Assessing Property Value Impacts of Dispersed Housing Subsidy Programs

George Galster
Anna M. Santiago
Robin E. Smith
Peter A. Tatian

Assessing Property Value Impacts of Dispersed Housing Subsidy Programs

March 1999

Prepared By:

George Galster
Anna M. Santiago
Robin E. Smith
Peter A. Tatian

with

Mary Cunningham
Charlene Y. Wilson

The Urban Institute
Washington, DC 20037

Submitted To:
U.S. Department of Housing and Urban Development
Washington, DC 20410-3000

Contract No. C-OPC-5929, TO 09
UI No. 06542-009-00

should not be attributed to the Urban Institute, its trustees, or it funders.

ACKNOWLEDGMENTS

Peter A. Tatian served as Urban Institute project director and was responsible for overseeing all aspects of the conduct and management of this study. In addition, Mr. Tatian directed and supervised the preparation of the data files and wrote all of the programs for the property value impact analysis. Drs. George Galster and Anna M. Santiago of Wayne State University in Detroit were the lead researchers on the project. Dr. Galster developed the conceptual and theoretical foundations of the work, reviewed the statistical literature, and devised the econometric model. Dr. Santiago established the working relationship with the Housing Authority of the City and County of Denver and had primary responsibility for the policy reconnaissance there. Both Drs. Galster and Santiago played lead roles in conducting the policy reconnaissance, key informant interviews, and focus groups, and interpreting the results of the qualitative and quantitative analyses. Robin Smith of the Urban Institute was responsible for designing the focus group guides and protocols, conducting key informant interviews, and facilitating and analyzing the groups in Baltimore County.

A study of this size and complexity can obviously not be accomplished without the support and participation of a number of people. The authors would like to recognize the contributions made by the following organizations and individuals.

First, we are very grateful for the support given to us by Lois Cramer, Administrator of the Baltimore County Housing Office (BCHO), Ruth Crystal, Director of the Moving To Opportunity Program (Baltimore), David Fields, Director of the Baltimore County Office of Community Conservations, Gary Markowski, Director of Rental and Assisted Housing for the Housing Authority of Baltimore City, and Salvatore Carpio, Executive Director of the Housing Authority of the City and County of Denver (DHA). We would also like to recognize the invaluable assistance given by Bob Bromley and Jill Miller of BCHO and Stella Madrid and Karen Spruce of DHA in securing for us the data files on their agencies' programs that we needed for our analysis. Roe Davis and Harold Reid of BCHO provided helpful background information on the sites where we conducted focus groups in Baltimore County. Bobby Anderson at DHA provided data on maintenance expenditures for the dispersed housing program.

Many people agreed to talk to us for our community and policy reconnaissance, providing us with valuable information on housing conditions and policy issues in Baltimore County and Denver. These participants are listed in Annex A of this report.

For organizing and conducting the focus groups in Denver, the Urban Institute subcontracted with the Latin American Research and Service Agency (LARASA). LARASA not only gave crucial assistance in completing the focus groups, but also provided us with useful insights into the neighborhoods of Denver. The work at LARASA was directed by Dr. Susan Gallo, who was assisted by Jeff Garnas.

Our thanks also goes to the many focus group participants in Denver and Baltimore County who openly shared their views and opinions with us on their neighborhoods and local communities.

Professor Tom Thibodeaux of Southern Methodist University provided exceptionally helpful suggestions on a preliminary version of this report. Dr. Ayse Can of the Fannie Mae Foundation gave us important comments and guidance on the design of our econometric models and on the incorporation of corrections for spatial effects. Carol Wiseman developed the programs that we used to calculate the spatial lag variables.

Several Urban Institute staff were involved in important roles in completing this study. Maris Mikelsons served as project director during the initial stages of the work. Mary K. Cunningham and Charlene Y. Wilson were responsible for assembling and processing the data files used for the quantitative analyses. Ms. Cunningham and Malcolm Drewery helped organize and conduct the focus groups in Baltimore County. Mark Rubin prepared the maps that appear in this report. Regina Madison was responsible for the report formatting and production.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

In 1996, the U.S. Department of Housing and Urban Development (HUD) requested that the Urban Institute of Washington, DC conduct an analysis of the impacts of dispersed housing subsidy programs on neighborhood property values. "Dispersed housing subsidy programs" are programs that are designed to provide greater locational opportunities to households receiving housing assistance. Many policy makers believe that these programs will have beneficial effects both for society, by avoiding problems associated with the clustering of low-income households, and for the households receiving assistance, by giving them more opportunities to live in better neighborhoods.

Such programs are not without controversy, however. In commissioning this study, HUD was responding to a number of concerns that have been raised about possible negative effects of dispersed housing programs in various recipient communities. These fears manifested themselves in the form of local resident protest in the two areas that are the subject of this report. The first was in Denver, Colorado, where the housing authority's plans to acquire single-family and small multi-family properties for use as public housing produced repercussions in the form of new City Council mandates. The second was in Baltimore County, Maryland, where HUD's Moving To Opportunity (MTO) program provoked a strong political backlash among homeowners who saw their very way of life threatened by "invaders" from Baltimore City.[1]

This study was designed to take an objective look at the issues that arose around both of these programs and to examine whether dispersed housing assistance does have the negative impacts that its critics contend. We used both quantitative and qualitative techniques to examine these questions, including interviews with key informants, econometric modeling, and focus groups with homeowners. We must emphasize, however, that our conclusions are specific to the unique aspects of the situations and programs that we examined. While some of these results may be applicable to other communities with similar types of subsidized housing, further research and replication of our findings would be required to establish their generality.

OVERVIEW OF THE PROGRAMS

Denver Dispersed Housing Program

The Housing Authority of the City and County of Denver (DHA) has operated various forms of dispersed public housing programs since 1969, beginning with a program to acquire VA or FHA

---

[1]For those who are unfamiliar with these areas, the City and County of Denver, with a population of 468,000, are coterminous jurisdictions. Throughout this report, we will refer to the City and County of Denver as simply, "Denver." In contrast, Baltimore County and Baltimore City are separate and distinct political and geographic entities. Baltimore County has a population of 692,000 and almost completely encircles the boundary of Baltimore City.

foreclosed properties. Its most recent dispersed housing program, the "Replacement Housing Program," began in the 1980s as a five-year modernization plan to demolish approximately 400 units of existing public housing. The demolished units were to be replaced through the acquisition of existing single family homes, duplexes, condominiums, townhouses and scattered-site clusters across Denver.

The controversy surrounding the dispersed housing program erupted when DHA interest in acquiring 132 one or two-story homes, particularly in Southwest Denver, was made public in 1989. On the basis of fears about declining property values and neighborhood degradation, residents in Southwest Denver were mobilized into action to oppose DHA's acquisition plans. Tensions reached a fever pitch at a neighborhood meeting held in April, 1989. There were frequent calls for the elimination of the program as well as for the ouster of DHA officials during the fractious debates. Indeed, after the April meeting, the Mayor of Denver halted the replacement housing plan, held the DHA accountable to City Council, and appointed a Citizens Task Force to study (and, it was hoped, diffuse) the issue.

As a result of the controversy and the recommendations of the Task Force, starting in 1989 the following restrictions were imposed on sites DHA could acquire for replacement housing: (1) the purchase of units in non-impacted census tracts (*i.e.,* low concentrations of poor as well as existing public housing units); (2) a minimum distance requirement of at least 950 feet between DHA properties in any given census tract; (3) a maximum DHA ownership threshold of one percent of all units or eight properties (whichever is less) in any given census tract; (4) a preference for the purchase of vacant or foreclosed homes. While these restrictions have made acquiring properties more difficult, the program has continued. Since 1989, DHA has acquired about 143 sites under the dispersed housing program. As of late 1997, DHA was operating about 1,005 dispersed units in 433 sites, representing roughly 27 percent of its total public housing inventory.

Another key aspect of the DHA dispersed housing program since 1989 is its strong ongoing maintenance and inspection policies. DHA also carefully screens and monitors all of the tenants in the dispersed housing program. Eligible tenants included those with excellent rent and housekeeping histories as well as those perceived as being more independent and highly motivated. Tenants also must have no criminal record and have sufficient means to meet the financial obligations of living in a dispersed unit (such as snow removal and lawn care). These practices have undoubtedly helped alleviate some of the tension surrounding the dispersed housing program.

Baltimore County MTO/Section 8

The national Section 8 program was instituted as part of the Housing and Community Development Act of 1974. It provided a new vehicle for aiding low-income tenants by providing them a subsidy (or "certificate") equivalent to the difference between "fair market rent" of an apartment and 25 percent of household income. In principle, tenants could use these certificates anywhere in the local housing authority's jurisdiction. A variant on the Section 8 tenant-based subsidy was provided by the voucher program, authorized in 1983. Vouchers mimicked Section 8 certificates, but had two distinctive features: (1) they could be used to defray rent expenses of apartments in any price/quality range, and (2) they could be used anywhere in the nation.

Despite subsequent permissive legislative and administrative rule changes regarding "portability" features of the certificate and voucher programs, relatively few households were relocating across jurisdictions. In an attempt to discover how to change tenant preferences and remove any existing disincentives for mobility, Congress enacted the Moving To Opportunity (MTO) demonstration in 1992. In Baltimore, Boston, Chicago, Los Angeles, and New York, HUD contracted with the central city PHA to administer the Section 8 subsidies allocated under the program, and with a non-profit agency to select experimental sample comparison groups and administer the appropriate type of mobility counseling and assistance to the "treatment" group. To be eligible, households must: (1) live in public housing or Section 8 site-based assistance projects located in central city neighborhoods with high concentrations of poverty, (2) have incomes below 50 percent of the area median, and (3) have children in the family.

Participants in MTO are randomly assigned to one of three groups: (1) the in-place control group continues to receive current, project-based assistance, (2) the Section 8 comparison group receives no additional services beyond that normally supplied by the PHA during the process of certificate/voucher administration, and (3) the MTO experimental group receives certificates or vouchers usable only in census tracts with less than 10 percent of the population below the poverty line. The experimental group also gets counseling and assistance in locating an apartment. Outcomes for all three groups are being monitored over a ten-year period.

The Housing Authority of Baltimore City (HABC) teamed with the Community Assistance Network (CAN) to carry out the Moving To Opportunity Demonstration in the Baltimore region. HABC currently operates by far the largest Section 8 program in the region. According to 1995 statistics, HABC administered 6,737 vouchers and certificates, Baltimore County administered 3,021, and the remaining six counties in the region administered 2,541. CAN/HABC proved to be one of the more effective MTO administrators.

Opposition to MTO started in the Baltimore County communities of Dundalk and Essex, but spread to other parts of the County as well. These older, blue collar, ethnic suburbs house

an aging population with longstanding ties to the community. Once home to large contingents of employees from heavy industry, the area steadily declined as employers left or downsized and neighborhoods where former workers lived became depressed. While the areas still had a strong sense of neighborhood identity, homeownership rates were declining and rental housing markets were increasingly weak and becoming "housing of last resort" as quality lessened. By the late 1980s, the economic indicators for most of the census tracts in these communities were low enough to disqualify them as destinations for MTO families.

Despite the ineligibility of most neighborhoods within Dundalk and Essex from MTO, local opposition to the program was fierce. A variety of factors, including a hotly contested political race involving the CAN Board President, conspired to fan the flames. Community meetings, parades, and editorial pages throughout the summer and fall of 1994 bore witness to the slogan "Say No to MTO." Our key informant interviews suggested that the full reaction to MTO was not about a specific demonstration program, Section 8 in general, or even about the prospect of African-Americans moving to traditionally White neighborhoods. Instead, MTO crystallized the pent-up anxiety and rage of area residents to the general decline of their community over several decades.

Several different types of rhetorical arguments were leveled against the MTO program. Underlying assumptions about who lives in city public housing made it possible for local politicians and community leaders in Baltimore County to build on a fear of forced integration. Accelerated community decline through a mass influx of poor minorities would, it was argued, erode community standards and increase social ills. Strong opposition also surfaced to anything that could be portrayed as a "welfare-like handout" that cheapened the American Dream and unfairly catapulted the undeserving poor to the same status as long-time community residents. Finally, a distrust of the city's motives and it's inability or unwillingness to carefully monitor such a "social engineering" program was leveraged to support the claims that MTO would result in undesirable outcomes for Baltimore County neighborhoods.

Although the controversy boiled all the way up to the national level and succeeded in temporarily stalling funding for MTO, the program basically continued as originally proposed. By the end of February, 1996, 222 families had been assigned to the MTO experimental group and 98 had rented apartments in low-poverty areas by April, 1996. As of August 1997, HUD reported that 57 percent (or 283) of the households that had been offered subsidies actually moved. Of this group, 69 percent moved to low-poverty neighborhoods in Baltimore City, while only 19 percent (about 47 households) relocated to areas in Baltimore County.

KEY FINDINGS

Community and Policy Reconnaissance

Through analysis of archival and published sources and interviews with key informants, we developed a context for understanding any observed neighborhood impacts of subsidized housing programs in Denver and Baltimore County and reactions to those programs. Demographically and economically, these areas are markedly different. Denver is less affluent and has a lower home ownership rate than Baltimore County. It also has a large, mostly Latino, minority population, whereas Baltimore County is predominantly White. In addition, Denver is experiencing a boom in its real estate market, while house prices in Baltimore County have been stagnating in the 1990s. Nonetheless, there are some striking similarities between the two areas. During the 1980s, Denver and Baltimore county had aging populations, increasing numbers of female-headed households, and growing minority populations--both in absolute numbers and relative to Whites. In both areas, the predominant participant in the housing mobility program was the poorest, fastest-growing racial/ethnic group.

Despite the differences in the dispersed housing policy initiatives implemented in Denver and Baltimore County, there were noteworthy similarities in the causes of the political firestorms that engulfed them. In both, stagnant home appreciation at the time of the controversies (1989 in Denver and 1994 in Baltimore County) provided a context for homeowner anxiety. The motive of electoral victory spurred local politicians into whipping up opposition to the housing mobility program in “threatened” neighborhoods. Moreover, there were allegations of housing authority insensitivity to local concerns, and a subsequent lack of preparation in dealing with surprisingly vehement public reactions. Ironically, in both situations essentially similar programs had been operating without significant public attention for many years prior to the controversies, but as a result of the political fallout their operations were significantly limited.

Quantitative Property Value Impacts Analysis

In both Denver and Baltimore County our analysis revealed that dispersed public housing sites and Section 8 households, respectively, were located in neighborhoods that, relative to the surrounding neighborhoods, had lower or declining property values prior to being occupied by subsidized households. In general, we found that at distances of 500 feet or less subsidized housing sites or tenants have a *positive* effect on the sales prices of single-family homes. Specifically, we observed overall increases in property values as a result of proximity to Denver Housing Authority dispersed acquisition/rehabilitation public housing sites, with greater numbers of proximate sites magnifying the beneficial impacts. Some of these positive impacts even spilled over to a range of 2,000 feet. A substantially more qualified result was found in Baltimore County,

where positive impacts were observed within 500 feet of a Section 8 site only so long as there were fewer than six sites and eight subsidized households at this range.

At ranges of 501-1,000 feet, larger numbers of Section 8 sites or occupied units progressively reduced sales prices initially after occupancy. But if the number of sites (units) exceeded five (fourteen), the negative pre-occupancy price trend in the neighborhood became positive. The net impact of these two countervailing effects clearly suggested that the fewer the number of Section 8 units occupied, the more likely would there be positive impacts on values within 1,000 feet. However, the impacts on values from 1,001 to 2,000 feet appeared unambiguously negative from any configuration of Section 8 occupancy, though these impacts were less on the margin than those more proximate. Negative impacts were consistently noted in Baltimore County neighborhoods that we have identified as "vulnerable": those with low to moderate median property values, negative real appreciation, and/or 20 percent or more black residents. In high value, real appreciation, predominantly White-occupied areas, a small number of Section 8 sites produced positive impacts, regardless of the race of the subsidized household.

Focus Group Analysis

We conducted ten focus groups of homeowners (six in Denver and four in Baltimore County) who live near sites of dispersed public housing or Section 8 households. The focus groups were used to help us interpret and understand the results of the quantitative analyses, as well as provide us with additional information about the concerns of homeowners living in these areas have as they might relate to subsidized housing policy.

Homeowners in our Denver focus groups did not mention DHA dispersed public housing as an important issue in defining the quality of their neighborhoods, although they consistently raised concerns about the potentially deleterious effects of poorly maintained Section 8 subsidized rental units. Five factors were consistently identified by focus group participants as shaping the quality of life in Denver neighborhoods and affecting property values: the sense of community and social cohesion in the neighborhood; the prevalence and quality of rental housing; the cleanliness/upkeep of the neighborhood; crime and safety concerns; and the prevalence of vacant housing.

These concerns must be interpreted within the context of a recently booming housing market in Denver after a decade-long drought. Participants from all of the focus groups indicated that the value of their homes had increased sharply. For the most part, residents were quite happy with the increase in property values, although they did not equate such inflation with an equivalent increase in quality of life. Participants expressed concerns about the consequences

of the current housing frenzy. Across all groups, participants expressed concerns about the present and future affordability of housing in Denver, especially for the elderly and people on fixed incomes.

In the Baltimore County focus groups, participants liked their neighborhoods and planned to stay in them. Nevertheless, all groups, whether they felt their property values were rising, level, or falling, were concerned about the current value of their homes and prospects for future appreciation. For the most part, participants felt property values reflected the quality of life in their community.

In the three sites representing various types of "vulnerable" neighborhoods, there was clear anxiety over demographic, tenure, and physical changes in their areas. Poorly maintained rental properties and disruptive tenants were seen as key contributors to decline. Two of these groups spoke pointedly about subsidized housing as a destructive force in their communities because it was stereotyped as involving "problem properties." Indeed, such properties were identified (often erroneously) as "subsidized," whereas well-maintained apartments with well-behaved Section 8 tenants were apparently invisible to neighbors. The anxiety about rental and subsidized housing clearly brings together concerns about physical conditions, safety, and resident characteristics.

We also surmise that the difference in house price trends in the 1990s -- the property value boom in Denver versus the bust in house prices in Baltimore County -- is one reason why Baltimore County homeowners are more sensitive to the presence of subsidized housing in their communities than their counterparts in Denver. Although the DHA dispersed housing program is no longer the focus of intense criticism or concern, even a well-designed program like DHA's might come under attack during an era of price stagnation (as it did in 1989).

IMPLICATIONS

The empirical and qualitative findings hold important implications for the origins of the neighborhood impacts of dispersed subsidized housing.

In the case of the Denver, it is manifest that the acquisition of vacant, often deteriorated properties by the housing authority and their subsequent rehabilitation and occupation were viewed by the housing market as having a beneficial effect, especially on the immediately surrounding neighborhood. In addition, the increasingly large positive initial price impact associated with increased amounts of dispersed public housing activity at a range of 1,001-2,000 feet is consistent with the hypothesis that the neighborhood market perceives positive externalities associated with housing authority acquisition and rehabilitation. If the market worries over loss

of status or potentially disruptive behaviors of the new subsidized tenants in Denver, it apparently is either minor or masked by the positive externality effects from rehabilitation. The lack of discussion about dispersed housing units by our focus group participants suggests that DHA is doing a good job with the maintenance of the units, tenant screening, and working with neighborhood homeowner groups to ensure that the subsidized units and their tenants are blending into the larger neighborhood.

For Baltimore County Section 8 sites, there is support for (though by no means conclusive proof of) several, non-mutually exclusive hypotheses. First, neighbors and the market are aware of the presence of Section 8 sites/units in Baltimore County, and one or more expected attributes associated with that site/unit are quickly capitalized into property values once the site is occupied. Second, improved price trends subsequent to occupancy within 500 feet lends support to the hypothesis that Section 8 landlords in Baltimore County use the enhanced rental revenues gained from Section 8 to reinvest in their properties and improve property management more than if Section 8 were not available, at least in stronger neighborhoods. They also may be required to undertake some renovations as a condition for participating in the program. Third, there may be a micro-neighborhood stigmatization effect, that is, if a small area exceeds a threshold number of Section 8 sites it may take on the imprimatur of a "subsidized housing pocket," whereupon the market attaches a stigma and reduces its property assessments accordingly. Finally, there is support for the hypotheses that uncivil behaviors of the Section 8 households themselves, poor property maintenance or management by certain types of Section 8 landlords (such as those owning properties exclusively housing Section 8 tenants), or class prejudices of the market (independent of actual conditions at subsidized sites) spawn adverse impacts on property values, at least in vulnerable neighborhoods.

A crucial, if incidental, finding of our statistical analyses was that, in both areas, dispersed subsidized sites were systematically located in the lowest-valued and/or slowest-appreciating areas within their census tracts. There are two important implications of this finding. First, from a research perspective, it implies that statistical models of house price effects must be specified carefully to avoid erroneous conclusions. Second, inasmuch as such housing currently has a tendency to be located in lower-valued, lower-appreciation neighborhoods, local residents and the market as a whole will more likely have their anxieties about the neighborhood's future abetted. From their perspective, subsidized housing will be seen as highly correlated with neighborhood depreciation, and this probably is sufficient to attribute causation to the former.

Our analysis suggests that a cornerstone for re-establishing a constituency for dispersed subsidized housing and defusing potential local opposition must be an attack on the stereotypes surrounding such housing. We believe that this attack requires comprehensive revisions in local

housing authority dispersed subsidized housing program design and operations, including siting, management, tenant selection and monitoring, dwelling monitoring, and public relations. In Chapter 8 (“Conclusions and Policy Implications”), we offer specific recommendations for those who design and administer dispersed subsidized housing policies.

CHAPTER 1
INTRODUCTION

In 1996, the U.S. Department of Housing and Urban Development (HUD) requested that the Urban Institute of Washington, DC conduct an analysis of the impacts of dispersed housing subsidy programs on neighborhood property values. "Dispersed housing subsidy programs" are programs that are designed to provide households receiving housing assistance with greater locational opportunities in neighborhoods having lower percentages of low-income and/or minority households. Examples of such programs include Section 8 Certificates and Vouchers, which are portable and therefore not tied to a particular housing unit or political jurisdiction, and dispersed public housing programs, which seek to acquire or build smaller housing developments that are not concentrated in only a few areas. It is felt that these programs will have beneficial effects both for communities, by avoiding the clustering of low-income households, and for the households receiving assistance, by giving them more opportunities to live in better neighborhoods providing superior educational, social, and economic opportunities.

Such programs are not without controversy, however. In commissioning this study, HUD was responding to a number of concerns that have been raised in various communities about possible negative effects of dispersed housing programs. In particular, some homeowners fear that the presence of assisted households in their neighborhoods will have an adverse impact on the property values of their homes and on the quality of life in their communities.

These fears manifested themselves in the form of local resident protest in the two areas that are the subject of this report. The first was in Denver, Colorado, where the housing authority's plans to acquire additional single-family and small multi-family properties for use as public housing produced repercussions resulting in new programmatic restrictions imposed by the City Council. The second was in Baltimore County, Maryland, where the HUD Moving To Opportunity (MTO) program provoked a strong political backlash among homeowners who saw their very way of life threatened by "invaders" from Baltimore City.[1]

This study was designed to take an objective look at the issues that arose around both of these programs and to examine whether dispersed housing assistance does have the negative impacts that its critics contend. We used both quantitative and qualitative techniques to examine these questions, including interviews with key informants, econometric modeling, and focus groups

[1]For those who are unfamiliar with these areas, the City and County of Denver, with a population of 468,000, are coterminous jurisdictions. Throughout this report, we will refer to the City and County of Denver as simply, "Denver." In contrast, Baltimore County and Baltimore City are separate and distinct political and geographic entities. Baltimore County has a population of 692,000 and almost completely encircles the boundary of Baltimore City.

with homeowners. This introductory chapter provides an overview of the policy issues and study methodology, as well as a summary of the key research findings. The remainder of the report contains detailed descriptions of the policy context in both study areas, an explanation of the research methodology and results, and a summary of our policy conclusions and recommendations.

POLICY BACKGROUND

Policy makers long have harbored concerns over the location of low-income households who receive housing assistance. Traditionally these concerns have been articulated in several themes related to social problems. Some have worried that if subsidized (and other low-income) households are concentrated in a neighborhood, a variety of social maladies—violence, crime, substance abuse, alienation, out-of-wedlock child bearing—will be intensified disproportionately (Datcher, 1982; Crane, 1991; Coulton and Pandey, 1992; Polikoff, 1994). Others believe that concentrating subsidized households facilitates their stigmatization and the withdrawal of private and public capital from their neighborhood (Rainwater, 1970; Massey and Kanaiaupuni, 1993; Schill and Wachter, 1995; Leavitt and Loukaitou-Sider, 1995). Still others see a social cost in the form of perpetuated racial and ethnic segregation and isolation (Goering and Coulibably, 1989; Massey, Gross and Eggers, 1991; Bauman, Hummon and Muller, 1991; Massey and Denton, 1993).

Recently, however, the locational issue has been framed more positively. Housing subsidy programs, it has been argued, should be structured to give low-income households more spatial options than they have had previously. This enrichment of residential alternatives would not only improve the freedom and well-being of recipients in the short run, but also their prospects for economic self-sufficiency in the long run, by enhancing their access to employment and job information networks and better-quality education. It would also expose them to community social norms more supportive of education and employment (Polikoff, 1994; Rosenbaum, 1995; Cisneros, 1995).

Programmatic manifestations over concerns regarding the locations of subsidized households have also evolved, corresponding to the shift in federal support from supply-side to demand-side subsidy strategies (Nenno, 1997; Turner, 1998). During the 1970s, “neighborhood impaction” standards were promulgated by the U.S. Department of Housing and Urban Development (HUD) that forbade the construction of subsidized housing in neighborhoods that exceeded certain percentages of low-income and minority residents (Gray and Tursky, 1986). Fears that the scales of some public housing developments were so gigantic that they would create concentrated poverty regardless of the neighborhoods in which they were placed led to

initiatives for constructing small-scale, widely scattered public housing complexes (Hogan, 1996).

With the ascendancy of tenant-based subsidies as the prime delivery vehicle for subsidized housing in the early 1980s (Hartung and Henig, 1997; Nenno, 1997), attention turned to how tenants could best be provided mobility information and counseling and how housing authorities could be encouraged to adopt procedures that would open up the widest feasible range of residential options. By 1990 a set of new legislative and rule changes were in place that permitted recipients of Section 8 certificates and vouchers to use their subsidies elsewhere than in the issuing local housing authority's jurisdiction (Goering et al., 1995; Peterson and Williams, 1995).

Spurred on by the encouraging evaluations of the tenant mobility program mandated by the Gautreaux settlement of a civil rights suit against the Chicago Public Housing Authority, Congress authorized the Moving To Opportunity (MTO) demonstration program in 1992 (Ludwig and Stolzberg, 1995). In five sites, this experimental program provided Section 8 assistance and mobility counseling to former inner-city public housing residents. The results were to be evaluated over ten years to assess the efficacy of different mobility-enhancing strategies and the long-run impacts on recipients of having greater mobility (HUD, 1996). At this writing, HUD has just begun another demonstration program in 12 metropolitan areas, the Regional Opportunity Counseling Program, which aims to provide comprehensive assistance in helping Section 8 households select the most appropriate dwellings and neighborhoods from a wide array of jurisdictions across their metropolitan area.

Regardless of the programmatic particulars, however, efforts to disperse tenants receiving housing subsidies outside of concentrated poverty neighborhoods must confront a common challenge: potential hostility from communities into which subsidized households move (McGrew, 1981; Schill, 1992; Goetz, Lam, and Heitlinger, 1996; Hogan, 1996). Although such hostility is sometimes dismissed by policy makers as founded on indefensible racial prejudices or class animosities, there may be legitimate public policy concerns that the introduction of subsidized tenants may seriously harm the quality of life in a neighborhood (Evans, 1996). These concerns often focus on possible erosion of civil behaviors, upsurges in crime and violence, accelerated physical decay, and a consequent drop in property values.[2]

TWO EXAMPLES OF DISPERSED HOUSING PROGRAMS

[2]As illustrations, see Husock, 1994; Bovard, 1994a, 1994b; and Montgomery, 1994.

Two recent examples provide quintessential illustrations of community opposition to creative policy initiatives to deconcentrate subsidized households, based on the fear of potential detrimental neighborhood impacts.[3] In both cases the opposition resulted in considerable modifications to the original programmatic initiatives. The two examples involve a supply-side strategy and a demand-side strategy: the Denver Housing Authority's "Dispersed Housing Program" and the HUD-sponsored MTO program as it was instituted in Baltimore City and County.

In 1969, the Housing Authority of the City and County of Denver (DHA) began operating a public housing "dispersal" program involving 100 single-family and duplex units acquired at foreclosure sales, which were then renovated and occupied by DHA tenants.[4] In 1988, HUD ordered DHA to publicly notify the Denver City Council about the site-by site details and obtain its approval for any dispersed housing plans. Prior to that ruling, DHA housing acquisitions needed to be described only in general terms to the Council and required only the Mayor's consent. When DHA proposed its second-phase dispersal plan, which involved purchases of over 400 additional homes in middle-class neighborhoods, an inflammatory political skirmish erupted, centering on the concerns of the local citizenry regarding the perceived deleterious effects of moving public housing residents into middle class neighborhoods (Galster, 1989).[5] In response to these concerns, a Council-appointed task force drafted a set of guidelines regulating further DHA acquisitions. These guidelines stipulated that the DHA could not acquire more than one unit per block face and no more than one percent of the units in any census tract. Moreover, DHA was to target the "non-impacted" areas of Denver for these purchases.

This concession did little to defuse the controversy. Opponents argued that the plan would increase crime and erode property maintenance in recipient neighborhoods, and was inequitable inasmuch as poor families could occupy better-quality homes than working class families currently living in these areas. Proponents argued that the plan was crucial for improving the quality of life for DHA tenants, enhancing the geographic diversity of their residential options, and creating an environment where their chances of economic self-sufficiency were enhanced. The Denver City

[3]These two cases do not exhaust the recent examples where attempts to deconcentrate lower income households through housing policy have been meet with local opposition. Arguably the most virulent opposition, including bomb threats to politicians, real estate agents, and tenants associated with the Section 8 program, has arisen in northeast Philadelphia's Mayfair neighborhood (Nichols and McCoy, 1997). The pressure has grown so intense that Mayor Ed Rendell has proposed "re-concentrating" Section 8 tenants in a few large apartment complexes.

[4]See for example, Morehead, 1969; Johnston, 1969.

[5]Over the period between April, 1989 through February, 1990, dozens of articles documented the public debate and subsequent policy decisions made about the DHA Dispersed Housing Program. See for example, Carnahan, 1989; Gottlieb, 1989a, Gottlieb, 1989b.

Council approved the plan and formulated an intergovernmental agreement, which has been in operation since 1989.

Another controversy over attempts to deconcentrate subsidized tenants emerged during the summer of 1994 in Baltimore County as a local political campaign ended up catalyzing strong opposition to HUD's just-begun Moving to Opportunity (MTO) demonstration. MTO, during its first phase in Baltimore, was designed to assist 143 subsidized tenants in moving from Baltimore City public housing developments to Baltimore County. Participating tenants were given a Section 8 rental certificate, and various experimental groups were provided different levels of assistance and had to meet different mobility requirements to measure the efficacy of various mobility-enhancement strategies (HUD, 1996).

Despite the small scale of the Baltimore MTO program, it became a lightning rod for opponents of dispersed housing subsidy programs. A Fourth of July parade in blue-collar Dundalk, Maryland, a community adjacent to Baltimore, turned into a *de facto* rally where "spectators made it clear with signs and shouts that they want no part of MTO, predicting that a flood of poor people from the City [of Baltimore] will bring down their property values" (Waldron, 1994). Ellen Sauerbrey, the Republican candidate for Maryland Governor who would be narrowly defeated later that year, remarked, "Once you start messing around with people's property values, you're asking for trouble" (Waldron, 1994). Indeed, this proved the case. Senator Barbara Mikulski (D-MD) was persuaded to use her influence as Chair of the Senate Appropriations Subcommittee for HUD to not allocate the next fiscal year's $149 million appropriation for MTO (Mariano, 1994).

OVERVIEW OF RESEARCH STRATEGY

These two examples illustrate clearly how community reaction can affect the success of dispersed housing subsidy programs. Indeed, such response can determine whether there will even *be* a program. Our research therefore attempts to determine the neighborhood impacts of the Dispersed Public Housing Program in Denver and the Section 8/MTO Program in Baltimore County.. Specifically, we will rigorously test the following hypotheses:

- The acquisition of an existing property by DHA and its subsequent rehabilitation and occupancy by DHA tenants in Denver significantly reduces the sales prices of single-family homes in the vicinity.

- The occupancy of an apartment by a Section 8 household in Baltimore County significantly reduces the sales prices of single-family homes in the vicinity.

We have undertaken a three-pronged investigative strategy in both Baltimore County and Denver case studies. These three prongs form the central organizational structure of this report:

- *Community and Policy Reconnaissance*. Through analysis of archival and published sources and interviews with key informants, we developed a context for understanding any observed neighborhood impacts. Specifically, we provide in this report: (1) a profile of the economic, demographic, and political landscape of the local communities and housing markets in Denver and Baltimore County; (2) a detailed description of the policy history, administration, and operation of the programs (especially regarding tenant selection, site selection, and counseling); (3) a historical narrative describing the opposition to the programs; (4) hypotheses about the relationship between the housing programs and neighborhood changes; and (5) an analysis of the implications of these findings for the quantitative analysis.

- *Quantitative Property Value Impact Analysis*. We performed comprehensive, pathbreaking multiple regression analyses to ascertain whether sales prices of single-family homes were adversely affected by proximity to dispersed public housing units in Denver and Section 8 households in Baltimore County. Addresses of Section 8 households, public housing units, and property sales were geocoded so that mapping software could be used to compute the distance between each sale and any nearby subsidized households or dwellings. Home sales prices were regressed on their structural characteristics, year/quarter time dummy variables, and a unique set of variables identifying sales trends occurring both pre- and post-occupancy by subsidized tenants in the vicinity of each individual subsidized site. This original specification allowed us not only to control for the idiosyncratic neighborhood, local public service, and zoning characteristics of the areas surrounding the subsidized sites but also to ascertain in which sorts of neighborhoods, if any, subsidized tenants or units affect property values.

- *Focus Group Analysis*. We conducted focus groups in a wide variety of neighborhoods where subsidized housing was present to collect more qualitative information on the possible interactions between house prices, neighborhood quality and the location of households receiving housing assistance. The focus groups also allowed us to collect additional information on homeowners' perceptions of the changes taking place in their communities, their views on what makes a good neighborhood, and their opinions about the impact of subsidized housing.

KEY FINDINGS

Community and Policy Reconnaissance

Demographically and economically, Denver and Baltimore County appear to have significant differences. Denver is less affluent, has lower home ownership rates, and has a much larger minority population. Furthermore, Hispanics are the largest and fastest-growing minority group in Denver, as opposed to Blacks in Baltimore County.[6]

What is perhaps more surprising, however, are the similarities between the two areas. During the 1980s, both had an aging population, increasing numbers of female-headed households, and growing minority populations--both in absolute numbers and relative to Whites. Economic polarization among Blacks, Hispanics, and Whites increased as well from 1980 to 1990. In both Denver and Baltimore County, the predominant participant in the housing mobility program was the poorest, fastest-growing racial/ethnic group.

Despite the programmatic differences between the local housing authorities and policy initiatives in Denver and Baltimore County, there were noteworthy similarities in the causes of the political firestorms that engulfed them. In both, stagnant metropolitan housing appreciation rates provided a backdrop of homeowner anxiety. The motive of electoral victory spurred local politicians into whipping up opposition to the housing mobility program in "threatened" neighborhoods, based on fears of property value declines, unsavory tenantry and associated social problems, and the unfairness of assistance to the "undeserving poor." The housing mobility policy became the convenient vehicle for political opportunism. In both sites there were allegations of housing authority insensitivity to local concerns, and subsequent lack of preparation in dealing with a surprisingly vehement public reaction. Ironically, in both situations essentially similar programs had been operating without significant public attention for many years prior to the controversies, but subsequently their operations were significantly limited as a result of the political fallout.

Quantitative Property Value Impacts Analysis

In both Denver and Baltimore County our statistical analyses revealed that dispersed public housing sites and Section 8 households, respectively, were located in neighborhoods that had

[6]Since much of our demographic information comes from the U.S. Census, we use the 1990 Census terms of "White," "Black," and "Hispanic" as opposed to other terminology that may be more current.

lower or declining property values relative to the surrounding census tracts before they became occupied by subsidized households. However, 500 foot proximity to a subsidized housing site generally had an independent, positive effect on single-family home sales prices in both locations.

We observed overall increases in property values as a result of proximity to Denver Housing Authority dispersed acquisition/rehabilitation public housing sites, with greater numbers of proximate sites magnifying the beneficial impacts. Some positive impacts spilled over to a range of 2,000 feet. However, these results were not manifested in areas that had more than 20 percent black residents in 1990. On the contrary, proximity to dispersed public housing sites in these neighborhoods resulted in slower growth in home sales prices in an otherwise booming market. We argue that these findings suggest a threshold within these "vulnerable" neighborhoods whereby any potential gains associated with rehabilitating existing units are offset by the increased concentration of poor residents.

A substantially more qualified set of results was found in Baltimore County, where sales prices were higher within 500 feet of a Section 8 site so long as there were fewer than six sites and eight or fewer subsidized households at his range. These positive externality effects appeared primarily in the highest-valued neighborhoods. At ranges of 501-1,000 feet, larger numbers of Section 8 sites or occupied units progressively reduced prices initially after occupancy. But if the number of sites (units) exceeded five (fourteen), the negative pre-occupancy price trend became positive. The net impact of these two effects clearly suggested that the fewer the number of Section 8 units occupied, the more likely would there be positive impacts on values within 1,000 feet. However, the impacts on values from 1,001 to 2,000 feet appeared unambiguously negative from any configuration of Section 8 occupancy. Negative property value impacts were particularly consistent in Baltimore County neighborhoods that we call "vulnerable," that is, those with low to moderate median property values, negative real appreciation, or 20 percent or more Black residents.

Focus Group Analysis

We conducted focus groups in ten sites (six in Denver and four in Baltimore County). The focus groups were used to help us interpret and understand the results of the quantitative analyses, as well as provide us with additional information about the concerns of homeowners living in these areas as it might relate to dispersed subsidized housing policy.

Homeowners in our Denver focus groups did not mention dispersed housing as an important issue in defining the quality of their neighborhoods, although they consistently raised concerns about the potentially deleterious effects of poorly maintained Section 8 subsidized rental

units in their neighborhoods. Five factors were consistently identified by focus group participants as affecting the quality of life in Denver neighborhoods and affecting property values: the sense of community and social cohesion in the neighborhood; the prevalence and quality of rental housing; the cleanliness/upkeep of the neighborhood; crime and safety concerns; and the prevalence of vacant housing.

Homeowner concerns must be taken within the context of a recently booming housing market in Denver after a decade-long drought that preceded it. Participants from all of the focus groups indicated that the value of their homes had increased sharply, with most claiming a two-to-threefold increase from their original purchase price. For the most part, residents were quite happy with the increase in property values, although they did not equate such inflation with an equivalent increase in quality of life. Nonetheless, there were concerns about the consequences of the current housing frenzy. Across all groups, participants expressed concerns about the present and future affordability of housing in Denver. In addition, there were concerns about the potential displacement of the elderly who were struggling to keep up with the corresponding rise in taxes while living on fixed incomes.

In the four Baltimore County focus groups, participants liked their neighborhoods and planned to stay in them. For the most part, participants felt property values reflected the quality of life in their community. Since in the 1990s property values had not kept pace with inflation, participants were very sensitive to perceived threats to the sales prices of their homes. There also was a heightened awareness of issues surrounding Section 8 in the suburbs, brought on by the recent extensive media coverage and local political rhetoric devoted to the issue.

In the three Baltimore County focus group sites representing “vulnerable” neighborhoods, homeowners expressed clear anxiety over demographic, tenure, and physical changes taking place in their communities. Rental properties in general, especially if they were poorly maintained and had disruptive tenants, were seen as key contributors to decline. Two of these groups (one with White participants, one with Black) spoke pointedly about subsidized housing as a destructive force in their communities because it was stereotyped as involving “problem properties.” Thus, in “vulnerable” neighborhoods any upsurge in problematic rental properties was equated with an “invasion” of Section 8 housing, whether or not such an influx was occurring. In reality, these perceptions seemed to have little to do with the actual presence of Section 8 tenants. On the contrary, focus group participants seemed unaware of the presence of Section 8 sites that were physically indistinguishable from other homes in the neighborhood.

Our Baltimore County focus group participants in a less vulnerable, all-white, high valued community were deeply concerned about their ability to keep out subsidized housing as a way of

preserving their neighborhood's quality of life. Although there was one Section 8 site nearby, focus group participants were unaware of it.

We surmise that the difference in house price trends in the 1990s -- the property value boom in Denver versus the bust in house prices in Baltimore County -- is one reason why Baltimore County homeowners are more sensitive to the presence of subsidized housing in their communities than their counterparts in Denver. Although the DHA dispersed housing program is no longer the focus of intense criticism or concern, even a well-designed program like DHA's might come under attack during an era of price stagnation (as it did in 1989).

Implications

The quantitative and qualitative findings hold important implications for the origins of the neighborhood impacts of dispersed subsidized housing. We stress that these are suggestive and are specific to the situations and programs we studied Denver and Baltimore County. Further research and replication in other communities would be needed to develop truly generalizable conclusions.

In the case of the Denver, it is manifest that the acquisition of vacant, often deteriorated properties by DHA and their subsequent rehabilitation and occupation were viewed by the housing market (except in neighborhoods with more black residents) as having a salutary effect, especially on the immediately surrounding neighborhood. Second, an increasingly large positive initial price impact associated with increased amounts of DHA dispersed housing activity at a range of 1,001-2,000 feet is consistent with the hypothesis that the neighborhood market perceives positive externalities associated with DHA acquisition and rehabilitation. If the market worries over loss of status or potentially disruptive behaviors of the new subsidized tenants in Denver, it apparently is either minor or masked by the positive externality effects from rehabilitation. Further, the lack of discussion about dispersed housing units in the neighborhood by our focus group participants suggests that the DHA is doing a good job with the maintenance of the units, tenant screening, and working with neighborhood homeowner groups to ensure that the subsidized units and their tenants are able to blend into the larger neighborhood. Yet increasing the number of DHA dispersed units in certain neighborhoods, as was noted in Denver's Black neighborhoods, does not produce this positive effect. Finally, it is important to note that although the DHA dispersed program was not mentioned specifically as an issue by the Denver focus group participants, there was considerable concern about the clustering of poorly maintained and managed government-subsidized rental housing, particularly the Section 8 program.

For sites where Baltimore County Section 8 households reside, it is clear that neighbors and the market as a whole are aware of their presence and one or more expected attributes associated with those sites are quickly capitalized into property values. That the market consistently prices proximity to these sites/units implies that the Section 8 program is visible, not necessarily because households are identified as "subsidized," but rather because there are some identifiable characteristics of Section 8 households or landlords with which they are associated.

Second, inasmuch as small numbers of occupied Section 8 units and, especially, sites within 500 feet improve the price trends subsequent to occupancy, there is support for the hypothesis that Section 8 landlords in Baltimore County use the enhanced rental revenues gained from Section 8 to reinvest in their properties (and perhaps manage them better) more than if Section 8 were not available. Furthermore, an additional factor may be at play: prospective Section 8 landlords failing to meet HUD Housing Quality Standards (HQS) may be required to rehabilitate their building.

Third, because the positive externality effect at close proximity to Section 8 occurs solely in higher valued, White census tracts, whereas negative externality effects were observed in more "vulnerable" tracts, there must be systematic, cross-tract differences in how the program operates or is perceived.

Fourth, the larger the number of sites or units which are currently occupied at time of sale, the greater the short-run negative impact and the prospects of long term negative price effects on proximate home prices. There is thus support for (non-mutually exclusive) hypotheses that: (1) uncivil behaviors of the Section 8 households; (2) poor property maintenance or management by certain types of Section 8 landlords (such as those owning properties almost exclusively housing Section 8 tenants); and (3) class prejudices of segments of the home buying market (which may not be behaviorally validated by actual Section 8 sites) adversely affect property values.

Fifth, the strong negative interaction effect evinced for larger concentrations of Section 8 sites within a 500 feet radius suggests that there may be a micro-neighborhood stigmatization effect. That is, if a small (especially a "vulnerable") area exceeds a threshold number of Section 8 sites it may take on the imprimatur of a "subsidized housing pocket."

A crucial, if incidental, finding of our statistical analyses was that, in both areas, dispersed subsidized sites were systematically located in the lowest-valued or slowest-appreciating sectors within any given census tract. These patterns can be traced to the behaviors of Section 8 landlords, Section 8 tenants, and the local housing authorities themselves. Perhaps of more

import, however, are two implications from this finding. First, from a research perspective, it implies that statistical models of house price effects must be specified carefully to avoid erroneous conclusions. For example, if one merely does a cross-sectional comparison of prices near subsidized sites with those less proximate, one will tend to observe lower prices in the former area, but this cannot necessarily be traced to an independent impact from the subsidized sites. As another example, if one merely compares levels of prices before and after occupancy of a subsidized site, there will be a bias toward observing a lower post-occupancy level because of a pre-existing trend of depreciation in the area, not because of subsidized housing.

The second implication relates to politics and the public support than can be mustered for a dispersed subsidized housing program. Inasmuch as such housing currently has a tendency to be located in lower-valued, lower-appreciation neighborhoods, local residents and the market as a whole will more likely have their anxieties about the neighborhood's future abetted. Moreover, local residents and the market are unlikely to be able to make the subtle distinctions in causality that our statistical analyses permitted here. From their perspective, subsidized housing will be seen as highly correlated with neighborhood depreciation, and this probably is sufficient for them to attribute causation to the former. Of course, in the case of the Baltimore County Section 8 program, we have found that such an attribution is justified, for it is in precisely these "vulnerable" neighborhood contexts where the program as it operated during the early to mid-1990s apparently caused additional value declines beyond those already present.

Our analysis suggests that a cornerstone for re-establishing a constituency for dispersed subsidized housing and defusing potential local opposition must be an attack on the attributes that fuel stereotypes surrounding such housing. We believe that this attack requires comprehensive revisions in local housing authority dispersed subsidized housing program design and operations, including siting, management, tenant selection and monitoring, dwelling monitoring, and public relations. Moreover, it requires a realignment of dispersed subsidized housing policy within the larger realm of local housing policies. In Chapter 8 ("Conclusions and Policy Recommendations"), we offer specific recommendations for those who design and administer dispersed subsidized housing policies.

We repeat that our findings should not necessarily be generalized to other locations or to other subsidized housing programs. Indeed, since this is the first systematic investigation into the property value impacts of Section 8 and acquired/rehabilitated scattered-site public housing in two particular sites, any findings should be treated as tentative. Clearly, the many intriguing hypotheses suggested above should be interpreted cautiously as topics for further inquiry, not as firm conclusions.

A GUIDE TO THIS REPORT

The remainder of this report presents the details of our two study locations, research methods, analysis, and policy recommendations. Chapter 2 describes the techniques we used to gather background information from key informants in both study areas. It reviews the national history of scattered site public housing and then describes the demographic, economic, historical, and policy context in Denver. Chapter 3 reviews the national policy history of the Section 8 program and presents similar background information on Baltimore County and its variants of the Section 8 program. The methodology presented in Chapter 4 begins with a non-technical overview for those who are less familiar with econometric modeling of house prices. It then discusses in detail the theoretical foundation of the statistical models used in this analysis, reviews prior models, and gives the exact specifications of the models that we used to quantify property value impacts of dispersed housing. We also present our methods for recruiting and conducting focus groups and descriptions of the focus group sites. A description of the data sources used to produce the model estimates is given in Chapter 5. This Chapter also provides maps showing the locations of dispersed subsidized housing sites in Denver and Baltimore County. The outcomes from the statistical model estimations and focus groups in Denver are reported in Chapter 6, followed by a discussion of the implications of these findings. Chapter 7 provides an analogous presentation for Baltimore County. Finally, Chapter 8 contains our conclusions and overall policy recommendations from this analysis.

The Annexes to this report contain additional materials for those who are interested in more details of various stages of the analysis. These Annexes contain discussion and interview guides, additional statistical tables not presented in the main body of the report, results from the regression model runs, focus group procedures, and brief summaries of each of the ten focus groups.

CHAPTER 2
DENVER AND THE DISPERSED HOUSING PROGRAM

METHODOLOGY FOR COMMUNITY AND POLICY RECONNAISSANCE

Before discussing our two study sites, we begin with a brief summary of the field methodology we employed for this component of our research. We used three sources of information for our Community and Policy Reconnaissance in Denver and Baltimore County: (1) archival materials and published reports, (2) key informant interviews, and (3) statistical databases. Each source was probed to glean insights about how the particular housing program operated, in what sorts of neighborhoods it operated, the political context in which it operated, and hypotheses about what sorts of neighborhood impacts it produced, if any, and the reasons it did or did not produce such impacts.

Archival Materials and Published Reports

We searched archival records of the major metropolitan daily newspapers for stories related to the Denver Dispersed Housing Program and the Baltimore Section 8/MTO Program. We used local agency reports and city council and commission minutes. Moreover, we reviewed HUD and other governmental reports as well as the scholarly literature related to scattered-site subsidized housing programs and their potential neighborhood impacts in cities across the nation, with particular focus on those conducted in the case study sites.

Key Informant Interviews

In both study sites we conducted personal interviews with City and County housing agency administrators, non-profit housing organization administrators, local foundation officials, and elected local officials (both proponents and opponents of the policy). As appropriate, we also interviewed neighborhood leaders and HUD personnel in both local and Washington offices. In April and September 1996 as well as February 1997, 23 interviews were conducted in Denver. During January and March 1997, we interviewed 14 key informants in the Baltimore area. The complete listing of all those interviewed and sample interview guides are provided in Annex A.

Subjects for key informant interviews were initially selected based on one or more of the following criteria: (1) leadership position in an agency primarily responsible for implementing the program, (2) elected local official with long-standing reputation for interest in housing policy, (3)

name that frequently appeared in newspaper coverage of local political controversy surrounding the policy; (4) referral by HUD Policy Development and Research staff. During each of these initial interviews we asked the respondent for names of additional people with whom to speak. This "snowball" method yielded the sample comprising the remainder of our interviews.

Before conducting interviews we took care to assure smooth entry into the community, inasmuch as the dispersed housing policies still had the potential to inflame political passions in ways that might damage ongoing programs and hurt recipients of housing subsidies. Prior to the actual interviews, we scoured archival materials to familiarize ourselves with the local context, personalities and issues. We also consulted with local resident experts with whom the researchers had long-standing professional relationships, who helped us become better attuned to local sensitivities and institutional and interpersonal interconnections. Letters of introduction and support for our research were sent by HUD-DC to local informants.

Each interview was structured by an Interview Guide (see Annex A), although in all cases the conversation developed organically. All respondents were assured that their responses would be kept confidential. Thus, citations of respondents below will refer only to their generic categories ("local elected official," for example), which are specified in sufficiently broad terms that several respondents are contained within each.

Statistical Databases

Our primary sources of statistical data for describing the neighborhood contexts of the subsidized housing programs under study included published U.S. Census reports and the Urban Institute's Underclass Database. The latter consisted of selected census tract data extracted from the decennial censuses of population and housing for 1970, 1980 and 1990. This database was extremely useful for examining trends at the tract level, inasmuch as all data were converted to standard (*i.e.,* 1990) boundaries of census tracts. Statistics extracted from the Underclass Database were compiled into tables that are included in the body of this report and were used to provide a general picture of the demographic and housing patterns in Denver and Baltimore County. To further enhance our understanding of the spatial nature of these patterns, we created a series of maps that display the geographic distributions of key census indicators.

Data related to the location and characteristics of subsidized dwellings and households were obtained from the two collaborating housing agencies. The Denver Housing Authority (DHA) supplied information about the location, start of occupancy, and structural characteristics of all its

public housing. The Baltimore County Housing Department (BCHD) provided archival files giving the location of each of its Section 8 tenants.[1]

POLICY HISTORY OF SCATTERED-SITE PUBLIC HOUSING

National Policy History

According to Hogan (1996) national policies aimed at deconcentrating public housing emerged in the 1960s in response to public concerns regarding the deleterious impacts of large scale public housing projects on inner-city neighborhoods. Increased criminal activity, concentrated poverty, increased social and spatial isolation of the poor, and the concomitant rise in negative behaviors (i.e. high school desertion, out-of-wedlock childbearing, withdrawal from the labor force) previously have been attributed to the presence of large public housing projects. In order to address these purported social ills, policy makers advocated the development of low-density, geographically dispersed assisted housing, also known as *scattered-site housing*.[2]

In actuality, the scattered-site housing policies of the 1960s were in many ways a return to earlier Public Works Administration (PWA) housing plans implemented in the 1930s and 1940s that emphasized low-density, low-rise construction (Friedman, 1968; Genung, 1970) and a rejection of the large-scale developments of the 1950s and 1960s. These small-scale developments, acclaimed for their attention to the physical design and management practices that fostered interaction among residents and facilitated the upward social mobility of low-income families (Wood, 1980), were replaced by large scale, high density, spatially concentrated projects. Previous studies (Bauer, 1957; Friedman, 1967; Stewart, 1979; Kellam, 1993) cite economies of scale, institutionalized practices of class and racial residential segregation, and the decrease of vacant land in urban areas after World War II as factors leading to the creation of the large, high-rise public housing projects of the 1950s and 1960s.

By the late 1950s and early 1960s, critics (Seligman, 1957; White, 1957; Jacobs, 1961) of large public housing projects called for the redesign of public housing to ensure the social,

---

[1]We are grateful to the staff of both of these agencies for their cooperation in providing these data.

[2]For the purpose of this study, we will adopt the definition used by Hogan (1996) to define scattered-site housing. According to Hogan (1996: 11), scattered-site housing is the construction or acquisition of low-density buildings (fewer than 15 units per site) in nonminority concentrated neighborhoods throughout the city or metropolitan area.

economic, and spatial integration of residents, the fostering of "normal" family and community life, and the creation of safe and usable public spaces. Central to this redesign were the principles of small-scale, low-density, spatially dispersed units: "scattered-site housing." Although the early history of scattered-site housing development is quite sketchy, Hogan (1996: 5) suggests that early work of Seligman (1957), White (1957), Bauer (1957) and Jacobs (1961) "contained seeds of thought about the appropriateness and appearance of scattered-site housing." Other proponents argued that public housing be "built in relatively small, scattered projects which would blend into their surroundings" (McEntire, 1960:324) and that smaller projects scattered throughout the community would seem more suitable than the massive high rises (Ledbetter, 1967).

According to a study by Schermer Associates (1968: 50-52), a number of federally-sponsored programs developed in the 1960s facilitated the emergence of scattered-site housing programs designed to foster the economic integration of low-income families in nonpoor neighborhoods. The underlying premise of these programs was that economic integration would, in turn, reduce the social and spatial isolation of the poor. Scattered-site (*i.e.,* low density, low-rise) new construction projects, housing acquisition programs, leasing programs, and turnkey housing developments were among the new, "nontraditional" public housing initiatives that emerged in the policy discourse.

The feasibility of these alternative strategies as viable housing programs was solidified with the enactment of the Housing and Urban Development Act of 1965. In particular, provisions described in Section 23, which established the leased-housing program as a means of integrating public housing tenants into middle-class neighborhoods, and Section 101, which authorized the rent supplement program extending access to housing in urban fringe areas (*Congress and the Nation*, 1965), provided the legislative framework from which proponents of dispersed public housing could begin to implement deconcentration efforts. As Hogan (1996: 11) notes, public housing authorities in New York, Atlanta, Washington D.C., San Francisco, and San Antonio were among the pioneers in "acquiring sites or purchasing buildings for family housing in working-and middle-class neighborhoods." It would not be until the early 1970s, however, that the scattered-site strategy would be endorsed widely by policy makers.

According to Hogan (1996: 6-7), another regulatory mechanism that affected the deconcentration of assisted housing was HUD's 1967 implementation of the equal opportunity regulation in compliance with the Civil Rights Act of 1964. The regulation provided that "any proposal to locate housing only in areas of racial concentration will be *prima facie* unacceptable and returned to the Housing Authority for reconsideration." For the first time, federal policy explicitly mandated nondiscriminatory site selection in public housing. Additional events that mandated public housing desegregation and the development of scattered-site public housing

include the passage of the 1968 Housing Act and a series of federal discrimination lawsuits against HUD as well as individual housing authorities.[3]

Dispersed Housing Initiatives in Denver

Denver was not unaffected by the national debates regarding public housing that crystallized at the close of the 1950s. Indeed, over the course of the next 37 years, the Denver Housing Authority (DHA) would implement three different initiatives under the rubric of "dispersed housing" that would generate approximately 1,300 units of scattered-site public housing by the end of 1997.[4] These program initiatives included: (1) the acquisition of VA or FHA foreclosures; (2) the infill construction of dispersed, clustered housing; and (3) the DHA replacement housing program, which purchased existing properties through the local real estate market. Each of these initiatives is described below.

VA/FHA Acquisition Program. Although the precise origins of, and reasons for, the development of the Dispersed Housing Program in Denver are not well documented, discussions about the feasibility of the program emerged as a regular agenda item at the monthly DHA Board of Commissioners meetings during the Fall of 1960.[5] Indeed, by the end of 1960, DHA had identified 20 areas in the city suitable for the development of newly constructed, dispersed public housing, presented a proposal to the City Council on the plan, and obtained City Council permission to release bids for the construction of these new dispersed units.[6] Despite City Council concerns regarding the program (i.e., density, proximity to existing public housing), DHA received Council approval to develop an initial 250 units of new dispersed housing in March, 1961.[7] This initial support for the Dispersed Housing Program solidified after the results of a DHA and Denver Health and Hospitals Corporation-sponsored needs assessment for large families underscored the serious problems confronted by large families in seeking low-rent housing in Denver.[8]

---

[3]Perhaps the most famous suit is Gautreaux. For more on these cases, see Peterson and Williams (1995) and Polikoff (1995).

[4]Information based on interviews with four public housing administrators.

[5]*Minutes of the DHA Board of Commissioners* (1960, various months).

[6]*Minutes of the DHA Board of Commissioners* (October 19, 1960:11; November 9-18, 1960:4; December 14, 1960:7).

[7]*Minutes of the DHA Board of Commissioners* (March 21, 1961:3).

[8]*Minutes of the DHA Board of Commissioners* (May 7, 1963:4).

Despite the reported interest in the program, it would not be until the end of the decade that the first dispersed units would be built. What caused the delay? In part, new construction of large-family units was delayed by a protracted debate about the development of 250 units of elderly housing — a debate that was finally resolved in the latter part of the 1960s. However, the primary factor cited for the delay was the enormous land costs in the City that inhibited the construction of
these units.[9] Others speculated that fears regarding the impact on property values of building units housing disadvantaged minority persons was a major reason for delaying new construction.[10]

Dogged by low vacancy rates and long waiting lists, DHA sought to reduce the costs of developing dispersed units and to speed their delivery. DHA investigated the use of foreclosed VA or FHA homes to achieve these ends.[11] In 1968, DHA received the unanimous endorsement of the City Council to acquire 100 units of VA or FHA foreclosed properties — mainly single-family homes.[12] One of the pioneering features of this plan was that, for the first time, many of the proposed units would be located in Southwest Denver.[13] By December, 1970, the first 100 FHA homes had been purchased.[14]

DHA Infill Construction Program. As mentioned above, DHA expressed considerable interest early on in the development of dispersed housing via new construction. It was not until 1969, however, that the Authority was authorized to build the first 200 dispersed units. Responding to HUD-supported urban renewal programs, DHA ultimately constructed approximately 800 units of "clustered dispersed" housing during the period between 1970 and 1974. Using turnkey style construction, these dispersed developments consisted of clusters of 20 to 50 units built on vacant lots scattered throughout the city.[15]

---

[9]*Minutes of the DHA Board of Commissioners* (February 15, 1967:4).

[10]See Gillies (1972:36).

[11]*Minutes of the DHA Board of Commissioners* (December 14, 1966:3; January 25, 1967:4); Johnston (1969:37).

[12]For further information see *Minutes of the DHA Board of Commissioners* (May 22, 1968:6; January 8, 1969:3); Johnston (1969:37).

[13]*Minutes of the DHA Board of Commissioners* (July 22, 1970:3).

[14]*Minutes of the DHA Board of Commissioners* (December 30, 1970:2).

[15]Material was based on interviews with four public housing administrators.

DHA Replacement Housing Program. In the 1980s, the DHA, like many housing authorities across the country, began to feel the pressures associated with the obsolescence of its conventional housing stock. To upgrade its housing stock and reduce densities in some of its oldest housing projects, the DHA proposed a five-year modernization plan in 1989 that would include the demolition of approximately 400 units of existing public housing. These would be replaced through the acquisition of existing single family units, duplexes, condominiums, townhouses and scattered site clusters across Denver (*Phase II Replacement Housing Plan for the Housing Authority of the City and County of Denver*, 1989).

Three elements made this particular DHA initiative unique: (1) the sheer volume of the acquisition plan; (2) the proposed purchase of pre-existing units from a particularly soft local real estate market; and (3) the passage of a HUD regulation in 1988 that not only mandated the one-to-one replacement of public housing units but also required the consent of the local governing body for the purchase of these replacement units. All of these elements rendered a heretofore relatively invisible program highly visible and subject to intense public scrutiny.[16] This led to a prolonged, contentious public debate regarding the entire Dispersed Housing Program and some might argue,
to its near demise. The details of this debate are discussed in a later section. One of the significant consequences of this debate was the development of the site and tenant selection criteria described below.

Site Selection Process in the DHA Dispersed Housing Program

Prior to 1989, the selection of acquisition homes or lots for infill construction under the Dispersed Housing Program was predicated primarily on budgetary constraints. As a result, a sizable fraction of dispersed units were concentrated in poor and working-class neighborhoods of Northeast, Central and Northwest Denver where land and housing values were lowest. However, as a result of the public scrutiny of the Replacement Housing Program in 1989 and the movement into middle-class neighborhoods, additional factors constrained the site selection process. These included: (1) the purchase of units in non-impacted census tracts (*i.e.,* low concentrations of poor as well as existing public housing units); (2) a minimum distance requirement of at least 950 feet between DHA properties in any given census tract; (3) a maximum DHA ownership threshold of one percent of all units or eight properties (whichever is less) in any

[16]Material based on interviews with six public housing administrators.

given census tract; (4) a DHA preference for the purchase of vacant or foreclosed homes.[17] These limitations appear to have made it more difficult for DHA during the 1990s to find suitable and affordable replacement units, while at the same time striving to blend unobtrusively into the neighborhood. Given the current housing boom in Denver, these difficulties are expected to worsen in the immediate future.

Since 1990, DHA has purchased existing homes with an emphasis on buying duplexes and smaller, clustered units. In order to identify appropriate properties, staff at the DHA work with local realtors, scour MLS listings, and look for "For Sale" signs in neighborhoods where DHA would like to expand their dispersed housing stock. All housing purchases must be of post-1948, brick construction. Further, the authority avoids purchasing properties that may have problems with asbestos and lead-based paint.[18] In the last few years, Denver's tight housing market has made it increasingly more difficult to find suitable properties within price restrictions. Moreover, access to once-closed neighborhoods is being constrained by the high costs of housing.

Tenant Selection Criteria in the DHA Dispersed Housing Program

Prior to 1987, Dispersed Housing Program units were only filled with families transferring from DHA conventional public housing. Eligible tenants included those with excellent rent and housekeeping histories as well as those perceived as being more independent and highly motivated.[19] Beginning in 1987, however, a set of stringent tenant selection criteria were adopted to screen all prospective DHA conventional housing residents. Since the Dispersed Housing Program is considered to be a part of DHA conventional housing (as opposed to the Section 8 rent-subsidy program), all applicants for conventional and dispersed housing programs are screened in the same manner and are placed on the same public housing waiting list.

These tenant selection criteria are as follows:[20]

- Adherence to HUD income guidelines for program participation as well as the 30% income caps for rental payments: The tenant must demonstrate the ability to meet

[17]Information based on interviews with six public housing administrators, four community leaders, and from *Resolution No. 100, Series of 1989, Resolution Supporting an Intergovernmental Agreement between the City and County of Denver and Denver Housing Authority.*

[18]Description based on interview with one public housing administrator.

[19]Interview with one public housing administrator.

[20]This discussion is based on the interviews of six public housing administrators.

the financial obligations associated with living in the dispersed unit, including costs of lawn maintenance and snow removal.

- No history of criminal activity: There is particular concern for previous drug use or dealing, gang activity, or other criminal acts.

- Proof of acceptable rent payment history: The tenant must have a history of paying rent in full and on time. If the applicant is not a DHA resident, he/she must provide landlord references on rent payment history. If the tenant is a current DHA resident, there must not be an outstanding DHA debt.

- Acceptable housekeeping record: The tenant must furnish a housekeeping report from either a private landlord or from the DHA. Implicit in this criterion is the notion that the applicant can and will work with others in terms of accepting preventive maintenance responsibilities for both inside and outside of the unit.

- Proof of identity regarding citizenship, relationship to children, and legal custody of children.

- Adherence to federal preferences for standing on the waiting list: Applicants who are involuntarily displaced from their homes are given the highest priority. Applicants residing in substandard housing receive the second preference. The third preference is for applicants who are rent burdened.

In addition, DHA expectations include a high degree of motivation towards self-sufficiency and community involvement. Evidence of these characteristics would include positive attitude and self-esteem, open communication and cooperation with housing management personnel, and participation in local resident councils or other community organizations.[21]

Once applicants are deemed eligible to participate in DHA conventional housing, they are placed on a waiting list according to the HUD preference guidelines described above. While at one point the waiting list exceeded 2,000, the current waiting list numbers only approximately 250. As tenants move to the top of the waiting list, they are referred to the appropriate property manager. If the applicant has been referred to the Dispersed Program, an interview with the manager is completed (whenever possible this is a home-based interview.)[22] At that interview,

[21]Bailey (1990:7).

[22]Information about the protocol followed was obtained from interviews with four public housing administrators.

applicants are provided information regarding rental responsibilities and rental rates. The terms and conditions of the lease are fully explained. In addition, the manager provides information about life in specific neighborhoods.

Every attempt is made to match tenants to unit and area preferences. If there is a good match, an offer is made. Applicants are given up to two offers in either conventional project or the Dispersed Program. However, after two refusals, applicants are placed on an inactive list for six months and must reapply for future consideration. According to the DHA housing administrators we interviewed, this procedure generally has identified good tenants. Indeed, they stressed that less than 5% of their tenants would be considered as "problematic" tenants. Further, they emphasized that when any problems occurred, their response was consistent and rapid. As a result, there has been a marked lessening of concern about tenants on the part of community residents, they alleged.

The racial/ethnic profile of DHA residents reflects the overrepresentation of people of color, particularly Hispanics, in public housing. Fifty-one percent of DHA residents are Hispanic, 23 percent are Black, and 14 percent are White. The Dispersed Housing Program contains about the same proportion of Hispanics as in DHA housing overall (52 percent), a higher proportion of Blacks (31 percent), and a lower proportion of Whites (7 percent).[23]

A PROFILE OF DENVER

To place the policy history in its a proper context, this section provides a general overview of the demographic and housing trends in Denver for the years 1980 and 1990. Table 2.1 summarizes Census data on population, education and employment, income and poverty, and housing characteristics for Denver by race/ethnic groupings. Because the spatial distribution of these changes are vitally important to this project, we have also created a series of maps that highlight the geographic distributions of key indicators in census tracts throughout the county (see Maps 2.1-2.10).

Population Characteristics

Denver serves as the economic, political and social center of not only the metropolitan area but also of the State of Colorado. In Denver, the City and County boundaries are geographically congruent and have a single, county-level government. During the 1980s, while the metropolitan population grew by one-tenth of a percent, the population of Denver declined by 5 percent. The

[23]Statistics derived from DHA Client and Property Databases and provided by DHA administrators.

population of Denver was 467,610 in 1990. Significant decreases in the White (*i.e.,* non-Hispanic White) population (-12 percent) and modest declines in the non-Hispanic Black population (-1 percent) in Denver were only partially offset by substantial increases in the Hispanic population (+16 percent) during the 1980s. These population shifts were reflected in the changing ethnic composition of Denver. By 1990, 61 percent of Denverites were White, 23 percent were Hispanic and 12 percent were Black. The 1980s also witnessed growth of foreign-born Hispanics. By 1990, one out of every six Hispanics was foreign-born.

Table 2.1. Selected Population and Housing Characteristics by Ethnicity, Denver 1980-90

	1980				1990			
	All	White	Black	Hispanic	All	White	Black	Hispanic
Population Characteristics								
Total population	492,365	326,554	58,408	92,348	467,610	287,162	57,793	107,382
Median age (in years)	30.2	32.3	25.9	23.0	33.8	37.3	30.6	26.0
% households headed by females	18.7	14.9	35.8	25.7	22.2	15.3	41.3	30.2
% foreign born	6.2	5.0	1.7	9.9	7.4	3.8	2.3	15.2
Education and Employment Characteristics								
% with < H.S. degree	25.3	22.0	29.9	57.2	20.8	12.6	25.0	49.6
% college graduates	24.8	27.9	12.0	6.1	29.0	37.1	14.5	6.9
Labor force participation rate	66.4	66.4	68.5	64.1	67.6	67.6	66.9	68.4
Unemployment rate	5.0	4.2	8.1	8.9	6.8	4.6	11.5	11.5
Income and Poverty Status								
Median family income	19,527	21,062	15,211	13,945	32,038	38,501	24,619	20,863
% households receiving public assistance	7.4	5.4	15.7	17.6	7.6	4.5	15.2	15.3
% families living in poverty	10.3	6.6	21.2	22.9	13.1	6.2	23.0	27.9
% persons living in poverty	13.7	10.2	23.3	23.9	17.1	9.8	27.0	30.6
% female-headed families living in poverty	30.2	21.5	41.2	49.3	34.1	21.1	41.0	51.5

Table 2.1. Selected Population and Housing Characteristics by Ethnicity, Denver 1980-90 (continued)

	1980				1990			
	All	White	Black	Hispanic	All	White	Black	Hispanic
Housing Characteristics								
Total year-round housing units	227,806	---	---	---	239,636	---	---	---
Occupied housing units	211,566	170,406	21,587	27,887	210,952	148,238	23,785	34,358
Housing vacancy rate	7.1	---	---	---	12.0	---	---	---
% owner-occupied	50.2	52.7	43.6	41.5	49.2	52.9	42.5	39.9
% renter-occupied	49.8	47.3	56.4	58.5	50.8	47.1	57.5	60.1
% housing units built prior to 1940	29.4	29.8	23.4	33.4	25.7	25.7	19.1	28.8
% housing units in 20+ unit structures	N/A	N/A	N/A	N/A	26.1	24.0	17.8	13.3
Median housing value	62,000	63,700	55,700	51,300	78,300	84,100	68,000	62,700
Median contract rent	213	222	195	175	338	362	302	294

NOTES: With the exception of total population counts for 1980, estimates of population and housing characteristics for Whites in 1980 include white Hispanics. Estimates on the number of housing units in structures with 20+ units could not be calculated from published records in 1980. In 1990, all estimates are based on mutually exclusive ethnic categories.

SOURCES: Various published tables were used from the following sources: U.S. Bureau of the Census (1983). *1980 Census of Population and Housing, Population and housing characteristics for Census Tracts: Denver-Boulder CO.* Washington D.C.: U.S. Government Printing Office; U.S. Bureau of the Census (1993). *1990 Census of Population and Housing, Population and Housing Characteristics for Census Tracts and Block Numbering Areas: Denver-Boulder CO.* Washington D.C.: U.S. Government Printing Office.

The City of Denver, as well as the larger metropolitan area, remain highly segregated along ethnic lines. Although only 23 percent of all metro area Whites lived in Denver in 1990, 51 percent of Hispanics and 63 percent of Blacks were Denver residents. While this concentration within the central city decreased during the 1980s for all groups, the declines were most pronounced for Blacks. Nonetheless, minority segregation from Whites is marked. In 1980, 72 percent of all Blacks and 57 percent of all Hispanics would have had to have moved from their place of residence in Denver in order to live in integrated neighborhoods with Whites (Santiago, 1996). During the 1980s, Black segregation from Whites decreased substantially — 59 percent of Black residents in Denver would have had to move from their place of residence in 1990 to live in integrated neighborhoods. In contrast, Hispanic segregation from Whites declined slightly. In 1990, 57 percent of all Hispanics would have had to move in order to live in integrated neighborhoods with Whites. Black residents in Denver tend to be concentrated in Northeast Denver while Hispanic residents tend to be concentrated in Northwest Denver as well as in some neighborhoods in central Denver.

Maps 2.1 and 2.2 show the percentage of Black residents in 1990 and the change in the percentage of Black residents (in percentage points) from 1980 to 1990 in Denver City and County census tracts. Most tracts in the area (102 out of 142) have fewer than 10 percent Black residents. The Black population is largely concentrated in the northeast part of the city, with 13 tracts having majority (> 50 percent) Black populations. From 1980 to 1990, most tracts in Denver experienced an increase in the share of Blacks. However, 42 census tracts showed a decline in the proportion of Black residents. Some of these latter tracts are in areas that had relatively high proportions of Blacks in 1980.

Maps 2.3 and 2.4 provide similar geographic distributions for the Hispanic population. Map 2.10 shows a quite clear division of the city into Hispanic and non-Hispanic areas. The western portion of the city contains mostly tracts with over 40 percent Hispanic. A second concentration of Hispanics can be found in the northeast corner of the city. These areas also experienced the most rapid growth in the proportion of Hispanics during the 1980s, with several tracts showing increases of greater than 10 percentage points.

Between 1980 and 1990, the age and household composition of Denver residents also changed markedly. The population became older — with the median age increasing from 30.2 to 33.8 years. Although aging occurred across all ethnic groups, it was most pronounced in the White and Black populations. The median age of Whites and Blacks was 37.3 and 30.6 years,

respectively. In contrast, the median age of the Hispanic population was 30.2 years — up from 23 years in 1980.

The 1980s also witnessed the significant growth in minority families headed by females. By 1990, 41 percent of Black families and 30 percent of Hispanic families were headed by women. In contrast, the fraction of White mother-only families increased only slightly from 14.9 percent in 1980 to 15.3 percent in 1990.

Education and Employment Characteristics

There are marked ethnic differences in the levels of educational attainment in Denver. Although the fraction of individuals with college degrees increased and the fraction of individuals with less than high school degrees decreased in the 1980s, the results presented in Table 2.1 underscore the very low levels of educational attainment of Hispanics in Denver. In 1990, nearly one-half of all adult Hispanics over the age of 25 had not completed high school. Only 7 percent held college degrees. In contrast, less than 13 percent of White and 25 percent of Black adults had not finished high school. Moreover, 37 percent of Whites and nearly 15 percent of Blacks held college degrees. Note that this low level of Hispanics' educational attainment in Denver is in marked contrast to that noted for Baltimore County.

While the lower levels of educational attainment of minority, and particularly Hispanic, residents might account for their significantly higher unemployment rates (12 percent) relative to Whites, they do not translate into markedly different rates of labor force participation. Across all groups, approximately two-thirds of persons over the age of 16 were in the labor force. In 1980, Blacks had the highest rate of labor force participation (69 percent); by 1990, Hispanics had the highest rate (68 percent). During the 1980s, unemployment rates increased for all groups, although the increase was almost negligible for Whites. Further, the unemployment rates for Blacks and Hispanics were nearly 2.5 times higher as that for Whites.

Income and Poverty Status

In 1990, the median family income in Denver was $32,038. However, there was considerable variation by ethnicity. On the upper end, White median family income was $36,501. On the lower end, Hispanic median family income was $20,863. Relative to White residents of Denver, Blacks and Hispanics experienced substantial erosion in their income during the 1980s. In 1980, Black and Hispanic median family incomes were 72 percent and 66 percent , respectively, of White median family income. By 1989, Black median family income had fallen to 64 percent of White median family income; for Hispanics the gap had widened to 54 percent of White median

family income. Thus, it is not surprising that 1989 family poverty rates for Blacks and Hispanics were 3.7 and 4.5 times higher, respectively, than the rate for Whites. By 1989, 23 percent of Black and 28 percent of Hispanic families were living in poverty. Although the ethnic differentials are not as pronounced for individual poverty rates, Blacks and Hispanics were approximately three times more likely to experience poverty than are Whites.

The findings in Table 2.1 underscore the precarious economic position of mother-only families. In Denver, more than one-third of all families headed by women were living in poverty. However, this ranged from 21 percent of White families to 41 percent of Black families and 52 percent of Hispanic families. Poverty rates among White and Black mother-only families decreased slightly during the 1980s, while the rates increased among Hispanic mother-only families.

Despite the high rates of poverty in Denver, the fraction of households receiving public assistance was relatively low. Approximately one out of 13 households received public assistance in 1989 — up slightly from 1980. Moreover, participation in public assistance programs declined for all groups in the 1980s — and the decline was most marked for Hispanics. Nevertheless, approximately 15 percent of Black and Hispanic households received public assistance in 1990 — a rate that was three times higher than that for Whites. Map 2.5 shows that the census tracts with the highest proportions of households receiving public assistance are in the western portion of the city. Forty out of the 142 tracts have greater than 10 percent of households receiving public assistance.

Housing Characteristics

Approximately 26 percent of the housing units were built before 1940 in Denver. Hispanics were more likely to live in these older units (29 percent) than Whites (26 percent) and Blacks (19 percent). In addition, 26 percent of the housing stock of Denver was constructed in complexes with 20 or more units. While 24 percent of all Whites lived in these larger housing complexes in 1990, only 18 percent of Blacks and 13 percent of Hispanics did. Although new housing construction added modestly to the housing stock in the 1980s — an increase of 5 percent of total units — the housing market mirrored the collapse of the Denver economy during the latter half of the 1980s. Vacancy rates climbed markedly from 7 percent in 1980 to 12 percent by 1990.

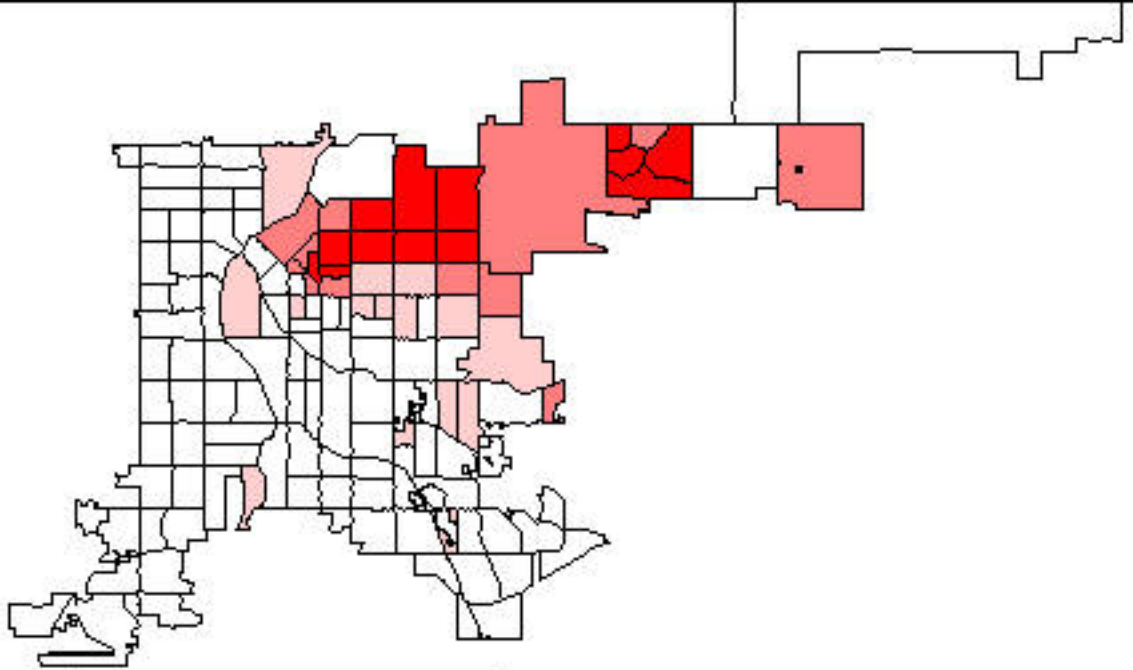
The instability of the local economy was reflected in the decrease in home ownership, particularly among minority residents. By 1990, less than one-half of all households owned their homes. Home ownership rates varied from a high of 53 percent among Whites to a low of 40

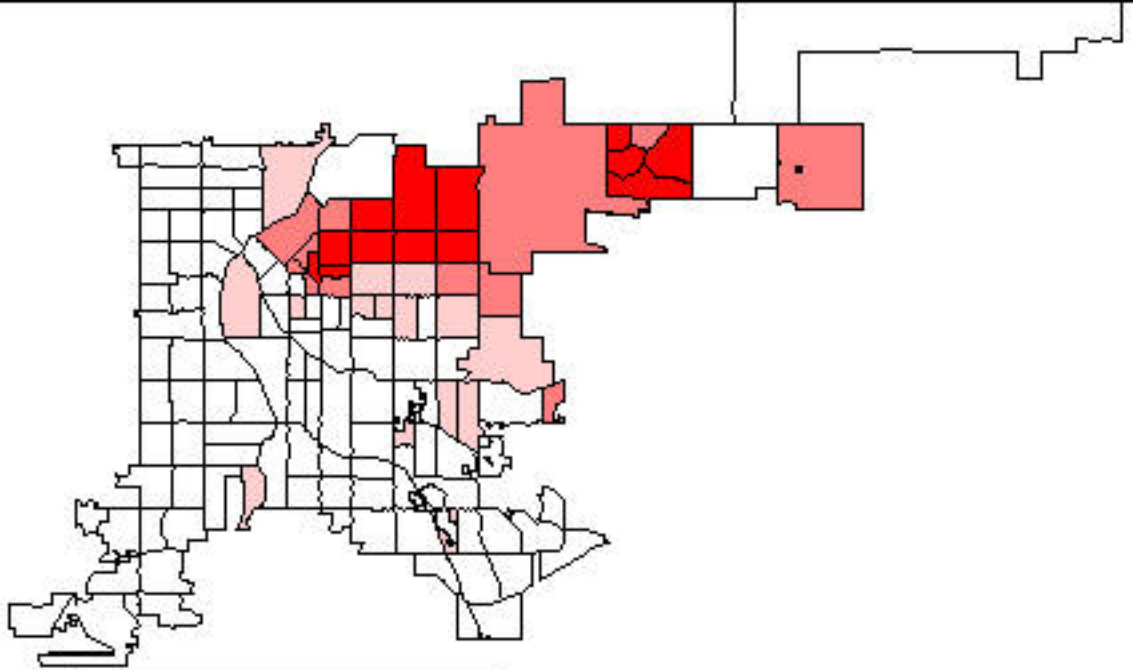
percent among Hispanics. Nevertheless according to Map 2.6, there are few areas with a high concentration (more than 80 percent) of rental housing, primarily in the northwest quadrant of the city. In addition, Map 2.7 shows that 56 tracts experienced a decline in the proportion of rental housing during the 1980s while another 52 tracts had only a slight (0 to 5 percentage points) increase.

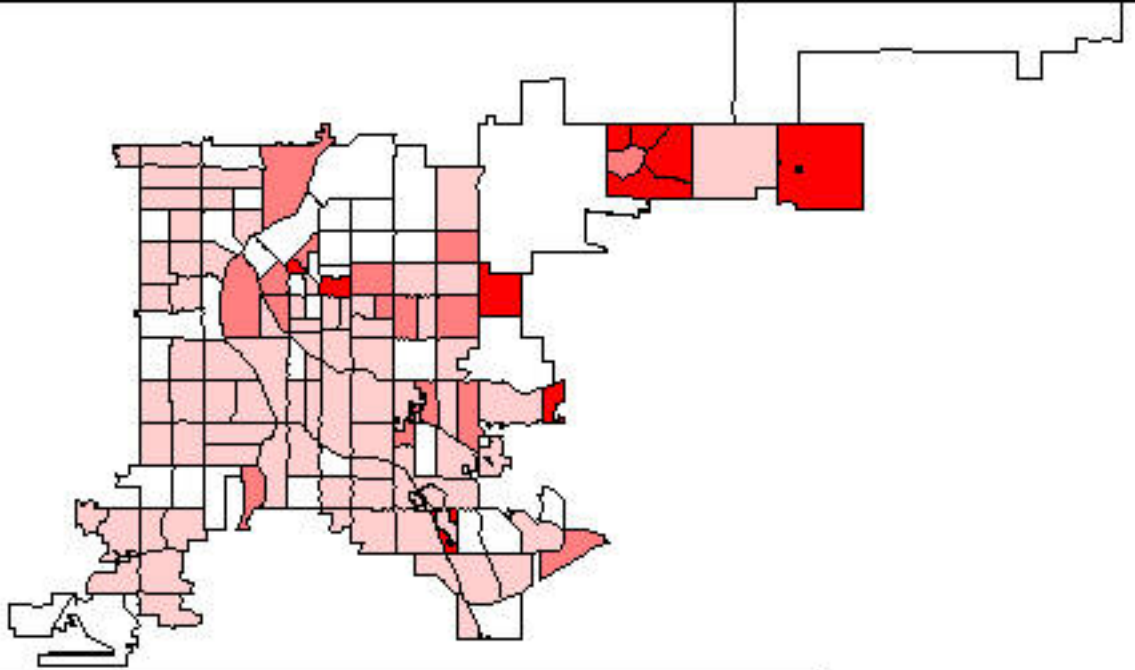
Median housing values increased during the 1980s but at a markedly slower pace for Blacks and Hispanics. Further, there were sizable differences in the median value of homes across ethnic groups. For Whites, the median value was $84,100, while for Blacks and Hispanics, it was $68,000 and $62,700, respectively. The median contract rent in Denver was $338, ranging from a low of $294 for Hispanics and a high of $362 for Whites. The areas with the highest house values in 1990 were in the southeast quadrant of the city (Map 2.8). Almost all tracts showed very modest growth in house values in the 1980s—155 tracts had 0 to 50 percent increase in average house values during the decade (Map 2.9). The 1990s witnessed an explosion in housing prices, with prices in 61 census tracts increasing 75 percent or more from 1990 to 1996 (Map 2.10).[24]

The demographic overview of Denver presented above reviews the statistical changes during the 1980s while the maps illustrate the spatial aspects of these shifts. Both overviews are useful in gaining perspective on neighborhood transition. The geographic and political context presented in the next section rests on these subtle changes and how they influenced the way residents perceived the future of their neighborhoods.

[24]The 1980 and 1990 housing data were obtained from the U.S. Census. The 1990 to 1996 price changes were estimated from residential home sales extracted from tax assessor records.

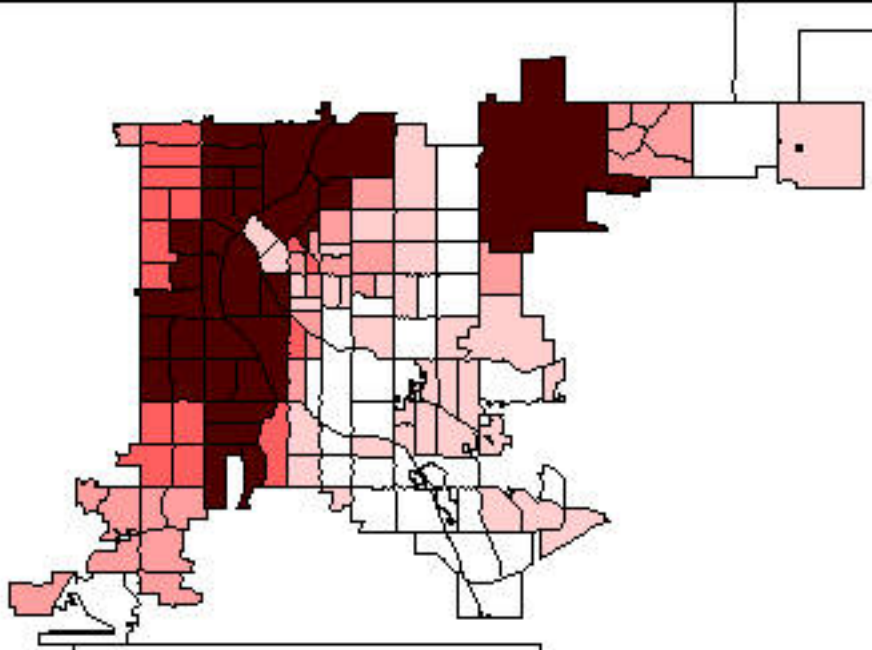

Map 2.1: Percent Black
1990
0 to 10 (144)
10 to 20 (15)
20 to 50 (12)
50 to 100 (13)


Map 2.1: Percent Black
1990
0 to 10 (144)
10 to 20 (15)
20 to 50 (12)
50 to 100 (13)



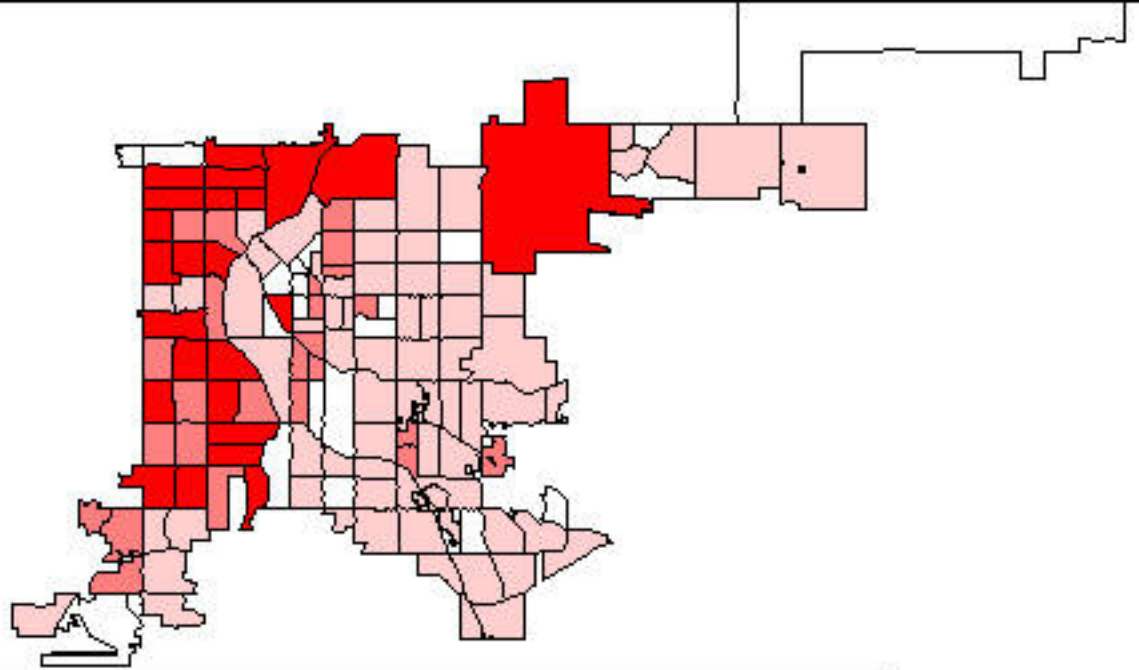
Map 2.2: Change in Percent Black (Percentage Points)
1980-1990

less than 0	(42)
0 to 5	(116)
5 to 10	(16)
greater than 10	(10)



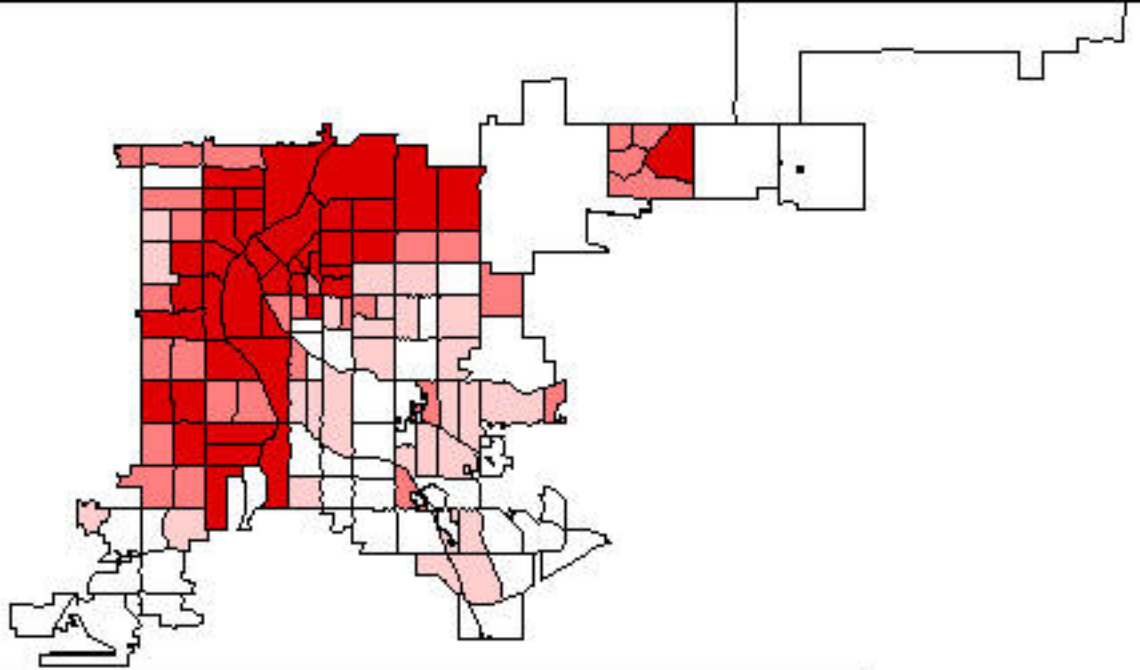
Map 2.3: Percent Hispanic
1990

0 to 5	(78)
5 to 10	(33)
10 to 20	(26)
20 to 40	(15)
40 to 85.7	(32)



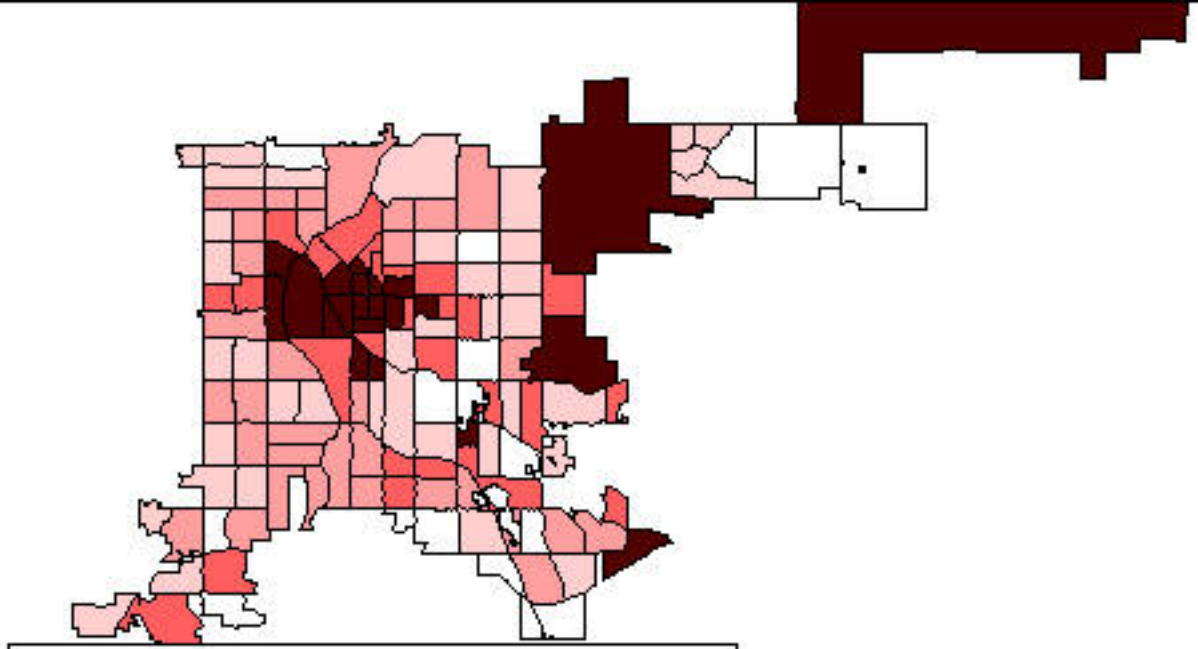
Map 2.4: Change in Percent Hispanic (Percentage Points)
1980-1990

less than 0	(28)
0 to 5	(107)
5 to 10	(25)
greater than 10	(24)



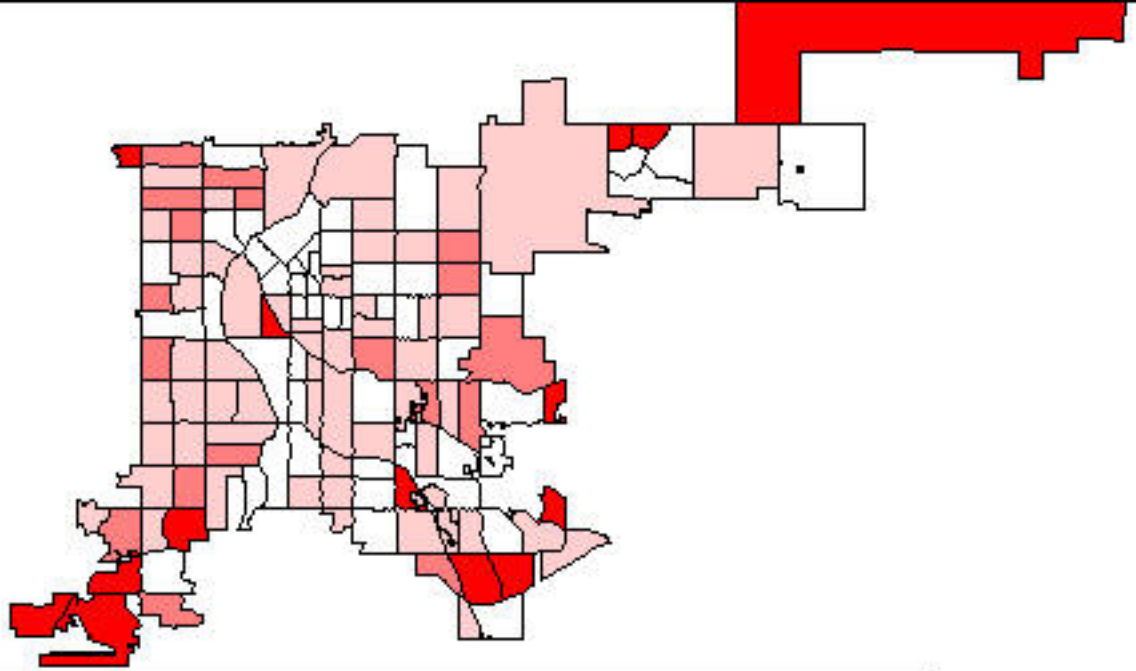
Map 2.5: Percent Households Receiving Public Assistance
1990

	0 to 3	(88)
	3 to 6	(27)
	6 to 10	(29)
	greater than 10	(40)



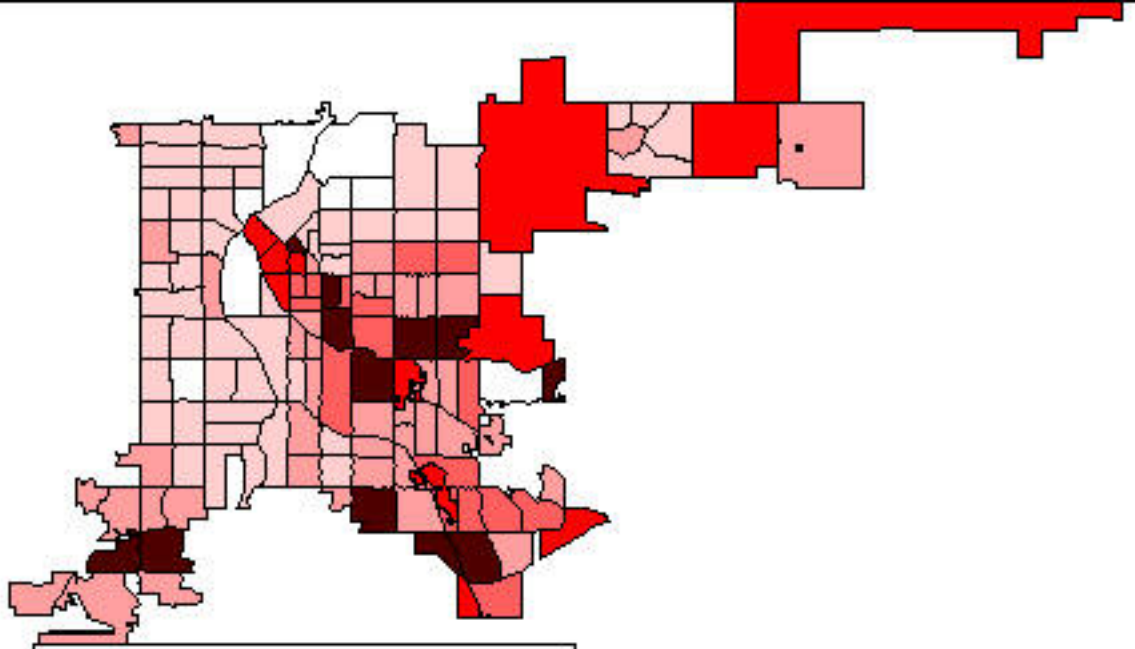
Map 2.6: Percent Renter Occupied Housing
1990

	0 to 20 (63)
	20 to 40 (39)
	40 to 60 (33)
	60 to 80 (27)
	80 to 100 (22)



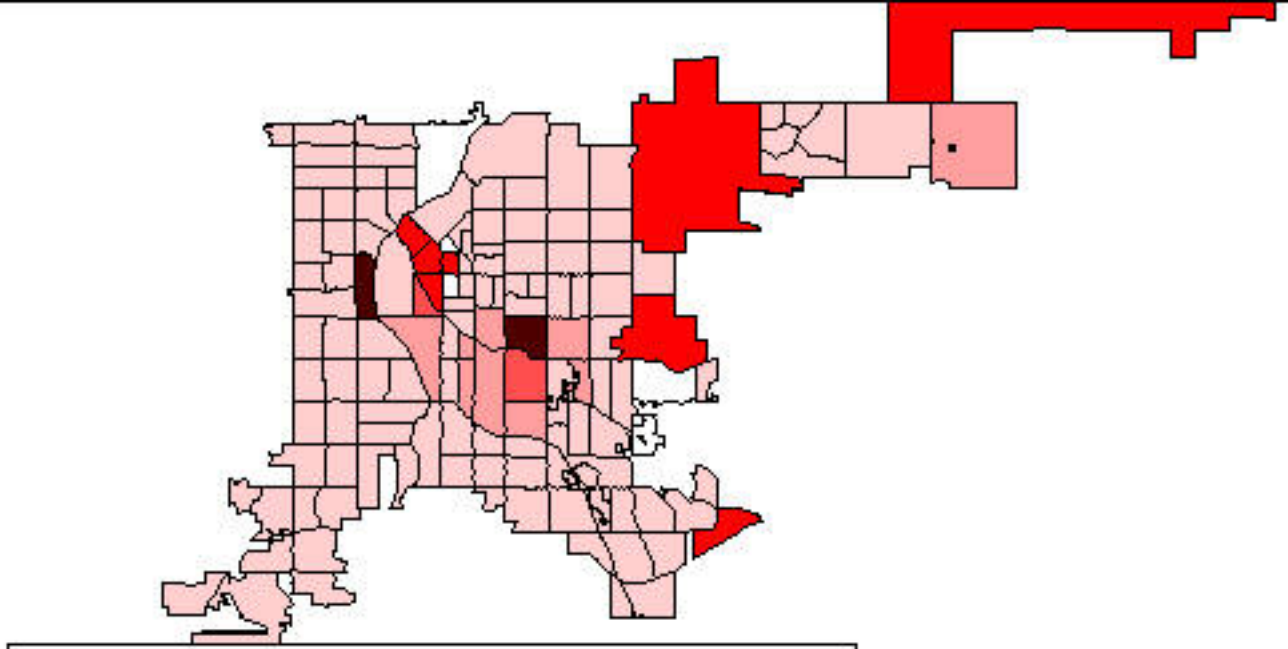
Map 2.7: Change in Pct. Renter Occupied Housing (Pct. Points)
1980-1990

less than 0	(56)
0 to 5	(95)
5 to 10	(18)
greater than 10	(15)



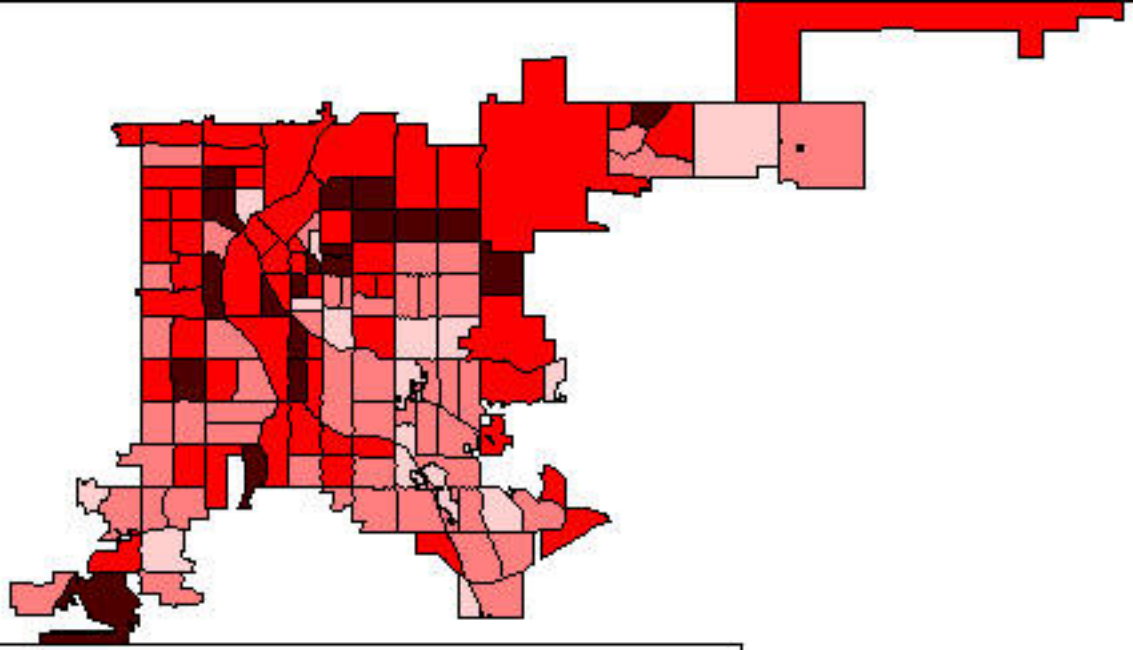
Map 2.8: Median House Values
1990

less than $50,000	(8)
50,000 to 75,000	(51)
75,000 to 100,000	(44)
100,000 to 125,000	(18)
greater than $125,000	(13)



Map 2.9: Percent Change in Average House Values
1980-1990

less than 0	(8)
0 to 50	(155)
50 to 75	(9)
75 to 100	(2)
100 to 140	(2)



Map 2.10: Percent Change in Average House Values
1990-1996

less than 0	(0)
0 to 50	(54)
50 to 75	(51)
75 to 100	(41)
100 to 280	(20)

THE GEOPOLITICAL CONTEXT OF REACTIONS TO THE DHA DISPERSED HOUSING PROGRAM

For most of its 28 year history, the Dispersed Housing Program had received considerable support from the leadership and staff of DHA, the DHA Board of Commissioners, and the City Council. Yet in 1989, the program was at the heart of an intense, highly publicized political controversy. For nearly one year the program served as the lightning rod that polarized Denverites: the DHA vs. City Council; the poor vs. the affluent; minorities vs. Whites. After 20 years of functioning with limited visibility and fanfare, why was the Dispersed Housing Program suddenly the center of attention? What was the political fallout of this controversy? What has happened to the program since then?

The 1989 Dispersed Housing Controversy

During our interviews, several community leaders suggested that at the heart of the controversy was the sheer magnitude of the demolitions involved as part of the five-year replacement housing plan proposed by DHA in 1989 primarily to accommodate persons dislocated from the North Lincoln Park project demolition (and later, the Stapleton Homes project). As one community respondent observed, "The primary concern was, where would DHA residents be moved to?" The large scale de-densifying of conventional projects made it clear that many people would need to be relocated and raised the specter of "what would be done with them?"

In Denver during the late 1980s, the potential relocation sites for displaced DHA residents were considerably more varied than those that were previously available. Denver was in the middle of a substantial economic downturn in the local economy, provoking, among other things, destabilization and deterioration of the local housing market. Housing prices had bottomed out in the city and for the first time, housing in more affluent neighborhoods located in Southwest and Southeast Denver potentially were available for purchase by the DHA.

A seemingly innocuous letter written by Ron Paul, DHA's director of redevelopment, in 1989 to area real estate agents may have been the spark which inflamed the public. On January 11, Mr. Paul informed area real estate agents that the DHA would be replacing 132 units of obsolete, row-type housing under a recently approved development plan.[25] Mr. Paul sought the assistance of local agents in identifying "solid, attractive, low-maintenance homes that met the following criteria: one or two story homes, livable functional floor plans, adequate storage space,

[25]Materials used in this section were derived primarily from a letter dated January 11, 1989 from Ron S. Paul, Director of Redevelopment, Denver Housing Authority to Denver area brokers and realtors and from a February 1989 open letter to Denver realtors by Mr. Paul that was published in the *Denver Realtor News*, p. 12.

good carpeting, and space for a laundry room." Excluded from consideration were properties located outside the Denver city limits, in industrial areas or deteriorated neighborhoods, on busy streets, or in areas with unpaved alleys or roads. HUD-owned properties were excluded from consideration since DHA only purchased said homes via foreclosure sales. Properties without city water or sewer, structural problems, flat roofs, lead pipes, high levels of lead-based paint, or electric heat were excluded as well.

Mr. Paul told the real estate agents that DHA would be looking for homes in the $55,000-70,000 price range, contingent upon the condition of the structure and the amount of cleanup and rehabilitation required. The statement that reputedly triggered the negative public response was the indication that DHA would be targeting home purchases in areas located south of Mississippi Avenue. Although Mr. Paul went on to emphasize that DHA would be restricted from purchasing more than two houses in any single block and that the high concentration of units in any one neighborhood would not be allowed, this statement would be used by real estate agents, neighborhood homeowners associations, and several elected officials to incite resident fears about the deleterious effects of moving poor people into these middle-class neighborhoods. Indeed, the NIMBY attitudes of certain City Council members and their constituents were viewed by a number of the respondents as the catalyst for the contentious debate that would follow.[26]

According to one public housing administrator, the resultant skirmish reflected three distinctive political positions regarding assisted housing. The first position was that of individuals and groups who were opposed to the development of *any* assisted housing in their neighborhoods. Several prominent leaders of Southwest Denver homeowners associations, as well as their representatives on City Council, led the opposition to the acquisition of any dispersed housing units in their neighborhoods. The second position was that of individuals who wanted a *truly dispersed* program. Several City Council members, as well as local community leaders, were concerned about the historical concentration of dispersed units within poor and working-class, older neighborhoods and wanted to see the deconcentration of these units into all Denver neighborhoods to maximize opportunities of the poor. Finally, a third position (closely related to the second) reflected concerns that some city districts already had *more than the "fair share"* of low-income housing. Council

members and the constituents in these heavily impacted neighborhoods felt that it was now time for other areas in Denver to share the burden of providing affordable housing to low-income families.

---

[26]Information described in this section was based on interviews with four public housing administrators and six community leaders. In addition, the controversy was part of intense media coverage including the publication of dozens of articles chronicling the fate of the Dispersed Housing Program.

According to one community respondent, on the basis of fears about declining property values and neighborhood degradation, residents in Southwest Denver were mobilized into action during the Spring and Summer of 1989 to oppose DHA's acquisition plans. As another community respondent notes, "Opponents skillfully played to the fears of the public and created a hot button issue." Residents were led to believe that the DHA was engaged in a new social-engineering experiment that would be conducted in their neighborhoods for the first time, even though small numbers of dispersed housing units had been operating quite successfully in these neighborhoods for some time. Leaders from several homeowners associations suggested that the DHA had acted illegally and covertly in the acquisition of dispersed units. Indeed, one community leader suggested that the program had been deliberately hidden from public scrutiny.

Also implicit within the rhetoric were sentiments of class and ethnic inferiority. Political opponents played on White stereotypes about the poor — particularly the minority poor — to incite community residents.[27] Residents in Southwest Denver were particularly concerned about the provision of good quality housing to "people on welfare." How could people who were not working live in homes that were better than theirs?

Tensions reached a fever pitch at a neighborhood meeting held in April, 1989. At that time, representatives of city government, including the mayor at the time, Frederico Peña, DHA officials, and other supporters attempted to allay resident fears. Unfortunately, these constituencies were ambushed at that meeting — and were totally unprepared for the intense backlash against DHA and the Dispersed Housing Program. There were frequent calls for the elimination of the program as well as for the ouster of DHA officials during the fractious debates that spring. Indeed, after the April meeting, Mayor Peña halted the replacement housing plan, held the DHA accountable to City Council, and appointed a Citizens Task Force to study (and, it was hoped, diffuse) the issue.

According to several community respondents, the Citizens Task Force was charged with the mandate to quickly develop a new replacement housing plan. Comprised of 30 members — two per Council district and four mayoral representatives, the Task Force met during May 1989 to draft its recommendations. Interestingly, most Task Force members supported the concept of dispersed housing and the debate centered only on the implementation of the program. Acting on consensus, the Task Force sought to develop a policy that would both avoid impacted areas and find noncontroversial places for subsidized units. The Task Force developed 29 policy recommendations that were submitted to the Mayor at the end of May, 1989, and presented to the City Council during public meetings in June 1989. A series of stringent regulations were

[27]Information based on interviews with four public housing administrators and five community leaders.

proposed. Some viewed these as major concessions to opponents of dispersed housing as a means of preventing the demise of the program. Included among the recommendations were guaranteed spatial dispersion of units by virtue of strict density and spatial distance requirements as well as the addition of four members to the DHA Board of Commissioners to provide additional oversight to the DHA.[28]

Although observers noted that there was strong consensus among Task Force members, these recommendations fueled additional controversy when presented to City Council. Public hearings on the Dispersed Housing Program spanned a four-day meeting of City Council during the period June 12-16, 1989, where more than 500 opponents or supporters registered to address the City Council. In addition, opponents of dispersed housing were able to convince a Task Force member to present a *minority report*, which essentially summarized on-going opposition to the program.[29] It would not be until the fall of 1989, that City Council would finally approve a significantly watered-down version of the dispersed housing plan through an intergovernmental agreement with DHA.

DHA's insensitivity to community resident concerns and their failure to consider the intense opposition that the replacement program might generate are now recognized by both public housing administrators and community leaders as a major error by the agency. As several administrators acknowledged, DHA officials were taken totally by surprise at the negative reaction to the program. Moreover, since they had not engaged in dialogues with community residents prior to program implementation, there had been a breakdown in communication as well as miscommunication between the DHA and local residents. DHA had no significant prior experience in dealing with community relations and had generally maintained a stance of limited involvement in dealing with larger community issues. As a result, the public meetings held about the Dispersed Housing Program were explosive.[30] One public housing administrator even suggested that it was DHA's arrogance and bumbling with public relations that led to the controversy in the first place.

Political Fallout from the 1989 Controversy

Fallout from the 1989 controversy was swift. The perceived inept handling of the matter led to the resignation of the Executive Director and significant changes in the administrative staff at DHA. Moreover, DHA was faced with the task of rebuilding its public image. Perceptions of

[28]Information from several community leaders.

[29]Information from a community leader.

[30]Information from a community leader.

DHA misconduct ran deep and as a result, the authority was subjected to intense scrutiny, particularly during the first 18 months after the controversy had subsided. DHA would now be held under strict

accountability to the City Council. At one point in 1990, attempts were made to bring DHA under the direct control of either the Mayor or of the City Council, but those efforts were unsuccessful.[31]

Perhaps the most far-reaching effects of the controversy revolve around the restrictions placed on the DHA via the intergovernmental agreement reached with the City Council. The continued HUD mandate for dispersing conventional public housing while at the same time complying with the non-impaction and unit separation distance requirements of the City Council agreement has made it increasingly more difficult for the DHA to find affordable housing to acquire.

The DHA Dispersed Housing Program in the 1990s

Despite the serious threat to the continued survival of the Dispersed Housing Program posed by the 1989 controversy, the Program has thrived in the 1990s.[32] According to several public housing administrators, DHA has been able to regain the trust of City Council and the public at large through its strict compliance to the intergovernmental agreement. As one administrator remarked, the program is not considered a substantive public issue at this time. Moreover, prompt attention to citizen concerns about problems and aggressive maintenance policies have led to a general public satisfaction with the program. Since 1990, DHA also has engaged in considerable community outreach in advance of the purchase of new acquisitions. Meetings with neighbors, homeowners associations, politicians and others have helped to defuse opposition to the program. Dispersed housing managers, as well as other central administration staff, have become actively involved in addressing concerns before they become major problems.

In the 1990s, DHA has acquired approximately 500 units of dispersed housing. The agency has just initiated another five year replacement plan to upgrade the conventional housing stock. In sharp contrast to 1989, the most recent intergovernmental agreement was reached with limited public fanfare.

PERCEIVED IMPACTS OF THE DHA DISPERSED HOUSING PROGRAM ON NEIGHBORHOOD CHANGE

[31]Based on several interviews with public housing administrators and community leaders as well as from the *1990 Minutes of the Meetings of the Council of the City and County of Denver,* various months.

[32]Information obtained from interviews with nine public housing administrators.

What emerged from the 1989 political battle over the DHA Dispersed Housing Program was a clear and vocal understanding of resident concerns about the potential neighborhood impacts of the program.[33] These concerns were: (1) a decrease in neighborhood property values; (2) physical degradation of DHA-owned property resulting from poor maintenance and upkeep; and (3) an increase in criminal activity and diminished personal safety attributable to the presence of DHA tenants. Our respondents were asked to reflect upon these concerns and identify what they perceived to have been the impacts of the program. Their responses are summarized below.

Decrease in Neighborhood Property Values. At least publicly, the fear of declining property values was at the heart of the 1989 controversy over integrating poor or minority families into middle class neighborhoods. In retrospect, however, our respondents believed that these concerns proved to be unwarranted. In fact, property values in Denver have increased in all neighborhoods over the past five years due to the rebounding local economy. According to one respondent familiar with the real estate market in Denver, the median value of housing in Denver rose remarkably from $78,000 in 1991 to $139,000 by the end of 1997. Moreover, another respondent indicated that evaluations completed at the time of the controversy strongly suggested that the Dispersed Housing Program did not destroy neighborhoods.[34] Rather, they suggested significant benefits of maintaining economically mixed neighborhoods.

Physical Degradation of Property. According to our respondents, the public concerns regarding the physical deterioration of the neighborhood have not been supported by actual experience. Respondents indicated that the presence of DHA dispersed units in a neighborhood generally served to improve the physical environment of the neighborhood. This was accomplished in two ways. First, DHA tends to purchase vacant housing or housing in need of substantial rehabilitation. By obtaining these units and bringing them back into occupancy through extensive rehabilitation, DHA properties are often the best-maintained units on the block. Second, the DHA maintains a strict maintenance and inspection schedule for all of the dispersed properties. Dispersed units are inspected every six months. Furthermore, DHA maintenance staff respond no later than 72 hours (and most likely within 24 hours) to provide maintenance service, according to our respondents.

Six of the respondents indicated that most complaints about presumed DHA dispersed properties are really complaints about housing owned by private landlords participating in the Section 8 site-based housing subsidy program. Thus, it appears that the public does not

[33]Information summarized in this section is derived from interviews with nine public housing administrators and eight community leaders.

[34]We were unable to obtain any further information about the nature of such “evaluations.”

necessarily distinguish among different housing programs and may assume that problems in one program are inherent in all housing programs.

Nevertheless, one of the community leaders mentioned that the 1989 controversy about the Dispersed Housing Program *did* have a significant negative impact on housing in Denver. This negative effect is not from the housing *per se*, but rather stems from the negative public perceptions

that the controversy engendered. Thus, affordable or dispersed housing has been equated with "low-income housing," so that these units would now carry the stigma traditionally attached to public housing.

Increased Criminal Activity and Decreased Personal Safety. Although several respondents were knowledgeable about the concerns of community residents regarding personal safety and crime, none of them mentioned these as perceived problems associated with the Dispersed Housing Program. To our knowledge, no other study has investigated this concern.

Perceived Impacts of the Dispersed Housing Program on the Denver Housing Authority. One significant area of impact has been on the housing authority itself. On the positive side, there is recognition of the program for the upgrading of the existing assisted housing stock in Denver. Indeed, DHA won an award from HUD in 1996 as the best housing authority in its size category. Moreover, there is a sense of pride among DHA staff in the Dispersed Housing Program and its benefits to participants. On the negative side, however, several public housing administrators underscored increasing problems with meeting the unit separation distance stipulations in the intergovernmental agreement. They also are concerned about rising maintenance costs at a time when significant cuts are being made in HUD subsidies to DHA. Indeed, there was consensus among public housing administrators about the need to do more with fewer resources.

CHAPTER 3
BALTIMORE AND THE SECTION 8/MTO MOBILITY PROGRAMS

POLICY HISTORY OF ENCOURAGING DISPERSAL OF TENANT-BASED SUBSIDY RECIPIENTS

National Policy History

The Section 8 program was instituted as part of the Housing and Community Development Act of 1974. It provided a new vehicle for aiding low-income tenants by providing them a subsidy (or "certificate") equivalent to the difference between "fair market rent" of an apartment (of the size appropriate to the given household) and 25 percent of household income.[1] Although some Section 8 subsidies were attached to new or substantially rehabilitated units, others were allocated to individual households. By 1984, approximately one million households received assistance through tenant-based Housing Certificate Program subsidies (Goering et al., 1995). In principle, tenants could use these certificates anywhere in the local housing authority's jurisdiction, subject to rent and housing quality stipulations.

Federal funding for these and other forms of housing assistance (like block grants) were tied to the jurisdiction's preparation of a Housing Assistance Plan (HAP). The HAP was specifically intended to identify regional housing needs, especially for lower-income persons both "residing in or expected to reside in the community" (Burchell, Listokin, and Pashman, 1994). To encourage jurisdictions with few low-income residents to take this admonition seriously, HUD in 1976 began a program of incentives for jurisdictions developing Areawide Housing Opportunity Plans (AHOP) that included mechanisms for encouraging greater spatial mobility for low-income residents outside of their current jurisdictions. Incentives could include bonus allocations of Section 8, Community Development Block Grants, and Section 701 planning funds. Before the AHOP's termination in 1981, 34 jurisdictions were awarded a total of $100 million in bonus funds based on their plans (Burchell, Listokin, and Pashman, 1994).

While AHOP provided some incentives for regional mobility of low-income households, it did not provide for portability of a Section 8 certificate outside of the issuing local public housing authority's (PHA) jurisdiction (Peterson and Williams, 1995). To demonstrate the possibilities for

[1]Fair market rent was defined as the rent at the 40th percentile of the apartment rent distribution, as determined by an annual HUD survey. The tenant contribution was later raised to 30 percent of income. Low-income is defined as earning less than 80 percent of the median income for a family of four in the given metropolitan area.

doing so, the Regional Housing Mobility Program (RHMP) was instituted from 1979 to 1981 (DeBernardo, 1979). Seventeen metropolitan areas involving 100 local housing authorities participated in the demonstration, signing regional cooperative agreements. Several models of cooperation were tried, including inter-PHA referrals, and transfers of pairs of applicants when each one wished to live in the other's jurisdiction, a multi-PHA pool of destinations for recipients who wish to move, and a single PHA controlling several alternative locations in other jurisdictions (McFall,
1981; Brooks, 1982). Evaluations suggested that RHMP sometimes succeeded in accommodating households that had clearly defined mobility plans, but rarely encouraged regional mobility by others (Truslow, 1982; Peterson and Williams, 1995).

A variant on the Section 8 tenant-based subsidy theme was provided by the voucher program, authorized under the Housing and Urban/Rural Recovery Act of 1983. Vouchers mimicked Section 8 certificates, but had two distinctive features: (1) they could be used to defray rent expenses of apartments in any price/quality range, and (2) they could be used anywhere in the nation. The spirit of the latter feature was extended to the Section 8 certificate program in 1987, permitting certificate holders to use their subsidy throughout their own or in a contiguous metropolitan area (Peterson and Williams, 1995).[2] By 1994, 294,000 households were being assisted by the Housing Voucher Program (Goering et al., 1995).

Despite several permissive legislative and administrative rule changes regarding "portability" features of the certificate and voucher programs in place by 1990 (Goering et al., 1995), relatively few cross-jurisdictional moves occurred initially.[3] A 1991 National Association of Housing and Redevelopment Officials survey revealed that only three percent of Section 8 certificates and vouchers nationwide involved inter-PHA portability (NAHRO, 1991). Alternative explanations for this dearth of mobility included: tenant preferences, disincentives in the administrative fee structure, ineffective PHA provision of housing information and mobility counseling, racial discrimination, landlord preferences to avoid subsidized households, and (ultimately, found to be illegal) preferences given to local residents (Goering et al., 1995; Peterson and Williams, 1995).

---

[2]For programmatic details related to Section 8 portability, see Burchell, Listokin, and Pashman (1994:199-201). It also operates approximately 18,000 public housing units, although ongoing demolitions render this estimate unreliable.

[3]During this period there were also several "special mobility" Section 8 programs that involved enhanced efforts to encourage movement across jurisdictional boundaries. These were created as elements of court-ordered remedies to civil rights cases. The better known examples include Chicago, Cincinnati, Dallas, Hartford, Memphis, Milwaukee, and Yonkers; for details see Goering et al. (1995) and Peterson and Williams (1995).

In an attempt to discover how to change tenant preferences and remove disincentives from administrative fees, Congress enacted the Moving To Opportunity (MTO) demonstration in 1992, as part of the Housing and Community Development Act.[4] In Baltimore, Boston, Chicago, Los Angeles, and New York, HUD contracted with the central city PHA to administer the Section 8 subsidies allocated under the program, and with a non-profit agency to select experimental sample comparison groups and administer the appropriate type of mobility counseling and assistance to the "treatment" group.[5] To be eligible, households must: (1) live in public housing or Section 8 site-based assistance projects located in central city neighborhoods with high concentrations of poverty, (2) have incomes below 50 percent of the area median, and (3) have children in the family. After completing a baseline questionnaire, participants are randomly assigned to one of three groups: (1) in-place control group continues to receive current, project-based assistance, (2) Section 8 comparison group receives no additional services beyond that normally supplied by the PHA during the process of certificate/voucher administration, and (3) the MTO experimental group receives certificates or vouchers usable only in census tracts with less than 10 percent of the population below the poverty line in 1989, along with counseling and assistance in locating an apartment to rent (HUD, 1996). Outcomes for all three groups are to be monitored over a ten-year period.

Training for participating MTO staff commenced in spring, 1994 and all five sites were operational by February, 1995 (HUD, 1996). At this writing approximately 1,300 families are participating in MTO. Funding thus far has consisted of $70 million total for fiscal years 1992- and 1993, plus $1 million for the non-profit agencies providing mobility assistance (HUD, 1996). Subsequent fiscal years' MTO funding, intended to finance additional waves of participating households, was not appropriated in September, 1994, as a result of local opposition filtering up to Senator Barbara Mikulski (Mariano, 1994).

The Section 8 Program Variants in Baltimore City and County

To fully comprehend the Baltimore area's experience with the Section 8 program, and especially the political controversies that it has engendered, it is important to recognize that there are three distinct, though chronologically overlapping, variants of the program. The first, which we shall refer to as the "basic Section 8" program, represents the standard local implementation of the national program that has operated for the last two decades. The second, the variant associated with the MTO demonstration, began in Baltimore in 1994 and finished placing its

[4]Several metropolitan areas were forced to experiment with ways to provide effective mobility with certificates as a result of settlements of fair housing suits; for an overview of these cases and subsequent studies, see Burchell, Listokin and Pashman (1994); Goering et al. (1995) and Peterson and Williams (1995).

[5]For operational details of MTO, see Fein, Holin and Phipps (1994).

tenants throughout the City and County by early 1997. The third, the "special Section 8" program, was agreed to in 1996 to comply with a Partial Consent Decree to settle a civil rights suit filed by the ACLU and at this writing is just getting underway. Each is considered below.

Basic Section 8 Certificate Program. The Section 8 certificate program was initiated by the Housing Authority of Baltimore City (HABC) in 1976. The first voucher program payments beginning in 1985 (Ards, 1991). The most recent study of these two HABC programs (Ards, 1991) revealed the following characteristics of participating households:

- In both programs the predominant household pattern was a single mother (mean age 35 years) with one or two children, with an average household size of roughly two-and-a-half persons.

- Over half of the participants in both programs received some additional form of public assistance, with mean adjusted family incomes between five and six thousand dollars, roughly half the mean income of all Baltimore City renters.

- 83 percent of voucher holders and 95 percent of certificate holders were Black, compared to 55 percent for the City as a whole.

- Three-fourths of the participants lived in only 30 percent of the City's planning districts.

- There were distinctive patterns of neighborhood locations in the two programs: certificate holders were concentrated in neighborhoods having above-average percentages of Black residents and unemployment rates and below-average mean incomes, high school completion rates, and owner-occupancy rates; just the opposite was the case for voucher holders.

- Black program participants had the same contributions to rent under both programs, whereas White participants paid less, on average, under the voucher program.

HABC currently operates by far the largest Section 8 program in the region (HUD, 1996).[2] According to 1995 statistics, HABC administered 6,737 vouchers and certificates, Baltimore County administered 3,021, and the remaining six counties in the region administered 2,541.[6] The

[6]Personal correspondence from Bob Gajdys, Community Assistance Network, Inc. Executive Director (January 13, 1997).

HABC Section 8 program has a waiting list of over 22,000 households; those who applied in early 1992 were being granted certificates as of March, 1997.[7]

Prior to MTO, HABC did little to encourage or facilitate the mobility of their Section 8 certificate or voucher recipients outside of the city into the seven-county surrounding region.[8] At the orientation for new Section 8 participants, HABC hands out lists of landlords who had asked that they be so listed, and encourages participants to check in the free apartment guides and Sunday newspapers. Large-scale landlords who have previously served Section 8 tenants are sometimes asked by HABC to give presentations at these orientations.[9] As of March, 1997, it was estimated
that approximately 900 Baltimore residents had moved into Baltimore County with their Section 8 subsidy (roughly one of eight participants), plus those (approximately 30) under the auspices of the MTO program.[10] As of August 1997, HUD estimated that only 47 MTO households had relocated from Baltimore City to Baltimore County (Lucas, 1997: 18).

HABC is strengthening its mobility counseling services, however. A new unit is being formed, Tenant Readiness Training and Mobility Counseling, that new program participants may avail themselves of voluntarily. It is planned that a HABC staff person will assist in finding appropriate apartments in low-poverty areas and, if appropriate, link tenants with specialized counseling agencies providing credit, family mediation, employment training, and other services.[11]

HABC's efforts to take a less *laissez faire* approach to the locational choices and residential behaviors of its Section 8 participants undoubtedly have been stimulated by the recent rise of vocal, grass-roots opposition to HABC in some neighborhoods both in Baltimore City and Baltimore County. In early 1996, for example, representatives of the Patterson Park neighborhood in Baltimore presented HABC with a list of over one thousand "problem properties" in their area that they attributed to the Section 8 program. Although a subsequent HABC investigation revealed that only four percent of those on the list were associated with Section 8, the political volatility surrounding the program was obvious.[12]

---

[7]Interview with local housing program administrator.

[8]The effort was described as "very minimal" by one local housing program administrator. Another called it "not real counseling."

[9]Interview with local housing program administrator.

[10]Ibid.

[11]Ibid.

[12]Ibid.

In response, HABC has begun the following initiatives:[13]

- Maintenance Checks: If periodic building inspections and/or damage reports suggest that a Section 8 tenants are responsible, they will be ticketed, with failure to respond being grounds for termination. The same procedure holds for landlords.

- Neighborhood Service Centers: In each of nine police districts HABC will establish centers with staff who will meet with community groups to deal with complaints and, if necessary, refer them to HABC for resolution.

- Tenant Screening: Although landlords are assumed to carry the major responsibility in this regard, HABC will try to ascertain whether information about an applicant's criminal record can be obtained and forwarded to the landlord without violation of confidentiality requirements.

- Intensified Lease Violation Reporting: Instead of merely failing to renew a misbehaving tenant's lease at the first anniversary renewal option point (and thus creating no blot on the tenant's record), HABC is encouraging landlords to report immediately any lease violations. In serious or repeated cases HABC will terminate assistance.

Whether these initiatives will be sufficient to defuse the still-smoldering controversy related to deconcentrating low-income households through Section 8 mobility programs within Baltimore City remains to be seen. Of course, the greater political controversy over such programs arose in Baltimore County, due to the coincidence of the other two variants of the Section 8 program, MTO and the ACLU suit special certificates, which in concert raised rhetorically the specter of a low-income "invasion" of the suburbs.

The MTO Program in Baltimore. HABC teamed with the Community Assistance Network (CAN) to carry out the Moving To Opportunity Demonstration in the Baltimore region.[14] CAN is a Baltimore County-based non-profit organization that, prior to MTO, had focused on assisting low-income people with child care, weatherization, and self-sufficiency counseling.

The mobility efforts of the Baltimore MTO program were concentrated on the residents of eight HABC public housing developments located in five census tracts having, on average, two-

[13]Ibid.

[14]This section is based on information presented in HUD (1996) and HABC (1993).

thirds of their residents in poverty. The chosen developments were home to 3,807 households. They had an average income of $6,880 with almost half receiving public assistance. Over 99 percent were Black and 84 percent were female-headed households (HUD, 1996).

CAN's effort to support the mobility of these residents was distinguished by its emphasis on post-move contact. That is, CAN's principle was that counseling for at least a year following the move to a low-poverty area was needed to maximize the chances for self-sufficiency.[15] The CAN augmented their capacity by subcontracting with other agencies for appropriate specialized services for MTO families.

The specific housing counseling services provided by CAN under MTO consisted of the following (HABC, 1993):

- Outreach to recruit apartment owners in low-poverty census tracts throughout the metropolitan area: The outreach effort included developing relationships with local realtors, landlord associations, and tenant associations, conducting windshield surveys to search for prospective buildings in appropriate neighborhoods, and creating informational and promotional materials. CAN provided landlords with rent payment records, references, family photos, credit checks, and histories to attempt to personalize prospective tenants.

- Written information to potential MTO families: CAN wrote and gave participants literature concerning tenant and landlord rights and responsibilities, housing and contract standards, and tenant-landlord and public housing laws. Baltimore Neighborhoods, Inc., a non-profit fair housing group, provided information and counseling on identifying and remedying housing discrimination and harassment that participants might face.

- Briefings for MTO Experimental Group: Once the Experimental Group was selected, CAN initiated seven required workshops for the participants. Workshops presented information about: (1) purposes and methodology of MTO, (2) effective housing search strategies, (3) advantages and disadvantages of living in low-poverty neighborhoods and what is involved in making the transition, (4) maps showing alternative low-poverty neighborhoods, with data on schools, shopping, transportation, demographics, health facilities, etc., and (5) legal issues. Workshops also started the process of assessment of participants. The first MTO

[15]Interview with local housing program administrator; HABC (1993).

families who successfully moved to low-poverty areas were often used as resource persons in workshops for later participants.

- Home visits: All Experimental Group families were visited in their current residences and had their credit history checked. The home visit was designed to show the counselor how the family was residing and behaving, to provide an opportunity to discuss confidential matters, and to build trust between the family and the counselor. The outcome of these visits was an assessment of which families were ready to begin housing search and the obstacles needed to be overcome before other families were ready. Information provided was used to help recruit landlords to house the given family.

- Supplemental assistance: For families who were not ready for immediate housing search, CAN provided referral to a variety of ancillary service providers. Among the services they provided were: budget/credit counseling, employment counseling, food/clothing/furniture, substance abuse counseling, day care provision, parenting skills, and home maintenance.

- Tours of areas: Heads of families judged ready for home search were taken on small-group tours of neighborhoods in which they had expressed an interest. Community attributes were highlighted, such as schools, parks, stores, employment centers, hospitals, and day care facilities. CAN counselors averaged ten hours per family.

- Facilitation of lease-up: CAN coordinated the discussion between the MTO family and the landlord and served as an agent/advocate on the family's behalf, contacted HABC regarding the need for the Section 8 certificate or voucher, and informed the landlord about Section 8 rules and procedures, if necessary.

- Post-occupancy follow-up: Within 90 days of the lease date, CAN contacted the family to offer additional counseling and referrals. Special efforts were made to familiarize the families with local utility companies and service providers, so that prospective problems could be pro-actively avoided. Four months prior to each of the first two annual home inspections, CAN contacted each family to clarify what was expected of them. At any point during occupancy, CAN served as a liaison between the MTO family and the appropriate authority to report alleged cases of discrimination or harassment. Finally, contacts were also made with landlords of MTO families, offering CAN's help in resolving any difficulties and to inform them of additional services available to the families.

CAN/HABC proved to be one of the more effective MTO administrators (HUD, 1996). HABC began to process applications for assignment to CAN in October, 1994. By the end of February, 1996, 222 families had been assigned to the MTO experimental group and 98 had rented apartments in low-poverty areas by April, 1996. By January, 1997, the full quota of 143 families had successfully rented.[16] As of August 1997, HUD reported that 57 percent (or 283) of the households that had been offered subsidies actually moved. Of this group, 69 percent moved to low-poverty neighborhoods in Baltimore City, while only 19 percent (about 47 households) relocated to areas in Baltimore County.[17]

ACLU Suit Special Certificates. Soon before the announcement of MTO, HABC announced plans to tear down, in stages, 2,728 units of decayed, high-rise public housing at Lafayette Court, Flag House Commons, Lexington Terrace, and Murphy Homes projects as part of its HOPE VI project. But when plans to rebuild many of the units on the same sites were revealed, the American Civil Liberties Union (ACLU) filed suit in January, 1995, on behalf of Blacks who are current and future residents of HABC housing.[18] They alleged that the Mayor and City Council of Baltimore, HABC, and HUD had created and maintained over many years a system of *de jure* segregation in public housing, that HABC's proposed redevelopment scheme would merely perpetuate. The plaintiffs sought relief to restore to class members the positions they would have enjoyed had housing assistance been provided in a non-discriminatory manner.

One of the key components to the tentative resolution proposed during the fall of 1996 by HUD was the issuance of Section 8 subsidies to residents of demolished developments, with concomitant counseling services to encourage their use in low-poverty areas of Baltimore County. This proposal drew fire from Baltimore County Executive C. A. "Dutch" Ruppersberger, and 1,600 County residents attended a public forum to discuss the issue (Mercurio, 1995; Hendren, 1996).

A Partial Consent Decree was approved on June 25, 1996. It contained three components for dispersing low-income housing opportunities (Evans, 1996; Hendren, 1996):

- Special Section 8 certificates: Over 1,300 certificates will be awarded to residents of demolished HABC developments. Certificates will be eligible only in census tracts having less than 10 percent poverty rates and in complexes having less than 20 percent of residents as certificate holders. HUD will provide $2.5 million to

[16]Interview with local housing program administrators.

[17]Lucas (1997: 18). HUD's database contained information on only 253 of the 283 "mover" households, which included both the restricted and non-restricted MTO groups.

[18]Thompson v. HUD.

HABC to subcontract with a non-profit provider of mobility counseling services to assist families in finding affordable housing in non-impacted areas.

- Homeownership Section 8 program: A set of both site-based and tenant-based certificates will be provided that can be used to accumulate equity in apartments with an ultimate goal of purchase. HABC will use over $18 million from its Urban Revitalization Demonstration (HOPE VI) grant for Lafayette Courts to fund at least 168 tenant-based certificates and HUD will allocate 496 site-based certificates for this purpose.

- Scattered-site replacement units: HABC will join with private developers and the Maryland State Partnership Rental Program to develop 188 public housing units within larger, market-rate apartment complexes. Although privately owned and managed, these units will receive public housing operating subsidies. These units will replace some of the units demolished at Lexington Terrace.

A PROFILE OF BALTIMORE COUNTY

To place the policy history in its a proper context, this section provides a general overview of the demographic and housing trends in Baltimore County for the years 1980 and 1990. Table 3.1 summarizes Census data on population, education and employment, income and poverty, and housing characteristics for Baltimore County. Because the spatial distribution of these changes are vitally important to this project, we have also created a series of maps that highlight the geographic distributions of key indicators in census tracts throughout the county (Maps 3.1 - 3.8).

Population Characteristics

In 1990, the population of Baltimore County was 692,134. Eighty-four (84) percent of all county residents were White (*i.e.,* non-Hispanic Whites), 12 percent were non-Hispanic Black, 1 percent were Hispanic, and the remaining 3 percent were of Asian or other ethnic ancestry. Nearly 5 percent of county residents were foreign-born. During the 1980s, the population of Baltimore County increased by 6 percent. Nearly all of this increase can be attributed to the growth of Black (+58 percent) and Hispanic (+51 percent) populations. The growth of the immigrant population during the 1980s played a slight role in the overall increase in the population. However, it warrants noting that nearly one-third of all Hispanic residents in the county were immigrants.

Baltimore County residents comprised only 29 percent of the total metropolitan population of Baltimore in 1990 — a slight decrease from 1980. An interesting pattern of geographic dispersion of ethnic groups is worth noting. Although 34 percent of Whites and 27 percent of Hispanics resided in the county in 1990, only 14 percent of Blacks lived there. During the 1980s, Whites moved out of the county, while an increasing fraction of both Blacks and Hispanics moved in.

Maps 3.1 and 3.2 show the percentage of Blacks living in census tracts in 1990 and the change in percentage of the tract population that is Black (in percentage points) from 1980 to 1990. We can see that out of the 194 census tracts in Baltimore County, 143 have less than 10 percent Black population. Tracts with 20 percent and higher Black population tend to be in an area to the west of Baltimore City. This area also showed the largest increase in the proportion of Black, with a greater than 10 percentage point change from 1980 to 1990.

The 1980s also witnessed a change in the age and household composition of county residents. Baltimore County residents were aging and there was also an increase in the number of mother-only families. The median age of county residents increased from 32.3 years to 35.2 years and the aging of the population cut across all ethnic groups. Nevertheless, the median age for Whites (36.4 years) was significantly higher than that for both Blacks (29.4 years) and Hispanics (29.2 years). Another significant trend was the increase in female headship for all three groups. By 1990, approximately one out of every six households were headed by females. This varied from a low of 13 percent for Whites to a high of 35 percent for Blacks. Nearly 17 percent of Hispanic households were headed by females.

Table 3.1. Selected Population and Housing Characteristics by Ethnicity, Baltimore County 1980-90

	1980				1990			
	All	White	Black	Hispanic	All	White	Black	Hispanic
Population Characteristics								
Total population	655,615	586,204	53,598	5,394	692,134	582,397	84,648	8,131
Median age (in years)	32.3	33.1	26.7	27.1	35.2	36.4	29.4	29.2
% households headed by females	13.0	11.7	30.9	13.1	15.7	13.2	35.0	16.9
% foreign born	4.1	3.2	1.7	33.9	4.7	2.9	3.4	32.0
Education and Employment Characteristics								
% with < H.S. degree	31.7	32.3	27.7	23.8	21.6	21.9	20.1	21.1
% college graduates	18.8	18.4	18.6	34.5	25.0	24.7	22.6	29.7
Labor force participation rate	66.3	65.5	75.2	69.7	68.6	67.1	78.3	75.0
Unemployment rate	5.0	4.8	7.5	4.5	3.7	3.2	7.0	4.3
Income and Poverty Status								
Median family income	24,413	24,683	20,436	25,313	44,502	45,394	37,463	41,935
% households receiving public assistance	4.0	3.6	8.9	3.6	4.1	3.7	7.8	3.8
% families living in poverty	4.1	3.5	10.6	5.9	3.8	3.3	9.2	4.4
% persons living in poverty	5.3	4.7	11.2	9.1	5.5	4.8	10.4	9.1
% female-headed families living in poverty	15.5	13.3	24.3	11.4	14.2	12.5	19.9	16.2

Table 3.1. Selected Population and Housing Characteristics by Ethnicity, Baltimore County 1980-90 (continued)

	1980				1990			
	All	White	Black	Hispanic	All	White	Black	Hispanic
Housing Characteristics								
Total year-round housing units	243,250	--	--	--	281,553	--	--	--
Occupied housing units	237,371	215,872	18,336	1,612	268,280	230,692	30,413	2,593
Housing vacancy rate	2.4	--	--	--	4.7	--	--	--
% owner-occupied	64.2	66.7	36.1	56.3	66.3	70.2	39.1	50.6
% renter-occupied	35.8	33.3	63.9	43.7	33.7	29.8	60.9	49.4
% housing units built prior to 1940	13.8	14.4	7.7	7.1	10.4	11.1	5.7	4.5
% housing units in 20+ unit structures	N/A	N/A	N/A	N/A	3.3	3.0	2.7	3.7
Median housing value	54,400	54,400	52,100	57,800	99,900	101,100	89,300	105,700
Median contract rent	232	233	227	238	458	460	449	46

NOTES: With the exception of total population counts for 1980, estimates of population and housing characteristics for Anglos in 1980 include white Hispanics. Estimates on the number of housing units in structures with 20+ units could not be calculated from published records in 1980. In 1990, all estimates are based on mutually exclusive ethnic categories.

SOURCES: Various published tables were used from the following sources: U.S. Bureau of the Census (1983). *1980 Census of Population and Housing, Population and Housing Characteristics for Census Tracts: Baltimore MD.* Washington D.C.: U.S. Government Printing Office; U.S. Bureau of the Census (1993). *1990 Census of Population and Housing, Population and Housing Characteristics for Census Tracts and Block Numbering Areas: Baltimore MD.* Washington D.C.: U.S. Government Printing Office.

Education and Employment Characteristics

During the 1980s, the fraction of Baltimore County residents who had obtained college degrees had increased from 19 to 25 percent. At the same time, the percentage of residents who had not completed high school declined from 32 percent to 22 percent. There were marked differences in the educational attainment of Whites, Blacks and Hispanics in Baltimore, particularly in terms of college completion. Nearly 30 percent of Hispanics had college degrees as compared to 25 percent of Whites and 23 percent of Blacks. Of interest, Whites had the highest fraction of persons with less than a high school degree — 22 percent — and Blacks had the lowest fraction — 20 percent.

In Baltimore County, minority residents have the highest rates of labor market participation underscoring the youthfulness of these populations. In 1990, 78 percent of Blacks and 75 percent of Hispanics were in the labor force as compared to 67 percent of Whites. The 1980s also witnessed an increase in the labor force participation rates of all groups, although the increase was the highest for Hispanics. In turn, unemployment rates declined in the 1980s, although the declines were negligible for Blacks and Hispanics. Moreover, the Black unemployment rate continued to be twice as high as that for Whites; the Hispanic unemployment rate was approximately 1.3 times higher.

Income and Poverty Status

In 1990, the median family income in Baltimore County was $44,502. This ranged from a low of $37,463 for Blacks to a high of $45,394 for Whites. While the income gap between Whites and Blacks remained relative stable during the 1980s, with Black median family income about 83 percent of White median family income, the gap between White and Hispanic income increased. In 1980, median family income for Hispanics was 103 percent of White median family income. By 1990, Hispanic median family income had decreased to 93 percent of the White median family income.

During the 1980s, family poverty rates declined for all groups in the 1980s. By 1990, only 4 percent of Baltimore families were living in poverty. The Black family poverty rate was 2.8 times higher than that for White families and 2.1 times higher than that for Hispanic families. Mother-only families were particularly susceptible to falling into poverty. White and Hispanic families headed by females had poverty rates approximately 4 times higher than the rate for all families; for Black families headed by females the poverty rate was twice as high as that for all Black families. When individual poverty rates are examined across ethnic groups, we see that poverty rates for both Blacks and Hispanics are approximately twice as high as that for Whites. One out of 10 Blacks and one out of 11 Hispanics were poor in 1990; in contrast, only one out of 20 White

residents were poor. During the 1980s, the individual poverty rate grew slightly for Whites, remained the same for Hispanics, and actually declined for Blacks.

The rate of participation in public assistance programs was similar for Whites and Hispanics (3.7 and 3.8 percent, respectively). In contrast, 8 percent of Black households — twice the rate for Whites and Hispanics — received public assistance in 1990. The trend during the 1980s, however, was one of declining Black participation and slight increases in White and Hispanic participation in public assistance programs. Map 3.3 shows that the recipients of public assistance income tend to be fairly dispersed, with only 11 tracts having greater than 10 percent of their residents on public assistance in 1990.

Housing Characteristics

The housing stock in Baltimore is relatively new: only one out of 10 housing units were built before 1940. Whites were about twice as likely as Blacks or Hispanics to live in these older housing units. Further, the 1980s witnessed a 16 percent increase in the housing stock. At the same time, vacancy rates increased from 2 percent in 1980 to 5 percent in 1990. Relative few housing units were concentrated in sizable clusters: only 3 percent of the housing units were found in structures with 20 or more units.

Approximately two-thirds of all county residents were homeowners in 1990, although homeownership rates were 39 percent for Blacks, 51 percent for Hispanics and 70 percent for Whites. During the 1980s, homeownership rates increased for Whites and Blacks but declined markedly for Hispanics. According to Map 3.4, the percentage of renter occupied housing can vary substantially from tract to tract, with 59 tracts having more than 40 percent renter occupied housing and 43 tracts having less than 10 percent renter housing. Further, one frequently finds tracts with high proportion of rental housing adjacent to tracts with high homeownership rates. Map 3.5 indicates that the percentages of renter occupied housing have been declining in most tracts, with only 12 tracts showing a greater than 10 percentage point increase in the proportion of rental housing.

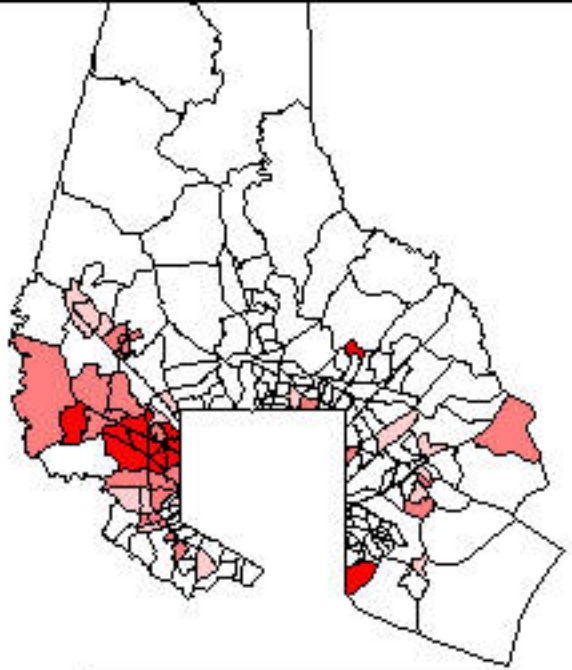
Median rents essentially doubled in nominal terms in the 1980s. By 1990, the median rent in Baltimore County was $458 and ranged from a low of $449 for Blacks and $464 for Hispanics. In 1990, the median housing value was $99,900 in the county although this varied by ethnic group: $89,300 for Blacks, $101,100 for Whites and $105,700 for Hispanics.

Map 3.6 shows the median house values and Maps 3.7 and 3.8 show the change in house values for 1980 to 1990 and 1990 to 1996, respectively, in Baltimore County census tracts. The area to the north of Baltimore City tends to have the most expensive housing, with most tracts

having median house values over $150,000. Baltimore County experienced strong growth in property values through the 1980s, with 144 tracts having increases of 75 percent or more. In contrast, from 1990 to 1996 property values declined or grew very slowly in most of the County. There were 63 census tracts where property values decreased over this period, and 96 tracts where they grew no more than 15 percent.[19]

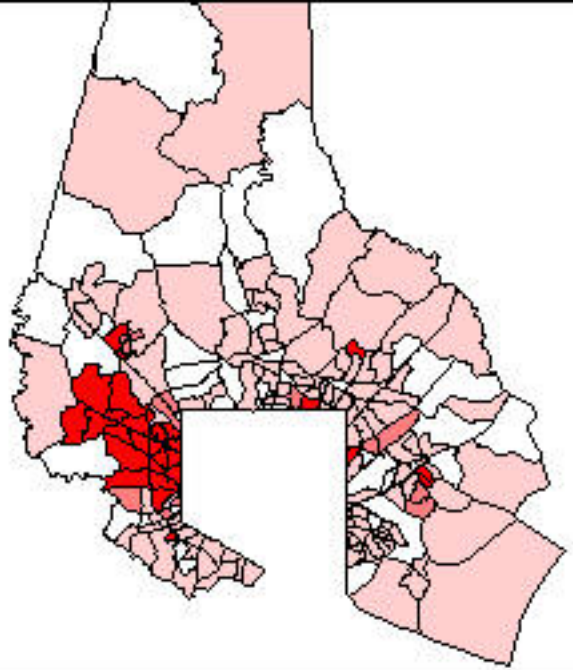
The demographic overview of Baltimore County presented above reviews the statistical changes during the 1980s. The Maps illustrate the spatial aspects of these shifts. Both overviews are useful in gaining perspective on neighborhood transition. The geographic and political context presented in the next section rests on these subtle changes and how they influenced the way residents perceived the future of their neighborhoods.

[19]The 1980 and 1990 housing data were obtained from the U.S. Census. The 1990 to 1996 price changes were estimated from residential home sales extracted from tax assessor records.



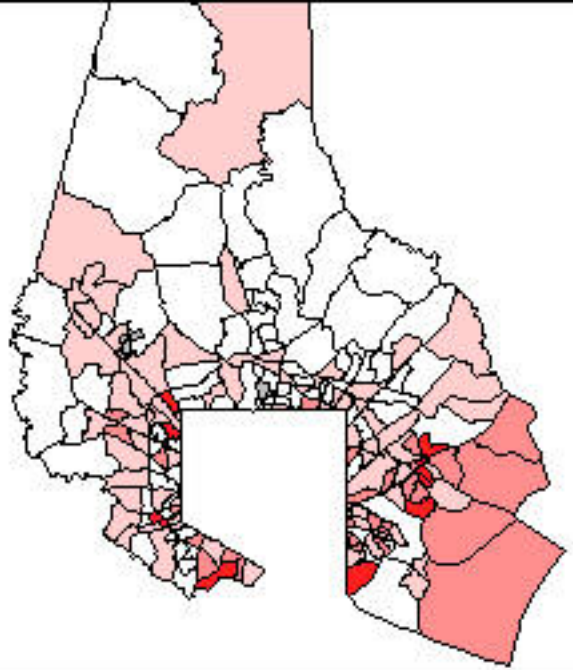
Map 3.1: Percent Black
1990

0 to 10	(147)
10 to 20	(16)
20 to 50	(21)
50 to 100	(14)



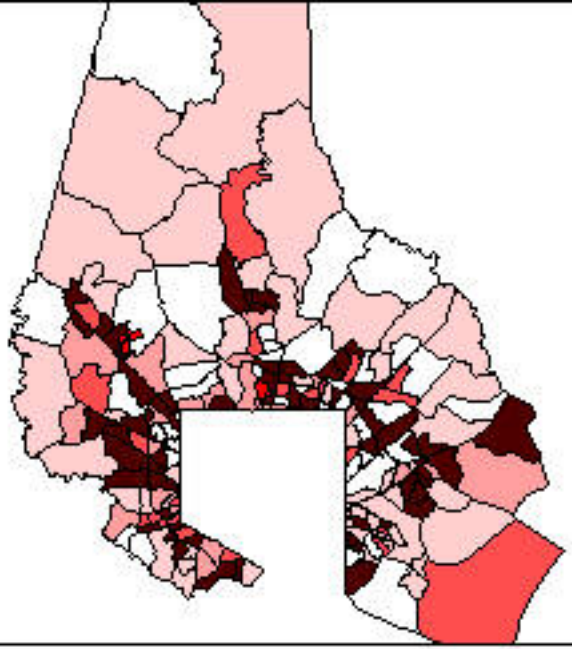
Map 3.2: Change in Percent Black (Percentage Points)
1980-1990

less than 0	(42)
0 to 5	(117)
5 to 10	(11)
greater than 10	(28)



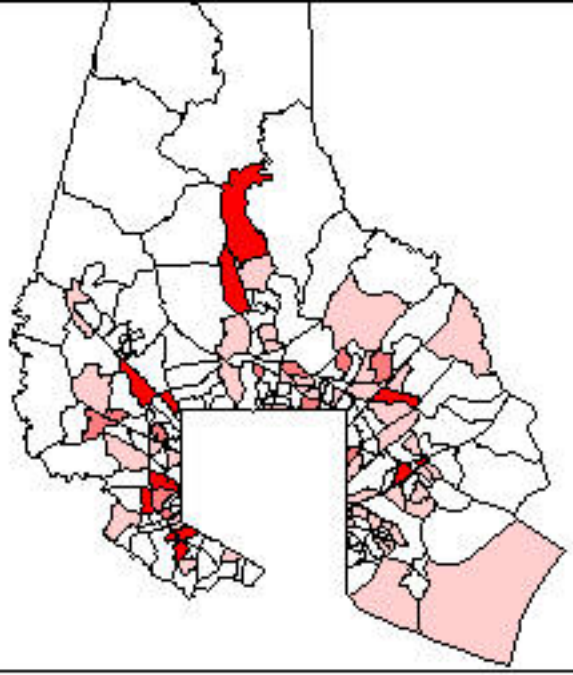
Map 3.3: Percent of Households Receiving Public Assistance
1990

0 to 3	(84)
3 to 6	(73)
6 to 10	(28)
greater than 10	(11)



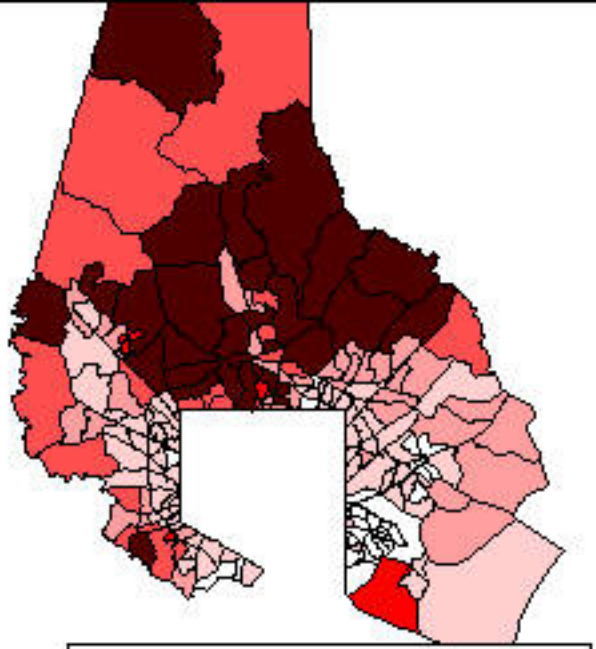
Map 3.4: Percent Renter Occupied Housing
1990

	0 to 10 (43)
	10 to 20 (51)
	20 to 30 (22)
	30 to 40 (21)
	40 to 100 (59)



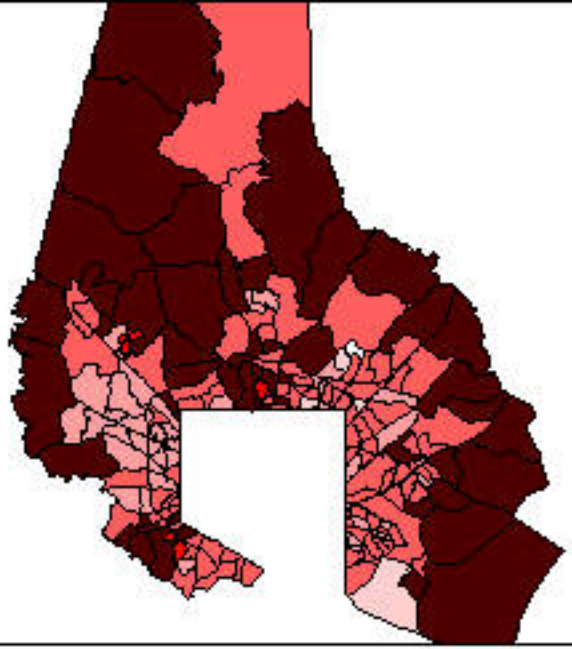
Map 3.5: Change in Percent Renter Occupied Housing (Pct. Points)
1980-1990

less than 0	(124)
0 to 5	(50)
5 to 10	(12)
greater than 10	(12)



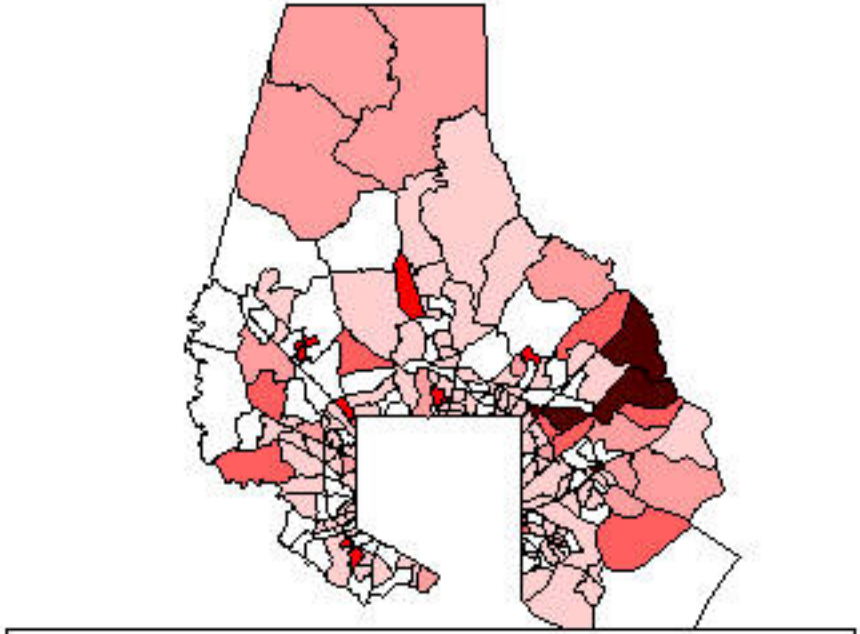
Map 3.6: Median House Value
1990

less than $75,000	(32)
75,000 to 100,000	(68)
100,000 to 125,000	(41)
125,000 to 150,000	(20)
greater than $150,000	(30)



Map 3.7: Percent Change in Average House Values
1980-1990

less than 0	(1)
0 to 50	(7)
50 to 75	(42)
75 to 100	(92)
greater than 100	(52)



Map 3.8: Percent Change in Average House Values
1990-1996

less than 0	(63)
0 to 15	(96)
15 to 30	(17)
30 to 45	(10)
greater than 45	(5)

THE GEOPOLITICAL CONTEXT OF REACTIONS TO SECTION 8/MTO POLICY IN BALTIMORE

What began in Spring 1994 as local opposition to the MTO program in Baltimore County brought national legislative action (Mariano, 1994). While the ramifications were national, the impetus can be more fully understood at the local level. Neighborhood reaction to the Section 8 and MTO programs was an expression and extension of deep-rooted community concerns and the nexus of several specific community events. The geopolitical context of reactions to mobility programs grounds the perceived relationships we observed in the County between housing policy and neighborhood change.

As described above, Baltimore County underwent significant demographic change in the 1980s. By 1990, a more diverse population lived in the county and the proportion of Whites had decreased. Family dynamics were also changing: the population was aging and more households were headed by women. Nevertheless, median family income rose and the poverty rate fell. Educational attainment increased with more county residents holding a high school diploma.[20] While these statistics alone do not paint an alarming future for Baltimore County, fears of an economic and social downturn festered. The 1993 Baltimore County CHAS stated the County was "poised precariously between renewal and decline" (Baltimore County, 1993: iii).

Despite these misgivings over the tenuous future of the County, it was increasingly portrayed as a place of opportunity and the City as a place of decay (McDougall, 1993).[21] The Baltimore County CHAS echoed the concern that "more and more of the City's poor will seek in the County the decent, safe, and affordable housing that they feel the City can no longer provide" (Baltimore County, 1993). As conditions seemed to worsen in the City, County residents braced for an invasion of former City citizens that they feared would strain public services, stir-up social ills, and lower neighborhood standards.[22]

Thus, race and class were underlying factors throughout the local debate on housing policy. The popularly perceived vehicle of this "invasion" was the City's Section 8 and MTO programs. And, for many County residents, the City's Section 8 and MTO programs were

[20]As noted in Table 1 previously, the percent of families living in poverty fell slightly from 4.1 percent in 1980 to 3.8 in 1990; 31.7 percent of the community had less than a high school degree while only 21.6 did in 1990; the African American community grew from 8 percent in 1980 to 12 percent in 1990; and female headed households increased from 13 percent to 15.7 percent.

[21]Also confirmed by interviews with local housing program administrators and nonprofit leaders.

[22]Interviews with local housing program administrators, elected officials and nonprofit leaders.

synonymous with "poor and Black."[23] The race and class distinctions between City and County have been highlighted in several reports. For example, the 1993 MTO Application submitted by Baltimore City highlights the difference between the City's poverty population (21.9 percent) and the County's (5.5 percent).[24] The Baltimore MSA was viewed as a Black center with a white outer ring (McDougall, 1993; Rusk, 1995).

Dundalk and Essex's Socio-Political Context. The Baltimore County communities of Dundalk and Essex are located abutting the south east edge of Baltimore City and proved the flashpoint for opposition to MTO.[25] These older, blue collar, ethnic suburbs house an aging population with longstanding ties to the community. Once home to large contingents of employees from Bethlehem Steel, Martin Aircraft, Western Electric and other industrial endeavors, the area steadily declined as employers left or downsized and neighborhoods where former workers lived became depressed (Baltimore County, 1993:ii). While the areas still had a strong sense of neighborhood identity, homeownership rates were declining and rental housing markets were increasingly weak and becoming "housing of last resort" as quality lessened.[26] The communities contained pockets of highly concentrated rental housing which continued to grow.[27] While house values increased between 1980 and 1990, housing in the communities was substantially less expensive than other Baltimore County neighborhoods which made it more affordable for lower income buyers.[28] By the late 1980s, the economic indicators for most of the census tracts in these communities were low enough to disqualify them as destinations for MTO families.[29]

Despite the ineligibility of most neighborhoods within Dundalk and Essex from MTO, local opposition to the program was fierce. Community meetings, parades, and editorial pages throughout the summer and fall of 1994 bore witness to the slogan "Say No to MTO." Interviewees across all categories suggested that the full reaction to MTO was not about a specific demonstration program, Section 8 in general, or even about the prospect of African-Americans

---

[23]Interview with local housing program administrator.

[24]This quote is based on information presented in Edkins (1996).

[25]The focus of opposition to housing mobility in Baltimore was MTO. While Section 8 is implicated, MTO was the catch phrase referring to any publicly assisted mobility program. It will be used here to refer to the opposition in 1994 to the MTO program and the broader meaning conferred on it as described in the text.

[26]Baltimore County (1993:14) and confirmed in interviews with housing administrators and nonprofit leaders.

[27]See Maps 3.4 and 3.5.

[28]See Maps 3.6 and 3.7.

[29]MTO required receiving census tracts to have less than 10 percent of the population below the poverty line in 1989.

moving to traditionally white neighborhoods. MTO became a "battle cry."[30] It crystallized the pent-up anxiety and rage of area residents to the general decline of their community over several decades.

This anxiety was manifested in the ongoing racial strife in Dundalk and Essex. In 1989, a federal grand jury indicted two white men for firebombing the home of an African-American woman in Dundalk. One of the men lived two blocks away from the woman. (McDougall, 1993). One County respondent familiar with the Dundalk area suggested, "These are the people that fled the City in their youth to get away from Blacks. Now they are too old to move. [With the in-moving of African Americans] they see erosion of their primary asset."[31] In Baltimore City, Dundalk and Essex residents saw an area plagued by crime[32] and other social maladies. Epitomized by the City's public housing communities, they also saw a "problem population" that also was overwhelmingly African-American. In an effort to lessen the downward slide of their community, Dundalk and Essex residents fought to stem the feared influx of African-Americans.

The working class nature of Dundalk and Essex also brought out significant angst regarding what residents viewed as "welfare-like handouts" to the "undeserving poor" that provided them the same sort of housing "they [Dundalk residents] worked hard for."[33] This theme was especially resonant with the audience of older, blue collar workers who had built equity over time in their homes and had long standing roots in the neighborhoods. Community residents saw "the American Dream" they worked decades for—home, school, community—being given to freeloading outsiders.[34] Moreover, since the projected in-movers were African-American, MTO stoked fires of racial prejudice as it symbolized "forced integration"[35] and "social engineering" (Waldron, 1994).

Confluence of Unfortunate Coincidences. Even though it could be argued that the Dundalk and Essex communities were ripe for an upsurge in public opinion against MTO, the outpouring

[30]Interview with an elected official.

[31]Ibid.

[32]According to the 1993 Baltimore County CHAS, the Baltimore County Police Department receives about 400,000 calls a year compared to twice that number for Baltimore City.

[33]Interview with housing program administrator. See also Montgomery (1994).

[34]Ibid.

[35]Interview with elected official.

of local sentiment was the result of a confluence of unfortunate coincidences which snowballed into insurmountable political obstacles. These incidents included:[36]

- A hotly contested County Council race which included the Board President of CAN (the organization contracted to provide MTO counseling);
- Baltimore City's plan to demolish public housing projects to be replaced with low-density developments and vouchers;
- Local and federal candidates vying for voters in areas of "Reagan Democrats" like Dundalk and Essex;
- Tensions between City and County, with deep-seated distrust of City government;
- HUD delays in issuing regulations implementing MTO in Baltimore; and
- U.S. Senator Mikulski of Maryland as Chair of the Senate Appropriations Subcommittee for HUD.

The summer of 1994 saw former Maryland State Legislative Delegate Lou DePazzo and CAN Board President Jean Jung running for the Seventh District County Council seat, which included Dundalk. As President of CAN's Board, Jung could be painted as instigating the move of low-income African-Americans to Baltimore County. Although the Seventh District seat did not include significant areas targeted for MTO moves, the association with Jung put the focus on Dundalk as the receiver of families from Baltimore City.

There was little doubt in the minds of many Baltimore County residents as to who these in-movers would be. Baltimore City had recently announced the impending demolition of 2,728 units of public housing under HOPE VI. Some of these units would be replaced on original sites but providing residents with mobility subsidies was part of the long-term plan. While proponents of MTO might cite that the program was targeted to less than 200 families, the specter of thousands of displaced public housing residents loomed. Prior to MTO, County planners were figuring Baltimore City's public housing plight into the County's affordable housing needs. They wrote that Baltimore County could "reasonably expect" an increase in the "poor and marginally skilled" population because of the City's public housing woes (Baltimore County, 1993:16).

[36]Interviews with elected officials, nonprofit leaders, and local housing program administrators.

MTO was a convenient symbol around which to mobilize opposition for a multitude of issues. Areas like Dundalk had been important sources of traditional Democratic power but more recently could not be relied upon. In an effort to appeal to this constituency, candidates from both parties took up the issue of MTO. From State Delegate candidates Michael Davis (Republican) and Diane DeCarlo (Democrat) to Republican gubernatorial hopefuls Ellen Sauerbrey and Helen Bentley, MTO became an issue around which to rally support. Continued media and campaign attention further heightened public awareness about all sorts of mobility programs.

An early public inquiry about MTO appeared as a letter to the editor in the May 12th, 1994, *Dundalk Eagle* from a community leader questioning the details of the program and asking for a public presentation.[37] Answering letters from the executive director of CAN and another from a housing administrator in a near-by county, described the broad goals of the program but explained that a contract was still in negotiation and details were not finalized. Without regulations in place to quickly and definitively answer questions, MTO opponents could (and did) portray HUD as stonewalling.[38] Worst-case scenarios were put forth for public consumption by MTO opponents without compelling arguments against them that could be buttressed by Baltimore specific policies. Pairing distrust of City government with a belief in the incompetency of HABC, opponents to MTO rhetorically painted a bleak picture (Carson, 1994).

Opposition continued to mount in a series of community meetings held throughout the summer. Attendance and tempers were high as community leaders, residents, advocates and opponents were brought out by MTO. Invited to speak on the goals of the program at a community meeting at a local high school, representatives from HUD Washington and local housing officials were peppered with hostile questions and statements. After contentious public meetings, community organizations, local landlords, and politicians kept the issue in the news. As the November elections approached, politicians repeatedly used MTO as a symbol for a variety of social and economic issues.

What started as local concern ended in changed national policy. Democratic Senator from Maryland, Barbara Mikulski, Chairwoman of the Senate appropriations subcommittee for HUD, was in a position of power over the future of MTO. Citing concerns about program oversight, she successfully lead the effort in late August to halt further funding of MTO (Mariano, 1994). But local anxiety did not end with stalled financing of the program, when Baltimore Mayor Kurt Schmoke and HABC Commissioner Daniel Henson, III, met with HUD Secretary Henry Cisneros in late

[37]Reported in Edkins (1996); see also Hersl (1994).

[38]Interview with housing program official.

September to discuss the program, Baltimore County opponents viewed the meeting as further evidence of a "secret deal" between the city and HUD.[39]

Types of Opposition. Several different types of rhetorical arguments were leveled against the MTO program. As discussed previously, underlying assumptions about who lives in city public housing made it possible for local politicians and community leaders in Baltimore County to build on a fear of forced integration. Accelerated community decline through a mass influx of poor minorities would, it was argued, erode community standards and increase social ills. Strong opposition also surfaced to anything that could be portrayed as a "welfare-like handout" that cheapened the American Dream and unfairly catapulted the undeserving poor to the same status as long-time community residents. Finally, a distrust of the city's motives and it's inability or unwillingness to carefully monitor such a "social engineering" program was leveraged to support the claims that MTO would result in undesirable outcomes for Baltimore County neighborhoods.

These positions grew out of direct opposition to the MTO program but were strengthened by the consensual association in the County between "bad neighbors" and government subsidies that goes far beyond MTO. A public perception exists that "eye-sore" housing complexes and trashy homes are the hallmark of public assistance.[40] Thus, part of the decline residents of areas like Dundalk and Essex saw in their neighborhoods was attributed to publicly assisted housing. In some cases, weak housing markets did, indeed, give rise to concentrations of Section 8, and some notoriously "bad" developments were connected to HUD through financing, insurance, or project-based Section 8.[41] But, as explained below, the realities of failed HUD programs were greatly exaggerated by those who sought to exploit MTO for their own political benefit.

PERCEIVED RELATIONSHIPS BETWEEN HOUSING POLICY AND NEIGHBORHOOD CHANGES

We have seen above how the geopolitical context of eastern Baltimore County and the confluence of several unfortunate circumstances conspired to whip up powerful opposition to the Section 8 and MTO programs. Although some of the opposition focused on anti-welfare sentiment and the unfairness of the housing subsidies, much appeared to be related to a fear of neighborhood decline. In this section we summarize the findings of our field reconnaissance as they relate to the various causal paths through which mobility housing policies were reputed to cause neighborhood decline. There appear to be five strands of argument that were articulated:

---

[39]Interview with elected official. See also Carson (1994).

[40]Interviews across multiple categories.

[41]Interview with housing program administrator.

(1) uncivil behaviors of subsidized tenants; (2) racial and class prejudices against subsidized tenants; (3) precursor to poverty concentration; (4) mismanagement by the housing authority; and (5) housing subsidies encourage poorly managed properties. We found additional evidence, however, that neighborhood decline actually preceded the entrance of subsidized tenants into the area. Even spurious correlation, of course, may further reinforce the public's (perhaps erroneous) perception of causation.

Behavior of Subsidized Tenants. During the public debate over MTO, allegations were made about the prospective behavior of MTO tenants. Baltimore County residents were concerned that the City was "exporting" it's problems.[42] Tenants were seen as "unskilled", "unclean" and "undisciplined." The much-publicized problems of HABC public housing as havens of crime, drugs, and welfare mothers fueled County resident concerns about an increase in crime in receiving neighborhoods.[43] Public housing residents (and, by association, MTO tenants) would bring unwanted behavior to Baltimore County neighborhoods, thus eroding community standards and the quality of life. Such concerns were illustrated by a 1994 Democratic candidate for the Maryland House of Delegates letter to constituents in which she pledged "to lead community effort(s) against any infringement of nuisance laws, health standards, or housing standards which may have been brought by MTO."[44]

Racial and Class Prejudice Against Subsidized Tenants. Assumptions about the behavior of MTO in-movers included stereotypes about race and class. But even beyond behaviors, minorities and lower-income tenants may be opposed on their own right (Simpson and Yinger, 1972). Racial and class prejudice may result in an outmigration of white residents and reduce demand by prospective white, nonpoor in-migrants when a neighborhood is seen as becoming "integrated" (Bradburn, Sudman, and Gockel, 1971; Galster, 1991). Thus, not only is the residential quality of life eroded for those who are prejudiced, but this erosion may be capitalized into declining property values.

Subsidized Tenants as Precursor to Poverty Concentration. There was a fear that "opening the door" to one subsidized tenant would inevitably lead to the concentration of low-income tenants in the neighborhood because of a perceived tendency for Section 8 households

[42]A local public official expressed this as "dumping the worst of the worst." This widespread sentiment was confirmed in four other Baltimore County interviews.

[43]Baltimore County Interviews; see also similar concerns of community residents discussed in Goetz, Lam, and Heitlinger (1996).

[44]This document presented in Edkins (1996).

to cluster.[45] Several of our interviewees from both the City and County indicated that there were some legitimate grounds for this worry. As noted above, until recently HABC had not actively encouraged dispersal of Section 8 recipients, and been seen as concentrating such tenants in transitional neighborhoods within the city.[46] Clustering of rental properties at Fair Market Rent levels and recruitment of Section 8 tenants to a location by word-of-mouth from peers were cited as additional causes of Section 8 clustering.

Mismanagement by Local Housing Authority. County residents' lack of faith in the public housing authority's ability to screen tenants heightened anxiety about the number and type of residents sent to receiving communities. Distrust of the HABC also bred insecurity about it's ability to monitor housing quality standards. It was believed that both forces could cause property values to decrease in Baltimore County neighborhoods as standards for residents and properties declined.

Housing Subsidies Encourage Poorly Managed Properties. There was a widespread sentiment among all categories of our respondents that the Section 8 program often created perverse incentives for property management that adversely affected the surrounding neighborhoods. Some landlords were seen as becoming lax with screening tenants, enforcing lease provisions, and adequately maintaining their properties because they believed that they had a "captive Section 8 market" that would continue to provide them with a steady stream of income regardless of their management practices. Thus, the public's perception about the association between deteriorated, badly run buildings and Section 8 tenantry is partly grounded in fact, it was argued.[47]

Weak Neighborhoods Attract Section 8. Finally, there appears to be recognition among a substantial number of our respondents that subsidized housing programs may not, indeed, be as much a cause of neighborhood decline as its result.[48] In soft local real estate markets, owners may be forced to reduce vacancies and thus become more lax on screening of Section 8 tenants and/or actively seek more such tenants inasmuch as they may be able to receive more rent from the housing authority than they could on the open market.[49] Even an opponent of MTO

[45]This was confirmed in numerous interviews. For a scholarly discussion of these issues, consult: Cox (1982); and Rohe and Stegman (1994).

[46]Interview with non-profit leader.

[47]Interviews with local housing program administrators, elected officials, and non-profit organization leaders.

[48]Other anecdotal evidence about landlords who specialize in the "Section 8 submarket" is presented in Peterson and Williams (1995).

[49]Interviews with elected public official and local housing program administrators.

volunteered that the macro forces leading to population loss from Eastern Baltimore County were fundamentally responsible for neighborhood decline, because under those circumstances more dwellings would be converted to renter occupancy and rents would more likely fall below Fair Market Rent levels.[50]

[50]Interview with elected public official.

CHAPTER 4
QUANTITATIVE AND QUALITATIVE METHODS

A NON-TECHNICAL OVERVIEW

Nothing can be quite as intimidating and incomprehensible as a discussion of advanced econometric models. Unfortunately, such a model forms the core of our quantitative analysis and it must be described with sufficient precision to be clearly reviewed and the accuracy of its findings assessed by specialist peers. The importance of the topic being investigated demands nothing less.

Nevertheless, at base our approach has a strong intuitive appeal. Thus, in this overview we aim to give a reader a comprehensible (albeit superficial) description of what our model is trying to accomplish and how it goes about doing so. Readers for whom this proves a sufficiently detailed explanation can then turn to the description of the focus group sites and methods at the end of this chapter. This will provide a sufficiently detailed explanation to understand the results presented in Chapters 6 and 7.

Our impacts model builds upon the work of numerous researchers who have investigated the degree to which a variety of factors associated with a neighborhood affect the sales prices of single-family homes. The heart of these investigations consists of a statistical model that attempts to decompose the sales price of a home into implicit prices paid for the home's myriad attributes—such as rooms, yard size, fireplaces, maintenance levels, year of construction—as well as attributes associated with the home's surroundings. This latter set can include the quality of local public schools, the condition of nearby properties, the proximity to shopping, the socioeconomic and racial characteristics of neighbors, and, of particular interest here, the presence of subsidized housing. The idea is that homes with a different bundle of attributes will sell for different prices, and that a home's sales price can be predicted by measuring the amount of each attribute present and multiplying that amount by its implicit price. By adding up the implicit values of the different attributes of a house, one can arrive at its total sales price.

The method for decomposing home sales prices into implicit prices of attributes is multiple regression analysis. In this technique, a sample of home sales is drawn and as many attributes of each home as feasible are measured. Home sales becomes the dependent variable in the regression model, and the attributes become the independent (or explanatory) variables. The multiple regression algorithm estimates coefficients for each attribute variable, finding the coefficients that provide the "best fit" between the observed house prices and those that would be predicted by the model. These estimated coefficients can then be interpreted as the implicit prices of these attributes.

Thus, should a regression of home sales prices on the properties' housing and neighborhood attributes produce, as illustration, a negative coefficient for the attribute "age of the home," we would interpret this to mean that the market does not value older homes as much as newer ones. Similarly, if our regression were to estimate a positive coefficient for the attribute "a park is within two blocks," it would signify that the market valued proximity to parks.

It is important to realize that coefficient is estimated independent of the effects of all the other attribute variables specified in the regression model. That is, one can interpret these coefficients as the additional impact on price that is contributed by the given attribute, controlling for the effects of all the other attributes. A crucial implication is that the accuracy of results is greater if one can control for as many attributes as possible in the multiple regression.

For the purposes of this study, we focus attention on a particular attribute: "proximity to a *subsidized housing site*" or, alternatively, "proximity to a *number of subsidized tenants*." We define "proximity" in terms of three distances "rings": within 500 feet, 501-1,000 feet, and 1,001-2,000 feet. A "subsidized housing site" could be a property owned and operated by a public housing authority or a private building housing Section 8 certificate holders. We consider two sorts of subsidized tenants in our models: those residing in Denver Housing Authority-owned dispersed housing and those receiving Section 8 certificates in Baltimore County. Our goal is to ascertain the degree to which proximity to subsidized housing affects sales prices in these two housing markets, controlling for a wide variety of attributes. These attributes include the home's structural characteristics, characteristics of the surrounding neighborhood measured both at the census tract scale and at the "micro-neighborhood" scale of 2,000 feet around a subsidized site, and measures to adjust for seasonal and business cycle influences.

To do this, we structure our multiple regression model to create the equivalent of a "pre/post" experiment. Effectively, we compare the level and trend of home prices in a micro-neighborhood both before and after a site within the area is occupied by a subsidized tenant. This level and trend is estimated on the basis of sales of identical homes or, more accurately, homes whose differences in prices have been adjusted so as to make them comparable. If either the level or the trend in prices were to be different after occupancy, that would signal to us that there was an independent effect from the occupied subsidized unit.[1]

[1]The price levels and trends, as well as the other coefficients in our models, are *estimates* and therefore have uncertainty associated with their values. While an estimated coefficient may be positive or negative, the uncertainty associated with this estimate may be large enough that one cannot say reliably that this attribute has an effect on sales prices. In reporting our results, we generally use a standard of "95 percent confidence," meaning that we only show impacts which we are 95 percent sure are not zero.

This pre/post approach is central to the power of our method and, indeed, represents a significant methodological advance in the analysis of house prices. It therefore warrants some additional explanation. Our model takes the locations of rental sites that first began subsidized occupancy during the early through the mid-1990s. For each site, we circumscribe a 2,000 foot radius circle and take every home sale within this circle that occurred up to the time that the first subsidized tenant moved in. Then, for each of the three distance rings noted above, we use a regression model to calculate the trend in prices, adjusting for any differences in attributes that may affect a home's price. We do the same for several years' worth of sales beginning with the quarter after a subsidized site was occupied. Finally, we compare the two trends and draw conclusions.

To more clearly see how we make these comparisons and draw conclusions regarding the impact of subsidized sites, consider the following illustrative (and hypothetical) examples:

1. Prior to occupancy of a subsidized site, the surrounding neighborhood's prices are holding constant, with the average home selling for $80,000. After the first subsidized tenants move in, prices remain at $80,000. Conclusion: no impact from the subsidized site.

2. As in 1., but in the quarter after the first subsidized tenants move in, prices drop to $70,000 and remain constant thereafter. Conclusion: negative impact from the subsidized site.

3. As in 1., but in the quarter after the first subsidized tenants move in, prices remain at $80,000 but decline thereafter. Conclusion: negative impact from the subsidized site.

4. As in 1., but in the quarter after the first subsidized tenants move in, prices either rise to $90,000 or rise thereafter. Conclusion: positive impact from the subsidized site.

5. Prior to occupancy of a subsidized site, the surrounding neighborhood's prices are rising five percent annually, and, just before the first tenants move in, the average home sells for $80,000. The quarter after the subsidized tenants move in, prices remain at $80,000 but thereafter prices rise only two percent annually. Conclusion: negative impact from the subsidized site.

6. As in 5., but in the quarter after the first subsidized tenants move in prices drop to $70,000 but continue to rise five percent annually. Conclusion: negative impact from the subsidized site.

7. As in 5., but in the quarter after the first subsidized tenants move in, prices either rise to $90,000 or thereafter prices rise ten percent annually. Conclusion: positive impact from the subsidized site.

The reader can easily extend the logic above to cover the situation of a neighborhood initially in decline before the subsidized site was occupied. But what is trickier is the situation where post-occupancy there is *both* a change in the *level* of prices and in the *trend* of prices, and the two work in opposite directions.

For example, take a situation where prior to occupancy of a subsidized site, the surrounding neighborhood's prices are rising five percent annually. Just before the first subsidized tenants occupy this site, the average home in the area sells for $80,000. In the quarter after the first subsidized tenants move in, prices rise to $90,000 (a positive impact in the short term) but thereafter prices rise only two percent annually (a negative impact in the long term). One can see that at some future time the initial $10,000 price increase will be eroded by the slower appreciation rate such that the level of prices in the neighborhood will be exactly what it would have been had the initial $80,000 value continued to appreciate at the original five percent rate. Prior to this date, the impact on the neighborhood would have been positive. Past this point into the future, however, it is clear that this
hypothetical neighborhood would have lower prices than would have occurred in the absence of the subsidized site.

The general set of models described above, when estimated over the entire set of house sales and for all subsidized housing sites, allows us to determine the average impacts of subsidized housing for Denver or Baltimore County. This assumes, however, that the impacts are similar in all subareas of these regions and for all types of sites. To determine whether the housing programs we were studying might have different impacts in different types of neighborhoods or for different types of sites, we can estimated our models on various stratifications of house sales or subsets of subsidized sites. Selected results from these stratified models are presented in Chapters 6 and 7.

The next four sections of this chapter set our model in the context of methodological history and provide more technical detail. Readers who do not require this level of explanation may skip to the discussion of our focus group sites and procedures at the end of this chapter. In Chapters

6 and 7, we will present our results in the context of graphs that portray situations analogous to those described hypothetically above. Our assessment of impacts relies on the logic illustrated here, so readers who do not read the technical description of the models will still be able to understand the results derived from the empirical analysis.

PREVIOUS STUDIES: RESULTS AND METHODOLOGICAL SHORTCOMINGS

Conventional wisdom is challenged

Through the 1980s, at least a dozen scholarly studies had investigated the question of whether subsidized housing generates a negative impact on neighboring single-family property values.[2] The preponderant conclusion reached by these studies was that there was no sizable or statistically significant impact, while a few studies even concluded that there was a positive impact. For example, Nourse (1963) found that prices rose faster in St. Louis neighborhoods surrounding newly built public housing than in control neighborhoods. De Salvo (1974) concluded that developing Mitchell-Lama apartment complexes led to much faster rates of appreciation in the low-moderate quality submarkets in which they were located compared to control areas. Warren, Aduddell, and Tatalovich (1983) claimed that positive externalities associated with privately owned, federally subsidized apartment complexes resulted in higher median property values in the Chicago census tracts where they were located. Most recently, Briggs, Darden, and Aidala (1999) found slightly higher home sales price levels, though not statistically significantly so, in the vicinity of seven scattered-site public housing developments in Yonkers, NY, after they opened compared to before.

Only two studies of this period even hinted at dissension, and both could be convincingly discounted on methodological grounds. Warren, Aduddell, and Tatalovich (1983) found that in Chicago census tracts having more than one-third poor households and two-thirds minority households, the presence of 30 percent or more of the housing stock consisting of public housing units proved detrimental to values. Unfortunately, this study suffers from serious omitted variables bias and aggregation bias (inasmuch as census tract median property values are employed as the dependent variable). Guy, Hysom, and Ruth (1985) found that new, Fairfax County townhouse clusters' prices were directly related to distance from two privately owned, mixed-income apartment complexes subsidized by the federal Below-Market Interest Rate (BMIR) program. These conclusions can be challenged because there is no way to distinguish the effects of low-

[2]See Matulef (1988), Martinez (1988), and Puryear (1989) for reviews. A related strand of literature, the impacts of group residences for handicapped individuals, is not considered here. For a review, see Galster and Williams (1994).

income neighbors from those of a large-scale apartment building nearby (since the two are perfectly collinear), and there is a strong association between distance from the BMIR developments and the median income of the census tract.

Recently, however, the conventional wisdom of no impact has been shaken by four, more sophisticated statistical studies that have emphasized the contextuality of impacts. These studies have concluded that, with certain circumstances and certain kinds of developments, particular sorts of subsidized housing can create severe effects on nearby property values. Their results for scattered-site public housing, new or rehabilitated infill housing, and tenant-based Section 8 sites will be of particular interest juxtaposed against the findings of the current study. First, Cummings and Landis (1993) studied six developments built by the San Francisco Bay-area non-profit, BRIDGE Program. Although they found no impacts from three developments and positive impacts from two, one was observed lower sales prices within a half mile by a remarkable $49,519.

Goetz, Lam, and Heitlinger (1996) studied property values near several types of subsidized rental housing developments in Minneapolis. They concluded that each 100 feet closer proximity to a Minnneapolis Community Development Corporation's subsidized rental development raised home sales prices by $86 a dwelling, but each 100 feet closer to a subsidized rental development run by a private, for-profit owner (such as site-based Section 8) reduced sales prices by $82 per dwelling.

Lyons and Loverage (1993) investigated the impacts of 120 locations where federally subsidized tenants resided in St. Paul, Minnesota. They found that each subsidized tenant residing within one-quarter mile of a single-family home reduced the assessed value of that home by a statistically significant $21; each such tenant within two miles reduced it by $5. Adding an additional proximate site where one or more subsidized tenants lived reduced assessed property values $1,585 if they were located within one-quarter mile. Moreover, this reduction in assessed value fell with distance from subsidized site until it reached $609 if the sites were within two miles.

Lyons and Loverage also disaggregated the number of subsidized units by program type at various distances from the property being assessed and found that the statistically significant impacts ranged from negative to positive. Specifically, within a quarter mile, each additional Section 8 site-based assisted unit reduced values by $50 per dwelling; the comparable reduction for Section 202 elderly units was $200. Within a half mile, each Section 221d(3) unit raised assessed values by $603 per dwelling and, surprisingly, public housing units did so by $19. Perhaps of special interest because it represents only one of two extant attempts to measure impacts of Section 8 certificate/voucher holders, the authors found no statistically significant

relationship between the locations of 39 Section 8 tenants in the sample and assessed values at any distance from them ranging from 300 feet to two miles. All the statistically significant coefficients for subsidized units or tenant-based assistance sites showed monotonically decreasing magnitudes at progressively larger radii measured from the given assessed value. Moreover, coefficients for the squared values of the number of subsidized units or sites consistently showed diminishing marginal impacts.

Finally, Lee, Culhane, and Wachter (forthcoming) examined various kinds of assisted housing in Philadelphia and examined single family home sales occurring within one-eighth and one-fourth mile during the 1989-1991 period. Results indicated a remarkable variation in apparent impact according to subsidized housing program. Specifically, controlling for neighborhood conditions, sales within one-eighth mile of: (1) any conventional public housing site were 9.4 percent lower; (2) each additional scattered public housing unit were 0.8 percent lower; (3) each additional FHA assisted unit were 0.2 percent higher; (4) each additional new / rehabilitated section 8 unit were 0.1 percent higher; (5) each additional section 8 certificate / voucher unit were 0.5 percent lower; and (6) each additional low-income tax credit unit were 0.1 percent lower.[3] When proximity was measured at a quarter-mile distance, the magnitude of the foregoing coefficients consistently dropped by roughly half.

Methodological Variants and Their Weaknesses

One possible explanation as to why the forgoing analyses have come to such variant, non-generalizable conclusions is because they employ different methodologies, each of which suffers from serious, if somewhat different, shortcomings. The three alternative approaches can be termed: control area, pre/post, and econometric.

The *control area approach*, represented by Nourse (1963), Schafer (1972), DeSalvo (1974) and William Berry & Company (1988), selects a neighborhood that is otherwise comparable to ones that have subsidized housing located within them and then compares property value levels or trends in both. The fundamental challenge here is identifying areas that are, indeed, identical in all respects save for subsidized housing and that have no other forces or land developments that differentially affect them subsequent to the subsidized housing development. Indeed, this challenge may be insurmountable, inasmuch as developers and occupants of subsidized dwellings may choose certain neighborhoods over others precisely because they have attributes that are particularly attractive for their purposes.

[3]The mean sales price in the sample was $47,626.

The *pre-post- approach*, represented by Rabiega, Lin and Robinson (1984), Puryear (1989), and Briggs, Darden and Aidala (1999), compares levels or trends in property values in the same neighborhoods before and after the introduction of a subsidized development.[4] The difficulty here is ensuring that there are no additional forces that may effect values in the target neighborhood, such as macroeconomic or local housing submarket pressures, that are coincident with the subsidized development. For example, the entire metropolitan area's housing market may be in an area of deflationary prices, whereupon there will be a tendency for any pre/post comparison of values in any neighborhood to show a secular trend of decline, regardless of the presence of a subsidized housing site.

The *econometric approach* has many variants,[5] but typically it tries to ascertain whether there is an independent, cross-sectional variation in housing prices that can be associated with proximity to a subsidized unit. Although not an inherent flaw in the approach, virtually all previous econometric studies have failed to control for the idiosyncratic characteristics of the micro-neighborhood environment that surrounds (say, within a radius of a quarter mile) but is unrelated to the subsidized housing site.[6] Instead, most settle for variables that measure characteristics of the encompassing census tract, which may be poor proxies for conditions in the area near the subsidized site. Thus, if these omitted, micro-neighborhood variables were correlated with the location of subsidized housing, apparently statistically significant proximity effects might erroneously be attributed to the latter instead of the former. One candidate for such an important omitted variable is the presence of a (possibly large) apartment building in the area, into which some assisted households are placed at a later date.

This criticism takes on additional importance when considering a major flaw that all three approaches share: they cannot convincingly distinguish the direction of causation between trends in neighborhood property values and the siting of assisted housing.[7] Put differently, because they do not control for the quality and market strength of the micro-neighborhood into which assisted housing is placed relative to the larger universe of potential sites, they cannot ascertain whether

---

[4]The comparison often is accomplished with the aid of multivariate statistical procedures to control for differences in the properties being sold pre- and post-occupancy of the site.

[5] Warren, Aduddell and Tatalovich (1983), Guy, Hysom, and Ruth (1985), Cummings and Landis (1993), Lyons and Loveridge (1993), Goetz, Lam, and Heitlinger (1996), Lee, Culhane, and Wachter (forthcoming).

[6]Replicating the specification first employed by Galster and Williams (1994) in their study of group homes for the mentally ill, Briggs and Darden (1996, 1997) specified for each subsidized site a pair of dummy variables that denoted sales within a quarter mile of the site which occurred either pre- or post-occupancy of that site.

[7]Lyons and Loveridge (1993) also discuss this problem.

subsidized sites lead to neighborhood decline or whether subsidized sites are systematically located in areas having property values that are low and not expected to depreciate in the future.

There are several reasons to suspect that subsidized housing developers, and even subsidized tenant themselves, may choose neighborhoods with low property values. First, if the site involves a subsidized structure, the developer it will be encouraged to husband its scare resources by acquiring the least-expensive properties available. Second, private landlords may be more willing to participate in the Section 8 program, and even actively recruit Section 8 tenants, if their properties are in weak housing submarkets and they cannot otherwise obtain fair market rents for their apartments. Third, Section 8 households who use vouchers may try to move into modest-value neighborhoods so as to free up more of their income for non-housing consumption, inasmuch as the value of their voucher is fixed.

A second, over-arching criticism of all extant empirical work related to the property value impacts of subsidized housing is the failure to account for spatial econometric issues. Can (1997) and Can and Megbolugbe (1997) have demonstrated how the predictive ability of home price regression models is enhanced considerably by the inclusion of variables measuring the spatial dependence (autocorrelation) among proximate home prices.

Our approach, what we label “econometric event analysis,” overcomes all the above shortcomings of prior approaches. By employing a variant of the “pre-/post-” design involving localized fixed effects, it controls for micro-neighborhood characteristics unrelated to subsidized housing. By relating these localized fixed effects to property value trends and levels in larger geographic areas it distinguishes the self-selection of subsidized housing into weak neighborhood submarkets from the ultimate consequences of such housing on these neighborhoods. By controlling for the characteristics of sold properties and more macro trends in values it purges several additional confounding elements that have plagued earlier analyses. The complete specification of our model follows after consideration of our conceptual framework for analyzing house price determinants.

A CONCEPTUAL FRAMEWORK FOR ANALYZING THE DETERMINANTS OF HOUSE PRICES

We adopt the conventional assumption that each house may be described as a package of various characteristics which describe numerous attributes of the structure [*S*], neighborhood [*N*], and local public services [*L*]. Symbolically:

$$H = f([S], [N], [L]) \quad [1]$$

where *H* can be thought of as the "quality" of that house or its "hedonic value" (Rothenberg et al., 1991: ch. 3). The price of the housing package is a function of its embodied quality:

$$P = g(H) \quad [2]$$

The "hedonic price function" represented by [2] represents, according to Rosen (1974), "a joint envelope of a family of 'value functions' [of sellers]." The partial derivative of *P* in [2] with respect to a particular attribute of the house yields the implicit price of that attribute. Rosen suggested that if hedonic relationships in part reflect sellers' pricing strategies there will be a problem in identifying household preferences. This concern is less severe in the case of housing because, as Muellbauer (1974) demonstrates, household preferences dominate "in second-hand durables markets where aggregate supply is fairly stable and particular supplies are usually held in decentralized fashion." Thus, the sign and magnitude of the implicit price can be interpreted as a measure of the degree to which households in the market prefer (or are averse to) that attribute (Muellbauer, 1974). Should proximity to a residence occupied by a subsidized tenant prove to have a negative implicit price in the estimated hedonic index, it would imply that such occupancy was imposing a social cost upon its neighbors.

Functional Form

We must first specify a particular mathematical form for the hedonic price equation [1] above. Two conventional practices exist in this regard. The first adopts a flexible, non-linear functional form and searches for a "best-fit" over an array of alternative parameters, using a technique proposed by Box and Cox (Halvorsen and Pollakowski, 1981). Two shortcomings render this approach inferior here. First, inasmuch as all variables end up being interacted with others, interpretation of coefficients is exceedingly difficult. Second, the power transformation employed in the Box-Cox technique becomes problematic in the presence of many dummy variables, such as will be the case with our specifications (Cooley and LeRoy, 1985)]. Thus, in this research we adopted the other conventional approach of specifying a theoretically sensible functional form *a priori*. Based on previous work (Rothenberg et al., 1991: ch. 13), we will use a semi-log form, that is, expressing the logarithm of sales price as a linear function of the house and neighborhood characteristics and other dependent variables.

Localized Fixed Effects

As shown in equations [1] and [2], the sales price of a home will be affected by numerous neighborhood attributes (including physical and occupancy characteristics of neighboring properties, environmental conditions, and potentially the proximity of subsidized tenant-occupied apartments) and attributes of the local public sector (including schools, police protection, taxes, and zoning). The challenge facing the analyst is to gather complete data on this array of neighborhood attributes so that results will not be tainted by omitted variable bias. This challenge has two facets: one must not only gather a comprehensive, dauntingly large set of attributes, but one also must ascertain the geographic area over which these attributes are most appropriately measured for each site.

The approach we have chosen responds to this challenge by specifying a spatial fixed effects model. That is, dummy variables were specified that denote a particular geographic areas ranging in scale from a census tract down to the area within 500 feet of a subsidized site. These variables control, in summary form, for the idiosyncratic bundle of attributes that are present in the corresponding space. The effect on sales prices of individual attributes in this bundle cannot be determined, however.

Our procedure is distinguished by its specification of the "neighborhood." We employed a set of fixed-boundary, mutually exclusive areas (census tracts) for defining one set of spatial fixed effect variables. However, to measure fixed effects in smaller, micro-neighborhoods we relied on a different procedure. Essentially, we defined a series of "neighborhoods" centered on each subsidized housing site, each one comprising one of several concentric rings within a range of 2,000 feet. Depending on the proximity of the subsidized sites, these neighborhoods may overlap. Our specification estimated a fixed effect for these micro-neighborhood spaces, either as a group or individually; we experimented with both degrees of aggregation.

Alternative Aggregated Model Specifications and their Assumptions

Overview. We estimated three alternative specifications of the hedonic price function [1] above that did not distinguish among subsidized sites. Each specification is founded on particular assumptions that we will discuss below. Because we employed all the sites for subsidized households in the relevant program in Denver and Baltimore County as the basis for estimating the parameters of these house price functions, we refer to them as our "aggregate models." These alternatives are expressed symbolically as:

Aggregated Model 1 (proximity to any subsidized site model):

LnP = c + [Struct][b] + [Quarter][n] + [Tract][m] +

$$dDAll_{500} + eDAll_{1k} + fDAll_{2k} + gDPost_{500} + hDPost_{1k} + jDPost_{2k} + qTime_{500} + rTime_{1k} + sTime_{2k} + tTrPost_{500} + uTrPost_{1k} + vTrPost_{2k} + \epsilon \quad [3]$$

Aggregated Model 2 (proximity to number of subsidized sites interaction model):

$$LnP = c + [Struct][b] + [Quarter][n] + [Tract][m] + dDAll_{500} + eDAll_{1k} + fDAll_{2k} + gPost_{500} + hPost_{1k} + jPost_{2k} + qTime_{500} + rTime_{1k} + sTime_{2k} + tTrPost_{500} + uTrPost_{1k} + vTrPost_{2k} + t'(TrPost_{500} * Post_{500}) + u'(TrPost_{1k} * Post_{1k}) + v'(TrPost_{2k} * Post_{2k}) + \epsilon \quad [4]$$

Aggregated Model 3 (proximity to number of subsidized units interaction model):

$$LnP = c + [Struct][b] + [Quarter][n] + [Tract][m] + dDAll_{500} + eDAll_{1k} + fDAll_{2k} + gUPost_{500} + hUPost_{1k} + jUPost_{2k} + qTime_{500} + rTime_{1k} + sTime_{2k} + tTrPost_{500} + uTrPost_{1k} + vTrPost_{2k} + t'(TrPost_{500} * UPost_{500}) + u'(TrPost_{1k} * UPost_{1k}) + v'(TrPost_{2k} * UPost_{2k}) + \epsilon \quad [5]$$

Where the components of the models are defined as follows:

LnP	Log of the sales price
c	Constant term
[Struct]	Vector of structural characteristics of home, including home and lot size, age, building materials and type, and numerous amenities; for details, see Annex D
[Quarter]	Vector of dummies indicating the time (year and quarter) of sale; seasonal and intertemporal trend measure
[Tract]	Vector of census tract dummies indicating the location of home; tract fixed effect measure
$Dpost_x$	Post-occupancy dummy for distance ring *x*; equals 1 if sale occurs within *x* feet of one or more occupied subsidized sites; zero otherwise

$Dall_x$ Dummy for distance ring *x*; equals 1 if sale occurs within *x* feet of current or future subsidized site, whether occupied or not; zero otherwise

$Post_x$ Number of post-occupancy locations (sites) of subsidized households for distance ring *x* at time of sale

$Upost_x$ Number of occupied subsidized units for distance ring *x* at time of sale

$TrPost_x$ Post-occupancy trend variable for distance ring *x*; equals 0 if sale is pre-occupancy for all sites in distance ring; if sale is post-occupancy of a site in ring *x*, then equals 1 if sale occurs in first quarter after site was occupied, equals 2 if sale occurs in second quarter after site was occupied, etc.

$Time_x$ Trend variable for distance ring *x;* equals 0 if no sites are in distance ring *x* of the sale; otherwise, equals 1 if sale occurs in first quarter of study period (i.e., 1st quarter 1989 in Baltimore Co. or 1st quarter 1987 in Denver), equals 2 if sale occurs in second quarter of study period, and sale is in distance ring *x*, etc.

ϵ A random error term with the usual assumed i.i.d. statistical properties.

All lower case letters in the equations represent coefficients to be estimated.

Model 1 tests for both price level shift and price trend slope alteration effects in impact areas near subsidized sites, and thus makes relatively few assumptions about what form any impact might take. Below we summarize how the various trend and fixed effects are being controlled for in Model 1 in a way that permits us to identify unambiguously the impact of proximity to a subsidized site:[8]

[Quarter] measures quarterly changes in the overall county house price levels associated to seasonality and general market trends

[Tract] measures the fixed effect on house prices due to location in the area defined by the Census tract

[8]For the Baltimore County Section 8/MTO program, a subsidized site refers to a unique street address where one or more Section 8 households are residing. For Denver, a site refers to a unique street address for a single or multi-family property.

$Dall_x$ measures the fixed effect throughout the County of being in the area defined as within distance *x* of one or more subsidized site(s), regardless of whether occupied yet

$Dpost_x$ measures the fixed effect throughout the County of being in the area defined as within distance *x* of one or more subsidized site(s) after occupancy

$Time_x$ measures the trend in house prices during the study period in the area throughout the County defined as within distance *x* of one or more subsidized site(s), regardless of whether occupied yet

$TrPost_x$ measures the trend in house prices during the study period in the area throughout the County defined as within distance *x* of one or more subsidized site(s) after occupancy

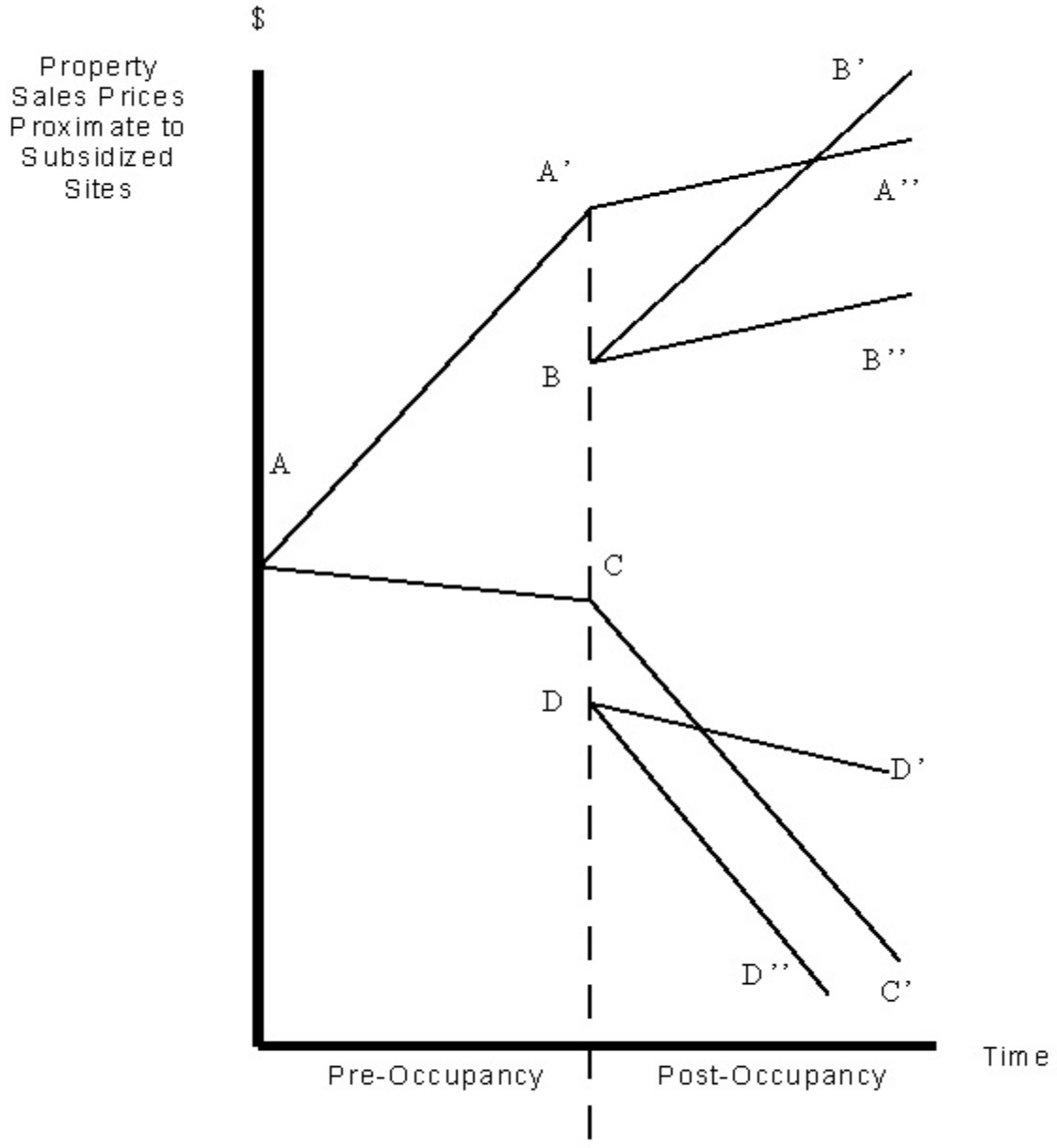
Similar points can be made graphically with the aid of Figure 4.1, which portrays hypothetical alternative price patterns associated with proximity to a subsidized site, *ceteris paribus*, both pre- and post-occupancy of that site. Several sorts of potential negative price impacts are illustrated. In the case of the upper set of lines, a neighborhood with a strong, positive trend in price appreciation could be adversely affected by the opening of a subsidized site through: (1) a diminution of the rate of price appreciation (pattern A-A'-A''); (2) a discontinuous shift down in the price gradient but a re-establishment of the prior rate of appreciation (pattern A-A'-B-B'); or (3) both of the above (pattern A-A'-B-B''). The same three sorts of negative impacts are shown with the lower lines in Figure 4.1, which portray a neighborhood with declining prices prior to occupancy of the subsidized site.

The test for statistical significance of the post-occupancy shift coefficients (g, h, j) of the $DPost_x$ variables is equivalent to testing that there is a discontinuous change in the price levels in the micro-neighborhoods (defined by a particular distance ring) around subsidized units post-occupancy. In terms if Figure 4.1, it is equivalent to testing whether A'=B or C=D. The test for statistical significance of the post-occupancy trend coefficients (t, u, v) of $TrPost_x$ is equivalent to testing that there is a change in the price trends in the micro-neighborhoods around subsidized units post-occupancy. In terms of Figure 4.1, this is equivalent to testing whether the slopes of A-A' and A'-A'' are equal (or the slopes of A-C and C-C' are equal). Should both the shift and trend post-occupancy coefficients prove to not be significantly different from zero, it would reject the hypothesis of impact.

Should one or both be statistically significant, however, the magnitude of subsidized housing impact across all sites involves assessing whether (d+qTime*) - (g+tTrPost), (e+rTime*) - (h+uTrPost), and/or (f+sTime*) - (j+vTrPost) $\neq$ 0, where Time* represents the latest quarter prior to occupancy of the site by a subsidized household. Should the alterations in shift and trend terms yield contrary implications (such as a downward shift but increased slope in the price gradient), it will be necessary to calculate net effects at different quarters post-occupancy.

FIGURE 4.1

Illustration of Three Potential Types of Negative Property Value Impacts from Subsidized Housing



Note: Diminution of Trend: A-A'-A"; A-C-C'
Downward Shift: A-A'-B-B'; A-C-D-D"
Both: A-A'-B--B"; A-C-D-D"

Models 2 and 3 build upon the foundation specification of Model 1 but differ from it in two important ways. Model 1 implicitly assumes that the measured impact of proximity to any subsidized site(s) is invariant to the number of such proximate sites. Model 2 relaxes this assumption and allows the post-occupancy shift variable to assume the number of occupied subsidized sites at the given distance at the time of sale. Model 3 does the same, but uses the number of occupied subsidized *units* instead of sites. These numbers of sites and units varied considerably across our sample, as shown by the maximum values in Table 4.1.

Table 4.1
Maximum Numbers of Subsidized Sites and Units Observed at Time of Sale, By Proximity

		Proximity		
		0-500 Feet	501-1,000 Feet	1,001-2,000 Feet
Baltimore Co.	Sites	46	84	154
(Section 8)	Units	206	303	467
Denver	Sites	6	11	16
(Dispersed PH)	Units	26	34	55

Models 2 and 3 also test for the possible effects of the number of sites or units on the post-occupancy price trends by use of the multiplicative interaction variables. That is, the model measures whether the decline (or appreciation) in house prices is magnified by the number of subsidized sites or units present.

We stress that the results of any regression model do not offer conclusive proof of causation, merely association. Nevertheless, our specification, by clearly delineating pre- and post-occupancy changes in prices, provides exceptionally convincing evidence in this regard.

Alternative Stratifications

The issue of aggregation poses an additional challenge to the analyst. At one extreme, one can assume that all subsidized households have identical impacts across all sites and housing submarkets and thereby gain maximum sample sizes. Such an assumption may not withstand

close scrutiny, however. At the other extreme, one can permit variations in impact across sites or across submarkets, but the price will be smaller sample sizes, and, consequently, less precision in estimating impacts. Therefore, to examine the impacts of individual sites, one must choose locations where there are a large number of pre and post sales observations at various distances.

To determine whether the housing programs we were studying might have different impacts in different types of neighborhoods, we estimated our models on various stratifications of house sales. The different strata were defined according to the characteristics of the census tracts in which the sales occurred, such as racial/ethnic composition, median property values, and changes in average house prices. We further estimated the impacts of subsets of subsidized sites based on the racial/ethnic characteristics of their initial occupants.

While these stratified estimations did not always yield useful or interesting results (because of sample size problems, for one reason), we report selected results from these models and discuss their implications in Chapters 6 and 7.

ECONOMETRIC AND DATA ISSUES

In estimating our price impact models, we wished to exclude from our database sales that were highly idiosyncratic and did not represent arms-length transactions. In this vein we eliminated the top and bottom two percent of all sales according to sales price and land area. On the basis of trial regressions, we also dropped records yielding regression residuals greater than two standard deviations from the mean value of all observations. These records might have biased the estimates in our models if they had been retained.[9]

One of the key assumptions in ordinary least squares (OLS) regression is that the data not exhibit the property of *heteroskedasticity*. This problem occurs when the error terms (ϵ) in the regression models do not have finite and constant variance. Heteroskedasticity can cause inefficiency in the parameter estimates, meaning that the standard errors are larger than they should be. If uncorrected, this might lead one to conclude that results were not statistically significant, when, in fact, they were. In our particular case, this condition would cause us to fail to find significant price impacts.

[9]Sales were also dropped for properties that did not have a complete set of house characteristics. In addition, we eliminated other sales which did not fit into our pre/post model design and might have confused our results. See Annex B for details. The final number of sales used to estimate our regressions (as reported in Annex D) were therefore much less than the number of sales reported in Table 5.1.

We tested for heteroskedasticity of the model error terms in our house price regressions by performing the Goldfeld-Quandt test (Pyndick and Rubinfeld, 1981). The F statistic produced by this test was barely statistically significant at the 10 percent level, indicating that heteroskedasticity was likely not present. Nevertheless, to be certain that we employed consistent estimates of parameter standard errors, we used the White (1980) covariance matrix to correct the standard errors.

Spatial Dependence

Spatial dependence, sometimes known as spatial autocorrelation, refers to the possibility that the observed price of one home is not independent of the prices of other homes nearby in geographic space. The presence of spatial dependence would violate one of the key assumptions of the error terms in the models--their independence across observations. If left uncorrected, such spatial dependence would lead to biased parameter estimates and misleading t-tests for statistical significance levels of parameters. The severity of this problem in house price regressions has been demonstrated by Can and Megbolugbe (1997).

To test for this potential problem we employed a specification that Can and Megbolugbe (1997) found to be robust. We calculated the *spatial lag* of the dependent variable (house price) and included it in our model as an independent variable. The spatial lag is a weighted average of all of the sales prices of homes within a certain distance from the reference sale. The average is weighted by the *spatial weight*, which is some function of the distance between sales. Consistent with the approach of Can and Megbolugbe, we used the inverse of the distance (1/d) as the spatial weight. The actual formula for the spatial lag is:

$$SpLag(P_i) = \frac{\sum_j (1/d_{ij}) P_j}{\sum_j 1/d_{ij}}$$

where P_i is the sale for which we are calculating the spatial lag, d_{ij} is the distance between sales I and j, and P_j is one of the set of all sales within distance D of P_j and that occurred within the six months prior to the date of P_i.

One of the key parameters is the selection of the cutoff distance D. The choice of D depends upon the researcher's knowledge and assumptions as to how far the supposed spatial dependence is likely to be felt, but can be tested by evaluating the effectiveness of different choices. We assumed that a minimum cutoff distance of 2,000 feet would be necessary to see a spatial effect. We calculated spatial lags at this distance, but also tested spatial lags with cutoffs

of 5,000 and 10,000 feet to examine the possibility that spatial dependence may exist over a larger area.

Because calculating the spatial lag is computationally intensive and very time consuming, we conducted several test cases before attempting to create spatial lags for the entire set of house sales. We calculated spatial lag variables for three census tracts in each of the study areas and estimated one of our model specifications first without any spatial lag variable, and then trying each of the spatial lag variables in turn. The test was whether the addition of the spatial lag variable significantly improved the goodness of fit (R^2) of the model.[10]

In fact, none of the spatial lag variables improved the model fit by any substantial amount. If the cost to computing the spatial lag were small, one might decide to include it in the models anyway. Given the fact that creating spatial lags for over 100,000 sales would take a great deal of time, we decided that the negligible improvement in the model estimations was not worth the cost of such an effort. We have therefore not included the spatial lag in our final models.

Spatial Heterogeneity

Spatial heterogeneity, sometimes known as spatial submarket segmentation, refers to the systematic variation in the behavior of a given process across space. Here, the issue is whether the parameters of the hedonic price equation are invariant across space or whether they assume different values according to the local socioeconomic, demographic, and/or physical contexts of the various neighborhoods across a metropolitan area. If such were the case, the error term ϵ would
be heteroskedastic, thus rendering ordinary least-squares inefficient and its estimated variances of parameter estimates biased.

To deal with this issue we employed the "spatial contextual expansion with quadratic trend" specification as suggested by Can (1997). This method involves adding to the models above the latitude (X) and longitude (Y) coordinates of each observed home sale in the following variables (normalized so that zero values represent the center of the respective counties): X, Y, XY, X^2, and Y^2. Higher numerical values of X (Y) signify increasing distance from the center of the county heading west (north). These variables typically proved statistically significant in our aggregate

[10]We actually calculated and tested six alternative specifications of spatial lag for each census tract. We created spatial lag variables for the sales price and for the log of sales price using 2,000, 5,000, and 10,000 foot cutoffs. To give some idea of the computationally intensive nature of determining spatial lag, calculating six spatial lag variables for each of six census tracts took over 32 hours on a Pentium computer.

specifications (see Annex D for details), suggesting that our various controls for local fixed effects needed further supplementation from these spatial coordinates. We therefore included these variables in all of our final regression models.

FOCUS GROUP SITES AND METHODS

The use of focus groups has a long-standing history in the social sciences as a tool to provide in-depth information for evaluative purposes.[11] The main purpose for using focus groups in this study was to determine how differences in local resident composition, social cohesion and interaction among neighborhood residents, political mobilization, and local area idiosyncracies might help explain the observed patterns in the results of the property value impact models. They also potentially provide us with an opportunity to rule out competing explanations from factors that we were not able to account for in our quantitative models.

Through the focus groups, we engaged in an in-depth discussion with homeowners about what makes for a good neighborhood, what affects quality of life in their neighborhood, what are the characteristics of community residents, and how they perceive changes in the quality of life and the composition of their community. The focus groups also provided a more contextual understanding of the relative importance residents place on different factors, such as changes in property values and the presence of assisted housing or tenants, that affect the quality of life in their neighborhoods. To understand how the focus group participants formed their views on these topics, we probed them on their perceptions, sources of information, and local social networks.

While the focus groups allowed us to capture any comments made by residents about assisted housing or tenants, it is important to note that these topics emerged in the discussion only as they were brought up by focus group participants themselves. The discussion guide was designed not to beg the question about the presence of subsidized housing programs. In fact, the lack of awareness about such sites may be part of the explanation for the lack of an observed property value impact in some areas. We were therefore reluctant to trigger a socially destructive "experimenter effect" by revealing the presence of subsidized sites in the neighborhood.

The next section of this chapter provides a brief overview of the procedures we followed to recruit focus group participants and conduct the focus group discussions. A complete description of these procedures, including a copy of the focus group discussion guide, is included

[11]For an extensive discussion on the appropriate methodology and use of focus group interview data for evaluation purposes, see Hayes and Tatham (1989), Stewart and Shamdasani (1990), and Krueger (1994).

in Annex E. A table summarizing the characteristics of the focus group participants can be found in Annex F, and summaries of each focus group are provided in Annex G.

Description of Denver Focus Group Neighborhoods

The location of each of these sites is shown on Map 4.1 and descriptive characteristics of the sites and surrounding census tracts are presented in Table 4.2. Two of the neighborhoods are located in Northwest Denver, one in Northeast Denver, and another in East Denver. The fifth site is located in South Denver, and the final site was located in Southeast Denver. All represent

Table 4.2 - Characteristics of Denver Focus Group Sites and Surrounding Neighborhoods

Site	Move in Date	HHs At Site	Other Census Tract DHA Units within 2000 ft	Population 1990	Pct Black 1980	Pct Black 1990	Pct Hispanic 1980	Pct Hispanic 1990	Pct Renters 1990	Median House Value 1990	Pct. Change in House Values 1980-90	Pct. Change in House Values 1990-96
Montbello	1992	1	1	4,371	40.1	54.7	12.9	13.3	19.1	63,900	3.3	78.4
East Colfax	1994	1	14	7,172	22.4	32.6	7.6	10.6	60.5	55,200	16.6	101.8
Berkeley #1	1994	1	8	3,269	0.0	0.5	17.2	27.6	34.3	65,800	28.2	73.7
Berkeley #2	1995	2	7	5,257	0.4	0.6	19.0	29.3	40.8	64,900	22.8	86.1
Platte Park	1994	5	2	5,236	0.4	0.6	6.7	9.0	40.3	80,200	40.7	92.2
University Hills	1991	1	2	4,235	0.8	1.7	2.9	3.4	25.7	75,400	21.4	61.8

distinctive communities. Montbello has been identified as a majority Black, working/middle class neighborhood in Denver. East Colfax is a more integrated, blue collar neighborhood proximate to the old Stapleton Airport and Lowry Air Force Base. The Berkeley neighborhoods are working to middle class neighborhoods experiencing considerable influx of Hispanics. Platte Park is an older, traditional White middle-class neighborhood while University Hills is one of the more affluent, White neighborhoods in Denver.

Below are more detailed descriptions of each of the focus group neighborhoods:[12]

Montbello, located in Northeast Denver, is one of the most proximate neighborhoods to the recently opened Denver International Airport. Often perceived as being a predominantly Black neighborhood, Montbello's resident population is considerably more diverse. In the 1970s and 1980s, the community went from being predominantly White to majority Black families. However, in the 1990s, this community has seen considerable growth in both the overall population and substantial increases in the White and Hispanic populations. In 1990, approximately 55 percent of the residents were Black and 13 percent were Hispanic.

[12]Data for these neighborhood descriptions were obtained from the "Neighborhood Facts" database compiled by the Piton Foundation (http://www.piton.org, accessed July 20, 1998) and the U.S. Census.

In 1990, homeowners occupied nearly 81 percent of all housing units in the area. Housing is relatively new: there were no housing units constructed prior to 1940. With the opening of the Denver International Airport, the neighborhood has seen a sharp rise in new housing and commercial development, raising some concerns about increased congestion and rapid growth in the neighborhood. The average sale price for homes in Montbello was $83,890 in 1995. Among renters, nearly half would be considered to be rent burdened paying more than 30% of their income on housing. Four percent of the units in the neighborhood are publicly subsidized.

East Colfax is located in East Denver, adjacent to the recently closed Stapleton Airport and Lowry Air Base. In 1990, nearly 33 percent of the population was Black and 11 percent were Hispanic. The neighborhood is valued for the high level of interaction between neighbors and high standards for maintaining the neighborhood. East Colfax also has one of the strongest neighborhood associations in Denver.

Although among the least expensive neighborhoods in Denver, East Colfax experienced significant appreciation of housing values in the 1990s. Nonetheless, the median housing values in East Colfax are approximately one-half of the average for Denver. Approximately 40 percent of the housing units are occupied by owners. Only 10 percent of the housing units were constructed prior to 1940. In 1995, the average sale price for homes in East Colfax was $63,221. Approximately 44 percent of all renters were rent-burdened. Five percent of the units in the neighborhood are publicly subsidized.

Two focus group sites were located in the Northwest Denver neighborhood of *Berkeley*. Berkeley has been described as a neighborhood that doesn't have an "inner city" feel. Instead, it contains many of the amenities people value in small towns, in addition to proximity to the Rocky Mountains and several state parks. The two Berkeley neighborhoods under study are located in a community experiencing rapid demographic change from a White to Hispanic working class population, with Hispanics being more concentrated in the southern part of the community. In 1990, nearly 29 percent of the residents were Hispanic and less than one percent were Black.

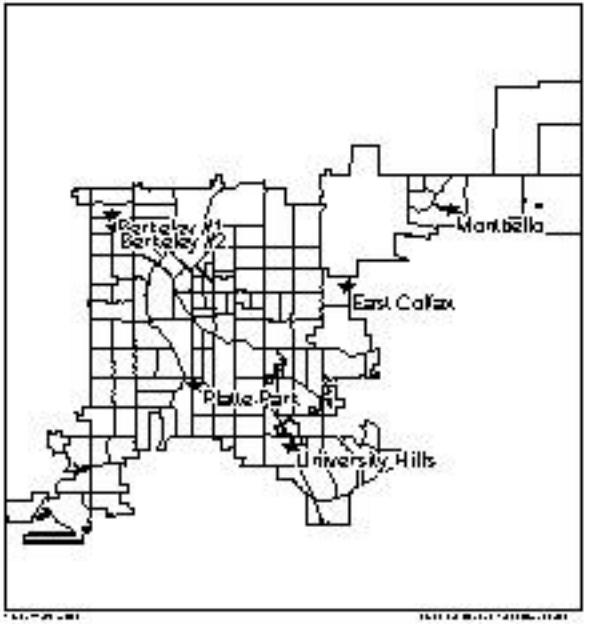
Homeowners occupied 60 to 66 percent of all housing units in the census tracts we sampled in Berkeley. Most of the homes are larger, older single family units built before the 1940s. The average sale price for homes located in the area was $92,912. Housing here is lower-valued but has experienced substantial appreciation in the 1990s -- due in part from it's proximity to the gentrification of the Lower Downtown area of Denver. Slightly less than half of all renters paid more than 30% of their incomes on rent. About six percent of the housing units are publicly subsidized.

Platte Park is located in Southwest Denver and is one of the oldest of the Denver neighborhoods. Community residents are primarily White and middle class, consisting of both younger families and retirees. Residents also indicated the presence of a sizable gay community in the neighborhood. In 1990, nearly 9 percent of the neighborhood residents were Hispanic and less than 1 percent were Black.

Homeowners occupy 60 percent of the housing units in the Platte Park. This is a neighborhood of very old homes: 73 percent of the housing units were built prior to 1940. Median housing values are close to the median for Denver as a whole and grew substantially in the 1990s. Increasing home prices apparently have dislocated many of the lower-income residents. The average sale price of homes located in Platte Park was $125,404 in 1995. Approximately 36 percent of all renters were rent-burdened. Less than three percent of the housing units in the neighborhood were publicly subsidized.

University Hills is in Southeast Denver and is a community of spacious homes and lots located with easy access to downtown and the Denver Technical Center. It is the most affluent of the focus group neighborhoods, although property values are still somewhat lower than the average for Denver as a whole. This is a predominantly White neighborhood with little racial or ethnic diversity. Located within the boundaries of this neighborhood is a major institution of higher learning which yields a somewhat transient nature to the population. In 1990, only 3 percent of the residents were Hispanic and less than 2 percent were Black.

Three-quarters of the housing units in University Hills were occupied by homeowners in 1990. Slightly more than one percent of the units were built prior to 1940. The average home sale price in the area was $110,276. Approximately 37 percent of all renters paid more than 30 percent of their incomes on rent in this neighborhood. Only two percent of the housing units in the area received public subsidies.



Map 4.1: Location of Focus Group Sites

Denver

Description of Baltimore County Focus Group Neighborhoods

The location of each of these sites is shown on Map 4.2 and descriptive characteristics of the sites and surrounding census tracts are presented in Table 4.3. Each set of focus group participants was assembled from the environs of one particular Section 8 site from our analysis sample for which there were large numbers of associated sales. The move in date shown in the third column is when the given Section 8 household first occupied this site. All these sites around which our focus group participants lived have been occupied continuously since that date, though not necessarily by the same household. The next two columns provide the number of subsidized households at the site (that is, residing in the same property or address) and within 2,000 feet of the site being investigated. The remaining columns report summary information on the census tract within which each Section 8 site is located.

Table 4.3 - Characteristics of Baltimore County Focus Group Sites and Surrounding Neighborhoods

Site	Move in Date	S8 HHs At Site	Other S8 HHs within 2000 ft	Census Tract Population 1990	Pct Black 1980	Pct Black 1990	Pct Renters 1990	Median House Value 1990	Pct. Change in House Values 1980-90	Pct. Change in House Values 1990-96
Dundalk	1994	1	12	3,680	1.5	0.3	14.9	72,900	82.5	0.3
Millbrook	1994	3	188	6,030	0.3	5.5	51.6	88,000	72.6	8.2
Rodgers Forge	1991	1	0	2,755	0.3	1.0	45.2	115,900	89.6	5.8
Twelve Trees	1995	1	3	8,841	15.4	35.7	37.6	97,800	63.6	37.8

The four focus group sites represent distinctive archetypes of communities. We believe that Dundalk, Millbrook, and Twelve Trees can fairly be described as “vulnerable.” All have relatively low median house values, but Dundalk is a White, working class area with a legacy of strident opposition to Section 8, Millbrook is an integrated area with a history of tolerance, and Twelve trees is a middle-class, predominantly Black neighborhood. Rodgers Forge, on the other hand, is an exclusively White, high value community that embodies the antithesis of a “vulnerable” area.

More detailed community profiles follow:[13]

[13]Information for these neighborhood descriptions was obtained from conversations with staff from the Baltimore County Office of Community Conservation and from the U.S. Census.

Dundalk can be characterized as a once thriving blue collar community outside the City's southeast edge. The area declined as industrial employers left or downsized and neighborhoods where former workers lived became depressed. The median house value in 1990 of $72,900 is the lowest of any in our focus group neighborhoods and is substantially less expensive than other Baltimore County neighborhoods which makes it more affordable for lower income buyers and renters. Respondents in the Dundalk focus group lived in brick row homes built over fifty years ago during the hey day of this community. The area is highly owner occupied with eighty five percent of the residents being homeowners in 1990. But the value of this precious asset recently has been eroding. Though Dundalk benefited from the County-wide property value inflation of the 1980s (Map 3.7), the appreciation rate has not kept pace with general inflation in the 1990s and some neighborhoods have witnessed declines in nominal prices (Map 3.8).

Although Dundalk cannot be described as having concentrated poverty, over five percent of its households were receiving public assistance as of 1990 (Map 3.3). Moreover, Section 8 households reside in and around Dundalk in some of the highest concentrations in the County (Maps 5.1 and 5.5). At least a dozen Section 8 households resided in the several square block area from which we selected our focus group participants. Of course, as described in Chapter 3, Dundalk was at the epicenter of opposition to Section 8 and MTO in recent years, during which time their anxiety over the future of their community was directed (often harshly) toward these programs.

Millbrook abuts the north edge of the City of Baltimore. Focus group respondents noted that this area is home to residents from a variety of racial, cultural, and religious backgrounds with a significant Jewish population and an influx of recent Russian immigrants, many of whom receive Section 8 subsidies. From 1980 to 1990, the census tract saw a growth in the number of African American residents from .3 percent to 5.5 percent. And diversity is clearly increasing. Millbrook is adjacent to the major northwestern corridor of Black suburban expansion extending out of Baltimore City.

Over half of the residents in this census tract are renters, and although poverty rates in the area remain relatively low, there are large numbers of Section 8 households in certain neighborhoods. Indeed, in the area from which we selected our focus group participants we observed one of the largest concentrations of Section 8 units in the County. In addition, Millbrook's location at the very edge of the City of Baltimore and the extension of the Baltimore Light Rail through it in the early 1990s have reputedly provided a context for unease among homeowners there, despite their tolerant proclivities.

The Village of Twelve Trees is in the Randallstown area of Baltimore County and the farthest of any of the focus group neighborhoods from the City of Baltimore. The larger Randallstown area underwent significant racial change during the 1980s with the African American population more than doubling during that time. Twelve Trees also saw racial change. Residents note that it moved from an integrated community to a segregated one with no recent White in-movers. The census tract which includes Twelve Trees saw the most significant appreciation in housing values of any of the focus group neighborhoods, although respondents at Twelve Trees did not comment on significant increases in property values in their neighborhood. Twelve Trees is a secluded community of row homes surrounded by trees and serviced by neighborhood amenities including a pool and play areas.

Though consolidation into the black housing submarket seems complete, instability of another sort seems to be looming in Twelve Trees. Expert opinion is that, increasingly, lower-income black households are moving in. One apparent consequence has been a reputed erosion in public satisfaction with the local public schools. Indeed, our data show increasing numbers of lower-income households supported by Section 8 living in the community (Maps 5.2 and 5.3). A focus group of black homeowners residing near such a cluster of Section 8 tenants allowed us to assess their perceptions of neighborhood change and potential fears regarding the loss of the cherished “suburban dream” that they had struggled to achieve.

Rodgers Forge is a neighborhood near Towson in Baltimore County. This community of row homes has the highest median value of any of the census tracts represented in the Baltimore County focus groups at $115,900. Rogers Forge is an overwhelmingly white, prosperous, middle-class community of homeowners, although renters comprise almost half of the residents in the census tract. In 1990 median home values were $43,000 more than in Dundalk and $16,000 more than in the County as a whole (cf. Tables 3.1 and 7.3). Home values have appreciated less slowly in the 1990s, but have roughly kept pace with inflation.

Stability characterizes Rogers Forge. As seen from Maps 3.1-3.8, there have been virtually no recent changes in its racial, class, or housing characteristics. This stability is not altogether accidental. On the contrary, Rogers Forge actively promotes the unique attributes of the community through various means. Its community association annually conducts a variety of social activities aimed at making the area a magnet for families with children. Rogers Forge seeks to advertise the fact that it has many neighborhoods consisting entirely of post-war row houses built in a consistent style. To preserve this unique architectural heritage, it has promulgated an extensive set of covenants attached to the deeds of its homes. These covenants restrict the types of structural modifications homeowners can undertake, even going so far as to limit the acceptable palette of exterior home colors (“Williamsburg style”).

Stability has also been sought in less positive ways. A decade ago there was shrill opposition when a building on the edge of Rogers Forge was acquired by a non-profit agency for conversion into a group home for the severely mentally ill. Although the group home went into operation and apparently there have been no community complaints since, the sensitivity to potential subsidized housing seems manifest. In light of this we thought it provocative to assemble a focus group consisting of neighbors of the lone Section 8 household residing in Rogers Forge.

Map 4.2: Location of Focus Groups Sites

Baltimore County

Recruitment of Focus Group Participants

Since the core research question posed in the focus groups concerns property value change, we limited focus group participation to homeowners who had resided in the neighborhood for two or more years. A targeted mailing was used to identify and screen potential focus group participants. Using a mailing list generated from property tax roll records, a recruitment letter was sent to all homeowners living within 1,000 to 1,400 feet of the selected subsidized housing site. In Denver, this letter was written in both English and Spanish. The Urban Institute subcontracted with the Latin American Research and Service Agency (LARASA) to conduct the recruitment process in Denver.

The recruitment letter described the project as a study on the quality of life in American neighborhoods. When necessary, we used a screening form returned by prospective participants to form focus groups that were representative of the demographic characteristics of the neighborhood.

Composition of the Focus Groups

The six focus groups in Denver ranged from 4 to 10 participants with an average size of 6 participants across all sites. On average, participants had resided in their homes for 12 years and in their neighborhoods for 15 years. The longest average tenure was found in the East Colfax and Berkeley #1 sites (17 and 16 years, respectively) while the shortest average tenure was 4 years in University Hills. Nearly one-third of the participating households had children under 18. Nearly 30 percent of the participants were employed in professional or managerial positions. Another 16 percent were employed in administrative support occupations. About one in five of the participants were retired and almost 14 percent identified themselves as homemakers.

In terms of ethnic composition, 73 percent of the Denver participants were White, 14 percent were Black, 8 percent were Hispanic, and 5 percent were of another race. About one in five were high school graduates while another six out of ten had college degrees. Approximately one out of five participants was aged 34 or younger and nearly one-third were over 50. Nearly three out of every four participants were female. (A demographic profile of Denver participants is presented in Annex F.)

The four focus groups in Baltimore County ranged from 5 to 11 participants with an average of 8 participants across groups. Of the four groups, three were comprised entirely of white homeowners (Dundalk, Millbrook, and Rodgers Forge) and one was comprised entirely of black homeowners (Twelve Trees). The racial composition of the groups reflected both the

demographics of the neighborhoods and the self-selection of residents in response to our invitation to participate. Participants in the White groups were on average, older, more likely to be retired, and more likely to have children. Participants in the black group were more likely to be women and to be highly educated. (A demographic profile of Baltimore County participants is presented in Annex F.)

Across all the Baltimore County groups, most participants were long time residents with an average of 17 years at their current address. Variation between groups in length of neighborhood residency was understandably linked to the age of the neighborhood. In the newest community, The Village of Twelve Trees, participants had resided an average of 9 years in the neighborhood. The older communities, like Dundalk, fielded focus groups with older participants. In Dundalk and Rodgers Forge between 40 and 45 percent of the participants were retired with half of the group in their late fifties or above. Focus group participants from these neighborhoods also included more households comprised of only one adult and were more likely to represent a household with children. Across the groups, almost half of the participants came from households which included children. Most participants were well educated with three out of five having at least a four year college degree.

Topic Areas Addressed in Focus Groups

Four main topic areas were addressed in the discussion guide (see Annex E). The first area of discussion concerned general questions on what makes for a good place to live and resident feelings regarding how their neighborhood reflected this definition. The second set of questions elicited participant opinions regarding neighborhood residents, existing social networks, and respondent perceptions regarding the presence or absence of community cohesion. The third topic area included questions on perceived changes in the neighborhood during the last five years, including changes in property values. Participants were asked to identify the changes that had occurred and to provide explanations as to why they thought these changes had occurred. If assisted housing was mentioned in the discussion, additional probes were utilized to further identify how assisted housing impacted property values. Finally, participants were asked to describe any
perceived changes in neighborhood residents. These questions were used to assess any perceived
changes in both the characteristics of neighborhood residents as well as the tenor of neighborhood interaction.

Focus Group Facilitation

Each focus group was conducted using a two-member interviewing team consisting of a facilitator and a recorder. The facilitator led the group discussion, ensuring that all participants joined in the discussion, saw that all issues were satisfactorily discussed, and guided the conversation in an efficient and effective manner. Provisions were made for bilingual, bicultural facilitators and recorders in Denver.[14] Facilitators and recorders in Baltimore were assigned to mirror the racial/ethnic composition of the focus group.

During the facilitator's introductory remarks, verbal and written assurances of respondent anonymity were provided. Each participant reviewed and signed an informed consent form prior to the group discussion.

As a safeguard against bias, neither the facilitator nor the recorder were informed about the results of the quantitative impact analysis prior to the focus group sessions. In this way, researchers were less likely to pre-judge responses or lead participants based on this information.

Data Analysis Strategies

During each focus group session, the recorder was asked to keep detailed notes regarding the content of the discussion. Upon completion of the focus group, both the facilitator and recorder were asked to write up their notes and impressions of the session. When possible, these notes were written up prior to a debriefing session between members of the research staff to check for inter-rater reliability. With very few exceptions, facilitator and recorder notes were comparable. The notes and the initial write-ups completed by the facilitator and recorder were all integrated into a two-page summary of findings for each focus group (see Annex G). The focus group comments were analyzed to identify key themes that emerged in the discussion. Analytical files based on these key themes were then created identifying relevant materials from the group discussion. Using content analysis, these thematic files also were analyzed to identify any contextual information that would facilitate interpretation of the quantitative results.

[14]Although provisions were made to conduct discussion sessions in Spanish, only three potential participants located across several sites indicated that they were monolingual Spanish. Therefore, we decided not to include them in the focus group discussions. Trying to hold a bilingual session was deemed impractical given the complexity of the issues being discussed.

CHAPTER 5
DESCRIPTION OF DATA SOURCES

The preceding chapter discussed the different model specifications that we used to quantify the impact of dispersed housing assistance programs on residential property values. Implementing these models required two main types of data. First, we needed data on residential property sales, including the street address of the house (so that the sale can be fixed in space), the amount and date of the sale, and characteristics of the house, such as square footage, lot size, number of rooms, age, and type of construction, that also affect the price of sale. Furthermore, we needed data for a range of sales starting at least two years prior to the date when the first households began occupying sites for the housing program in question.

The second set of data we required were the location and tenure of households for the two housing programs--Baltimore County Section 8 Certificates and Vouchers and Denver Dispersed Public Housing. Again, to fix the location of these households in space we needed the addresses where Section 8 recipients or public housing residents lived. We had to know when households first moved into these locations and when they left. In addition, some basic characteristics of the households such as race and number of persons are very useful for understanding the nature of these programs and for interpreting some of the modeling results.

We were able to obtain all of the data we required for this analysis from a private data vendor and from the administrative agencies responsible for the two housing programs. For home sales, we purchased a complete set of property tax roll records, supplemented with sales history records, for Baltimore County and Denver from the private data vendor Experian. The Baltimore County Housing Office and the Housing Authority of the City and County of Denver provided us with the necessary data on their programs. A more detailed description of these data sources, along with some summary statistics on the characteristics of home sales and dispersed housing program participants, is given in the rest of this chapter.

HOME SALES

The most complete source of home sale data available is the property tax rolls maintained by local property tax assessment offices. Because all property sales must be registered with the assessor, these records contain a complete set of the most recent sales transactions for every residential property. Furthermore, since legally the actual sales price must be reported to the assessor, the amount of the sale is considered to be quite accurate. The assessor's records also contain data on the physical attributes of the property, as well as information on the buyer and seller. Tax roll records are in the public domain and can be obtained directly from some tax assessment offices or through private data vendors.

We purchased a complete set of property tax roll records for Baltimore County and Denver from the private data vendor Experian. Experian obtains tax roll data directly from tax assessment offices throughout the country and then reformats and resells the data to private users. The Experian data contain all of the information available from the tax rolls on the property itself (including address, number of rooms, square footage, and type of construction), as well as the dates and amounts of the last two sales for each property.

The tax roll data may not be sufficient to obtain a complete sales history for each property, however. If a property was sold more than two times during the period of interest, then the sales record will not be complete as only the two most recent sales will be recorded. Therefore, we supplemented the tax roll data with a sales history data file, also obtained from Experian, that had a listing of the dates and amounts of every sale of the properties in the county. This sales history file allowed us to have a complete record of sales back to 1989 for Baltimore County and back to 1987 for Denver.

Both the tax roll and sales history files were geocoded to match street addresses with latitude and longitude coordinates, Census geographic identifiers (*i.e.,* state, county, tract, and block), and US Postal Service ZIP+4 codes.[1] The geocoding rates were very successful for both study locations. We were able to geocode 92 percent of property addresses in Baltimore County and 98 percent of property addresses in Denver to an exact street address or to a ZIP+4 centroid.[2] Sales records that could not be geocoded to at least this level of precision were excluded from the analysis.

Because the sales history file does not contain all of the detail on the physical attributes of the property, as does the tax roll data, the two data sources must be merged together to get a complete data set for our model specifications. This is not as simple a process as it might seem. In principle, each property is identified by a unique parcel identification number. And one should be able to use this number to match records in the tax roll file with the sales history file. Unfortunately, the parcel numbers are not always consistent between the two files, so matching files all records this way is not possible. Another possibility is to use street addresses, but these are also not always formatted uniformly between the two files, making matching difficult.

To make the merging of the two files as accurate as possible, we used two key fields for

[1]Geocoding was done using MapMarker software from MapInfo Corporation.

[2]ZIP+4 codes are roughly equivalent to a city block. The centroid of a ZIP+4 would be the geographical center of a block.

matching records. The first was the parcel number and the second was a reformatted "address" field, consisting of the ZIP+4 code and the street number of the property. In principle, each of these fields should be able to identify uniquely each property record. We first attempted to match sales history to tax roll records using both fields at the same time. For all records that could not be matched this way, we attempted to match them first using one field and, if unsuccessful, per the other.

For Baltimore County, we were able to match 49 percent of the records using both parcel number and address. A further 11 percent of the records were matched using parcel number alone, and another 10 percent were matched using address alone. The remaining 30 percent of the Baltimore County sales history records could not be matched. For Denver, we were able to match 82 percent of the records using both parcel number and address. A further 2 percent of the records were matched using parcel number alone, and another 2 percent were matched using address alone. The remaining 14 percent of the Denver sales history records could not be matched to tax roll records.

In evaluating the success of the tax roll-sales history merge, it is important to keep in mind that the sales history is only intended to supplement the sales recorded in the tax roll data. Looking at the properties where we were successfully able to merge the two sources of property transactions, we found that less than 2 percent of all the properties in both study areas had more than 2 sales recorded since the start of the sales history data. In other words, for virtually all of the properties the tax roll data by itself was sufficient to obtain the complete sales history for the period of interest.

From the final set of sales data, we selected only sales of single-family homes. To ensure that we are only dealing with "typical" homes, we eliminated the top and bottom two percent of sales according to sales price and land area. Table 5.1 summarizes the sales prices and the numbers of sales of single-family homes per year from the cleaned sales file. The average sales price in Baltimore County was $122,000, ranging from $10,000 to 390,000; the average sales price for Denver was $87,000, ranging from $9,000 to 344,000. The total volume of sales is fairly even from year to year, with the exception of 1997 where we only have data for part of the year.

Table 5.1
Residential Single-Family Home Sales in Denver and Baltimore County

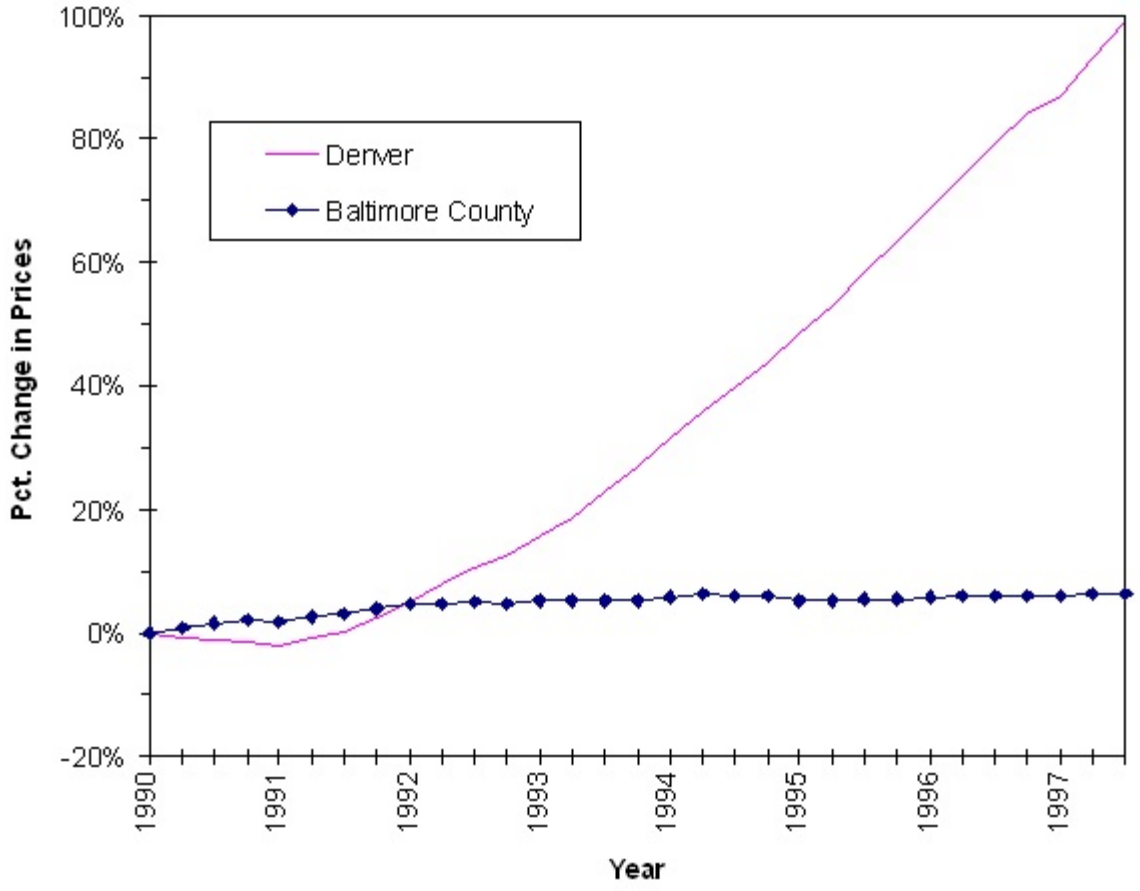
	Denver 1987-97	Balt Co 1989-97
Sales Price ($)		
Mean	86,853	122,134
Std Dev	50,515	60,133
Min	9,000	10,000
Max	344,000	390,000
Number of Sales		
Total	74,569	77,797
1987	4,517	-
1988	6,533	-
1989	7,083	8,789
1990	7,665	9,717
1991	7,615	8,755
1992	8,644	9,832
1993	8,781	9,624
1994	8,626	9,280
1995	7,599	8,577
1996	7,285	8,894
1997	221	4,329

Note: Cleaned sales of single-family homes with top and bottom two percent of sales by price and land area removed.

To get a sense of how house prices have been changing in our study areas in the 1990's, Figure 5.1 shows trend lines for prices of single-family homes from 1990 through the second quarter of 1997. Each point on the graph represents the total percentage change in average house prices from the first quarter of 1990. These trend lines were derived from our regression models, and so incorporate adjustments for the quality and location of the home. To de-emphasize seasonal fluctuations, the trend lines have also been smoothed by taking one year moving averages.

The difference in price trends is quite striking. While house prices in Baltimore County have been stagnant, in Denver there has been a dramatic increase in property values through most of the decade. House prices in Baltimore County have fluctuated a little, but on average have not increased more than 7 percent since 1990. In contrast, in Denver house prices dropped slightly in 1991 but soon began a sharp rise that continued throughout the rest of the period, ending at almost a 100 percent average increase in mid-1997.

Figure 5.1 - Percent Change in Single-Family Home Prices



DENVER DISPERSED PUBLIC HOUSING

In addition to the home sales data, we also needed data on the location and tenure of households for the two housing programs we are studying. For the dispersed public housing program in Denver, we were able to obtain these data from the Housing Authority of the City and County of Denver (DHA). The DHA maintains a complete database of all its public housing projects. The database consists of a property data file, with information on the buildings and housing units, and a tenant data file, which tracks occupancy dates and household characteristics such as income and race, sex, and ethnicity of household head. The property data include the project address, the year the property was built, acquisition date, and the number of units. The DHA tenant files have both move in and move out dates, so we know exactly when each tenant occupied its unit.

The DHA files contained information on 541 public housing sites, all of which were

occupied at some time between 1980 and 1997. Of these sites, 432 were dispersed housing projects. The addresses of these sites were geocoded to allow us to identify the locations where tenants lived. We were able to geocode 97 percent of the records to an exact street address and an additional 1 percent to a ZIP+4 centroid. The locations of the DHA dispersed public housing sites are shown in Maps 5.1 through 5.4. Each dot on this map represents a single public housing site. Map 5.1 gives an overview of the entire city, while the next three maps zoom in on the regions with the highest numbers of public housing sites. One can see that the northeast and southwest quadrants of the city contain the largest numbers of dispersed public housing sites. In general, however, the sites are fairly evenly spread out throughout the city, with some small clusters in a few locations.

The significance of this generally deconcentrated pattern of DHA dispersed housing sites should not be minimized. Through a combination of DHA choices and clustering restrictions imposed by Denver City Council after 1989, Denver now evinces a remarkably uniform distribution of dispersed public housing units across the majority of census tracts. Although the primary exceptions to the uniform pattern are in the predominately white-occupied areas in the south-central/eastern portion of Denver (Maps 5.1 and 2.1 - 2.4), these also correspond to areas with little rental housing (Maps 2.6 and 2.7). Moreover, it is clear that dispersed units were located not only in many of the highest-values tracts in 1990, but ones that appreciated the most during the housing boom of the 1990s (Maps 5.1 and 2.8-2.10).

Table 5.2 provides some statistics on the entire inventory of DHA public housing sites as well as the subset of dispersed sites. The average move in date for the first household to occupy any public housing site was the second quarter of 1981, while the average for dispersed housing sites was fourth quarter 1980. The average public housing site was occupied 69 percent of the time from 1980 through 1997, compared to 74 percent of the time for dispersed housing. As a result of DHA's efforts to move to smaller-scale, more dispersed housing projects, the number of occupied sites has increased from 315 in 1980 to 539 in 1997, while the average number of households per site has dropped from a high of 10.2 in 1990 to 7.0 in 1997. The number of households per site has remained fairly constant for dispersed housing sites, fluctuating between 2.2 in 1980 to a high of 2.8 in 1990.

Table 5.2
Occupancy Statistics for Public Housing Sites in Denver, 1980-97

	All Housing Sites	Dispersed Housing Sites
Average Move-In Date for First Household at Site	2nd Quarter 1981	4th Quarter 1980
Average Percent of Period That Site was Occupied	69 %	74 %
Number of Occupied Sites		
1980	315	273
1985	329	286
1990	334	287
1995	498	426
1997	539	432
Average Number of HHs Per Site		
1980	8.3	2.2
1985	9.9	2.6
1990	10.2	2.8
1995	7.0	2.3
1997	7.0	2.3

Table 5.3 shows the distribution of all DHA sites and dispersed housing sites by number of housing units. The majority of public housing sites have one or two housing units, while 90 percent of the sites have no more than 10 units. This reflects the more recent acquisition of smaller housing projects under the dispersed housing program. Table 5.4 shows how the size of the public housing projects acquired or built by DHA have changed over the years for both the dispersed and non-dispersed programs. The largest acquisitions of dispersed housing projects occurred in the 1970s and the 1990s. These sites had an average size of 2 units. Non-dispersed housing projects acquired prior to 1980 were much bigger, with average sizes ranging from 39 to 70 units per site.

Table 5.3
Public Housing Sites in Denver by Number of Units

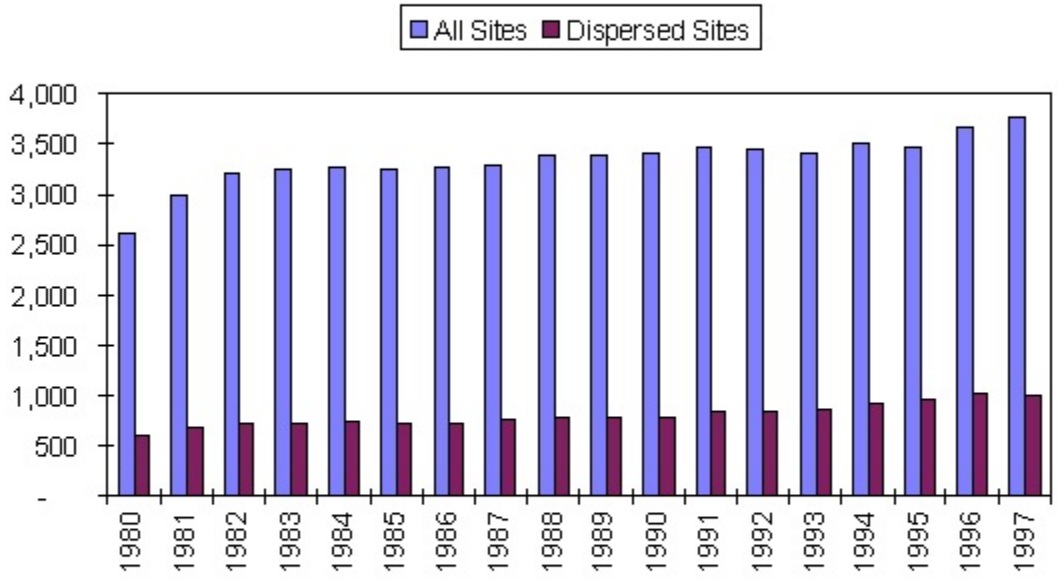
Number of housing units	All Sites		Dispersed Sites	
Total	541	100.0 %	433	100.0 %
1	272	50.3	250	57.7
2	134	24.8	107	24.7
3-5	62	11.5	50	11.5
6-10	20	3.7	17	3.9
11-20	17	3.1	9	2.1
21-30	9	1.7	0	0
31-40	2	0.4	0	0
41-50	7	1.3	0	0
51+	18	3.3	0	0

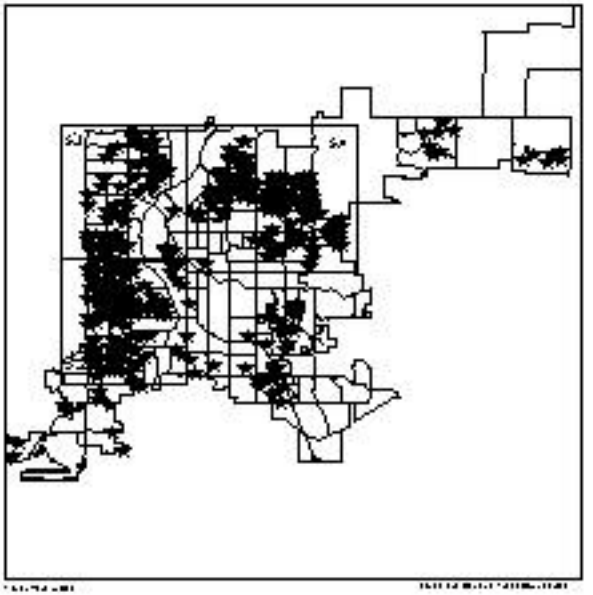
Table 5.4
Denver Public Housing Sites
Average Year Built and Number of Housing Units by Year of Acquisition

Year of Acquisition	No. Sites	Average Year Built	No. of Housing Units Mean	Largest
Non-Dispersed Sites				
Total	108	1961	27	260
1950-1959	15	1958	70	260
1960-1969	16	1960	57	207
1970-1979	12	1959	39	160
1980-1989	4	1971	66	127
1990-1997	61	1961	4	67
Dispersed Sites				
Total	433	1958	2	20
1950-1959	11	1955	4	14
1960-1969	44	1966	3	20
1970-1979	194	1960	2	11
1980-1989	41	1956	1	3
1990-1997	143	1955	2	19

Figure 5.2 shows the number of households living in DHA public housing and in dispersed sites by year. The numbers of households have slowly increased over time, from a low of 2,609 households in 1980 to the current total of 3,753 households. Despite the large number of dispersed housing sites acquired by DHA, most public housing residents still live in traditional public housing projects. In 1997, 1,005 of DHA's tenants (27 percent) live in dispersed housing projects.

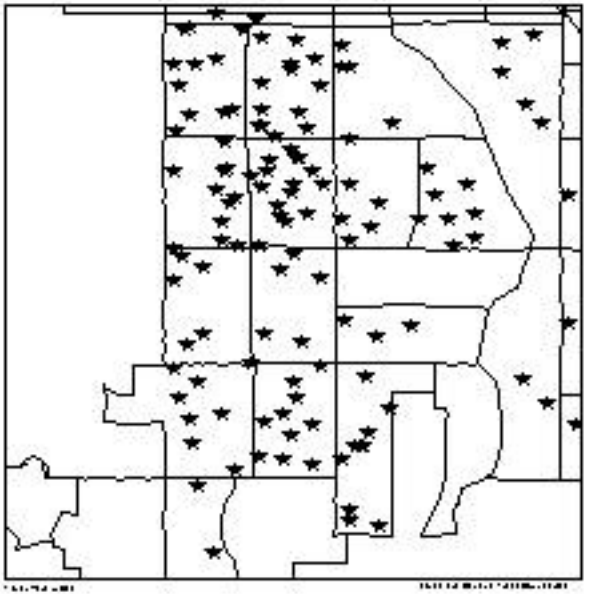
Figure 5.2 - Number of Households in Public Housing Projects
Denver
1980-97





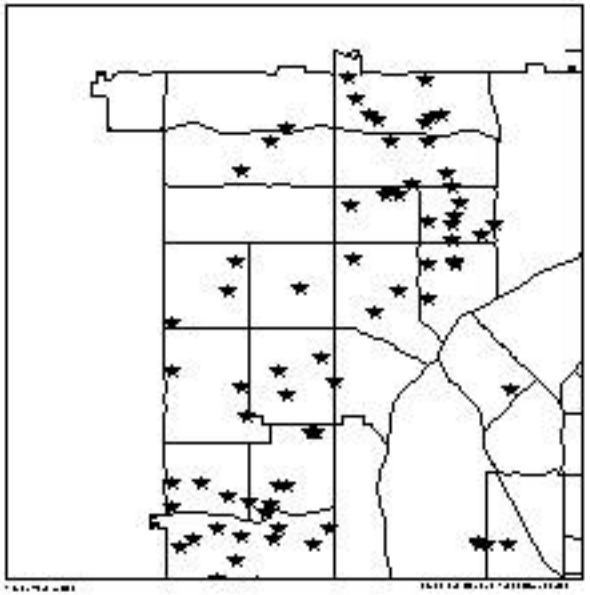
Map 5.1: Location of Dispersed Public Housing Sites, 1980-1997

Denver



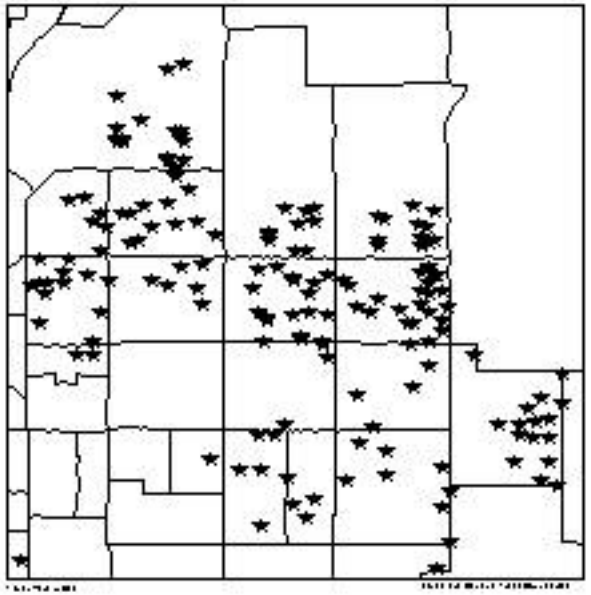
Map 5.2: Location of Dispersed Public Housing Sites, 1980-1997

Denver



Map 5.3: Location of Dispersed Public Housing Sites, 1980-1997

Denver



Map 5.4: Location of Dispersed Public Housing Sites, 1980-1997

Denver

BALTIMORE COUNTY SECTION 8

For the Section 8 Certificates and Vouchers Program in Baltimore County, we were able to obtain data from the Baltimore County Housing Office (BCHO). The BCHO is responsible for administering all Certificates and Vouchers that are used within the county, including those for people who move from other jurisdictions, such as participants in the MTO Program.

The BCHO maintains a database of all Section 8 households for whom it is responsible. These data include identification numbers for the landlords and tenants, the current address of the Section 8 household, the date when the household moved into this address, the number of household members, the number of bedrooms in the unit, the household's income, and the sex, race, and ethnicity (Hispanic/non-Hispanic) of the household head.[3]

The data do not include a specific move out date, but records for households who move out of their unit are coded as “inactive.” Since we needed to know the period of occupancy for each Section 8 location, we had to determine when the household moved out. The BCHO was able to provide us with a series of monthly “snap-shot” files from February 1991 through August 1997. These files contained records for all households who were receiving a Section 8 subsidy in that month. By tracing the tenant identification numbers in this series of files, we could determine when someone moved out by identifying the month when the record for that household disappeared from the active file.

BCHO had to retrieve these monthly files from archived copies of their database. Unfortunately, some of the older files were unrecoverable and, as a result, there were some gaps in the monthly file series, including a 16 month gap from December 1993 through March 1995. This meant that if a tenant moved into and then out of a unit within one of these gaps, we would have no record of this household at all. Furthermore, if a tenant moved in during a month for which we had data but moved out in one of the gaps, we assumed the move-out date was at the start of the gap. For example, anyone who moved out between December 93 and March 95 would be assumed to have moved out in November 93.

The BCHO files contained information on approximately 11,000 Section 8 households who lived in the county sometime between February 1991 and August 1997. The addresses of each of these households were geocoded to allow us to identify unique locations where Section 8

[3]The BCHO data also contained information on 131 Section 8 Moderate Rehabilitation (MR) properties. Since this program was not the subject of our analysis, we excluded these sites from our models. Furthermore, to avoid confusing the price impacts of the two programs, we excluded from our models all sales in Baltimore County that were within 2,000 feet of a Section 8 MR site.

tenants
lived. We were able to geocode 96 percent of the records to an exact street address and an

additional 2 percent to a ZIP+4 centroid. By aggregating these records by their geographic coordinates (latitude and longitude) we identified a total of 4,969 unique Section 8 sites in Baltimore County.[4]

The locations of the Section 8 sites are shown in Maps 5.5 through 5.9. Each dot on this map represents a single Section 8 site, which may contain more than one subsidized household. Map 5.5 gives an overview of the entire county, while the next four maps zoom in on the regions with the highest numbers of Section 8 sites. One can see that almost all of the sites are located in the southern part of the county, closer to Baltimore City. There also appear to be definite clusters of Section 8 households, such as in the southeast corner of Map 5.5.

Map 5.5 can be compared with Maps 3.1 - 3.8 to get a pictorial sense of how the distribution of Section 8 households relates to several demographic and housing market characteristics of Baltimore County census tracts. Not surprisingly, there is an obvious correspondence between the Section 8 distribution and the distribution of rental housing (Maps 5.5 and 3.4). There also appears to be a correspondence between Section 8 locations and households receiving public assistance (Maps 5.5 and 3.3), suggesting that Section 8 certificate holders may not often be using them to move out of higher-poverty neighborhoods, although it is beyond the scope of this study to investigate this further. It is worth recalling that although the MTO program forbids some of the participants in the experiment to move to neighborhoods with greater than ten percent poverty rates, such certificate holders represent less than one percent of the total pool of Section 8 certificate holders in Baltimore County portrayed here.

The Section 8 households also appear to locate primarily in census tracts having more modest values of single-family homes, which tend to be tracts that have appreciated the least not only during the 1980s but especially during the study period (Maps 5.5, 3.6, 3.7, and 3.8). Analyses reported in Chapter 7 indicate that this patterns continues down to smaller geographic scales. There are many reasons for this phenomenon, which has important implications for policy, as discussed elsewhere in this report. There are a few exceptions to this generalization, however, and motivate the choice of one of our focus groups.

One other pattern is noteworthy. Baltimore County Section 8 holders clearly did not

[4]Unique locations mean distinct street addresses, not apartment or unit numbers. Tenants living in different apartments at a multi-family property were counted as living at a single site.

concentrate in predominately black-occupied census tracts or ones with rapidly growing black populations (Maps 5.5, 3.1, and 3.2). Of course, given that roughly equal numbers of the Section 8 certificate holders are black and white, there is likely some racial self-selection occurring such that many Section 8 in-movers match the predominant race of other residents. Again, the extent to which

the program encourages racial diversity is beyond the scope of this study, although the significance
of racial self selection in understanding the property value impacts of Section 8 will be explored in Chapter 6.

Table 5.5 provides some statistics on occupancy of the Section 8 sites. Of the Section 8 sites occupied sometime during the period 1991 through 1997, the average move in date for the first household to occupy a site was the first quarter of 1992. The average site was occupied just under half of this time period. The average number of households per site did not change much from 1991 through 1997, varying between 1.39 and 1.54. Finally, we note that only 29 of the 4,969 Section 8 sites in the county were occupied by a participant in the MTO program.

Table 5.5
Occupancy Statistics for Section 8 Sites in Baltimore County, 1991-97

Number of Sites	4,969
Sites with MTO HH	29
Maximum Number of Section 8 HHs at a Site	Sites

Figure 5.3 - Number of Section 8 Households
Baltimore County
1991-97

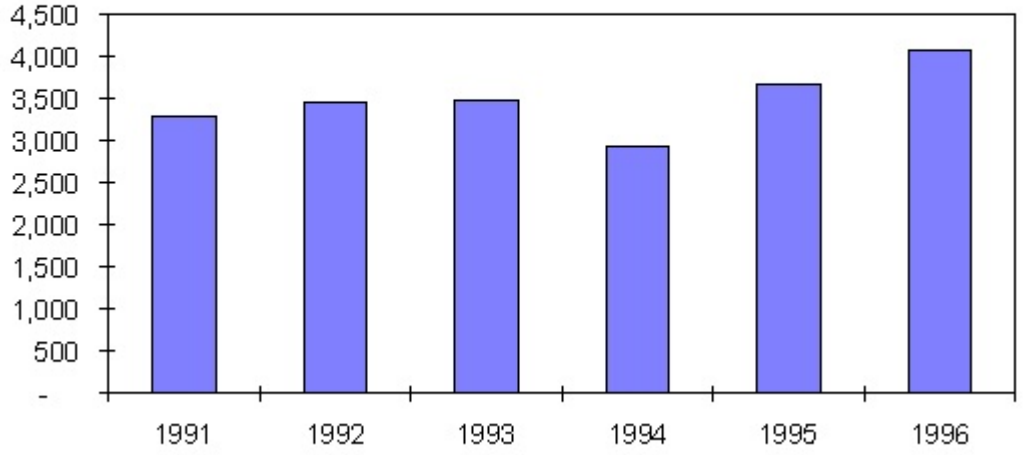
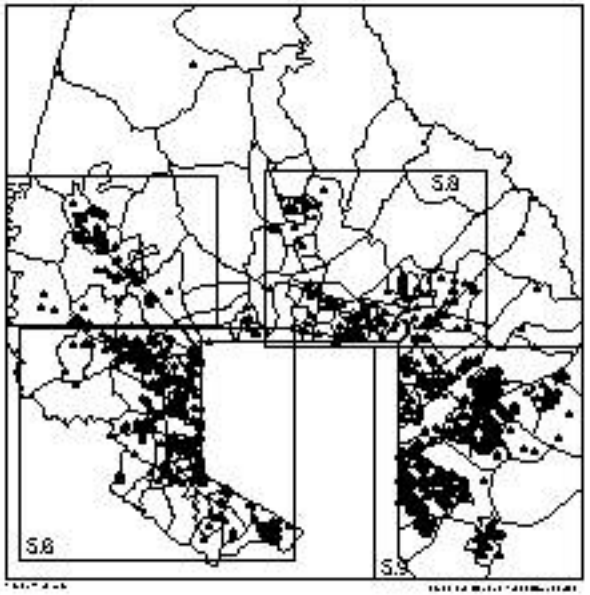
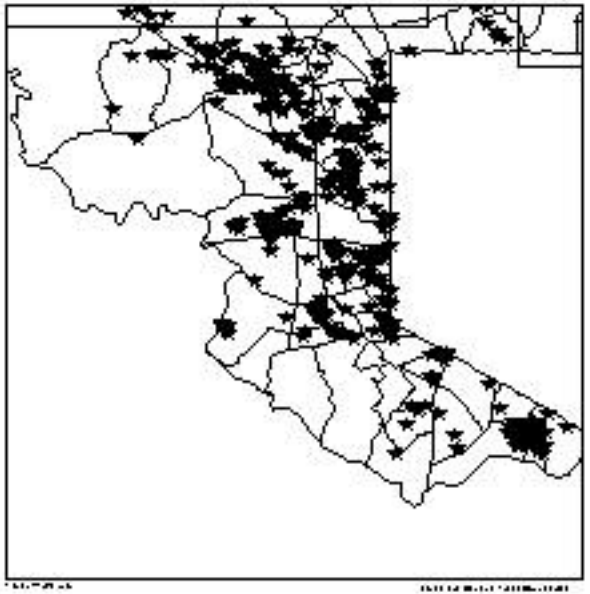


Figure 5.3 shows the number of Section 8 households by year. One can see that the number of households has remained fairly constant over time, increasing from 3,275 households in 1991 to 4,078 in 1997. (The dip in the number of households in 1994 may be attributable to the data gap from December 1993 through March 1995, described above.)



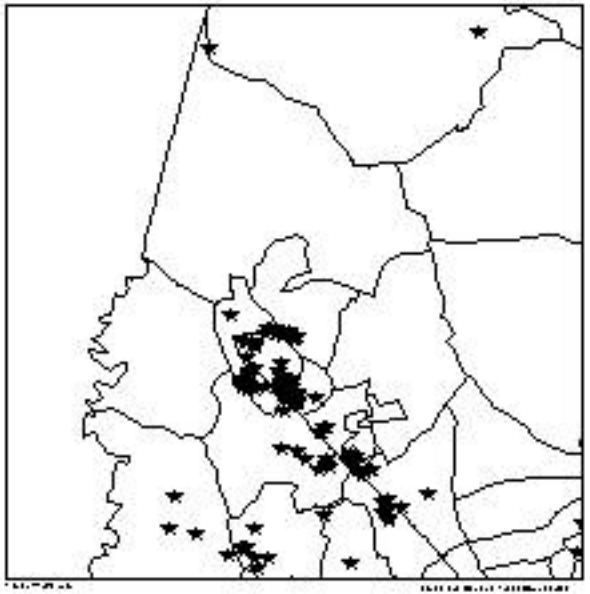
Map 5.5: Locations of Section 8 Households, 1991-1997

Baltimore County



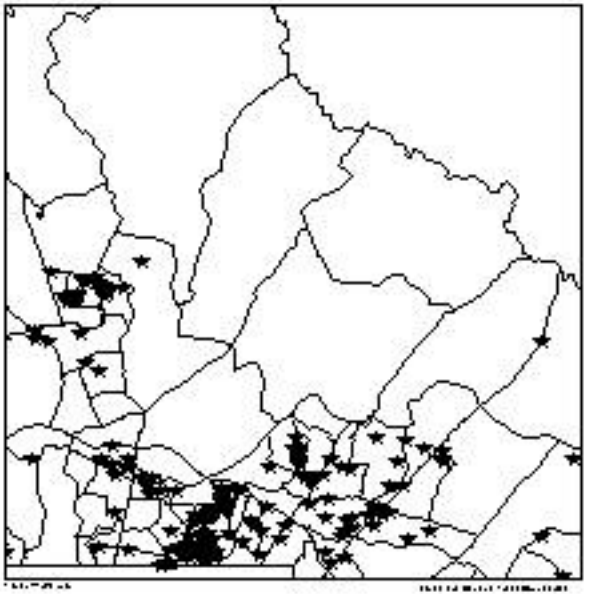
Map 5.6: Locations of Section 8 Households

Baltimore County



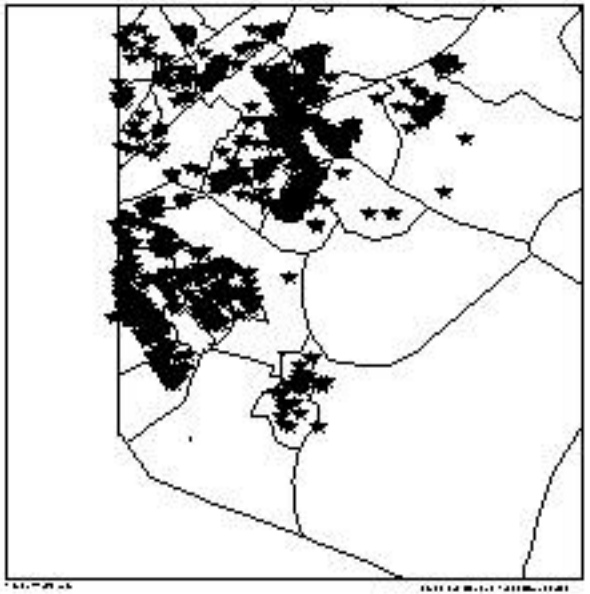
Map 5.7: Locations of Section 8 Households

Baltimore County



Map 5.8: Locations of Section 8 Households

Baltimore County



Map 5.9: Locations of Section 8 Households

Baltimore County

ANALYSIS SUBSAMPLES OF SUBSIDIZED SITES AND HOME SALES

The foregoing sections of Chapter 5 described a variety of characteristics of single-family home sales in the two areas under study. All of the observed sales and Section 8 households and dispersed public housing sites in Baltimore County and Denver, respectively, were not utilized in our quantitative analysis, however. Rather, we conducted our econometric analysis of property value impacts on a subset of home sales and dispersed subsidized sites that we will refer to as "analysis sites."

To operationalize our pre/post econometric specification described in Chapter 4, we necessarily were restricted to those subsidized locations having sufficient observations of single-family home sales within various distances over several years both prior to first occupancy and subsequently. Given that our sales data spanned the period 1987 (Denver) or 1989 (Baltimore County) to mid-1997, we confined our analysis sites to those that were first occupied between the first quarter, 1989 (Denver) or 1991 (Baltimore County) and the third quarter 1997.

Moreover, to qualify as an analysis site a location had to be continuously occupied by a subsidized household (though not necessarily the same one), so that we could measure a consistent "post-occupancy" impact. Finally, only those sites meeting the prior two criteria that also had an average annual rate of single-family homes sales of at least 2.0 in each of the ranges 0-500 feet, 501-1,000 feet, and 1,001-2,000 feet qualified as analysis sites.

Our subset of sales to be used in the econometric analysis was chosen in the following manner. We used all sales that either were: (1) not within 2,000 feet of any occupied subsidized site, or (2) within 2,000 feet of one (or more) of our analysis sites after it was occupied. We omitted sales that were within 2,000 feet of any other occupied subsidized site(s) but did not qualify as an analysis site(s). This exclusion allowed to conduct unambiguous tests based on our pre/post principles of deciphering impacts.

CHAPTER 6
DENVER RESULTS AND POLICY IMPLICATIONS

This chapter presents our findings related to property value impacts of the dispersed public housing program in Denver. As was explained in Chapter 4, the house price impact models allow us to obtain both aggregated estimates (to measure the average impact of all subsidized housing sites in an area) and stratified estimates (to measure how the characteristics of an area affect the price impacts). We used information obtained from the key informant interviews and the focus group participants to contextualize our assessment of the property value impacts. The chapter concludes with a discussion of the policy implications of these results.

Overall, we found that the dispersed public housing program as implemented by the DHA had a *positive* impact on house prices in a neighborhood. In general, the area within 500 feet of a dispersed housing site experienced an upward trend in house prices relative to the prices of similar homes not near dispersed housing. This reversed a relative decline in house prices that existed in these areas prior to the presence of the DHA housing site. As one moved further away from the dispersed housing site, however, the positive affects became more temporary. Prices of homes within 1,001 to 2,000 feet of a dispersed housing site experienced a short term increase in prices, but no reversal of the negative price trend. We attribute these positive effects to the effective rehabilitation and management practices of the DHA.

While the *average* impact of dispersed housing was to increase house prices, not all neighborhoods in Denver experienced the same positive effects. When we stratified our analysis to measure the differences in impacts for different types of neighborhoods, we found that dispersed housing sites located in Black neighborhoods had a *negative* effect on house prices. This may indicate that higher poverty or more vulnerable neighborhoods are more susceptible to possible negative effects created by the presence of additional numbers of subsidized households.

PROPERTY VALUE IMPACTS IN DENVER

We start by examining the results of our aggregate house price impact models for Denver.[1] These models are designed to measure the average impact of dispersed public housing projects

[1]Overall, the aggregated models for Denver performed extremely well. The adjusted R-squares were .81 in the regressions and did not vary significantly across the three model specifications. Not surprisingly given the exceptional sample sizes, virtually all of the [Struct], [Tract], and [Quarter] control variables evinced coefficients that were significantly different from zero. All the coefficients of the [Struct] characteristics of homes proved to have the expected signs. Results of the [Struct] and [Quarter] control variables, as well as the impact variables, are provided in Annex D.

across the entire city. We summarize the regression results in graphical form for selected models and distance rings. The graphs in Figures 6.1 and 6.2 show the relative percentage differences in prices over time in single-family home sales prices in proximity to DHA dispersed housing sites, compared to prices for similar dwellings elsewhere in the same census tracts but not within 2,000 feet of any dispersed (or other public housing) units. The vertical axis on the graph indicates the percentage differences in house prices over the baseline. The horizontal axis indicates time, starting with the beginning of our study period, the first quarter of 1989. The first dotted line indicates a representative starting date chosen as the point of first occupancy of the archetypical dispersed unit. Therefore, the section of the graph to the left of the dotted line is the price trend *before* the dispersed housing site was occupied, and the section to the right of the dotted line is the price trend *after* the site was occupied.[2]

Sales Price Trends Before Dispersed Sites are Occupied

The results show that in Denver there was a systematic tendency for dispersed housing sites to be acquired in declining, lower-priced pockets within census tracts. The negative and significant coefficients on the time trend variables indicate that areas within 2,000 feet of sites acquired for dispersed housing developments evinced price trends in the late 1980s and early 1990s that were falling relative to other areas within their same census tracts. These declines can also be seen in the downward sloping trend lines in the left-hand sides of the price trend graphs. These declines were roughly constant across all three distance rings. Over a five-year period 1989-1993, prices within 2,000 feet of future dispersed sites fell about three (3) to four (4) percentage points relative to other areas within the same tracts.

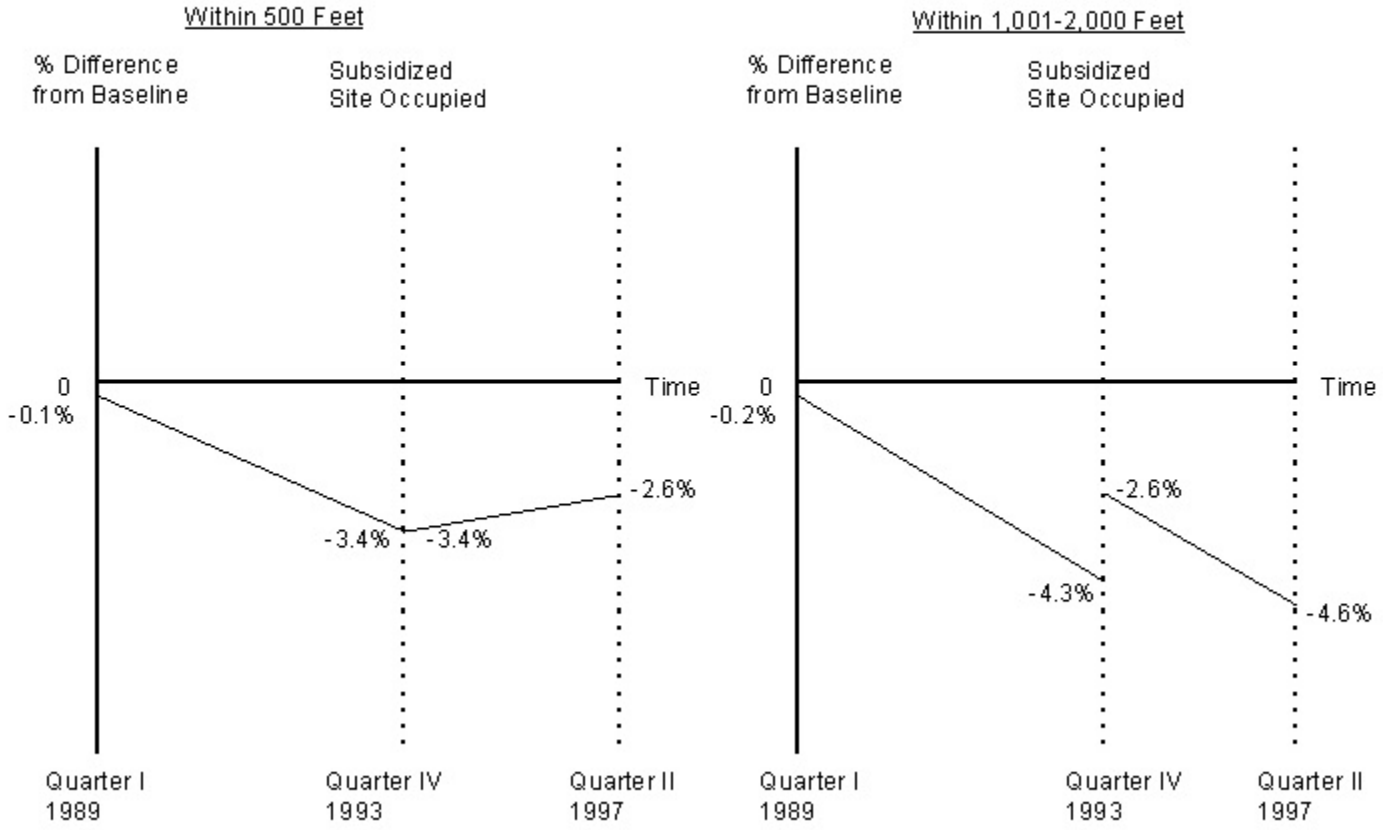
Our key informant interviews and subsequent discussions with DHA operational staff provided confirmation and further explanation of this empirical finding. First, DHA typically acquired vacant, boarded up property for their dispersed units. Insofar as these units had been generating negative externalities for the surrounding neighborhood for oftentimes considerable periods prior to DHA acquisition, these micro-neighborhoods defined by proximity to these units would tend to have lower values.

Second, there were two sources of potential self-selection bias in DHA's purchasing strategy. Because DHA was required to do a variety of time-consuming property inspections prior to purchase, buildings in "hotter" housing submarkets would often be purchased by private interests before DHA could acquire them. Moreover, DHA itself was likely to search more

[2]In these graphs, we only show the effect of regression coefficients significant at the 95 percent confidence level.

intensively for buildings for purchase in areas where “they could get the most building for the money,” and thereby stretch their scarce programmatic resources as far as possible.

FIGURE 6.1
Estimated Price Trends Within 2,000 Feet of Any Dispersed Site(s),* Denver County
(Relative to Baseline Areas of Same Tracts Not Within 2,000 Feet)**



* There were no statistically significant impacts of dispersed housing observed in the 500-1,000 feet range
** Baseline prices control for seasonal and county-wide quarterly trends, plus housing stock characteristics.

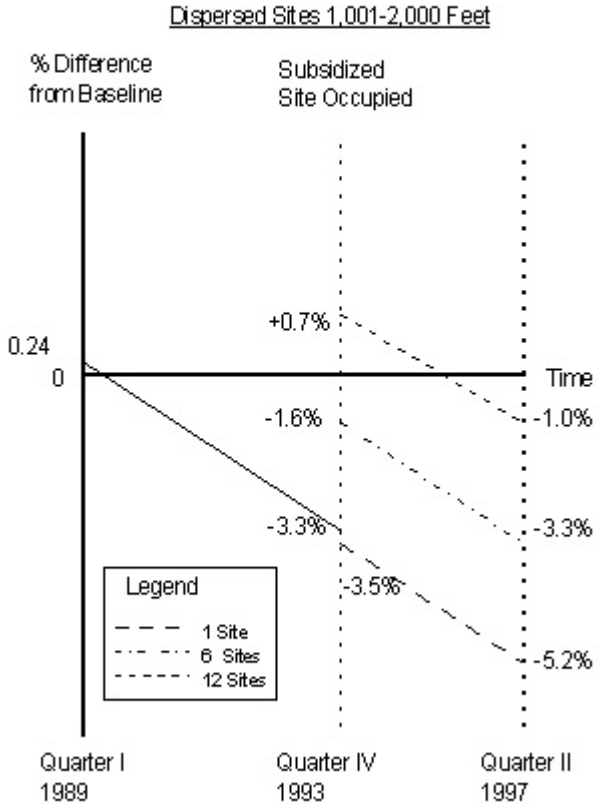
Property Value Impacts of Dispersed Public Housing Occupancy

The regressions showed clear and convincing evidence of positive property price impacts associated with nearby DHA dispersed housing. During the late 1980s to mid-1990s, we observed overall increases in property values as a result of proximity to DHA dispersed public housing sites, with greater numbers of proximate sites magnifying the beneficial impacts. As shown in the first panel of Figure 6.1, after a dispersed housing project was occupied, sales prices within 500 feet reversed their previous relative downward trend evinced before occupancy. Fourteen quarters after occupancy, prices at this distance were only 2.6 percent less than the baseline; immediately preceding occupancy they were 3.4 percent less. Thus, for all intents and purposes, the opening of a DHA dispersed development significantly revitalized the surrounding neighborhood within 500 feet.

Within 1,001-2,000 feet, proximity to a dispersed site apparently provided an additional upward boost of 1.7 percentage points to house prices relative to other areas (Figure 6.1, second panel).[3] This one time increase did not result in a change in the previous downward price trend, however, and less than four years after the occupancy of the dispersed housing site prices were back down to their pre-occupancy levels. Though the wider neighborhood was not "turned around," the DHA dispersed units apparently provided some nontrivial benefits to property values. This conclusion is reinforced by consideration of effects of various numbers of dispersed sites nearby (Figure 6.2). The greater the number of sites within this distance, the more positive was the initial impact, though there was no subsequent change in the trend of prices. At the observed sample maximum, 12 sites within 1,001-2,000 feet of a sale, the fixed effect was to boost price levels four (4) percentage points, which initially was sufficient to boost the area above the baseline price for such areas.

[3]Though coefficients of both post-occupancy shift and trend variables were positive, neither were statistically significant.

FIGURE 6.2
Estimated Price Trends as Function of Density of Dispersed Sites,* Denver County
(Relative to Baseline Areas of Same Tracts Not Within 2,000 Feet)**



* There were no observed aggregate density effects of dispersed sites at distances closer than 1,000 feet.
** Baseline prices control for seasonal and county-wide quarterly trends, plus housing stock characteristics.

The price-enhancing impacts observed for the Denver dispersed housing program can most likely be attributed to the structure of the program itself. Under this program, DHA acquired vacant, often deteriorated properties and invested on average, $21,432 per unit for rehabilitation.[4] The improvement of the physical appearance of these properties and the return of vacant buildings to occupancy may serve to stem the decline of the areas where they are located. As these activities are carried out, the declining price trends within a small area of the neighborhood (*i.e.,* within 500 feet of the site) can apparently be reversed. Meanwhile, at larger distances from the site (*i.e.,* 1,001 to 2,000 feet), we observed a fixed positive price impact that increased with the number of DHA sites within the same area. Unfortunately, this upward shift in home values was eventually overcome by the continuing downward trend in prices. It would therefore appear that, while the housing market perceives a short-term boost in the desirability of an area from the act of rehabilitating units, such activity is insufficient to reverse overall negative trends in a larger neighborhood.

Discussion of Property Value Impacts from Stratified Models

Each of the specifications of our aggregated impact models were replicated for different clusters of census tracts in Denver. We stratified census tracts according to the racial/ethnic composition,[5] median 1990 home values, and real changes in median home values from 1990-1995.

The overall positive results of the aggregated models attributed to proximity to DHA dispersed housing units do not occur across all types of neighborhoods in Denver. Rather, they occur in predominantly White neighborhoods and in the most affluent neighborhoods. These positive impacts also occurred in the farthest distances -- 1,001 to 2,000 feet -- in low, moderate and high value neighborhoods regardless of the level of appreciation. In other words, the symbolic effect of reinvestment in an area is perhaps more spatially general and relevant for all neighborhoods.

The only consistent negative impacts occurred in Black neighborhoods at all distances from the dispersed sites, raising the question regarding whether there was something inherently different about these neighborhoods. These findings suggest that the market may be picking up

[4]This figure was provided via a written communication with DHA on July 7, 1998 and is based on rehabilitation costs on dispersed housing acquired after 1988.

[5]White tracts were defined as those containing less than 5% Black and 5% Hispanic. Black and Hispanic tracts were those that were substantially integrated (20-49 percent) as well as those that were majority Black or Hispanic.

on some structural weaknesses in an already vulnerable part of the housing market. Many Black neighborhoods in Denver are characterized by high poverty rates, high rates of out-of-wedlock birth, and higher concentrations of publicly subsidized housing (including all DHA, HUD, Section 8 and low-income housing tax credit assisted units).[6] Thus, these neighborhoods may be exhibiting the effects of concentrated poverty, and more DHA units in such a vulnerable market context only contribute to the negative effects of concentration. There also may be systematic differences in DHA's tenant and building management practices in Black areas, although none of our sources suggested this. We emphasize that, lacking any corroborating information, these explanations remain highly speculative.

Key Insights of the Focus Groups Regarding Impacts

Awareness of Dispersed Housing Sites. The empirical results underscore that the real estate market in Denver is receiving consistent and accurate information regarding the location of dispersed housing units and that house pricing systematically reflects this information. Indeed, since the enactment of the intergovernmental agreement between the City Council and the DHA in late 1989 that stipulates public hearings in regards to the purchase of dispersed units, both the market as well as homeowners are made aware of the purchase of units in their neighborhoods. Further, according to our key informants, DHA works directly with realtors to identify and purchase potential dispersed units. This would suggest that the market is responding to the rehabilitation and management of these units by DHA. Our key informant interviews suggest that this indeed may be the case.

It is quite interesting, then, that none of our focus group participants specifically mentioned the dispersed public housing units in their neighborhoods. This suggests that the DHA has been successful, through their maintenance and tenant screening efforts, in blending their dispersed projects into the larger community.[7] Our focus groups did, however, consistently emphasize elements of neighborhood quality that are relevant to subsidized housing policy makers: the physical condition of the neighborhood, the presence of vacant and abandoned buildings or rental properties, social cohesion, and crime and public safety. The DHA seems to have been able to address many of these issues in the dispersed housing program.

---

[6]Data on Black neighborhoods were obtained from the Neighborhood Facts database found at the Piton Foundation website (http://www.piton.org).

[7]By design, none of the focus group participants in Denver was informed that HUD was a sponsor of this study. This withholding of information did not prevent participants from mentioning other HUD subsidized housing programs, however, such as Section 8.

One of the primary concerns raised during the 1989 controversy regarding dispersed housing was the potential for physical degradation of the neighborhood and how that would negatively affect property values. Focus group participants underscored the importance of this issue. Participants were very interested in the upkeep not only of residential units, but also of yards, streets, commercial establishments, and other infrastructural features of the neighborhood. The consensus among participants was that poor upkeep contributed to the decline in property values in a neighborhood: *"There's trash everywhere. People aren't cleaning up their front yards. It gives kids the impression that people don't care,*" according to a Berkeley respondent.

DHA has addressed fears of neighborhood degradation by maintaining a strict maintenance and inspection schedule for all of its dispersed properties. Housing managers respond promptly to complaints, including those made by neighbors of the public housing tenants. DHA staff told us that their properties are often some of the best maintained on the block. These proactive and comprehensive maintenance policies have undoubtedly helped DHA achieve greater acceptance of their projects in neighborhoods.

Related to resident worries about the physical upkeep of the neighborhood was their apprehension about abandoned or vacant properties. Focus group participants expressed concern about having homes left vacant for extended periods of time, especially multiple vacant units on a single block. The presence of many vacant units was thought to lower property values. It is therefore significant that a key element of the DHA dispersed housing program is the acquisition and rehabilitation of abandoned or foreclosed properties. The act of returning these housing units to active occupancy may signal a beneficial change to the community.

Homeowners also expressed concerns regarding the high number of rental units in their neighborhoods and the potential problems that might result from having a large renter population. One respondent from Platte Park stated: "*I think it makes a huge difference about how many rental houses there are. That was a major problem here – there were so many rentals. There was no stability here.*" The general consensus was that neighborhood life, particularly a sense of community and commitment to the neighborhood, was enhanced by the presence of homeowners. Although participants acknowledged that some fraction of the housing in the neighborhood needs to be set aside for rental use, they were very concerned that after a certain threshold, the number of rental units in the area would adversely affect property values.

The presence of large numbers of rental properties was seen to weaken social cohesion in a neighborhood, which was another issue raised by the focus group participants. Homeowners in all six groups indicated that the most important factor affecting their quality of life was having good neighbors and feeling some sense of connection with others in the neighborhood. *Who you*

lived with in the neighborhood was equally, if not more, important than *where you lived*. The focus group discussions underscored how important it was for participants to feel a sense of community with neighbors. This sense of community was described in terms of knowing one another, looking out for one another, interacting with each other, and protecting one another. However, being neighborly did not necessarily mean being totally immersed in the lives of one's neighbors. Rather, it reflected a commitment to others as well as to the neighborhood.

Another concern closely related to stability and cohesion, and one that was expressed during the 1989 controversy, is the perceived threat of increased criminal activity. While none of the focus group participants directly attributed increased crime with the presence of subsidized or unsubsidized renters, they nonetheless expressed on-going concerns about crime and safety issues in their neighborhoods. In particular, participants were concerned about safety on the streets and in the schools: *"It used to be when you saw kids you could ask them why they weren't in school. In this day and age you can't do that because they might have a gun or knife or will track you down"* (Berkeley respondent). Other on-going issues in the neighborhoods included youth crime (mainly vandalism and petty thefts, graffiti, unsupervised children, and truancy), gang violence, and drugs.

Even though DHA cannot directly affect the distribution of rental properties in a neighborhood or the problems that may be caused by occupants of other types of rental housing, DHA's tenant screening procedures and occupancy policies have tried to diminish these concerns in the dispersed housing program. Tenants for the dispersed housing program are rigorously screened by DHA and must continue to exhibit good behavior throughout their tenure. Prospective dispersed housing tenants must have an acceptable rent payment history and no record of criminal activity. They are also expected to exhibit a high degree of motivation towards self-sufficiency and community involvement. While beneficiaries of the dispersed housing program, the tenants are expected to cooperate with DHA in maintaining the interior and exterior of the property and must be able to pay for snow removal and lawn care. DHA staff informed us that they respond promptly to any complaints regarding their properties or tenants, and will not hesitate to remove a tenant who cannot meet the required standards.

While our participant homeowners did not identify dispersed housing developments as being the source of neighborhood problems, we must point out that they were very aware of the existence of conventional public housing units, as well as Section 8-occupied units, in their neighborhoods. For example, residents in both of the Berkeley focus groups mentioned disparagingly the conventional public housing projects in their neighborhoods. Participants in all six of the focus groups discussed at length their concerns about the maintenance and management of rental properties in their neighborhoods, particularly those owned by Section 8

landlords. Their knowledge of Section 8 landlords was not based on mere speculation. Homeowners identified "problem" landlords by calling the City Property Assessor's office directly. Although our focus group respondents did not directly mention dispersed housing, homeowners still approach the DHA to check whether the "problem" property is owned by the Authority. According to our DHA key informants, most of the inquiries they receive prove to be for privately-owned units.

Based on this discussion, it is important to emphasize that the positive property value impacts observed here cannot be generalized to public housing dispersal programs run by other housing authorities without the safeguards of the Denver program. It is the particular characteristics of DHA's program--the acquisition and rehabilitation of run-down properties, the effective ongoing maintenance practices, and the strict screening and monitoring of tenants--that arguably contribute to the beneficial, or at least non-harmful, effects that we have found. One might expect that comparable programs operating in other cities would have similar impacts, but this is a question that can only be answered by further research.

Dispersed Housing Impacts in White and Black Neighborhoods. Our stratified models indicated that the overall positive effects of dispersed housing occurred in predominantly White and in affluent neighborhoods. Black neighborhoods, however, experienced consistent negative house price impacts from the presence of dispersed housing sites. Although we conducted focus groups in both majority White and Black neighborhoods, neither our focus group findings nor information from our key informant interviews revealed anything that would explain these disparate effects.

We can therefore only surmise that this contrast may be due to certain characteristics that distinguish these two types of neighborhoods, such as differences in levels of poverty or concentrations of subsidized housing or differences in DHA management practices. We deem it more likely that, in the presence of large numbers of subsidized households, the addition of DHA dispersed sites to "vulnerable" neighborhoods may reverse the positive effects seen in more affluent areas. We emphasize that such an explanation is only a hypothesis and would have to be verified through further research.

Reactions of Homeowners in a Booming Housing Market. To further understand the responses from the Denver focus groups and their failure to implicate dispersed housing as a negative factor in their communities, it is necessary to place their comments within the context of a city and county which has experienced tremendous growth in property values during the past few years. The housing market in Denver has been booming after a decade-long drought.

Participants from all of the focus groups indicated that the value of their homes had increased sharply, with most indicating a two-to-threefold increase from their original purchase price.

Although some participants expressed concern about the effect of higher prices and accompanying rapid population growth on their neighborhoods, most homeowners were quite happy with the increases they noted in the value of their property. Several focus group participants felt that these price increases were good for their neighborhoods, particularly in terms of improving physical conditions. A respondent from East Colfax explained: "*Yes. As property values rise, it makes people in the neighborhood a bit more caring because of the value of their homes.*" Other homeowners echoed the opinion that in a climate of rising property values, neighbors were more likely to look after their properties. They noted that homes were being fixed up and that a number of properties were converting from rental use to homeownership.

The reactions of homeowners to subsidized housing programs need to been viewed in this environment of rising house prices. While it is true that our focus group participants did not hesitate to speak negatively about other forms of subsidized housing, and that the policies described above no doubt shielded DHA's dispersed housing program from such criticism, one must also recognize that homeowners are less likely to notice small price differentials in a booming housing market. As long as house prices are rising, a typical homeowner may not be as concerned about the possible price impacts of subsidized housing.

This reaction might change, however, in an environment where house prices are declining or stagnating. The perceptions of homeowners would become more attuned to anything that might explain why property values were not increasing. Even a well-designed program like DHA's may come under scrutiny and attack in such a situation, as it was in 1989 during an era of stagnation. As we shall see in the next chapter for the case of Baltimore County, the comments and concerns of homeowners become quite different when house prices are not appreciating rapidly.

SUGGESTIONS FROM THE DENVER EXPERIENCE

As described above, the presence of DHA units generally did not adversely affect property values in neighborhoods. Data from the homeowner focus groups would seem to be consistent with this conclusion. The failure to identify dispersed housing sites as a problem in any of the focus groups would suggest that the DHA is doing its job in maintaining their dispersed units as well as working to blend both the housing units and their occupants into the neighborhood. Rigorous tenant screening by the DHA for participation in the dispersed housing program most

likely contributes to the lack of complaints by participants regarding DHA tenants in dispersed units.

These findings would underscore the need for dispersed housing programs to adhere to stringent guidelines regarding property maintenance and tenant screening and management. As key informants suggest, it was DHA's good faith efforts to comply with the intergovernmental agreement that led to the diffusion of the controversy as well as fostering better community relations and support for the program. Interestingly, positive impacts of DHA dispersed units also were not noted in our focus groups, implying that the DHA itself and the units it operates are relatively low-profile in the perceptions of owners, although the market clearly values the renovation and occupancy of previously vacant units.

Based on these results, we suggest a tentative conclusion regarding the mechanism by which dispersed housing affects the sales prices of nearby homes. Inasmuch as we observed an overall increase in property values as a result of proximity to DHA dispersed housing, with greater numbers of sites increasing the beneficial impacts, one could argue that the acquisition of vacant, often deteriorated properties by DHA and their subsequent rehabilitation and occupation is viewed by the housing market as having a positive effect on the immediate neighborhood. While this conclusion is consistent with the data that we have presented here, further research and replication are warranted to ascertain its veracity.

We further found that subsidized rental housing (beyond the dispersed housing program) continues to be identified as a problem by our Denver focus group participants. Homeowners seem very concerned with the potentially deleterious effects of proximity to poorly maintained and managed Section 8-subsidized units. Given the successful implementation of regular inspections and maintenance of DHA dispersed units as well as rigorous tenant screening policies, it follows that similar guidelines and policies might be beneficial for Section 8-subsidized units as well.

Finally, our negative impact finding associated with siting additional dispersed units in more "vulnerable" (*i.e.,* Black, concentrated poverty) neighborhoods suggests that there may be a maximum threshold of poor or subsidized households beyond which this negative impact is triggered, irrespective of the distance or characteristics of DHA housing or occupants. This implies that DHA consider expanding their deconcentration efforts, such as converting conventional public housing developments via HOPE VI into "Campuses of Learners" that incorporate lower densities, dispersing some tenants into non-impacted areas, and limiting the total time spent by tenants in

public housing.[8] In addition, our results suggest that further additions of subsidized housing units -- dispersed or Section 8 -- should be discouraged in these impacted neighborhoods.

[8]DHA has already used HOPE VI in this manner at the North Lincoln Park public housing development.

CHAPTER 7
BALTIMORE COUNTY RESULTS AND POLICY IMPLICATIONS

This chapter presents our findings related to the property value impacts of Section 8 households in Baltimore County. We provide a graphical portrayal of the results of our three alternative aggregate specifications of property value models, and then interpret these findings in the context of the County and the Section 8 program. A discussion of whether these aggregate patterns persist over various strata of the data follows. We provide a richer view of these quantitative findings by juxtaposing them against results of our four Baltimore County focus groups. Finally, we discuss possible policy implications for the Section 8 program based on our analysis.

The results for Baltimore County Section 8 were more varied, and less clear cut, than those for Denver dispersed public housing. Overall, there was an average *upward shift* in prices associated with the presence of Section 8 households within 500 feet of a single-family home. The impact changed to a relative *decline* in post-occupancy house prices, however, if there were more than six Section 8 sites or eight units within 500 feet of the same house. At distances of 501-1,000 feet, while sales prices are initially *lower* after a Section 8 household moves into a site, there is a subsequent *upward trend* in prices if sufficient numbers of households (28) or sites (14) are present. At distances of 1,001-2,000 feet, the presence of Section 8 units has a *negative* effect on property values. The relative decline in prices is greater the larger the number of sites or units.

As was the case in Denver, Section 8 households do not have the same impacts on all neighborhoods in Baltimore County. The stratified model results show that positive price effects occur in neighborhoods with high and fast-appreciating house values and that are overwhelmingly White. Negative price impacts appear confined to “vulnerable” neighborhoods, that is, neighborhoods with low-to-moderate value homes that have declined in real value since 1990 or are racially mixed or mostly Black occupied.

QUANTITATIVE ESTIMATES OF PROPERTY VALUE IMPACTS OF SECTION 8

Aggregate Results for Baltimore County as a Whole

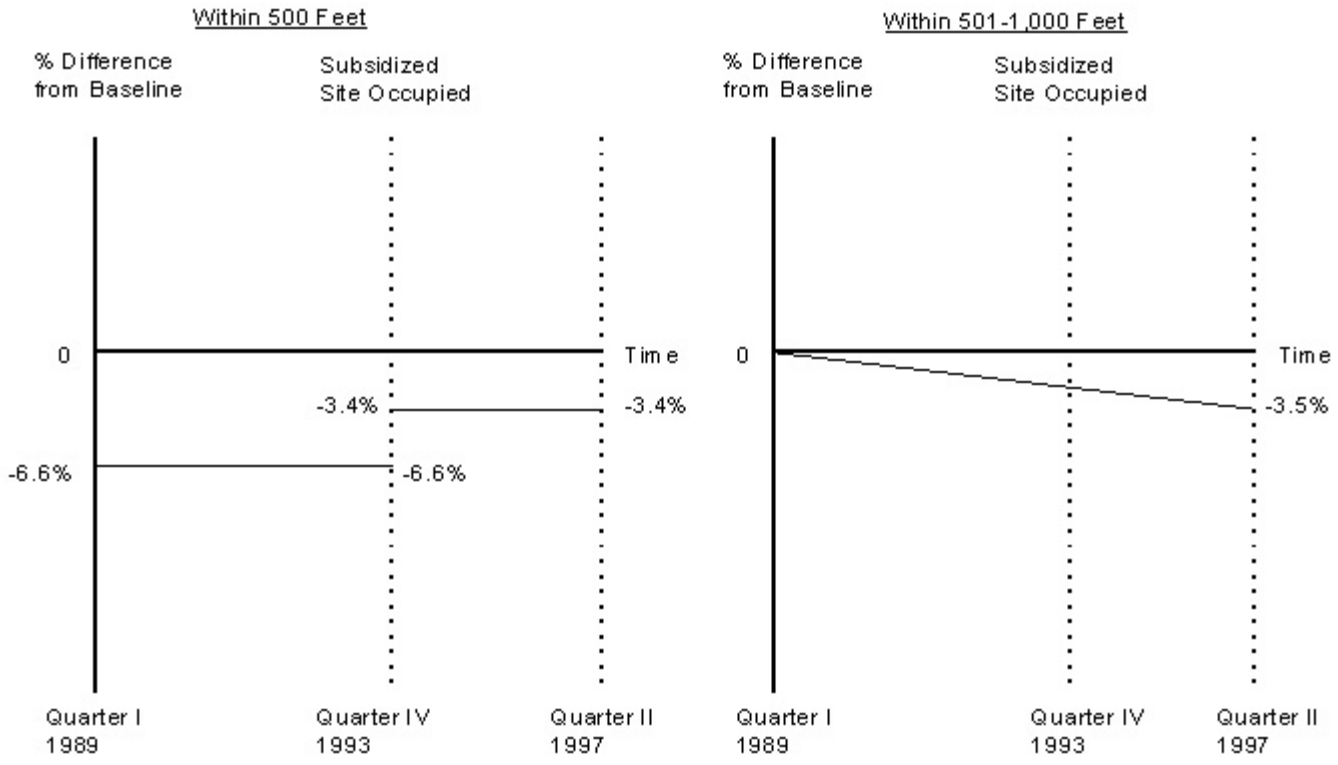
We start by examining the results from the aggregated regression models for Baltimore County.[1] The net effects of the model coefficients are easier to see when portrayed graphically. Figure 7.1 shows the estimated home sales price trends within 1,000 feet of any Section 8 site in Baltimore County for the study period, based on the estimated (statistically significant) coefficients of Model 1 (as shown in Chapter 4).[2] Figures 7.2, 7.3, and 7.4 do the same for Models 2 and 3.[3] In all figures, the trends are plotted before and after occupancy of an archetypical Section 8 site, computed at the median of the occupancy dates--fourth quarter, 1993.

[1]Overall, the aggregated models for Baltimore County performed extremely well. The adjusted R-squares were .81 in the regressions and did not vary significantly across the three model specifications. Not surprisingly given the exceptional sample sizes, virtually all of the [Struct], [Tract], and [Quarter] control variables evinced coefficients that were significantly different from zero. All the coefficients of the [Struct] characteristics of homes proved to have the expected signs. Results of the [Struct] and [Quarter] control variables, as well as the impact variables, are provided in Annex D.

[2]In Figure 7.1 only coefficients statistically significant at the 95 percent confidence level are portrayed.

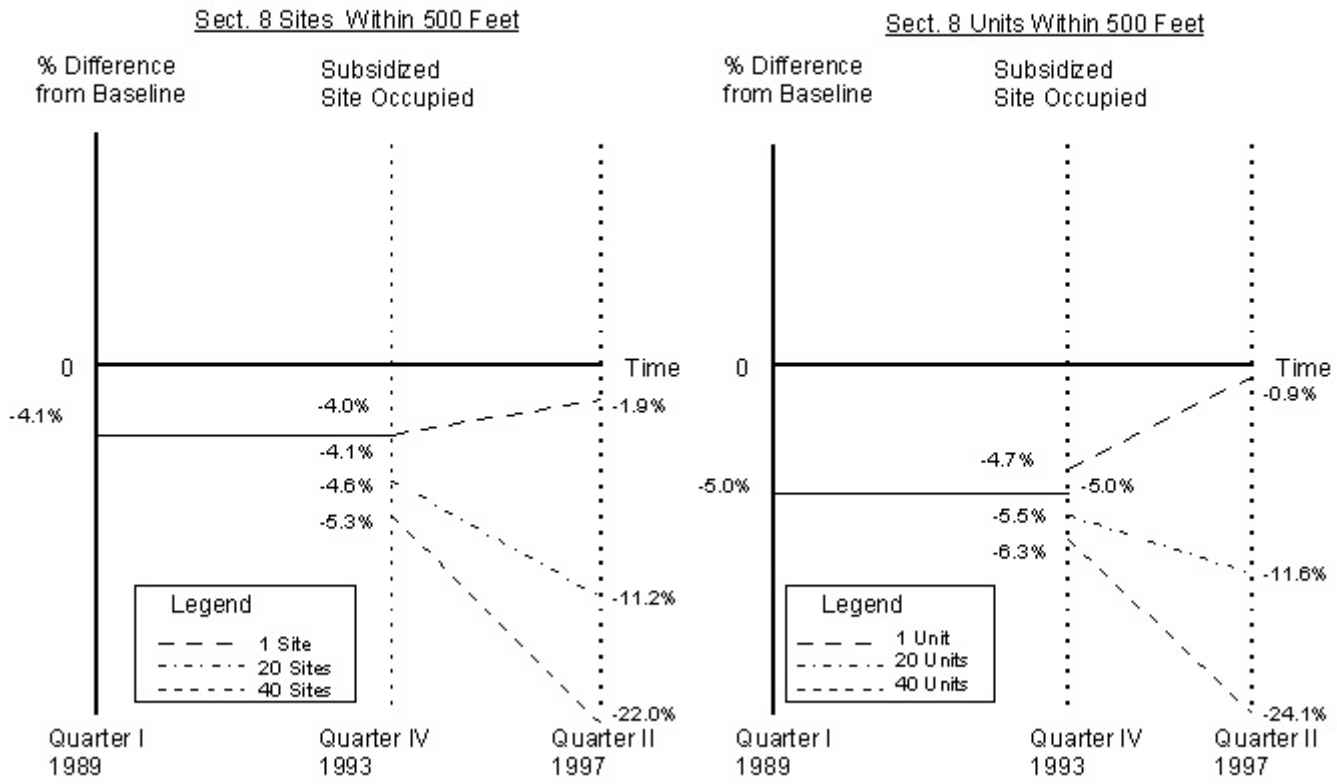
[3]In Figures 7.2 and 7.3 coefficients statistically significant at the 90 percent confidence level are portrayed. Examination of the patterns of coefficients among main effects and interaction effects across Models 2 and 3, and the fact that many coefficients narrowly missed significance at 95 percent confidence, suggested that to only include those significant at this level or higher would give a misleading portrait of the overall pattern of results.

FIGURE 7.1
Estimated Price Trends Within 500 Feet of Any Section 8 Site, Baltimore County
(Relative to Baseline Areas of Same Tracts Not Within 2,000 Feet)*



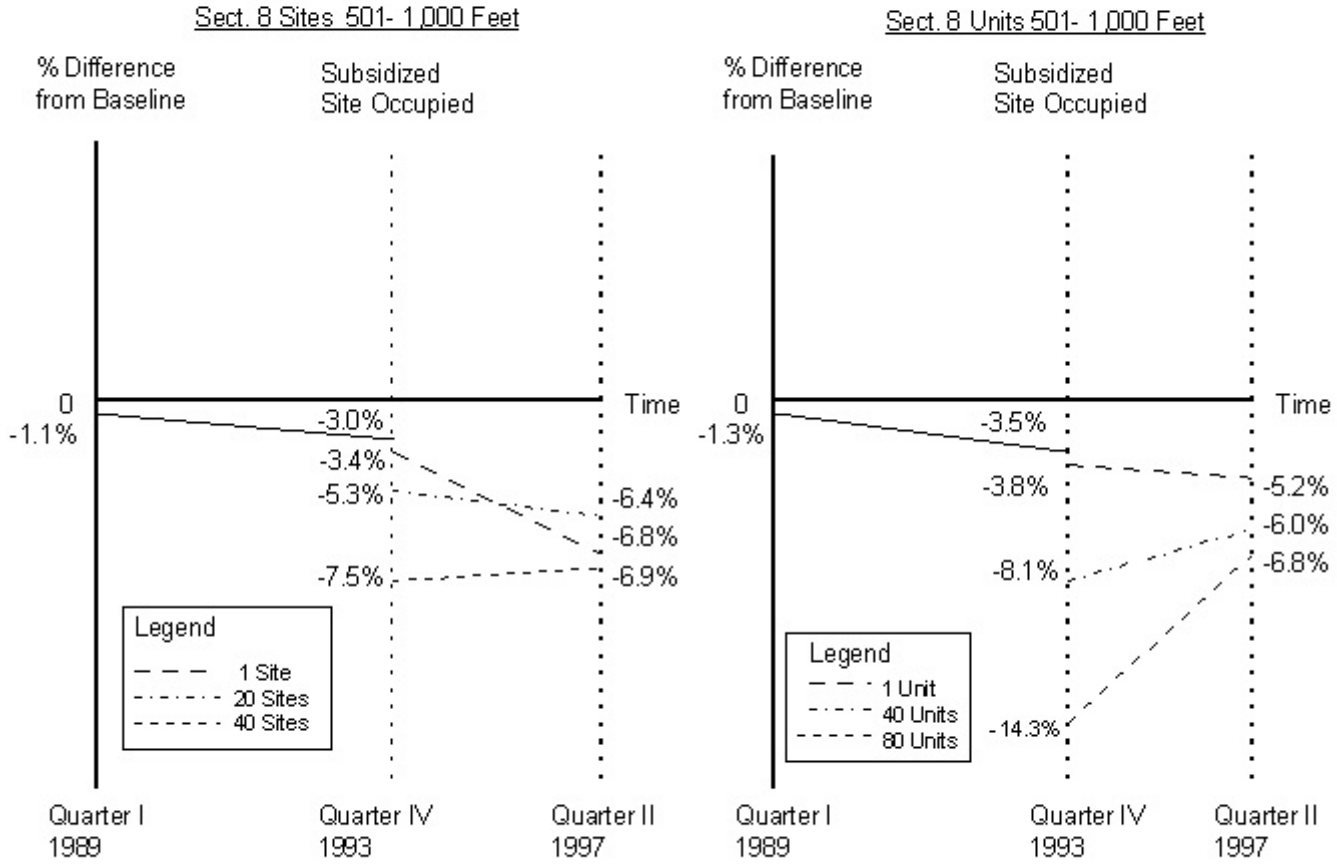
* Baseline prices control for seasonal and county-wide quarterly trends, plus housing stock characteristics.

FIGURE 7.2
Estimated Price Trends as Function of Density of Section 8 Sites, Baltimore County
(Relative to Baseline Areas of Same Tracts Not Within 2,000 Feet)*



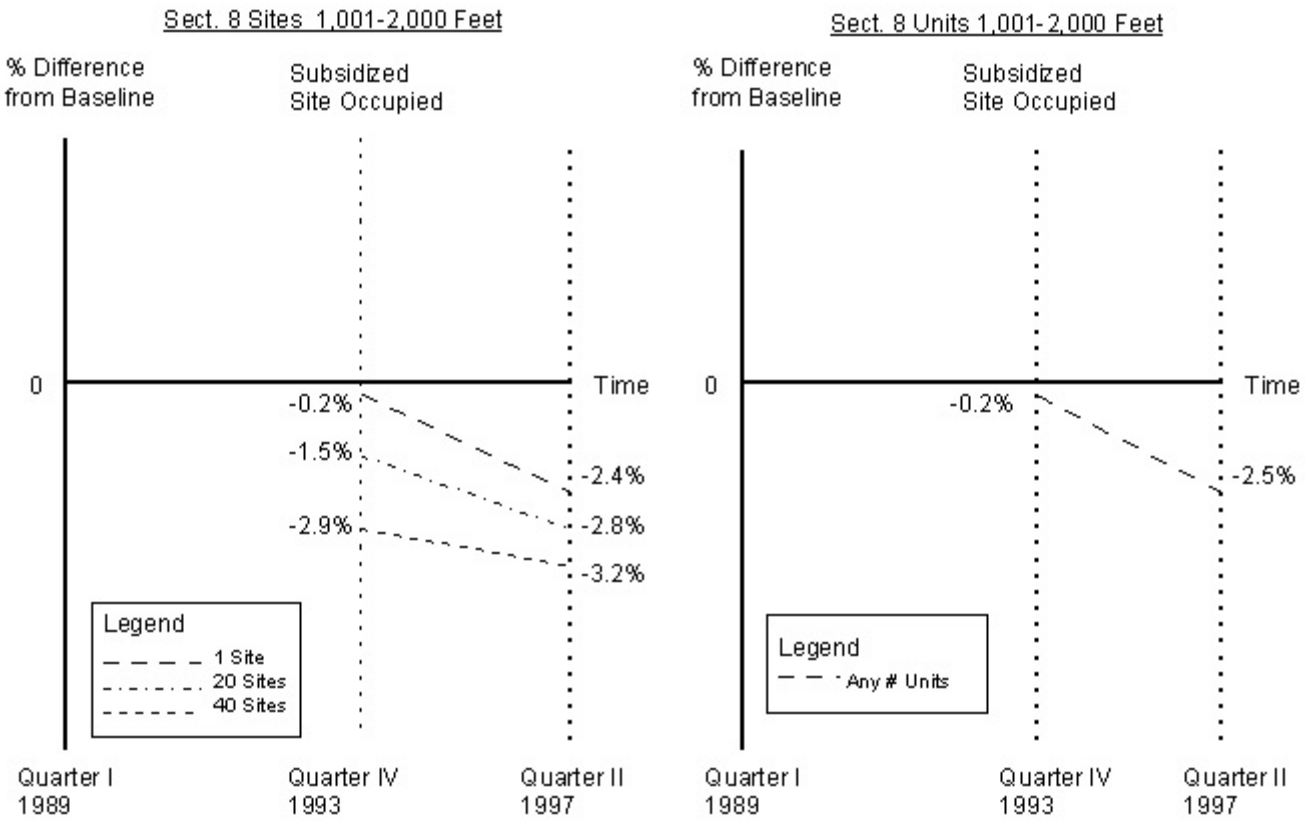
* Baseline prices control for seasonal and county-wide quarterly trends, plus housing stock characteristics.

FIGURE 7.3
Estimated Price Trends as Function of Density of Section 8 Sites, Baltimore County
(Relative to Baseline Areas of Same Tracts Not Within 2,000 Feet)*



* Baseline prices control for seasonal and county-wide quarterly trends, plus housing stock characteristics.

FIGURE 7.4
Estimated Price Trends as Function of Density of Section 8 Sites, Baltimore County
(Relative to Baseline Areas of Same Tracts Not Within 2,000 Feet)*



* Baseline prices control for seasonal and county-wide quarterly trends, plus housing stock characteristics.

Sales Price Trends Before Section 8 Sites are Occupied

As Figures 7.1, 7.2, and 7.3 make clear, the neighborhoods into which Section 8 households moved tended to be valued somewhat lower than other neighborhoods within the same census tract. By the fourth quarter 1993, just prior to occupancy by a representative Section 8 household, prices for areas within 500 feet of the future site were 4.1 to 6.6 percent lower (depending on the specification; see Figures 7.1 and 7.2). The same was true of sales within a distance of 501-1,000 feet, but with a slightly lower decrement of between 3.0 and 3.5 percent (Figures 7.1 and 7.2). There were no statistically significant indicators that areas within 1,000-2,000 feet from an eventual Section 8 site were priced any differently from other locations in the tract. Thus, it is clear that the size of the price decrement was consistently greater the closer the home was to a site eventually occupied by Section 8 households.

These results indicate that there was a tendency for Section 8 households to locate in weaker market niches of Baltimore County, independent of any subsequent impacts of such locational choices on the neighborhoods thereafter. This confirms the speculations of several of our key informants reported in Chapter 3. From this information we are unable, however, to distinguish among several plausible hypotheses: (1) landlords in declining market niches are more likely to participate in Section 8 or more actively recruit Section 8 households; (2) Section 8 voucher (not certificate) holders seek to stretch their subsidy by occupying less-expensive sections of neighborhoods; (3) selective information and kin/friendship networks lead Section 8 households to cluster in the less-expensive niches within neighborhoods; (4) clusters of rental housing depress single-family house prices.

Discussion of Property Value Impacts for Aggregate Models

The aggregate models showed that, within 500 feet, there was a distinct *upward shift* in local area price patterns associated with the occupancy of a site by one or more Section 8 households. Figure 7.1 indicates that the price level within 500 feet of the site was 3.2 percentage points higher compared to the level of prices in that area prior to occupancy. Even though the micro-neighborhoods within 500 feet of Section 8 sites still remain somewhat lower-valued than elsewhere in the tract, the apparent impact of the Section 8 occupancy itself appears positive and significant, both statistically and substantively. No such positive impact was observed beyond 500 feet.[4]

[4]The appropriate model coefficients were negative and marginally statistically significant.

These results must be qualified in important ways by considering the impacts of the number of proximate Section 8 sites and occupied units nearby, not merely whether any are present or not (Figures 7.1 and 7.2). There was a strong interaction between the post-occupancy trend in prices and the number of occupied Section 8 sites in the given distance range. As the first panel of Figure 7.2 demonstrates, the greater the number of occupied Section 8 sites within 500 feet of a sale, the greater the initial shift downward in values and the greater the rate of decline thereafter. There appears to be the possibility of net *positive* price trend however, so long as the number of sites was limited. Specifically, if the number of Section 8 sites within 500 feet remained below six (6), there was a positive post-occupancy price trend. This trend was such that the initial negative impact was completely wiped out within 14 quarters after opening; thereafter prices were higher than otherwise would have been the case in this micro-neighborhood. Nevertheless, with larger numbers of proximate sites, such as the observed sample maximum of 39, the net impact on price proved substantively *negative*, both immediately following occupancy and thereafter (Figure 7.2).

Similar insights are gained from consideration of the results for Section 8 unit counts, portrayed in the second panel of Figure 7.2. Results indicate that 500-foot proximity to a greater number of occupied Section 8 *units* (as opposed to distinct addresses) was associated with *higher* sales prices, so long as the number of units did not exceed eight (8). As with the first panel of this Figure, the result is encouraging, inasmuch as the vast majority of observations met this criterion. On the other hand, the parameters suggest that were a sale to occur within 500 feet of the observed sample maximum number of Section 8 units (67), substantial price decrements would occur, especially as more time elapsed between sale and first occupancy of the units.

Taken together, the results for the area described by a 500-foot radius from the site provide clear implications about impacts from various configurations of Section 8 occupancy. At one extreme, if the area only had one Section 8 household, the estimated initial impact in the quarter after occupancy would be virtually nil. Subsequently, a positive impact would occur, rising to roughly two to four percentage points after 14 quarters since the first occupancy. If the area were to have hypothetically only one address at which Section 8 tenants resided, the net impact on prices would be continue to be positive until the building's occupancy reached eight Section 8 tenants, whereupon there would be no estimated impact, either immediately after occupancy or thereafter. The parameters clearly show that the net positive impacts are enhanced if more Section 8 tenants occupy a single site, as opposed to the same number of tenants scattered across an equal number of sites. As noted above, if more than five distinct Section 8 occupied sites are present within 500 feet of a sale, there will be a net negative impact on property values both initially after occupancy and accelerating thereafter.

The foregoing helps one to understand the combination of results from the different model specifications. The vast majority of observations in our sales sample which are within 500 feet of one or more Section 8 occupied dwellings consist of combinations of sites and units that are well below the combinations that yield net negative effects. As such, the net proximity effects of Section 8 overall will be measured as positive, as shown in Figure 7.1. However, other combinations of larger numbers of sites and units, though relatively rare, will produce negative price effects, as shown by the result in Figures 7.2.

The results at 500-1,000 feet further reinforce the conclusion that the number of Section 8 sites and units have a profound effect on property values. As portrayed in Figure 7.3, sales prices within 501-1,000 feet of a site are initially *lower* the larger number of sites or units present. However, the larger this number the more *positive* the subsequent trend in prices. The price trend turns positive when the number of sites (units) exceeds 28 (14).[5] The net positive impact on the price trend post-occupancy is clearly better for a marginal unit than for a marginal site. But with fewer units in the ring the post occupancy price level more quickly exceeds the level that would have occurred in the absence of any Section 8 sites in the ring. Just the opposite is true for the number of sites, as shown in Figure 7.3.

These findings pose a potential policy dilemma when contrasted with those from the 500-feet ring. Whereas within 500 feet the implication for enhancing positive impacts was to limit the number of sites, for the 501-1,000 foot ring the implication was just the opposite--more sites produce a larger initial negative impact. Comparing the results based on numbers of *units*, however, yields a more consistent story--more positive effects would occur with fewer units in the ring.

Results for 1,001-2,000 feet distances show that the presence (and less so the number) of Section 8 sites and units has a *negative* effect on property values (Figure 7.4). Also unlike results for the nearer distances, those for the 1,001-2,000 feet distances do not reveal any combinations of sites and units wherein the net property value impacts are not negative. This raises a challenging question: Why might any numbers of sites or units yield a negative price impact on properties within 1,001-2,000 feet when they often might simultaneously be yielding a positive impact at closer distances? This apparent conundrum disappears when we disaggregate the results by neighborhood type.

[5]For comparison, the observed sample maximum for sites (units) in this range was 84 (116).

Discussion of Property Value Impacts for Stratified Models

We replicated our three econometric specifications for different clusters of census tracts in Baltimore County, which were stratified according to racial composition,[6] median 1990 home values, and real changes in median values from 1990-1996.[7]

These stratified regressions show that the results reported for the aggregate, County-wide econometric specifications above require important qualification. Positive price impacts from close proximity to Section 8 sites apparently do not occur in all sorts of neighborhoods, but appear to be an exclusive feature of census tracts that: (1) rank in the highest third of 1990 median values, (2) have real appreciation of median values 1990-1996, and (3) are overwhelmingly white-occupied (less than five percent black in 1990). Moreover, the magnitude of the implied impacts is great: an extra one percentage point increase in value each succeeding year after opening. In these areas there are no apparent negative price effects anywhere from tenant-based Section 8.

Negative price impacts—statistically significant impacts occurring at all distances up to 2,000 feet—appear confined to neighborhoods that we hereafter will call "vulnerable:" areas comprised of low-to-moderate value homes that have declined in real value since 1990. We also note that all Baltimore County racially mixed-to-predominantly black-occupied (20 percent black-occupied or more) neighborhoods fall into this category, although a much larger number of predominantly white-occupied ones do as well.[8] Here, however, the magnitude of impact is quite modest: within 500 feet a 0.4 percentage point and from 501-2,000 feet a 0.1 percentage point lower value level per occupied Section 8 site.

In conjunction, these results mean that positive and negative price impacts are not being manifested in the same neighborhoods, as the aggregate regression results might erroneously lead us to believe. Rather, the larger positive impacts generated by Section 8 in stronger neighborhoods are merely masking the smaller negative impacts in vulnerable neighborhoods

[6]We included substantially integrated (20-49 percent Black) tracts with majority-Black tracts due to paucity of the latter.

[7]For a few sites in Baltimore County around which an unusually large number of sales occurred both pre- and post-Section 8 occupancy we ran site-specific regressions. Unfortunately, our specifications apparently require more observations than were available from these disaggregated runs, inasmuch as very few results were statistically significant.

[8]There is so much overlap among tracts comprising these three alternative strata that it is impossible to unambiguously delineate with dimension of vulnerability is most important.

within the 500-foot range; at longer distances, only the small negative impacts in vulnerable neighborhoods are manifest.

What is less clear from these results is whether racial composition *per se* or its correlation with median property values and appreciation rates is the driving force. As our focus group results made clear, the answer relates much more to median values. All-White but low-valued, stagnant neighborhoods clearly can feel vulnerable to changes they perceive as being wrought by Section 8. We were able to explore econometrically another intriguing dimension of these stratified results. We had information on the race of the first Section 8 household to occupy each of our analysis sites, thus we were able to estimate our models for all four combinations of race of first Section 8 occupant and racial composition of the neighborhood. There were virtually no substantive differences among the four race of Section 8 household/neighborhood cells, regardless of distance. Not only are the same coefficient sign and statistical significance patterns evinced, but the magnitude of the price effects do not differ appreciably across the combinations.[9] This leads us to conclude that it is some non-racially identifiable aspect(s) of the Section 8 program in Baltimore County that produces the strong, consistent property value impacts we observe.

Key Insights of the Focus Groups Regarding Impacts

Awareness of Section 8 Sites. Our foregoing empirical results make it clear that the real estate market is gaining consistent information about the location of Section 8 households in Baltimore County and is pricing proximity to these locations in a systematic fashion. As was the case with Denver's dispersed housing, we cannot tell directly from our econometric study whether it is Section 8 *per se* that is signaling the market or some more visible correlates of Section 8, such as exterior building renovation or behavioral problems with tenants. Our focus group findings suggest that the latter probably predominates in Baltimore County. In other words, the market does not price subsidized housing as such, but some conditions associated with it.

Especially in Dundalk, but in other sites as well, homeowners were highly attuned to the issue of Section 8, volunteering their concerns about the program by name without any encouragement from the group facilitator.[10] Several homeowners were so concerned about

[9]This is true when all three model specifications are considered as a set.

[10]All homeowners in the Baltimore County focus groups were informed that HUD was the sponsor of this study. They were not told that the study involved specific programs, however, only that we wished to obtain information about the views of homeowners on the quality of life in neighborhoods.

Section 8 occupancy that they told us they have personally questioned new tenants and landlords about whether their apartments were subsidized. Another participant found out about Section 8 sites from a friend who was a real estate broker. These homeowners apparently gathered quite accurate information, given that several locations they could identify during the focus group as "Section 8-occupied" were, indeed, according to our database. Nonetheless, even the Dundalk focus group incorrectly identified some addresses as "Section 8-occupied" and overlooked others that were. This failure to identify Section 8-occupied units was typical in the other focus groups. Indeed, the Rogers Forge group confidently (if erroneously) asserted the absence of such sites near their homes. Thus, although some Section 8 sites clearly were known to the homeowners nearby and, apparently, to some local real estate agents, this direct evidence appears to be generally inaccurate and spotty, especially where few Section 8 sites are present.

Additional qualitative evidence suggests that homeowners' failure to identify proximate Section 8 apartments was directly related to the state of repair and the behavior of tenants in these units. Significantly, one of the sites that the Dundalk group failed to identify was the apartment at the center of the neighborhood from which we drew focus group participants. Our windshield inspection of this unit revealed that it was indistinguishable from all the other row houses in the area. In Millbrook, focus group participants commented favorably about the civic-minded behaviors of Russian immigrants who lived in a large, well-maintained garden apartment complex across the street from them, without any reference to the fact that this complex had the largest spatial concentration of Section 8 tenants in our sample and that many of these immigrants received housing subsidies. We believe, therefore, that it is not Section 8 occupancy in and of itself, but rather the correlation (albeit imperfect) between Section 8 and "bad properties" that the market is observing (and pricing). This finding is crucial, for it implies that if policy makers succeed in developing and operating well-functioning subsidized housing it will likely be invisible to neighboring homeowners and to the market.

It is quite clear that "problem properties" were visible and of great significance to their quality of life and the value of their properties on the market. All groups were acutely aware of rental properties that were poorly managed and maintained, and whose occupants engaged in visibly uncivil or disreputable behaviors, such as loud partying, selling drugs, or "having a lot of men hanging around." Moreover, as our key informants and the Patterson Park experience would have lead us to predict, our focus group participants generally equated rental properties having the associated problems above as "Section 8 apartments." As some focus group participants commented:

[There is a] Section 8 person on my street who is a headache for everyone...government pays the rent and this person doesn't care [about neighbors or neighborhood]. (Respondent, Twelve Trees)

Families will be moved in [through subsidized housing programs]...[who] will be on welfare and will not be good neighbors. (Respondent, Rodgers Forge)

Our tax dollars are being used for MTO programs and undesirables are moving. (Respondent, Rodgers Forge)

Our econometric results imply that there must be some validity to this perception in Baltimore County, for otherwise there would be no statistically significant negative relationships between sales prices and proximity to Section 8 units, at least when the number of units passes a critical amount. Our focus groups indicate that homeowners (and, presumably, prospective buyers) are extremely sensitive to rental properties with visibly problematic maintenance or tenants. They perceive that most problem properties are subsidized, but are apparently not cognizant of Section 8 sites that do not exhibit these problems. They thus seem unaware of Section 8 when it occurs in a strong neighborhood and the occupied property creates no problems. Unfortunately, in Baltimore County there apparently is a strong statistical association between Section 8 sites and problem properties, at least in the more vulnerable neighborhoods, as we explore more below.

Section 8 Impacts in Vulnerable Neighborhoods. Our stratified model results revealed that there were consistently negative property value impacts at all distances up to 2,000 feet from a Section 8 site in low- and medium-valued neighborhoods, in those suffering real declines in their property values since 1990, and in those having more than 20 percent Black residents in 1990. In the previous sections we called such tracts "vulnerable." Our focus groups in Twelve Trees,[11] Millbrook, and, especially, Dundalk, revealed much about the nature of this perceived vulnerability.

Notably, most of the concerns suggesting neighborhood vulnerability were remarkably similar across these three sites, despite the fact that they differed dramatically in their racial composition. We interpret this as evidence that weak market values signaling a decline in the quality of neighborhood life are the key ingredient of "vulnerability" as applicable here, not racial composition.

[11]Note that although Twelve Trees evinced high real property value appreciation during the 1990-1996 period, most was due, we believe, to a recovery from an artificially low level of prices to which the area had fallen during the 1980s era of racial tipping.

A generational split in views was evident, however. Older residents recalled times in the neighborhood before "central air conditioning kept everyone indoors" and when "women were home to visit during the day" where neighbor connections seemed stronger and ties to the community ran deeper. In general, long time, older residents felt that people with different values were coming to their neighborhood. These different values they attributed partly to society at large ("the rise of the 'me' decade") and partly to "a different class of people." Younger participants with a shorter experience in their neighborhoods shared the second concern. Indeed, all age groups were concerned about an influx of owners and residents who did not take care of their homes, attracted or committed crime and vandalism, and did not care about their neighbors.

All groups mentioned concerns about the encroachment of "the City" as bringing an increase in crime and deterioration to their neighborhoods.[12] "*The City is coming closer and that is scary,*" said one homeowner in Dundalk. Respondents felt these in-movers had different values and standards than the current residents desired for their neighborhood.

Sources of racial anxiety varied among the three neighborhoods. Millbrook was explicitly concerned about racial and cultural shifts in their community. This area had once been historically occupied by White residents but was now racially and ethnically diverse. Focus group participants supported integrated living. As one homeowner put it: "*[Who lives here?] Russians, Whites, Blacks, Orientals...there is a nice mixture."* They were concerned, however, about the growing concentration of minorities in their neighborhood. They believed that their community could no longer attract new White buyers, which depressed resale prices and encouraged a "rougher" type of new resident. More units were becoming available as long time residents were moving who did not want to live in a neighborhood with a growing number of minorities, they noted with regret: "*I lost neighbors when they [referring to minorities] moved in.*"

Respondents from Twelve Trees, a predominantly Black community, also were very concerned about changes that they felt were contributing to physical deterioration and to a decrease in the quality of life in the neighborhood. Resident change was described as both a change in resident values and a change in the overall racial composition of the community. This group of Black respondents described many of the newer (mainly Black) residents as a "different culture within our culture" and feared this new resident had adverse effects on neighborhood life. Moreover, long time residents moved to the neighborhood when it was predominantly White and chose the area because they desired an integrated community. They were concerned that as the

[12]Three of the four neighborhoods represented (Sites Dundalk, Millbrook, and Rodgers Forge) were relatively close to the city limit of Baltimore, including one community where a neighborhood boundary was the City line. See Map 4.2.

racial composition changed from integrated to segregated, the benefits of integrated living were lost and property values would decrease.

Importantly, all focus groups in our three "vulnerable" neighborhoods perceived that adverse influences on their neighborhood were not merely the product of broad social forces or inexorable metropolitan trends. Rather, they explicitly and consistently portrayed the real estate brokerage industry or subsidized housing policies as major contributing factors to their neighborhoods' vulnerability. For example, residents of the Millbrook and Twelve Trees neighborhoods felt real estate and rental agents were steering minorities to their community:

> *Realtors will do anything for a sale...they don't care if a person can keep up the house or not...bringing borderline buyers. (Respondent, Millbrook)*

> *A lot of Realtors will steer Black people to Randallstown [the broader community of which Twelve Trees is a part]. (Respondent, Twelve Trees)*

Dundalk and Twelve Trees groups spoke pointedly about subsidized housing as a destructive force now operating in their communities. One Dundalk homeowner put it quite clearly: "*Everyone seems to say there are Section 8 houses throughout the neighborhood. People don't want to live near Section 8.*"

The anxiety about rental housing in general and subsidized housing in particular brings together concerns about physical conditions, safety, and resident characteristics. One Dundalk participant went so far as to volunteer that what makes for a good neighborhood is having few Section 8 households. While some participants talked about "good renters" or "not everyone on Section 8 does bad," rental and subsidized housing was strongly perceived as associated with declining physical standards, increased crime, and bad neighbors, as noted above. In this sort of skittish neighborhood context it is understandable that additional Section 8 households apparently are viewed by the market as forces of decline.

One Dundalk respondent, however, saw Section 8 as the last resort of owners in already declining neighborhoods: "*If people can't sell their homes, they turn it over to the government and get Section 8.*" His views correspond with our econometric results that, indeed, there often is a prior condition of relative or absolute neighborhood decline in values prior to Section 8 occupancy.

Section 8 Impacts in Less Vulnerable Neighborhoods. In Rodgers Forge, focus group participants generally expressed more confidence in the future of their neighborhood and the lack

of current deleterious forces compared to other groups. Indeed, whereas the other three groups in "vulnerable" neighborhoods typically listed a dozen or more problems eroding their neighborhood's livability, those in Rodgers Forge only mentioned that some owners were building fences that violated the covenants and that there was a bit more vandalism. The group viewed their property values as remaining strong, thereby implicitly supporting and endorsing their neighborhood standards and covenants. Indeed, it was this very strength of property values buttressed by housing covenants that led the group to believe that they were less vulnerable to the "wrong sort of people moving in."

This high degree of confidence did not mean, however, that there was any less distaste for the prospect of subsidized housing. Rodgers Forge respondents were united in strong opposition to subsidized housing coming to their neighborhood but said (erroneously) such housing was not currently in their neighborhood and as such was not a problem for them.[13] Participants felt very strongly that subsidized housing brought physical decay and vandalism. *"When subsidized housing comes, it's bad,"* said one homeowner.

In a context of less neighborhood vulnerability, the Rodgers Forge focus group indicates that, despite opposition in principle to subsidized housing, there is less likelihood that: (1) the relatively isolated Section 8 household will be noticed and (2) any negative consequences will follow. On the contrary, our stratified econometric results clearly showed that in higher valued, White neighborhoods like Rodgers Forge the effect on sales prices within 500 feet is consistently positive. We speculate that this is due to the physical improvements to the dwelling that are made at the time of initial Section 8 occupancy, although unfortunately we have no direct evidence on this point from the focus group. We could go even further, and speculate that it is precisely because the Section 8 unit in question apparently was renovated and well-maintained and there were no serious behavioral issues with the Section 8 household(s) that the respondents did not think of it as a subsidized site, given the stereotypes they held about such sites.

Reactions of Homeowners in a Stagnant Housing Market. In contrast to the environment in Denver, house prices throughout most of Baltimore County have increased modestly or declined in the 1990s. The comments made by our homeowner focus groups and their concerns about subsidized housing need to be evaluated in this context. Three of the four focus group locations, Dundalk, Millbrook, and Rodgers Forge, experienced extremely low price appreciation from 1990 to 1996 (see Table 4.3). As we hypothesized in the previous chapter, such an environment can

[13]While all of our focus group sites contained some Section 8 households, only one such household was living within the vicinity of Rodgers Forge as of late 1997.

heighten homeowner sensitivity to potential threats to property values and can lead them to look for “scape goats” on which to focus their frustration.

While, overall, our focus group participants liked their neighborhoods and planned to stay in them, all groups were concerned about the current value of their homes and prospects for future appreciation. This concern was not only financial, but also because property value declines were seen as an indicator of eroding quality of neighborhood life. Across the focus groups in Baltimore County, participants attributed property value decline to similar factors: (1) physical upkeep, (2) safety, and (3) resident values. Issues related to the physical condition of homes and yards were at the forefront for many participants, with widespread scorn for people who did not keep up their properties, particularly owners of rental units. For many focus group participants, an increase in the amount of rental housing was a harbinger of neighborhood decline.

Groups in the “vulnerable” neighborhoods of Dundalk, Millbrook, and Twelve Trees were especially anxious about neighborhood changes in terms of both physical conditions and resident characteristics and thought these shifts would soon be manifested in slowing or declining values. Their comments projected dual themes--both high regard for neighborhood living and anxiety about the future of their valued environment and asset:

> *This is a quiet, family neighborhood and we want to keep it that way. (Respondent, Millbrook)*

> *There are a lot of 'For Sale' signs...that is very disturbing. (Respondent, Twelve Trees)*

> *When I see a house go up for sale, I get worried. (Respondent, Dundalk)*

The 1994 controversy over the MTO program occurred in the middle of the stagnating housing market being felt by most of the county. In Dundalk, one of the centers of the MTO protests, average property values had increased less than 1 percent from 1990 to 1996. Even though most areas in Dundalk were ineligible to receive MTO households, and despite the fact that no MTO households ever moved there,[14] homeowners were highly sensitized to any potential threats to property values and to the quality of life in their neighborhoods.

[14]Lucas (1997:Map 5A).

Four years after the controversy over MTO erupted, our focus groups indicate that many homeowners in Baltimore County continue to be alarmed by the prospect of more subsidized housing entering into their communities. We view such a reaction as a product of ongoing homeowner concerns regarding a wide array of changes and problems in these areas, mostly unrelated to Section 8. But even if Section 8 were not a major contributor to these problems, it would be difficult to develop a more welcoming environment for such a program given the larger housing market conditions. If the building maintenance and tenant behavior issues are addressed, however, it may be possible to make subsidized housing more palatable to existing homeowners.

MECHANISMS OF NEIGHBORHOOD IMPACTS OF SECTION 8

The set of aggregate and stratified econometric models and focus group results for Baltimore County hold interesting implications about the sources of impact of Section 8 sites nearby. Our findings support the positions forwarded by key informants reported in Chapter 3, which we summarize below. We stress that these conclusions are suggestive and not definitive, and are limited to the context of Baltimore County. Further research and replication are needed to validate these claims more generally and for other areas.

First and foremost, inasmuch as there are a variety of statistically significant relationships between single-family home prices and proximity to Section 8 sites: (1) neighbors and the market as a whole are aware (with some systematic degree of accuracy) of the presence of Section 8 sites/units in Baltimore County; and (2) one or more expected attributes associated with those sites/units are quickly capitalized into property values. That the market consistently prices proximity to these sites/units implies that the Section 8 program is visible, not necessarily because households are identified as “subsidized,” but rather because there are some identifiable characteristics of Section 8 households or landlords with which they are associated.

Second, inasmuch as small numbers of occupied Section 8 units and, especially sites within 500 feet improve the price trends subsequent to occupancy, there is support for the notion that Section 8 landlords in Baltimore County use the enhanced rental revenues gained from Section 8 to reinvest in their properties (and perhaps manage them better) more than if Section 8 were not available, at least in stronger neighborhoods. An additional factor may be at play: prospective Section 8 landlords failing to meet HUD Housing Quality Standards (HQS) may be required to rehabilitate their building.[15] The fact that considerably more units in an area, not more

[15]This point was suggested to us at a briefing with Baltimore County housing officials. They also suggested that Housing Quality Inspectors also took note of housing code violators in the vicinity of Section 8 buildings, and reported such to the appropriate County department for enforcement. Were this enforcement to generate rehabilitation

sites, could continue to produce this positive result implies, however, that it is the revenue stream that may be more important for generating the apparent positive externality for the immediate neighborhood.

Third, being that the positive externality effect at close proximity to Section 8 occurs solely in higher valued, White census tracts, whereas negative externality effects were observed in more "vulnerable" tracts, there must be systematic, cross-tract differences in how the program operates or is perceived. These differences potentially include: (1) how effective the HQS inspections are in triggering renovations; (2) how well Section 8 landlords maintain and manage their properties; (3) how Section 8 households behave; (4) how strong the class/race prejudices of neighbors are; and (5) how likely neighbors and the market are to identify the Section 8 site.

Fourth, at all distances studied, the larger the number of sites or units which are currently occupied at time of sale, the greater the short-run negative impact on proximate home prices. Moreover, larger numbers of proximate occupied Section 8 units increased the prospects of long term negative price effects within 500 feet and 501-1,000 feet rings. There is thus support for (non-mutually exclusive) hypotheses that: (1) uncivil behaviors of the Section 8 households; (2) poor property maintenance or management by certain types of Section 8 landlords (such as those owning properties almost exclusively housing Section 8 tenants); or (3) class prejudices of segments of the home buying market (which may not be behaviorally validated by actual Section 8 sites) adversely affect property values. Inasmuch as the Baltimore County Section 8 program participants are racially diverse and we could discern no differences in impacts when White or Black Section 8 households moved into either White or Black neighborhoods, we cannot attribute the observed effects to racial prejudices.

Fifth, the strong negative interaction effect evinced for larger concentrations of Section 8 sites within a 500 feet radius suggests that there may be a micro-neighborhood stigmatization effect. That is, if a small area exceeds a threshold number of Section 8 sites it may take on the imprimatur of a "subsidized housing pocket," whereupon the market attaches a stigma and reduces its property valuations accordingly. This appears especially likely in "vulnerable" neighborhoods having lower and weakly appreciating property values or Black populations.

SUGGESTIONS FROM THE BALTIMORE COUNTY EXPERIENCE

---

activities from other property owners proximate tot he Section 8 building, the positive externality effect would be magnified, of course.

We emphasize at the outset that drawing firm policy conclusions from the study of only one Section 8 jurisdiction would be premature. Nevertheless, we believe that the logical implications of our findings for potential changes in the way dispersed subsidized housing programs are delivered should be noted explicitly so they can be more easily discussed by policy makers. Assuming that our findings have general applicability, our overarching implication is that comprehensive initiatives should be undertaken to direct Section 8 households away from vulnerable neighborhoods and into stronger ones.

Our results make it clear that, in higher-valued, appreciating, predominantly white-occupied neighborhoods, Section 8 can be a vehicle for generating positive externalities. If we are correct in our supposition that this effect is associated with improvements to the exterior of the rental building, policy makers may well seek to recruit into Section 8 landlords of deteriorating structures in otherwise-solid neighborhoods, and then require (perhaps with financial assistance) renovation as part of program participation. Even if such targeted landlord recruitment does not prove feasible, efforts should be intensified to recruit landlords in stronger neighborhoods. The Community Assistance Network, the mobility contractor for the MTO program in Baltimore, has already provided some useful precedents in this regard. Such initiatives may also require HUD to grant more exception rents in certain target communities, thereby allowing certificate and voucher payment formulas to exceed the standard Fair Market Rent limits.

Clear implications also follow from our findings that too many Section 8 households or sites clustered in a small area within vulnerable neighborhoods result in increasingly negative price impacts. If such deleterious clustering is to be avoided, policy makers would need to encourage or even mandate spatially related choices on the part of Section 8 tenants and landlords. Tenants would be induced or perhaps required to move into areas with stronger housing submarkets that have not already been significantly impacted by Section 8 (or other subsidized housing programs or poverty in general). For example, the MTO program experimental group in Baltimore (and in other sites) was required to meet one such non-impaction standard, of course, inasmuch as they were required to reside in tracts with less than 10 percent poverty rates. Analogously, landlords in vulnerable neighborhoods would be discouraged or forbidden from leasing units to additional section 8 households once the number in the given apartment and/or neighborhood reached some ceiling. Though the institution of such impaction standards would likely be opposed by landlords and some tenant rights groups, there is a longstanding precedent of analogous standards for all sorts of site-based housing assistance programs. Of course, such standards would likely require significant regulatory or even legislative changes at the federal level.

Whether Section 8 impaction standards can be promulgated or not, another implied policy response is devising ways to ensure that Section 8 sites are well-maintained and managed and

Section 8 tenants do not engage in disruptive or illegal behaviors in their residences. According to key informants we interviewed in conjunction with this project, the Housing Authority of Baltimore City has recently initiated several policies aimed at precisely these goals. These policies include stepped up maintenance checks on landlords and tenants, encouraging intensified lease violation reporting by landlords, and neighborhood service centers to deal with community complaints. The Community Assistance Network has engaged in several activities that are suggested by our results, including assessing tenants' readiness to move and providing appropriate referral and counseling services, and conducting post-move follow ups. During key informant interviews, the BCHO indicated to other researchers (Varady and Walker, 1998) and us that they were stricter in screening Section 8 tenants and in requiring Housing Quality Standard compliance than many other jurisdictions. Nevertheless, they were often frustrated by the regulatory limits placed on which screening criteria could be applied and by Section 8 landlords who proved weak property managers and lease enforcers. The Cincinnati housing authority represents one creative response to this issue. They are attempting to form an association of Section 8 landlords, with the goal of enhancing their skills in property management.[16]

[16]We are indebted to David Varady for bringing this to our attention.

CHAPTER 8
CONCLUSIONS AND POLICY RECOMMENDATIONS

Housing mobility programs are a major policy thrust both nationally and in many local areas. Much evidence suggests that such mobility programs, whether the subsidies be attached to sites or to tenants, can have more positive consequences for participants than residence in traditional public housing in concentrated poverty neighborhoods. The main question raised about mobility programs has concerned their social costs, typically framed in terms of their impacts on receiving neighborhoods.

This report has analyzed the issue of neighborhood impacts by reporting on a quantitative and qualitative reconnaissance into two sites where fears about neighborhood impacts of housing mobility programs led to major political controversies and subsequent program modifications. In Denver we investigated the 1989 reactions to the Dispersed Housing Program and in Baltimore County we investigated the 1994 reactions to the Section 8 and MTO programs.

Demographically and economically, these two study sites have significant differences. Baltimore County is more affluent, had higher home ownership rates, had a much smaller minority population, and the predominant and fastest-growing minority group was Blacks (instead of Hispanics in Denver). None of these differences are surprising, inasmuch as Baltimore County is a largely suburban area outside of the City of Baltimore whereas Denver is a large urban center. What is perhaps more surprising is that the two areas show several similarities. During the 1980s both had increasing median ages, percentages of female-headed households, and absolute numbers and relative percentages of minorities, whereas the White population declined absolutely and relatively. Both witnessed increasing economic polarization among Blacks, Hispanics, and Whites during the decade. In the five year period prior to their respective major political controversy, both metropolitan areas' housing markets saw declines in the real values of most homes. Finally, in both contexts the predominant participant in the housing mobility program was the most impoverished, fastest-growing racial/ethnic group in the area. Thus, despite their many differences, the geopolitical context in both situations demonstrated some crucial similarities that rendered the areas vulnerable to local political demagoguery.

Despite the programmatic differences between the local housing authorities, the reconnaissance into Denver and Baltimore County also revealed noteworthy similarities in the etiology of the political firestorms that engulfed them. In both, the motive of electoral victory spurred local politicians into whipping up opposition to the housing mobility program in "threatened" neighborhoods, based on fears of property value declines, unsavory tenantry and associated social problems, and the unfairness of assistance to the "undeserving poor." The housing mobility policy became the convenient vehicle for political opportunism. Both sites

experienced allegations of housing authority insensitivity to local concerns, and subsequent lack of preparation in dealing with a surprisingly vehement public reaction. Ironically, in both Denver and Baltimore County essentially similar programs had been operating without significant public attention for many years prior to the controversies, but subsequently their operations were significantly limited or changed as a result of the controversies.

These political controversies appear especially intriguing in light of our primary statistical findings. The general pattern in both Counties during the late 1980s through the mid-1990s was that 500-foot proximity to a Section 8 household or a dispersed acquisition/rehabilitation unit, respectively, was associated with *higher* single-family home prices, contrary to conventional wisdom. In Denver, the overall impacts of acquiring and rehabilitating dwellings for use a scattered-site public housing boosted single-family home prices up to a range of 2,000 feet, especially in highest-value, white-occupied areas. In Baltimore County, the impacts were much more complex and mixed, however, depending on distance and the number of Section 8 sites and occupied units, as well as neighborhood context. In certain densities and configurations, Section 8 sites first occupied in Baltimore County in the late 1980s through the mid-1990s had adverse impacts on single-family home sales prices within 2,000 feet. In both study sites, however, additional amounts of dispersed subsidized housing proved harmful to proximate home values if the neighborhood was already "vulnerable," as measured either by low property values or appreciation rates, high percentages of black residents, and/or high poverty rates.

These statistical findings hold important implications for the origins of the neighborhood impacts of dispersed subsidized housing, both positive and negative. In both Counties it is clear that, in the right configurations (rehabilitation in Denver and limited density of Section 8 sites and units in Baltimore County; high-value, predominantly white-occupied neighborhoods in both sites), subsidized sites can produce net positive externalities within a 500 foot radius. We believe that start-of-program renovations and (in Denver's case) improved property maintenance is likely responsible for this effect. In the case of the Denver results, it is manifest that the acquisition of vacant, often deteriorated properties by DHA and their subsequent rehabilitation and occupation (followed apparently by consistently good management, tenant screening, and property upkeep) were viewed by the neighborhood and the market as the replacement of a negative externality generator with a positive externality generator.

For Baltimore County Section 8 sites, the findings of negative impacts under certain conditions lend support for several causal hypotheses, including weak ongoing maintenance and management practices by participating landlords, class prejudices of the market, and uncivil behaviors of the Section 8 households themselves. Finally, the strong negative interaction effect evinced for larger concentrations of Baltimore County Section 8 sites within a 500 feet radius

suggests that there may be a threshold for a "neighborhood stigmatization" effect. That is, if a small area exceeds a threshold number of Section 8 sites it may take on the imprimatur of a "subsidized housing neighborhood," whereupon the market attaches a stigma and reduces its property assessments accordingly. It appears that in "vulnerable" neighborhoods in both Denver and Baltimore County the reality and symbolism of subsidized housing interact with anxieties of homeowners and the market to produce negative externalities.

A crucial, if incidental, finding of our statistical analyses was that, in both Denver and Baltimore County, dispersed subsidized sites systematically tended to be located in the lowest-valued, slowest-appreciating sectors within any given census tract. These patterns can possibly be traced to the behaviors of Section 8 landlords, Section 8 tenants, and the local housing authorities themselves, although we cannot disentangle these causes here. Perhaps of more import, however, are two implications from this finding. First, from a research perspective, it implies that statistical models of house price effects must be specified carefully to avoid erroneous conclusions. For example, if one merely does a cross-sectional comparison of prices near subsidized sites with those less proximate, one will tend to observe lower prices in the former area, but this cannot necessarily be traced to an independent impact from the subsidized sites. As another example, if one merely compares levels of prices before and after occupancy of a subsidized site, there will be a bias toward observing a lower post-occupancy level because of a pre-existing trend of depreciation in the area, not because of subsidized housing.

The second implication relates to politics and the public support than can be mustered for a dispersed subsidized housing program in the current context. Inasmuch as such housing currently has a tendency to be located in lower-valued, lower-appreciation neighborhoods, local residents and the market as a whole will more likely have their anxieties about the neighborhood's future abetted. Moreover, local residents and the market are unlikely to be able to make the subtle distinctions in causality that our statistical analyses permitted here. From their perspective, subsidized housing will be seen as highly correlated with neighborhood depreciation, and this probably is sufficient to attribute causation to the former. Of course, both our Denver and Baltimore County analysis showed that this attribution may be correct if the census tract in question is in a "vulnerable" market situation or the spatial concentration of the Baltimore County Section 8 sites becomes excessive.

Finally, consider our focus group finding that many residents in neighborhoods containing dispersed subsidized housing have a tendency to equate "bad landlords of bad properties housing bad tenants" with government housing subsidy programs. Although clearly not generalizable, this conventional wisdom erodes support for such initiatives and provides another "factual" justification for recipient neighborhood NIMBY-ism. In any event, the empirical and perceptual conditions surrounding the geography of dispersed subsidized housing appears primed for perpetual public

opposition by recipient neighborhoods, needing only the spark of political opportunism to set off an explosion.

It follows that a cornerstone for re-establishing a constituency for dispersed subsidized housing and defusing potential local opposition must be an attack on the stereotypes surrounding such housing. We believe that this attack requires changing both the objective conditions associated with subsidized housing and the public's perceptions of these conditions. This will necessitate comprehensive revisions in local housing authority dispersed subsidized housing program design and operations, including siting, management, tenant selection and monitoring, dwelling monitoring, and public relations. Moreover, it will requires a realignment of dispersed subsidized housing policy within the larger realm of local housing policies.

Again, we caution that our results must be viewed as tentative, and do not necessarily apply to other subsidized housing programs in other locales. Nevertheless, we think it valuable to discuss what our findings from both sites imply for policy were they to prove generally applicable after further study and replication. In this spirit we offer the following recommendations for those who design and administer dispersed subsidized housing policies.

Match Subsidy to Dwelling Renovations. To the extent feasible, site-based dispersed subsidized housing programs should attempt to acquire and rehabilitate vacant, poorly maintained properties, given the positive externalities associated with such activities evinced in Denver. Of course, as the efforts of DHA make manifest, the conscientious management and maintenance of such properties is required if this positive effect is to persist. Tenant-based dispersed housing programs should seek to recruit owners of deteriorated properties in otherwise-strong neighborhoods and then apply incentives for the rehabilitation of said properties prior to qualification for Section 8 lease-up. No landlords should be allowed to participate in the Section 8 program without meeting stringent maintenance codes, both at initial lease-up and on an ongoing basis. The Baltimore County experience suggests some efficacy from the initial Housing Quality Standard inspections.

Establish Impaction Standards. Dispersed subsidized households or dwelling sites should not be permitted in "vulnerable" neighborhoods and concentrations of Section 8 units and, especially, sites should not be permitted in any neighborhood. This suggests that housing authorities operating Section 8 programs may wish to develop effective mobility counseling programs that disperse tenants widely (such as CAN's in Baltimore). Failing this, policy makers may wish to consider restricting additional Section 8 certificate holders from occupying units in particular neighborhoods, much in the way MTO does. Analogous sorts of impaction standards should be enforced to prevent individual landlords from over-concentrating Section 8 households

within a single apartment complex. Developers of scattered-site public housing units similarly should be restricted in which neighborhoods they can develop units and how many they can develop there, similar in principle to the longstanding HUD impaction standards for privately owned, subsidized complexes or to those imposed on DHA by the Denver City Council. In some contexts, the deconcentration of pre-existing clusters of subsidized and public housing that give rise to "vulnerable" neighborhoods should be considered, such as the "de-densification" programs for conventional public housing sites in Denver.

Screen and Monitor Tenants. Only tenants that pass rigorous screening of past rental performance (including housekeeping, behavior, and financial responsibility) should be permitted to participate in dispersed housing programs; otherwise, public stereotypes that "subsidized tenants are bad" cannot be disconfirmed. Once subsidized tenants are in residence, local housing authorities should ensure that the tenants obey all the financial and behavioral conditions of the lease, and are swiftly evicted once these conditions are violated. For instance, DHA claims that vigilant screening and lease enforcement results in fewer than five percent of their dispersed tenants creating any problems.

Monitor Dwellings and Landlords. Once subsidized tenants are in residence, local housing authorities must ensure that the property is maintained at a level superior to the general upkeep of the neighborhood, to confound public stereotypes and make the unit less likely to be identified as subsidized. In the case of Section 8, this means ongoing inspections of private apartments to guarantee adequate exterior and interior maintenance. In the case of scattered-site public housing, it means the conscientious investment of housing authority resources in building upkeep and semi-annual inspections, as is done in Denver.

Expand Housing Code Enforcement in the Private Rental Sector. Local housing authorities should lobby for enhanced enforcement of municipal and state housing codes as they apply to private, unsubsidized rental housing. Homeowners clearly worry over absentee landlords who poorly manage and maintain their properties, and this worry apparently spills over to stigmatize local housing authorities as well. By reducing the specter of the "bad absentee landlord" through vigilant code enforcement, perhaps coupled with grants or low-interest loans to finance repairs for the lowest-rent rental stock that may be found in violation, this source of homeowner opposition to rental housing may be mitigated.

Beyond the aforementioned programmatic and operational changes, however, our findings lead us to recommend initiatives aimed at altering the *perceptions* of dispersed subsidized housing programs held by residents in potential recipient neighborhoods and the public at large. Although changing the functional reality of dispersed housing programs may be a necessary condition for

changing public perceptions and opposition, it may not be sufficient. We recommend two sets of initiatives in this regard.

Collaboration With Neighborhood Groups. The lessons of 1989 in Denver and 1994 in Baltimore County demonstrate how a campaign of misinformation and fear-mongering can mobilize powerful forces in opposition to dispersed housing. We thus recommend that local housing authorities develop constructive, ongoing relationships with neighborhood groups, homeowner associations, and other local opinion leaders. For example, it now appears that DHA has learned to work more openly with neighborhoods receiving dispersed sites, demonstrating DHA's understanding of the neighborhood's concerns and their commitment to avoiding "problem properties." The fact that none of our focus group participants cited DHA as a source of their neighborhood's problems, plus the good public relations currently enjoyed by DHA as evinced from multiple sources, should be grounds for optimism in light of the vitriol of a decade ago. By contrast,
the ill repute in which the Housing Authority of Baltimore City is widely held throughout Baltimore County provides fertile ground for suspicion and fear of the Section 8 program as a vehicle for the "invasion of the City."

Burnish the Image of Dispersed Housing. We have suggestive evidence that well-maintained, well-managed buildings housing well-behaved tenants are ruled out as subsidized housing in the public's perceptual scheme. Local housing authorities should undertake a concerted, ongoing public relations campaign to convince the public that dispersed housing is good for neighborhoods and offers appropriate aid to worthy low-income households. Many developers of supportive housing, for example, offer tours of their operating developments to leaders in neighborhoods where new developments are being proposed. The DHA blanketed the media with information on successful dispersed sites, though it only did so as a reaction once the 1989 furor had erupted. The resentment against the "undeserving poor" we observed might well be mollified were local housing authorities effective in providing poignant vignettes of past subsidized dispersed households (preferably, with a variety of races and ethnicities portrayed) who had moved to economic independence. Finally, we believe that local and federal policy makers should seriously consider renaming the set of dispersed housing programs. Inasmuch as "public housing" and "Section 8" currently carry a stigma, the aforementioned programmatic improvements face an uphill struggle to alter public opinion. A new symbolic umbrella under which these reforms could flourish might yield dramatically better public relations payoffs.

REFERENCES

Ards, Sheila. "The Role of Housing Vouchers in Baltimore City, Maryland." *The Review of Black Political Economy* 19 (1991): pp. 111-123.

Bailey, K. "City profile of tenants under fire." *The Rocky Mountain News* (May 23, 1990): p. 7.

Baltimore County. *Comprehensive Housing Affordability Strategy (CHAS)*. Baltimore, MD: Baltimore County Department of Community Development, 1993.

Bauman, John, Norman Hummon and Edward Mulller. "Public Housing, Isolation, and the Urban Underclass: Philadelphia's Richard Allen Homes, 1941-1965." *Journal of Urban History* 17 (1991): pp. 264-292.

Bradburn, Norman, Sudman, Seymour, and Gockel, Galen. *Side by Side: Integrated Neighborhoods in America.* Chicago: Quadrangle Books,1971.

Briggs, Xavier de Souza, Joe T. Darden, and Angela Aidala. "In the Wake of Desegregation: Early Impacts of Scattered-Site Public Housing on Neighborhoods in Yonkers, NY." *Journal of the American Planning Association* 65 (1999): pp. 27-49.

Brooks, Mary, et. al. *A Study of Interjurisdictional Housing Mobility Programs*. New York: Metropolitan Action Institute, 1982.

Bovard, James. "Suburban Guerrilla." *American Spectator* (September 1994a): pp. 26-32.

_____. "Clinton's Wrecking Ball for the Suburbs." *Wall Street Journal* (August 4, 1994b).

Burchell, Richard, David Listokin and Arlene Pashman. *Regional Housing Opportunities for Lower Income Households: A Resource Guide to Affordable Housing and Regional Mobility Strategies*. Washington, DC:, U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 1994.

Can, Ayse. *Spatial Segmentation in Urban House Prices: Alternative Approaches.* Unpublished working paper of the Policy, Research, Evaluation, and Training Division, Fannie Mae Foundation, Washington, D.C., January 1997.

Can, Ayse and Issac Megbolugbe. "Spatial Dependence and House Price Index Construction." *Journal of Real Estate and Economics*, 14 (1997): pp. 203-222.

Carnahan, Ann. "Homeowners Protest Public-Housing Plan." *Rocky Mountain News* (June 15, 1989): p. 26.

Carson, Larry. "City Vows to Proceed on Housing." *Baltimore Sun* (September 3, 1994).

_____. "City Unqualified for MTO, Hayden Says." *Baltimore Sun* (September 23, 1994b).

Cisneros, Henry. *Regionalism: The New Geography of Opportunity*. Washington, DC: U.S. Department of Housing and Urban Development, 1995.

Cooley, T. and S. LeRoy. "Atheoretical Macroeconomics: A Critique." *Journal of Monetary Economics*, 16, (1985): pp. 283-308.

Coulton, Claudia and Shanta Pandey. "Geographic Concentration of Poverty and the Risk to Children in Urban Neighborhoods." *American Behavioral Scientist* 35 (1992): pp. 238-257.

Cox, Kevin. "Housing Tenure and Neighborhood Activism." *Urban Affairs Quarterly* 18 (1982): pp. 107-129.

Crane, Jonathan. "The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing." *American Journal of Sociology* 96 (1991): pp. 1226-1259.

Cummings, Paul M., and John D. Landis. *Relationships between Affordable Housing Developments and Neighboring Property Values*. Working Paper 599, September: Institute of Urban and Regional Development. University of California at Berkeley, 1993.

Datcher, Linda. "Effects of Community and Family Background on Achievement." *Review of Economics and Statistics* 64 (1982): pp. 32-41.

Davis, Mary. "The Gautreaux Assisted Housing Program," in *Housing Markets and Residential Mobility.* Edited by Thomas Kingsley and Margery Austin Turner. Washington, DC: The Urban Institute, 1993: pp. 243-253.

DeSalvo, Joseph. "Neighborhood Upgrading Effects of Middle Income Housing Projects in New York City." *Journal of Urban Economics* 1 (1974): pp. 269-277.

DeBernardo, Henry. *Analysis of HUD's Regional Housing Mobility Program*. Unpublished report, Philadelphia, PA, 1979.

Edkins, Laura. *The Controversy Over Moving to Opportunity for Fair Housing*. Unpublished Masters Thesis for The George Washington University. Washington, DC, 1996.

Evans, Judith. "In Baltimore, Leaving Behind A City's Crime." *Washington Post* (March 23, 1996): p. E1.

Feins, Judith, Mary Joel Holin, and Anthony Phipps. *Moving to Opportunity for Fair Housing Demonstration: Program Operation Manual*. Washington, DC: U.S. Department of Housing and Urban Development, 1994.

Galster, George, and Yolonda Williams. "Dwellings for the Severely Mentally Disabled and Neighborhood Property Values: The Details Matter." *Land Economics* 70 (1994): pp. 466-477.

Galster, George. "Denver PHA Dispersal Plan Controversy." *Trends in Housing* 28 (1989): pp. 1,8.

_____ . "White Flight from Integrated Neighborhoods." *Urban Studies* 27 (1990): pp. 385-399.

Gillies, F. "Housing inaction scored." *The Denver Post* (November 16, 1972): pp. 35, 42.

Goering, John, Abdollah Haghighi, Helene Stebbins, and Michael Siewert. *Promoting Housing Choice in HUD's Rental Assistance Programs.* Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 1995.

Goering, John and Modibo Coulibably. "Investigating Public Housing Segregation: Conceptual an Methodological Issues." *Urban Affairs Quarterly* 25 (1989): pp. 265-297.

Goetz, Edward, Lam, Hin Kin, and Heitlinger, Anne. *There Goes the Neighborhood? The Impact of Subsidized Multi-Family Housing on Urban Neighborhoods*. Minneapolis: Center for Urban and Regional Affairs, 1996.

Gottlieb, Alan. "Panel Split on Public Housing Dispersal." *Denver Post* (May 16, 1989a): pp. 1B, 3B.

_____. "Dissenting Report Opposes Plan." *Denver Post* (June 13, 1989b): p. 8A.

Gray, Robert and Stephen Tursky. "Location and Racial/Ethnic Occupancy Patterns for HUD Subsidized Family Housing in Ten Metropolitan Areas," in *Housing Desegregation and Federal Policy*. Edited by John Goering. Chapel Hill, NC: University of North Carolina Press, 1986: pp. 235-252.

Guy, Donald C., John L. Hyson, and Stephen R. Ruth. "The Effect of Subsidized Housing on Values of Adjacent Housing." *AREUEA Journal* 13 (1985): pp. 378-387.

Halvorsen, Robert and Henry Pollakowski. "Choice of Functional Form of Hedonic Price Equations." *Journal of Urban Economics* 10 (1981): pp. 37-49.

Hartung, John and Jeffrey Henig. "Housing Vouchers and Certificates as a Vehicle For Deconcentrating the Poor: Evidence from the Washington, D.C., Metropolitan Area." *Urban Affairs Review* 32 (1997): pp. 403-419.

Hayes, Thomas J. and Carol B. Tatham. *Focus Group Interviews: A Reader.* Chicago: American Marketing Association, 1989.

Hendren, John. "Judge Approves Plan To Relocate 2,000 Black Families To White Suburbs." Associated Press release on Internet (June 26, 1996).

Hersl, Jerry. "Move to Opportunity? Please Explain." *The Dundalk Eagle* (May 12, 1994).

Hogan, James. *Scattered-Site Housing: Characteristics and Consequences*. Washington DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 1996.

Housing Authority of Baltimore City. *MTO Demonstration Program Application*. Baltimore, MD: Housing Authority of Baltimore City, 1993.

Husock, Howard. "Voucher Plan for Housing: A Trojan Horse." *Wall Street Journal* (December 12, 1994): p. A14.

Johnston, D. "Low-income housing plan ready to go." *The Denver Post* (November 20, 1969): p. 37.

Krueger, Richard A. *Focus Groups: A Practical Guide for Applied Research.* 2nd ed. Thousand Oaks, CA: Sage, 1994.

Leavitt, Jacqueline and Anastasia Loukaitou-Sideris. "A Decent Home and A Suitable Environment: Dilemmas of Public Housing Residents in Los Angeles." *Journal of Architectural and Planning Research* 12 (1995): pp. 221-239.

Lee, Chang-Moo, Culhane, Dennis, and Wachter, Susan. "The Heterogeneous Impacts of Assisted Housing on Property Values," Philadelphia, PA: Wharton School of University of Pennsylvania; report to HUD, forthcoming.

Lucas, Wendy. *Baltimore County's Eastern Sector: Rental Housing Market Study.* Boston, MA: Economic Market Analysis Division, Massachusetts State Office, U.S. Department of Housing and Urban Development, 1997.

Ludwig, Jens and Simeon Stolzberg. "HUD's Moving To Opportunity Demonstration: Uncertain Benefits, Unlikely Costs, Unfortunate Politics." *The Georgetown Public Policy Review* 1 (1995): pp. 25-37.

Lyons, Robert F. and Loveridge, Scott. *An Hedonic Estimation of the Effect of Federally Subsidized Housing on Nearby Residential Property Values.* Staff Paper P93-6, January. St. Paul, MN: Department of Agriculture and Applied Economics, University of Minnesota, 1993.

Mariano, Ann. "Hill Panel Halts Plan To Move Poor Families." *Washington Post* (September 3, 1994).

Martinez, Marco. *The Effects of Subsidized and Affordable Housing on Property Values: A Survey of Research*. Sacramento, CA: Department of Housing and Community Development, State of California, 1988.

Massey, Douglas and Nancy Denton. *American Apartheid: Segregation and the Making of the Underclass.* Cambridge, MA: Harvard University Press, 1993.

Massey Douglas, Andrew Gross and Mitchell Eggers. "Segregation, the Concentration of Poverty, and the Life Chances of Individuals." *Social Science Research* 20 (1991): pp. 397-420.

Massey, Douglas and Shawn Kanaiaupuni. "Public Housing, the Concentration of Poverty, and the Life Chances of Individuals." *Social Science Quarterly* 74 (1993): pp. 109-123.

Matulef, Mark. "The Effects of Subsidized Housing on Property Values." *Journal of Housing* (1988): pp. 286-287.

McDougall, Harold. *Black Baltimore: A New Theory of Community*. Philadelphia, PA: Temple University Press, 1993.

McFall, Trudy. "Voluntary Agreements Among PHAs Can Increase Low-Income Housing Choices." *Journal of Housing* 38 (1981): pp. 251-255.

McGrew, Jane Lang. "Resistance to Change Continues to Restrict Public Housing Choices." *Journal of Housing* (1981): pp. 375-381.

Mercurio, John. "HUD Offers Limit on Suburban Shift." *Washington Times* (December 14, 1995).

Montgomery, Lori. "U.S. Plan to Spread Out Poor Creates Storm." *Detroit Free Press*, (July 14, 1994).

Morehead, John. "Denver Council Okays Low-Rent Housing." *Denver Post* (May 14, 1969): p. 12.

Muellbauer, John. "Household Production Theory, Quality, and the 'Hedonic Technique'." *American Economic Review* 64 (1974): pp. 977-994.

Nenno, Mary. "Changes and Challenges in Affordable Housing and Urban Development," in *Affordable Housing and Urban Redevelopment in the United States*. Edited by Willem van Vliet, pp. 1-22. Thousand Oaks, CA: Sage Publications, 1997.

Nichols, Peter and Craig McCoy. "Section 8: A racist rallying cry?" *Philadelphia Inquirer* (November 16, 1997): pp. B1, B7-8.

Nourse, Hugh. "The Effect of Public Housing on Property Values in St. Louis." *Land Economics* 39 (1963): pp. 433-441.

Odland, John. *Spatial Autocorrelation*. Newbury Park, CA: Sage Publications, 1988.

Peterson, George and Kale Williams. *Housing Mobility: What Has it Accomplished and What is its Promise?* Washington, DC: The Urban Institute, 1995.

Pindyck, Robert and Daniel Rubinfeld. *Econometric & Models: Economic Forecasts*. New York, NY: McGraw-Hill, 1981.

Polikoff, Alexander. *Housing Policy and Urban Poverty*. Washington, DC: Center for Housing Policy, 1994.

Puryear, Vivian. *The Effects of Scattered-Site Public Housing on Residential Property Values.* Unpublished Masters Thesis, University of North Carolina at Charlotte, 1989.

Rabiega, William A., Ta-Win Lin, and Linda M. Robinson. 1984. "The Property Values Impacts of Public Housing Projects in Low and Moderate Density Residential Neighborhoods." *Land Economic* 60 (1984): pp. 174-179.

Rainwater, Lee. *Behind Ghetto Walls*. Chicago, IL: Aldine-Atheron Inc., 1970.

Rohe, William and Stegman, Michael. "The Impact of Homeownership on the Social and Political Involvement of Low Income People." *Urban Affairs Quarterly*, 30, no. 1 (1994): pp. 152-172.

Rosen, Sherwin. "Hedonic Prices and Implicit Markets." *Journal of Political Economy* 82 (1974): pp. 34-55.

Rosenbaum, James. "Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program." *Housing Policy Debate*, 6 (1995): pp. 231-270.

Rothenberg, Jerome, George Galster, Richard Butler, and John Pitkin. *The Maze of Urban Housing Markets: Theory, Evidence and Policy*. Chicago: University of Chicago Press, 1991.

Rusk, David. *Baltimore Unbound:A Strategy for Regional Renewal*. Baltimore, MD: Johns Hopkins, 1995.

Santiago, Anna M. "Trends in Black and Latino Segregation in the Post-Fair Housing Era: Implications for Housing Policy." *La Raza Law Journal* 9 (1996): pp. 131-153.

Schafer, Robert. "The Effect of BMIR Housing on Property Values." *Land Economics* 48 (1972): pp. 282-286.

Schill, Michael. "Deconcentrating the Inner City Poor." *Chicago-Kent Law Review* 67 (1992): pp. 795-853.

Schill, Michael and Susan Wachter. "The Spatial Bias of Federal Housing Law and Policy: Concentrated Poverty in Urban America." *University of Pennsylvania Law Review* 143 (1995): pp. 1285-1341.

Simpson, George, and J. Milton Yinger. *Racial and Cultural Minorities: An Analysis of Prejudice and Discrimination*. 4th ed. New York: Harper & Row, 1972.

Stewart, David W. and Prem N. Shamdasani. *Focus Groups: Theory and Practice.* Newbury Park, CA: Sage Publications, 1990.

Truslow, Jonathan. *Final Report: Regional Housing Mobility Program.* Boston, MA: Metropolitan Area Planning Council, 1982.

Turner, Margery A. "Moving Out of Poverty: Expanding Mobility and Choice through Tenant-Based Housing Assistance." *Housing Policy Debate* 9 (1998): pp. 373-393.

U.S. Department of Housing and Urban Development (HUD). *Expanding Housing Choices for HUD-Assisted Families.* Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 1996.

Varady, David and Carol Walker. 1998. *Case Studies of Vouchering-Out Assisted Properties*. Rutgers, NJ: Center for Urban Policy Research, Report to HUD.

Waldron, Thomas. "Parading Politicians Hear Critics of Housing Program." *Baltimore Sun*, (September 12, 1994).

Warren, Elizabeth, Aduddell, Robert M., and Tatalovich, Raymond. *The Impact of Subsidized Housing on Property Values: A Two-pronged Analysis of Chicago an Cook County Suburbs.* Urban Insight Series no. 13. Chicago, Illinois: Center for Urban Policy, Loyola University, August 1983.

White, Halbert. "A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity." *Econometrica* 48 (1980): pp. 817-838.

William L. Berry & Co., Inc. *A Comparison of the Appreciation Rates of Homes in Montgomery County Communities With and Without Moderately Priced Dwelling Units (MPDUs).* Bethesda, MD: Author, 1988.

Annex A

List of Interview Participants and Discussion Guides for Community and Policy Reconnaissance

List of Interview Participants--Denver

Bobby Anderson, Director of Operations
Denver Housing Authority

Terri Bailey, Director of Research
Piton Foundation

Veronica Barela, Executive Director
NEWSED Community Development Corporation

Esther Campbell, Dispersed Housing Manager
Denver Housing Authority

Salvatore Carpio, Executive Director
Denver Housing Authority

Chris Carriere, Dispersed Housing Manager
Denver Housing Authority

Vivian Curtis
Denver Housing Authority

Hon. Hiawatha Davis, City Council Member
(former member of DHA Board of Commissioners)

Gina del Castillo
Denver Housing Authority

Jim Di Paolo, Director of Finance
Denver Housing Authority

Alan Gottleib, Reporter
Denver Post

Maria Guajardo Lucero, Executive Director
Latin American Research and Service Agency

Michelle Harper, Chief of Staff
Denver Housing Authority

Len Henry, Director of Planning
Denver Housing Authority

Robert Kelly, Occupancy Supervisor
Denver Housing Authority

Hon. Deborah Ortega, City Council Member

Marlene Ospino, Realtor
Denver Housing Authority

Rick Padilla, Director
Neighborhood Reinvestment Corporation and member of the 1989 Citizens Task Force.

Robert Rosenheim, DURA Board of Commissioners
(former Regional Director of HUD)

Tina Segura, Director of Resident and Community Services
Denver Housing Authority

Fr. Joseph Sullivan, Co-Founder of Souwthwest Improvement Council and member of the 1989 Citizens Task Force

List of Interview Participants--Baltimore

Carol Beck, Program Officer
The Abell Foundation

Lois Cramer, Administrator
Baltimore County Housing Office

Ruth Crystal, Director
MTO Program
Community Assistance Network

The Honorable Louis DePazzo
Baltimore County Council Seventh District

Robert Embry, President
The Abell Foundation

Mary Emerick, Southeast Sector Coordinator
Baltimore County Office of Community Conservation

Marilyn Ebaugh, Program Manager
Baltimore County Housing Office

David Fields, Director
Baltimore County Office of Community Conservation

Robert Gajdys, Executive Director
Community Assistance Network

The Honorable Vincent J. Gardenia
Baltimore County Council Fifth District

Penelope Johnson, Central Sector Coodinator
Baltimore County Office of Community Conservation

James Kelly, Economist
U.S. Department of Housing and Urban Development
Maryland State Office

Stephen Lafferty, Manager
Baltimore County Office of Community Conservation
Neighborhood Revitalization

Gary Markowski, Director
Rental and Assisted Housing
Housing Authority of Baltimore City

Margery Austin Turner, Senior Fellow
The Urban Institute
(former Deputy Assistant Secretary for Policy Development and Research
U.S. Department of Housing and Urban Development)

This document is provided as an example of the types of questions a researcher might cover with a respondent. Exchanges are considered free-flowing dialogues.

RESEARCH DESIGN: GENERAL DISCUSSION GUIDE[1]

Date _____
Interviewer Initials _____

Respondent _____

Title _____

Organization _____

Address _____

Telephone _____

Thank you for agreeing to speak with us today.

As you know, the U.S. Department of Housing and Urban Development has requested that the Urban Institute conduct a study evaluating property value impacts of dispersed housing subsidy programs in Baltimore City and Baltimore County. The overall assessment will focus on both qualitative neighborhood characteristics and quantitative value changes. Our discussion today is part of the qualitative effort and will focus on the economic, demographic and political landscape in the Baltimore area and interactions with the Moving to Opportunity Program.

- Let's begin by discussing how your organization is related to community development, housing, neighborhoods or the Moving to Opportunity program? (tailor for respondent and level of obviousness)
- What is your role in the organization?
- Was your organization involved with community action, either pro or con, regarding the Moving to Opportunity Program?
- How did the group respond to MTO?
- What is it about the cultural or historical atmosphere or the mission of the organization that prompted this response?

[1]These Baltimore County Discussion Guides are provided to illustrate the types of questions that were asked during the Policy Reconnaissance. Guides similar to these were used for the Denver interviews, with appropriate substitutions of locations and program names.

- Were there economic or political dimensions to the organization's response? What were these?

I would also like to discuss your impressions about neighborhood impacts and the MTO program.

- What do you think the neighborhood impacts from MTO have been, if any?
  How meaningful and long lasting have these impacts been?

- If respondent believes it is too early to detect impacts from MTO,
  What do you think the neighborhood impacts from MTO will be?

- Is there something about the history or culture of the neighborhood that contributed to (or will contribute to) this affect?

- Do you think the impacts were/are predictable?

- Have these impacts changed over time? Why?

- Were there any explicit considerations by policymakers of potential neighborhood impacts?
  If yes, what were these considerations?
  If no, why do you think policymakers did not consider neighborhood impacts?

- If respondent perceives a negative impact,
  Do you have suggestions about how policy might be revised to minimize negative outcomes in future?

- If respondent perceives a positive impact,
  Do you have suggestions about how policy might be used to encourage such benefits?

- Is there anything else you think we need to know to understand the economic, demographic, and political landscape in Baltimore to be able to understand reactions to and impacts of the MTO program?

This document is provided as an example of the types of questions a researcher might cover with a respondent. Exchanges are considered free-flowing dialogues.

RESEARCH DESIGN: POLICY IMPLEMENTATION DISCUSSION GUIDE

Date _____
Interviewer Initials _____

Respondent _____

Title _____

Organization _____

Address _____

Telephone _____

Thank you for agreeing to speak with us today.

As you know, the U.S. Department of Housing and Urban Development has requested that the Urban Institute conduct a study evaluating property value impacts of dispersed housing subsidy programs in Baltimore City and Baltimore County. This assessment will focus on both qualitative neighborhood characteristics and quantitative value changes. Our discussion today is part of the qualitative effort and will focus on the economic, demographic and political landscape in the Baltimore area and interactions with the Moving to Opportunity Program.

- Let's begin by discussing how your organization is related to community development, housing, mobility issues, neighborhoods or the MTO program? (tailor for respondent and level of obviousness)
- What is your role in the organization?
- Could you describe the details of the policy implementation process for MTO?

I would like to talk specifically about how the program was designed and is operated in Baltimore.

- Tell me about the tenant selection process
- How is site selection accomplished? What guidelines are in place for site selection and who prepared these procedures?
- Describe the counseling component of the Baltimore MTO program.

The cultural, political, and economic landscape in Baltimore is important context for us in understanding local activity. I would like to discuss what you think contributed to the local reception of the Moving to Opportunity program in Baltimore. We'll also talk about neighborhood impacts and the program.

- How would you characterize the response to the Moving to Opportunity program?

- Did the response differ between neighborhoods or areas of the County?

- What is it about the cultural or historical atmosphere of Baltimore County that prompted this response (or prompted the different responses)?

- Were there economic or political dimensions to the response? What were these? (If appropriate, why did they differ in each area?)

- What do you think the neighborhood impacts from MTO have been, if any?
  How meaningful and long lasting have these impacts been?

  If respondent believes it is too early to detect impacts from MTO,
  What do you think the neighborhood impacts from MTO will be? Have you seen preliminary signs of these impacts?

- Do you think the impacts were/are predictable?

- Were there any explicit considerations by policymakers of potential neighborhood impacts?
  If yes, what were these considerations?
  If no, why do you think policymakers did not consider neighborhood impacts?

- If respondent perceives a negative impact,
  Do you have suggestions about how policy might be revised to minimize negative outcomes in future?

- If respondent perceives a positive impact,
  Do you have suggestions about how policy might be used to encourage such benefits?

- Is there anything else you think we need to know to understand the economic, demographic, and political landscape in Baltimore and their relation to the MTO program?

This document is provided as an example of the types of questions a researcher might cover with a respondent. Exchanges are considered free-flowing dialogues.

BACKGROUND DISCUSSION GUIDE

Date _____
Interviewer Initials _____

Respondent _____

Title _____

Organization _____

Address _____

Telephone _____

Thank you for agreeing to speak with us today.

As you know, the U.S. Department of Housing and Urban Development has requested that the Urban Institute conduct a study evaluating property value impacts of dispersed housing subsidy programs in Baltimore City and Baltimore County. This assessment will focus on both qualitative neighborhood characteristics and quantitative value changes. Our discussion today is part of the qualitative effort and will focus on the economic, demographic and political landscape in the Baltimore area and interactions with the Moving to Opportunity Program.

- Let's begin by discussing how your organization is related to neighborhoods, mobility issues or the MTO program? (tailor for respondent and level of obviousness)
- What is the history of your organization and mobility issues in Baltimore?
- What is the role of your organization in the local policy process?
- What is your role in the organization?

CULTURAL, POLITICAL, ECONOMIC LANDSCAPE

The cultural, political, and economic landscape in Baltimore is important context for us in understanding local activity. I would like to discuss what you think contributed to the local reception of the Moving to Opportunity program (and other mobility programs) in Baltimore.

- How would you characterize the response to the Moving to Opportunity and other mobility programs?

- Did the response differ between neighborhoods or areas of the County?

- What is it about the cultural or historical atmosphere of Baltimore County that prompted this response (or prompted the different responses)?

- Were there economic or political dimensions to the response? What were these? (If appropriate, why did they differ in each area?)

NEIGHBORHOOD IMPACTS

- What do you think the neighborhood impacts from MTO (or other mobility programs) have been, if any?
  How meaningful and long lasting have these impacts been?

  If respondent believes it is too early to detect impacts from MTO,
  What do you think the neighborhood impacts from MTO will be? Have you seen preliminary signs of these impacts?

- Do you think the impacts were/are predictable?

- Were there any explicit considerations by policymakers of potential neighborhood impacts?
  If yes, what were these considerations?
  If no, why do you think policymakers did not consider neighborhood impacts?

- If respondent perceives a negative impact,
  Do you have suggestions about how policy might be revised to minimize negative outcomes in future?

- If respondent perceives a positive impact,
  Do you have suggestions about how policy might be used to encourage such benefits?

SUMMARY

- Is there anything else you think we need to know to understand the economic, demographic, and political landscape in Baltimore and their relation to the MTO program?

- If we want to interview people to find out about the history, operation, reception and impact of MTO, who should be speak to at both the city and county?

Annex B

Coding Scheme for Property Value Model Impact Variables

Coding Scheme for Property Value Model Impact Variables

Define distance rings of 0-500 ft, 501-1000 ft, and 1001-2000 ft. Let $A_i = \{A_1, A_2, \ldots\}$ be the set of subsidized housing sites for which we want to measure impacts. For the aggregated models, A_i is a subset of all sites that were first occupied at least two years after the earliest date in the home price sales data (*i.e.,* 1991 for Baltimore Count and 1989 for Denver) and were continuously occupied through the 3rd Qtr. 1997. The selection of A sites is further narrowed to those that have sufficient numbers of pre and post sales observations within 2000 feet. For the disaggregated models, A_i consists of a single site. Let $B = \{B_1, B_2, \ldots\}$ be the set of all remaining subsidized housing sites not in A_i.

Given a house sale X and the sets A_i and B_i, let dXA_i be the distance (ring) from A_i to X and dXB_i be the distance (ring) from B_i to X. Also define $DPre\_dXA_i$ as a pre flag for the distance from site A_i to X, $DPost\_dXA_i$ as a post flag for the distance from site A_i to X, and $DPost\_dXB_i$ as a post flag for the distance from site B_i to X. These pre and post flags are coded as follows:

> For each A_i, we code $DPre\_dXA_i = 1$ if and only if (i) X occurs pre A_i, (ii) there exists no other A_i such that $dXA_i \leq 2000$ and X occurs in a quarter when A_i is occupied (*i.e.*, post), and (iii) there exists no B_i such that $dXB_i \leq 2000$ and X occurs in a quarter when B_i is occupied (*i.e.*, post).
>
> For each A_i, we code $DPost\_dXA_i = 1$ if and only if X occurs post A_i.
>
> For each B_i, we code $DPost\_dXB_i = 1$ if and only if (i) X occurs in a quarter whep B is occupied and (ii) there exists some A_i such that X occurs post A_i and $dXA_i \leq 2000$.
>
> We delete sale X if there exists some A_i such that X occurs pre A_i and $dXA_i \leq 2000$ and some B_i such that X occurs in a quarter when B_i is occupied and $dXB_i \leq 2000$.
>
> We delete sale X if there exists some B_i such that X occurs while B_i is occupied and $dXB_i \leq 2000$ and there exists no A_i such that $dXA_i \leq 2000$.

To obtain the aggregated site impact variables, we add together the dummies $DPost\_dXA_i$ and $DPost\_dXB_i$ to get Post500, Post1k, and Post2k, and we add together the dummies Pre_dXA_i to get Pre500, Prelk, and Pre2k.

To create the impact variables for unit counts, we proceed as described above but set DPost_ and DPre_ equal to the number of occupied units at the site instead of to 1.

To create the trend variables, we proceed as follows:

> Given a distance ring d:
>
> If Post–d = 0, then TRPost_d = 0

If Post–d > 0, then TRPost_d = 1 if sale occured in 1st Qtr. after first site in distance ring was occupied, = 2 if sale occured in 2nd Qtr. after first site in distance ring was occupied, etc.

Use a similar approach for TRPre_d.

Annex C
Descriptive Statistics

Table C.1
Occupancy Statistics for Analysis Sites in Denver, 1990-1996

Average Move-In Date for First Household at Site	2nd Quarter 1993
Number of Occupied Sites	
1990	1
1992	30
1994	77
1996	92
Average Number of HHs Per Site	
1990	1.0
1992	1.0
1994	1.1
1996	1.3

Table C.2
Occupancy Statistics for Analysis Sites in Baltimore County, 1991-1997

Number of Sites	72
Maximum Number of Section 8 HHs at a Site	Sites
1	56
2	14
3	1
4	1
Average Move-In Date for First Household at Site	3rd Quarter 1994
Average Number of Sec. 8 HHs Per Site	
1991	1.00
1994	1.11
1997	1.08

Table C.3 - Descriptive Statistics on Structural, Spatial, Quarter, and Impact Variables
Denver Aggregate Models

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
DBATH1	Has 1/1.5 bathrooms	43361	0.4497359	0.4974728	0	1.0000000
DBATH2	Has 2/2.5 bathrooms	43361	0.4383893	0.4961953	0	1.0000000
DBATH3	Has 3+ bathrooms	43361	0.1113212	0.3145331	0	1.0000000
DBRICK	Brick ext. wall	43361	0.5131570	0.4998326	0	1.0000000
DCONCRT	Concrete ext. wall	43361	0.0146214	0.1200332	0	1.0000000
DFRAME	Frame ext. wall	43361	0.3776435	0.4848034	0	1.0000000
DMASONRY	Masonry/frame ext. wall	43361	0.0697401	0.2547114	0	1.0000000
DSTUCCO	Stucco ext. wall	43361	0.0228777	0.1495153	0	1.0000000
DEWOTHR	Other ext. wall	43361	0.0019603	0.0442322	0	1.0000000
DFIREPL1	Has 1 fireplace	43361	0.5463666	0.4978512	0	1.0000000
DFIREPL2	Has 2+ fireplaces	43361	0.0130763	0.1136027	0	1.0000000
DSTOR15	Building 1.5 stories	43361	0.0387676	0.1930427	0	1.0000000
DSTOR2	Building 2+ stories	43361	0.1501119	0.3571851	0	1.0000000
DYRB1900	Built 1900-19	43361	0.1149881	0.3190113	0	1.0000000
DYRB1920	Built 1920-39	43361	0.1731741	0.3784020	0	1.0000000
DYRB1940	Built 1940-49	43361	0.1252047	0.3309547	0	1.0000000
DYRB1950	Built 1950-59	43361	0.2221812	0.4157171	0	1.0000000
DYRB1960	Built 1960-69	43361	0.0895736	0.2855732	0	1.0000000
DYRB1970	Built 1970-79	43361	0.1059247	0.3077447	0	1.0000000
DYRB1980	Built 1980-89	43361	0.1122437	0.3156697	0	1.0000000
DYRB1990	Built 1990 or later	43361	0.0259680	0.1590418	0	1.0000000
BASEFT	base square feet	43361	1104.74	331.5715523	271.0000000	4429.00
SQRFT	square footage	43361	6971.72	1956.95	3120.00	14100.00
DQ872	2nd qtr 1987	43361	0.0167893	0.1284826	0	1.0000000
DQ873	3rd qtr 1987	43361	0.0159590	0.1253184	0	1.0000000
DQ874		43361	0.0212172	0.1441094	0	1.0000000
DQ881		43361	0.0142294	0.1184366	0	1.0000000
DQ882		43361	0.0226471	0.1487773	0	1.0000000
DQ883		43361	0.0273056	0.1629744	0	1.0000000
DQ884		43361	0.0229699	0.1498094	0	1.0000000
DQ891		43361	0.0173889	0.1307169	0	1.0000000
DQ892		43361	0.0270058	0.1621022	0	1.0000000
DQ893		43361	0.0269597	0.1619676	0	1.0000000
DQ894		43361	0.0226240	0.1487033	0	1.0000000
DQ901		43361	0.0180808	0.1332451	0	1.0000000
DQ902		43361	0.0283665	0.1660195	0	1.0000000
DQ903		43361	0.0296119	0.1695160	0	1.0000000
DQ904		43361	0.0250455	0.1562653	0	1.0000000
DQ911		43361	0.0187034	0.1354771	0	1.0000000
DQ912		43361	0.0287816	0.1671942	0	1.0000000
DQ913		43361	0.0274440	0.1633752	0	1.0000000
DQ914		43361	0.0254837	0.1575909	0	1.0000000
DQ921		43361	0.0202255	0.1407726	0	1.0000000
DQ922		43361	0.0341551	0.1816296	0	1.0000000
DQ923		43361	0.0298425	0.1701546	0	1.0000000
DQ924		43361	0.0315952	0.1749219	0	1.0000000

Table C.3 - Descriptive Statistics on Structural, Spatial, Quarter, and Impact Variables (continued)
Denver Aggregate Models

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
DQ931		43361	0.0228085	0.1492943	0	1.0000000
DQ932		43361	0.0326330	0.1776762	0	1.0000000
DQ933		43361	0.0319873	0.1759682	0	1.0000000
DQ934		43361	0.0295427	0.1693239	0	1.0000000
DQ941		43361	0.0249533	0.1559846	0	1.0000000
DQ942		43361	0.0336708	0.1803825	0	1.0000000
DQ943		43361	0.0280898	0.1652312	0	1.0000000
DQ944		43361	0.0264985	0.1606141	0	1.0000000
DQ951		43361	0.0220475	0.1468396	0	1.0000000
DQ952		43361	0.0279744	0.1649015	0	1.0000000
DQ953		43361	0.0291045	0.1681014	0	1.0000000
DQ954		43361	0.0246304	0.1549978	0	1.0000000
DQ961		43361	0.0225087	0.1483326	0	1.0000000
DQ962		43361	0.0296349	0.1695800	0	1.0000000
DQ963		43361	0.0278822	0.1646372	0	1.0000000
DQ964		43361	0.0199027	0.1396675	0	1.0000000
DQ971		43361	0.000714928	0.0267289	0	1.0000000
DQ972		43361	0.0010378	0.0321985	0	1.0000000
DQ973		43361	0.000668804	0.0258529	0	1.0000000
XCOORD	X coordinate	43361	0.0118515	0.0812213	-0.1537022	0.2182348
YCOORD	Y coordinate	43361	-0.0060935	0.0464829	-0.0991571	0.0761050
XY	X * Y	43361	0.0017278	0.0046172	-0.0071297	0.0148495
XX	X * X	43361	0.0067372	0.0097851	3.335552E-14	0.0476264
YY	Y * Y	43361	0.0021977	0.0020919	3.7469363-12	0.0098321
DPST500X	0/1 dummy: Post <=500 ft.	43361	0.0591776	0.2359595	0	1.0000000
DPST1K	0/1 dummy: Post 500-1000 ft.	43361	0.1123360	0.3157830	0	1.0000000
DPST2K	0/1 dummy: Post 1000-2000 ft.	43361	0.2259173	0.4181898	0	1.0000000
DALL500X	0/1 dummy: All <=500 ft.	43361	0.0966076	0.2954260	0	1.0000000
DALL1K	0/1 dummy: All 500-1000 ft.	43361	0.1922004	0.3940342	0	1.0000000
DALL2K	0/1 dummy: All 1000-2000 ft.	43361	0.4147045	0.4926766	0	1.0000000
PST500X	# Post locs. <=500 ft.	43361	0.0608842	0.2462479	0	3.0000000
PST1K	# Post locs. 500-1000 ft.	43361	0.1430779	0.4473772	0	7.0000000
PST2K	# Post locs. 1000-2000 ft.	43361	0.5195452	1.2189661	0	12.0000000
UPST500X	# Post units <=500 ft.	43361	0.0819631	0.4089267	0	14.0000000
UPST1K	# Post units 500-1000 ft.	43361	0.2048615	0.8169844	0	16.0000000
UPST2K	# Post units 1000-2000 ft.	43361	0.8019418	2.3840407	0	39.0000000
SQPST50X	Sq. # Post locs. <=500 ft.	43361	0.0643435	0.2859922	0	9.0000000
SQPST1K	Sq. # Post locs, 500-1000 ft.	43361	0.2206130	1.0894032	0	49.0000000
SQPST2K	Sq. # Post locs. 1000-2000 ft.	43361	1.7557713	6.5855455	0	144.0000000
SQUPS50X	Sq. # Post units <=500 ft.	43361	0.1739351	2.2512101	0	196.0000000
SQUPS1K	Sq. # Post units 500-1000 ft.	43361	0.7094163	7.0118815	0	256.0000000
SQUPS2K	Sq. # Post units 1000-2000 ft.	43361	6.3266299	42.2672024	0	1521.00
TRPST50X	Trend Post <=500 ft.	43361	0.3676114	2.1280626	0	31.0000000
TRPST1K	Trend Post 500-1000 ft.	43361	0.7056802	2.9251103	0	29.0000000
TRPST2K	Trend Post 1000-2000 ft.	43361	1.7270589	4.3787444	0	31.0000000
TIME500X	Trend All <=500 ft.	43361	1.8922995	7.0922640	0	43.0000000

Table C.3 - Descriptive Statistics on Structural, Spatial, Quarter, and Impact Variables (continued)
Denver Aggregate Models

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
TIME1K	Trend All 500-1000 ft.	43361	3.6994996	9.5302907	0	43.0000000
TIME2K	Trend All 1000-2000 ft.	43361	9.0854454	13.2459372	0	43.0000000
PXT50X	(PST500X * TRPST50X)	43361	0.3728235	2.1662825	0	34.0000000
PXT1K	(PST1K * TRPST1K)	43361	0.8800535	3.9283104	0	72.0000000
PXT2K	(PST2K * TRPST2K)	43361	4.2277162	13.7273157	0	310.0000000
UPXT50X	(UPST500X * TRPST50X)	43361	0.4153271	2.4819430	0	60.0000000
UPXT1K	(UPST1K * TRPST1K)	43361	1.0336247	5.0492751	0	169.0000000
UPXT2K	(UPST2K * TRPST2K)	43361	6.0846152	24.6940759	0	750.0000000

Table C.4 - Descriptive Statistics on Structural, Spatial, Quarter, and Impact Variables
Baltimore County Aggregate Models

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
DAC	Has air conditioning	37169	0.7471818	0.4346335	0	1.0000000
DBATH1	Has 1 bathroom	37169	0.2759827	0.4470141	0	1.0000000
DBATH15	Has 1.5 bathrooms	37169	0.1946784	0.3959582	0	1.0000000
DBATH2	Has 2/2.5 bathrooms	37169	0.4809384	0.4996432	0	1.0000000
DBATH3	Has 3+ bathrooms	37169	0.0483467	0.2145007	0	1.0000000
DBRICK	Brick/stone construction	37169	0.3277462	0.4693981	0	1.0000000
DSIDING	Vinyl or aluminum siding	37169	0.3468482	0.4759733	0	1.0000000
DFIREPL1	Has 1 fireplace	37169	0.4343404	0.4956767	0	1.0000000
DFIREPL2	Has 2+ fireplaces	37169	0.0291641	0.1682686	0	1.0000000
DSTOR15	Building 1.5 stories	37169	0.1252926	0.3310548	0	1.0000000
DSTOR2	Building 2+ stories	37169	0.6465065	0.4780607	0	1.0000000
DYRB1900	Built 1900-29	37169	0.0433157	0.2035695	0	1.0000000
DYRB1930	Built 1930-49	37169	0.1090765	0.3127400	0	1.0000000
DYRB1950	Built 1950-59	37169	0.2795071	0.4487631	0	1.0000000
DYRB1960	Built 1960-69	37169	0.1375071	0.3443865	0	1.0000000
DYRB1970	Built 1970-79	37169	0.0942183	0.2921361	0	1.0000000
DYRB1980	Built 1980-89	37169	0.2428368	0.4288030	0	1.0000000
DYRB1990	Built 1990 or later	37169	0.0855283	0.2796700	0	1.0000000
ACRES	acres	37169	0.3103294	0.4481224	0.0350000	3.1600000
BUILDFT	building square feet	37169	1578.75	560.9295375	129.0000000	7148.00
DQ892	2nd qtr 1989	37169	0.0427776	0.2023580	0	1.0000000
DQ893	3rd qtr 1989	37169	0.0388227	0.1931747	0	1.0000000
DQ894		37169	0.0329307	0.1784575	0	1.0000000
DQ901		37169	0.0336302	0.1802777	0	1.0000000
DQ902		37169	0.0396836	0.1952174	0	1.0000000
DQ903		37169	0.0355404	0.1851437	0	1.0000000
DQ904		37169	0.0340337	0.1813183	0	1.0000000
DQ911		37169	0.0185370	0.1348845	0	1.0000000
DQ912		37169	0.0362399	0.1868890	0	1.0000000
DQ913		37169	0.0315586	0.1748240	0	1.0000000
DQ914		37169	0.0299712	0.1705102	0	1.0000000
DQ921		37169	0.0229761	0.1498294	0	1.0000000
DQ922		37169	0.0309667	0.1732297	0	1.0000000
DQ923		37169	0.0265275	0.1606999	0	1.0000000
DQ924		37169	0.0254782	0.1575746	0	1.0000000
DQ931		37169	0.0183755	0.1343069	0	1.0000000
DQ932		37169	0.0291910	0.1683438	0	1.0000000
DQ933		37169	0.0315047	0.1746798	0	1.0000000
DQ934		37169	0.0296215	0.1695429	0	1.0000000
DQ941		37169	0.0236487	0.1519543	0	1.0000000
DQ942		37169	0.0342490	0.1818705	0	1.0000000
DQ943		37169	0.0302672	0.1713238	0	1.0000000
DQ944		37169	0.0224111	0.1480185	0	1.0000000
DQ951		37169	0.0172186	0.1300870	0	1.0000000
DQ952		37169	0.0278458	0.1645331	0	1.0000000
DQ953		37169	0.0307514	0.1726458	0	1.0000000

Table C.4 - Descriptive Statistics on Structural, Spatial, Quarter, and Impact Variables (continued)
Baltimore County Aggregate Models

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
DQ954		37169	0.0253168	0.1570876	0	1.0000000
DQ961		37169	0.0192096	0.1372627	0	1.0000000
DQ962		37169	0.0352444	0.1843995	0	1.0000000
DQ963		37169	0.0312088	0.1738839	0	1.0000000
DQ964		37169	0.0244559	0.1544617	0	1.0000000
DQ971		37169	0.0211198	0.1437855	0	1.0000000
DQ972		37169	0.0235949	0.1517855	0	1.0000000
DQ973		37169	0.0142861	0.1186692	0	1.0000000
XCOORD	X coordinate	37169	-1.234963-13	0.1166053	-0.2462415	0.2974585
YCOORD	Y coordinate	37169	1.520912E-14	0.0771378	-0.1709182	0.3382478
XY	X * Y	37169	0.000308529	0.0078807	-0.0470456	0.0253821
XX	X * X	37169	0.0135964	0.0141214	2.3702993-13	0.0884816
YY	Y * Y	37169	0.0059501	0.0114603	5.022595E-14	0.1144116
DPST500X	0/1 dummy: Post <=500 ft.	37169	0.0483198	0.2144441	0	1.0000000
DPST1K	0/1 dummy: Post 500-1000 ft.	37169	0.0768113	0.2662954	0	1.0000000
DPST2K	0/1 dummy: Post 1000-2000 ft.	37169	0.1120288	0.3154062	0	1.0000000
DALL500X	0/1 dummy: All <=500 ft.	37169	0.0592698	0.2361322	0	1.0000000
DALL1K	0/1 dummy: All 500-1000 ft.	37169	0.0950254	0.2932540	0	1.0000000
DALL2K	0/1 dummy: All 1000-2000 ft.	37169	0.1512282	0.3582760	0	1.0000000
PST500X	# Post locs. <=500 ft.	37169	0.1739891	1.3410733	0	39.0000000
PST1K	# Post locs. 500-1000 ft.	37169	0.5453200	3.7530584	0	84.0000000
PST2K	# Post locs. 1000-2000 ft.	37169	1.7996718	10.4209950	0	154.0000000
UPST500X	# Post units <=500 ft.	36971	0.1726488	1.5684110	0	67.0000000
UPST1K	# Post units 500-1000 ft.	36844	0.5590055	4.3902187	0	116.0000000
UPST2K	# Post units 1000-2000 ft.	36567	1.6780704	10.7745416	0	168.0000000
SQPST50X	Sq. # Post locs. <=500 ft.	37169	1.8287013	31.4163302	0	1521.00
SQPST1K	Sq. # Post locs. 500-1000 ft.	37169	14.3824424	181.8174998	0	7056.00
SQPST2K	Sq. # Post locs. 1000-2000 ft.	37169	111.8330329	997.3125463	0	23716.00
SQUPSSOX	Sq. # Post units <=500 Et.	36971	2.4896541	56.7005537	0	4489.00
SQUPS1K	Sq. # Post units 500-1000 ft.	36844	19.5859841	284.4961596	0	13456.00
SQUPS2K	Sq. # Post units 1000-2000 ft.	36567	118.9034922	1154.68	0	28224.00
TRPST50X	Trend Post <=500 ft.	37169	0.1907504	1.4043394	0	23,0000000
TRPST1K	Trend Post 500-1000 Et.	37169	0.3576098	1.9970157	0	24.0000000
TRPST2K	Trend Post 1000-2000 Et.	37169	0.7304474	2.8248023	0	24.0000000
TIME500X	Trend All <=500 ft.	37169	0.8484221	4.6899397	0	35.0000000
TIME1K	Trend All 500-1000 ft.	37169	1.4414969	6.0146163	0	35.0000000
TIME2K	Trend All 1000-2000 ft.	37169	2.8808416	8.1867155	0	35.0000000
PXTSOX	(PST500X * TRPST50X)	37169	0.8394361	12.0456445	0	648.0000000
PXT1K	(PST1K * TRPST1K)	37169	3.0464096	34.5037863	0	1334.00
PXT2K	(PST2K * TRPST2K)	37169	14.8965805	125.2260746	0	2926.00
UPXT50X	(UPST500X • TRPST50X)	36971	0.8894539	13.7617260	0	648.0000000
UPXT1K	(UPST1K • TRPST1K)	36844	3.1704755	38.0065058	0	1334.00
UPXT2K	(UPST2K * TRPST2K)	36567	15.3667241	138.7600465	0	3140.00

Annex D
Regression Results

Table D.1
Aggregated Model Coefficients for Impact Variables
Denver

We show the estimated coefficients of the variables of interest for our three Denver aggregated models in equations [1], [2], and [3] below (White consistent standard errors are given parenthetically):

Denver Aggregated Model 1 (proximity to any subsidized site model):

LnP =	-.0107 $DAll_{500}$	-.0087 $DAll_{1k}$	+.0044 $DAll_{2k}$	
	(.007)	(.005)	(.005)	
	-.0143 $DPost_{500}$	+.0001 $DPost_{1k}$	-.0182 $DPost_{2k}$	
	(.008)	(.006)	(.005)***	
	-.12 $Time_{500}$ (/100)	-.10 $Time_{1k}$ (/100)	-.155 $Time_{2k}$ (/100)	
	(.03)***	(.03)***	(.02)***	
	+.18 $TrPost_{500}$ (/100)	+.06 $TrPost_{1k}$ (/100)	-.04 $TrPost_{2k}$ (/100)	[1]
	(.07)**	(.06)	(.04)	

Denver Aggregated Model 2 (proximity to number of subsidized sites interaction model):

LnP =	-.0117 $DAll_{500}$	-.0078 $DAll_{1k}$	+.006 $DAll_{2k}$	
	(.007)	(.005)	(.005)	
	-1.33 $Post_{500}$ (/100)	-.29 $Post_{1k}$ (/100)	+.37 $Post_{2k}$ (/100)	
	(.76)	(.38)	(.18)*	
	- .12 $Time_{500}$ (/100)	-.10 $Time_{1k}$ (/100)	-.13 $Time_{2k}$ (/100)	
	(.03)***	(.03)***	(.02)***	
	+.37 $TrPost_{500}$ (/100)	+.05 $TrPost_{1k}$ (/100)	+.01 $TrPost_{2k}$ (/100)	
	(.35)	(.86)	(.05)	
	-1.86 ($TrPost_{500}$ * $Post_{500}$) (/1000)		+.29 ($TrPost_{1k}$ * $Post_{1k}$) (/1000)	
	(3.5)		(.60)	
	-.12 ($TrPost_{2k}$ * $Post_{2k}$) (/1000)			[2]
	(.15)			

Table D.1
Aggregated Model Coefficients for Impact Variables
Denver

Denver Aggregated Model 3 (proximity to number of subsidized units interaction model):

LnP =	-.0127 $DAll_{500}$	-.0014 $DAll_{1k}$	+.0060 $DAll_{2k}$
	(.007)	(.005)	(.005)
	-.53 $UPost_{500}$ (/100)	-.17 $UPost_{1k}$ (/100)	+.07 $UPost_{2k}$ (/100)
	(.33)	(.18)	(.07)
	- .13 $Time_{500}$ (/100)	-.10 $Time_{1k}$ (/100)	-.12 $Time_{2k}$ (/100)
	(.03)***	(.03)***	(.02)***
	+.04 $TrPost_{500}$ (/100)	+.01 $TrPost_{1k}$ (/100)	-.02 $TrPost_{2k}$ (/100)
	(.12)	(.06)	(.05)
	+1.22 ($TrPost_{500}$ * $UPost_{500}$) (/1000)		+.57 ($TrPost_{1k}$ * $UPost_{1k}$) (/1000)
	(1.1)		(.31)
	+.04 ($TrPost_{2k}$ * $UPost_{2k}$) (/1000)		[3]
	(.07)		

where:

*** = coefficient statistically significant at .0001 level, two-tailed test
** = coefficient statistically significant at .01 level, two-tailed test
* = coefficient statistically significant at .05 level, two-tailed test

Table D.2 - Regression Estimates for Structural, Quarter, and Spatial Variables
Denver

Model: MODEL1
Dependent Variable: LNSALAMT Log of sale price

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	194	7966.67022	41.06531	951.463	0.0001
Error	43166	1863.05163	0.04316		
C Total	43360	9829.72185			

Root MSE	0.20775	R-square	0.8105
Dep Mean	11.40641	Adj R-sq	0.8096
C.V.	1.82135		

Table D.2 - Regression Estimates for Structural, Quarter, and Spatial Variables (continued)

Denver

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|	Variable Label
DBATH1	1	0.268045	0.04283260	6.258	0.0001	Has 1/1.5 bathrooms
DBATH2	1	0.376120	0.04290340	8.767	0.0001	Has 2/2.5 bathrooms
DBATH3	1	0.411640	0.04306480	9.559	0.0001	Has 3+ bathrooms
DBRICK	B	0.025661	0.02277134	1.127	0.2598	Brick ext. wall
DCONCRT	B	-0.072401	0.02410473	-3.004	0.0027	Concrete ext. wall
DFRAME	B	-0.046042	0.02274157	-2.025	0.0429	Frame ext. wall
DMASONRY	B	-0.032806	0.02322196	-1.413	0.1577	Masonry/frame ext. wall
DSTUCCO	B	-0.130872	0.02362710	-5.539	0.0001	Stucco ext. wall
DEWOTHR	0	0	.	.	.	Other ext. wall
DFIREPL1	1	0.078045	0.00251876	30.985	0.0001	Has 1 fireplace
DFIREPL2	1	0.126698	0.00944012	13.421	0.0001	Has 2+ fireplaces
DSTOR15	1	0.221291	0.00560860	39.456	0.0001	Building 1.5 stories
DSTOR2	1	0.246469	0.00372370	66.189	0.0001	Building 2+ stories
DYRB1900	1	0.082103	0.00684210	12.000	0.0001	Built 1900-19
DYRB1920	1	0.132852	0.00719429	18.466	0.0001	Built 1920-39
DYRB1940	1	0.096309	0.00786387	12.247	0.0001	Built 1940-49
DYRB1950	1	0.093905	0.00805138	11.663	0.0001	Built 1950-59
DYRB1960	1	0.086543	0.00961658	8.999	0.0001	Built 1960-69
DYRB1970	1	0.131815	0.00994627	13.253	0.0001	Built 1970-79
DYRB1980	1	0.248328	0.01013783	24.495	0.0001	Built 1980-89

DYRB1990	1	0.143075	0.01136439	12.590	0.0001	Built 1990 or later
BASEFT	1	0.000345	0.00000458	75.370	0.0001	base square feet
SQRFT	1	0.000015284	0.00000078	19.705	0.0001	square footage
DQ872	1	-0.001867	0.01217414	-0.153	0.8781	
DQ873	1	-0.020483	0.01229689	-1.666	0.0958	
DQ874	1	-0.034536	0.01165529	-2.963	0.0030	
DQ881	1	-0.044782	0.01260926	-3.552	0.0004	
DQ882	1	-0.067888	0.01153055	-5.888	0.0001	
DQ883	1	-0.063535	0.01120969	-5.668	0.0001	
DQ884	1	-0.076593	0.01150949	-6.655	0.0001	

Table D.2 - Regression Estimates for Structural, Quarter, and Spatial Variables (continued)
Denver

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|	Variable Label
DQ891	1	-0.110466	0.01210390	-9.126	0.0001	
DQ892	1	-0.083423	0.01123647	-7.424	0.0001	
DQ893	1	-0.099631	0.01124780	-8.858	0.0001	
DQ894	1	-0.105340	0.01156477	-9.109	0.0001	
DQ901	1	-0.126127	0.01205072	-10.466	0.0001	
DQ902	1	-0.112382	0.01119564	-10.038	0.0001	
DQ903	1	-0.104054	0.01113754	-9.343	0.0001	
DQ904	1	-0.119418	0.01142320	-10.454	0.0001	
DQ911	1	-0.130489	0.01200363	-10.871	0.0001	
DQ912	1	-0.067835	0.01120645	-6.053	0.0001	
DQ913	1	-0.055253	0.01128423	-4.896	0.0001	
DQ914	1	-0.031890	0.01141285	-2.794	0.0052	
DQ921	1	-0.025441	0.01185791	-2.146	0.0319	
DQ922	1	0.032995	0.01098232	3.004	0.0027	
DQ923	1	0.042634	0.01118283	3.812	0.0001	
DQ924	1	0.046831	0.01111663	4.213	0.0001	
DQ931	1	0.076378	0.01165738	6.552	0.0001	
DQ932	1	0.128530	0.01108247	11.598	0.0001	
DQ933	1	0.161046	0.01112406	14.477	0.0001	
DQ934	1	0.174723	0.01123956	15.545	0.0001	
DQ941	1	0.203386	0.01152251	17.651	0.0001	

DQ942	1	0.266207	0.01108233	24.021	0.0001	
DQ943	1	0.267098	0.01138012	23.471	0.0001	
DQ944	1	0.283785	0.01149518	24.687	0.0001	
DQ951	1	0.316987	0.01185636	26.736	0.0001	
DQ952	1	0.362084	0.01141081	31.732	0.0001	
DQ953	1	0.385029	0.01138303	33.825	0.0001	
DQ954	1	0.392689	0.01165871	33.682	0.0001	
DQ961	1	0.434453	0.01185668	36.642	0.0001	
DQ962	1	0.454140	0.01142199	39.760	0.0001	
DQ963	1	0.488965	0.01155346	42.322	0.0001	
DQ964	1	0.492473	0.01215815	40.506	0.0001	
DQ971	1	0.509503	0.03864655	13.184	0.0001	
DQ972	1	0.548674	0.03253930	16.862	0.0001	
DQ973	1	0.527354	0.03997659	13.192	0.0001	
XCOORD	B	-1.177196	0.23948228	-4.916	0.0001	X coordinate
YCOORD	1	-6.467223	0.30442221	-21.244	0.0001	Y coordinate
XY	B	5.068835	3.53596516	1.434	0.1517	X * Y
XX	1	-1.076674	1.14325896	-0.942	0.3463	X * X
YY	1	-56.013024	3.76862556	-14.863	0.0001	Y * Y

Table D.3
Aggregated Model Coefficients for Impact Variables
Baltimore County

The estimated parameters of the variables of interest for our three Baltimore County models are shown below (White consistent standard errors are shown parenthetically):

Baltimore Co. Aggregated Model 1 (proximity to any subsidized site model):

LnP =	-.0643 $DAll_{500}$	-.0075 $DAll_{1k}$	-.0069 $Dall_{2k}$	
	(.009)***	(.007)	(.005)	
	+.0307 $DPost_{500}$	-.0139 $DPost_{1k}$	-.0114 $Dpost_{2k}$	
	(.010)**	(.008)°	(.007)°	
	-.038 $Time_{500}$ (/100)	-.102 $Time_{1k}$ (/100)	+.048$Time_{2k}$ (/100)	
	(.042)	(.033)**	(.032)	
	-.038 $TrPost_{500}$ (/100)	-.042 $TrPost_{1k}$ (/100)	-.108 $TrPost_{2k}$ (/100)	[1]
	(.110)	(.079)	(.060)°	

Baltimore Co. Aggregated Model 2 (proximity to number of subsidized sites interaction model):

LnP =	-.0403 $DAll_{500}$	-.0103 $DAll_{1k}$	-.0078 $Dall_{2k}$	
	(.002)***	(.005)*	(.005)	
	-.15 $Post_{500}$ (/100)	-.11 $Post_{1k}$ (/100)	-.07 $Post_{2k}$ (/100)	
	(.16)	(.06)°	(.03)**	
	-.054 $Time_{500}$ (/100)	-.095 $Time_{1k}$ (/100)	+.039 $Time_{2k}$ (/100)	
	(.04)	(.03)**	(.03)	
	+.188 $TrPost_{500}$ (/100)	-.166 $TrPost_{1k}$ (/100)	-.168 $TrPost_{2k}$ (/100)	
	(.12)°	(.08)*	(.06)**	
	-.325 ($TrPost_{500}$ * $Post_{500}$) (/1000)		+.092 ($TrPost_{1k}$ * $Post_{1k}$) (/1000)	
	(.16)*		(.06)°	
	+.036 ($TrPost_{2k}$ * $Post_{2k}$) (/1000)			[2]
	(.01)**			

Table D.3
Aggregated Model Coefficients for Impact Variables
Baltimore County

Baltimore Co. Aggregated Model 3 (proximity to number of subsidized units interaction model):

LnP =	-.0492 $DAll_{500}$	-.0114 $DAll_{1k}$	-.0069 $Dall_{2k}$
	(.007)***	(.006)*	(.005)
	+.10 $UPost_{500}$ (/100)	-.13 $UPost_{1k}$ (/100)	-.02 $UPost_{2k}$ (/100)
	(.14)	(.06)**	(.03)
	-.080 $Time_{500}$ (/100)	-.115 $Time_{1k}$ (/100)	-.034 $Time_{2k}$ (/100)
	(.05)	(.04)**	(.03)
	+.328 $TrPost_{500}$ (/100)	-.108 $TrPost_{1k}$ (/100)	-.174 $TrPost_{2k}$ (/100)
	(.12)**	(.08)	(.07)**
	-.38 ($TrPost_{500}$ * $UPost_{500}$) (/1000)		+.08 ($TrPost_{1k}$ * $UPost_{1k}$) (/1000)
	(.14)**		(.05)°
	+.03 ($TrPost_{2k}$ * $UPost_{2k}$) (/1000)		[8]
	(.02)		

where:

*** = coefficient statistically significant at .0001 level, two-tailed test
** = coefficient statistically significant at .01 level, two-tailed test
* = coefficient statistically significant at .05 level, two-tailed test
° = coefficient statistically significant at .10 level, two-tailed test

Table D.4 - Regression Estimates for Structural, Quarter, and Spatial Variables
Baltimore County

Model: MODEL1
Dependent Variable: LNSALAMT Log of sale price

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	270	4719.43397	17.47939	591.681	0.0001
Error	36898	1090.03806	0.02954		
C Total	37168	5809.47202			

Root MSE	0.17188	R-square	0.8124
Dep Mean	11.72894	Adj R-sq	0.8110
C.V.	1.46541		

Table D.4 - Regression Estimates for Structural, Quarter, and Spatial Variables (continued)
Baltimore County

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|	Variable Label
DAC	1	0.063824	0.00269850	23.652	0.0001	Has air conditioning
DBATH1	1	0.710973	0.12387298	5.740	0.0001	Has 1 bathroom
DBATH15	1	0.725557	0.12388416	5.857	0.0001	Has 1.5 bathrooms
DBATH2	1	0.778123	0.12389097	6.281	0.0001	Has 2/2.5 bathrooms
DBATH3	1	0.808398	0.12396011	6.521	0.0001	Has 3+ bathrooms
DBRICK	1	-0.001308	0.00268339	-0.487	0.6260	Brick/stone construction
DSIDING	1	0.008419	0.00241890	3.481	0.0005	Vinyl or aluminum siding
DFIREPL1	1	0.096031	0.00225401	42.604	0.0001	Has 1 fireplace
DFIREPL2	1	0.137356	0.00597358	22.994	0.0001	Has 2+ fireplaces
DSTOR15	1	0.009057	0.00355649	2.547	0.0109	Building 1.5 stories
DSTOR2	1	-0.024627	0.00281067	-8.762	0.0001	Building 2+ stories
DYRB1900	1	0.048437	0.01178643	4.110	0.0001	Built 1900-29
DYRB1930	1	0.083892	0.01150537	7.292	0.0001	Built 1930-49
DYRB1950	1	0.098668	0.01133397	8.706	0.0001	Built 1950-59
DYRB1960	1	0.181210	0.01151406	15.738	0.0001	Built 1960-69
DYRB1970	1	0.162577	0.01158106	14.038	0.0001	Built 1970-79
DYRB1980	1	0.195826	0.01142296	17.143	0.0001	Built 1980-89
DYRB1990	1	0.259891	0.01180412	22.017	0.0001	Built 1990 or later
ACRES	1	0.152636	0.00331902	45.988	0.0001	acres
BUILDFT	1	0.000270	0.00000239	113.225	0.0001	building square feet

DQ892	1	0.030078	0.00669116	4.495	0.0001
DQ893	1	0.033511	0.00684312	4.897	0.0001
DQ894	1	0.043478	0.00713107	6.097	0.0001
DQ901	1	0.047958	0.00708730	6.767	0.0001
DQ902	1	0.058089	0.00684100	8.491	0.0001
DQ903	1	0.071320	0.00704434	10.124	0.0001
DQ904	1	0.057720	0.00712659	8.099	0.0001
DQ911	1	0.041272	0.00837366	4.929	0.0001
DQ912	1	0.080256	0.00700115	11.463	0.0001
DQ913	1	0.082090	0.00728018	11.276	0.0001

Table D.4 - Regression Estimates for Structural, Quarter, and Spatial Variables (continued)
Baltimore County

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > |T|	Variable Label
DQ914	1	0.097042	0.00737871	13.152	0.0001	
DQ921	1	0.069665	0.00784882	8.876	0.0001	
DQ922	1	0.083736	0.00724830	11.552	0.0001	
DQ923	1	0.092338	0.00753884	12.248	0.0001	
DQ924	1	0.076193	0.00762812	9.988	0.0001	
DQ931	1	0.072441	0.00838753	8.637	0.0001	
DQ932	1	0.083480	0.00736513	11.335	0.0001	
DQ933	1	0.098011	0.00724006	13.537	0.0001	
DQ934	1	0.091424	0.00735519	12.430	0.0001	
DQ941	1	0.095373	0.00780648	12.217	0.0001	
DQ942	1	0.102697	0.00709916	14.466	0.0001	
DQ943	1	0.094514	0.00732472	12.903	0.0001	
DQ944	1	0.086985	0.00794458	10.949	0.0001	
DQ951	1	0.060905	0.00862549	7.061	0.0001	
DQ952	1	0.099469	0.00753156	13.207	0.0001	
DQ953	1	0.111682	0.00735250	15.190	0.0001	
DQ954	1	0.091529	0.00772916	11.842	0.0001	
DQ961	1	0.082069	0.00838585	9.787	0.0001	
DQ962	1	0.113040	0.00714202	15.827	0.0001	
DQ963	1	0.107332	0.00734842	14.606	0.0001	
DQ964	1	0.100073	0.00783722	12.769	0.0001	

DQ971	1	0.090642	0.00817581	11.087	0.0001	
DQ972	1	0.120298	0.00793012	15.170	0.0001	
DQ973	1	0.119090	0.00921552	12.923	0.0001	
XCOORD	1	-0.400496	0.11637103	-3.442	0.0006	X coordinate
YCOORD	1	-0.032442	0.15991536	-0.203	0.8392	Y coordinate
XY	1	1.365509	0.64714659	2.110	0.0349	X * Y
XX	1	-1.387581	0.39815019	-3.485	0.0005	X * X
YY	1	-3.430594	0.47543644	-7.216	0.0001	Y * Y

Annex E
Focus Group Protocols and Materials

DISPERSED HOUSING FOCUS GROUP PROTOCOLS

Purpose

Following the quantitative analyses, we conducted focus groups to gain a deeper understanding of resident thoughts on the quality of life in their neighborhoods. In particular, we wished to ascertain differences in how residents view their neighborhood's quality of life, resident composition, social cohesion, political mobilization, and social interaction patterns. Our goal was to use these insights to enrich our understanding of the quantitative findings.

Researchers did not prompt residents for their thoughts on assisted housing or tenants. These topics emerged only as they were brought up by residents. Protocols for focus groups were designed to not beg the question about the presence of subsidized sites. Indeed, in some areas the lack of awareness about such sites may be the reason for absence of property value impact, and we were reluctant to trigger a socially destructive "experimenter effect." Our focus groups asked general questions about what makes a good neighborhood, the quality of life in the neighborhood, characteristics of community residents, and perceived changes in quality of life and changes in the composition of the resident population. We probed residents' perceptions, sources of information, local social networks, and expectations of neighborhood change; any reputed role of subsidized sites or tenants emerged only if it is raised by the participants.

Participant Recruitment

The initial strategy to recruit neighborhood residents for participation in focus groups was a targeted mailing offering a monetary incentive. The main steps in the recruitment strategy were: (1) identification of addresses within 2,000 feet to selected subsidized properties [using the 1990 census tract]; (2) initial targeted mailing to the identified properties; (3) receipt of the information form in postage paid, addressed envelope (included in the mailing) by interested residents; (4) telephone follow-up with interested residents; and (5) selection of focus group participants from successfully screened candidates.

Identification of Addresses for Targeted Mailing

The mailing was directed to residences located within 2,000 feet of the specified subsidized housing address. Given that focus groups will be composed of homeowners, addresses identified to receive the mailing were those living in housing which could be privately owned (i.e, single family homes, duplexes, rowhouses, condos, etc). Homeowners were selected for the focus groups because the core research question concerns property value change and homeowners are more directly concerned about and aware of property values.

Appropriate addresses were gathered through public records. In cases where the name of residents are not known, mailings were sent to "resident" at the identified addresses.

Initial Targeted Mailing

The mailing included a letter from the project director describing the project, the Urban Institute, and the purpose of the focus group (copy attached). A bilingual letter was sent in

Denver. The project was described as a study on the quality of life in American neighborhoods. The letter stressed that this session had nothing to do with participants purchasing a product or service and was for research purposes. It was made clear that all responses were to be kept confidential.

The letter stated that all participants would be paid $25 to cover any expenses incurred in order to attend the session. It was also noted that the Institute would be unable to provide childcare during the focus group and the prohibition against children attending the session. The letter will specified that only homeowners who had lived in the neighborhood for two or more years were eligible to participate in the focus group. In Denver, the letter also noted that groups would be conducted in English and Spanish.

Potential Participant Information Form and Postage Paid Return Envelope

The mailing included a form for potential participants to complete and return to the Urban Institute (or local subcontractor) in a provided postage paid, addressed envelope. People responding to the mailing returned the information form indicating their interest in learning more about the study and their possible participation. The letter explained that not everyone returning a form would be selected to participate in the study. We asked respondents for information such as: (1) name; (2) address; (3) telephone number where they could be reached; (4) if they were a homeowner; (5) age; (6) race; (7) presence of children in the household; and (8) the language with which they were most comfortable. The form also had a place for respondents to ask for a representative from the Urban Institute (or local subcontractor) to call them and provide more information. These forms were translated into Spanish for the Denver mailings.

Additional Recruitment Efforts

When the mailing did not generate at least 12 potential participants, phone calls were made to encourage participation in those focus groups that were undersubscribed. Using telephone numbers provided in property tax records, neighborhood residents were called to see if they received a letter and to ask them to participate in the study. Researchers began calling from the beginning of the tax record list and progressed through the list until at least 12 potential participants were identified.

Telephone Follow-up with Willing Residents

Using the information in the form returned to the Urban Institute, a potential list of participants was selected. These persons were contacted by telephone and given a more detailed description of the study and focus groups and provided with details of participation (date, time, incentive payment). We answered any questions they had about the study or their participation. When appropriate, we asked the resident if they would like to participate in a focus group. If they did not want to participate, we thanked them for their interest and concluded the call. If they wanted to participate, we registered them for the appropriate group and asked for any additional information needed. We informed them they would receive a confirmation letter by mail or a phone call confirming their participation.

Confirmation of Participants

All registered participants were sent a letter confirming their participation and listing details on their focus group (copy attached). One day before the group, each registered respondent was called to remind them of the focus group day, time and location.

Selection of Focus Group Participants

When we had a pool of successfully screened candidates larger than the number needed for specific focus groups, we attempted to stratify potential participants by geographic area, age, race, and family composition to select a group representative of the 1990 census demographic profile of the neighborhood.

Focus Group Location

Focus groups were conducted in "neutral" community spaces, such as libraries, schools or other public buildings. Neutral sites were those that were not associated with a specific individual or organization whose activities or positions could influence the responses or response rate of potential participants. Locations were also selected which were convenient for the majority of potential participants.

Childcare

Childcare was not provided at the focus group due to liability concerns. All participants were notified of this in advance and no exceptions were made. Participants bringing children to the focus group, were excused from participating.

Confidentiality

All information and comments gleaned from focus groups, the background survey, or other documents or contacts, were confidential. No written or verbal reports were or will be made by the research team which link individual focus group participants with specific views. Moreover, focus group responses are reported in aggregate without a corresponding list of participants. Names or specific addresses of participants will not be released to the U.S. Department of Housing and Urban Development or others. Participants were only introduced to each other by first name.

Participants were assured that their names, addresses, or other personal information would not be linked to any individual's comments or views in the Urban Institute report. All participants were assured of confidentiality both verbally and in writing. Flyers and letters to focus group participants indicated that the focus group sessions and the resulting analysis would be held in the strictest confidence by the Urban Institute and local subcontractors.

Informed Consent

After explaining the purpose of the focus group and the broader study, participants were asked to sign a form (attached) acknowledging that they were participating freely and had been informed of the purpose of the research. The Facilitator distributed the forms, read it out loud to the group, and answered any related questions. Participants were asked to sign and return the form before the discussion began. Extra copies of the form were made available to participants who wanted to keep a copy. The forms were available in English and Spanish. As part of the

informed consent procedures, participants in the Baltimore County focus groups were informed that HUD was the sponsor of this study. Denver focus group participants were not so informed.

Conducting the Focus Groups

Each focus group had one person designated as Facilitator and one as Recorder. The focus group Facilitator used the discussion guide (copy attached) to steer the conversation to all topics of interest. The Facilitator ensured that all participants joined in the discussion, saw that all issues were satisfactorily discussed, and guided the conversation so that the exchange progressed in an efficient and effective manner. The Recorder was responsible for taking notes during the meeting, monitoring the audio tape, paying participants (including collecting receipts), and providing written summary texts of the focus group discussion. The Recorder also interjected questions to the group during the discussion who he/she felt that it was appropriate. Both team members were available to answer questions and speak with focus group participants prior to and following each session.

Tape Recording the Discussion

In the introduction, the Facilitator explained that we wanted to tape record the session in order to ensure accuracy in writing up the report. Tapes were used to verify and clarify comments made during the session but will not release them to anyone outside the Urban Institute. Participants were reminded that their responses would not be linked with their name or address and told the tapes were not to be released to any other person or agency outside the Urban Institute. Participants were also told that if at any time during the discussion they wanted the tape recorder turned off, they could ask and it would be turned off. The Facilitator asked if anyone objected to the session being tape recorded. Participants in each focus group gave permission to audiotape the session.

Payment to Participants

Each person who participated in a focus group were given $25 in cash to defray the costs of participation. Participants were not given any additional payments to cover specific expenses such as transportation, parking, or childcare since these items were what the $25 was intended to cover.

A check to cover payments to focus group participants was given to the focus group Facilitator or other designee by the Urban Institute (in Denver the funds were given to LARASA). This person or organization was responsible for cashing the check, documenting who received payments, and returning to the Urban Institute any funds not documented as distributed.

Prior to the focus group, the cash for participant payments were divided in $25 increments. Single payments of $25 were placed in numbered envelopes. These envelopes were taken to the focus group for distribution along with a stack of blank receipts (copy attached).

At the beginning of the focus group when the Facilitator thanked the participants for coming, he/she reminded participants that they would receive a payment of $25 to cover any costs incurred by participation in the group. They were told that payments would be made at the end of the session and they were asked to sign a receipt for the payment. The receipt was necessary to document that the money was distributed as reported.

During the focus group, the Recorder prepared a receipt for each person in attendance with their name, the date of the focus group, and an envelope number. The Recorder wrote the participant's name on "their" envelope (the one corresponding to the number on their receipt).

At the conclusion of the group, the Recorder distributed the receipts for signature. Each participant signed a receipt indicating they had received the $25. As each participant returned the signed receipt, they were given the envelope with their name on it. The receipt also included a space for participants to include their social security number. If a participant did not want to divulge their social security number, they were still given the payment. Social Security information was desired by the Urban Institute's Accounting Office.

A participant was given the stipend if they completed the focus group (or made prior arrangements if they had to leave early). The stipend was dependent on participation in the group. However, a participant who finished the group but refused to complete the background survey was still eligible for the stipend.

After all focus groups were completed, funds earmarked for participant payments were accounted for in full. Receipts were obtained for all payments made to participants. Receipts were forwarded to the Urban Institute to document dispersed funds. Any funds not documented by a signed receipt were returned to the Urban Institute.

Guarding Against Researcher Bias

Neither the Facilitator nor the Recorder were told the results of any of the disaggregated statistical analyses. In this way, researchers were kept from pre-judging responses or leading participants based on information about the results of the quantitative analysis.

Focus Group Discussion Guide

As described above, the focus group discussion guide were designed to facilitate a group discussion on life in the neighborhoods targeted in the study. Focus group data were used in conjunction with the quantitative analyses to gain a fuller understanding of neighborhood life and resident feelings. We hoped that groups provided information on the impact of differences in local resident composition, social cohesion, political mobilization, assisted housing siting and architectural characteristics, and resident social interaction patterns. However, at no time did the Facilitator or Recorder prompt the group for their feelings on publicly assisted or sponsored housing or tenants.

The focus group discussion guide (copy attached) had four main subject areas, in addition to introductory remarks and a conclusion. In the Introduction, we introduced the Facilitator and

Recorder and their respective roles, described what a focus group was, and asked them if we could tape record the session. We also alerted participants that at the end of the meeting we would be asking them to sign a receipt for their expense payment and fill out a background information survey. During the introduction, we told them about the purpose of the overall study and the focus group in which they were participating as well as asked them to sign an informed consent form. The introduction set the tone for the focus group. It was important to let them know that there were no wrong answers: we wanted to hear their thoughts, both positive and negative.

The first area of discussion after the introduction concerned general issues on what makes for a good place to live and resident feelings on how their neighborhood falls into this definition. We chose to begin with a general, though pertinent, discussion to encourage everyone's participation and to put the participants at ease. We drew upon these views about quality of neighborhood life and resident composition in our understanding of neighborhood dynamics.

From this general discussion, we moved to the second discussion guide topic which was geared to elicit opinions regarding who lived in the neighborhood and what organizations/individuals represented the neighborhood. These discussions were designed to allow residents to speak as broadly or specifically as they chose about community cohesion, networks, and resident characteristics. No probes were made by the Facilitator or Recorder to encourage participants to classify residents by any demographic or economic characteristic. However, in the main introduction to the focus group, participants were told that they had been invited to participate in the group because they were homeowners. This item of information gave them the freedom to speak about renters (including those who are publicly subsidized) without fear that someone in the room was such a person. Again, their knowledge of, or feelings on, the presence of publicly subsidized persons in their neighborhood were never raised by researchers.

The third discussion guide topic area included questions on perceived changes in the neighborhood in the last five years. We recapped answers to quality of life questions in the first section and asked if neighborhood characteristics or amenities had changed in the last five years. We also asked group members why they thought change had or had not occurred. If participants mentioned publicly sponsored housing or tenants, the Facilitator probed for more information on these comments, including sources of information on which participants based their judgements. But Facilitators never confirmed the presence of publicly assisted housing in focus group neighborhoods or reacted in such a way as to alert participants to the importance of this topic. If property values were not spontaneously raised by participants, the Facilitator asked the group what kind of measure property values are of quality of life, if values had changed in the last five years, and why they felt the way they did.

The fourth discussion guide topic area was designed to prompt discussion on perceived changes in neighborhood residents. We asked participants if they felt that the people who lived in the neighborhood had changed much over the past 5 years and why they felt this change or lack of change had occurred. The previous discussion of residents (in part two) was designed to prompt participants to discuss a variety of resident aspects--speaking both to demographics and social cohesion. With this section, we hoped to assess any perceived changes in both the characteristics of the neighborhood and the tenor of resident interaction.

Concluding remarks of the focus group included broad questions asking for additional thoughts or comments and a time to ask any questions or concerns about the study or the group. By concluding in this way, we hoped participants felt free to make any comments they thought were important to understanding their community that our questions did not directly address.

Background Survey

These forms allowed us to broadly categorize the members of each group, providing some context for the analysis of results. The survey asked basic demographic questions. If participants refused to complete the background survey, but participated in the focus group, they were still given the $25 stipend.

Attachments

The protocols and focus group operational procedures outlined above were used in both Baltimore County and Denver. Attached to this protocol are copies of the following:

- Introduction Letter for initial mailing
- Confirmation/Invitation Letter
- Focus Group Discussion Guide
- Background Survey
- Informed Consent Form
- Payment Receipt

INTRODUCTION LETTER and RESPONSE FORM FOR INITIAL MAILING

THE URBAN INSTITUTE **2100 M STREET, N.W. / WASHINGTON D.C. 20037**

Peter Tatian
Research Associate

Direct Dial: (202) 857-8588
Fax: (202) 223-3043

DATE

Dear Resident:

The Urban Institute, a non-profit research organization based in Washington, DC, is conducting a study on life in American neighborhoods. As a part of this study, we are getting together groups of homeowners in Baltimore County to discuss their thoughts and concerns about neighborhood living from a local point of view. You have been chosen as a possible participant for one of these groups.

The discussion group will last around two hours and refreshments will be served. Each participant will be paid $25 to cover any costs you might incur in order to attend the group. The groups are in no way connected to the sale or purchase of any product or service. We are interested in your opinions on neighborhood life for research purposes only. All responses, addresses, and other identifying information will be kept confidential.

The group for your neighborhood is scheduled to take place on **DAY, DATE** at the **PLACE** (address). We will confirm the location and set a specific time after speaking with potential participants about their availability. If you would like to participate, please send back the response form that came with this letter. Not everyone who returns the sheet will be selected, so please include a phone number so we can call you if you have been selected. Again, this information will not be used for soliciting or activities of any kind outside of this research project.

If you are a homeowner and have lived in your current neighborhood for two or more years, please consider participating in this important study. To be selected, return the enclosed response form to the Urban Institute by **DATE.** Responses received earlier are more likely to be accommodated in a discussion group. Also, we will not be able to provide child care during the session and no children or guests will be allowed in the meeting room, so please leave children at h

If you have any questions about the discussion group or the study and would like a representative of the Urban Institute to call you, just answer "Yes" to Question 1 on the response form and give us a telephone number where we can contact you. Also, if you would like to speak with someone at the Urban Institute before we are able to reach you, please contact the researchers who will be conducting the discussion groups in Baltimore County, NAME or NAME, at TELEPHONE NUMBER

Thank you very much for your time.

Sincerely,

Peter Tatian
Project Director

THE URBAN INSTITUTE
DISCUSSION GROUP APPLICANT INFORMATION FORM

Thank you for your interest in the Urban Institute discussion group in your neighborhood. Please complete this form and return it in the enclosed envelope by **DATE.** We expect a good response from people in your neighborhood and not everyone returning a form will be selected to participate. All information provided will be kept confidential and used only for the research purposes of this study. If you would like more information, please indicate below that you would like someone to call you or contact NAME or NAME at TELEPHONE NUMBER.

Would you like someone from the Urban Institute to contact you by telephone to answer questions about this study?
(Please circle one) Yes No

Name:_____

Address:_____

_____

Telephone #: Daytime _____ and/or Evening _____

Are you a Homeowner? (Please circle one) No Yes

Have you lived in your neighborhood for two or more years? (Please circle one) Yes No

Do children under 18 live in your household? (Please circle one) Yes No

What is your Race/Ethnicity (Please check one)

_____ White (not Hispanic)
_____ African-American/Black (not Hispanic)
_____ Hispanic
_____ Asian/Pacific Islander
_____ American Indian/Alaska Native
_____ Other (Please list: _____)

Age

_____ Under 25
_____ 25 to 35
_____ 36 to 45
_____ 46 to 55
_____ 56 to 65
_____ Over 65

This form should be enclosed in the postage paid envelope enclosed. The envelope will be returned to NAME at The Urban Institute, 2100 M Street, NW, Washington, DC, 20037.

CONFIRMATION/INVITATION LETTER

THE URBAN INSTITUTE **2100 M STREET, N.W. / WASHINGTON D.C. 20037**

Peter Tatian
Research Associate

Direct Dial: (202) 261-5588
Fax: (202) 223-3043

Date

Name
Address
City, State Zip

Dear Name:

Thank you for your interest in the discussion groups the Urban Institute is conducting in your neighborhood. You have been selected to participate and we invite you to attend the group being held in your area. The group for your neighborhood will be held at **TIME,** on **DAY, DATE,** at **LOCATION** (directions below). The discussion group will last two hours and you will be given $25 at the end of the group. Light refreshments will be served.

We will be asking general questions about life in your neighborhood and are interested in your opinions and experience. Your responses will be part of a report to public leaders on local perspectives on neighborhood life. Your name and address will be kept confidential and not linked with your comments. As we mentioned in our previous letter, the groups are in no way connected to the sale or purchase of any product or service.

DIRECTIONS. Information on parking.

As a reminder, we will not be able to provide child care during the session and no children or guests will be allowed in the meeting room. We want to focus on your opinions and those of your neighbors. Having children or too many people in the room can be a distraction so we ask that you leave children and guests at home. Only one person per family is invited to attend.

The discussion group leaders for your neighborhood are **NAME** and **NAME**. They will facilitate your group and be available for questions. A staff person of the Urban Institute will call you before the meeting to remind you about the group. If you need to reach the group leaders prior to their call, please call **NAME** at **PHONE NUMBER**.

We look forward to hearing your opinions and ideas. Thank you for your participation in this important study.

Sincerely,

Peter Tatian
Project Director

DISCUSSION GUIDE

Neighborhood Resident Focus Group Discussion Guide

WARM-UP AND EXPLANATION [10 minutes]

A. Introduction

Please help yourselves to some refreshments.

1. Thanks for coming and agreeing to participate in this group discussion today.

2. I'm *[name of Facilitator]*, a researcher with the Urban Institute, and I will be your moderator for the session. My associate *[name of Recorder]* will be helping with the report. She will take some notes during the discussion and may have a few questions to ask you toward the end of our session. The Urban Institute is a non-profit research organization, and we have been asked by the federal government to arrange these discussions and report the results.

3. Your presence/opinion is important. *Describe focus group* – a way to find out what people think through group discussion. We are interested in learning about your ideas, feelings, and opinions. Please understand that everything you say today will be kept strictly confidential. Nothing you say will be attributed to you or linked with information that could identify you like your address.

4. Before we begin the focus group, we will discuss the purpose of this meeting and the related research project of which it is a part. We will ask you to sign a release saying that we informed you about the study and you are freely participating.

5. The session today should last about two hours. At the end of this session, we will ask you to complete a short, anonymous background information form. We will also be giving you $25 for your participation today and will ask that you sign a receipt saying you have received this payment.

   Before we jump in to the main discussion, please help yourselves to some refreshments. Feel free to eat and drink during our discussion.

B. Purpose

1. You have been asked to join this group because you are a homeowner in (*Baltimore County or name of town*). The Urban Institute is studying the quality of life in American neighborhoods and Baltimore County is one of the study areas. Policymakers are interested in finding out the local perspective on neighborhood life in a sample of

Baltimore County neighborhoods--to put some firsthand information with the statistics found in national information sources like the census. We will be holding several discussion groups like this, and the information we learn will be used to write a report on how people feel about their neighborhoods and what types of issues are important to residents.

2. In a group interview like this it is **very** important that you express yourself openly. There are no right or wrong answers. We want to know what **you** think. We are interested in all of your ideas and comments, both positive and negative. You should also feel free to disagree with each other–we want to have as many points of view as we can.

C. Procedure

1. Use of recorder: we would like to tape record the session in order to ensure accuracy in writing up our report. Let me remind you that your responses will not be linked with your name or address in any way and the tapes will not be released to any other person or agency outside the Urban Institute. Everything will be confidential. At any time if you would like us to turn off the tape recorder, please let us know and we will do so. Does anyone have a concern at this time about the use of the tape recorder?

2. I may remind you occasionally to speak one at a time so that we can all hear your comments. I am your guide, but this is a group discussion and so everyone should feel free to speak up. To keep us on schedule, I may change the subject or move ahead. Please stop me if you have something to add.

3. Again, we are very pleased that you have taken the time today to share your ideas with us. Before we begin, I would like to pass out the informed consent forms for your signature and answer any questions you may have about the focus group or the study.

   Distribute the informed consent forms. Read the consent form out loud and answer any questions. Have participants sign the form and return before beginning the session.

D. Introductions

1. Ask each person to introduce him/herself by their first name–
   Please tell us your **first name** and something about yourself, like what street you live on and how long you and your family have lived there.

I. General Thoughts on "Good" Housing and This Neighborhood [25 minutes]

1. I'd like to start the discussion today with your ideas about what makes for a "good" neighborhood in which to live?

2. I'd like to turn the discussion to this neighborhood. What do you consider the boundaries of your neighborhood?

3. Is this neighborhood a good place to live? Why?

4. What do you like most about this neighborhood?

5. What do you like least about this neighborhood?

II. The People Who Live in This Neighborhood [20 minutes]

1. How would you describe the people who live in this neighborhood? (Probe for basic demographics).

2. How connected to each other are residents of this neighborhood? What accounts for this sense/lack of connection to others?

3. Are there organizations or institutions that draw people together in this community? What are they?

4. Are there particular individuals or organizations who you believe effectively "speak for" this neighborhood? Who?

III. Perceived Changes in This Neighborhood [20 minutes]

1. In our discussion of this neighborhood as a good place to live you mentioned many characteristics and amenities that effect the quality of life. Do you think the quality of life in this neighborhood has changed much over the past 5 years? If so, how?

2. Why do you think change has (or has not) occurred? [*Be sure to probe if participants mention publicly sponsored housing or tenants. Probe for sources of information: media, first-hand observation, gossip, etc.*]

Probe on Property Values if not mentioned. Are property values a measure of a good place to live? Have property values changed in the last five years? Why do participants feel the way they do? On what do they base their information?

IV. PERCEIVED CHANGES IN NEIGHBORHOOD RESIDENTS [20 minutes]

1. Have the people who live in this neighborhood changed much over the past 5 years? If so, how?

2. Why do you think change has (or has not) occurred?

CONCLUSIONS AND WRAP-UP [10 minutes]

1. Does anyone have any additional thoughts or comments about any of the topics we have been discussing today?

2. Is there anything else we should know to understand your community?

3. Are there any questions or other concerns you have about this study?

Your comments and insights have been very helpful. Thank you all very much for participating today!

Explain and administer short (anonymous) Background Information Form.
Hand-out stipends as participants return completed payment receipts.

BACKGROUND SURVEY

THE URBAN INSTITUTE

What street do you currently live on? _____

How long have you lived there?_____

How long have you lived in Baltimore County?_____

Number of other adults who live with you (most of the time) _____

Number of children who live with you (most of the time) _____

Are you retired? ☐ Yes ☐ No

Highest Level of Education:

☐ Grade School
☐ Some High School
☐ High School Grad or GED
☐ Some College
☐ 2-Year College Degree
☐ 4-Year College Degree
☐ Graduate School

Sex: ☐ Female ☐ Male

INFORMED CONSENT FORM

Consent for Participation in Discussion Group

Introduction and Sponsorship
I understand that I am being asked to participate in a research study focusing on issues related to neighborhood dynamics in my area. The study is being conducted by researchers at the Urban Institute and funded by the U.S. Department of Housing and Urban Development.[1] Specifically, I am being asked to participate in a two-hour focus group discussion session facilitated by researchers from the Urban Institute.

Purpose
I understand that this discussion will focus on how people feel about their neighborhoods and identify issues that are important to residents. Results will be reported in conjunction with other quantitative information about my neighborhood and used to help explain statistical information.

Risk of Participation in the Study
There are no known risks associated with participation in this study.

Benefits of Participating in the Study
Myself, as well as the Urban Institute and federal policymakers, may benefit from the results of the study as it explores quality of life issues that are important to neighborhood residents.

Compensation
I will receive $25.00 at the conclusion of the focus group discussion to cover any expenses I may have in order to attend this session. No additional reimbursement or compensation is offered by the Urban Institute.

Voluntary Participation/Withdrawal
I understand that my participation is completely voluntary and that I have the right to refuse to answer any questions and I am free to leave the session at any time.

Questions
If I have any questions concerning my participation in this study now or in the future, I can contact Robin Smith or Mary Cunningham at the Urban Institute at 202-833-7200.

Confidentiality
Any information that I provide in this discussion session may be used in written or oral presentations only if my identity is disguised and anonymity is maintained. I understand that the findings of this study generally will be reported in terms of the aggregate group and not in terms of individual findings. I also understand that I can ask than any part of the information that I provide not be discussed in the research reports. Otherwise, written quotes from my comments may be used in reports as long as identifying characteristics are removed.

I also understand that the conversation is being tape recorded. I understand that the tape recorder can be turned off at any time during the session if I request it be turned off. I understand that the tape will not be labeled with my name or address, and that it will be heard by no one except the researchers and research staff.

[1]Focus group participants in Denver were not told that HUD was the sponsor of this study.

Consent to Participation in the Research Study

I understand all of the above information about this research study, including the procedures, possible risks, and the likelihood of any benefits to me. The content and meaning of this information has been explained and is understood. All of my questions have been answered. I hereby consent and voluntarily offer to follow the study requirements and take part in the study. I understand that I may retain a copy of this consent form.

Written Consent:

_____ _____

Participant's signature Date

_____ _____

Signature of Research Team Member Date

PAYMENT RECEIPT

THE URBAN INSTITUTE 2100 M STREET, N.W. / WASHINGTON D.C. 20037

Envelope Number_____

My signature on this receipt signifies that I received $25 to cover my expenses as a participant in focus groups sponsored by the Urban Institute.

Printed Name _____

Signature _____

Social Security # _____

Date _____

Table F.1 Demographic Characteristics of Focus Group Participants: Denver

Characteristic	All Sites	Montbello	East Colfax	Berkeley #1	Berkeley #2	Platte Park	University Hills
Number of Participants	37	4	8	5	6	10	4
Tenure in Neighborhood							
Average Years at Current Address	11.8	5.5	16.5	16.4	5.8	15	4
Average Years in Baltimore County	14.7	9	20	21.4	10.5	16.3	4
Household Composition							
Average Number of Other Adults in Household	1	1	0.9	1.2	1.2	0.7	1
Average Number of Children in Household	0.9	1.5	0.1	2.4	1.3	0.5	0
Percent of Households with Children	32	75	13	40	60	30	0
Race							
Percent Hispanic	8	50	0	20	0	0	0
Percent White	73	0	75	80	67	90	100
Gender							
Percent Women	73	25	88	40	83	90	50
Educational Attainment							
Percent < High School	3	0	0	20	33	0	0

Percent H.S.	22	25	50	20	33	0	0
Percent Some College	14	0	13	20	17	20	0
Percent 2 yr. Coll. Degree	11	25	25	0	0	10	0
Percent 4 yr. Coll. Degree	30	50	0	20	17	40	75
Percent Graduate School	22	0	13	20	33	30	25
*Age Cohort**							
Percent 25 to 35	20	25	0	20	33	20	50
Percent 36 to 45	0	50	37	0	50	20	25
Percent 46 to 55	40	25	13	40	0	30	25
Percent 56 to 65	20	0	37	20	17	0	0
Percent over 65	20	0	13	20	0	30	0
Occupational							
Percent Retired	19	25	25	60	0	10	0
Percent	5	0	13	0	17	0	0
Percent	14	0	25	20	17	10	0
Percent Profess./Managerial	30	0	0	20	17	70	50
Percent	8	0	25	0	0	0	25
Percent	16	50	13	0	50	0	0
Percent Other Occupations	8	25	0	0	0	10	25

*Age data over age 50 is from two sources and is illustrative only

Table F.2 Demographic Characteristics of Focus Group Participants: Baltimore County

Characteristic	All Sites	Dundalk	Millbrook	Rodgers Forge	Twelve Trees
Number of Participants	33	8	5	11	9
Tenure in Neighborhood					
Average Years at Current Address	17	25	14	18	9
Average Years in Baltimore County	27	33	24	33	17
Household Composition					
Average Number of Children in Household	0.79	0.9	0.6	0.9	0.67
Percent Households with Children	45	50	40	55	33
Percent Households with more than one adult	76	50	100	73	89
Occupational Status					
Percent Retired	27	40	0	45	11
Race					
Percent African American	27	0	0	0	100
Percent White	73	100	100	100	0
Gender					
Percent Women	58	50	60	45	78
Educational Attainment All in Percentages					
Less than High School	6	25	0	0	0
Some College	21	50	0	0	33
2 year College Degree	12	0	20	18	11
4 year College Degree	39	13	80	55	22

Graduate School	21	13	0	27	33
Age Cohort					
Percent 25 to 35	0	0	0	0	0
Percent 36 to 45	13	0	20	27	0
Percent 46 to 55	50	43	60	27	86
Percent 56 to 65	20	43	20	18	0
Percent Over 65	17	14	0	27	14

Table G.1. Denver Focus Group Summary: Montbello (5/20/98)

Boundaries of Neighborhood: 56th Avenue, 40th/46th Avenue, Chambers, Peoria.

Qualities of "Good" Neighborhoods

Low crime rates, upkeep of property, high employment, good work ethic. Neighbors that watch out for each other, keep an eye on the children. Pride in homes and upkeep of property. Affordable homes. Accessible.

Good Qualities of This Neighborhood

- Safe.
- Strong police presence.
- People have family values.
- Good schools.
- Diversity of neighborhood residents.
- Convenient access to DIA.
- People are friendly, interact with each other.
- People maintain their homes.

Problems in This Neighborhood

- Not enough access to shopping in the neighborhood.
- Growth in population.
- Traffic congestion.
- Lot a rentals in area.
- Lack of upkeep on rental properties.
- Need better code enforcement.
- Problems with traffic signs.
- Graffiti.

Characteristics of Neighborhood Residents

- Various age groups represented, including young people and elderly.
- Once a predominantly Black neighborhood but not now. About 60% Black at one time.
- Growth of Hispanic population. Big growth in Mexican Americans here.
- Have Blacks, Hispanics, Asians, and Whites. Definitely more Whites coming in.

Sense of Connection Among Residents

- People are neighborly and watch out for each other, concerned for their neighbors.
- Sense of community but not a lot of socializing going on.
- People used to be more connected. Less so now because of turnover in residents.

Organizations/Institutions that Draw People Together

- Booster's Club.
- Montbello Falcon teams.

Organizations/Institutions that Draw People Together

- Far Northeast Neighborhood Association
- Churches.
- Lots of activity clubs (i.e. car clubs).

Individuals or Organizations that "Speak" for Neighborhood

- John Smith, President of the Far Northeast Neighborhood Association.
- Monthly newsletter from the Far Northeast Neighborhood Association.
- Daddy-O, an on-air radio personality on KDDO (1510 AM) who is the "voice" of the community.

Perceived Changes in Neighborhood Quality of Life

- Fast growth of population and housing.
- Need more schools.
- Changing demographics. More Whites and Asians. Blacks are moving out.
- Increased cost of housing.
- Concerns about affordability.
- More traffic congestion.
- Lack of upkeep on some rental units which brings property values down.
- Lack of code enforcement.

Reasons for Perceived Changes in Quality of Life

- Airport relocation.
- Different kinds of values in some families (mentioned Section 8 families).
- Rentals owned by slumlords, persons who live outside of the neighborhood and don't care about the conditions of their properties.

Property Values as Indicator of Quality of Life

- Not necessarily a good indicator of quality of life. Neighborhood was better when housing was cheaper and people knew each other.
- Change in the quality of homes here. Putting in some upscale homes.

Perceived Changes in Neighborhood Residents

- Increase in the number of kids. They are going to be teenagers soon. Concerned about potential problems with teens.
- A lot of people are moving in.
- Increased diversity of residents.

Reasons for Changes in Neighborhood Residents

- The airport is the magnet drawing people to the area.
- Rising property values because of the airport. Good investment to buy here.

- Relocation of people from out of state into the area.

Table G.2. Denver Focus Group Summary: East Colfax (5/19/98)

Boundaries of Neighborhood: Colfax/Montview, Monaco, Yosemite, 11th Avenue

Qualities of "Good" Neighborhoods

Knowing your neighbors, their kids, their pets. Neighbors who watch out for and help each other. Return to neighborhood of younger families with children. Few renters and rental units. Better to have owners than renters. Lots of trees.

Good Qualities of This Neighborhood

- Racial, ethnic, religious, sexual orientation diversity.
- Neighbors are friendly, help each other out, talk to each other, watch out for each other.
- Accessibility of neighborhood to jobs, amenities, services.
- Neighborhood is well kept.
- Quieter due to the closing of the Stapleton Airport.
- Reduction in the number of rental units.
- Improved commercial usage on Colfax Avenue.
- Strong neighborhood association helping to maintain high quality of property.
- Superb police and fire protection.

Problems in This Neighborhood

- Occasional thefts.
- Street noise from car stereos.
- Need to have even fewer rental units.
- Unoccupied homes owned by elderly who either live in them seasonally or have been left vacant due to death, illness, etc.

Characteristics of Neighborhood Residents

High percentage of homeowners. Lots of younger Hispanic families moving in. Younger families in general. Still a lot of older people here. Lots of racial/ethnic/age diversity.

Sense of Connection Among Residents

- Physical layout of the neighborhood enhances contact, interaction between neighbors.
- Children play outside.
- People don't ignore their neighbors.
- High level of neighborhood awareness.

Organizations/Institutions that Draw People Together

- East Montclair Neighborhood Association
- Area churches, particularly St. Luke's.
- Tom Martino

Individuals or Organizations that "Speak" for Neighborhood

- East Montclair Neighborhood Association.

Perceived Changes in Neighborhood Quality of Life

- Increased property values.
- Closing of Stapleton has made the neighborhood quieter and more peaceful.
- More families.
- Deterioration of Aurora.
- Growth of shopping malls in the vicinity.
- Concerned about addition of prisons in the neighborhood.
- Deterioration of specific neighborhood areas (between Colfax and 16th on Wabash; 14th and Xenia, Montview). Presence of low-income hotels, rentals.
- Poor upkeep of Section 8 properties.
- Cleanup of some rental units, construction of Habitat Houses.
- Lack of or poor quality of infrastructure improvements (i.e. street paving, etc.)

Reasons for Perceived Changes in Quality of Life

- Relocation of Stapleton Airport.
- Residents are talking more pride and care of their properties because of increased property values. They are becoming more responsible. They care more.
- People have learned how to use resources and will not put up with problems anymore.
- Increase in homeowners and reduction of renters.
- Addition of more expensive housing stock.
- More families and more children.

Property Values as Indicator of Quality of Life

- As property values rise, residents care more for their properties.
- Value of homes less important than affordability of housing.
- Pride of ownership is important.
- Expensive homes do not necessarily indicate a good neighborhood. Suburban areas have quite sterile environments.
- Sense of community, neighbors more important than house values.

Perceived Changes in Neighborhood Residents

- Addition of younger families with children in some areas.
- Other blocks have fairly stable populations.
- More single income/single parent families.
- Lots of retirees.
- Significant gay/lesbian population.

Reasons for Changes in Neighborhood Residents

- Homes remain relatively affordable.
- Friendly, caring neighbors who watch out for each other.

Table G.3. Denver Focus Group Summary: Berkeley #1 (5/18/98)

Boundaries of Neighborhood: 52nd Avenue, Colfax, Zuni, Sheridan. N.W. Denver

Qualities of "Good" Neighborhoods

Good neighbors, social cohesiveness, racially mixed (diverse).

Good Qualities of This Neighborhood

- Good quality and well-maintained homes.
- Sense of history and historical integrity of neighborhood.
- People take a sense of responsibility and interest in neighborhood.
- Closeness among neighbors.
- Strong Neighborhood Watch.
- Commercial areas create neighborhood activities.

Problems in This Neighborhood

- Police not as responsive to community and it's needs as they should be.
- Traffic congestion.
- Lack of public transportation.
- Pollution.
- Political patronage and cronyism. Politicians not in touch with residents.
- Quality of public schools.
- Safety.

Characteristics of Neighborhood Residents

40% Hispanic, 40% White, and 20% other.
Few Blacks in neighborhood but are welcome.

Sense of Connection Among Residents

- Neighbors are intimately bound, close.
- People reach out to others, talk with each other.
- Shared sense of responsibility.
- Tradition of neighborliness.
- Some transient homeowners who buy into the neighborhood for the short term.
- Difficult to bring transient/renter population into neighborhood organizations.

Organizations/Institutions that Draw People Together

- West Highland, Sunnyside, and Berkeley Neighborhood Associations.
- Regis University.
- Commercial District.
- Sloan Lake Soccer Association.
- Berkeley Recreation Center.
- Community centers.

- Local schools and churches.
- Local library.

Individuals or Organizations that "Speak" for Neighborhood

- Neighborhood Associations.
- *North Denver Tribune*, neighborhood paper.
- Dennis Gallagher, City Council representative.

Perceived Changes in Neighborhood Quality of Life

- Improved quality of life. Better wages, more economic security.
- Growth in population and housing values.
- Better upkeep of homes.
- Higher taxes.
- Increased rental housing costs making neighborhood less accessible and affordable for persons of color, low-income residents.

Reasons for Perceived Changes in Quality of Life

- Accessibility of neighborhood.
- More White people returning to neighborhood.
- Greater appreciation of diversity.
- More affordable than other parts of Denver.

Property Values as Indicator of Quality of Life

- Recent rise in housing values. 113% increase in past 10 years.
- Driven by community and economic development.
- Good returns on investment and better amenities for value of housing.
- Not necessarily a measure of quality of life. Important component but not everything.

Perceived Changes in Neighborhood Residents

- Addition of yuppies, young couples.
- More "white collar" workers and their families.
- Two-earner families.
- People moving back to neighborhood.
- Individuals are looking for good properties.

Reasons for Changes in Neighborhood Residents

- Good value for property.
- Looking for amenities, access to facilities, parks, downtown.
- People looking for easy access to jobs.
- Neighborhood doesn't have the "inner-city" feel.

Table G.4. Denver Focus Group Summary: Berkeley #2 (5/21/98)

Boundaries of Neighborhood: Sloan's Lake, 52nd Avenue, Sheridan Blvd., Federal Blvd.

Qualities of "Good" Neighborhoods

Safety. Friendly and cooperative neighbors. Cleanliness. Sense of connection between neighbors. Youth programs that keep youth engaged and prevent them from getting into trouble. Communication with neighbors. Having responsive government agencies/officials.

Good Qualities of This Neighborhood

- Diversity of the people who live here.
- Increased property values.
- Small "Mom and Pop" stores.
- Convenient to rest of Denver, shopping, jobs,
- Has a small town feel.
- Neighborhood is pretty clean.
- Neighborhood is quiet.
- More children are back in the neighborhood.
- Neighbors watch out for each other, the children.
- Bounded by parks.

Problems in This Neighborhood

- Pockets where housing is deteriorated. Heavily rentals and low-income. They are strewn with trash, poor upkeep of homes and yards.
- Too expensive to buy a house now in this neighborhood.
- High concentration of renters.
- Poor public transportation.
- Graffiti.
- Some areas have problems with cleanliness.
- Landlords who are not held accountable for property upkeep.
- Poor schools, high truancy, lack of cooperation by schools in addressing problems, few teachers who care, school overcrowding.
- Poor city services.
- Businesses do not maintain properties.
- Traffic congestion and speeding.
- Homeless camps near highway.

Characteristics of Neighborhood Residents

Very mixed, ethnically, racially, culturally, by income, and by age. At least 25% renters. Too many renters.

Sense of Connection Among Residents

- People interested in getting to know neighbors but are constrained by time.
- Some neighbors watch out for each other. People choose level of contact.

Organizations/Institutions that Draw People Together

- Dennis Gallagher's office.
- Local schools and recreation centers.
- Neighborhood stores and restaurants.
- West Highland Neighborhood Association.
- Park Hill Neighborhood Association.
- Area churches.

Individuals or Organizations that "Speak" for Neighborhood

- Don't think that it is possible to have one representative voice because of the diversity.
- No real champion for the neighborhood.
- Felt that at one time Gallagher's office served that role but not now.

Perceived Changes in Neighborhood Quality of Life

- Housing values have increased.
- Neighborhood has cleaned up significantly.
- Higher taxes. Concerned about impact on the elderly.
- Low-income people are moving out.
- Concerned about the future affordability of housing.
- Influx of people from other states (i.e. California).
- Was working class neighborhood, now changing because of house prices.
- Gang problems.

Reasons for Perceived Changes in Quality of Life

- Values of homes have increased.
- Revitalization of downtown and the proximity of the neighborhood to downtown.
- People like the older homes.

Property Values as Indicator of Quality of Life

- Not necessarily. Contrasted the quality of homes and amenities in the neighborhood with the more upscale suburban subdivisions.

Perceived Changes in Neighborhood Residents

- Influx of people form out of state.
- More professionals in neighborhood.
- More families with children.
- Growth of Hispanic population.

Reasons for Changes in Neighborhood Residents

- Proximity to downtown, services, job opportunities.

- Accessibility to mountains, state parks.
- People attracted to the affordability.

Table G.5. Denver Focus Group Summary: Platte Park (6/1/98)

Boundaries of Neighborhood: Broadway, Pearl, Mississippi, Evans. I-25.

Qualities of "Good" Neighborhoods

- Trees and parks.
- Safe.
- Access to jobs, amenities, shopping, services.
- Sense of community. Caring and friendly neighbors.
- Small town feel to neighborhood.
- Rising property values.
- Environmentally healthy and safe.

Good Qualities of This Neighborhood

- Low crime.
- Access to shopping areas.
- Good neighbors.
- Can walk to bank, drycleaner, coffee shops, theaters.
- Good quality schools.
- Pride in neighborhood.
- Parks.

Problems in This Neighborhood

- Unsupervised kids. Some crime and graffiti.
- A bar and two sleazy hotels in area.
- City not responsive to residents.
- Truck access to I-25.
- Traffic congestion and speeding.
- Some lack of upkeep on housing, particularly rentals.
- A lot of rental units.
- Considerable gang activity until fairly recently.
- Unoccupied housing.
- No group representing community.

Characteristics of Neighborhood Residents

Mixed neighborhood. About half of residents are retired. Some families with children and some college students. Not many children. Change from middle class to a more young professional neighborhood. Mostly white, some Hispanics, Blacks, and Asians. There is sexual orientation diversity here -- a lot of gay people live here. Lower income people had to move out.

Sense of Connection Among Residents

- Some socialization with immediate neighbors.
- Neighbors have something in common, are friendly and caring, watch out for each

other, talk to each other.
- No real neighborhood groups.

Organizations/Institutions that Draw People Together

- W. Washington Park Association.
- The university.
- Platt Park Senior Center.
- McKinley/Thatcher School.

Individuals or Organizations that "Speak" for Neighborhood

- *Washington Park Profile*, a community paper.
- The merchants in the community.

Perceived Changes in Neighborhood Quality of Life

- Quality and upkeep of homes has improved. Values have gone sky high.
- More air and street traffic.
- Traffic and noise are worse.
- Better schools.
- Air pollution has improved.
- More sense of community.

Reasons for Perceived Changes in Quality of Life

- Improved economy.
- Denver as a city has improved.

Property Values as Indicator of Quality of Life

- Property values are a secondary factor. Determines who ends up living here.
- Rising property values have tended to make rental owners sell.
- People now cannot afford to live in the neighborhood. There are pluses and minuses to that.
- People need a lot more money to live here.
- Higher values are a mixed blessing. Reduces diversity.

Perceived Changes in Neighborhood Residents

- Renters have come and gone.
- Neighbors are younger. Older residents have died off.
- Neighborhood has remained fairly stable.

Reasons for Changes in Neighborhood Residents

- People who stay love the neighborhood and their homes.
- Higher cost of living has driven poor people out.

Table G.6. Denver Focus Group Summary: University Hills (6/8/98)

Boundaries of Neighborhood: Yale, Hampton, I-25, and Colorado.

Qualities of "Good" Neighborhoods

Safety, good schools, diversity, getting to know your neighbors, trees.

Good Qualities of This Neighborhood

- Housing values have been rising.
- Spacious homes and lots.
- Easy access to downtown, DTC, highway.
- Below 10% rentals now. Before about 40% rentals.
- No through streets.
- Relatively quiet.
- People take care of homes.
- Good neighbors.
- Access to the Highland Canal.
- Lots of trees.

Problems in This Neighborhood

- Not enough street lights.
- Schools could use some improvement.
- No noise barriers on I-25.
- Traffic congestion because of I-25.

Characteristics of Neighborhood Residents

- Diversity of people.
- Older people, some young families with children, some others just starting out.
- Not too many kids in the neighborhood.
- Mostly white, some Latinos and Blacks.
- Mostly working class -- some wealthy people.
- People are in the neighborhood to stay.
- Some renters.

Sense of Connection Among Residents

- Some socialization with immediate neighbors.
- Neighbors do care about each other.
- Some felt real friendliness with neighbors, but no real socialization beyond exchanging hellos.
- Depends on whether you have kids or not.

Organizations/Institutions that Draw People Together

- No real neighborhood groups.

Individuals or Organizations that "Speak" for Neighborhood

- No organization speaks for residents. Not even a Neighborhood Watch here.

Perceived Changes in Neighborhood Quality of Life

- Quality of life has definitely improved.
- Property values have gone up.
- Houses are being fixed up.
- People have more money because the economy has improved.
- There's a new shopping center.
- Increased noise and traffic.
- Increased use of fire department.
- Rentals are not always well maintained.

Reasons for Perceived Changes in Quality of Life

- The economy has improved.
- More people are buying and owning homes in the neighborhood.
- City of Denver has improved.
- People are moving to Colorado from other places (i.e. California).

Property Values as Indicator of Quality of Life

- Property values are a good indicator of quality of life. People care more about their property.
- Renters are leaving. People who own homes are here to stay.
- Receiving flyers/calls for home equity loans, requests to buy property.

Perceived Changes in Neighborhood Residents

- Mostly are the same neighbors.
- Fewer renters.

Reasons for Changes in Neighborhood Residents

- People are staying because they like the area.
- Higher costs of housing are forcing renters to leave.

Table G.7. Baltimore County Focus Group Summary: Dundalk (6/18/98)

Qualities of "Good" Neighborhoods

- Limited amount of rental property (first response to question)
- Few hi-rises and little Section 8
- Houses kept in good physical condition
- Safe
- Friendly neighbors
- Good schools
- Reasonable taxes
- Access to highways
- Access to churches

Good Qualities of This Neighborhood

- Neighbors care about each other
- Multiple generations live here (children buy in to the neighborhood when become adults)
- Good fire protection and ambulance service
- Responsive politicians

Problems in This Neighborhood

- Too much Section 8 ("They don't care about the neighborhood or other neighbors")
- Crime particularly vandalism of cars and property
- Absentee landlords who let properties run down and don't screen tenants
- Too much near-by commercial development
- Groups of teenagers roaming the streets (coming through neighborhood from bordering apartments on their way to local shopping centers)
- People don't know each other like they used to
- "Problem properties" where people not keeping up yard and house
- "Problem families" who are selling drugs and bringing in an unsafe element

Characteristics of Neighborhood Residents

- Hardworking
- Conservative
- Watch out for each other

Organizations/Institutions that Draw People Together

- Used to be Neighborhood Improvement Association (no longer functioning)
- Used to have PTA (neighborhood elementary school closed at least 15 years previously)
- "Someone" is "paying attention" and calls neighborhood meetings when "something is going on" (rumors of a HUD development on a large vacant lot) but don't know who

Perceived Changes in Neighborhood Quality of Life

- Not as good as it used to be
- More crime and vandalism
- More vacant properties, absentee landlords, and Section 8
- Neighbors not as connected to each other as used to be

Reasons for Perceived Changes in Quality of Life

- People are busier now and don't get to know each other
- Older generation is retiring and selling or renting homes to different kind of people
- More renters, subsidized housing, and absentee landlords
- More women work and aren't home during the day to get to know each other
- Houses are getting older/showing their age
- "People don't want to live near Section 8"
- Policy Academy (located in neighborhood) closed--less police presence
- Close to the city and accessible for people moving out of the city
- Small, starter homes that people can afford

Property Values as Indicator of Quality of Life

- Property values are dropping as quality of life is dropping
- Property values are dropping because people don't want to live near Section 8

Reasons for Perceived Changes in Property Values

- Subsidized Housing
- Tearing down local elementary school (at least 15 years ago)
- Built too many shopping centers around neighborhood
- New police chief downsized and fewer officers on streets so less security
- People want to move farther out into the suburbs
- Property values in the whole county are dropping and slowing
- Perceived as an unsafe area with different kind of people than used to live here

Perceived Changes in Neighborhood Residents

- Lower income
- People don't care about neighborhood standards
- Different attitudes about taking care of a home, neighbors, and themselves
- Different "socio-ethnic" groups

Reasons for Changes in Neighborhood Residents

- More Section 8 in neighborhood
- More renters in neighborhood
- Older people are retiring/moving/dying
- Young people are so busy these days and have different view of neighborhood life
- Former area employers who paid good salaries are gone or downsized (industrial jobs)

Table G.8. Baltimore County Focus Group Summary: Millbrook (6/25/98)

Qualities of "Good" Neighborhoods
- People that take care of their properties
- Friendly, cooperative, nice neighbors
- Stability of neighbors
- Peace and harmony between people
- Homes and yards that look good
- Safety

Good Qualities of This Neighborhood
- People are helpful, nice
- Quiet
- Beautiful
- Good transportation
- Convenient to shopping
- Affordable homes and mortgages
- Good schools

Problems in This Neighborhood
- Increased crime (vandalism to cars and theft)
- People drive too fast
- Increase in "Borderline Buyers" (people buy into neighborhood because of assistance)
- People not keeping up properties as well
- Real Estate agents steer "Borderline Buyers" to neighborhood
- Whites no longer buying in the neighborhood

Characteristics of Neighborhood Residents
- Racially mixed neighborhood (white and African American)
- Nearby Apartment complex is almost all Russian immigrants
- Working class neighborhood with some retired people
- Single mothers (affordable on one salary and in a good school district)

Organizations/Institutions that Draw People Together
- Neighborhood Association but not much participation
- Children bring people together (schools and activities)

Perceived Changes in Neighborhood Quality of Life
- Still a good place to live but more crime
- Higher resident turn over
- Some properties not being kept up

Reasons for Perceived Changes in Quality of Life
- People moving in with less economic means ("borderline buyers")
- People moving in with different standards
- Kids are coming in from the City (on bus and subway) and increasing crime
- People didn't have air conditioning and used to be outside more
- Two parents that are working makes it hard to get to know people

Property Values as Indicator of Quality of Life

- Property values are slowing but stable
- If doesn't look good then can't resell

Reasons for Perceived Changes in Property Values

- High number of homes for sale
- Some people moved when more Blacks started moving in
- "Some people say" values will start slipping within five years
- More people don't keep up property
- Perception of more crime

Perceived Changes in Neighborhood Residents

- More African Americans and fewer whites
- More people from a economic income background

Reasons for Changes in Neighborhood Residents

- As more African Americans move in, more whites move out
- Whites don't move in to an integrated neighborhood
- Out movers are moving away from a certain race and class of people

Table G.9. Baltimore County Focus Group Summary: Rodgers Forge (6/20/98)

Qualities of "Good" Neighborhoods
- Good neighbors connected to each other
- Diversity of age of neighbors
- Accepted community standards/covenants
- Few absentee landlords
- Good schools
- Stability of residents
- Residents active in community/neighborhood affairs

Good Qualities of This Neighborhood
- Neighbors care about each other
- Residents look out for the neighborhood
- Strong/stable property values
- Good schools
- Strong covenants (neighborhood standards)
- Only a few deteriorated or vacant properties

Problems in This Neighborhood
- People not respecting the covenants (building tall fences, enclosed porches, etc)
- Some say there is more vandalism
- Anxiety about possible in-movers

Characteristics of Neighborhood Residents
- Majority white
- Concerned about each other
- Concerned about community
- Family oriented

Organizations/Institutions that Draw People Together
- Neighborhood Association
- PTA
- Business associations

Individuals or Organizations that "Speak" for Neighborhood
- Neighborhood Association
- Local politicians

Perceived Changes in Neighborhood Quality of Life
- People aren't as connected as once were

Reasons for Perceived Changes in Quality of Life
- The "me" generation moved in
- Central air means people stay inside
- Older, long time residents retiring/dying/moving

Property Values as Indicator of Quality of Life

- Property values have increased but not as quickly as previously
- Good neighborhood is reflected in strong property values
- People attracted because of strong property values

Reasons for Perceived Changes in Property Values

- Market is slower
- Some people who don't want to follow the covenants don't buy (no decks and porches)

Perceived Changes in Neighborhood Residents

- Younger
- Not as connected to community
- More likely to protest/push covenants

Reasons for Changes in Neighborhood Residents

- Long time residents retiring/leaving neighborhood
- People are busier
- In-movers more concerned about selves

Table G.10. Baltimore County Focus Group Summary: Twelve Trees (6/22/98)

Qualities of "Good" Neighborhoods
- Mostly homeowners
- Diversity
- Racially Integrated
- Good schools
- Quiet
- Good transportation
- Access to stores, banks, other amenities
- Homes and yards are well maintained

Good Qualities of This Neighborhood
- Friendly neighbors
- Quiet (better than the city)
- Neighbors keep up homes and yards
- Quick response from police
- Most of the kids are respectful
- Parents pay attention to children

Problems in This Neighborhood
- Poor public transportation
- Schools over crowded
- Increase in number of renters
- Area doesn't have large stores (like Ames, Walmart, or Target)
- Not enough parking
- People moving in with different community standards
- Some problems with physical upkeep (15 to 20% of homes have upkeep problems)
- Absentee landlords who let property run down and rent to disruptive tenants
- Getting too congested
- Increased vandalism (particularly to cars)
- Poor landscaping of common areas (but this is changing)
- Not many long term residents...people are selling
- Whites are moving out

Characteristics of Neighborhood Residents
- Mostly African American (neighborhood 10 to 12 years ago was predominantly white)
- Friendly
- Hard working

Organizations/Institutions that Draw People Together
- Neighborhood Association had serious problems (allusion to misuse of funds) but "new people" are taking over
- Old Association didn't let residents speak at meetings
- General hopes that new Association will truly represent and work for the community

Reasons for Perceived Changes in Quality of Life
- Fewer homeowners

- Different type of people are moving in (disruptive, disrespectful)
- People coming in have different community standards
- Changes in the way people are brought up (no longer respect themselves and others)
- Kids don't have enough to do so they hang out and some cause trouble
- Randallstown (in general) is declining
- Used to be mostly white but now mostly Black

Property Values as Indicator of Quality of Life
- Property values are slipping or at least slowing
- Area is not as nice a place to live as it once was

Reasons for Perceived Changes in Property Values
- Neighborhood is perceived as "ghetto of Randallstown"
- Neighborhood went from predominantly white to predominantly Black
- Randallstown (in general) is a less desirable area
- Problem with physical upkeep of some properties
- Long time landscape contractor did not do a good job and Homeowners Association did nothing about it

Perceived Changes in Neighborhood Residents
- More renters
- Different kind of people with different standards
- Used to have more whites in neighborhood

Reasons for Changes in Neighborhood Residents
- People raised differently and don't respect themselves and other people like they used to
- Whites are moving out and Blacks are being steered to Randallstown
- The inner city is tearing down hi-rises and former tenants with a different way of life and community standards are coming to areas like Randallstown