THERE GOES THE NEIGHBORHOOD?

The Impact of Subsidized Multi-Family Housing on Urban Neighborhoods

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EXECUTIVE SUMMARY

This study analyzes the impact of subsidized housing on urban neighborhoods. Specifically, we examine the effect of subsidized multi-family projects developed by nonprofit community development corporations (CDCs) in the central neighborhoods of Minneapolis.

Subsidized rental housing in Minneapolis is largely carried out through the efforts of nonprofit, neighborhood-based CDCs. In 1995 there were thirteen neighborhood-based CDCs producing housing, along with four regional CDCs that pursue some of their development in Minneapolis. Recently, the strategy of subsidizing multi-family housing rehabilitation in the inner city has come under attack from a variety of sources. There are three major concerns regarding the multi-family subsidized housing created by the CDCs. First, opponents claim that it depresses nearby residential property values. Second, some fear that subsidized multi-family housing increases crime. Finally, some neighbors fear that this type of housing attracts newcomers to the neighborhood, increasing the concentration of poverty and destabilizing the neighborhood.

Given these concerns, neighborhood organizations and local officials are beginning to question whether the subsidized housing that CDCs produce contributes to the decline of neighborhoods. Many neighborhood organizations have expressed the desire to halt multi-family housing projects and shift to homeownership assistance. This study is aimed at providing factual content for the debate on the effects of subsidized housing on neighborhood health.

FINDINGS

Property Values

We find that proximity to nonprofit-developed subsidized housing actually enhances property values at a rate of $.86 per foot. That is, if one were to compare two properties, A and B, that are identical in all respects except that property A is 100 feet closer to a nonprofit-developed subsidized housing project than property B, the value of property A would be $86 higher than that of property B. Nonprofit-developed subsidized housing projects improve the property values of nearby residential units. Two other categories of subsidized housing, public housing and privately owned, publicly subsidized housing have slight negative effects. Proximity to privately owned, publicly subsidized housing depresses property values at a rate of $.82 per foot. Public housing deflates property values by $.46 per foot. More significant in determining property values is the state of private sector housing management in the neighborhood, including the number of vacant homes, and code violations issued to property owners in the surrounding blocks.

Crime

Crime data on fourteen nonprofit projects show that there were significantly fewer crime calls at these properties after their rehabilitation and conversion to subsidized housing. There was a decline of an average of over one and one-half crime events per month at the fourteen buildings included in the analysis. When the fourteen projects are examined individually, five buildings show a decline in police calls after rehabilitation, two show a slight increase, and eight buildings show no statistical change due to the rehabilitation. Thus, there is virtually no supporting evidence for the fears that these CDC-developed subsidized housing projects increase crime. In fact, the balance of the evidence shows the opposite: there is less crime after the buildings were rehabilitated by the CDCs and converted into subsidized housing.

Neighborhood Fit

Length of Residency

The tenants of subsidized nonprofit projects are less transient than other renters in the project neighborhoods. This suggests that the subsidized projects contribute to the stability of the neighborhood. Of the tenants in twenty-three subsidized nonprofit projects, 23.2 percent had, in the fall of 1994, lived in their units for less than one year. This compares to 47.7 percent of all tenants in the neighborhoods in which these projects were located.

Previous Residency

There is little support for the hypothesis that these subsidized housing units are attracting new low-income residents to the city; 88 percent of the current residents of these buildings lived in the city prior to moving into their subsidized units. Almost four out of ten (38.3 percent) had lived in the same neighborhood.

Race and Income

The subsidized housing units overrepresent people of color compared to the neighborhood-wide distribution of race. While whites make up 62 percent of the residents of the study site neighborhoods, they account for only 16.1 percent of the study site residents. Conversely, African Americans make up only 23.6 percent of the study site neighborhood, but 49.8 percent of the study site residents. In addition, Asians are overrepresented among the residents of the subsidized rental buildings in our study. Residents of the study sites are more likely to have very low incomes compared to neighborhood residents. Even though these projects are located in the poorest neighborhoods in the city of Minneapolis, very low income residents are overrepresented among the project site tenants. Almost three of every four project residents (70.9 percent) have incomes below 50 percent of the area median. This compares to only 52.4 percent of the neighborhood residents.

Employment and Source of Income

Fifty-six percent of the households in the subsidized units receive wages from employment (43.7 percent from full-time and 12.9 percent from part-time employment). This compares to 74.5 percent of the households in the neighborhoods in which the study sites are located. The

data on public assistance do not show such a wide disparity, however. One in five (20.2 percent) neighborhood resident households receives Social Security income compared to only 14.7 percent of the study site households. Similarly, 21.9 percent of neighborhood households receive income assistance through General Assistance (GA) or Aid to Families with Dependent Children (AFDC), compared to 29 percent of the study site residents. When combined, the percentage of households receiving public assistance is virtually identical between study site residents (44.8 percent) and neighborhood residents (42.1 percent).

Rents

There is significant unmet demand for affordable units in the neighborhoods in which nonprofit projects are located. The data show a very large number of renter households in need of affordable housing in each of the census tracts having one of the sample projects. In some of these areas the absolute number of households needing affordable housing is huge, for example in two southside tracts where over 1000 and 900 households, respectively, are paying too much for their housing. In a number of southside locations, over 90 percent of renters with incomes below $10,000 are overpaying for their housing. In all but two study site neighborhoods, for households in the lowest income category, the median percentage of income paid for housing exceeds 50 percent.

Since 74 percent of the tenants in the subsidized multi-family projects in our sample have incomes less than 50 percent of the median (incomes less than $18,282), we conclude that the majority of these units are targeting a population for whom there is an extreme shortage of affordable housing. There may well be some competition with the private landlords for tenants whose incomes are above the 80 percent threshold (incomes of $29,252 or higher), but these remain a small percentage of the units operated by the CDCs.

SUMMARY

In summary, we find none of the supposed negative effects on neighborhood vitality of subsidized housing that is developed by nonprofit CDCs. Multi-family housing rehabilitation is a strategy that cannot be abandoned or deemphasized by public officials. As the multi-family housing stock in the inner city continues to age and deteriorate, housing rehabilitation by community-based nonprofit organizations is a necessary and effective public policy strategy. Indeed, this strategy may provide three benefits simultaneously: rehabilitation of deteriorating physical stock of housing, neighborhood revitalization through enhanced property values, and the provision of affordable housing for lower-income families.

The disposal of subsidized housing being advocated by many is not strictly necessary for the sake of inner-city neighborhoods, at least with respect to nonprofit-developed housing. There remain, however, other compelling reasons to disperse subsidized housing: for example, to provide lower-income residents with easier access to areas of job growth and to provide lower-income children with better educational opportunities. Recent studies of the Twin Cities economy have shown that the greatest job growth is occurring in suburban areas. If affordable housing is provided in suburban areas, lower-income residents will be better able to access these jobs. The creation of affordable housing in suburban areas will also allow the

children of low-income families to benefit from the educational opportunities provided in suburban schools. Finally, there is a sizable low-income population already residing in the region's suburbs that needs affordable housing. Estimates based on 1990 census data suggest there are over 35,000 low-income households paying more than 30 percent of their income for housing in the Twin Cities suburbs. These, and other, justifications for the dispersal of affordable subsidized housing still exist, and they remain compelling. The issue of the dispersal of affordable housing, therefore, needs to be reframed; it should be not be undertaken to relieve the burden of central-city neighborhoods, but rather to enhance the educational and employment opportunities available to lower-income people and to provide families with a wider range of communities to choose from when they make their housing decisions.

1 INTRODUCTION AND BACKGROUND

This study analyzes the impact of subsidized housing on urban neighborhoods. Specifically, we examine the effect of subsidized multi-family projects developed by nonprofit community development corporations (CDCs) in the central neighborhoods of Minneapolis. This study is an attempt to shed some empirical light on a topic of increasing debate in the Twin Cities of Minneapolis and St. Paul: that is, does the rehabilitation of multi-family housing and conversion to public-subsidy housing contribute to the improvement of neighborhoods or to their decline?

THE POLITICAL CONTEXT FOR CDC HOUSING DEVELOPMENT

Opposition to subsidized housing for low-income people is not a new phenomenon. The history of class and race exclusionism is a long one in the United States.[1] During the 1960s and 1970s, when federal subsidies for low-income housing were expanding, there were widespread and, in some cases, notorious examples of communities attempting to exclude federally subsidized housing.[2] Referred to as a NIMBY (Not In My Back Yard) response, the reaction of opponents to subsidized housing generally focuses on three fears—that property values will decline, that personal safety will be compromised, and that neighborhood amenities will suffer.[3]

During the last two presidential administrations, the Federal Department of Housing and Urban Development (HUD) has focused its efforts on dispersing the recipients of subsidized housing. These dispersal initiatives have served two policy objectives: to increase the role of the private housing market through the use of rent subsidies, and to deconcentrate poverty and provide better neighborhood options for those receiving housing assistance. This effort has picked up steam under the Clinton administration with the implementation of the Moving to Opportunity program and HUD's emphasis on metropolitan-wide affordable housing.[4] The Moving to Opportunity program is a national demonstration program modeled after the Chicago Gautreaux program that provides rental subsidies to public housing tenants to relocate to non-segregated city neighborhoods or suburban locations. The metropolitan-wide housing strategies supported by the current HUD administration include the development of new subsidized housing opportunities in suburban areas. These initiatives, and their emphasis on metropolitan solutions to affordable housing problems, have increased the potential for NIMBYism among residents and officials in suburban locations not wishing to receive subsidized low-income housing, and in central-city neighborhoods that feel as though they have already done their fair share.[5] These national trends are being duplicated in the Twin Cities.

Subsidized rental housing in Minneapolis is largely carried out through the efforts of nonprofit, neighborhood-based community development corporations (CDCs). In 1995 there were thirteen neighborhood-based community development corporations (CDCs) producing

housing, along with four regional CDCs that pursue some of their development in Minneapolis. Most of the neighborhood-based CDCs emerged from community activism that took place during the 1970s or 1980s. When a number of neighborhoods, such as Cedar–Riverside, Seward, and Near North, organized in response to large-scale urban renewal efforts, the community organizations representing these groups realized the need to become more proactive in community development issues.[6] These neighborhood organizations spun off CDCs in order to give themselves a role in land development.[7]

As CDCs became more numerous and more sophisticated, the city of Minneapolis (through the Minneapolis Community Development Agency, MCDA, and its predecessor, the Minneapolis Housing and Redevelopment Agency, MHRA) began to channel resources to the nonprofit developers, including operating support funds and project capital for multi-family housing rehabilitation. In the late 1970s, neighborhood and tenant activists created Common Space, a nonprofit organization that came to be a central clearinghouse for the CDC movement. In 1981, wishing to devote more of its time to cooperative housing development, Common Space helped create the Minneapolis Consortium of Community Developers to act as a coalitional body for the growing CDC movement in the city. During the 1980s, CDCs strengthened their relationship with MCDA, becoming the primary vehicle through which the city rehabilitated its multi-family housing stock. MCDA created new programs for the CDCs to use, provided CDCs with operating support for each project they completed, and relied on the CDCs to implement many of its community development programs. The CDCs became especially valuable to the city as the private sector proved increasingly reluctant to provide affordable housing. The MCDA's multi-family housing division actively encouraged the formation of CDCs in neighborhoods across the city.

Recently, however, the strategy of subsidizing multi-family housing rehabilitation in the inner city has come under attack from a variety of sources. Subsidized multi-family housing[8] has become associated with concentrated poverty in the inner cities, and in turn with problems of crime and property value decline. The recent attention of the media and policymakers to the issue of intrametropolitan inequalities has also served to heighten concerns about the concentration of subsidized housing in the inner cities. The Minneapolis–St. Paul region has been regarded by many experts as a national example of regional cooperation on land use issues, primarily on the strength of the Metropolitan Council and the regional tax base sharing program. Befitting its leadership role in this area, the region has hosted a lively debate in the past four years on the merits of a region-wide approach to affordable housing.

Intrametropolitan Inequities and the Concentration of Poverty

There is a growing awareness within the two central cities of the Minneapolis–St. Paul metropolitan area of the very large inequities between inner-city and outlying areas of the region. Between 1970 and 1980, the metropolitan area experienced a 50 percent increase in the number of census tracts with concentrated poverty.[9] There is evidence that concentrated poverty increased more dramatically during the 1980s. The issue is made more volatile because of heavy racial overtones. In fact, according to 1990 census figures, the difference between central city and suburban poverty rates for nonwhites in the Twin Cities is greater than in any other large metropolitan area in the country.[10] In the Twin Cities region, the number of African

Americans living in census tracts in which 40 percent or more have incomes below the poverty level increased from 27.4 percent in 1980 to 46.6 percent in 1990. In absolute terms, the number of African American residents living in neighborhoods of concentrated poverty in the Twin Cities rose from 12,237 in 1980 to 41,376 in 1990.[11]

In 1992, the Metropolitan Council of the Twin Cities published a report documenting alarming inequities between the region's core cities and its outlying suburban areas.[12] Entitled *Trouble at the Core*, the report has set off a prolonged regional discussion of the future of the inner cities and the appropriateness of regional approaches to heading off urban decline. A subsequent report by the Metropolitan Council published in 1994 revisited the issue and presented a series of strategies for dealing with the decline of the core.[13] Both major daily newspapers in the region have devoted a number of articles since 1991 to the issue of decline in the core and intrametropolitan inequities. The *St. Paul Pioneer Press* ran a series by national columnist Neal Peirce, "The Peirce Report: St. Paul and Beyond," in November 1991 that focused on revitalizing the city's neighborhoods. In the summer of 1993 the *Minneapolis Star-Tribune* ran a series of articles called "Strengthening the Core" that explicitly took up the issue of regional disparities. The Minneapolis paper has also featured a regular supply of articles on the issue of income inequities in the metropolitan area and regional housing issues.[14] Both papers have closely followed the legislative history of Minneapolis Democratic State Representative Myron Orfield's proposal for a regional fair-share housing initiative.

Beyond media coverage of the issue, various public policy bodies have also presented analyses of regional economic trends. In addition to the Metropolitan Council, other groups such as The Citizen's League (a regional public interest organization), The League of Women Voters of Minneapolis, the local Urban Coalition, and the former director of city planning for Minneapolis have each published reports or books on issues of housing segregation, suburban exclusionary zoning, and regional disparities.[15] The policy debate has also been fanned by a pair of studies completed by faculty at the University of Minnesota. One study examined exclusionary zoning by suburbs of the Twin Cities, while another analyzed the regional system of subsidizing growth on the metropolitan fringe through the sewer system pricing structure.[16]

Though these publications have helped to inform the political debate surrounding regional inequities, at the center of that debate has been a series of legislative proposals by a state representative from Minneapolis that would require "fair share" housing requirements for suburbs, the pooling of regional property values, and the restructuring of highway and sewer development subsidies in the area. State Representative Myron Orfield has introduced bills in the past three legislative sessions that would require suburban areas to produce a fair share of subsidized housing.[17] The first two years, a coalition of representatives from the core cities and the inner-ring suburbs, and outstate DFLers pushed the housing bill through, only to have it vetoed by the governor. As Orfield meets with civic leaders, community organizations, and business groups, he stresses the inequities in regional conditions. In 1994, the Independent Republicans created their own version of fair-share housing in response to Orfield. The IR plan stresses an incentive-based market approach to creating affordable housing in the suburbs. The Metropolitan Council has advocated a third approach, closer to the IR proposal, that primarily relies upon incentives. This version of the program was introduced by two

DFL legislators during the 1995 legislative session. The program, called the Livable Communities Act, was passed by the legislature and signed into law by the governor in the spring of 1995. The program is entirely voluntary and contains no penalties for non-participation.

The policy debate has also been influenced by the perception of many that Twin Cities suburbs are resisting the siting of subsidized multi-family housing in their areas. The University's study of suburban exclusionary policies certainly reinforced that perception, but so has a series of highly publicized cases in which suburban jurisdictions have denied permits or zoning approval to subsidized multi-family housing developments. In the late fall of 1993, suburban Maple Grove denied approval for low- and moderate-income townhouses after residents filled the city council chambers and complained of fears of crime and property devaluation.[18] In 1994, the suburban city of Eagan denied a zoning variation for subsidized low-density townhouses.[19] Qualifying incomes for each of these projects were well into the $20,000 range, yet residents feared an influx of crime and lower property values. Though the Maple Grove project was never built, the Eagan development will go on after the county Housing and Redevelopment Agency filed suit against the city.

In 1995, two state legislators from St. Paul introduced a bill that would have put a moratorium on newly constructed subsidized housing in the inner cities of Minneapolis and St. Paul. The Dawkins-Kelly bill would have put a stop to additional subsidized housing in the core cities until the rest of the region begins to meet its obligation in providing affordable housing opportunities. The preamble of the bill suggests, without reference to any study, that the concentration of subsidized housing deflates property values and increases crime.

Fear of Crime

Fear of crime is a central issue for policymakers and residents of Minneapolis. Just below the surface of that fear is the issue of race. High-profile crime cases are supplemented weekly by a steady flow of media stories on crime. A local weekly newspaper has taken to counting the number of times local television stations lead their 10:00 P.M. news programs with crime stories. In the first six months of 1995, the stations used local crime stories to lead their programs approximately 40 percent of the time.[20]

Fear of crime has escalated sharply in the region. In 1993, 61 percent of the respondents to a public opinion poll of metropolitan residents identified crime as the single most important issue in the region. The second most often mentioned issue was listed by only 11 percent of the respondents. The salience of the crime issue has increased steadily since 1986, when only 17 percent of the respondents mentioned it as a problem.[21] A Planning Department survey of homeowners in 1993 found that 39 percent of those considering moving cited crime as the main reason, a rate almost twice that given to the next most common reason.[22]

In the late 1980s, the city and county created the Community and Resource Exchange (CARE) program to facilitate community-based crime prevention. Since then, anti-crime initiatives have been a major part of most community organizations in the core neighborhoods of Minneapolis. In fact, in 1993, the CARE program was merged with the city's Neighborhood Revitalization Program (NRP), evidence of the degree to which neighborhood revitalization has merged with crime prevention in the minds of policymakers and neighborhood

groups. A survey of thirteen NRP plans in 1994 revealed an array of anti-crime initiatives, including block clubs, street lighting, citizen and police patrols, and crackdowns on drug houses. The average number of anti-crime programs planned by these neighborhoods was five. In many neighborhoods, the current focus on crime prevention has increasingly pitted middle-income property owners against lower-income tenants, a pattern that has occurred in other cities as well.[23]

In this new policy environment, subsidized housing is on the wrong side of the equation. Subsidized housing is increasingly thought to contribute to the concentration of poverty leading to greater criminal activity. In some neighborhoods, there is concern that the subsidized buildings themselves are the location of significant criminal activity.[24] Suburban areas that reject subsidized housing projects often cite crime concerns.[25] As one director of a CDC said, "Low-income housing in most people's minds is what you see on late-night TV, with cops running up the tenement hallway and knocking the door open with their feet, and cockroaches scurrying and Wild Irish Rose bottles in the hallway..."

The growing use of tenant screening is an expression of the degree to which tenants have become identified with neighborhood problems. City government has lent legitimacy, support, and funding to neighborhood organizations in their attempt to police tenant behavior. The police departments in St. Paul, Minneapolis, and at least one large suburb have initiated tenant screening services in the past few years. In the Phillips neighborhood of Minneapolis, a crime prevention specialist with the city's police department helped landlords create a master list of problem tenants. The list had more than 600 names, each followed with a note describing the tenant's bad behavior. The behavior ranged from drug dealing to consorting with dealers to simply complaining. The list was discontinued when it was shown that most of the information in the tenants' notes was inaccurate.[26] The Hawthorne neighborhood organizations received $10,000 in 1993 from the city of Minneapolis to create a landlord coalition and initiate tenant screening in the neighborhood.[27]

CDCs and Neighborhood Politics

Given prevailing concerns about crime and the concentration of poverty in inner cities, many neighborhood organizations point to the subsidized housing that CDCs produce and argue that it contributes to the decline of their neighborhoods. The 1990s have seen a growing rift between neighborhood organizations and CDCs. Some neighborhood groups believe the CDCs act too independently, and that the projects they pursue are "developer-driven" rather than "neighborhood-driven." Neighborhood organizations argue that CDCs are too autonomous and do not reflect the will of residents. Furthermore, many neighborhood organizations have expressed the desire to halt multi-family housing projects and shift to homeownership assistance.[28]

The conflict between CDCs and neighborhood organizations is exacerbated by the city's ambitious program for neighborhood planning and community development, the NRP. The City of Minneapolis has promised to allocate $20 million per year for twenty years to neighborhoods participating in NRP. In the most deteriorated inner-city neighborhoods, NRP has caused a great deal of upheaval within community organizations, often shifting them away from active advocacy of lower-income residents, to organizations that serve the interests

of primarily resident homeowners, businesses, and landlords.[29] The enormous resources made available by NRP have created an incentive for middle-income property owners, who had stayed away from or ignored the local community organizations, to participate in setting neighborhood priorities through NRP. As they have done this, subsidized housing by CDCs has come under attack. The coalition of CDCs in the city, called the Minneapolis Consortium of Community Developers, has requested reforms in the NRP program to loosen up money earlier on in the planning process for affordable housing, drawing criticism from neighborhood representatives.

In 1993 and 1994, a coalition of community organizations called the Coalition of Minnesota Neighborhoods (COMN) became a forum for complaints against CDCs, who were portrayed as trying to take over community organizations and push their own agenda upon the neighborhoods. Two articles very critical of CDCs appeared in 1994, one in a business magazine and one in a free weekly newspaper.[30] These articles criticized CDCs for wasting public resources and enjoying a privileged relationship with the city development agency at the expense of both taxpayers generally and neighborhood residents more specifically. The city's affordable housing programs were subject to further scrutiny by a series of critical articles in the Minneapolis daily newspaper, focusing on the high cost of providing subsidized affordable housing and on the political influence of those organizations and individuals in the subsidized housing field.[31] CDCs have even come under attack for competing unfairly with private sector landlords.[32] For their part, CDCs maintain that the housing they create is good for their communities as well as for the lower-income residents who benefit directly from the subsidized affordable housing produced. CDCs also maintain that the housing they operate is often combined with services for tenants, which differentiates their product from the housing provided by the private sector.

The negative press received by CDCs continued in 1995 with another cover story in a weekly newspaper about the financial problems experienced by one of the city's largest CDCs, the Phillips Neighborhood Housing Trust.[33] The article sensationalized a common problem for CDCs—the financial constraints of managing their physical and financial assets. Many CDC housing projects were initially financed with a small or nonexistent margin. This was done to keep down the initial capital costs and reduce rents to the lowest levels possible. But as the housing stock ages and the inflation of costs associated with housing management (such as taxes, security, utilities, labor, and replacement capital) rise at a rate greater than tenant incomes, virtually all CDCs are faced with the dilemma of keeping their buildings on budget from one year to the next. In addition, though CDCs are rewarded for developing properties, in the form of developer fees, they typically receive no financial support for the important task of property and financial management. These problems affect CDCs nationwide.[34] In the Twin Cities, public and private funders have convened an Interagency Stabilization Group (ISG), a regional group of funders of affordable housing, in order to address these ongoing needs of CDCs.[35] The newspaper article, however, focused on alleged mismanagement and strained neighborhood relationships as reasons for PNHT's financial woes.

Hollman v. Cisneros and the Mayor's Housing Principles

In 1992, fourteen minority residents of Minneapolis public housing filed suit against HUD, MCDA, and the Minneapolis Public Housing Authority (MPHA), alleging discrimination in the siting of public housing (*Hollman v. Cisneros*). Represented by the Minneapolis Legal Aid Society, the plaintiffs alleged that the administration of public housing in the city has perpetuated racial segregation and concentrated public housing in a few, inner-city, neighborhoods. The suit was part of a national strategy by Legal Aid, the American Civil Liberties Union (ACLU), and the National Association for the Advancement of Colored People (NAACP) that has generated over twenty similar cases across the country.[36] The Minneapolis case was settled by a consent decree in March 1995. The settlement called for the removal from service of 770 units of public housing, located in a single project on the city's north side that dates back to 1939. HUD is to supply the city with funding to replace the 770 units on a scattered site basis, with at least 200 units to be located outside the city of Minneapolis. The replacement scattered site units are not to be located in poverty-concentrated areas, nor in areas of minority concentration. HUD will also provide funding for 600 tenant-based Section 8 certificates and 300 tenant-based vouchers in order to facilitate the further deconcentration of public housing in the city. Counseling and referral systems will be set up on a metropolitan-wide basis to encourage the dispersal of the Section 8 recipients throughout the metropolitan area.[37]

The City Council enthusiastically endorsed the settlement, eager to receive the estimated $100 million in housing assistance promised by HUD. But as implementation of the decree has progressed, decisions about where to site the replacement housing have run into obstacles produced by politicians who resist having the subsidized units placed in their areas of the city.[38]

In May 1995, the mayor of Minneapolis, Sharon Sayles-Belton, introduced a housing initiative for the city that stresses increasing the diversity of the housing stock in the city's neighborhoods. The set of four principles included one that suggested that the balance of assisted housing throughout the city be improved. This provoked a debate that one councilmember called the "ugliest" she had ever witnessed. A number of councilmembers opposed the principles as too vague, worried that they may result in an increase in subsidized housing in their parts of the city. Councilmember Alice Rainville described her view of subsidized housing recipients: "They can pull an engine out of a car, but they can't figure out how to mow the lawn."[39] Councilmember Walt Dziedzic objected to the use of the phrase "assisted housing" in the Mayor's proposal, suggesting that this label be reserved for housing for the elderly, and that lumping the elderly in with the recipients of subsidized housing was "not fair." The city council voted to table the proposal until they could insert more specific language that, in effect, narrowed the number of options available for distributing subsidized housing in the city. One amendment required that for every homesteaded property converted to subsidized housing, another homesteaded property will be created as a replacement (making the project prohibitively expensive), or, as an alternative, that scattered site subsidized units can only occur on already blighted properties. The more specific set of principles was approved by the council in July 1995.

In summary, the cumulative impact of recent political developments, including the regional debate on intrametropolitan inequalities, the heightened fear of crime in inner-city

neighborhoods and suburban areas, and the erosion of neighborhood support for CDCs has been a rapid decline in the legitimacy of subsidized multi-family housing as a means of neighborhood revitalization. City officials and neighborhood residents focus less on the physical rehabilitation and upgrading of the housing stock accomplished by multi-family housing, and more on the assumed negative consequences of offering affordable, subsidized housing to lower-income households in inner city neighborhoods. These negative consequences are felt to be a lowering of all property values in the affected neighborhoods, an increase in the concentration of poverty, crime, and neighborhood deterioration. This study is aimed at providing factual content for the debate on the effects of subsidized housing on neighborhood health.

PREVIOUS STUDIES

Subsidized Housing

The NIMBY phenomenon has received a good deal of media attention in recent years, but it is a longstanding characteristic of American land use politics. NIMBYism is most prevalent in response to the siting of subsidized multi-family housing, hazardous waste dumps, and the location of human service agencies serving populations such as homeless persons, ex-offenders, and persons with AIDS.[40] Studies that have examined the impact of these types of land uses on neighborhoods have generated conflicting results. Hazardous waste sites typically show a small, negative impact on nearby property values, though the effect disappears rapidly as the distance from the waste site increases.[41] The studies of human service agencies show no effect on nearby property values.[42] Previous studies of the impact of subsidized housing are mixed and generally inconclusive.

The earliest study, published in 1964, examined public housing projects in three neighborhoods of St. Louis, Missouri.[43] The public housing had no effect upon property values in two of the three neighborhoods. In the third, there was a small (but statistically insignificant) *positive* effect on value. Of thirteen subsequent studies, only two have provided support for the proposition that subsidized housing has a negative effect on nearby property values.[44] These analyses have incorporated a variety of methods, settings, and types of subsidized housing. Analysts have examined actual sales prices of nearby homes and assessed market values. The studies have been conducted in all regions of the country, and have included white, middle-class neighborhoods, inner-city neighborhoods, suburban locations, and entire urban counties. Federal public housing, Section 8, Section 236, Section 23, Section 221 (d)(3), and local housing assistance programs have been analyzed. Using a slightly different indicator of neighborhood health, Vitaliano, in a study of thirty-three cities in New York State, found that the existence of public housing does not cause decline in the private sector development industry, nor does it increase vacancies, dilapidation, or demolition of housing in the private market.[45]

The two most recent analyses provide conflicting results. An analysis of the effect of nonprofit housing on property values was conducted on projects developed by the Bridge Housing Corporation in the San Francisco Bay area.[46] Seven Bridge Housing Corporation projects (four for the elderly, one mixed-use, and two family townhouse complexes) were analyzed for their effects on property values from 1985 to 1992. The authors used several radii increasing in distance from the projects. At distances of one-eighth and one-quarter mile, only

one project demonstrated a statistically significant impact and it was positive. At one-half mile, two projects had statistically significant effects, one positive, and one negative.

A recent study analyzed the impact of both project-based and individual subsidies on property values in Ramsey County (St. Paul), Minnesota.[47] The study dramatically expands the area studied as well as the number of properties included in the analysis. Lyons and Loveridge sought to quantify the amount that property owners are willing to pay to have more or less subsidized housing in proximity to their residence. Using a sample of 26,503 properties, they analyzed effects of all subsidized housing projects at 300 feet, one-quarter mile, one-half mile, one mile, and two miles. Overall, they concluded that there was a small, statistically significant, negative effect of subsidized housing on property values, effects that were most significant at one-quarter mile. At this distance, adding one additional unit of subsidized housing is equivalent to removing one-half square foot of living space (valued at $21.00). Adding an entire housing project has the equivalent effect of removing thirty-seven square feet of living space. Effects diminish with increased distance from housing projects. The authors found that effects of subsidized housing projects were greater in suburban areas than in urban St. Paul, and that multi-family housing complexes had a larger impact than scattered site or single-family dwellings.

Crime

Subsidized housing projects carry with them the popular legacy of Pruitt-Igoe, a now defunct project in St. Louis, and Cabrini Green, a Chicago project notorious for drug and gang activity—images of residential war zones and ungovernable places. They are depicted as fertile ground for criminal activity which will spill out and affect the surrounding community. The connection made between crime and subsidized housing is often a function of project residents being perceived solely as unemployed poor minorities without roots in their surrounding communities. Despite a long tradition of exclusion in American settlement patterns, some argue that the trends toward race and class segregation are greater today than ever before. Much of this is fueled by fear of crime. Suburban communities are created with great walls, fences, and armed gates surrounding them, constructed, as Judd argues, to "keep the hordes at bay."[48] Even urban neighborhoods are erecting gates and traffic barriers to keep out the "bad elements" of the community.[49] The impulse is quite often taken to the extreme. An exclusive community in Florida was the scene of a virtual uprising when a developer announced his intention to build homes valued at $110,000. Residents demanded that a wall be erected between their million dollar homes and the newer, cheaper models that were to be introduced. The frightened original residents also demanded a separate vehicular entrance to the development for the newcomers. Many of the original residents took to buying guns to protect themselves from supposed increase in crime that would be introduced by the newcomers.[50] One community in Boca Raton, Florida, spends $1 million per year on helicopters and armed patrols.[51]

Only one study, however, directly addresses the issue of subsidized housing and crime. Roncek, Bell, and Francik estimate the correlation between scatter-site housing projects in Cleveland, Ohio, and block-level crime rates.[52] They found that public housing projects did have a small, statistically significant effect upon rates for violent crime in adjacent blocks. The effect diminishes with distance. Once socioeconomic characteristics are controlled for, how-

ever, public housing explained only 1.7 percent of the variation in crime rates per block. Roncek, Bell, and Francik found that population density, percentage of African Americans, total population, and the proportion of the housing stock in multi-unit buildings were stronger predictors of crime rates than public housing.

A number of studies on crime present findings that identify neighborhood characteristics such as density, mobile population, percentage of African Americans, and poverty rate as important predictors. Many of the studies focus, however, on the impact of concentrated poverty on crime.[53] In a study specific to Minneapolis, Cannon examines the effect of concentrated poverty and the underclass on crime from 1987 to 1989. He finds that there is a positive, significant effect from the increased proportion or number of residents receiving public assistance, as well as the number of individuals in categories included in the Sawhill index (a measure using education, family structure, employment, poverty, and public assistance variables).[54]

Renters and Neighborhood Stability

Part of the NIMBY response to subsidized multi-family housing is that the residents of these buildings will destabilize a neighborhood simply by virtue of being renters. Renters are thought of as a more transient population compared to homeowners, and there is a belief that they have less of a stake in their neighborhoods than homeowners.[55] This is seen as harmful because it is felt that renters and landlords will not maintain their properties as well as homeowners, and are not as likely to become involved in the neighborhood.[56] Studies do suggest that renters differ from homeowners in that they are less likely to join voluntary organizations.

Existing studies also confirm that homeowners are more likely to be active in neighborhood associations than renters.[57] One study comparing low-income homebuyers to rental subsidy recipients found that homeowners were almost twice as likely as renters to belong to a neighborhood or block group, and four times as likely to attend meetings.[58]

Studies show that renters do have significantly higher mobility rates than homeowners. Renters are five to ten times more likely to move than owners.[59] However, residents of publicly owned units had mobility rates at least 10 percent less than renters of private units. This is consistent for both urban and suburban populations.[60]

Concentrated Poverty

The phenomenon of concentrated poverty has attracted a great deal of scholarly attention in the past decade. One group of analysts sees higher concentrations of urban poverty as the result of global economic changes that have restructured local economies and eliminated employment and income sources for many lower- and moderate-income people. Another group points to residential segregation as the important factor in increasing poverty in inner-city areas.[61]

The "spatial mismatch" hypothesis suggests that lower-income populations are trapped in economically obsolete inner cities, away from the dynamic growth centers of the economy which are now increasingly located in suburban and non-metropolitan areas.[62] The growth of the urban "underclass" is tied, in this explanation, to the shift in the industrial economy during the 1970s to a high-skill, technology-oriented economy whose job base is in suburban

areas. Job requirements with respect to both skill and education increased. The suburban location of job growth areas makes the ownership of a car necessary. The link between the growth of the underclass and the shift in the economy comes from the effects of male joblessness. William Julius Wilson's analysis of the urban underclass also points to economic dislocation and shifts in regional economic structures as the cause of concentrated poverty.[63]

However, many analyses have shown that concentrated poverty is experienced almost entirely by people of color.[64] Thus, according to some, explanations of concentrated poverty must take into account the racial character of urban ghettos and the legacy of discrimination and segregation that created them.[65] One important factor in this explanation is federally subsidized low-income housing. Massey and Kanauaypuni argue that the concentration of urban poverty and the placement of subsidized public housing are interdependent.[66] That is, it has historically been the case that public housing has been located in poorer neighborhoods and neighborhoods with higher concentrations of people of color. In fact, there has been a great deal of segregation within public housing, especially family housing located in inner cities.[67] It is also the case, Massey and Kanauaypuni argue, that the placement of public housing guarantees the concentration of poverty in a neighborhood because of the low-income eligiblity criterion that applies to public housing. They found the strongest predictors of an area receiving a housing project were median income and the percentage of African Americans present in 1950. More recent poverty rates are explained at least partially by the amount of public housing in the neighborhoods. They conclude that "public housing thus represents a federally funded, physically permanent institution for the isolation of black families by race and class, and it must be considered an important structural cause of concentrated poverty in U.S. cities."[68]

Living in areas of concentrated poverty has been shown to have an adverse effect on a range of life experiences, from isolating youth from employment opportunities, to consigning youth to inferior education, dangerous neighborhood conditions, and harmful environmental conditions. Studies have shown that neighborhood affects the rate of teenage pregnancy, the likelihood of dropping out of school, exposure to toxic wastes, and violent crime.[69]

2 DESCRIPTIONS OF SAMPLE PROJECTS

In this chapter we provide a short summary of a sample of twenty-three subsidized multi-family properties. We provide a physical description of the building and the surrounding neighborhood, a short development history (where possible), and the financing and amenities provided by the public subsidies put into the building. These summaries provide contextual information for a representative sample of the type of multi-family housing being developed by CDCs in Minneapolis.

Using information collected from on-site inspections and interviews with CDC personnel, we constructed short project summaries for each of the subsidized housing projects analyzed. We had difficulties acquiring historical information on many of the projects; many of the CDCs did not have reliable information on the details of the actual purchase and construction. This was due, in part, to a high level of turnover in CDC staff and the subsequent loss of "institutional memory." This high turnover, however, merely exacerbates the main problem, which is a lack of documentation by CDCs regarding the land use history, financing details, management history, and community context for most of the projects we profile below.

SAMPLE PROJECTS

The sample of twenty-three nonprofit-developed projects is non-random; projects were chosen to maximize the variation on geography (we included both north and south side projects), size of the project (number of units), age of the development, type of subsidy (i.e., Section 8 rental subsidy or building subsidy), rent levels, income mix of tenants, and type of building management (leasehold co-op,[70] limited equity co-op, tenant management, and traditional). The developments chosen are multi-family (buildings with four units or more), publicly subsidized, and developed by nonprofit CDCs. The analysis excludes single-family home rehabilitation programs because there is little debate about whether single-family home rehabilitation is good or bad for the neighborhood; the controversy surrounding subsidized housing focuses on multi-family buildings.

Table 1 provides a list of the twenty-three housing projects analyzed.

Table 1. Sample of Twenty-three Subsidized Multi-Family Housing Projects Developed by CDCs

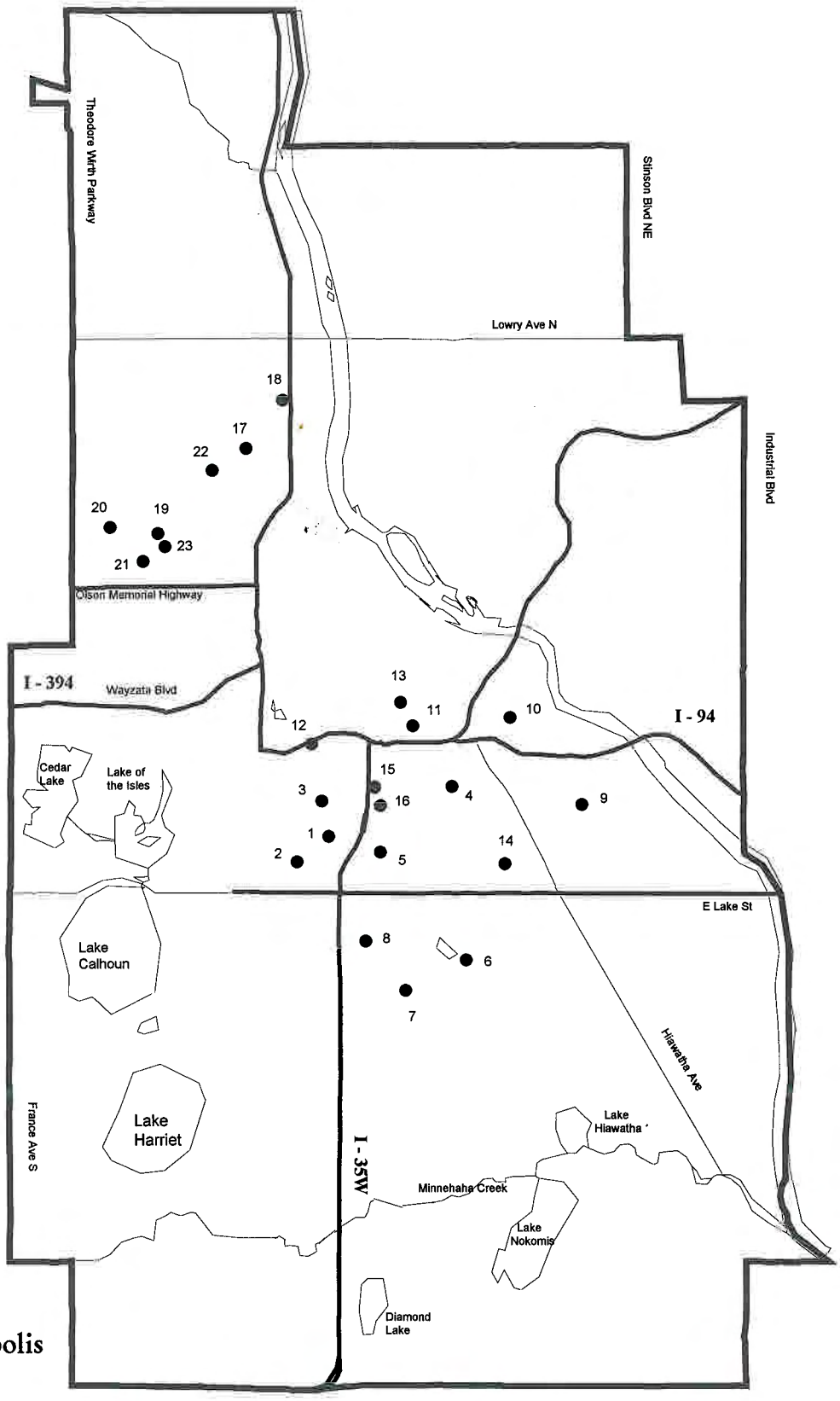
	Project Name/Address	CDC	Units	Year
1.	B-Flats, 2633 1st Avenue South	Whittier Alliance	9	1989
2.	Double Flats, 211 West 28th Street	Whittier Alliance	58	1991
3.	Passages, 17 East 24th Street	WCH	17	1986
4.	Arbor Commons, 1301-12 East 22nd Street	PRG	16	1983
5.	New Village, 2730 Portland Avenue South	PRG	86	1992
6.	Greenwood Co-op, 3439 15th Avenue South	PRG	7	1989
7.	3637 Columbus Avenue South	PPL/CNIA	4	1985
8.	3312 Fourth Avenue South	PPL	4	1991
9.	Matthews Park, 2413-31 26th Avenue South	Seward Redesign	24	1976
10.	The Mission Building, 1819 South 5th Street	WBCDC	14	1990
11.	Buri Manor, 1515 Chicago Avenue South	CCHT	38	1987
12.	The Coyle, 1801 LaSalle Avenue	CCHT	25	1992
13.	Barrington Hotel, 911 Park Avenue	CCHT	26	1991
14.	The Cedars, 2805-13 Cedar Avenue	PNHT	29	1989
15.	The Howards, 2205 5th Avenue South	PNHT	10	1989
16.	Portland Place, 2430 Portland Avenue	PNHT	17	1990
17.	Bell Building, 816 21st Avenue North	FNDC	25	1986
18.	Castle Apts., 300 N. 26th Avenue	FNDC	11	1991
19.	Morgan Co-op, 1220 Morgan Avenue North	NRRC/PPL	9	1986
20.	Homewood Apts., 1239 Sheridan Avenue North	NRRC	29	1986
21.	920-22 Oliver Avenue North	NRRC/PPL	4	1983
22.	Polaris Apts., 1814-22 Fremont Avenue North	NRRC	10	1983
23.	1123 Logan Avenue North	NRRC/PPL	4	1989

WCH = Women's Community Housing
PRG = Powderhorn Residents' Group
PPL = Project for Pride in Living
CNIA = Central Neighborhood Improvement Association
WBCDC = West Bank Community Development Corporation
CCHT = Central Community Housing Trust
PNHT = Phillips Neighborhood Housing Trust
FNDC = Farview Neighborhood Development Corporation
NRRC = Northside Residents' Redevelopment Council

Because subsidized, multi-family housing is concentrated in the inner core neighborhoods of Minneapolis, the sample projects are clustered in these communities. Figure 1 shows the location of the twenty-three subsidized multi-family projects analyzed in this study. Seven projects are located on the city's north side, nearly all of which are in or immediately adjacent to the Near North neighborhood. There are no nonprofit-developed subsidized multi-family projects north of Lowry Avenue or anywhere in northeast Minneapolis. On the south side most of the projects are located in near south neighborhoods. Thirteen of the sixteen sample projects on the south side are north of Lake Street. Projects are located in Stevens Square, Elliot Park, Whittier, Phillips, the West Bank, Seward, Central, and Powderhorn Park. The far southwest and southeast neighborhoods have no such subsidized housing.

Nine of the twenty-three projects are larger than twenty units, another seven have ten to twenty units. Most of the projects (sixteen) were developed during the 1980s. Only one project, Matthews Park in the Seward neighborhood, predates 1980. The twenty-three projects represent the work of nine different community development corporations.

Figure 1. Location of Sample Nonprofit-Developed Subsidized Housing Projects



City of Minneapolis

Number 1. B-Flats

The B-Flats complex was developed by the Whittier Alliance in 1989. The Alliance converted a fifteen-unit apartment into a nine-unit leasehold cooperative. Located at 2633 First Avenue South, B-Flats is nestled in the middle of a residential area, across the street from another multi-family project sponsored by the Alliance, and surrounded by a mix of multi-family and single-family buildings. B-Flats is a two and one-half story walk-up.

Number 2. Double-Flats

Double-Flats, developed by the Whittier Alliance in 1991, consists of two buildings, one at 211 West 28th Street, and the other at 2813 Pillsbury Avenue South. There are fifty-eight units between the two buildings. This study focuses on the building at 211 West 28th Street. Located on a major one-way, east-west thoroughfare, the 211 West 28th Street building has eleven units. Across the street are an apartment building and a parking lot. The remaining buildings on the block across the street are single-family homes and duplexes. To the east of the development there is another apartment building on the corner. West of the development are two more apartment buildings. The Whittier Alliance has set up Double-Flats as a lease-hold cooperative. Double-Flats is a two and one-half story walk-up, with a brick facade.

Number 3. Passages/Women's Community Housing

The Passages program is service-enriched housing for women, subsidized through Section 8 rent subsidies. The project is for women with children, and is seen as a transitional residence for the women while they are in school or receiving job training. There are seventeen families housed at a time, and over fifty have been served over the years since 1986. The building at 17 East 24th Street is a large (three and one-half story) apartment building with an imposing facade, located on the corner of First Avenue and 24th Street, both of which are highly travelled thoroughfares. Across the street from the building are a group home and another affordable housing project with Section 8 subsidies. To the west of the building are another parking lot and a small food market. For a block in either direction on First Avenue, the housing stock is primarily small apartment buildings. The building was rehabilitated in 1986 after having been destroyed by a fire and left vacant. Project subsidies came from the Family Housing Fund and the Minnesota Housing Finance Agency.

Number 4. Arbor Commons

Arbor Commons contains sixteen units built as townhomes on a quiet residential street, 1301 East 22nd Street. Built in 1983 on vacant land, the apartments have a well-kept, natural wood exterior. The buildings are recessed from the sidewalk, providing about eight feet of front lawn. There are apartment buildings across the street and next to Arbor Commons. The building is run as a leasehold cooperative, though the building owner, the Powderhorn Residents' Group (PRG), reports that the cooperative is weak from a lack of resident involvement. The units are for low-income families with incomes less than 80 percent of the area median. It is managed by a private management company. Project subsidies came from the Minneapolis Community Development Agency (MCDA) and the Family Housing Fund.

Number 5. New Village

New Village is a twenty-one-unit apartment building located at 2730 Portland Avenue South. Portland Avenue is a three-lane, one-way commuter corridor on the city's south side. Subsidies for the project came from MCDA and the Family Housing Fund of Minneapolis and St. Paul, a pool of funds capitalized by the McKnight Foundation and the cities of Minneapolis and St. Paul. The project was completed in 1992. Building owners (Powderhorn Residents' Group) report that surrounding properties were in poor condition when the project was conceived. The parking lot next to the property was an outdoor drug market. The rehabilitation cost more than $1 million. Many of the original tenants, primarily Cambodian families, moved back in after rehabilitation was completed. The building is a leasehold cooperative, with a strong tenant group.

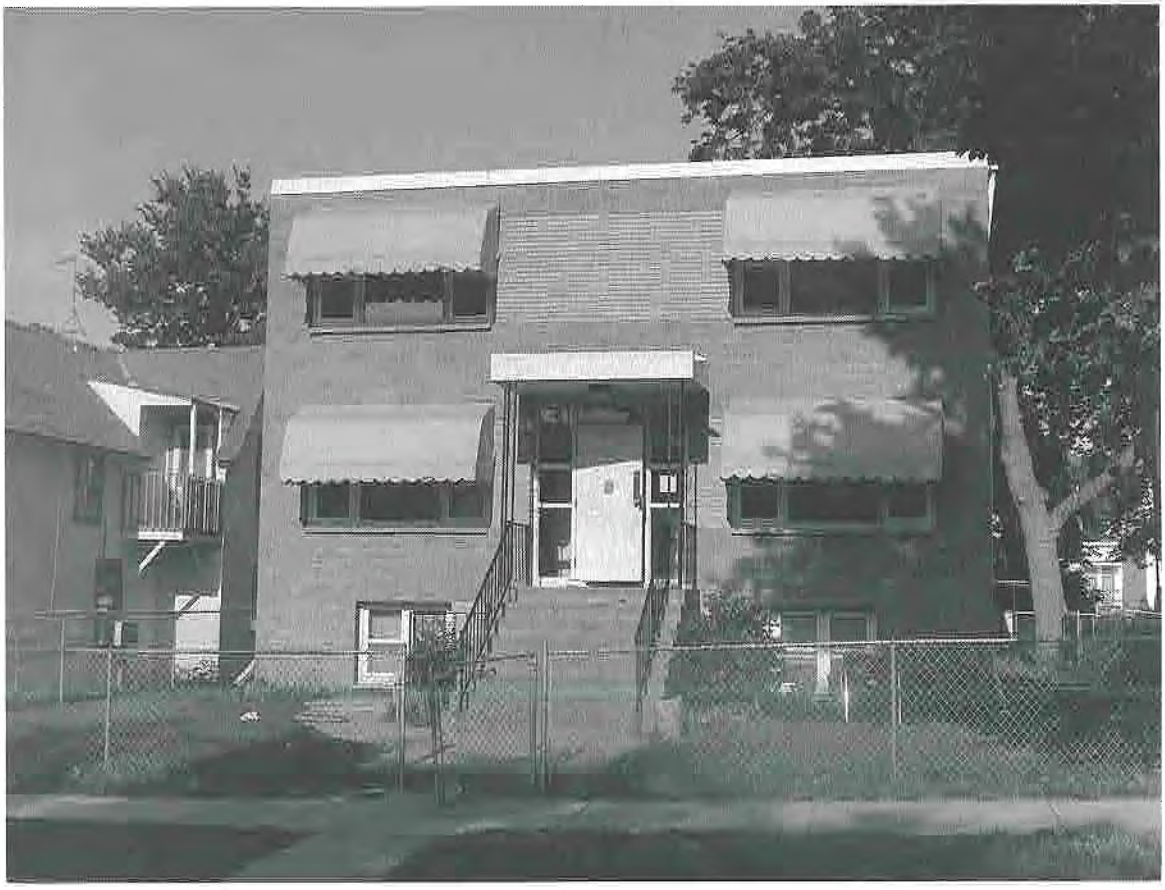
The building is a three and one-half story brick U-shaped design with a gated outdoor courtyard in the front. New Village is located across the street from a block of multi-family structures. The apartment building directly facing New Village is boarded up. A parking lot for New Village residents abuts the property on the south, while single-family homes are located to the north. New Village is one block east of the Honeywell plant.

Number 6. Greenwood Co-op

The Greenwood Co-op is located across from Powderhorn Park on the south side of Minneapolis. To the north and south of the building there is a mixture of single-family and small, multi-family buildings. The street is very quiet, with little traffic. The co-op was rehabilitated in 1989 by the Powderhorn Residents Group (PRG) and is a seven-unit leasehold cooperative. Funding for the project came from the city's Community Development Block Grant (CDBG) program and the State of Minnesota's Urban Renewal Assistance Program (URAP).

The property was purchased by PRG in 1989. Though the surrounding properties were in decent condition, the Greenwood building was seen as a problem by neighbors, according to the executive director of PRG. Even so, the response of the neighborhood was mixed when people found out that Section 8 recipients were going to move in. The property underwent moderate rehabilitation in 1989. The tenant cooperative is active. The property is managed for PRG by a private management company.

PRG officials indicate that the surrounding neighborhood is "getting rougher," and that the condition of the nearby housing stock is beginning to decline.



Number 7. 3637 Columbus Avenue

This building on the city's south side, in the Central neighborhood, faces multi-family buildings across the street and on either side. To the south of 3637 Columbus is a boarded-up apartment building. To the north is a mixture of single-family homes and apartment buildings. The street is quiet, with little traffic. The building underwent significant rehabilitation and was completed in 1986 by a partnership of Project for Pride in Living (PPL) and the Central Neighborhood Improvement Association (CNIA). The project is four units and was funded through the city's Community Development Block Grant program.

The building is designed to serve low- and moderate-income tenants. There is an income ceiling of 60 percent of the area median income. The property is currently valued at $85,000 and pays $4,000 in property taxes. PPL manages the property. Occupancy is relatively stable, according to PPL officials. PPL began a self-sufficiency program for all of its residents in the late 1980s. The program provides for support services to residents of PPL properties, emphasizing learning skills that will lead to greater self-reliance.

Number 8. 3312 4th Avenue South

The 3312 building is one of four in a row owned and managed by PPL. There are single-family homes across the street. To the north are a multi-family building and a corner market. An empty lot is directly to the south of the building. Fences surround most of the single- and multi-family units on the block. The building is a four-unit Section 8 subsidized project that PPL completed in 1989. PPL purchased it from a private individual and completed cosmetic improvements to the building. PPL manages the property and provides VISTA volunteers to all of its buildings with the goal of community organizing and increasing resident involvement with the building and the neighborhood. The building is located in the Central neighborhood. The managers reported in 1994 that the south side of the block has two drug houses which have been the location of shootings. The entire neighborhood has been the location of drug and criminal activity. PPL management staff report that the neighborhood is a very difficult one to operate in, and that it is difficult to keep good tenants because of the neighborhood environment. PPL has recently secured financing to carry out additional improvements to the building.

Number 9. Matthews Park

Matthews Park faces a block of single-family homes. To the north, there is an empty lot and then a single-family home. To the south of the building there is a commercial development. 26th Avenue is a busy thoroughfare. The development is about two blocks from two neighborhood bars. The project was new construction, completed in 1976 by Seward Redesign. There are twenty-four units, subsidized by state funds and Section 8. Matthews Park is a leasehold co-op, and was part of a larger redevelopment effort taking place in Seward during the 1970s. In 1985, Seward Redesign bought out its private sector partner in order to retain the project as a subsidized Section 8 building. At the time of the buy-out, the project was reorganized into a leasehold co-op. Participation in the tenants' management board is weak, according to the property's asset manager. Seward Redesign has brought in several trainers to work with tenants; however, it has been difficult to sustain involvement.

The units are primarily for low- and moderate-income families with children. The project is managed by Perennial Properties. There is a very stable tenant population. The fact that the project is subsidized by Section 8 is one reason for the low rate of turnover. Some families have raised their children entirely in Matthews Park. Two residents have been there since the 1970s.

The building is in good financial health, due, in part, to the nature of the subsidy (Section 8 subsidies allow for greater rent income to the owners while keeping costs down for residents), and the stability of the tenants.

Number 10. Mission Building

The Mission Building is one block south of the West Bank campus of the University of Minnesota, in the Cedar–Riverside neighborhood. Across the street from the building is a multi-family complex. To the west is a parking lot, and to the east are an empty lot and then a multi-family building. Fifth Street is a small side street with no direct access to Cedar Avenue and no through traffic.

The Mission Building has fourteen efficiency units, and was funded through tax increment funds. It is run as a leasehold co-op. Prior to the rehabilitation completed by the West Bank Community Development Corporation (WBCDC), the building was nearly vacant (25 percent occupied) and very dilapidated. Major building systems were in disrepair. The building was owned by the Minneapolis Community Development Agency (MCDA), which had not been an effective property manager for the site. WBCDC purchased the property from MCDA in 1990 for one dollar. The purchase was part of a larger development strategy of comprehensive revitalization for the neighborhood. The CDC worked with the neighborhood group on the design and on tenant selection issues. The property is managed by a private property management firm. The managers report a high turnover in the building, though units do not remain vacant. Average resident tenure is approximately one year. The units rent for about $200 a month, targeting a very low income population.

In the fall of 1992 a tenant was raped in the Mission Building. The perpetrator was a serial rapist, whose habit was to enter through open windows. The event has heightened fear of crime in the area and in the building, and led to a number of security precautions implemented by WBCDC at the site.

Number 11. Buri Manor

This building is a thirty-eight-unit, new construction project erected on the site of two older single-family units and a notorious neighborhood bar. The Central Community Housing Trust (CCHT) completed the project in 1987 with replacement housing funds from MCDA (part of the city's effort to replace affordable housing demolished to make way for the downtown convention center).

Buri Manor is located across from a corner food mart and a multi-family building. To the north are a single-family home and then a commercial building. To the south are a community garden and a commercial building. Buri Manor is on Chicago Avenue, a four-lane thoroughfare supporting continual traffic. The development is one block from Interstate 94 in the Elliot Park neighborhood.

The units in the building are all efficiencies with a maximum tenant income of $17,580. The building won an award in 1988 for its contribution to the local community and for its architectural design. The property is managed by a private management firm.

Number 12. The Coyle

The Coyle is a twenty-five-unit residential hotel for very low income individuals, located at 1801 LaSalle Ave. It is bordered on both sides by vacant lots, both of which had, until 1993, apartment buildings of a similar size. These apartment buildings had become the location of drug activity prior to their demolition. Beyond the vacant lot to the north runs Interstate 94, and past the vacant lot to the south is a parking lot for a commercial center that bridges LaSalle Avenue and Nicollet Avenue. Across the street are apartment buildings. The rehabilitation of the building cost $1.3 million.

The Coyle Hotel is part of the Central Community Housing Trust's (CCHT) Opportunity Housing Project, which is a three-site project that serves homeless adults with incomes at around $8,000 a year. Despite the fact that the Stevens Square Community Organization (SSCO) originally approved the development, opposition to the Coyle arose within SSCO before the project broke ground. Some elements within the neighborhood had different plans for the land on which the Coyle sits and attempted to stop the development, going so far as to initiate a lawsuit against CCHT and the city. The project has run smoothly since its completion. The Coyle is managed by a private management firm.

Number 13. The Barrington Hotel

This twenty-six-unit residential hotel at 911 Park Avenue in the Elliot Park neighborhood was rehabilitated by CCHT in 1991. The property had been owned by a private individual prior to its purchase by CCHT. The property was closed down by city health inspectors due to rapidly deteriorating conditions in the building. It was closed for almost one year before CCHT purchased it and completed the rehabilitation. In this case, the neighborhood organization, Elliot Park Neighborhood, Inc., requested that CCHT purchase and improve the building, and thus it was very supportive of the project.

The Barrington is located near downtown Minneapolis and is across the street from two multi-family buildings and a parking lot. Immediately to the north of the Barrington are a commercial building and an apartment building. To the south are two parking lots. Park Avenue is a four-lane thoroughfare.

The building has thirteen efficiency units and thirteen one-bedroom apartments. The maximum income for the efficiencies is $10,710 a year, and $21,420 a year for the one-bedroom units. Six of the one-bedroom units are equipped for hearing-impaired residents. The building is managed by a private management company for CCHT. Half of the units in the hotel are used to serve low-income working poor and the other units are targeted to moderate-income people.

Number 14. The Cedars

The Cedars apartment complex faces a block of single-family homes. Directly to the north is a small parking lot that sits on the corner of Cedar Avenue and 28th Street. Both Cedar and 28th Street are major arteries. To the south, the building is adjacent to an asphalt plant, and directly behind the Cedars is a foundry and the rest of the asphalt plant.

The Cedars has twenty-nine units and was purchased by the Phillips Neighborhood Housing Trust (PNHT) in 1989. The building is a two and one-half story walk-up that was in basically sound condition, rehabilitation was minimal. Ten units were vacant at the time of purchase, the rest of the units contained a mix of elderly households, students, and single-parent households. PNHT purchased the building to improve the management. The purchase and rehabilitation cost $690,000. The minimal amount devoted to rehabilitation was financed by the Family Housing Fund.

Number 15. The Howards

This is a ten-unit building at 2205 Fifth Avenue South, also purchased and rehabilitated by PNHT in 1989. The Howards faces the highway sound barrier for Highway 35W. To the north is another multi-family building on the corner. To the south there is an empty lot adjacent to a multi-family building. There are also single-family homes on the block to the south. Fifth Avenue South is a quiet street with little traffic.

The building was purchased for $10,000 per unit and rehabilitated for the same amount (a total rehabilitation and purchase cost of roughly $20,000 per unit). When purchased, the building was in fairly good physical condition. It had been sold as condominium units by the Honeywell Corporation, whose headquarters are in the neighborhood. But only one of the units was occupied and the other nine were vacant and owned by a mortgage insurance company.

PNHT officials report that this was not a high-profile development, it did not attract much attention. There was no opposition to the project.

The ten two-bedroom units are targeted to households at 50 percent of the area median income. The units are occupied by mostly young households, single parents and low-income working people. The building pays $6,600 in property taxes. The building behind the Howards has recently been repaired. The remaining homes in the area are still in disrepair. The neighborhood saw considerable drug activity in 1993.

Number 16. Portland Place

Portland Place, at 2430 Portland Avenue South, faces a block containing an empty lot, a multi-family building, and a duplex. To the north of the building is the residents' parking lot. On both the north and south sides of the development are single-family homes and duplexes. Behind the complex there are two large apartment towers. Portland Avenue is a major thoroughfare with three lanes of unidirectional traffic.

The project is a seventeen-unit, leasehold cooperative developed in 1989 by PNHT. When it was purchased in 1989, the property was in general disrepair, requiring major structural improvements. In the year prior to its purchase by PNHT, Portland Place accumulated more police calls than any property in the city of Minneapolis. Prior to gut rehab, it was a twenty-eight-unit building, less than half-occupied. There was significant drug use in the building. The purchase price was $1.2 million, with subsidies from the Family Housing Fund and MCDA. Current Minneapolis Mayor, and then City Council member, Sharon Sayles-Belton requested PNHT to purchase the property because of complaints from senior citizens in the immediate area. Portland Place is near two senior citizen towers. The building is across from a Lutheran Social Services transitional housing project.

Units in the building were enlarged during rehab. The tax credit financing on the building requires that all of the units be rented to households at or below 60 percent of the area median income. Currently there are five residents with Section 8 certificates. Most residents in the building are working poor. The property is managed by PNHT.

The resident cooperative is strong and very active. Residents are cohesive, involved, and communicate well. The atmosphere in the building is very family-oriented. Residents' children are organized into work crews to take care of the projects in the complex, such as cleaning the halls. Residents plan holiday parties and other activities for the children. The building has a low turnover rate. One-third of the residents have been in the building since 1990. Occupancy of the one-bedroom units is less stable. Large units usually only turn over if the resident is evicted. Under homestead status, PNHT paid $7,500 in property taxes in 1994.

Number 17. The Bell Building

The Bell is a well-maintained brick building of modern design, three stories high. Across the street are a commercial building and a parking lot. To the west there is a fenced-in open space for use by the residents. On the other side of the street to the west are a vacant lot and single-family homes. To the east are an alley, a single-family home and then a vacant corner lot. The Bell Building is one-half block north of the Broadway commercial strip in the Near North neighborhood of the city.

The building was owned by the Bell Telephone Company when it was purchased by Farview Neighborhood Development Corporation (FNDC) in 1986. FNDC converted the building to twenty-five units and runs it as a leasehold cooperative. The building is currently experiencing some difficulties with drugs and prostitution that have generated opposition from neighbors. FNDC itself has not been active in recent months, having lost funding to support ongoing operations. The project is managed by a private management company.

The neighborhood is in the very southern portion of Hawthorne, and is a transitional neighborhood. There has been more single-family home construction and rehabilitation in the neighborhood. The Hawthorne community organization is starting to organize around the issues of crime, drugs, and prostitution, and is attempting to encourage single-family home-ownership.

Number 18. Castle Apartments

The Castle Apartments are located next to Interstate 94, one block from Farview Park in Minneapolis' north side Hawthorne neighborhood. The complex is outwardly well-kept and set in a row house design located on the corner of Third Avenue and 26th Street North. The complex is bordered on the west by a parking lot for residents and then a residential block made up of single-family homes.

The Farview Neighborhood Development Corporation (FNDC) purchased and rehabilitated the building in 1991. It was a twenty-unit building that had deteriorated significantly. The building was condemned when FNDC bought it. The Hawthorne Area Community Council encouraged FNDC to purchase the building in order to improve it and hopefully improve the neighborhood surrounding it. FNDC purchased it and reconfigured the building to lower the density. The development is eleven townhomes, one four-bedroom unit, and ten three-bedroom units. Currently, almost all of the units are subsidized through the Section 8 program. The apartments are managed by a private management company.

The surrounding neighborhood has significant problems with crime, drugs, and prostitution, according to the director of FNDC. Six blocks north of the revitalized Broadway commercial corridor, the apartments are in a neighborhood with a high number of vacant and boarded-up properties. The neighborhood began a SAFE crime prevention program three years ago.

Number 19. Morgan Co-op

The Morgan Co-op is located at 1220 Morgan Avenue North. It is an eight-unit building that was developed by the Northside Residents' Redevelopment Council (NRRC) along with Project for Pride in Living (PPL). The building is run as a leasehold co-op.

When it was purchased by NRRC, the building was in disrepair, though not condemned. NRRC purchased it in 1985 and completed moderate rehabilitation in 1986. The building has two-bedroom units and is thus targeted to families. The property is managed by NRRC. Tenancy in the building has been fairly stable, according to the manager. The average length of residency is about two years. The resident cooperative meets throughout the year and provides input into the budgeting process for the building. But the property manager reports that resident participation in the cooperative is minimal.

NRRC officials report that neighbors supported the rehabilitation efforts because they felt that the rehabilitation would result in "better tenants" residing in the building. The building is located in the Near North neighborhood, one-half block away from the Plymouth Avenue Townhomes. The Townhomes, with 140 units, exert a strong pressure on the surrounding properties. The neighborhood suffers from gang activity and drug use. Though a police station exists in close proximity to the co-op, it has little deterrent effect on street activity.

Number 20. Homewood Apartments

The Homewood Apartments were purchased by NRRC in 1986 and rehabilitation was completed in 1987. It is a thirty-six-unit apartment complex that is also run as a leasehold co-op by NRRC. The complex consists of two buildings that stand back to back facing Sheridan and Thomas Avenues. Our analysis focuses on the Sheridan Avenue building. The Homewood is a well-maintained building with white columns on the front. There are bars inside the windows of the apartments on the first floor.

Across from the Homewood are one multi-family building and several single-family homes. One home on the block is boarded-up and vacant. The Homewood is on the corner of Sheridan Avenue North and Plymouth Avenue. Sheridan is a quiet residential street, and Plymouth is a busy four-lane, two-way traffic artery. There is a bus stop on the corner of Sheridan and Plymouth. To the south of the building are a parking lot for residents and a single-family home. One block to the south is a small park. Across Plymouth are two small commercial properties.

The building once housed elderly residents and was well-maintained. It was then sold, and most of the elderly residents left. The complex quickly went downhill, and neighbors complained about the property and its increasingly run-down condition. Complaints from neighbors prompted NRRC to purchase and redevelop the property. The entire complex was purchased for $665,000 in 1986. NRRC did minor to moderate levels of rehabilitation on the buildings, costing a total of $335,000 for the two properties. Purchase and rehabilitation were subsidized by the Minneapolis Community Development Agency (MCDA) through community development block grant funds. Because it is a leasehold co-op, the building pays the homestead tax rate: $10,552 in 1994.

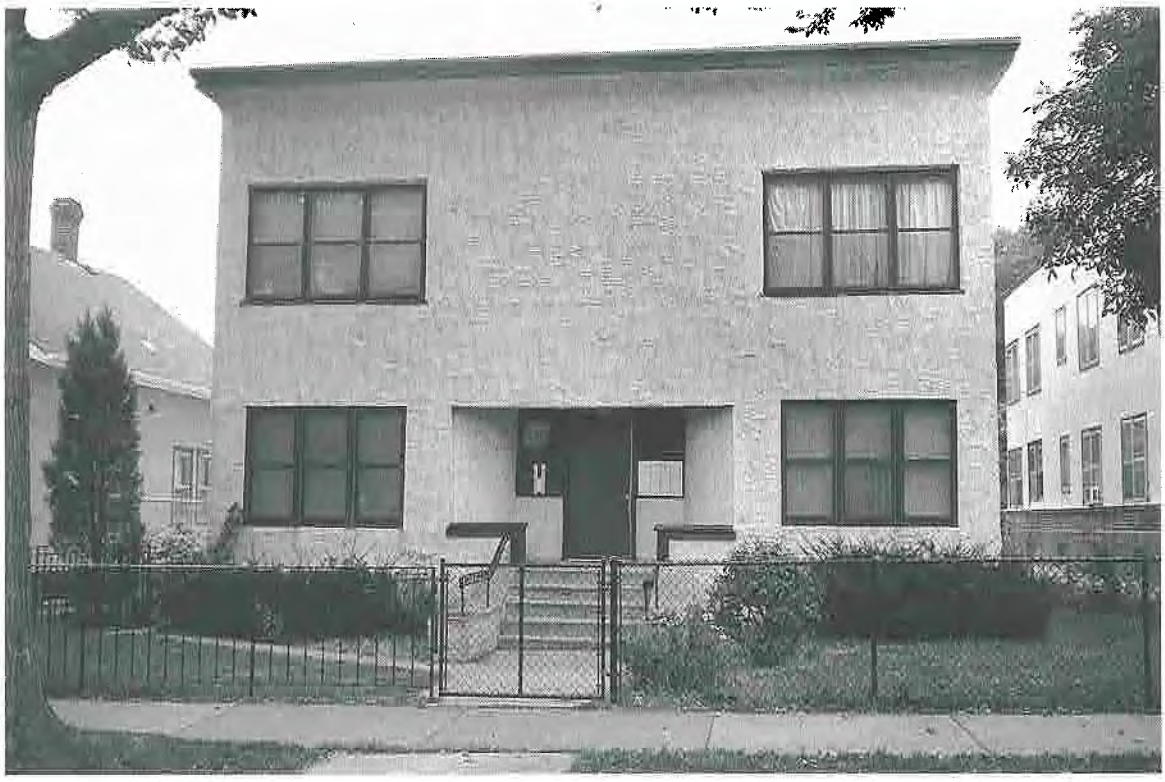
The building is targeted to low-income families with children. The city's subsidy limits qualifying income to 80 percent of the area median. In actuality, incomes are generally at 60 to

65 percent of the area median. The property is managed by a private management firm. The resident cooperative is not well-organized, though one of the nonprofit partners in the project, the Twin Cities Housing Development Corporation (TCHDC), is attempting to improve the organizing of residents. The immediate surrounding neighborhood is well-kept, with an active block club organization. Though there are boarded-up buildings on the immediate block, the single-family homes in the neighborhood are well-maintained. The neighborhood is racially mixed, with whites and African Americans.

Number 21. 920-22 Oliver Avenue North

The development at 920-22 Oliver Avenue North is a four-unit leasehold cooperative that was purchased and rehabilitated by NRRC and PPL. Oliver is a quiet, one-way street with several single-family homes and several multi-family buildings. To the north of the project one of two single-family homes is vacant. There is a large church down the street that includes a mission. Across from the church is a school.

The building was purchased in 1983, and the acquisition and rehabilitation cost $207,000. The property is managed by PPL and is targeted to low- and moderate-income families. The residents' cooperative is not functioning at this time, though building occupancy is stable. The building is part of a larger process of stabilization that PPL is undertaking for all of its rental property. PPL is in the process of securing $35,000 to pay down the mortgage in order to reduce the debt service on the building. In 1993, PPL paid $1,500 in property taxes on the building.



Number 22. Polaris Apartments

The Polaris Apartments are comprised of three adjacent two-story brick buildings. Directly across from the apartments is a high school football field, with barbed wire around the top of the fence. To the north are two single-family homes. To the south there is a mixture of single-family and multi-family dwellings. The apartments are located one-half block south of Broadway on Fremont. Lerner Processing Labs are on the corner of Fremont and Broadway. There is a parking lot for employees on Fremont. Fremont is a fairly busy one-way southbound street. The project was completed by NRRC in 1983. It is ten units of Section 8 subsidized apartments, run as a leasehold co-op.

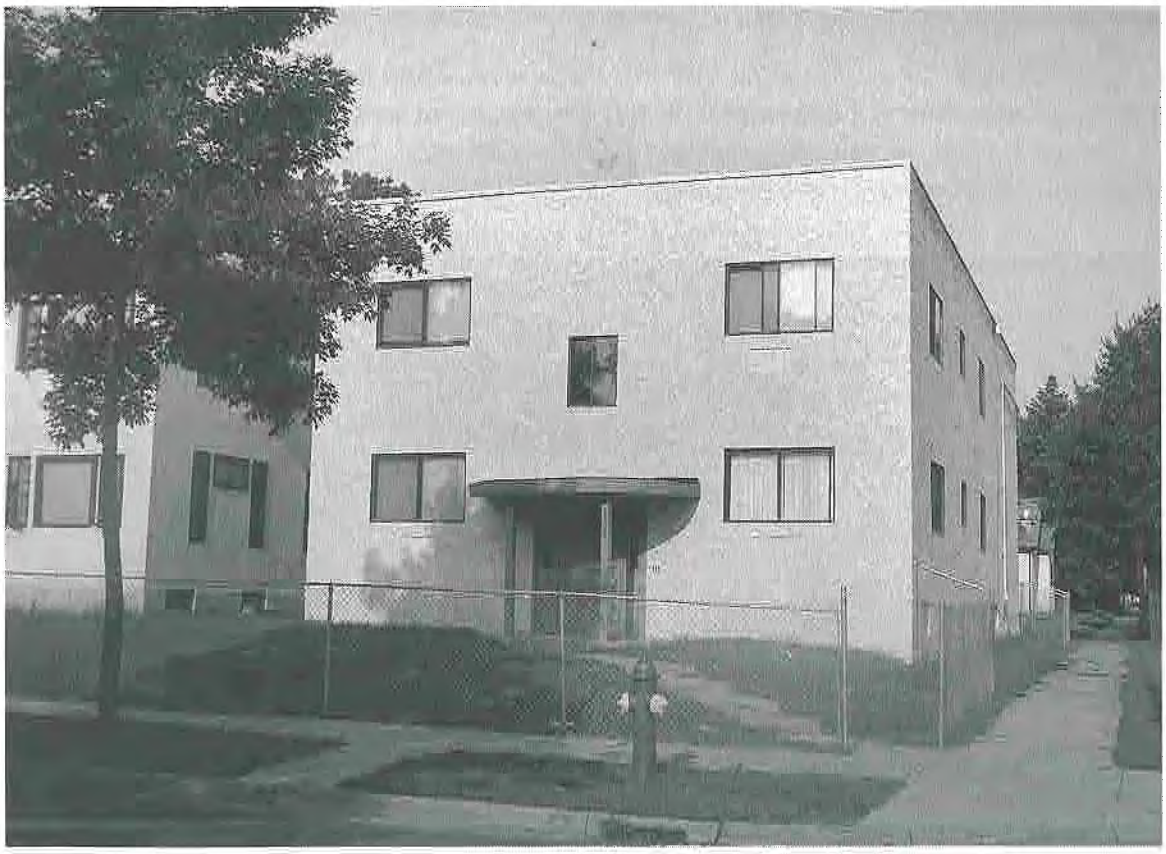
There are mostly two-bedroom units, targeted for families at 80 percent of the area median income. NRRC manages the property. The resident cooperative is functioning well, with a high level of resident participation. The building is fully occupied and very stable due to the Section 8 subsidies provided to tenants. The development is currently in healthy financial condition.

The neighborhood is located near North High School and has occasional problems with gang and drug activity. The complex is near a commercial area, a school, and Broadway Avenue. The immediate surroundings are not heavily residential. NRRC is about to begin an additional $120,000 of work on the buildings.

Number 23. 1123 Logan Avenue North

1123 Logan is a faceless, square building. Vacant lots are scattered around the building in each direction. To the south, there are a multi-family building, a large single-family home with no glass in the windows on the first floor, and several vacant lots. Logan Avenue and 12th Avenue are quiet residential streets.

NRRC developed 1123 Logan with PPL in 1989. The building has four units of Section 8, and is run as a leasehold cooperative. The property was purchased for $114,000, including rehabilitation costs. The subsidies from MCDA require that tenant income be at or below 60 percent of the area median. The building has two-bedroom units. PPL currently manages the property. The building is fully occupied and stable. In 1993, PPL paid $3,800 in property taxes. PPL is contesting the assessed property value of the building. They will petition for the total assessed value to reflect a range of $20,000 to $30,000 per unit.



3 METHODS AND DATA

This study examines the impact of subsidized housing on neighborhood revitalization in Minneapolis. The study will focus on the relationships between subsidized housing and three dimensions of neighborhood vitality: property values, crime, and the "fit" of the building and the residents with the surrounding neighborhood (including the impact of the building on residential stability, the concentration of poverty, and the degree to which the building competes with the private sector residential market).

We focus, in this analysis, on subsidized housing that is owned, developed, or operated by neighborhood-based community development corporations. We differentiate these from the stock of public housing owned and operated by the Minneapolis Public Housing Authority, and the stock of privately owned multi-family housing subsidized through various local, state, and federal programs. We did not study public housing because there is essentially no more new construction of public housing projects; thus their neighborhood impact (though debatable) is of less practical policy relevance than the impact of subsidized projects generally sponsored by nonprofit developers. Privately owned, multi-family projects are excluded for the same reason. In the city of Minneapolis there are thirteen nonprofit community development corporations developing subsidized housing. By 1995 these CDCs have created, through new construction or rehabilitation, over 3,600 units of affordable multi-family housing in more than 100 separate projects. In the analysis of property values we examine the impact of these units on nearby properties.

THE PROPERTY VALUES ANALYSIS

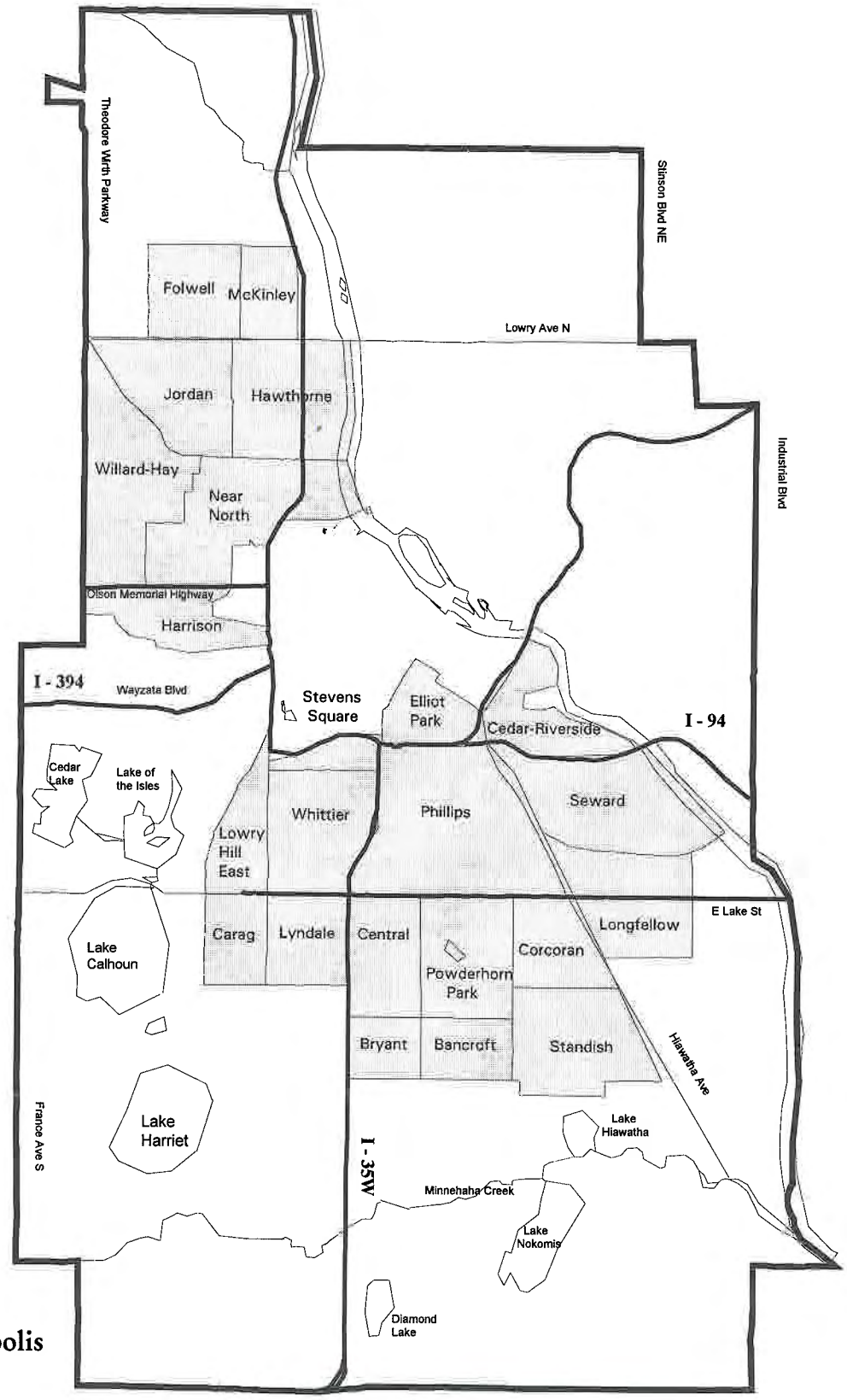
In the analysis of property values we evaluate the contention of subsidized housing opponents that subsidized projects contribute to the decline of property values in the neighborhoods in which they are located. Earlier studies of the impact of subsidized housing on property values compared neighborhoods with subsidized housing to "control" neighborhoods that did not have such housing.[71] Neighborhoods were defined as two to three residential blocks immediately surrounding project sites. Control neighborhoods were selected for their similarity to study areas with respect to population density, racial composition, demographics, housing stock, and proximity to the central business district. That procedure is virtually impossible today, given the important differences between the lower-income neighborhoods into which subsidized multi-family housing has gone and the more affluent neighborhoods where it is not placed. A more effective means of controlling for all of the relevant variables that create housing value (and thereby isolating the contributing impact of subsidized housing) is the construction of a hedonic price model. Hedonic price models are means of estimating the influence of a number of factors on property values. Most hedonic price models incorporate a series of building and lot characteristics in a multiple regression analysis of housing values. Such a

technique allows the analyst to measure the added value contributed by structural elements of a house such as a fireplace, porch, or central air conditioning. Lot size and characteristics are also generally included in the analysis. Though building and property characteristics are central to determining housing value, ignoring neighborhood-level characteristics such as demographic information and locational characteristics can bias the model.[72]

In this study we construct a hedonic price model for all residential properties in the central neighborhoods of Minneapolis. Figure 2 shows the neighborhoods for which property value data were collected. We chose to focus on the central neighborhoods for a number of reasons. First, the political debate in the city centers on the impact of these projects in the neighborhoods in which they are located. It makes little sense, logically and statistically, to measure the impact of these projects on neighborhoods where they are not located. Second, some very important natural and man-made barriers exist throughout the city that create natural boundaries in housing sub-markets. For example, the northeast part of the city is separated from the north side by the Mississippi River and by an interstate highway. It is highly unlikely that the placement of a subsidized housing project on the north side will have any measurable impact on property values across these two barriers.

In our analysis we incorporate fourteen structural and lot variables that provide information on the characteristics of the parcel and building. These data were gathered from records of the City of Minneapolis Assessor's Office in 1994. To that data base we have added twelve neighborhood level variables that measure a variety of social, economic, and physical characteristics of the neighborhoods. Tables 2 and 3 list the property and neighborhood variables included in our hedonic price model.

Figure 2. Minneapolis Neighborhoods Chosen for Property Values Analysis



City of Minneapolis

Table 2. Housing Unit Characteristics Included in Hedonic Price Model

Variable Name	Description
LAND	total land area of residential parcel
BUILDING AREA	gross building area
BEDROOMS	number of bedrooms
BATHROOMS	number of bathrooms
FIREPLACE	fireplace (0=no, 1=yes)
GARAGE	garage (0=no, 1=yes)
POOL	swimming pool (0=no, 1=yes)
SIDE PORCH AREA	side porch area
AGE	age of building
CONDITION	condition of the property (0=substandard, 1=standard)
WALL TYPE	wall material used (0=substandard, 1=standard)
HEAT TYPE	type of heating system (0=substandard, 1=standard)
NONOWNER	nonowner occupancy (0=no, 1=yes)
MULTI-FAMILY	multi-family dwelling (0=no, 1=yes)

Source: Assessor's Office, City of Minneapolis.

The neighborhood level variables were collected primarily from census data. We used block group level data in order to collect measures of the immediate surrounding neighborhood. We felt that census tracts were too large to provide a meaningful estimate of the effect of neighborhood conditions on housing values. In addition to census data we collected other neighborhood data relevant to housing values. From the City of Minneapolis Housing Inspection Department we received data on abandoned residential properties and housing code violations. Vacant housing has a strong negative impact on neighborhood well-being;[73] thus we include the number of abandoned units in the census tract to measure the deflating effect of abandonment on nearby housing values. In addition, housing code violations are a measure of the adequacy of nearby property management. All data from the Housing Inspections Department reflect conditions that existed in 1994, matching the assessor's data on values.

We have also included two indicator variables that measure important locational effects on home values: the presence of a major highway within one-eighth of a mile, and the presence of a lake within one-eighth of a mile. We incorporate three separate distance variables for the subsidized multi-family housing stock in Minneapolis: one measuring the distance to the nearest public housing development, another measuring the distance to the nearest privately owned, publicly subsidized project, and the third measuring the distance to the nearest CDC-sponsored multi-family building. These variables allow us to estimate the separate impact of each of these types of subsidized housing.[74]

Table 3. Neighborhood Level Characteristics Included in Hedonic Price Model

Variable Name	Description
OVER 65*	percentage of the population over 65 years old
BLACK*	percentage of the population African American
NATIVE AMERICAN*	percentage of the population Native American
HISPANIC*	percentage of the population Hispanic
UNEMP*	percentage of the labor force unemployed
ABANDONED**	number of abandoned housing buildings in census tract
VIOLATIONS**	number of code violations issued to the properties in census tract
HIGHWAY***	presence of major highway within .125 mile (0=no, 1=yes)
LAKE***	presence of lake within .125 mile (0=no, 1=yes)
DISTANCE TO PRIVATE, PUBLICLY SUBSIDIZED HOUSING***	distance to nearest privately owned, publicly subsidized housing project
DISTANCE TO PUBLIC HOUSING***	distance to nearest public housing development
DISTANCE TO CDC***	distance to nearest CDC-developed subsidized housing

* Source: 1990 U.S. Census of Housing and Population (all based on census blockgroups).

** Source: Housing Inspections Department, City of Minneapolis.

*** Source: Authors' calculations.

The dependent variable for our hedonic model is the assessed property value in 1994. In addition to having the 1994 assessed value, we also incorporate the 1988 assessed value into our analysis. These data improve the analysis over previous hedonic price estimates in two ways: First, other analyses have used actual sales prices as the dependent variable. This limits the sample size to only those houses that have sold during the study period. Such a limited sample may be biased if the types of homes that are selling in a neighborhood are consistently different than those that do not change hands. Utilizing data on assessed values allows us to analyze all residential properties in our target neighborhoods.

Second, by incorporating the 1988 value as a control variable in the equation predicting 1994 home value, we are able to analyze the impact of our independent variables on the change in assessed value over time.[75]

THE CRIME ANALYSIS

In order to measure the impact of subsidized multi-family housing on crime, we collected crime call data from the City of Minneapolis Police Department. By charting the number of police calls, crime reports filed, and arrests made at the location of the subsidized housing projects prior to and after their development as subsidized multi-family housing, we are able to directly assess whether these projects have contributed to crime problems in the neighbor-

hood. The Minneapolis Police Department's automated police call files provide a daily summary of the number of calls, police reports, and arrests made, by individual property address. These data only go back as far as 1986, however. Fourteen of our sample properties were developed into subsidized housing after 1986. Thus, we are able to employ a simple interrupted time series analysis of crime calls for those fourteen properties. After analyzing each of the fourteen properties separately, we employ a pooled time series technique to assess the overall impact of these developments on crime.

We aggregate the crime data into monthly totals. Such a time series analysis requires an exact knowledge of when the "intervention" takes place. That is, in such a "before and after" comparison, one needs to know exactly when the "before" ends and the "after" begins. Though this sounds fairly simple, the actual amount of time it takes to rehabilitate multi-family housing can confound the analysis. It is often several months between the beginning of construction to the point in time when the building is fully occupied and operational. If the working hypothesis is that conversion of the property to subsidized multi-family housing will result in an increase in crime, then the intervention point would be the completion of rehabilitation/ construction. If, however, one hypothesizes that nonprofit ownership and development will result in less crime at that property, one might use the commencement of rehabilitation/ construction as the intervention point. Using interviews with personnel at the CDCs, as well as city permit data, we determined the actual month that construction began and the month that it ended. We ran our time series analyses twice, once using the beginning of construction as the intervention point, and again using the end of construction as the point of intervention. The crime analysis is reported in Chapter 5.

THE ANALYSIS OF NEIGHBORHOOD FIT

In Chapter 6 we analyze the extent to which building and resident characteristics match that of the surrounding neighborhood. For example, some object to subsidized housing because it further concentrates poverty, attracting new people to already impacted neighborhoods. In this analysis we examine six elements of neighborhood fit: 1) the length of residency of tenants of subsidized multi-family housing compared to that of tenants in the surrounding neighborhood; 2) the previous residency of tenants of subsidized multi-family housing compared to that of all residents in the surrounding neighborhood; 3) race of tenants of subsidized housing compared to race of tenants in the neighborhood; 4) income of tenants of subsidized projects compared to income of all households in the neighborhood; 5) source of income for subsidized tenant households compared to that of all households in the neighborhood; and 6) the rent structure in the subsidized multi-family projects.

The data for the sample properties was gathered from the nonprofit developers (and in some cases from the companies managing the properties). The neighborhood data are census tract level information from the 1990 census.

4 THE IMPACT OF SUBSIDIZED MULTI-FAMILY HOUSING ON NEARBY PROPERTY VALUES

Two important facts emerge when we analyze the impact of nonprofit-developed, multi-family subsidized housing on residential property values in the central neighborhoods of Minneapolis. Our findings indicate that CDC-developed housing increases property values, controlling for a host of other neighborhood and building characteristics. We also find that the condition of the private housing market and the practices of private landowners are a more important determinant of property values than the existence of subsidized housing.

We use data on residential properties from the Minneapolis tax assessor's office to determine the impact of nonprofit-developed multi-family subsidized housing on property values. We construct an hedonic price model that incorporates a number of structural characteristics, neighborhood level characteristics, and distance/location variables to predict property value. The data provide values for both 1988 and 1994; this allows us to evaluate the degree of change over time.

Table 4 presents the findings of the first hedonic price model. The dependent variable in this model is the 1994 property value. In the left-hand column are the independent variables, including the structural characteristics, neighborhood conditions, and the variables measuring distance to subsidized housing (see pages 48 and 49 for a definition of these variables). We have created three subsidized housing distance variables, one for public housing projects, another for privately owned, publicly subsidized units, and one for nonprofit-developed projects. This allows us to differentiate between the impacts of these three types of subsidized housing projects.

The findings reveal the direction and magnitude of the effect of each of the independent variables on property values, controlling for all of the other variables. Thus, for example, controlling for other factors, each additional bedroom in the properties we analyze is worth, on the average, $1,715.43 in property value. Each additional bathroom provides somewhat lesser value. Each of these findings is highly statistically significant, with the probability being less than one in one thousand (P=.000) that the findings are random occurrences; i.e., we believe these findings are statistically valid.

Most of the relationships are what would be expected; a fireplace (FIREPLACE) adds an average of $5,055 in value to a house, for example. As houses in these neighborhoods get older, their value declines an average of $120.56 per year (see the coefficient for AGE). Houses within one-eighth of a mile of a major highway (HIGHWAY) have lower property values than other homes by an average of $1,949.

Table 4. Hedonic Price Model for 1994 Residential Property Values

	Coefficient	Standard Error	t	Prob.
BEDROOMS	1715.43	107.93	15.9	.000
BATHROOMS	926.61	277.56	3.3	.001
BUILDING AREA	16.17	.25	64.7	.000
LAND	.17	.01	13.5	.000
FIREPLACE	5055.29	190.51	26.5	.000
GARAGE	3283.12	417.95	7.9	.000
POOL	8511.66	2034.15	4.2	.000
AGE	-120.56	4.46	-27.0	.000
NONOWNER	-3186.44	199.09	-16.0	.000
WALL TYPE	448.66	162.56	2.8	.006
HEAT TYPE	1799.40	180.76	10.0	.000
CONDITION	7473.02	277.89	26.9	.000
SIDE PORCH AREA	14.80	4.97	3.0	.003
MULTI-FAMILY	-15449.18	317.31	-48.7	.000
UNEMPLOYED	-114.68	13.39	-8.6	.000
OVER 65	-134.53	12.97	-10.4	.000
BLACK	-252.09	4.50	-56.1	.000
HISPANIC	-261.75	22.45	-11.7	.000
NATIVE AMERICAN	-461.43	11.11	-41.5	.000
HIGHWAY	-1949.98	309.39	-6.3	.000
LAKE	6321.68	352.80	17.9	.000
ABANDONED	-859.98	36.03	-23.9	.000
VIOLATIONS	-2.37	.13	-18.5	.000
DISTANCE TO CDC	.86	.16	-17.3	.000
DISTANCE TO PUBLIC HOUSING	-.46	.16	-9.4	.000
DISTANCE TO PRIVATE, PUBLICLY SUBSIDIZED HOUSING	-.82	.30	9.1	.000
CONSTANT	47253.84	644.81	73.3	.000

Dependent variable: Assessed value, 1994

N = 22,156

Adjusted R^2 = .590

Examination of the coefficients for the distance variables reveals that, in terms of property values, there is a difference in the impact of nonprofit-developed subsidized housing and subsidized housing provided through public housing or through the private sector. The coefficient for the variable DISTANCE TO CDC means that as proximity to a nonprofit-developed subsidized multi-family project increases, property values also increase slightly

(at a rate of $.86 per foot). That is, if one were to compare two properties, A and B, that are identical in all respects except that property A is 100 feet closer to a nonprofit-developed subsidized housing project, the value of property A would be $86 higher than the value of property B. Thus, these projects have a positive impact on property values. On the other hand, public housing (DISTANCE TO PUBLIC HOUSING) and privately owned, publicly subsidized housing units (DISTANCE TO PRIVATE PUBLICLY SUBSIDIZED HOUSING) have a slight negative impact on property values (-$.46 per foot and -$.82 per foot respectively).

Why do nonprofit-developed properties have a different impact on property values than either public housing or privately owned, publicly subsidized housing? Though we are unable to address that question directly with the data we have, several explanations suggest themselves. First, nonprofit CDCs are typically community-based organizations that were created by neighborhood residents or were offshoots of neighborhood organizations. They typically have significant representation of neighborhood residents and, often, their own building residents on their boards of directors. The CDC model was created, in the first place, to provide for a more responsive type of land development, one that took into account the desires and needs of community residents. Thus, the types of projects that CDCs undertake are likely to fit in with neighborhood plans, or the objectives of existing neighborhood organizations. This is likely to be true of most CDC housing projects, notwithstanding the current tension between CDCs and neighborhood organizations.

Second, CDCs tend to continue to be responsive to neighborhood resident concerns during the management stage. As community-based organizations, most CDCs regard their buildings as neighborhood assets. In addition, many CDC projects incorporate forms of tenant management or tenant representation on governing boards. This helps to ensure that CDCs continue to respond to the needs of their residents, and the concerns of neighborhood residents. Though it would be an exaggeration to suggest that this model works in every case, nevertheless, CDCs have created structures for more responsive management than have private owners of subsidized housing.

Private owners who use public subsidies in their developments do so primarily for the tax benefits that are provided. These owners do not typically share the community development orientation of CDCs, nor are they always active in community affairs as are CDCs. Furthermore, as the tax benefits of subsidized development are generally determined upfront (though collected over ten years), the ongoing viability of privately owned, publicly subsidized buildings is of less concern to their private owners from an investment standpoint. This is especially true after the accelerated tax benefits have expired.

Public housing projects suffer from a different set of problems than privately owned subsidized buildings. Years of underfunding have led to deferred maintenance in some buildings, contributing to property decline and deterioration. Though these problems are not as severe in Minneapolis as in some other large cities, they do occur; the recent decision by HUD to demolish the Sumner-Glenwood project, for example, is acknowledgement of the irretrievably poor condition of that project. Furthermore, public housing has become stigmatized in the minds of most of the public. The underfunding of the program, the physical decline of the projects, and poor management practices, have contributed to an overwhelmingly negative public image of public housing. Public housing projects are widely seen as government-made

ghettos, and the source of criminal and anti-social behavior in neighborhoods. This general assessment is surely played out in the housing market, as buyers and sellers both act on the presumption that proximity to public housing is negative.

Thus, the embeddedness of CDCs in their communities, their high level of visibility in community affairs, and the models of property and organizational management they frequently use could all contribute to a model of housing development that would not only fit into the neighborhood, but contribute to its revitalization.

In any case, it is important to note that the findings from Table 4 suggest that the condition of the private housing market, and the management practices of the owners of private housing are more significant in determining residential property values than is the existence of publicly-subsidized housing of any sort. For example, the existence of abandoned housing in the nearby neighborhood has a dramatic negative effect on property values. Each abandoned building in the surrounding neighborhood reduces residential property values an average of $859.98. The number of code violations issued in the neighborhood also has a downward effect on property values (an average of $2.37 per violation). In addition, the condition of the property itself (CONDITION) is an important factor as well, with properties in standard condition worth an average of $7,473 more than those rated substandard by the assessor's office. These findings point to the importance of the private sector's maintenance and management of residential property as an important determinant of residential property values. In terms of magnitude, they tend to be more significant than the presence of publicly subsidized housing.

We duplicated the above analysis, adding the 1988 assessed value to the regression equation. The addition of a lagged value of the dependent variable into the equation as an explanatory vari-able effectively changes the interpretation of the statistical model into an analysis of the *change* in property values between the two time points. Thus, the coefficients should be interpreted as the effect of a particular variable on the change in value between 1988 and 1994. The results are listed in Table 5.

Most of the coefficients, of course, reduce in value since they are explaining only the increment in value between the two time points 1988 and 1994. The pattern of findings, however, is identical to that found in Table 4. Amenities on the site or amenities added to the structure have positive effects on the change in property values. Bedrooms were worth an average of $627 in additional value over this time period, bathrooms were worth almost $500 each ($498.84). Gross building area (BUILDING AREA) and lot size (LAND) contributed slightly to increased property values. Proximity to a major highway (HIGHWAY) decreased value an average of $1,073.99 during these years.

As with the earlier findings, proximity to nonprofit-developed subsidized multi-family housing added slightly to property values between 1988 and 1994 (an increase of $.42 per foot), while proximity to public housing and privately owned, publicly subsidized housing had slight negative effects (-$.26 and -$.41 per foot respectively). The variables measuring the quality of private residential maintenance and upkeep are also consistent with the findings in Table 4. Each abandoned house in the surrounding neighborhood decreased property values by $420 over this period. Each code violation issued by City of Minneapolis inspectors to properties in the surrounding neighborhood reduced property values by $1.28.

Table 5. Hedonic Price Model for 1994 Residential Property Values with the 1988 Values as an Additional Independence Variable

	Coefficient	Standard Error	t	Prob.
BEDROOMS	627.35	70.38	8.9	.000
BATHROOMS	498.84	179.32	2.8	.005
BUILDING AREA	2.64	.18	14.3	.000
LAND	.07	.01	8.7	.000
FIREPLACE	1039.02	124.86	8.3	.000
GARAGE	1458.94	269.83	5.4	.000
POOL	3103.41	1323.01	2.3	.019
AGE	-5.68	2.96	-1.9	.055
NONOWNER	-619.24	129.56	-4.8	.000
WALL TYPE	-415.13	104.36	-4.0	.000
HEAT TYPE	552.71	116.17	4.8	.000
CONDITION	3097.73	180.50	17.2	.000
SIDE PORCH AREA	7.52	3.18	2.4	.018
MULTI-FAMILY	-9078.18	207.78	-43.7	.000
UNEMPLOYED	-84.78	8.61	-9.8	.000
OVER 65	-90.98	8.40	-10.8	.000
BLACK	-110.01	3.00	-36.7	.000
HISPANIC	-128.62	14.41	-8.9	.000
NATIVE AMERICAN	-204.93	7.29	-28.1	.000
HIGHWAY	-1073.99	198.57	-5.4	.000
LAKE	3393.05	226.52	15.0	.000
ABANDONED	-420.48	23.30	-18.0	.000
VIOLATIONS	-1.28	.08	-15.6	.000
DISTANCE TO CDC	.42	.10	-13.0	.000
DISTANCE TO PUBLIC HOUSING	-.26	.10	8.1	.000
DISTANCE TO PRIVATE, PUBLICLY SUBSIDIZED HOUSING	-.41	.19	7.2	.000
1988 VALUE	.88	.01	177.9	.000
CONSTANT	8957.09	467.40	19.2	.000

Dependent variable: Assessed value, 1994

N = 22,017

Adjusted R^2 = .8310

5 THE IMPACT OF SUBSIDIZED MULTI-FAMILY HOUSING ON CRIME

In this chapter we analyze the impact of nonprofit housing development on criminal activity. Our findings in this chapter indicate that the conversion of a sample of buildings into subsidized housing by nonprofit CDCs reduced the police-reported criminal activity on those sites. Our measure of criminal activity is the number of police calls received from or about a given address. In the following analyses, we include police calls that result in crime reports being filed, or arrests, or bookings being made by the police. In addition, we have filtered out multiple calls for a single incident. In these ways we eliminate extraneous calls and focus on the number of criminal incidents taking place at the project properties. The Minneapolis Police Department has computerized data on monthly police calls by address going as far back as 1986.[76] Utilizing that data base, we conduct a before- and after-rehab analysis for each of the sample projects presented in Chapter 2 that was developed after 1986. Fourteen of the twenty-three subsidized housing projects were developed after 1986 and thus constitute the sample for this analysis of crime. Table 6 presents is a list of the developments that we analyze in this chapter.

Figure 3 presents the graphic illustrations of the number of police calls per month at each of the project locations. It should be noted that because of the wide range in the number of calls at these locations, the graphs are on different scales. What is of interest here is not so much the absolute level of calls being made about each of the properties, but the change in the level after the project was rehabilitated and turned into subsidized housing. If the NIMBY arguments are correct, we would expect to see an increase in the number of police calls after the projects were developed into subsidized housing. The two vertical lines in the graphs represent the beginning and end of the rehabilitation period. If there is only one vertical line, it represents the date the property was transferred to nonprofit ownership (only one vertical line is included for those properties that underwent little or no rehabilitation).

The first property shown in the graphs is the Barrington Hotel. One can see a rapid escalation in criminal activity at the hotel throughout 1988 and 1989. This activity abruptly ends at the end of 1989, coinciding with when the building was condemned by the city and vacated of all tenants. The Central Community Housing Trust (CCHT) purchased the building shortly afterward and operates it now. To the right of the Barrington Hotel graph is the graph for Portland Place. The Portland Place graph shows a rapid drop in police calls right at the time of rehabilitation, and a continued low level since then. The graph for the Coyle also shows relatively high levels of criminal activity through the late 1980s, and lower levels since. CCHT rehabilitated the property in 1992.

Table 6. Subsidized Multi-Family Housing Projects in the Crime Analysis

Subsidized Housing Project	Developer
B-Flats, 2633 1st Avenue South	Whittier Alliance
Double Flats, 211 West 28th Street	Whittier Alliance
New Village, 2730 Portland Avenue South	PRG
Greenwood Co-op, 3439 15th Avenue South	PRG
3312 Fourth Avenue South	PPL
The Mission Building, 1819 South 5th Street	WBCDC
The Coyle, 1801 La Salle Avenue	CCHT
The Barrington Hotel, 911 Park Avenue South	CCHT
The Cedars, 2805-13 Cedar Avenue South	PNHT
The Howards, 2205 5th Avenue South	PNHT
Castle Apartments, 300 North 26th Avenue	FNDC
Homewood Apartments, 1239 Sheridan Avenue North	NRRC/TCHDC
1123 Logan Avenue North	NRRC/PPL
Portland Place, 2430 Portland Avenue	PNHT/TCHDC

PRG = Powderhorn Residents' Group
PPL = Project for Pride in Living
WBCDC = West Bank Community Development Corporation
CCHT = Central Community Housing Trust
PNHT = Phillips Neighborhood Housing Trust
FNDC = Farview Neighborhood Development Corporation
NRRC = Northside Residents' Redevelopment Council
TCHDC = Twin Cities Housing Development Corporation

Many of the graphs show a clear decline in police call activity after rehabilitation, including the Barrington, Portland Place, the Coyle, Double Flats, and the Castle Apartments. However, it is not clear whether the changes are statistically significant. Furthermore, in some of the buildings, the graphs do not depict such a clear difference in the pre- and post-rehab levels of crime (see, for example, the graphs for the Homewood Apartments, B-Flats, or 3312 4th Avenue South). In order to examine more rigorously the difference between pre- and post-rehab crime, we resort to statistical methods of individual and pooled time series analyses.

Figure 3. Monthly Numbers of 911 Police Calls from the Project Locations

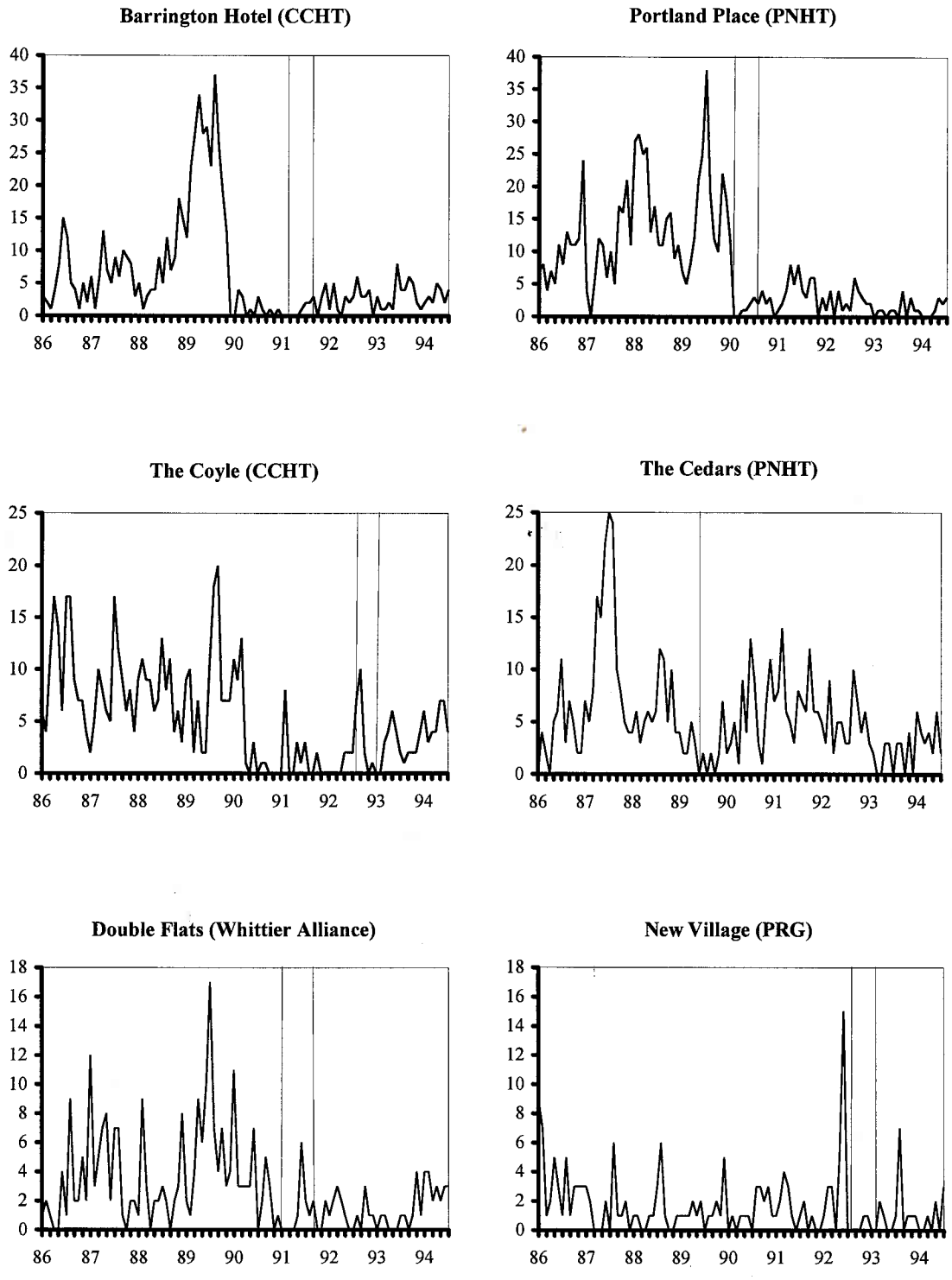
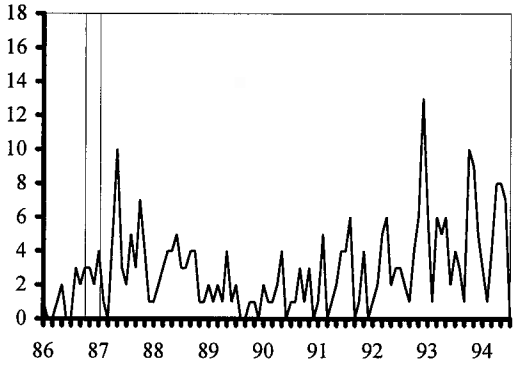
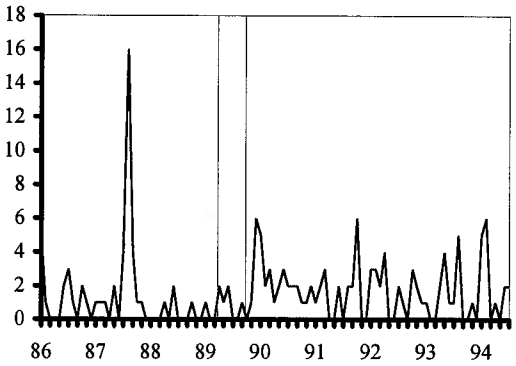


Figure 3. Monthly Numbers of 911 Police Calls from the Project Locations, continued

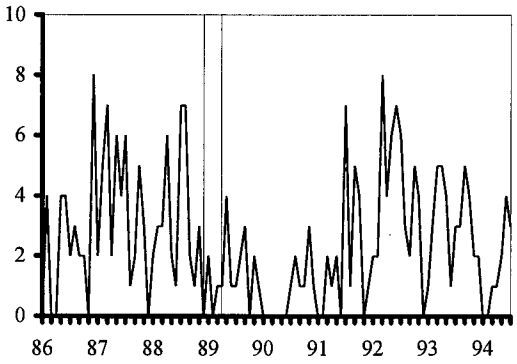
Homewood Apartment (NRRC/TCHDC)



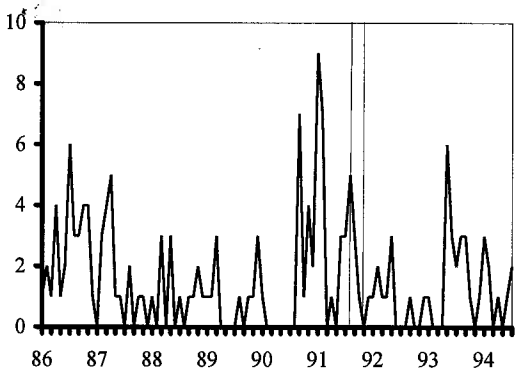
1123 Logan Avenue North(NRRC/PPL)



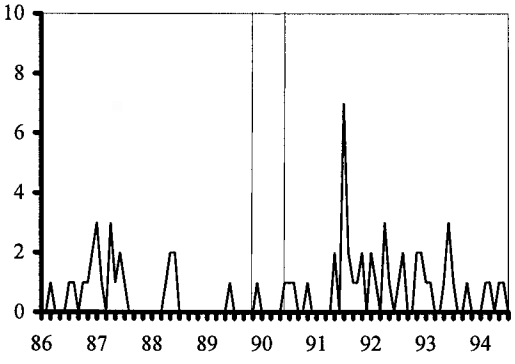
B-Flats (Whittier Alliance)



3312 4th Avenue South (PPL)



The Mission Building (West Bank CDC)



Castle Apartments (FNDC)

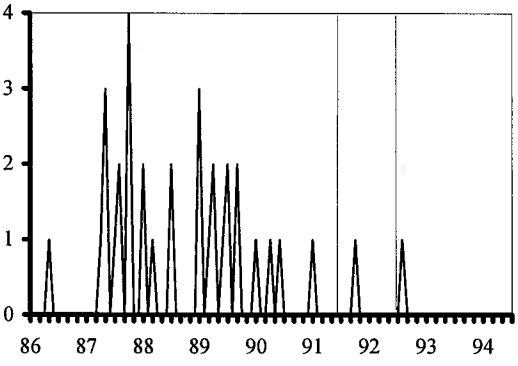
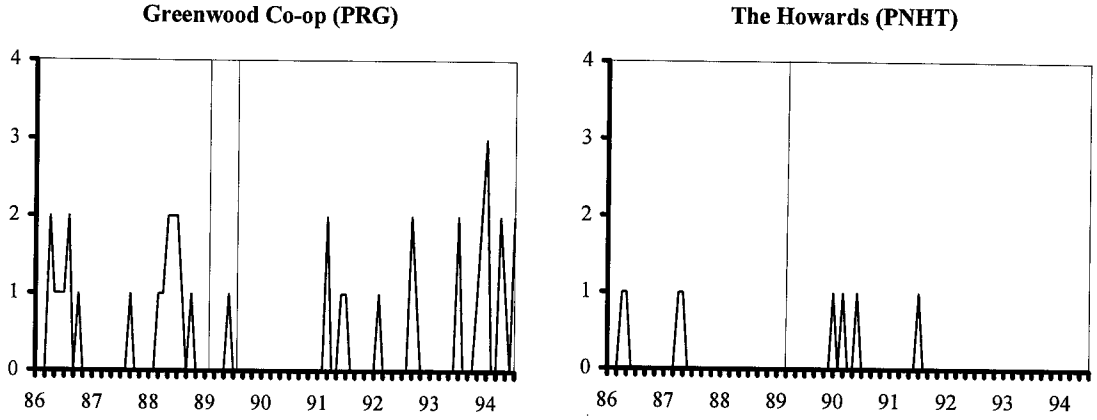


Figure 3. Monthly Numbers of 911 Police Calls from the Project Locations, continued



Notes: 1) The numbers of monthly calls were filtered from the raw data in such a way that only calls that resulted in crime reports filed and/or arrests made will be counted. 2) Due to the heterogeneous distribution of the calls across projects, the charts were grouped under five different scales, representing a maximum of 40, 25, 18, 10, and 4 police calls per month, respectively. 3) The two vertical lines inside each chart denote the beginning and end of the rehab period respectively. 4) For the Howards and Cedars, the single vertical line denotes the dates of purchase.

Source: RECAP unit of the City of Minneapolis Police Department.

INDIVIDUAL TIME SERIES ANALYSIS

Most of the graphs do not show particularly clear patterns of increase or decrease over time. In order to examine the statistical probability that there were real changes in crime patterns caused by conversion of the properties to subsidized housing, we employ a simple interrupted time series (SITS) method.[77] Time series models evaluate whether the occurrence of a policy intervention at a discrete point in time has an impact on a phenomenon measured over time. In this instance, we measure the number of police calls per month over a nine-year period and analyze whether conversion of a property to subsidized housing affects the level and trend of those crime calls. The simple interrupted times series technique is a multiple regression model that creates three coefficients of interest: one that indicates the overall trend in crime prior to rehab, another that indicates the average change in the amount of crime after rehab, and a third that indicates the direction and size of the trend in crime since rehab. A full explanation of the statistical model utilized appears in the appendix of this report.

The results from the individual time series models for each of the fourteen projects are listed in Table 7. The figures in the table that are of most interest are in the columns headed "Change in Intercept" and "Post-rehab Trend." The change in the intercept indicates whether the conversion of the property in question to subsidized housing changed the average number of police crime calls at that property. A positive number in that column indicates that, on average, there were more police calls after rehabilitation than before. The asterisk indicates

whether the change was statistically significant. The value of the coefficient represents the difference in the average number of calls pre- and post-rehab. The pre- and post-rehab trends indicate the direction and degree to which criminal activity was changing over time before and after rehab. For example, a positive number indicates that the number of calls was generally increasing from one month to the next, while negative value indicates a reduction over time. For each property that underwent substantial rehabilitation we report the findings from two equations: one using the beginning of rehabilitation as the intervention point and another using the end of the period of rehabilitation as the intervention point. For the Cedars and the Howards we use the date of purchase by the nonprofit developer as the intervention. The statistics presented in the final two columns are explained in the appendix, and are not critical to understanding the findings.

So, for example, the analysis shows that the number of police crime calls at the B-Flats building, 2633 First Avenue South, fell by an average of 2.77 per month after the beginning of rehabilitation (or 1.82 per month after the end of rehabilitation), and that that drop was statistically significant. The change in the trend was quite small and statistically insignificant. The Durbin–Watson statistic indicates there was no autocorrelation of the error terms for this model. The figures in the second column of numbers indicate that of the twenty-six interrupted time series models run (two for each property in the crime analysis except the Cedars and the Howards) there were nine cases in which the change in the intercept was statistically significant. In seven of those cases, the coefficient has a negative value, indicating fewer police calls after conversion of the units into subsidized, low-income housing. Portland Place showed a dramatic reduction of over thirteen calls per month, using the beginning of rehabilitation as the intervention. In addition, there are two other cases, the Barrington Hotel and the Coyle Hotel, for which the statistics do not show a significant reduction in crime calls, primarily, we suspect, because of the period of time directly prior to the date of purchase and rehabilitation by the nonprofit when the buildings stood vacant. Comparison of the graphs for these two buildings suggests that the number of crime calls under nonprofit management is, on the average, less than the number experienced under private ownership when the buildings were in operation.

There were two buildings (of fourteen in the analysis) for which the figures show an increase in the average number of police crime calls after rehabilitation: the Mission Building and the Howards. For the Mission Building, the increase in the number of calls, using the end of rehabilitation as the intervention point, is less than one per month. By checking the graph for the Mission Building, it seems that most of the statistical effect is produced by a single month in 1991 when seven calls were made. Otherwise, the level of crime call activity after rehabilitation mirrors the pattern prior to rehabilitation. The average increase in crime calls at the Howards after rehabilitation is also less than one per month. But, in fact, the graph shows that never during the entire span of the time series did the building ever experience more than one call per month, indicating that the increase, though statistically significant, is miniscule. At twelve of the subsidized housing sites, subsidized housing development had no negative impact on crime. In fact, in four buildings there was the opposite effect, i.e, a reduction in crime calls after conversion to nonprofit ownership and operation.

Table 7. Simple Interrupted Time Series Results: The Impact of Subsidized Housing Rehabilitation on Police Crime Calls, 1986-1994

Building		Intercept	Change in Intercept	Pre-rehab Trend	Post-rehab Trend	D-W	ρ
B-Flats	Beginning of rehab	2.385*	-2.776*	0.042	-0.009	1.709	
		(0.721)	(0.852)	(0.036)	(0.038)		
	End of rehab	2.893*	-1.823*	0.001	0.032	1.613	
		(0.695)	(0.851)	(0.031)	(0.034)		
Double Flats	Beginning of rehab	3.084*	-4.138*	0.029	0.002	1.573	
		(0.739)	(1.122)	(0.021)	(0.039)		
	End of rehab	4.083*	-2.666*	-0.011	0.055		0.283*
		(1.000)	(1.557)	(0.025)	(0.066)		(0.095)
New Village	Beginning of rehab	2.162*	-1.405	-0.006	0.049	1.559	
		(0.502)	(1.031)	(0.011)	(0.062)		
	End of rehab	2.336*	-0.477	-0.012	0.033	1.612	
		(0.488)	(1.161)	(0.010)	(0.093)		
Greenwood Co-op	Beginning of rehab	0.421*	-0.770*	0.006	0.008	1.506	
		(0.234)	(0.282)	(0.011)	(0.012)		
	End of rehab	0.555*	-0.483*	-0.004	0.019	1.482	
		(0.221)	(0.279)	(0.009)	(0.010)		
3312 4th Avenue South	Beginning of rehab	1.923*	0.181	-0.007	-0.003		0.283*
		(0.635)	(0.973)	(0.016)	(0.040)		(0.095)
	End of rehab	1.707*	-1.073	0.001	0.024		0.277*
		(0.610)	(0.979)	(0.015)	(0.044)		(0.096)
The Mission Building	Beginning of rehab	0.927*	0.577	-0.017	0.020	1.686	
		(0.310)	(0.409)	(0.011)	(0.014)		
	End of rehab	0.912*	0.950*	-0.016	0.011	1.739	
		(0.287)	(0.402)	(0.009)	(0.013)		
The Coyle	Beginning of rehab	11.929*	2.879	-0.147*	0.182		0.415*
		(1.428)	(2.553)	(0.030)	(0.165)		(0.089)
	End of rehab	11.382*	1.019	-0.127*	0.329		0.418*
		(1.388)	(2.821)	(0.027)	(0.246)		(0.089)
Barrington Hotel	Beginning of rehab	12.349	-0.995	-0.114	0.090		0.843*
		(7.448)	(4.086)	(0.172)	(0.339)		(0.052)
	End of rehab	12.808*	0.363	-0.130	0.094		0.845*
		(7.248)	(4.116)	(0.157)	(0.364)		(0.052)
The Cedars	Date of purchase	9.755*	-0.904	0.111	-0.065		0.598*
		(3.111)	(2.901)	(0.115)	(0.138)		(0.077)
The Howards	Date of purchase	0.261*	0.183*	-0.008*	0.006	1.745	
		(0.088)	(0.107)	(0.004)	(0.004)		

Table 7. continued

Building		Intercept	Change in Intercept	Pre-rehab Trend	Post-rehab Trend	D-W	ρ
Castle Apartments	Beginning of rehab	0.581*	-0.275	-0.003	0.000	2.248	
		(0.178)	(0.319)	(0.004)	(0.015)		
	End of rehab	0.635*	-0.189	-0.005	0.005	2.231	
		(0.165)	(0.381)	(0.003)	(0.029)		
Homewood Apartments	Beginning of rehab	-1.463	-0.157	0.454	-0.433		0.318*
		(3.695)	(2.059)	(0.627)	(0.628)		(0.095)
	End of rehab	-0.346	-0.308	0.231	-0.210		0.315*
		(2.591)	(1.827)	(0.317)	(0.317)		(0.096)
1123 Logan Avenue North	Beginning of rehab	2.006*	0.961	-0.034	0.034	1.523	
		(0.704)	(0.861)	(0.031)	(0.034)		
	End of rehab	1.515*	1.181	-0.014	0.005		0.212*
		(0.830)	(1.008)	(0.031)	(0.037)		(0.096)
Portland Place	Beginning of rehab	8.390*	-13.664*	0.201*	-0.263*		0.427*
		(2.536)	(2.947)	(0.086)	(0.112)		(0.09)
	End of rehab	13.127*	-5.471	-0.038	-0.068		0.600*
		(3.656)	(3.909)	(0.108)	(0.166)		(0.079)

N = 103 for each individual time series; standard errors are in parentheses.

For those regression equations without the D-W statistic, Cochrane-Orcutt procedure was used to correct for first-order serial correlation.

* indicates $p < .10$

The NIMBY argument related to crime and subsidized housing might suggest that as the housing projects age, the potential benefits of the original rehabilitation may diminish and criminal activity might increase. That is, we would expect to find that the post-rehab trend in crime calls is positive and significant. In fact, in none of the individual cases is the post-rehab trend in crime positive and significant. In one case (Portland Place), however, the post-intervention trend is negative and significant, reflecting a continued downward drift in crime activity at that building.

POOLED TIME SERIES ANALYSIS

The small sample size of our data might render the estimates of the individual time series coefficients imprecise. This problem, however, can be overcome by utilizing the cross-sectional nature of our sample collection: We can pool the observations of all fourteen projects together and estimate a single pooled time series model.[78] A pooled time series analysis allows us to analyze all of the fourteen projects in one statistical test to determine, in an overall manner, whether conversion of these buildings to subsidized housing increased or decreased the criminal activity at those sites. The full statistical explanation of the model is presented in the appendix.

Table 8 presents the pooled time series results. The table reports the results using all crime calls and also two subsets of crime (not mutually exclusive subsets), violent and domestic crimes. We are able to use these subsets of crimes because our sample size has increased due to the pooling of all data into one model. When we looked at each individual project in the simple interrupted time series models reported in Table 7, the occurrence of violent or domestic crimes was too sporadic to produce reliable statistical findings. Recall that the coefficient for change in the intercept measures the average change in the amount of crime pre- and post-rehab. The coefficients for trend measure the direction and size of the trend in crime prior to rehab, and the change in trend reflects the rate of crime after rehab.

Regardless of whether we use the beginning or the end of rehabilitation as the intervention point, the figures show that on the average at these fourteen buildings there were significantly fewer crime calls after rehabilitation of the buildings and their conversion to subsidized housing. All of the coefficients for the change in intercept are negative, indicating fewer events after conversion of the property to subsidized multi-family housing. The coefficient for the first model (all crime calls) is statistically significant. When we examine two subsets of crime, we find that the estimate for the drop in violent crime after the beginning of rehabilitation if significant. The evidence clearly refutes the NIMBY fears of greater criminal activity in nonprofit-developed, subsidized housing projects.

There is, however, a positive and statistically significant coefficient for the post-rehab trend, shown in Table 8. This indicates that taking all fourteen projects as a whole, the trend in crime appears to be rising as the length of time since rehabilitation of the property increases. Yet, the size of the coefficient is extremely small, less than 6 percent of a crime call per month (0.058; i.e., at that rate it would take eighteen months for an additional crime call to manifest itself). When the crimes are broken down into the two categories, the magnitude of the coefficients becomes even smaller. Thus, the impact of the positive trend in post-rehab crime is virtually nil.

Table 8. Pooled Time Series Results: The Impact of Subsidized Housing Rehabilitation on Crime in Fourteen Project Sites, 1986-1994

		Change in Intercept	Pre-rehab Trend	Post-rehab Trend	Adj. R^2
Total calls	Beginning of rehabilitation	-1.532*	-0.018	0.058*	.558
		(0.365)	(0.015)	(0.012)	
	End of rehabilitation	-0.781*	-0.025*	0.063*	.555
		(0.359)	(0.015)	(0.011)	
Violent crime	Beginning of rehabilitation	-0.256*	-0.006*	0.016*	.340
		(0.093)	(0.004)	(0.003)	
	End of rehabilitation	-0.064	-0.008*	0.016*	.337
		(0.092)	(0.004)	(0.003)	
Domestic crime	Beginning of rehabilitation	-0.197	-0.008	0.013*	.411
		(0.130)	(0.005)	(0.004)	
	End of rehabilitation	-0.061	-0.008	0.013*	.410
		(0.128)	(0.005)	(0.004)	

N = 1442; standard errors are in parentheses.

* Indicates coefficient significant at $p < .10$

6 THE NEIGHBORHOOD FIT OF SUBSIDIZED MULTI-FAMILY HOUSING

In this chapter we compare the residents of subsidized housing developments owned or operated by nonprofit CDCs with other residents of the immediate surrounding neighborhood. Much of the opposition to subsidized housing programs is based on the extent to which neighborhood residents believe that "other" kinds of people will be brought into the neighborhood as a result of the subsidized projects. Often the most relevant dimensions of the "otherness" of the subsidized housing residents are their class and race. In addition, the opponents of subsidized housing in Minneapolis neighborhoods object to the further concentration of poverty in their neighborhoods. Thus, the degree to which these subsidized housing projects are attracting lower-income people to the neighborhoods in which the projects lie is an important aspect of their impact. On the other hand, the nonprofit CDCs maintain that they are simply providing needed affordable housing for the kinds of people that already live in these neighborhoods.

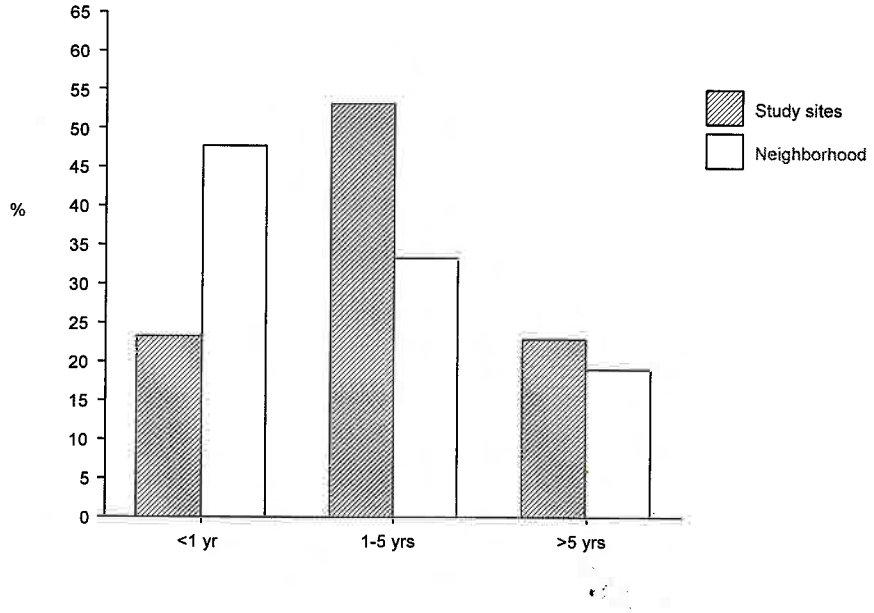
We proceeded by collecting data on the residents of the twenty-three sample projects presented in Chapter 2 directly from the management company responsible for property management or the CDC that owns the property. We attempted to collect data according to the same categories used by the U.S. Bureau of the Census so that we might compare the residents of the projects with the overall makeup of the census tract in which the project exists. We were unable to collect data for five of the twenty-three projects. Thus, the analysis that follows is based on eighteen developments.[79]

LENGTH OF RESIDENCY

Some neighborhood opposition to subsidized housing is that it increases the transiency in the neighborhood. In this light, the residents of subsidized housing are seen as more likely to move about, less rooted in their community, and less likely to feel as if they have a stake in the future of the neighborhood. Although it was impossible for us to examine the extent to which residents feel they have a stake in the neighborhood, it was possible for us to collect information on length of residency, to test the assumption behind this objection to subsidized housing.

Figure 4 compares the length of residency of the tenants of our sample developments with that of tenants in the census tracts in which those developments lie. We make summary comparisons below; i.e., we provide the summary data for all eighteen of the sample developments compared to the summary information for all of the census tracts represented by those projects. We do this to avoid the less useful analysis that would result from comparing a single project having a small number of units with an entire census tract. This would entail comparing the distribution created by, say five units, with that created by hundreds.

Figure 4. Length of Residency: A Comparison of Study Site and Neighborhood Tenants



Overall, for the subsidized tenants, 23.2 percent had, at the time of the data collection (fall 1994), lived in their units for less than one year. This compares to 47.7 percent of all tenants in the sample census tracts who had lived in their units for less than one year prior to the 1990 census taking. This suggests much less transiency among the residents in our sample buildings. This pattern is repeated using other time frames. For example, 53.1 percent of the residents in the sample buildings had resided in their units for somewhere between one and five years prior to the fall of 1994, whereas only 33.3 percent of all tenants in these census tracts have lived in their units that long. Finally, 22.8 percent of the residents of the sample subsidized projects have lived in their units for more than five years, compared to 19 percent of all tenants in the census tracts covered. Thus, it seems that compared to all tenants in the neighborhoods affected, the residents of these subsidized housing units are actually less transient, and more likely to have lived in their units for a longer period of time.

There is also a slight tendency for the residents of the larger subsidized projects to be somewhat more stable. Five of the eighteen reporting projects have twenty-five or more units, and thus are categorized as large projects. In these projects, only 19.2 percent of the residents had lived in their units less than one year, while 28 percent had lived there for more than five years. The discrepancy between the transiency of renters in the neighborhood and those in the sample projects is greatest for the north side of Minneapolis. In the neighborhoods in which the sample developments are located, 46 percent of all renters had resided in their units for less than one year, compared to only 18 percent of the residents of the north side subsidized developments.

These data indicate that it is not true that these projects have contributed to higher rates of transiency in the neighborhoods where they are located. In fact, the effect is in the opposite direction; these projects create the conditions for a greater level of stability within

the tenant population. This is probably due to the nature of the subsidies made available to these residents. For most of these residents, their subsidy is tied to the building. Thus, to move means to lose one's housing subsidy. This anchors the residents to the building and to the neighborhood.

PREVIOUS RESIDENCY

Another argument made by opponents of subsidized housing is that the developments attract more poor people to the neighborhoods, increasing the concentration of poverty. This is a variation on the magnet thesis that critics apply to many local redistributive policies. The argument goes that by providing resources to lower-income people, local governments run the risk of attracting more needy households. This argument has been used to justify low levels of public assistance despite recent evidence that shows a lack of migration related to welfare benefit levels.[80]

Are the subsidized housing units produced by nonprofit CDCs a magnet for lower-income people? Do these developments further concentrate poverty in the city by providing housing to households who had not already lived there? We can answer that question with some precision, though comparisons with other neighborhood residents are somewhat problematic. Property managers provided data on the prior residence of the tenants of the study sites. These categories are somewhat more specific than the Census Bureau categories, but nevertheless provide some basis for comparison. The data are presented in Table 9.

Table 9. Prior Residence of Study Site Tenants

Prior Residence	Study Sites*	Neighborhoods**
Same building prior to rehab	22.4	31.5
Same neighborhood	15.9	n/a
Elsewhere in the city	49.7	34.9
Elsewhere in the county	5.5	7.3
Elsewhere in the state	2.1	n/a
Out of state	4.5	26.3

* Data for the study sites are from the property managers/owners and reflect the residents' previous residence.

** The census data (collected in 1990) for neighborhoods are based on the respondents' residence in 1985.

The data collected for residents of the study sites are not fully comparable to the census data collected for neighborhood residents. The Census Bureau asks respondents where they were living five years before. The data we have collected for the study sites simply indicate their prior place of residence. Given mobility rates, it is likely that many of the neighborhood residents who reported their 1985 place of residence may have moved more than once since then. Another way of describing the difference in the data collected is that we expect that the

time frame for comparison of residence is longer for the census data than it is for the typical case in the study sites. Thus, we might expect greater spatial variation in their responses than in those of the study site tenants. On the other hand, the welfare magnet thesis holds that subsidized housing should attract tenants from outside the neighborhood and/or the city at a high rate.

The data show that 22.4 percent of the study site residents lived in their same building prior to the rehab completed by the CDCs. This compares to 31.5 percent of neighborhood residents who lived in their same building five years prior to the census. Sixteen percent (15.9) of the study site tenants lived in the same neighborhood prior to moving to the subsidized project. The census data do not provide a comparison for this category. By combining the first two categories for the study site residents, we find that 38.3 percent lived in the same neighborhood before becoming residents of subsidized housing. The next category includes those who lived elsewhere in Minneapolis (for the census data this could include the same neighborhood). The data show that half (49.7 percent) of the study site residents lived in other parts of Minneapolis prior to moving into the subsidized development. According to the census data, 34.9 percent of neighborhood residents lived in the city five years prior to the census. The final three categories constitute previous residences that are at least outside the city limits. For the study sites, only 12.1 percent of the residents lived outside the city prior to moving into their subsidized units. According to the census, over one quarter (26.3 percent) of neighborhood residents lived outside the city five years prior to the census.

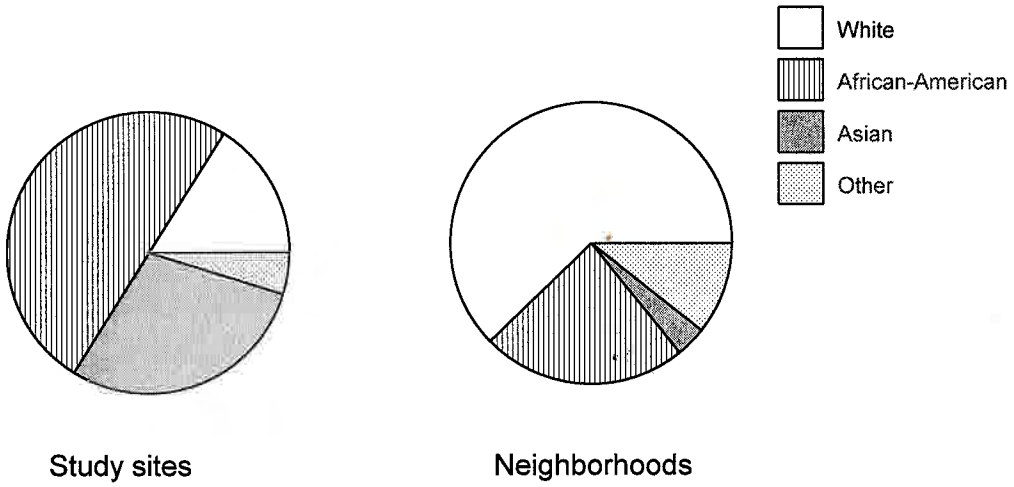
At an absolute level there seems little support for the hypothesis that these subsidized housing units are attracting new low-income residents to the city; 88 percent of the current residents of these buildings lived in the city prior to moving into their subsidized units. Almost four out of ten (38.3 percent) lived in the same neighborhood. In comparison with other neighborhood residents, there seems to be little support for the notion that subsidized tenants are more likely to be outsiders than nonsubsidized residents. The data actually show that a larger percentage of subsidized tenants previously resided somewhere in the city compared to all neighborhood residents. Some of that is undoubtedly due to the difference in the time reference for the census data. Yet if subsidized tenants were to be significantly more likely to be outsiders, we would most certainly see a pattern of responses that was more similar across the groups, or even one that showed study site residents to be less rooted in the city than the comparison group. It should also be noted here that the comparison group data from the census are for all residents, including homeowners, who are less mobile than tenants. Thus, the census data actually underrepresent the mobility of neighborhood residents who rent.

RACE

The subsidized housing units overrepresent people of color compared to the neighborhood-wide distribution of race. While whites make up 62 percent of the residents of the neighborhoods in which study sites are located, they account for only 16.1 percent of the study site residents (Figure 5). Conversely, African Americans make up only 23.6 percent of the study site neighborhood, but 49.8 percent of the study site residents. In addition, Asians are overrepresented among the residents of the subsidized rental buildings in our study. While Asians

make up only 3.5 percent of the study site neighborhoods, they make up 29.2 percent of the study site residents. Virtually all of this effect is due to a single property, New Village, in which 81 of the 86 units are inhabited by Asian households. Thus, 84 percent of the residents of the study projects are people of color, compared to 38 percent of the residents of the neighborhoods in which these projects are located.

Figure 5. Racial Breakdown of Study Site and Neighborhood Tenants

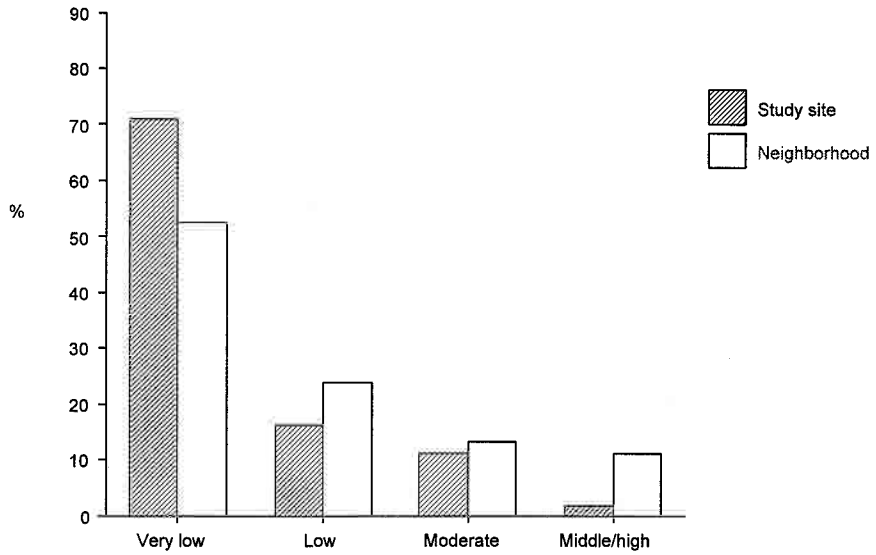


Though few of the opponents of subsidized housing mention race as a reason for their opposition, the data show that the residents of the study sites are much more likely to be of color than are neighborhood residents.

INCOME

Residents of the study sites are more likely to have very low incomes compared to neighborhood residents. Even though these projects are located in the poorest neighborhoods in the city of Minneapolis, very low income residents are overrepresented among the project site tenants. Almost three of every four project residents (70.9 percent) have incomes below 50 percent of the area median. This compares to only 52.4 percent of the neighborhood residents. Figure 6 shows the income breakdown for study site residents and neighborhood residents. There are important class differences between the residents of the study sites and their neighbors. Project residents are 35 percent more likely to have very low incomes, and half as likely to have moderate incomes or higher compared to neighborhood residents as a whole.

Figure 6. Income Breakdown of Study Site and Neighborhood Tenants



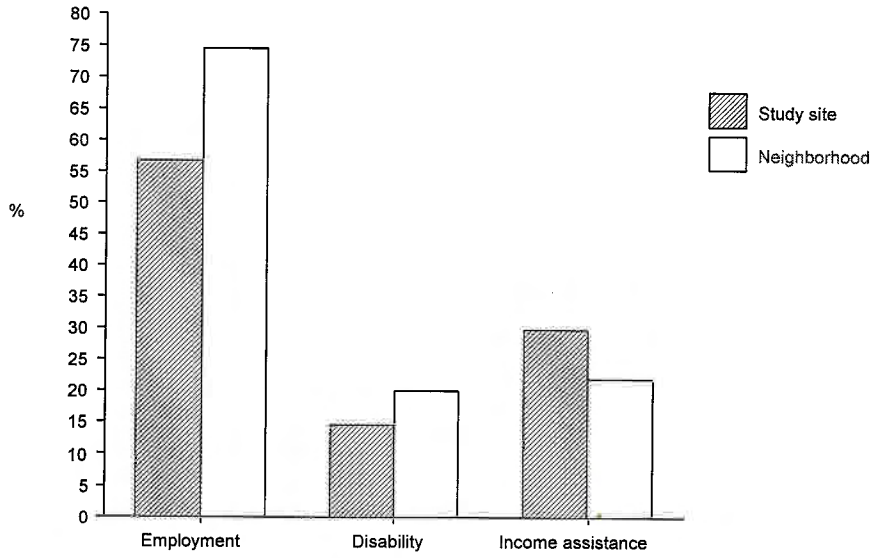
The income profile of the study site households is, of course, no accident. As the project profiles described, most of these developments are targeted to households with very low or low incomes. The public subsidies that are tied to the developments often require that tenants meet these strict income requirements. Thus, this kind of income distribution is expected in the projects analyzed here.

EMPLOYMENT AND SOURCE OF INCOME

Data on employment and public assistance provide another dimension on which to compare the residents of the study sites and their immediate neighbors. The following data are based on households, not individuals. For both the census data and the project site information, the following figures represent the percentage of all households that receive some income from employment or public assistance. The managers of the eighteen properties who responded to our inquiries report that 56.3 percent of their households receive wages from employment (43.7 percent from full-time and 12.9 percent from part-time employment). This compares to 74.5 percent of the households in the neighborhoods in which the study sites are located (Figure 7).

The data on public assistance do not show such a wide disparity, however. One in five (20.2 percent) neighborhood resident households receive disability income through Social Security payments compared to only 14.7 percent of the study site households. Similarly, 21.9 percent of neighborhood households receive income assistance through GA or AFDC, compared to 29 percent of the study site residents. When combined, the percentage of households receiving public assistance is virtually identical between study site residents (43.7 percent) and neighborhood residents (42.1 percent).

Figure 7. Source of Income of Study Site and Neighborhood Tenants



RENTS

One aspect of the opposition to nonprofit housing comes from the private landlord industry, which sometimes objects to what it considers the unfair competition created by the public subsidies that the CDCs receive to develop their housing. Private landlords in parts of the city suggest that the CDCs are taking a significant portion of their market share by providing comparable housing opportunities. The following analysis examines this issue. Census data allow a comparison of the income structure of a neighborhood (or census tract) with the rent structure of apartment units in the neighborhood. Such an analysis allows one to establish an estimate of the need for affordable housing units in a given area. If it can be established that there is a significant unmet need for low-cost housing units in the sample neighborhoods, then the objections of private landlords must be dismissed. If, on the other hand, there seems to be a match between the income profile of tenants in the neighborhood and low-cost rental opportunities, then the nonprofit projects might be competing with private sector property owners for tenants.

Using 1990 census figures, we first compiled the number of rental units at various price levels, (e.g., the number of units renting for less than $100, $100-$199, $200-$299, $300-$499, and $500-$750). We then compiled the income profile for residents in each of the sample census tracts, using the census categories (less than $5,000, $5,000-$9,999, $10,000-$14,999, $15,000-$24,999, and $25,000-$34,999). Using the mid-point for each of these income categories, we calculated the amount of rent households could afford, using 30 percent of income as the standard for affordability. So, for example, households making $7,500 per year can afford rents of $187.50 per month (7500/12 x .3). Table 10 shows the affordability level for each of the income categories in the census data.

Table 10. Affordable Rent Levels by Income

Income Level	Affordable Rent Level
Less than $5,000	$125
$5,000 to $9,999	$188
$10,000 to $14,999	$312
$15,000 to $24,999	$500
$25,000 to $34,999	$750

Since the affordable rent levels approximate the rent categories used by the census data, it is possible to compare the number of households in each income category with the number of rental units in each price category. Before that comparison can be made, however, we must adjust for the percentage of households that live in owner-occupied units (the income data are for all households, not just renters). Thus, we divide the total number of households in each income category by the percentage of all households that are renters in order to estimate the number of renter households in each income category. It should be noted that this method will underestimate the number of renters in the lower income categories. Figures for Minneapolis show that homeowners have a median income that is roughly twice that of renters, so we would expect an overrepresentation of renters in the very low income categories. However, because we do not know the precise distribution of income for tenants, we used a strict proportional estimate. As one can see from the method used, the final estimate of the income to rent match in these neighborhoods is quite rough. The estimates are listed in Table 11.

The census data show that in every sample census tract there is a significant shortage of rental housing units for very low income households. In all nineteen census tracts, there is a total shortage of 3,443 units. On the other hand, there seems to be a surplus of units in these neighborhoods affordable to households in the low and moderate income categories. The income categories $15,000-$24,999 and $25,000-$34,999 constitute a range from 41 percent of the area median to 95 percent. For these categories there seems to be a surplus in virtually all of the neighborhoods. Again, it should be emphasized that the methods we used for estimating the number of low- and moderate-income renters underestimated their numbers. Thus, we would expect the real size of the deficits to be larger and the surpluses to be less than shown in Table 11.

Table 11. Affordable Rental Housing Deficits, by Rent Level

Census Tract	Number of Units Needed for Very Low Income Households (<41% median)	Number of Units Needed for Low and Moderate Income Households (41-95% median)
16	171	(353)
22	140	(228)
29	32	(109)
32	25	(60)
33	34	(177)
48	20	(32)
54	44	(40)
56	607	(909)
59	90	(90)
60	247	(373)
69	168	(266)
71	483	(712)
73	132	(196)
74	54	(108)
77	275	13
78	273	121
83	225	(366)
85	304	(444)
95	119	(224)
TOTAL	3443	(4553)

Figures in parentheses indicate a surplus of units at that price level.

A more direct way of measuring the degree to which there is untapped demand for affordable housing in these neighborhoods is to look at the census figures for renters who are paying more than 30 percent of their incomes on rent. Table 12 shows the number and percentage of renters in each of our sample neighborhoods living in unaffordable housing. The table also shows the median percentage of income devoted to rent for two income categories. These figures are straight from the census data and required no manipulation or methods of estimation.

Table 12. Rent Burden in Project Site Neighborhoods

Census Tract	Tenants With Incomes Less than $10,000		Tenants With Incomes Between $10,000 and $19,999	
	Number (and percentage) Paying >30% of Income on Rent	Median Percentage of Income Paid for Rent	Number (and percentage) Paying >30% of Income on Rent	Median Percentage of Income Paid for Rent
16	270 (62%)	50+	208 (80%)	36
22	197 (90%)	50+	94 (72%)	37
29	83 (87%)	50+	41 (49%)	29
32	24 (77%)	50+	20 (61%)	32
33	173 (74%)	50+	79 (72%)	45
48	78 (76%)	38	64 (55%)	32
54	144 (74%)	50+	74 (37%)	23
56	580 (86%)	50+	587 (56%)	31
59	349 (69%)	47	130 (40%)	27
60	332 (67%)	50+	204 (66%)	39
69	255 (78%)	50+	146 (45%)	29
71	703 (75%)	50+	237 (53%)	31
73	232 (74%)	50+	83 (52%)	31
74	71 (71%)	50+	89 (68%)	36
77	223 (97%)	50+	157 (56%)	31
78	340 (78%)	50+	222 (55%)	32
83	260 (92%)	50+	145 (78%)	39
85	276 (91%)	50+	206 (55%)	32
95	157 (84%)	50+	74 (77%)	38

Source: 1990 Census Bureau.

Thus, for example, in census tract number 16 (where the Castle Apartments are located), there were, in 1989, 270 renter households with incomes less than $10,000 (62 percent of all renter households in that income category) who paid more than 30 percent of their incomes for housing. The median percentage of income paid for housing by these households was greater than 50 percent (the census bureau did not compute exact percentages over 50 percent). Of renter households with incomes between $10,000 and $20,000 in census tract num-

ber 16, 208 (or 80 percent) paid more than 30 percent of their incomes on housing. The table shows a very large number of renter households in need of affordable housing in each of the census tracts that has one of the sample projects. This indicates an untapped demand for the type of housing provided by the nonprofit CDCs we study here. In some of these areas the absolute number of households needing affordable housing is huge, such as in census tracts nos. 56 and 71, where over 1,000 and 900 households, respectively, are paying too much for their housing. In other census tracts with fewer people, the percentages of households in need of affordable housing are overwhelming. In census tracts nos. 77, 83, and 85, over 90 percent of renters with incomes below $10,000 are overpaying for their housing. In all but two census tracts, for households in the lowest income category, the median percentage of income paid for housing exceeds 50 percent. These data leave little doubt that there is unmet need for subsidized, affordable housing in each of the neighborhoods represented in this analysis.

Since 74 percent of the tenants in the subsidized multi-family projects in our sample have incomes less than 50 percent of the median (incomes less than $18,282), we must conclude that the majority of these units are targeting a population for whom there is an extreme shortage of affordable housing. This suggests that, for the most part, there is no direct competition with the private sector for these tenants. There may well be some competition with the private landlords for tenants whose incomes are above the 80 percent threshold (incomes of $29,252 or higher). But these remain a small percentage of the units operated by the CDCs.

This analysis has only dealt with potential price competition between the CDCs and the for-profit owners, and says nothing about the relative quality of the housing product provided, nor the package of amenities and services provided and how those characteristics might affect competition in the marketplace.

SUMMARY

In this chapter we have shown that the study site residents are not more likely than others in the neighborhood to be transient, nor are they more likely to be outsiders, attracted to the neighborhood by housing subsidies. In fact, the data show that virtually all of the study site residents come from somewhere in the city of Minneapolis, and tend to be less mobile than other tenants in the neighborhoods in which the study sites are located. Thus, according to the data summarized above, the assumptions about the mobility behaviors of assisted households seem unfounded. The greatest differences in the profiles of assisted households and neighborhood residents are those of class and race. Residents of the study sites are much more likely to be of color compared to neighborhood residents, and are significantly more likely to have very low incomes. Differences in mobility behavior are imagined; differences in race and class are real.

7 CONCLUSIONS AND IMPLICATIONS

This research provides several important pieces of information regarding the impact of nonprofit-developed subsidized housing on inner-city neighborhoods. First, our analysis provides strong evidence that this type of subsidized housing enhances the value of nearby residential property. Despite the fears of some that subsidized housing undermines neighborhood property values, we found that the effect of subsidized housing is rather small. Nonprofit-developed subsidized housing has a small positive impact on property values, while public housing and privately owned, publicly subsidized housing have even smaller negative impacts. Of much greater importance in determining residential property values is the quality of private ownership in the neighborhood. The quality of the housing stock, the existence of abandoned properties, and lack of adequate maintenance by private owners, together, have a much more sizable impact on neighborhood property values. The preoccupation of many with the issue of subsidized housing therefore seems misplaced, at least with respect to property values.

We also examined the issue of crime, and the degree to which nonprofit-developed subsidized housing contributes to problems of inner-city crime. Our findings here are also quite strong and consistent. The conversion of the properties that we studied from private ownership into nonprofit-owned subsidized housing had the effect of reducing the average level of criminal activity at those sites. There were fewer crime incidents after conversion of the buildings into subsidized housing than there were before the buildings became subsidized. Only two of the fourteen sites studies showed a statistical increase in crime after rehab, but in each case the increase was an average of less than one police call per month, and in one case the building has never had more than one event per month since rehab. These two cases are far outweighed by several instances in which the police reported many fewer calls after the properties became subsidized. In most cases, however, there was no statistical difference between the amount of crime calls prior to rehab and after rehab. Overall, the fears of some that these buildings increase crime problems in the neighborhoods in which they are placed are unfounded. Not only do these projects not increase crime, on average they reduce it.

The third area of study focused on the concern of some that these subsidized housing projects introduce a "new element" into neighborhoods that results in greater instability and a concentration of poverty. These concerns, too, appear to be unfounded. First, we found that the residents of the subsidized projects we studied appear to be more stable in their housing than other tenants in their neighborhoods. Second, our data suggest that the residents of these subsidized units are typically not outsiders to the community who are attracted into pockets of poverty by the lure of affordable rents. Almost 40 percent of the residents lived in the same building prior to rehab or in the same neighborhood, and another 50 percent lived elsewhere in the city of Minneapolis. There are two dimensions on which the residents of subsidized housing tend to be different than the residents of their surrounding neighborhoods: they are more likely to be very low income, and they are more likely to be people of color. Finally, data on the rent and income structures of the neighborhoods we studied suggest that there is a

significant unmet demand for affordable housing for very low income people. Because of the large affordability gaps that exist in these neighborhoods, there is little support for the suggestion that these subsidized units are competing with the private sector. Census data reveal that there is a need for many thousands more such units in order to meet the needs of the low-income residents who already live in these neighborhoods.

This research focused on nonprofit-developed subsidized housing because nonprofit CDCs are the most active developers of affordable housing in inner-city neighborhoods. Though our results are positive regarding the impact of this type of housing on neighborhoods, we are not suggesting that all is well with CDCs and the housing they produce. The political problems of CDCs in the neighborhoods which they serve are very real. CDCs need to continue to address the concerns of their communities and to reduce problems of communication and perception. As the number of units produced by CDCs increases, concerns of property management begin to take on greater importance. CDCs must devote as much, if not more, attention to this less glamorous side of affordable housing development. Public officials and funders must also acknowledge the continuing financial difficulties of operating affordable housing for a population of very low income families whose real earning power has declined over the past decade. These issues are, ultimately, beyond the scope of this research, though they may represent areas of continuing concern for CDCs. Notwithstanding these concerns, the issue that we did study in this report, the impact of CDC-developed housing on neighborhoods, provides a positive picture of CDC efforts and suggests they are important actors in central-city revitalization efforts.

POLICY IMPLICATIONS

As mentioned in the introductory chapter, the Twin Cities region is currently involved in a public debate over the future of subsidized housing. One dimension of the debate focuses on the role of subsidized housing in inner-city neighborhoods. There seems to be a growing consensus on the part of neighborhood groups and local officials in both Minneapolis and St. Paul that subsidized multi-family housing is not an effective community development strategy. A second dimension of the debate relates to the wisdom of dispersing subsidized housing throughout the city (as is being planned pursuant to the *Hollman v. Cisneros* consent decree). In addition, politicians and the media are debating the strategy of dispersing subsidized housing throughout the region, and encouraging heretofore reluctant suburbs to take on their fair share of affordable housing.

Subsidized Housing as a Community Development Strategy

Few critics of subsidized housing dispute the fact that there is a severe shortage of affordable housing for very low income families, both in the central cities of Minneapolis and St. Paul, and in the rest of the region. Thus, they have little or no objection to subsidized housing as social welfare policy. That is, most people agree that subsidized housing is virtually the only way to ensure that very low income households receive decent, safe, and affordable housing in today's marketplace. The opposition to subsidized housing, therefore, primarily rests upon its suitability as community development policy. In other words, is subsidized housing good for

the neighborhoods in which it is placed? One impetus for this research was the growing public consensus that subsidized housing was detrimental to the inner-city neighborhoods in which it is located. Local officials, politicians, neighborhood groups, and the media have voiced a growing level of concern about the adverse effects of subsidized housing in inner-city neighborhoods. The findings of this research indicate that these concerns are misplaced. Nonprofit-developed subsidized multi-family housing is a very effective community development strategy; it increases nearby property values while reducing crime where it is located. Minneapolis neighborhood organizations and the residents of the neighborhoods in which CDCs operate should look upon those organizations and the housing they produce as assets to the neighborhood and positive contributors to attempts to revitalize their neighborhoods.

Multi-family housing rehabilitation is a strategy that cannot be abandoned or deemphasized by public officials. As the multi-family housing stock in the inner city continues to age and deteriorate, housing rehabilitation by community-based nonprofit organizations is a necessary and effective public policy strategy. Indeed, this strategy may provide three benefits simultaneously: rehabilitation of deteriorating physical stock of housing, neighborhood revitalization through enhanced property values, and the provision of affordable housing for lower-income families.

Subsidized Housing as Regional Policy

As we have mentioned before, the prevailing notion about subsidized housing is that it is detrimental to the neighborhoods in which it is located. This has led some policymakers and neighborhood activists to advocate the dispersion of subsidized housing. In order to deconcentrate and therefore reduce the negative effects of such housing in a few neighborhoods, the argument goes, we should begin to locate subsidized housing in other places (including non-impacted central-city neighborhoods and the suburbs). The findings reported here, of course, suggest that the underlying premise of this argument is wrong. Our evidence suggests that nonprofit-developed subsidized housing does not depress property values, it does not increase crime, it does not concentrate poverty by attracting more poor families to the central city. *Thus, the dispersal of subsidized housing is not necessary for the sake of inner-city neighborhoods.*

There are, however, other compelling reasons to disperse subsidized housing: for example, to provide lower-income residents with easier access to areas of job growth and to provide lower-income children with better educational opportunities. Recent studies of the Twin Cities economy have shown that the greatest job growth is occurring in suburban areas. If affordable housing is provided in suburban areas, lower-income residents will have better access to these jobs. The creation of affordable housing in suburban areas will also allow the children of low-income families to benefit from the educational opportunities provided in suburban schools. Finally, there is a sizable low income population already residing in the region's suburbs which needs affordable housing. Estimates based on 1990 census data suggest there are over 35,000 low income households paying more than 30 percent of their income for housing in the Twin Cities suburbs.[81] These, and other, justifications for the dispersal of affordable subsidized housing still exist, and they remain compelling. The issue of the dispersal of affordable housing, therefore, needs to be reframed; it should not be undertaken to relieve the burden of central-city neighborhoods, it should be undertaken to enhance the educational

and employment opportunities available to lower-income people and to provide families with a wider range of communities to choose from when they make their housing decisions.

Our findings should serve to reassure the residents of more affluent central-city neighborhoods and suburban residents that these policy objectives can be accomplished without subjecting their communities to higher crime or lower property values.

Some might look at our finding that public housing has a slight negative impact on property values and use that to question the Minneapolis Public Housing Authority's plan to disperse public housing throughout the city and the region. Such an inference would be mistaken. It is important to note that the current program of public housing dispersal being undertaken as a result of the *Hollman v. Cisneros* consent decree involves scattered site housing and not the larger multi-family projects that we included in our analysis of property values. We did not study the impact of scattered site public housing on neighborhoods, and our report should not be taken as evidence on either side regarding its potential impact.

Some might also object to the extension of our results regarding crime and property values to suburban areas. One such argument suggests that the type of capital investment represented by housing rehabilitation might have a positive impact in central-city areas where there is widespread decline, but in a suburban area in which the housing stock is newer and there is little if any apparent disinvestment, subsidized housing is unlikely to have such a positive impact. It is true that our statistical analysis was restricted to the central neighborhoods of Minneapolis and did not include suburban areas. The generalization of these findings to suburban areas should be done carefully. But to argue that these findings are irrelevant to suburban areas is to suggest that the factors that create property value in suburban housing markets are fundamentally different than those that create value in the inner city. Though we are hesitant to maintain that our findings can be directly translated to suburban areas, we think that we have tested the impact of subsidized housing in a very difficult environment—i.e., in central neighborhoods that suffer from private sector disinvestment, higher crime rates, aging housing stock, declining infrastructure, and under-funded schools. Yet, net of these many factors, nonprofit-developed subsidized housing provided positive contributions in terms of property values and crime reduction. If subsidized housing can produce positive outcomes in difficult neighborhoods, it is reasonable to expect positive outcomes in less difficult neighborhoods.

Our research focused on housing developed by CDCs. There are very few CDCs operating in suburban areas. Our findings suggest that if the dispersal of subsidized housing is to take place, the number of CDCs working in suburban areas needs to be increased.

Should the region pursue a parallel strategy of continued upgrading of the housing stock in the inner cities, and the expansion of affordable housing opportunities in suburban areas by nonprofits, there are likely to be benefits in all areas. Inner-city neighborhoods desperately need the capital investment necessary to turn neighborhood eyesores into assets. Lower-income families, in turn, desperately need more choice in housing, they need more affordable housing, and they need better access to quality jobs and schools. These policies can be pursued through the creation of subsidized nonprofit housing without fear of destroying our communities.

APPENDIX

CRIME ANALYSIS

The simple interrupted time series (SITS) model is:

$$Y_t = b_0 + b_1X_{1t} + b_2X_{2t} + b_3X_{3t} + e_t$$

where t = 1,2,3,...,T; Y_t = the number of time series observations of the dependent variable (in this case, the number of police calls); X_{1t} = a time trend variable counting from 1 to T; X_{2t} = a dichotomous dummy variable coded 0 for those months prior to rehabilitation of the property and 1 for those months after rehabilitation; X_{3t} = a time trend variable coded 0 for months prior to rehabilitation, and 1, 2, 3... for months after rehabilitation; and e_t = the disturbance term. If the disturbance term is independent and individually distributed, ordinary least squares (OLS) regression can be applied to consistently estimate the parameters b_0, b_1, b_2, and b_3. The estimated values of b_1 can be interpreted as the slope or trend in crime activities prior to the rehabilitation; the estimated value of b_2 is a measure of the change in the intercept or level of crime attributable to the intervention; and the estimated value of b_3 is the slope or trend in crime after intervention.[82]

As with other regression models, the assumption of independent and individually distributed disturbance terms in the SITS model is often violated. One possible form of violation of this assumption is called autocorrelation of the disturbance terms. The reason this particular assumption is often violated is because the disturbance term for any regression equation incorporates factors that influence the dependent variable but are left out of the equation. Thus, if those factors influence the dependent variable, Y, at time t-1, they most likely will also influence Y at time t. In a time series model that attempts to explain variation over time, this problem will cause the disturbance terms to be correlated. The most common form of autocorrelation is first-order autocorrelation, AR(1), in which the disturbance from one observation is correlated with the one at the next observation. The problem of autocorrelation does not bias the estimate of coefficients, but the estimates will no longer be statistically efficient, and the estimated standard errors will be biased; this latter difficulty will render the tests of statistical significance invalid. Thus, when autocorrelation is present, it is impossible to determine whether the policy impacts captured in the model are really due to the intervention or just statistical artifacts.

The most widely used method for determining whether first-order autocorrelation exists is the Durbin-Watson (D-W) statistic. An acceptable level of D-W depends on the number of observations in the time series and the number of independent variables. When the D-W statistic shows autocorrelation of the error terms, the equation must be adjusted by transforming the variables using the autocorrelation coefficient, ρ (rho). We estimate ρ by

correlating the residuals for the original equation. Each variable in the equation is then adjusted by the following equation (a):

$$X = X_t - \rho X_{t-1}.$$

This process renders the error terms independent.[83]

Thus, for each of the SITS models estimated for the sample projects, we have computed the Durbin-Watson statistic. Where the magnitude of D-W indicates no autocorrelation of the error terms, we list the D-W. Where D-W indicates autocorrelation, we list ρ (rho), the estimated population correlation between error terms. For those equations, the coefficients and t-ratios reflect the findings after all variables have been adjusted using equation (a) above.[84]

POOLED TIME SERIES ANALYSIS

Formally, we let:

$$Y_{it} = b_0 + b_1X_{1it} + b_2X_{2it} + b_3X_{3it} + e_{it}, \qquad (1)$$

$$i = 1,2,3,..., N; \quad t = 1,2,3,..., T.$$

Notice that each variable now has a unit subscript *i* and a time subscript *t*. Variable definitions are similar to those in the individual time series model above, except that we stack up the observational time points of all fourteen projects for each variable. This pooled process possesses some important advantages over the conventional individual time series or cross-sectional designs.[85] First, sample size is increased. For our study, we have fourteen separate subsidized housing projects and 103 observational time points (the number of months between January 1986 and August 1994). By combining these into a single set we have a total sample size of 1,442, which will greatly improve the statistical efficiency (precision) of the coefficient estimates. Second, pooled time series sets give more informative data, more variability, and less collinearity among the variables. Furthermore, and most importantly, this technique allows us to control for unobservable individual heterogeneity and time effects. Let us illustrate this with a simple example. Suppose the true model for our crime analysis is not equation (1) above, but

$$Y_{it} = b_0 + b_1X_{1it} + b_2X_{2it} + b_3X_{3it} + b_4X_{4it} + e_{it}, \qquad (2)$$

$$i = 1,2,3,...,N; \qquad t = 1,2,3,..., T,$$

where X_{4it} is an unobservable factor we left out of our model. To put it into context, between 1986 and 1994 many events and policies other than the conversion of these buildings to non-profit, subsidized housing occurred in these neighborhoods, and these may have affected crime rates. One possibility, for example, is a shift in local law-enforcement efforts, such as the introduction of community crime prevention programs. Alternatively, we might suppose that crime activities follow a seasonal pattern. More simply, X_{4it} may represent inherent fixed heterogeneity across the property sites that will lead to the observed trend in crime activities. Therefore, X_{4it} may be treated as *individual effects* or *time effects*; and these may be considered either *fixed constants* or *random variables* as well. The choice of these will have very important ramifications for the other coefficient estimates in the model. Regardless of their true nature (fixed or random, individual or time effects) the exclusion of these variables in our estimation of equation (1) will bias all the coefficient estimates.

In order to account for the possible presence of these unobservable individual and/or time effects we rewrite equation (2) as[86]

$$Y_{it} = b_0 + b_1X_{1it} + b_2X_{2it} + b_3X_{3it} + u_i + v_t + e_{it}, \qquad (3)$$

$$i = 1,2,3,...,N; \qquad t = 1,2,3,..., T,$$

where u_i is the individual effect term and v_t is the time effect term. If u_i and v_t are fixed, as we mention above, this is called a two-way-fixed-effects model and can be estimated consistently by ordinary least squares (OLS) with the aid of dummy variables. Alternatively, if we assume u_i and v_t are random variables, the model should be estimated as a two-way-random-effects model by generalized least squares technique.[87] However, in the situation that T is sufficiently large, the estimates of two-way-random-effects models will be asymptotically equivalent to those produced by the two-way-fixed-effects model. We thus choose the two-way-fixed-effects model for our pooled time-series analysis.

The estimates reported in Table 8 can thus be considered robust to the omission of any unobservable time-invariant individual effects and individual-invariant time effects.

NOTES

1. See, for example, Kenneth Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985); Evan McKenzie, *Privatopia: Homeowner Associations and the Rise of Residential Private Government* (New Haven, CT: Yale University Press, 1994); and Michael N. Danielson, *The Politics of Exclusion* (New York: Columbia University Press, 1976).

2. Danielson, *The Politics of Exlusion*; and W. Dennis Keating, *The Suburban Racial Dilemma: Housing and Neighborhoods* (Philadelphia: Temple University Press, 1994).

3. Michael Dear, "Understanding and Overcoming the NIMBY Syndrome," *Journal of the American Planning Association* 58(3): 288-300 (1992).

4. Chester Hartman, "Interview with Roberta Achtenberg, HUD Assistant Secretary for Fair Housing and Equal Opportunity," *Shelterforce* 27(1): 12-15 (1995); Henry G. Cisneros, *Regionalism: The New Geography of Opportunity* (Washington, D.C.: U.S. Department of Housing and Urban Development, March 1995).

5. See, for example, the opposition to Moving to Opportunity in suburban Baltimore, and opposition to affordable housing in Hispanic neighborhoods of Chicago. David Moberg, "No Vacancy: Moving to Opportunity Program Loses to Fear and Rumor in Suburban Baltimore," *Shelterforce* 27(1): 15-16 (1995); and Jenni Grever, "Communities Contend Scattered-Site Housing Too Concentrated," *The Neighborhood Works* June/July 1994, pages 13 and 28.

6. Randy Stoecker, *Defending Community: The Struggle for Alternative Redevelopment in Cedar-Riverside* (Philadelphia: Temple University Press, 1994).

7. Edward G. Goetz and Mara Sidney, *Government Support for Nonprofit Housing in the Twin Cities* (St. Paul, MN: Research Report, Housing Program, University of Minnesota, February 1994).

8. The largest housing subsidies in the United States go to middle- and upper-income households in the form of tax deductions for mortgage interest payments. These tax subsidies dwarf the direct subsidies to lower-income people provided through budgetary expenditures (see Paul A. Leonard, Cushing N. Dolbeare, and Edward B. Lazere, *A Place to Call Home: The Crisis in Housing for the Poor* (Washington, D.C.: Center on Budget and Policy Priorities, 1989). Thus, we use the term "subsidized multi-family housing" to differentiate the type of developments we are concerned with in this report from the bulk of the rest of the housing stock.

9. Mark Alan Hughes, "Misspeaking Truth to Power: A Geographical Perspective on the 'Underclass' Fallacy," *Economic Geography* 65: 187-207 (1989).

10. Norman Draper, "Twin Cities' Core Has Worst Poverty Rate for Minorities," *Minneapolis Star-Tribune* December 13, 1993, page 1A. See also Samuel L. Myers, Jr., *Widening Racial Economic Disparities: A Problem of "Minnesota Nice"* (St. Paul, MN: Metropolitan Council of the Twin Cities, Technical report, 1992).

11. Paul A. Jargowsky, "Ghetto Poverty Among Blacks in the 1980s," *Journal of Policy Analysis and Management* 13(2): 288-310 (1994).

12. Metropolitan Council of the Twin Cities, *Trouble at the Core: The Twin Cities Under Stress* (St. Paul, MN: Metropolitan Council of the Twin Cities, November 18, 1992).

13. Metropolitan Council of the Twin Cities, *Keeping the Twin Cities Vital* (St. Paul, MN: Metropolitan Council of the Twin Cities, February 1994).

14. For example, when the 1990 census data became available, the paper ran articles on the distribution of income and employment opportunities in the region. See Peter Leyden, "Disparity in Income Widened in 1980s," *Minneapolis Star-Tribune*, July 26, 1992, page 1A. The paper even covered the publication of a book on the issue of metropolitan economic health, by David Rusk, the ex-mayor of Albuquerque, New Mexico, entitled *Cities Without Suburbs* (Washington, D.C.: The Woodrow Wilson Center Press, 1993). See Steve Berg, "Must Suburbs Be Abolished to Save Cities?" *Minneapolis Star-Tribune*, July 11, 1993, page 1A. Other stories include Norman Draper, "Twin Cities' Core Has Worst Poverty Rate for Minorities," December 13, 1993, page 1A; Bob von Sternberg, "Study Finds Concentrations of Poverty in Metro Area," January 21, 1994; and a steady series of editorials in favor of a regional approach to affordable housing.

15. Citizen's League, *Why We Should Build Inclusive Communities: The Case for a Regional Housing Policy in the Twin Cities Metropolitan Area* (final report of the Committee on Housing Policy and Metropolitan Development, Citizen's League: May 1994). See also League of Women Voters of Minneapolis, *Affordable Housing: Does Zoning Make a Difference?* (Minneapolis: LWVM, May 1992); *The Urban Coalition, Housing Segregation in the Twin Cities* (St. Paul: The Urban Coalition, Winter 1994); Oliver E. Byrum, *Old Problems in New Times: Urban Strategies for the 1990s* (Chicago: American Planning Association, 1992).

16. Barbara L. Lukermann and Michael P. Kane, *Land Use Practices: Exclusionary Zoning, de Facto or de Jure? An Examination of the Practices of Ten Suburban Communities in the Twin Cities Metropolitan Area* (Minneapolis: Center for Urban and Regional Affairs, University of Minnesota, April 1994); and Thomas F. Luce, Barbara L. Lukermann, and Herbert Mohring, *Regional Sewer System Rate Structure Study* (Minneapolis: Center for Urban and Regional Affairs, University of Minnesota, December 7, 1994).

17. Representative Orfield has, in fact, an entire package of proposals that he has called the Metropolitan Stabilization Act. His proposals cover a range of policy areas from tax base sharing to development subsidies.

18. Mike Kaszuba, "Maple Grove Tables Low Income Project After Angry Meeting," *Minneapolis Star-Tribune*, November 18, 1993, page 1B.

19. Dennis Cassano, "Rezoning to Build Low Income Housing Voted Down in Eagan," *Minneapolis Star-Tribune*, December 9, 1994, page 1B.

20. "Body count," *City Pages*, July 5, 1995, page 3. The 1995 year-to-date counts for WCCO, Channel 4, 39.3 percent; KSTP, Channel 5, 42.2 percent; KNSP, Channel 9, 46.6 percent; and KARE, Channel 11, 34.0 percent. The trend seems to be toward even higher percentages during the spring and summer months, with totals between 40 and 60 percent.

21. Metropolitan Council, *Keeping the Twin Cities Vital*, appendix.

22. Bob von Sternberg, "Minneapolis Finds That 29 Percent Intend to Move Out," *Minneapolis Star-Tribune*, September 2, 1993, page 1A.

23. Kevin Diaz, "In Fight on Blight, Does Might Make Right?" *Minneapolis Star-Tribune*, December 26, 1993, page 1A. See also Wesley G. Skogan, *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods* (New York: Free Press, 1990).

24. Frank D'Addesa, "Statistics Show Crime a Big Problem at Four Alliance Co-ops," *Whittier Globe*, Volume 19, number 7 (July) 1995, page 1.

25. Concerns about crime were central to the Maple Grove and Eagan cases.

26. Jennifer Vogel, "Bad New Tenant," *City Pages*, June 16, 1993, page 10.

27. Willard Woods, "Residents Call for Hawthorne Landlords to Face Problems," *Minneapolis Star-Tribune*, June 5, 1993, page 26H.

28. Goetz and Sidney, *Government Support for Nonprofit Housing.*

29. Edward G. Goetz and Mara Sidney, "Revenge of the Property Owners: Community Development and the Politics of Property," *Journal of Urban Affairs* 16 (4): 319-334; Mara Suzanne Sidney, "Citizen Participation and the Minneapolis Neighborhood Revitalization Program" (master's thesis, University of Minnesota, 1994); and Edward G. Goetz and Mara S. Sidney, *The Impact of the Minneapolis Neighborhood Revitalization Program on Neighborhood Organizations* (Minneapolis: Center for Urban and Regional Affairs, University of Minnesota, 1994).

30. Eric J. Wieffering, "The Twisted Economics of Minneapolis Neighborhood Nonprofits and Low Income Housing," *Corporate Report Minnesota*, March 1994; and Eric Wieffering, "The Housing That Sucks," *Twin Cities Reader,* March 23-29, 1994, page 12.

31. Allen Short, Patricia Lopez Baden, and Dennis J. McGrath, "Money, Politics Play Key Roles in Development Projects," *Minneapolis Star-Tribune*, March 24, 1994, page 1A; Allen Short, "Plan to Spend Over $1 Million to Build Four $90,000 Houses is Questioned," *Minneapolis Star-Tribune*, September 27, 1993.

32. John Manning, "Housing Hubbub," *Minnesota Real Estate Journal,* October 12, 1992, page 1.

33. Rose Farley, "Busted Trust," *Twin Cities Reader*, April 19-25, 1995, page 16. The *Twin Cities Reader* has a special liking for articles critical of CDCs. In addition to the "Housing that Sucks" and "Busted Trust" articles, the paper ran, in the summer of 1995, a third article critical of the nonprofit group Phoenix, and the housing that it runs on the city's south side. See David Schimke, "Phoenix Falling?" *Twin Cities Reader,* July 12-18, 1995, page 6.

34. See Rachel G. Bratt, Langley C. Keyes, Alex Schwartz, and Avis C. Vidal, *Confronting the Management Challenge: Affordable Housing in the Nonprofit Sector* (New York: Community Development Research Center, New School for Social Research, 1994).

35. The ISG includes representatives from the state housing finance agency, local government development agencies, and private funders (including the Local Initiatives Support Corporation, and the McKnight Foundation's Family Housing Fund).

36. Chester Hartman, "Shelterforce Interview: Roberta Achtenberg," *Shelterforce,* January/February 1995, page 7.

37. United States District Court, District of Minnesota, Fourth Division, *Consent Decree* Civil 4-92-712.

38. Steve Brandt and Norman Draper, "House the Poor, Sure; the Fight Is Over Where," *Minneapolis Star-Tribune,* June 5, 1995, page 1A.

39. *Southwest Journal,* June 14-28, 1995, page 18.

40. Dear, "Understanding and Overcoming the NIMBY Syndrome."

41. See, for example, M. Greenberg and J. Hughes, "The Impact of Hazardous Waste Superfund Sites on the Value of Houses Sold in New Jersey," *The Annals of Regional Science* 26: 147-153 (1992); A. Skaburskis, "Impact Attenuation in Nonconflict Situations: The Price Effects of a Nuisance Land-Use," *Environment and Planning* A 21: 375-383 (1989); Arthur C. Nelson, John Genereaux, and Michelle Genereaux, "Price Effects of Landfills on House Values," *Land Economics* 68(4): 359-365; Janet E. Kohlhase, "The Impact of Toxic Waste Sites on Housing Values," *Journal of Urban Economics* 30: 1-26 (1991); Gary H. McClelland, William D. Schulze, and Brian Hurd, "The Effect of Risk Beliefs on Property Values: A Case Study of a Hazardous Waste Site," *Risk Analysis* 10(4): 485-497 (1990).

42. Dear, "Understanding and Overcoming the NIMBY Syndrome"; Stephen Farber, "Market Segmentation and the Effects of Group Homes for the Handicapped on Residential Property Values," *Urban Studies* 23 (December): 519-525 (1986).

43. Hugh O. Nourse, "The Effect of Public Housing on Property Values in St. Louis," *Land Economics* 39 (4): 443-441 (1963).

44. The studies indicating no negative impact of subsidized housing on nearby property values are: Carol E. Babb, Louis G. Pol, and Rebecca F. Guy, "The Impact of Federally-Assisted Housing on Single-Family Housing Sales: 1970-1980," *Mid-South Business Journal*, July 1984, pages 13-17; Jeffrey C. Baird, *The Effects of Federally Subsidized Low-Income Housing on Residential Property Values In Suburban Neighborhoods* (Northern Virginia Board of Realtors Research Study, December 1980); Joseph S. DeSalvo, "Neighborhood Upgrading Effects of Middle-Income Housing Projects in New York City," *Journal of Urban Economics* 1 (3): 269-277 (1974); William A. Rabiega, Ta-Win Lin, and Linda M. Robinson, "The Property Value Impacts of Public Housing Projects in Low and Moderate Density Residential Neighborhoods," *Land Economics* 60 (2): 174-179 (1984); Linda Saunders and Michael J. Woodford, *The Effect of a Federally Assisted Housing Project on Property Values* (Jefferson County, CO: Colorado State University Extension Service, 1979); Robert Schafer, "The Effect of BMIR Housing on Property Values," *Land Economics* 48 (3): 282-286 (1972); Lynn Sedway and Associates, *Impact of Affordable Housing on Property Values* (report prepared for the Ecumenical Association for Housing, 1983); Elizabeth Warren, Robert M. Aduddell, and Raymond Tatalovich, *The Impact of Subsidized Housing on Property Values: A Two-Pronged Analysis of Chicago and Cook County Suburbs* (Chicago: Center for Urban Policy, Loyola University of Chicago, Urban Insight Series No. 13, 1983); and Paul M. Cummings with John D. Landis, *Relationships Between Affordable Housing Developments and Neighboring Property Values* (Berkeley, CA: Institute of Urban and Regional Development, University of California at Berkeley, Working Paper 599, 1993). Another study showed that property values increased less rapidly in proximity to subsidized housing; see Donald C. Guy, John L. Hysom, and Stephen R. Ruth, "The Effect of Subsidized Housing on Values of Adjacent Housing," *Journal of the American Real Estate and Urban Economic Association* 13 (4): 378-387 (1985). Finally, one study showed that proximity to subsidized housing in Ramsey County, Minnesota (St.Paul) was associated with lower property values: Robert Lyons and Scott Loveridge, *An Hedonic Estimation of the Effect of Federally Subsidized Housing on Nearby Residential Property Values* (St. Paul, MN: Department of Agricultural and Applied Economics, University of Minnesota, Staff paper series P93-6, 1993).

45. Donald F. Vitaliano, "Public Housing and Slums: Cure or Cause?" *Urban Studies* 20: 173-183 (1983).

46. Cummings with Landis, *Relationships Between Affordable Housing Developments and Neighboring Property Values*.

47. Lyons and Loveridge, *An Hedonic Estimation of the Effect of Federally Subsidized Housing on Nearby Residential Property Values*.

48. In Dennis R. Judd, "The New Walled Cities," in Helen Liggett and David C. Perry, eds., *Spatial Practices: Critical Explorations in Social/Spatial Theory* (Thousand Oaks, CA: Sage Publications, 1994), page 160. See

also McKenzie, *Privatopia.* One Chicago suburb recently established security checkpoints at two entrances to its largest residential area. The protected zone excludes almost half of the village's residents, most of whom live in apartment buildings. Kevin V. Johnson, "Chicago Suburb a Fortress Against Crime," *USA Today*, July 5, 1995, page 3A.

49. See David Dillon, "Fortress America," *Planning* 60 (6): 8 (1994); and Anne Jordan, "Walls that Unite," *Governing*, October 1993, page 32.

50. Alecia Swasy, "'Exclusive' Town Panics as Plunging Home Prices Smash Social Barriers," *The Wall Street Journal*, November 22, 1993, page B1.

51. Dillon, "Fortress America."

52. Dennis W. Roncek, Ralph Bell, Jeffrey M.A. Francik, "Housing Projects and Crime: Testing a Proximity Hypothesis," *Social Problems* 29 (2): 151-166 (1981).

53. See, for example, William C. Bailey, "Poverty, Inequality, and City Homicide Rates," *Criminology* 22 (4): 531-550; Robert Nash Parker, "Poverty, Subculture of Violence, and Type of Homicide," *Social Forces* 67 (4): 983-1007; E. Britt Patterson, "Poverty, Income Inequality, and Community Crime Rates," *Criminology* 29 (4): 755-776; Terance Meithe, Michael Hughes, and David McDowell, "Social Change and Crime Rates: An Evaluation of Alternative Theoretical Approaches," *Social Forces* 70 (1): 165-185; Judith R. Blau and Peter M. Blau, "The Cost of Inequality: Metropolitan Structure and Violent Crime," *American Sociological Review* 47: 114-129 (1982); Kirk R. Williams, "Economic Sources of Homicide: Reestimating the Effects of Poverty and Inequality," *American Sociological Review* 49: 283-289 (1984); Robert J. Bursik, Jr., and Harold G. Grasmick, "Economic Deprivation and Neighborhood Crime Rates, 1960–1980," *Law and Society Review* 27 (2): 263-283 (1993); and Steven F. Messner and Kenneth Tardiff, "Economic Inequality and Levels of Homicide: An Analysis of Urban Neighborhoods," *Criminology* 24 (2): 297-317 (1986).

54. Steven Cannon, "The Effects of Concentrated Poverty on Crime Rates in Minneapolis Tracts," unpublished manuscript, University of Minnesota, 1993.

55. See Constance Perin, *Everything in Its Place: Social Order and Land Use in America* (Princeton: Princeton University Press, 1977).

56. Stuart M. Butler, *Privatizing Federal Spending* (New York: Universe Books, 1985).

57. Jeffrey M. Berry, Kent E. Portney, and Ken Thomson, *The Rebirth of Urban Democracy* (Washington, D.C.: The Urban Institution, 1993); Kevin R. Cox, "Housing Tenure and Neighborhood Activism," *Urban Affairs Quarterly* 18 (1): 107-129 (1982); William M. Rohe and Michael A. Stegman, "The Impact of Homeownership on the Social and Political Involvement of Low-Income People," *Urban Affairs Quarterly* 30 (1): 152-172 (1994); O. Ditkovsky and Willem van Vliet–, "Housing Tenure and Community Participation," *Ekistics*, 307 (July/August): 345-348; Carol J. Whitaker, "Crime Prevention Measures," *Bureau of Justice Statistics Special Report* (Washington, D.C.: Bureau of Justice Statistics, U.S. Department of Justice, 1986); Stephanie W. Greenberg, William M. Rohe, and J.R. Williams, *Safe and Secure Neighborhoods: Physical Characteristics and Informal Territorial Control in High and Low Crime Neighborhoods* (Washington, D.C.: National Institute of Justice, U.S. Department of Justice, 1982); and Wesley G. Skogan, *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods* (New York: The Free Press, 1990).

58. Rohe and Stegman, "The Impact of Homeownership on the Social and Political Involvement of Low-Income People."

59. Eric G. Moore and W.A.V. Clark, "Stable Structure and Local Variation: A Comparison of Household Flows in Four Metropolitan Areas," *Urban Studies* 23: 185-196 (1986); Barrett A. Lee, R.S. Oropesa, and James W. Kanan, "Neighborhood Context and Residential Mobility," *Demography* 31 (2): 249-270 (1994).

60. Moore and Clark, "Stable Structure and Local Variation."

61. A third explanation for the emergence of the urban underclass is a cultural explanation forcefully expounded by a number of neoconservative policy analysts during the 1980s. These explanations are rooted in the "culture of poverty" argument that is now several decades old. The culture of poverty explanation was first made by Oscar Lewis in *La Vida: A Puerto Rican Family in the Culture of Poverty—San Juan and New York* (New York: Random House, 1965). See also Edward C. Banfield, *The Unheavenly City* (Boston: Little, Brown, 1970) for another description of poverty that blames poverty on the dysfunctional behavior of the poor. Conservative writers such as Charles Murray and Lawrence Mead updated the ideas of these cultural explanations during the 1980s, especially regarding the debilitating nature of government programs and the impediments they create for poor families trying to escape their cultural deficiencies. The explanation essentially suggests that the poor have adopted a series of behavioral patterns that are not conducive to individual economic success, and that they have become dependent upon an array of government programs that do not foster self-sufficiency, but rather enhance the dependency of the poor and culturally dysfunctional. See Charles Murray, *Losing Ground: American Social Policy, 1950-1980* (New York: Basic Books, 1984); and Lawrence M. Mead, *Beyond Entitlement: The Social Obligations of Citizenship* (New York: Free Press, 1986). For similar arguments see Ken Auletta, *The Underclass* (New York: Random House, 1982); and Nicholas Lehman, "The Origins of the Underclass?" *The Atlantic* (June): 31-55, and (July): 54-68, 1986.

62. See, John D. Kasarda, "Structural Factors Affecting the Location and Timing of Urban Underclass Growth," *Urban Geography* 11 (3): 234-264 (1990). Mark A. Hughes argues that concentrated poverty is best explained by the decentralization of manufacturing employment, out of the inner cities and toward the fringes of metropolitan areas: Mark Alan Hughes, "Misspeaking Truth to Power: A Geographical Perspective on the 'Underclass' Fallacy," *Economic Geography* 65: 187-207 (1989).

63. See William Julius Wilson, *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy* (Chicago: University of Chicago Press, 1987).

64. Paul A. Jargowsky and Mary Jo Bane, "Ghetto Poverty in the United States, 1970 to 1980" in Christopher Jencks and Paul E. Peterson (eds.), *The Urban Underclass* (Washington, D.C.: The Brookings Institution, 1991); John D. Kasarda, "Inner-City Concentrated Poverty and Neighborhood Distress: 1970-1990," *Housing Policy Debate* 4 (3): 253-302; and Ronald B. Mincy, "Industrial Restructuring, Dynamic Events and the Racial Composition of Concentrated Poverty," paper prepared for planning meeting of the Social Science Research Council on Industrial Restructuring, Local Political Economies, and Communities and Neighborhoods; New York, September 1988. Quoted in Kasarda, "Structural Factors Affecting the Location and Timing of Urban Underclass Growth."

65. See for example, Douglas S. Massey and Mitchell L. Eggers, "The Ecology of Inequality: Minorities and the Concentration of Poverty, 1970–1980," *American Journal of Sociology* 95 (5): 1153-1188; Douglas S. Massey and Nancy A. Denton, *American Apartheid: Segregation and the Making of the Underclass* (Cambridge, MA: Harvard University Press, 1993); and Robert D. Bullard and Charles Lee, "Racism and American Apartheid," in Robert D. Bullard, J. Eugene Grigsby III, and Charles Lee (eds.), *Residential Apartheid: The American Legacy* (Los Angeles: Center for Afro-American Studies, University of California, Los Angeles, 1994).

66. Douglas S. Massey and Shawn M. Kanauaypuni, "Public Housing and the Concentration of Poverty," *Social Science Quarterly* 74 (1): 109-122 (1993).

67. Adam Bickford and Douglas S. Massey, "Segregation in the Second Ghetto: Racial and Ethnic Segregation in American Public Housing, 1977," *Social Forces* 69 (4): 1011-1036 (1991).

68. Massey and Kanauaypuni, "Public Housing and the Concentration of Poverty," page 120.

69. See, for example, Jonathan Crane, "The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing," *American Journal of Sociology* 96 (5): 1226-1259; Anne C. Case and Lawrence F. Katz, "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youths," *NBER*, May 1991; Katherine M. O'Regan, "The Effect of Social Network and Concentrated Poverty on Black and Hispanic Youth Unemployment," *Regional Science* 27 (4): 327-343; Douglas S. Massey, Andrew B. Gross, and Mitchell L. Eggers, "Segregation, the Concentration of Poverty, and the Life Chances of Individuals," *Social Science Review* 20: 397-420; Elijah Anderson, "Neighborhood Effects on Teenage Pregnancy," in Jencks and Peterson, *The Urban Underclass*; Jonathan Kozol, *Savage Inequalities: Children in America's Schools* (New York: Crown Publishers, Inc., 1991); and Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder, Co: Westview Press, 1990).

70. Leasehold cooperatives are a style of building ownership and management that evolved as a response to the peculiarities of Minnesota's property tax system. Property taxes for non-owner-occupied housing in Minnesota are three times higher than for owner-occupied (or "homesteaded") properties. In order to reduce the tax burden on subsidized multi-family housing, affordable housing advocates successfully lobbied the state legislature to create a category of cooperative housing in which the tenants purchase a share of a building cooperative, but do not own their home. The cooperative corporation leases the building from the owner, typically a limited partnership, and assumes management responsibility for the building. The tax savings are passed along to the tenants in the form of lower rents. See Rachel Fang, "Nonprofit-Sponsored Development of Cooperative Housing in Minnesota: What Does the Future Hold?" (master's Plan B paper, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota, 1991).

71. Nourse, "The Effect of Public Housing on Property Values in St. Louis"; and Schafer, "The Effect of BMIR (Below Market Interest Rate) Housing on Property Values."

72. Mingche M. Li and H. James Brown, "Micro-Neighborhood Externalities and Hedonic Housing Prices," *Land Economics* 56 (2): 125-141 (1980).

73. See Skogan, *Disorder and Decline.*

74. The data on the location of subsidized housing came from the following sources: the U.S. Department of Housing and Urban Development Minneapolis regional office; the Minneapolis-St. Paul Family Housing Fund; the Minnesota Housing Finance Agency; "Assisted Neighborhood Housing Projects List," Minneapolis Community Development Agency, 1994; "Survey of Non-Profit Developers," Common Space, Minneapolis, 1988; *Directory of Subsidized Rental Housing*, Metropolitan Council of the Twin Cities, 1994; *State of the City Report*, City Planning Department, City of Minneapolis, 1990; Janet Larsen, *Sooner or Later... The Disappearance of Federally Subsidized Low Income Rental Housing in Minnesota*, Minnesota Housing Project, University of Minnesota, 1988. There were numerous inconsistencies in the information provided by these lists. Where necessary, we confirmed our data by contacting building owners or public agencies. There was a subset of scattered site projects for which we could not obtain verifiable addresses, and these properties were left uncoded. There were thirty-six such projects that we could not include in the analysis (compared to 358 multi-family projects that are included in the analysis). Because our analysis focuses on the effect of multi-family subsidized housing, we do not include scattered-site single-family homes in our data base.

75. Residential properties are assessed at least once every five years in Minneapolis. Thus, all of the properties would have had an updated assessment between 1987 and 1994.

76. The authors would like to acknowledge the cooperation and support of the Minneapolis Police Department and the Recap Unit in going out of their way to make these data available to us.

77. The technique is widely accepted in the policy evaluation literature. See, for example, Marvin B. Mandell et al., "Using Linear Trend Models to Analyze Policy Impact," *Policy Studies Review* 6: 476-495 (1987).

78. In the econometrics and statistics literature, pooled time series models are sometimes referred to as panel data models or time-series-cross-sectional models.

79. We were unable to collect the data from the Whittier Alliance (Double Flats and E-Flats), the West Bank CDC (the Mission Building), and Farview Neighborhood Development Corporation (Bell Building and Castle Apartments).

80. See Paul E. Peterson and Mark C. Rom, *Welfare Magnets: A New Case for a National Standard* (Washington, DC: The Brookings Institution, 1990) for an example of this argument. Various recent analyses, however, find no support for large scale migration of the poor in response to welfare benefit levels. See Sanford F. Schram and Gary Krueger, "'Welfare Magnets' and Benefit Decline: Symbolic Problems and Substantive Consequences," *Publius: The Journal of Federalism* 24 (4): 61-82; Russell L. Hanson and John T. Hartman, "Do Welfare Magnets Attract?" Discussion paper 1028-94 (Madison: Institute for Research on Poverty, University of Wisconsin–Madison, 1994).

81. Metropolitan Council of the Twin Cities, *Housing Policy for the 1990s* (Metropolitan Council: St. Paul, 1994).

82. Michael S. Lewis-Beck, "Interrupted Time Series," in William D. Berry and Michael S. Lewis-Beck (eds.), *New Tools for Social Scientists: Advances and Applications in Research Methods* (Beverly Hills, CA: Sage Publications, 1986).

83. Ibid.

84. One limitation of the D-W statistic is that there is an inconclusive test region, which depends on the number of regressors and sample size. The D-W statistic fell into that range in a few of our fourteen projects. We made the judgement that first-order autocorrelated disturbances are not present in those cases.

85. See B.H. Baltagi, *Econometric Analysis of Panel Data* (West Sussex, England: John Wiley and Sons, Ltd., 1995), and C. Hsiao, *Analysis of Panel Data* (New York: Cambridge University Press, 1986).

86. W.H. Greene, *Econometric Analysis* (New York: Macmillan Publishing, 1993). Our discussion also draws heavily from P.D. Allison, "Using Panel Data to Estimate the Effects of Events," *Sociological Methods and Research* 23: 174-199 (1994).

87. Ibid.