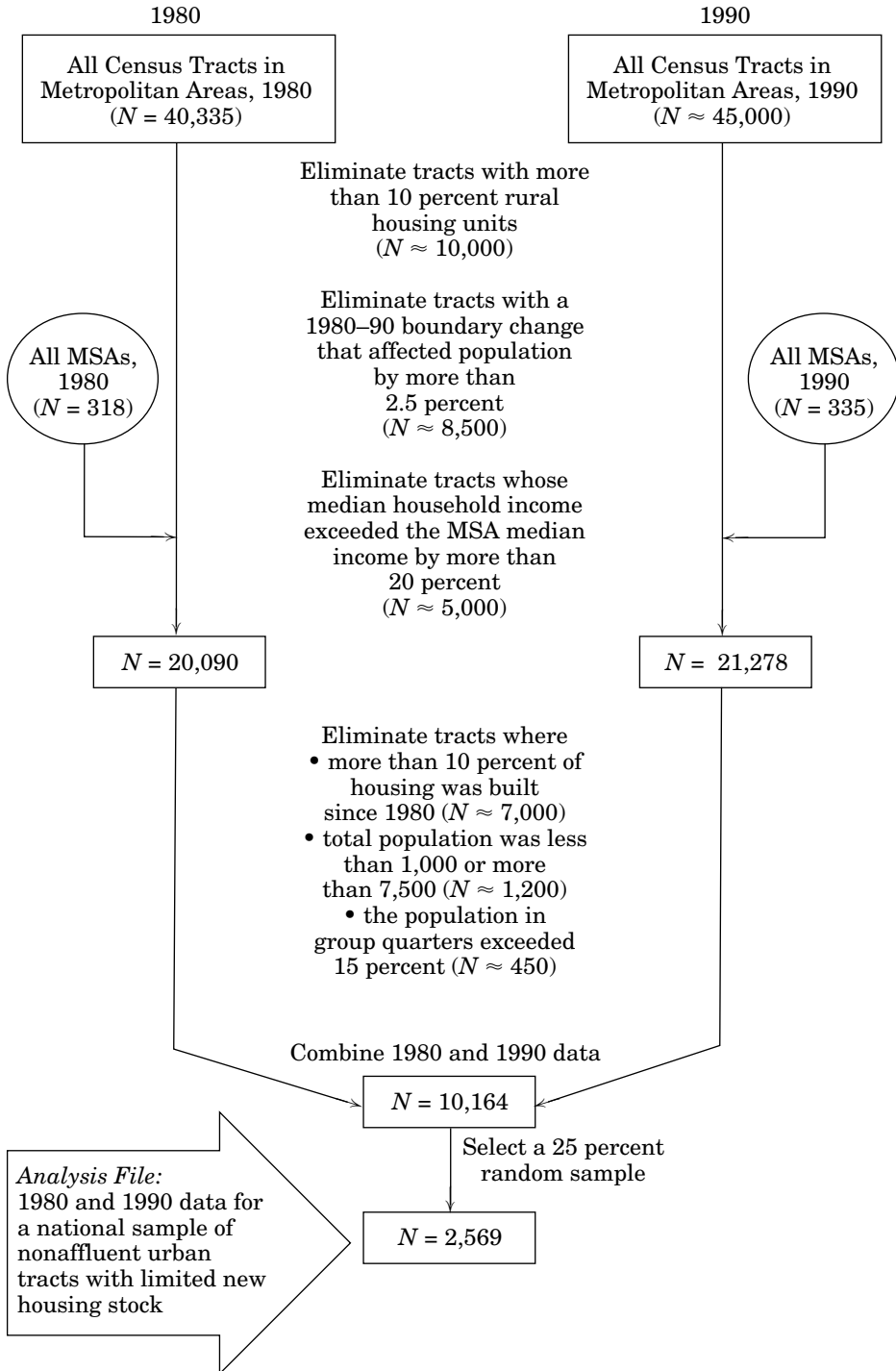
*Measures of homeownership and neighborhood stability*

Previous studies examined the determinants of homeownership, treating homeownership as an outcome. This analysis treats homeownership as a theoretical cause of neighborhood conditions. In the two models we present below, neighborhood stability is the outcome, or dependent variable, and homeownership is the key independent variable.

---

<sup>3</sup> We identified these tracts with the Census Bureau's Topographically Integrated Geographic Encoding and Referencing (TIGER) System/Census Tract Comparability File for the Census of Population and Housing, 1990.

Figure 2. Analysis File Creation from U.S. Census Data



Homeownership rate is constructed for each census tract as follows:

$$\text{Homeownership rate} = \frac{(\text{owner-occupied housing units}) + (\text{vacant units for sale})}{(\text{occupied housing units}) + (\text{vacant units for sale or rent})}$$

This measure of ownership includes all owned properties in the neighborhood that are either occupied or vacant and on the market. The denominator excludes “other vacants” such as boarded-up properties.

Any of the measures of neighborhood stability described earlier would be interesting to examine. However, the two best measures of stability that can be constructed with census data are the length of tenure of the current householder and the property value of owner-occupied housing units.<sup>4</sup> Therefore, we specified two models, each using one of these as the dependent variable.

In addition to the measures of homeownership and neighborhood stability, our models include several other independent variables as control variables. These are characteristics of the households, economy, and housing units that may also have effects on neighborhood stability, effects for which we want to control to isolate the effect of homeownership. The mix of control variables is slightly different for each model and is discussed separately below.

### *Model of homeownership's effect on length of tenure*

As the measure of length of tenure, we used the percentage of occupied units in the tract where the current householder had resided for five or more years,<sup>5</sup> hypothesizing that neighborhoods where a high percentage of residents stay for that long would be more stable than neighborhoods where people move more often.<sup>6</sup>

<sup>4</sup> The American Housing Survey (AHS) includes data that could be used to measure stability, but its geographic units of analysis (cities and 10-unit clusters) are not good approximations of a neighborhood. Only by linking AHS city or cluster data with census tract data could researchers access the AHS's more qualitative data on neighborhood conditions.

<sup>5</sup> Census data on length of tenure are in categories by the year the householder moved in, such as (in 1990) 1989 to March 1990, 1985 to 1988, and 1980 to 1984. These categories allow the construction of only a threshold measure of length of tenure, not a continuous measure such as mean length of tenure.

<sup>6</sup> An alternative hypothesis is that length of tenure may work to the detriment of neighborhood conditions or vitality if residents stay a long time but do not keep up their properties. Length of tenure is thus an incomplete measure of neighborhood stability.

Because the length of tenure as of 1990 is the outcome of interest in this model, the causal factors (independent variables) should predate it. In other words, the decision to have stayed in one's current residence for five or more years by 1990 was influenced by household and housing characteristics that existed prior to that time. Therefore, we used 1980 values for each of our independent variables as potential predictors of the percentage of 1990 householders who stay at least five years. In addition to the key independent variable, which is the 1980 homeownership rate in the tract, the model includes several other variables to control for population and housing characteristics that may affect length of tenure.

First, we expect (in part from our review of the literature) that householders in the middle age range (30 to 61), when careers tend to stabilize, are likely to stay in one home longer than young adults and retirees. One control variable is thus the 1980 percentage of householders in the tract who are between the ages of 30 and 61.

Similarly, we expect that households with children, particularly school-age children, are more likely to stay in one home longer than those without children, provided the household does not run out of space. The 1980 percentage of households with children and the 1980 tract-level mean number of bedrooms per unit are included as covariates in predicting length of tenure.

Another characteristic expected to influence the mobility of households is income. While families of all incomes may tend to stay in one home longer during certain phases of their life cycle, those with higher incomes are in a better position to move if they choose to do so. Because mobility opportunities and patterns may differ among racial groups, we also included as a covariate the percentage of 1980 householders who are black.

In addition to the mean number of bedrooms, we included as covariates several other housing characteristics that may affect the length of tenure: the 1980 percentage of owner-occupied units that are condominiums, the 1980 vacancy rate, the percentage of 1980 housing units built before 1940, and the percentage of 1980 housing units without complete plumbing facilities.

To predict the effect of homeownership rate on length of tenure, controlling for the additional factors discussed above, we used an ordinary least squares (OLS) regression model and determined the means for each model variable (see table 1).

*Table 1. Model of Homeownership's Effect on Length of Tenure, Parameter Estimates, 1980 to 1990*

	Parameter Estimate	Significance	Mean Value
Homeownership <sup>a</sup>			
Percentage of housing units that are owner-occupied <sup>b</sup>	0.3634	0.0001	50.08
Control variables <sup>a</sup>			
Percentage of householders ages 30 to 61	0.7547	0.0001	34.50
Percentage of households with children	0.1407	0.0001	42.00
Percentage of householders who are black	0.0944	0.0001	24.18
Median household income in tract <sup>c</sup>	-0.000665	0.0001	\$14,563
Mean number of bedrooms per unit	3.795	0.0001	2.28
Percentage of housing units that are vacant	-0.4774	0.0001	6.15
Percentage of owner-occupied units that are condominiums	0.1437	0.0001	9.98
Percentage of occupied housing units built prior to 1940	-0.0147	0.3073	9.80
Percentage of housing units without complete plumbing	0.2296	0.0333	1.62
Intercept	2.070	0.2509	

*Note:* The dependent variable is the percentage of 1990 occupied housing units where the householder has resided for five or more years. Analysis of variance: Mean of dependent variable = 54.52 percent;  $N = 2,442$ ;  $F = 304.1$ ; probability  $> F = 0.0001$ ;  $R^2 = 0.5557$ ; adjusted  $R^2 = 0.5538$ .

<sup>a</sup> 1980 data unless otherwise specified.

<sup>b</sup> Includes units that are vacant and for sale.

<sup>c</sup> 1979 data. Income data reported in each decennial census are annual figures for the previous full year.

Overall, this model explains more than half ( $R^2 = 0.56$ ) of the variance in length of tenure. Clearly other factors, such as overall satisfaction with the neighborhood, neighborhood conditions (including crime), and the career situations of householders,



affect the decision to move, but these variables are not available in census data.

This model does provide some neighborhood-level evidence to corroborate the literature review finding at the individual level that homeowners tend to stay longer in one home than renters do, even after controlling for family life course and housing characteristics. The parameter estimate for the homeownership variable suggests that, holding all the other factors constant, a 10-percentage-point increase in owner-occupied housing units in a tract would be associated with a 3.6-percentage-point increase in households that stay in their homes for five or more years. The causal relationship between tenure and length of tenure is likely to work in both directions, however: Tracts where people stay longer also tend to be tracts where people buy homes.

As expected, the age of the householder and the presence of children also are positively associated with length of tenure. The prevalence of householders ages 30 to 61 has an especially strong relationship: For every 10-percentage-point increase in householders in this age group, tracts have about a 7.5-point increase in the percentage of householders who stay five or more years.

The model also suggests that black householders and households with lower incomes tend to have higher percentages who stay five or more years. Each \$10,000 increase in the median household income of the tract predicts a 6.7-point drop in the percentage of households that stay in their homes for five or more years. Presumably, households with higher incomes often move on to more expensive homes. The signs on the coefficients for the race and income covariates suggest that length of tenure sometimes reflects a lack of household mobility, not necessarily neighborhood stability.

The size of the housing unit, as expected, has a strong positive association with the length of tenure. The coefficient suggests that tracts where housing units have an average of three bedrooms might expect the percentage of their households that stay for five or more years to be 4 points higher than in tracts with an average of only two bedrooms per unit.

The model also suggests, as expected, that higher vacancy rates are a deterrent to remaining in a tract for a long time. The vacancy rate is our best available proxy measure for neighborhood housing conditions or markets. Again, however, the model does not establish the causal relationship: Tracts with a higher turnover rate may also have higher vacancy rates.

Other things being equal, tracts with condominiums in 1980 had greater proportions of householders who stayed at least five years. Tracts with condominiums tend to be concentrated in large cities with high home prices such as New York and San Francisco, where condominiums in 1980 were among the only affordable homes available to own. A higher proportion of residents in the tract may have stayed longer either because they could not afford to buy up or because they could not sell their condominiums after interest rates declined and made single-family starter homes more affordable.

The prevalence of older housing stock (built before 1940) in a tract might be expected to be a deterrent to longer tenure, but its effect is not statistically significant in our model. Similarly, though lack of plumbing facilities might be expected to prompt people to move, it shows a weakly significant positive association with length of tenure. Again, length of tenure may be reflecting the lack of mobility of persons living in substandard housing rather than being a complete and valid measure of neighborhood stability.

This model, though limited, does support the hypothesis that tracts where there are high proportions of homeowners and middle-aged householders with children tend to have higher proportions of people who stay in their homes longer. Tracts with high proportions of lower income, however, also have higher proportions of people who remain for five or more years, suggesting that some tracts' residents remain longer because of lack of mobility rather than commitment to the well-being of the neighborhood.

### *Model of homeownership's effect on property values*

Recognizing the above limitations of length of tenure as a measure of neighborhood stability, we also developed a model using property value as the outcome measure. Like length of tenure, property values measure the desirability of a neighborhood, but they are a better indicator of the economic stability of neighborhoods.

The property value model is a longitudinal model of the effect of changes in homeownership rates on changes in property values over the 1980–90 period. The specific measure of property value we used as the dependent variable is the mean value of owner-occupied single-family dwelling units in the tract.<sup>7</sup> The

<sup>7</sup> The property value data on STF3A are limited to “specified” owner-occupied units, which exclude properties in multifamily dwelling units and those that share property with a commercial or medical office. Although the *median*

census data on property values are subject to some measurement error because values are estimated by property owners and may not coincide with appraised values.<sup>8</sup> This bias may be especially important in cross-sectional models, but because it was used consistently in 1980 and 1990 it seems unlikely to affect change in value.<sup>9</sup>

Nearly all the tracts in our sample had some increase in single-family property values from 1980 to 1990. The mean and the median of the change in the property values of single-family owner-occupied units were \$50,915 and \$24,475, respectively. Changes in homeownership rates between 1980 and 1990, however, were small. The mean change in homeownership rate from 1980 to 1990 was -0.9 percent and the median was -1.06 percent. About 38 percent of tracts had an increase in homeownership from 1980 to 1990. Only 6 percent saw changes (up or down) of 10 percentage points or more in the proportion of homeowners in the tract. Thus, for most of our tracts the regression model estimates the effect of relatively small changes in the homeownership rate on changes in property values.

We constructed a cross-tabulation to examine the joint distribution of property value changes versus homeownership rate changes (see table 2). If the relationship were consistently positive, the distribution would be concentrated in the lower right and upper left cells of the table. There are clearly exceptions to this positive relationship.<sup>10</sup>

Moreover, evidence from our literature review suggests that changes in homeownership rates not only affect but also are

---

value of owner-occupied housing units is available for 1990, only the *mean* can be constructed from 1980 census data. For comparability, we used the mean for both years.

<sup>8</sup> Nelson (1978) found that this error is relatively small. In a comparison of median owner estimates and those made by professional assessors in the Washington, DC, area, he found owner estimates were on average 3 to 6 percent higher. The simple correlation between the two estimates was 0.90.

<sup>9</sup> In 1990 cross-sectional models run prior to developing the longitudinal model, we included a covariate for length of tenure, the same measure we used as the dependent variable in our first model: the percentage of 1990 housing units where the householder has lived there for five or more years. We expected (and found) that long-time residents may be lower estimators of the market value of their properties than those who bought them more recently.

<sup>10</sup> In numerous early specifications of our regression model, both the 1980 homeownership rate and the 1980-90 change in homeownership rate showed a (sometimes significant) negative relationship with 1990 mean property values, 1980-90 changes in property values, and tract values relative to MSA values.

*Table 2. Cross-Tabulation of Changes in Property Values by Changes in Homeownership Rate, 1980 to 1990*

Change in Property Value	Change in Homeownership Rate (Percentage Points)				Total	Percent of Sample
	Dropped by > 3	Dropped by up to 3	Increased by up to 3	Increased by > 3		
Dropped or increased less than \$5,000	100	55	20	26	201	8
Increased \$5,000 to \$25,000	422	317	180	119	1,038	43
Increased \$25,000 to \$100,000	165	260	225	108	758	31
Increased more than \$100,000	72	123	107	130	432	18
Total	759	755	532	383	2,429	100
Percent of sample	31	31	22	16	100	

*Source:* STF3A data for selected census tracts.

affected by changes in property values. Neighborhoods with healthy property appreciation tend to attract more homeowners and perhaps also more rental conversions as landlords see a greater return in selling than in renting their property. Our primary independent variable and our dependent variable thus appear to be endogenously related, rendering OLS regression inadequate to estimate the relationship between them.<sup>11</sup> Therefore, we developed a two-stage least squares model that first predicts 1980–90 changes in homeownership rate using changes in property value as well as household and housing characteristics expected to influence homeownership rates.<sup>12</sup> The second stage of the model estimates the change in property value using

<sup>11</sup> A critical assumption of OLS is that the regressors are uncorrelated with the residual—or, in this case, that changes in homeownership are uncorrelated with the unexplained variance in property value changes. When an independent variable and the dependent variable are endogenously related (i.e., depend on each other), this assumption is violated and the OLS parameter estimates are biased and inconsistent.

<sup>12</sup> Specifically, the regressors for the first-stage equation included 1980 homeownership rate; median household income, 1979 and 1979–89 change; and 1980 value and 1980–90 change for proportion of housing units with one unit per dwelling, ratio of mean single-family property value to mean rent, proportion of housing units vacant, mean number of bedrooms per unit,

the predicted values of homeownership rate change from the first model rather than actual values.

To isolate the relationship of homeownership changes and property value changes, we included in our model a variety of control variables that we also expected to affect neighborhood property values. First, we included the 1980 homeownership rate and the 1980 mean property value as baseline measures.

Next, recognizing that neighborhood housing markets are influenced by market conditions in the larger urban areas, we included several covariates describing the economic conditions of the MSA where each tract is located: the 1980 single-family mean property value of the MSA and the 1980–90 change and the 1980 population of the MSA and the 1980–90 change. These variables attempt to control for local business cycle and market effects; for instance, tracts in cities with very high or rapidly increasing property values or with fast population growth may experience different change dynamics from tracts generally.<sup>13</sup>

Moreover, the model controls for several characteristics of tracts' households that may be related to property values. As an income measure we included the tract-level median household income relative to the MSA median, both the 1979–89 change measure and the 1979 value. To capture any differences in tract property values that may be associated with having a large elderly population, we included the 1980 percentage of householders age 62 or older as well as the change from 1980 to 1990. Change in value (as perceived by owners) may also be related to a tract's racial composition and change, measured here by the percentage of black householders in 1980 and the 1980–90 change. Another characteristic of households that may affect a tract's perceived property values is the householders' length of tenure; we included the percentage of householders who had lived in their unit five or more years in 1980, as well as the 1980–90 change in this percentage.

---

single-family mean property value of the MSA, homeownership rate of the MSA, population of the MSA, unemployment rate of the MSA, proportion of households with householder age 30 to 61, proportion of households with householder age 62 or older, proportion of householders who are married with children, and proportion of households with black householder. The  $R^2$  for this first-stage equation is 0.43.

<sup>13</sup> The inclusion of MSA-level variables in the model may result in some heteroskedasticity in the error terms, as the MSAs vary greatly in size. This is not likely to be a serious problem, however, since the differences in MSA size are not very large and the number of MSA-level variables in the model is small.

Finally, we included several covariates describing the housing stock of the tract in terms of supply, type, age, and size. The 1980 vacancy rate and 1980–90 change control for supply factors that might affect value. The percentage of units with a single dwelling (1980 and 1980–90 change) controls for the amount of and changes in single-family housing stock. The percentage of units built before 1940 and the average number of bedrooms per unit control in part for the age and size of the tract's housing stock.

Changes in homeownership rate do have a positive and significant relationship to changes in property values (see table 3). If all other variables could be held constant, each percentage point increase in the homeownership rate of a tract would yield about a \$1,600 increase in the property value of the average single-family home (which was \$42,529 in 1980) over a 10-year period. Since the majority of single-family properties are built for owner-occupants, however, changes in the percentage of single-family properties nearly always bring about changes in the homeownership rate. In effect, these variables are too highly correlated ( $r = 0.70$ ) for their parameter estimates to be interpreted separately.

Rather, for every percentage point increase in the homeownership rate in a tract from 1980 to 1990, which often meant a corresponding unit increase in the percentage of single-family homes, the property value of an average single-family home increased by about \$800. A 10-percentage-point increase in the homeownership rate of a tract would be associated with about an \$8,000 increase in the mean single-family property value over a 10-year period.

This model suggests that current property owners will receive an added benefit whenever the homeownership rate in their neighborhood increases. The negative sign on the coefficient for change in single-family homes also suggests that homeownership programs need not focus entirely on single-family homes to increase the property values of the neighborhood.

The other variables whose relationships with property values are significant (at the 0.001 level) and the directions of the relationships (in parentheses) are property values in 1980 (+); the change in MSA-level values (+); the change in tract income relative to the MSA (+); the percentage of 1980 householders who had stayed in their unit five or more years (+) and the change in this percentage (+); the percentage of elderly residents (–); the

**Table 3. Model of Homeownership's Effect on Property Values in Parameter Estimates from Two-Stage Least Squares Estimation, 1980 to 1990**

	Parameter Estimate	Significance	Mean Value
<b>Homeownership</b>			
Change in percentage of housing units that are owned, 1980–90	1,641	0.0002	–0.996
Percentage of housing units that are owner-occupied, <sup>a</sup> 1980	–172.1	0.1549	52.46
<b>Control variables</b>			
Mean value of single-family, owner-occupied homes, 1980	1.184	0.0001	42,529
Mean value of single-family, owner-occupied homes in MSA, 1980	0.1764	0.0040	48,341
Change in mean value of single-family, owner-occupied homes in MSA, 1980–90	0.2768	0.0001	101,222
Population of MSA, 1980	–0.0004	0.5864	2,681,000
Change in population of MSA, 1980–90	–0.0012	0.0854	–1,654,000
Median household income in tract relative to MSA, 1979 <sup>b</sup>	201.4	0.0024	80.77
Change in median household income in tract relative to MSA, 1979–89 <sup>b</sup>	702.5	0.0001	–8.62
Percentage of householders age 62 or older, 1980	–523.0	0.0001	16.53
Change in percentage of householders age 62 or older, 1980–90	–356.6	0.1337	0.339
Percentage of householders who are black, 1980	–31.86	0.2491	22.91
Change in percentage of householders who are black, 1980–90	60.33	0.5163	3.22
Percentage of householders in unit five or more years, 1980	669.0	0.0001	53.39
Change in percentage of householders in unit five or more years, 1980–90	399.2	0.0003	1.158
Percentage of housing units with one unit per dwelling, 1980	–39.09	0.5373	57.01
Change in percentage of housing units with one unit per dwelling, 1980–90	–862.4	0.0001	1.186

**Table 3. Model of Homeownership's Effect on Property Values in Parameter Estimates from Two-Stage Least Squares Estimation, 1980 to 1990 (continued)**

	Parameter Estimate	Significance	Mean Value
Percentage of housing units that are vacant, 1980	240.9	0.1807	6.06
Change in percentage of housing units that are vacant, 1980-90	132.6	0.4261	2.01
Mean number of bedrooms per unit, 1980	-18,274	0.0001	2.31
Percentage of 1980 occupied housing units built prior to 1940	215.2	0.0001	43.10
Intercept	-28,618	0.0003	1.00

*Note:* The dependent variable is the 1980-90 change in the mean value of single-family, owner-occupied units in the tract. Analysis of variance: Mean of dependent variable = \$51,188;  $N = 2,286$ ;  $F = 349.3$ ; probability  $> F = 0.0001$ ;  $R^2 = 0.7641$ ; adjusted  $R^2 = 0.7619$ .

<sup>a</sup> Includes units that are vacant and for sale.

<sup>b</sup> Income data reported in each decennial census are annual figures for the previous full year.

percentage of pre-1940 housing in 1980 (+); and the mean number of bedrooms per unit (-).

As we hypothesized, tracts that enjoyed income growth relative to their MSAs experienced greater property value appreciation, as did tracts in MSAs that saw larger increases in value. Housing in tracts with higher 1980 values also tended to appreciate better. In addition, places where higher proportions of 1980 householders had stayed at least five years and where that proportion increased over time enjoyed greater value appreciation. Perhaps areas with longer householder tenure, and therefore less frequent turnover in the housing market, convey an image of stability and desirability that pushes up property values.

The direction of the other significant relationships requires further exploration to understand. For instance, tracts with a high proportion of elderly residents in 1980 tended to have lower value increases. Given the urban and nonaffluent nature of our sample, tracts with a preponderance of elderly residents are likely to be modest city neighborhoods where residents have lived for many years, not rural retirement havens for more affluent retirees. Property values may appreciate more slowly in these tracts partly because older residents have more difficulty with property maintenance.



We might expect tracts with substantial proportions of older housing stock to appreciate less rapidly; however, the simple relationship between value changes and proportions of pre-1940 housing is positive ( $r = 0.11$ ). In nearly 40 percent of the tracts, the housing stock is relatively new, but other factors such as general economic downturn have held property value appreciation below average. These tracts are disproportionately located in Florida, Michigan, Oklahoma, and Texas. In addition, nearly 20 percent of the tracts with a high proportion of older housing experienced quite high value appreciation; these tend to be in Boston, New York City (and the surrounding areas of Connecticut and New Jersey), and the San Francisco Bay Area of California.

While values might be expected to rise with housing size, nearly 40 percent of the tracts are in areas that had higher than average (more than 2.31) bedrooms per unit in 1980 but where value increases between 1980 and 1990 were below average. Many urban tracts in the industrial belt states of Michigan, Ohio, Pennsylvania, and Wisconsin fit this pattern. Moreover, another 20 percent of the tracts had smaller than average units in 1980 but experienced higher than average increases in value. These tracts are concentrated in areas with very tight markets for starter homes, including Boston, New York City (and the surrounding areas of Connecticut and New Jersey), and the San Francisco Bay Area. For many of these tracts, in fact, increases in value may be a poor measure of neighborhood stability. Downs (1981) argues that healthy neighborhoods experience steady price appreciation and turnover, not dramatic shifts.

These patterns of appreciation between 1980 and 1990 are perhaps atypical of 10-year periods generally. The important point for interpreting the model is that it controls for these appreciation patterns by isolating the relationship of changes in homeownership and changes in value.

The change in homeownership rate was one of the strongest influences on change in property value; specifically, it ranked fourth in terms of standardized magnitude behind the change in MSA-level property values, 1980 property values at the tract level, and the change in tract-level household income relative to the MSA.<sup>14</sup>

---

<sup>14</sup> The standardized coefficients are as follows: change in MSA-level mean property value, 0.505; 1980 mean tract value, 0.457; change in tract-level household income relative to MSA, 0.179; change in homeownership rate, 0.143.

Changes in homeownership are often assumed to be tied to changes in income, because of thresholds of home affordability. Most of the tracts where homeownership increased also had increases in median household income, but there are many exceptions (see table 4). About 38 percent of the tracts where homeownership increased by more than 3 percentage points from 1980 to 1990 had below-average increases (less than \$10,000) in median household income over that period.

*Table 4. Cross-Tabulation of Changes in Homeownership Rate by Changes in Household Income, 1980 to 1990*

Homeownership Rate (Percentage Points)	Change in Median Household Income				Total	Percent of Sample
	Under \$3,000	\$3,000 to \$9,999	\$10,000 to \$19,999	\$20,000 or More		
Dropped by more than 3	73	368	256	29	726	30
Dropped by up to 3	66	288	352	64	770	31
Increased by up to 3	53	171	266	67	557	23
Increased by more than 3	40	116	182	68	406	17
Total	232	943	1,056	228	2,459	100
Percent of sample	9	38	43	9	100	

*Source:* STF3A data for selected census tracts.

*Note:* Percentages may not add to 100 because of rounding.

Moreover, tracts with above-average growth (\$10,000 or more) in income account for 39 percent of the tracts where homeownership rates dropped by more than 3 percentage points, suggesting that high income growth occurs frequently in areas with rental growth as well. Although there is less coincidence of homeownership and income changes than we might have expected, increasing the homeownership rate in an area still may adversely affect or displace low-income tenants.

## Conclusions

Our literature review provides substantial evidence that homeownership leads to greater neighborhood stability as measured by length of residence and property condition. Two processes seem to be at work. The first concerns the types of

households that are attracted to, and capable of affording, homeownership. These households tend to be higher income family households with older household heads. They anticipate staying in an area a longer time. Clearly, self-selection plays an important role in the stability of homeowners relative to renters.

The second process, however, seems to be related to the additional interests that homeowners have in their dwelling units and the transaction costs associated with buying and selling real estate. Studies that control for socioeconomic and other potentially important characteristics still find that homeowners are more likely to be stable, defined in terms of length of residence and property condition.

Homeowners, unlike renters and landlords, have both an economic and a use interest in their properties. This combination of interests seems to provide powerful incentives for owner-occupants to maintain their properties at a higher standard and to join organizations that protect the collective interests of homeowners in the area.

The owner-occupied dwelling unit has become a major source of wealth for many families, which they will work hard to protect. It has become an important indicator of status in our society and a visible indicator of success. It also offers greater control over one's living environment. A household's dwelling unit and neighborhood also provide important social and psychological benefits, which are closely guarded. Thus, threats to the condition of the house and the neighborhood may be interpreted as threats to the status and security of the occupants.

The original empirical analysis further supports an association between homeownership and neighborhood stability as defined by length of tenure. Census tracts with a higher proportion of homeowners have a lower turnover rate, even after controlling for family life course and housing characteristics. However, factors related to lack of mobility (especially income) also affect the length of tenure, and these may have mitigating effects on overall neighborhood health, especially in the long run. Householders without the means to make a move may also lack the resources to maintain their properties. The lack of turnover in an area may not translate into better property conditions.

The property value model suggests that changes in the homeownership rate in an area also have a positive association with changes in property values. After controlling for housing stock characteristics, household characteristics, and MSA-level

economic factors, a 5-percentage-point change in the homeownership rate of a tract would be associated with about a \$4,000 increase in mean single-family property value over a 10-year period. In terms of magnitude, initial property values and MSA-level changes in property values affect changes in tract property values much more than the homeownership rate does. Nonetheless, modest increases in homeownership rates, even in areas with a high proportion of multifamily dwelling units, may increase neighborhood property values over time.

The results of the literature review and analysis should not be interpreted as a condemnation of renters or of predominantly rental neighborhoods. Though higher rates of homeownership are associated with some measures of neighborhood stability, many predominantly rental neighborhoods are stable and attractive places to live. Not everyone is capable of owning a home, and others, for a variety of reasons, do not want to own. An adequate supply of affordable and attractive rental units and areas is needed. A major challenge, then, is to find ways to improve the stability of areas with a predominance of rental units without converting them to owner-occupied units.

An additional caveat is that increasing the proportion of homeowners in an area should not be seen as a magic elixir for neighborhood problems. First, as demonstrated in our empirical analysis, many other factors affect mobility and housing value. Second, the type of structures in the area and the amount of public subsidy restrict any increase in the proportion of homeowners in many urban areas. The homeownership rate may need to be increased by several percentage points to dramatically affect any measure of neighborhood stability. Third, even where there is an opportunity for a large increase in the homeownership rate in an area, such an increase may come at the expense of the original residents of the area. Thus, homeownership programs should focus on current renters who are both capable of and interested in buying a home. In this way, the neighborhood is stabilized but not at the expense of former low-income residents.

Housing policy makers and practitioners should exercise caution in qualifying home buyers, ensure that the units being sold are in good condition, and select neighborhoods that have a good chance of providing a livable environment. Encouraging families with highly variable or even flat income trajectories to purchase dwelling units is counterproductive: They are unlikely to be able to afford them over the long run. Encouraging low-income families to purchase units that they will not be able to maintain at a

reasonable standard is also harmful. In assessing the British experience with inner-city homeownership programs, Karn, Kemeny, and Williams (1985) described it as “the privatization of squalor.” Certainly, we want to avoid this problem. Homeowners must be able to make repairs when needed. Finally, homeownership programs must be targeted to areas with a reasonable probability of stable or increasing property values and of positive social conditions. Encouraging households to buy in areas that are likely to continue to decline over time is unwise, if not unethical.

### **Future research needs**

Because most research looks at middle- and upper-income homeowners, we do not know if low-income owners, particularly those with relatively small investments in their units, will behave in the same way with respect to maintenance, participation, and other actions as higher income homeowners do. Carefully designed longitudinal research is needed to assess how homeownership affects the relevant attitudes and behaviors of low-income owners. Their relative lack of income, for example, may depress the amount they can spend on repairs, and their units may be in greater disrepair. This, in fact, was the conclusion of a British study comparing the condition of owner-occupied dwellings and rental units with low-income occupants (Doling 1986).

The hedonic modeling literature has sought to both identify and quantify the effects of various housing characteristics on the price of housing. Although these models have included selected characteristics of the surrounding neighborhoods, such as the racial mix and the air pollution level, their developers ignored the potential effect of neighborhood tenure characteristics on housing prices (Anderson and Croker 1971; Freeman 1979; Kain and Quigley 1970; Muth and Goodman 1989; Quigley 1979). To further assess how tenure affects housing prices, future hedonic pricing studies should include the proportion of homeowners in the area as a predictor variable in their models.

In addition, there is very little literature on the relationship between homeownership and indicators of the social stability of an area. The recent study by Green and White (1994) showed surprisingly strong and consistent associations between owner occupancy and the incidence of several social problems. More research is needed to corroborate and explain the results of this study.

Another question worthy of further research attention is whether there is a threshold or tipping point associated with tenure as there is for the racial composition of households. Particularly in areas that are composed predominantly of single-family dwelling units, is there some percentage of rental units that will trigger the rapid conversion of most of the existing owner-occupied units to rental units? Is the percentage of rental units in an area seen as an indication that the neighborhood is going downhill, thus causing widespread conversion?

We also know very little about the process involved in the conversion of owner-occupied units to rental units. At what point do these units become attractive to investor-owners? What housing characteristics are associated with investor-ownership? What role do real estate agents play in this process?

In addition, our empirical analysis of census data raises questions that could be better answered through other sources of data. For instance, what do the National Board of Realtors data and the Fannie Mae–Freddie Mac data add to understanding the dynamics of actual property values at the neighborhood level? What do data on neighborhood conditions and neighborhood satisfaction (e.g., from the American Housing Survey) contribute to an understanding of neighborhood dynamics related to tenure? What do data about credit flows (e.g., from the Home Mortgage Disclosure Act data set) suggest about the effect of credit flows on neighborhood conditions, expectations, or stability?

Finally, from a policy standpoint, further research is needed on which actions of outsiders (including media portrayals, public policy programs, and credit flows) are most effective in changing neighborhood conditions or expectations.

### *Authors*

William M. Rohe is the Dean E. Smith Professor in the Department of City and Regional Planning and the Director of the Center for Urban and Regional Studies at the University of North Carolina at Chapel Hill. Leslie S. Stewart is a Research Associate in the Health and Social Policy Division at Research Triangle Institute.

The authors wish to thank Priscila Prunella and Margery Turner at the U.S. Department of Housing and Urban Development (HUD) for their support of this project and their comments on earlier drafts of this article. They also owe a debt to George McCarthy and Roberto Quercia, who provided valuable advice on the analysis presented here.

The research forming the basis for this article was conducted pursuant to a contract with HUD. The statements and conclusions contained herein are those of the authors and do not necessarily reflect the views of the U.S. government in general, of HUD in particular, or of Fannie Mae.

## References

- Ahlbrandt, Roger, and James Cunningham. 1979. *A New Public Policy for Neighborhood Preservation*. New York: Praeger.
- Anderson, Robert, and Thomas Croker. 1971. Air Pollution and Residential Property Values. *Urban Studies* 8(October):171–80.
- Austin, D. Mark, and Yoko Baba. 1990. Social Determinants of Neighborhood Attachments. *Sociological Spectrum* 10:59–78.
- Baba, Yoko, and D. Mark Austin. 1989. Neighborhood Environmental Satisfaction, Victimization, and Social Participation as Determinants of Perceived Neighborhood Safety. *Environment and Behavior* 21(November):763–80.
- Babchuk, Nicholas, and John Edwards. 1965. Voluntary Associations and the Integration Hypothesis. *Social Inquiry* 35:149–62.
- Baldassare, Mark. 1982. The Effects of Neighborhood Density and Social Control on Resident Satisfaction. *Sociological Quarterly* 23(Winter):95–105.
- Baum, Thomas, and Paul Kingston. 1984. Homeownership and Social Attachment. *Sociological Perspectives* 27(2):159–80.
- Boehm, Thomas, and Keith Ihlenfeldt. 1986. The Improvement Expenditures of Urban Homeowners: An Empirical Analysis. *AREUEA Journal* 14:48–60.
- Brown, Thomas. 1981. Tenure Choice and Expected Mobility: A Synthesis. *Journal of Urban Economics* 10:375–89.
- Carliner, Geoffrey. 1974. Determinants of Home Ownership. *Land Economics* 50:109–19.
- Chambers, Daniel, and Douglas Diamond. 1988. Who Never Becomes a Homeowner? *Housing Finance Review* 7:149–67.
- Chinloy, Peter. 1980. The Effect of Maintenance Expenditures on the Measurement of Depreciation in Housing. *Journal of Urban Economics* 8:86–107.
- Cisneros, Henry. 1995. Home Ownership Goals for the Year 2000. *Stone Group* 13(Spring):3.
- Connerly, Charles. 1986. The Impact of Neighborhood Social Relations on Prospective Mobility. *Social Science Quarterly* (March):12–20.
- Cooperstein, Richard. 1989. Quantifying the Decision to Become a First-Time Home Buyer. *Urban Studies* 26:223–33.
- Cox, Kevin. 1982. Housing Tenure and Neighborhood Activism. *Urban Affairs Quarterly* 18(1):107–29.

- Cox, Kevin, and Jeffery J. McCarthy. 1980. Neighborhood Activism in the American City: Behavioral Relationships and Evaluation. *Urban Geography* 1(1):22–38.
- Danes, Sharon, and Earl Morris. 1986. Housing Status, Housing Expenditures and Satisfaction. *Housing and Society* 13:32–43.
- Davis, Earl, and Margaret Fine-Davis. 1981. Predictors of Satisfaction with Housing and Neighbourhood: A Nationwide Study in the Republic of Ireland. *Social Indicators Research* 9:477–94.
- Davis, John. 1991. *Contested Ground: Collective Action and the Urban Neighborhood*. Ithaca, NY: Cornell University Press.
- Ditkovsky, Orit, and Willem van Vliet. 1984. Housing Tenure and Community Participation. *Ekistics* 307(July–August):345–48.
- Doling, John. 1986. Owner Occupation, House Condition, and Government Subsidies. In *Low Cost Home Ownership*, ed. Philip Booth and Tony Crook, 170–89. Aldershot, England: Gower.
- Downs, Anthony. 1981. *Neighborhoods and Urban Development*. Washington, DC: The Brookings Institution.
- Dreier, Peter. 1982. The Status of Renters in the United States. *Social Forces* 30(December):179–98.
- Fischer, Claude. 1982. *To Dwell among Friends: Personal Networks in Town and Country*. Chicago: University of Chicago Press.
- Fischer, Claude, Robert Jackson, C. Ann Stueve, Kathleen Gerson, and Lynne Jones. 1977. *Networks and Places: Social Relations in the Urban Setting*. New York: Free Press.
- Freeman, A. Myrick. 1979. The Hedonic Price Approach to Measuring Demand for Neighborhood Characteristics. In *The Economics of Neighborhoods*, ed. David Segal, 191–217. New York: Academic Press.
- Fried, Mark. 1982. Residential Attachment: Sources of Residential and Community Satisfaction. *Journal of Social Issues* 28(3):107–19.
- Galster, George. 1983. Empirical Evidence on Cross-Tenure Differences in Home Maintenance and Conditions. *Land Economics* 59(February):107–13.
- Galster, George. 1987a. *Homeowners and Neighborhood Reinvestment*. Durham, NC: Duke University Press.
- Galster, George. 1987b. Identifying the Correlates of Dwelling Satisfaction. *Environment and Behavior* 19(5):539–68.
- Galster, George. 1990. *Neighborhood Evaluations, Expectations, Mobility, and Housing Reinvestment: Measuring the Social Impacts of Community Development Corporations*. New York: New School for Social Research, Community Development Research Center.
- Galster, George, and Gary Hesser. 1981. Residential Satisfaction: Compositional and Contextual Correlates. *Environment and Behavior* 13:735–58.



- Goetze, Rolf. 1979. *Understanding Neighborhood Change: The Role of Expectations in Urban Revitalization*. Cambridge, MA: Ballinger.
- Goodman, John. 1974. Local Residential Mobility and Family Housing Adjustments. In *Five Thousand American Families: Patterns of Economic Progress*, ed. James Morgan 2:79–105. Ann Arbor, MI: Institute for Survey Research, University of Michigan.
- Green, Richard K., and Michelle White. 1994. *Measuring the Benefits of Homeowning's Effect on Children*. Chicago: University of Chicago, Center for the Study of the Economy and State.
- Greensberg, Stephanie, William Rohe, and Jay Williams. 1985. *Informal Citizen Action and Crime Prevention at the Neighborhood Level*. Washington, DC: U.S. Department of Justice.
- Grigsby, William. 1963. *Housing Markets and Public Policy*. Philadelphia: University of Pennsylvania Press.
- Ha, Mikyoung, and Margaret Weber. 1991. The Determinants of Residential Environmental Qualities and Satisfaction: Effects of Financing, Housing Programs, and Housing Regulations. *Housing and Society* 18(3):65–76.
- Hamnett, Chris. 1991. The Relationship between Residential Migration and Housing Tenure in London, 1971–81: A Longitudinal Analysis. *Environment and Planning* 23(August):1147–62.
- Hanushek, Eric, and John Quigley. 1978. An Explicit Model of Intra-Metropolitan Mobility. *Land Economics* 54(4):411–29.
- Henderson, J. Vernon, and Yannis Ioannides. 1986. Tenure Choice and the Demand for Housing. *Economica* 53:231–46.
- Henderson, J. Vernon, and Yannis Ioannides. 1987. Owner-Occupancy: Investment vs. Consumption Demand. *Journal of Urban Economics* 21:228–41.
- Henig, Jeffrey. 1982. *Neighborhood Mobilization*. New Brunswick, NJ: Rutgers University Press.
- Hunter, Albert. 1975. The Loss of Community: An Empirical Test through Replication. *American Sociological Review* 40(5):537–555L.
- Jeffers, Leo, and Jean Dobos. 1984. Communication and Neighborhood Mobilization. *Urban Affairs Quarterly* 20:97–112.
- Kain, John, and John Quigley. 1970. Measuring the Value of Housing Quality. *Journal of the American Statistical Association* 65(June):532–48.
- Karn, Valerie, Jim Kemeny, and Peter Williams. 1985. *Home Ownership in the Inner City: Salvation or Despair*. Aldershot, England: Gower.
- Kasarda, John, and Morris Janowitz. 1974. Community Attachment in Mass Society. *American Sociological Review* 39:328–39.
- Kingston, Paul, John Thompson, and Douglas Eichar. 1984. The Politics of Homeownership. *American Politics Quarterly* 12(April):131–50.

Kinsey, Jean, and Sylvia Lane. 1983. Race, Housing Attributes, and Satisfaction with Housing. *Housing and Society* 10:98–116.

Knoke, David, and James Wood. 1981. *Organized for Action: Commitment in Voluntary Associations*. New Brunswick, NJ: Rutgers University Press.

Lam, Julie. 1985. Type of Structure, Satisfaction, and Propensity to Move. *Housing and Society* 12:32–44.

Lane, Sylvia, and Jean Kinsey. 1980. Housing Tenure Status and Housing Satisfaction. *Journal of Consumer Affairs* 14(Winter):341–65.

Lee, Barrett, and Avery Guest. 1983. *Sociological Quarterly* 24(Spring): 287–303.

Linneman, Peter, and Susan Wachter. 1989. The Impacts of Borrowing Constraints on Homeownership. *AREUEA Journal* 17(4):389–402.

Litwak, Eugene. 1961. Voluntary Associations and Neighborhood Cohesion. *American Sociological Review* 26(2):258–71.

Lyons, William, and David Lowery. 1989. Citizen Responses to Dissatisfaction in Urban Community: A Partial Test of a General Model. *Journal of Politics* 15(4):841–68.

Marans, Robert, and Willard Rodgers. 1975. Toward an Understanding of Community Satisfaction. In *Metropolitan America in Contemporary Perspective*, ed. Amos Hauley and Vincent Rock, 299–352. New York: Wiley.

Mayer, Neil. 1981. Rehabilitation Decisions in Rental Housing. *Journal of Urban Economics* 10(July):76–94.

McConney, Mary. 1985. An Empirical Look at Housing Rehabilitation as a Spatial Process. *Urban Studies* 22:39–48.

Megbolugbe, Isaac, and Peter Linneman. 1993. Home Ownership. *Urban Studies* 30(4–5):659–82.

Mendelson, Robert. 1977. Empirical Evidence on Home Improvements. *Journal of Urban Economics* 4(October):458–68.

Meyer, Peter, Jerry Yeager, and Michael Burayidi. 1994. Institutional Myopia and Policy Distortions: The Promotion of Homeownership for the Poor. *Journal of Economic Issues* 28(June):567–76.

Miller, Frederick, Sam Tsemberis, Gregory Malia, and Dennis Grega. 1980. Neighborhood Satisfaction among Urban Dwellers. *Journal of Social Issues* 36(3):101–17.

Moore, Dora J. 1991. Forecasting the Probability of Homeownership: A Cross-Sectional Regression Analysis. *Journal of Housing Research* 2(2):125–43.

Morris, Earl, Sue Crull, and Mary Winter. 1976. Housing Norms, Housing Satisfaction, and the Propensity to Move. *Journal of Marriage and the Family* 38:309–20.

- Murie, Allen. 1991. Divisions of Homeownership: Housing Tenure and Social Change. *Environment and Planning A* 23(February):349–70.
- Muth, Richard, and Allen Goodman. 1989. *The Economics of Housing Markets*. New York: Harwood Academic.
- Nelson, Richard. 1978. *Economic Analysis of Transportation Noise Abatement*. Cambridge, MA: Ballanger.
- Newman, Sandra, and Greg Duncan. 1979. Residential Problems, Dissatisfaction, and Mobility. *Journal of the American Planning Association* 45:154–66.
- O'Brien, David J. 1975. *Neighborhood Organization and Interest Group Processes*. Princeton, NJ: Princeton University Press.
- Ong, Paul, and Eugene Grigsby. 1988. Race and Life-Cycle Effects on Homeownership in Los Angeles 1970–1980. *Urban Affairs Quarterly* 23(June):601–15.
- Pedone, Carla, Patricia Remch, and Karl Case. 1980. *Evaluation of the Urban Homesteading Demonstration Program: The Neighborhood Impact of Urban Homesteading*. Vol. 5. Rockville, MD: U.S. Department of Housing and Urban Development.
- Percy, Charles. 1966. A New Dawn for Our Cities. *Congressional Record*, October 17, 89th Cong., 2nd sess. Vol. 112, Part 20, pp. 2725B–26B.
- Peterson, George, Arthur Solomon, Hadi Madjid, and William Apgar. 1973. *Property Taxes, Housing, and the Cities*. Lexington, MA: Heath/Lexington.
- Podolefsky, Aaron, and Fredric DuBow. 1980. *The Reactions to Crime Papers. Vol. II: Strategies for Community Crime Prevention*. Evanston, IL: Northwestern University, Center for Urban Affairs.
- Quigley, John. 1979. What Have We Learned about Urban Housing Markets? In *Current Issues in Urban Economics*, ed. Peter Mieszkowski and Mahlon Straszheim, 391–429. Baltimore: Johns Hopkins University Press.
- Quigley, John, and Daniel Weinberg. 1977. Intra-Urban Residential Mobility: A Review and Synthesis. *International Regional Science Review* 2(2):41–66.
- Rent, George, and Clyda Rent. 1978. Low-Income Housing: Factors Related to Residential Satisfaction. *Environment and Behavior* 10(December):459–88.
- Rohe, William, and Lauren Gates. 1985. *Planning with Neighborhoods*. Chapel Hill, NC: University of North Carolina Press.
- Rohe, William, and Scott Mouw. 1991. The Politics of Relocation: The Moving of the Crest Street Community. *Journal of the American Planning Association* 57:57–68.
- Rohe, William, and Michael Stegman. 1994. The Impact of Home Ownership on the Social and Political Involvement of Low-Income People. *Urban Affairs Quarterly* 30(September):152–72.

- Roistacher, Elizabeth. 1974a. Residential Mobility. In *Five Thousand American Families: Patterns of Economic Progress*, ed. James Morgan, 2:1–40. Ann Arbor, MI: University of Michigan, Institute for Survey Research.
- Roistacher, Elizabeth. 1974b. Housing and Home Ownership. In *Five Thousand American Families: Patterns of Economic Progress*, ed. James Morgan, 2:41–79. Ann Arbor, MI: University of Michigan, Institute for Survey Research.
- Rossi, Peter. 1955. *Why Families Move*. Glencoe, IL: Free Press.
- Sampson, Robert. 1988. Local Friendship Ties and Community Attachment in Mass Society: A Multilevel Systemic Model. *American Sociological Review* 53(October):766–79.
- Saunders, Peter. 1990. *A Nation of Home Owners*. London: Unwin Hyman.
- Schafer, Robert. 1977. *Maintenance and Operating Behavior of Resident and Absentee Landlords*. Department of City Planning Discussion Paper DD77-10. Cambridge, MA: Harvard University Press.
- Schoenberg, Sandra, and Patricia Rosenbaum. 1980. *Neighborhoods That Work: Sources of Viability in the Inner City*. New Brunswick, NJ: Rutgers University Press.
- Shear, William. 1983. Urban Housing Rehabilitation and Move Decisions. *Southern Economic Journal* 49(April):1030–52.
- Shelton, John. 1968. The Cost of Renting versus Owning a Home. *Land Economics* 44(February):59–72.
- Speare, Alden. 1974. Residential Satisfaction as an Intervening Variable in Residential Mobility. *Demography* 11:173–88.
- Steinberger, Peter. 1981. Political Participation and Communitarity: A Cultural/Interpersonal Approach. *Rural Sociology* 46(1):7–19.
- Stipak, Brian, and Carl Hensler. 1983. Effect of Neighborhood Racial and Socioeconomic Composition on Urban Residents' Evaluation of Their Neighborhoods. *Social Indicators Research* 12:311–20.
- Taub, Richard, George Surgeon, Sara Lindholm, Phyllis Otti, and Amy Bridges. 1977. Urban Voluntary Associations, Locally Based and Externally Induced. *American Journal of Sociology* 83(2):425–42.
- Taub, Richard, D. Garth Taylor, and Jan Dunham. 1981. Neighborhoods and Safety. In *Reactions to Crime: Individual and Institutional Responses*, ed. Dan Lewis. Newbury Park, CA: Sage.
- Taub, Richard, D. Garth Taylor, and Jan Dunham. 1984. *Paths of Neighborhood Change*. Chicago: University of Chicago Press.
- Tomeh, Aida. 1973. Formal Voluntary Organizations: Participation, Correlates, and Interrelationships. *Sociological Inquiry* 43(3–4):89–122.

- Varady, David. 1983. Determinants of Residential Mobility Decisions. *Journal of the American Planning Association* 49:181–99.
- Varady, David. 1986a. Neighborhood Confidence: A Critical Factor in Neighborhood Revitalization? *Environment and Behavior* 18:480–501.
- Varady, David. 1986b. *Neighborhood Upgrading: A Realistic Assessment*. Albany: State University of New York Press.
- Wachter, Susan, and Isaac Megbolugbe. 1992. Racial and Ethnic Disparities in Homeownership. *Housing Policy Debate* 3(2):333–70.
- Wandersman, Abraham. 1981. A Framework of Participation in Community Organizations. *Journal of Applied Behavioral Science* 17(1):27–58.
- Wandersman, Abraham, John Jakubs, and Gary Giamartino. 1981. Participation in Block Organizations. *Journal of Community Action* 1(1):40–47.
- Winger, Alan. 1973. Some Internal Determinants of Upkeep Spending by Urban Home Owners. *Land Economics* 49(November):474–79.
- Wirth, Lewis. 1937. Urbanism as a Way of Life. *American Journal of Sociology* 44:3–24.

