LOCATIONAL CHARACTERISTICS OF

TENANT-BASED VERSUS PROJECT-BASED RENTAL HOUSING ASSISTANCE

IN THE ATLANTA METROPOLITAN REGION, GEORGIA

by

JUNE CYNTHIA CHEPWOGEN MARTIN

(Under the Direction of ANNE L. SWEANEY)

ABSTRACT

The ten-county Atlanta Metropolitan Region was used to assess the performance of a tenant-based rental assistance program (the Section 8 certificate and voucher program) relative to two types of project-based rental assistance programs (public housing and private subsidized housing). The effectiveness of the program was examined with respect to the goal of promoting greater economic and racial/ethnic integration and quality of life for assisted households. Data for this study were obtained from the 1998 A Picture of Subsidized Households data set. Logistic and OLS regressions as well as descriptive data were used to analyze the data. The findings show that tenant-based rental assistance expands the housing opportunities of assisted households in better quality neighborhoods. Unlike public housing residents, certificate and voucher recipients in the Atlanta Metropolitan Region are more likely to live in neighborhoods with low- to moderate-poverty levels. Tenant-based rental assistance, however, is not as effective in promoting greater racial/ethnic integration.

INDEX WORDS: Atlanta Metropolitan Region, Federal housing programs,

neighborhood, Low-income housing, Rental housing assistance,

Section 8 housing programs.

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CHAPTER 1

INTRODUCTION

In 1949, the U.S. Congress passed the National Housing Act that proclaimed the goal of a "decent home and suitable living environment" for every American family (National Housing Act of 1949). As a result of this legislation housing assistance is now considered an essential public service and part of a basic package of benefits (along with food, clothing, medical care, and education) necessary to maintain a minimum standard of living (Hays, 1985). One of the various housing programs offered by the federal government is rental assistance to low-income households that aims to improve their living conditions and reduce their housing costs. The most efficient and effective means of providing rental assistance, however, is a continual debate.

Federal rental housing assistance first arose in the late 1930s out of public pressure to address the deplorable living conditions of poor families in urban centers, and as a response to the Great Depression that gripped the country in the 1930s. In response, the U.S. Congress passed the Housing Act of 1937 which authorized the first rental housing assistance program, Public Housing, which entailed direct government production and operation of low-income housing (Bloomberg, 1951; Hays, 1985).

Preceding the passage of the 1937 Housing Act, considerable debate surrounded how the federal government could best provide housing assistance to its neediest citizens: through supply-side or project-based assistance/subsidies to construct low-income rental housing, or through demand-side or tenant-based assistance/subsidies (rental housing allowances) to low-income tenants to enhance their purchasing power and enable them to pay private market rents for housing. This debate continues to the present day. In 1937, however, the potential of the construction of housing as a job-creating public works

project to counter the economic recession while improving the housing conditions for low-income urban dwellers won favor with many legislators (Winnick, 1995). Although the main impetus behind the passage of the Housing Act of 1937 was job creation, the federal government nevertheless committed itself to improving housing conditions for poor Americans. This commitment was sealed and expanded under the National Act of 1949.

Until the mid-1970s, project-based assistance was the mainstay of federal rental housing assistance. Through government-owned and operated public housing and government subsidies to private developers (private subsidized housing), millions of lowincome rental housing units were constructed or rehabilitated to provide affordable housing for low-income households. Private subsidized housing refers to housing units built or rehabilitated by private for-profit and nonprofit housing developers who have received federal assistance through various housing subsidy programs. These programs include, but are not limited to, the Section 236 Direct Loan program, Section 8 (projectbased) new construction and rehabilitation programs, several FHA-insured loan programs (including Below Market Interest Rate (BMIR), Loan Management Set-Aside (LMSA), and Property Disposition, and the Low-Income Housing Tax Credit (LIHTC) program (Burke, 1999). With the exception of the LIHTC program, the programs are administered by the U.S. Department of Housing and Urban Development (HUD) (Orlebeke, 2000). As a condition of the subsidy, a proportion of the units (the proportion varies by program) in the private subsidized housing developments has to be rented to low-income households. Currently, private subsidized housing forms the bulk (42%) of the lowincome rental housing stock (Burke, 1999).

Both the public housing and private-subsidized housing programs, however, have encountered serious social and financial problems. Factors associated with site selection, the target population, and financing impeded the success of the public housing program.

Local opposition to the program forced the siting of public housing developments in the lowest income, predominantly minority neighborhoods. Declining income limits on program eligibility designated the program for the lowest income households. As a result, public housing has become concentrated with the poorest of households and is itself concentrated in high-poverty neighborhoods. These neighborhoods also tend to have high levels of crime, drug abuse, unemployment, teenage pregnancies and other social pathologies, which results in a very disadvantaged social environment for public housing residents. Additionally, funding cuts and limits on construction costs, coupled with reduced revenues from tenant incomes, put many public housing developments into financial difficulty which has greatly affected the design, maintenance, and daily operation of the developments (Hays, 1985; Newman & Schnare, 1997; von Hoffman, 2000).

Serious financial mismanagement also led to the default and foreclosure of many private subsidized housing developments. Furthermore, there has also been community resistance to the siting of some private subsidized housing developments in more affluent and suburban neighborhoods which has led to the further concentration of urban poverty (Hays, 1985). The evidence, however, does not indicate that private subsidized housing consistently concentrates households in predominantly minority or poor neighborhoods (Turner, 1998).

Beginning in 1974, a distinct shift occurred in federal rental housing policy toward tenant-based assistance. Several factors led to this shift in focus: 1) recognition that the core housing problem in the U.S. had become one of inability to afford housing rather than substandard housing; 2) rampant social problems occurring in public housing; 3) the failure of the private subsidized housing stock due to poor management; 4) the rise in the real cost of subsidized multi-family housing; and 5) the growing political support for tenant-based assistance (Winnick, 1995).

Tenant-based housing assistance was seen as a less costly alternative to project-based assistance that would potentially serve a greater number of households more efficiently and effectively. It was also seen as a tool for addressing minority and poverty concentration and the attendant social problems that plague many low-income inner-city neighborhoods (Turner, 1998; Winnick, 1995). Project-based housing programs have often been blamed for contributing to the concentration of poor and minority households in America's urban areas (Hartung & Henig, 1997; Turner, 1998). This concentration of poverty in inner-cities and older suburban areas has given rise to a host of social pathologies such as violent crime and drug use, with devastating consequences for the families and host neighborhoods, cities and metropolitan areas (Pendall, 2000).

The Section 8 certificate and voucher program (currently named the Housing Choice program) is the federal government's main tenant-based rental assistance program. Enacted in 1974 under the Housing and Community Development Act as the Section 8 Existing Housing program, the program has since become the federal government's largest rental housing program (Dolbeare, 2000; Mayer, 1995; Winnick, 1995). Approximately 1.46 million households received housing assistance under this program in 1997 (Simmons, 1999).

The program is presently designed as a rent subsidy for low-income households. It pays the difference between 30% of the participating family's income and a payment standard calculated by the local housing agency that administers HUD's public housing program and other HUD programs. Recipients of the Section 8 certificates and vouchers are free to choose any rental housing unit of any type (single-family homes, townhouses, as well as multi-family apartments) in the private market that meets minimum health and safety standards as determined by the local housing agency administrators. The family can choose a location anywhere in the metropolitan area or anywhere in the United States

where there is another housing agency administering the rental certificate and voucher program (U.S. Department of Housing and Urban Development (HUD), 2000a).

With the passage of the Section 8 Existing Housing program, the federal government hoped to accomplish several goals: reduce the cost of rental assistance, serve a greater number of households more efficiently and effectively, and reduce minority and poverty concentration in the inner-cities by enabling low-income renters to move out of distressed neighborhoods to neighborhoods that offer better opportunities and quality of life (Maney & Crowley, 1999; Turner, 1998).

While the Section 8 certificate and voucher program has largely achieved the goals of reducing costs and serving more households, the question remains whether tenant-based rental assistance is really effective in encouraging low-income households to migrate to low-poverty and low-minority neighborhoods primarily in the suburbs. There is a growing body of research that seeks to answer this question, including national evaluations of the program (U.S. Department of Housing and Urban Development, 2000c; Newman & Schnare, 1997; Turner, Popkin & Cunningham, 1999), case studies in various cities and metropolitan areas (Hartung & Henig, 1997; Turner, 1998), and other housing allowance experimental programs.

Past studies have shown that Section 8 certificate and voucher recipients generally live in neighborhoods with higher poverty rates and higher concentrations of minority residents than do other renters (Hartung & Henig, 1997; Newman & Schnare, 1997; Pendall, 2000). Several studies (Turner, 1998; Turner, Popkin & Cunningham, 1999; U.S. Department of Housing and Urban Development, 2000b), however, show that in comparison to public housing residents, Section 8 certificate and voucher recipients are more dispersed and less likely to be located in high-poverty neighborhoods. When compared to private subsidized housing, however, the performance of the program is mixed. In some metropolitan areas, certificate and voucher recipients were more likely

than privately owned project-based subsidized housing residents to live in high-poverty census tracts or predominantly black neighborhoods (Turner, 1998). The program's design, which provides participants with greater residential choice and provides some flexibility in the subsidy determination, is cited as having been successful in encouraging program participants to move to neighborhoods with lower poverty rates and minority concentrations (U.S. Department of Housing and Urban Development, 2000b).

Section 8 certificate and voucher recipients are fairly dispersed in metropolitan areas. Recipients are much more likely to be found in suburban neighborhoods than either public housing or private subsidized housing residents (Hartung & Henig, 1997). There is, however, evidence that Section 8 certificate and voucher recipients in the suburbs tend to cluster in neighborhoods that have lower median incomes and higher proportions of minorities than other suburban neighborhoods (HUD, 2000a; Turner, Popkin & Cunningham, 1999; Hartung & Henig, 1997). Furthermore, the performance of the program is not the same for all recipients. White and elderly recipients are more likely to have better location outcomes in suburban areas than African Americans, Hispanics, the non-elderly, families with children, and disabled persons (Turner, 1998).

According to Turner (1998) and Turner, Popkin and Cunningham (1999), there are several factors affecting the success of the program. One set of factors deals with the administration of the program by the local housing agencies. These include the amount of assistance the recipients receive from housing agency administrators in their housing search, the outreach by housing agency administrators to landlords, and administrative barriers faced by program participants when transferring between housing agency jurisdictions. Another major set of factors is associated with the housing market. These factors include the receptivity of suburban areas and low-poverty neighborhoods to the program, the availability of affordable units in low-poverty neighborhoods, and discrimination in housing markets against minorities, households with children, the

disabled, and the Section 8 program itself. A third set of factors is related to household preferences, such as the desire to remain close to family and friends, and the availability of public transportation, social services, and other supports.

To the extent that these factors vary across and within metropolitan areas, program performance will be different. The performance of the program by city or metropolitan area will continue to be important in identifying appropriate strategies for improving the effectiveness of the Section 8 certificate and voucher program in particular locations.

Purpose, Objectives and Hypothesis of the Study

The purpose of this study is to examine the effectiveness of a tenant-based rental housing assistance program (Section 8 certificates and vouchers) relative to two types of project-based rental assistance programs (public housing and private subsidized housing). The effectiveness of the program will be examined with respect to the goal of promoting greater economic and racial/ethnic integration and quality of life for low-income households. The neighborhood characteristics for Section 8 certificate and voucher recipients compared to that of residents of public housing and private subsidized housing will be examined in the ten-county Atlanta Metropolitan Region in Georgia. The main objectives of this study are to:

- Assess the neighborhood poverty level of Section 8 certificate and voucher recipients compared to that of residents of public housing and private subsidized housing;
- Assess the neighborhood rate of single-family homeownership for Section 8
 certificate and voucher recipients compared to that of residents of public housing
 and private subsidized housing;

- Assess the neighborhood minority concentration of Section 8 certificate and voucher recipients compared to that of residents of public housing and private subsidized housing;
- Assess whether Section 8 certificate and voucher recipients are more likely to live in suburban neighborhoods than residents of public housing and private subsidized housing;
- 5. Assess whether Section 8 certificate and voucher recipients cluster in suburban neighborhoods that have higher poverty rates and minority concentrations than other suburban neighborhoods; and
- 6. Assess whether Section 8 certificate and voucher recipients live in neighborhoods with lower concentrations of assisted housing than residents of public housing and private subsidized housing.

Based on the findings of previous studies, six hypotheses are posited regarding the expected performance of the Section 8 certificate and voucher program as they relate to the above stated objectives. The hypotheses to be tested in this study are:

- H₁: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with low- and moderate-poverty levels.
- H₂: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with higher homeownership rates.
- H₃: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with a lower minority concentration.

- H₄: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in suburban neighborhoods.
- H₅: *Ceterus paribus*, Section 8 certificate and voucher recipients living in the suburbs are likely to cluster in neighborhoods with higher poverty rates and minority concentrations.
- H₆: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with lower concentrations of other types of assisted housing.

To date, no studies have been identified that provide an assessment of the effectiveness of the Section 8 certificate and voucher program in the Atlanta Metropolitan Region. This study will contribute to the growing body of research related to the performance of the Section 8 certificate and voucher program in reducing the concentration of poverty and minorities in central cities.

The public housing agencies that administer the Section 8 certificate and voucher program in the Atlanta Metropolitan Region can also benefit from the results of this study in various ways. They can monitor the location of Section 8 certificate and voucher recipients to determine where there may be clustering, determine areas needing aggressive outreach to landlords, assess whether there is an adequate supply of affordable housing and identify areas for expanding the affordable housing stock. Additionally, low-income households receiving housing assistance can also benefit from this research, in that the housing agencies can assist program participants in their decisions regarding which type housing assistance will lead to the neighborhoods that are suitable for their needs.

Definitions

Following are definitions and descriptions of the U.S. Department of Housing and Urban Development (HUD) terminology that is frequently used in this study. These terms include:

Affordable housing

HUD's definition of affordability is for a household to pay no more than 30% of its annual income on housing. Households that pay more than 30% of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.

Census tract

Small, relatively permanent statistical subdivisions of a county that are delineated by local census statistical areas committees following Census Bureau guidelines. Census tracts usually have between 2,500 and 8,000 persons and, when first delineated, are designed to be homogeneous with respect to population characteristics, economic status, and living conditions. Census tracts do not cross county boundaries. Census tract boundaries remain fairly stable from one decade to the next but may be split due to large population growth or may be combined due to significant population decline.

Fair Market Rent (FMR)

The rent, including the cost of utilities (except telephone), that would be required to be paid in the housing market area to obtain privately owned, existing, decent, safe and sanitary rental housing of modest (non-luxury) nature with suitable amenities. Fair market rents for existing housing are established annually by HUD for housing units of varying sizes (number of bedrooms), and are published in the Federal Register.

<u>HAMFI</u>

HUD-Adjusted Median Family Income. HUD establishes a median family income that varies by family size, metropolitan area and non-metropolitan area. Although the

HAMFI is based on the median family income established by the U.S. Census Bureau, it is not the same as the median income.

Housing agencies

A state, county, municipality or other governmental entity or public body (or agency or instrumentality thereof) authorized to engage in or assist in the development or operation of low-income housing. Housing agencies manage the day-to-day operations of public housing developments.

Housing allowance

A grant to low-income households to enable them to rent or purchase units in the private housing market that they otherwise cannot afford.

Housing certificate

A document issued by a housing agency to a family selected for admission to the rental certificate program. The certificate describes the program, and the procedures for housing agency approval of a unit selected by the family. The certificate also states the obligations of the family under the program.

Housing subsidy

Government housing assistance provided to private housing developers or households to reduce the cost of housing.

Housing voucher

A tenant-based rental housing allowance provided directly to eligible low-income households that pays the difference between the asking rent and a minimum required household contribution.

HUD

The U.S. Department of Housing and Urban Development.

Low-income

Income that does not exceed 80% of the HUD-adjusted Median Family Income (HAMFI).

Low-income households

Households with household income that is 80% and below the HUD-adjusted Median Family Income (HAMFI).

Low-Income housing

Housing units that, by reason of rental levels or amount of other charges, are available to families or individuals whose incomes do not exceed the maximum income limits established for continued occupancy in federally assisted low-rent public housing.

<u>Low Income Housing Tax Credits (LIHTC)</u>

A way of obtaining financing to develop low-income housing. Government programs provide dollar-for-dollar credit toward taxes owed by the housing owner. These tax credits can be sold, or used to back up bonds that are sold, to obtain financing to develop the housing.

Low-rent (low-income) housing

Housing assisted under the provisions of the U.S. Housing Act of 1937 or under a state or local program having the same general purposes as the Federal Program.

Minorities

Members of non-white racial and ethnic groups.

Moving to opportunity for fair housing (MTO)

A ten-year research demonstration program (administered by HUD) that combines tenant-based rental assistance with housing counseling to help very low-income families move from poverty stricken urban areas to low-poverty neighborhoods. MTO tests the impact of housing counseling and other assistance on the housing choices of Section 8 households.

Neighborhood

The Census Tract that surrounds the assisted household(s).

Portability

Renting a dwelling unit with Section 8 tenant-based assistance outside the jurisdiction of the initial housing agency.

Project-based assistance/subsidies

Rental assistance that is attached to the structure. Provided to private for-profit and nonprofit housing developers to construct or rehabilitate low-income housing.

Public housing

Housing assisted under the provisions of the U.S. Housing Act of 1937 or under a state or local program having the same general purposes as the federal program.

Distinguished from privately financed housing, regardless of whether federal subsidies or mortgage insurance are features of such housing development.

Public Housing Agency (PHA)

Organization created by local government which administers HUD's Low-Income Public Housing Program and other HUD programs.

Section 221 (d) (3)

Mortgage insurance to facilitate the new construction or substantial rehabilitation of multi-family rental or cooperative housing for moderate-income families, elderly, and the handicapped.

Section 236

Rental and cooperative housing subsidies and mortgage insurance to reduce mortgage interest costs on rental units for lower income families.

Section 8

Housing Assistance Payments Program, authorized by the Housing and Community Development Act of 1974.

Standard housing

Housing that meets minimally acceptable physical housing quality standards (HQS) as defined by HUD.

Subsidy

Generally, a payment or benefit made where the benefit exceeds the cost to the beneficiary.

Tenant-based assistance/subsidies

Rental assistance, primarily in the form of rental certificates or vouchers, provided directly to eligible low-income renters to rent units in the private housing market. The subsidy pays the difference between a required minimum household contribution and the asking rent

Very low-income

Defined as 50% of the median family income for the area, subject to specified adjustments for areas with unusually high or low incomes.

Voucher (rental voucher)

Document issued by a housing agency to a family selected for admission to the voucher program. The voucher describes the program and the procedures for housing agency approval of a unit selected by the family. The voucher also states the obligations of the family under the program.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

This section begins with a literature review which examines the housing problems of low-income urban renters followed by a review of the justifications for government housing assistance. Next, the types of rental housing assistance that have been provided and the role of the federal government are discussed. A brief history of federal rental housing assistance outlines the factors that prompted a shift in housing policy emphasis from project-based assistance to tenant-based assistance as the main form of federal rental housing assistance. The major factors leading to the adoption of the tenant-based Section 8 certificate and voucher program and the goals of the program are reviewed. The empirical evidence regarding the performance of the Section 8 certificate and voucher program in meeting the programmatic goal of promoting economic and racial/ethnic integration is then discussed. This section concludes with a brief discussion of the main factors influencing the housing and neighborhood selection by Section 8 certificate and voucher recipients.

The Housing Problems of Low-income Renters

Housing or shelter is acknowledged as one of man's basic needs, performing various necessary functions: protection from the elements, privacy, and security, as well as other social, psychological and cultural needs. Adequate and affordable housing is therefore essential to man's physical, social, psychological and economic well-being (Hays, 1985). In recognition of the importance of shelter, the U.S. Congress in 1949 enacted the National Housing Act that established an enduring housing goal for the nation:

"The Congress hereby declares that the general welfare and security of the Nation and the health and living standards of its people require housing productionto remedy the serious housing shortage, the elimination of substandard and other inadequate housingand the realization as soon as is feasible of the goal of a decent home and suitable living environment for every American family ..."

(National Housing Act of 1949).

Adequate, affordable housing and a suitable living environment, however, are often not afforded to many low-income Americans, the majority of whom are renters in urban areas. In 1995, low-income households comprised approximately 64% of all renters (Simmons, 1999). The U.S. Department of Housing and Urban Development (HUD) defines low-income households as those with incomes 80% and below the HUD-Adjusted Median Family Income (HAMFI). HUD further categorizes low-income households into three income ranges for programmatic purposes: extremely low-income households with incomes 30% below the HAMFI, low-income households with incomes between 30% and 50% of the HAMFI, and moderate-income households with incomes of between 50% and 80% of HAMFI (Consolidated Submission for Community Planning and Development Programs; Final Rule 24 C.F.R. Part 91, et al., 1995).

The meaning of adequate or standard housing as it pertains to housing quality has changed as society's standards have changed. In the early 20th Century, rental housing for the poor did not meet minimum health and safety standards and the focus was on improving basic health and sanitary conditions of dwellings, such as lighting, ventilation and separate sanitary facilities (Levy, 1994). Great strides have since been made to improve housing conditions for lower income households. Since the 1940s, minimum building standards and codes have been adopted and enforced by local governments,

dilapidated structures have been torn down, and virtually all housing units have indoor plumbing (Levy, 1994; Lineman & Megbolugbe, 1992; Schussheim, 1999).

Consequently, the U.S. housing stock is now subject to higher quality standards. Inadequate or substandard housing, as defined by the American Housing Survey (AHS), currently refers to units with severe or moderate physical problems and/or units that are overcrowded. A unit is defined as having severe physical problems if it has severe problems in any of five areas: plumbing, heating, electrical system, upkeep, and hallways. It has moderate problems if it has problems in plumbing, heating, upkeep, hallways, or kitchen, but no severe problems. Overcrowding is defined as having more than one person per room in a residence (HUD, 2000a). Data from the 1995 American Housing Survey indicated that only about three percent of all renters lived in severely inadequate housing, seven percent lived in moderately inadequate housing, and five percent in overcrowded housing. Even among very low-income renters, only four percent lived in housing with moderate physical problems and three percent in housing with severe physical problems (Simmons, 1999).

Clearly, these are indicators of improved housing conditions. Today, few would argue with the statement that Americans are some of the best housed people in the world. Not surprisingly, concern over housing quality has ceased to be a major housing policy issue (Linneman & Megbolugbe, 1992). Instead, housing affordability has climbed to the top of the U.S. housing policy agenda. Inadequate incomes coupled with higher housing prices resulting from higher housing standards have left many lower income households paying a disproportionately large share of their income for housing (Kaufman, 1997; Linneman & Megbolugbe, 1992).

HUD defines affordable housing as a housing payment that is 30% or below a household's gross income. A housing payment that exceeds 30% of income is considered unaffordable as it impedes a household's ability to meet other basic living expenses such

as food, clothing and transportation (Linneman & Megbolugbe, 1992; Twombly, Lawson, Smith, & Crowley, 2001). A housing payment of between 31% and 50% of income is considered a cost burden and a housing payment that exceeds 50% of income is considered a severe cost burden (Simmons, 1999).

Data from the 1995 American Housing Survey indicated that over two-thirds (70%) of poor renter households spent more than 30% of their incomes for housing and at least one-half (50%) spent more than one-half of their incomes for housing. Many poor households also are forced into inadequate, overcrowded, and even dangerous, living conditions (Kaufman, 1997; Schussheim, 1999). Unaffordable housing has contributed to the rising ranks in homelessness that comprises approximately 600,000 persons on any given night (Schussheim, 1999).

These concerns are echoed in HUD's 1999 report to Congress on the nation's worst case housing needs entitled Rental Housing Assistance - the Worsening Crisis. Households with worst case housing needs are defined as renters with incomes below 50% of HAMFI who do not receive any kind of housing assistance, pay more than one-half of their income for rent or live in severely substandard housing (HUD, 2000a).

According to the HUD report households with worst case housing needs increased by four percent between 1995 and 1997, reaching an all-time high of 5.4 million households. Housing affordability, rather than housing quality, is the main problem facing these households. The report indicates that there is a critical shortage of rental units affordable to these families, a situation that has become worse over the past decade. For example, in 1997, there were only 36 affordable units for every 100 extremely low-income families earning below 30% of the area median income. Furthermore, the number of rental units affordable to these households has decreased by five percent (over 370,000 units) since 1991 (HUD, 2000a).

In addition to affordable housing, another housing problem that affects low-income renters concerns the quality of the neighborhoods in which they live. Research shows that neighborhood conditions play an important role in the outcomes of the residents. In their extensive review of the literature on neighborhood effects on families and children, Ellen and Turner (1997) contend that most empirical evidence to date suggests that neighborhood environment has important influences on educational attainment, criminal involvement, teen sexual activity, and employment. While the existing evidence is inconclusive as to which neighborhood conditions matter most, there is a general agreement that neighborhood characteristics such as high poverty and unemployment rates and poor quality schools tend to give rise to and reinforce social pathologies such as violent crime, drug abuse and teen pregnancy.

Due to a variety of factors such as racial and ethnic discrimination and restrictive zoning ordinances that limit the development of affordable multi-family rental housing, the housing choices for a high proportion of low-income renters are often limited to dwellings located in poor quality, distressed neighborhoods (Mulroy, 1990; Pendall, 2000; Turner, Popkin & Cunningham, 2000). These neighborhoods are often characterized by high poverty and unemployment rates and experience high levels of crime and violence, teenage pregnancies, and drug abuse. These neighborhoods also tend to be to be predominantly minority and a high proportion of the households are femaleheaded or receiving some form of public assistance (Newman & Schnare, 1997; Pendall, 2000). In 1990, approximately one-fourth (27%) of poor renters in large metropolitan areas lived in distressed census tracts (Pendall, 2000).

Justifications for Government Housing Assistance

In the United States, the government has historically been minimally involved in the housing arena in the belief that the private market can best determine and respond to the housing needs of American households (Hays, 1985; Levy, 1994). Market imperfections, however, have resulted in the poorer segments of society living in housing that is considered substandard, crowded or that consumes a disproportionate share of the household income. Linneman and Megbolugbe (1992) contend that the combination of increased building amenity requirements, lower housing densities, and rising housing construction costs has made it impossible for private housing developers to profitably build housing that is affordable to low-income households without some form of subsidy.

Government housing assistance is justified on the grounds of promoting social welfare, such as protecting human life, distributing goods more equally, or to promote fairness in the distribution process (Weimer & Vining, 1989). Housing assistance improves the equality of housing by enabling low-income households to secure minimally adequate shelter (Grigsby, Morton & Maclennan, 1983). A case can also be made that housing assistance reduces negative externalities attributed to inadequate housing, such as fire and disease, depression of property values, and the reduction of aesthetic enjoyment (Grigsby, Morton & Maclennan, 1983).

Therefore, beginning in 1937, various rental housing assistance programs have been implemented, primarily at the federal level, to enable low-income households to live in adequate and decent housing at affordable rents. Rental housing assistance, however, unlike other social welfare programs, is not an entitlement program where all who are eligible receive it (Grigsby, Morton & Maclennan, 1983). Less than one-fourth of households eligible for rental assistance actually receive it (Twombly, et al., 2001).

Project-based Verses Tenant-based Housing Assistance

With the basis for government housing assistance having been established, the question then becomes one of how government rental housing assistance should be provided. The two general approaches to rental housing assistance are project-based and tenant-based assistance. Project-based (or supply-side) assistance includes government production and operation of low-income housing (public housing), or subsidies directed

at for-profit and nonprofit producers of housing as an incentive to produce new or rehabilitated low-income housing (private subsidized housing). These subsidies, which include mortgage insurance or loan guarantees, interest rate subsidies, or tax incentives, lower the price of housing by reducing the construction or rehabilitation costs, thereby guaranteeing housing developers a fair return on their investment (Kemp, 2000).

Tenant-based subsidies provide a housing allowance, primarily in the form of rental certificates or vouchers, directly to eligible low-income renters to rent housing units in the private market. The subsidy pays the difference between a required minimum household contribution (usually a percentage of household income) and the asking rent, which is usually capped (Kemp, 2000; Winnick, 1995). There are two main objectives of tenant-based subsidies. The first is to reduce the share of the household's income devoted to housing expenses, thereby increasing the amount allocated to non-housing expenditures. The second objective is to raise the recipients' level of housing consumption by enabling them to rent adequate or standard housing that they otherwise could not afford (Hirshleifer, 1976; Kemp, 2000; Weimer & Vining, 1989).

Both types of assistance have been used by the government to meet the housing needs of low-income Americans. Project-based assistance was the mainstay of federal rental assistance from the late 1930s to the mid-1970, and is the main form of rental assistance sponsored by state and local governments. Since 1974, tenant-based subsidies have become the preferred form of federal rental assistance (Orlebeke, 2000; von Hoffman, 2000).

Problems and Prospects in Federal Rental Housing Assistance: A Brief Review

The federal government is the primary provider of housing assistance for lowincome renters in the United States. The magnitude and nature of housing problems and
the cost involved to alleviate the problems require policy making at a national level. The
federal government is better able to amass the necessary resources and can influence the

housing market through interest rates, mortgage capital, and subsidies to influence the production of low-income rental housing (Nenno & Brophy, 1982).

In the past two decades, however, federal rental housing assistance has been significantly reduced and the federal government has increasingly shifted the responsibility for housing low-income households to state and local governments (Hays, 1985; Orlebeke, 2000; von Hoffman, 2000). In response, state and local governments have initiated new housing programs, appropriating more their own general revenues and entering into partnerships with the private sector to meet the housing needs of low-income renters. These programs, however, represent a small fraction of the federal programs that they are trying to replace and without substantial federal subsidy presence, the housing needs of low-income renters will continue to outstrip the available resources (Stegman & Holden, 1987; Twombly et al, 2001).

This review examines the U.S. federal government's strategy for addressing the rental housing needs of low-income households in urban areas. A brief review of the major urban rental housing legislation and the legacy of the programs stemming from these policies provide the background for understanding the shift in federal policy from an emphasis on project-based assistance to the current emphasis on tenant-based assistance.

Project-based Assistance

The first 40 years of federal involvement in rental housing primarily focused on increasing the supply and improving the quality of the low-income rental housing stock. This was achieved through project-based housing assistance, first through direct government production of public housing units (public housing) and then through various types of subsidies to private developers (private subsidized housing).

The federal government's involvement in the rental housing market began with the passage of the U.S. Housing Act in 1937 that authorized the construction of public housing units. The impetus for the passage of this Housing Act was the multifaceted economic crisis brought on by the economic recession following the stock market crash of 1929. Housing construction was part of an economic stimulus package that would revive the housing industry and provide needed jobs (Bloomberg, 1951; Hays, 1985).

Adding to the economic pressures were urban reformers who actively campaigned for federal government action to clear urban slums and to improve the living environment and housing conditions of poor urban workers. Housing for urban workers was often unsafe and unsanitary, lacking a water supply and sanitary facilities, and usually very crowded (Levy, 1994). Although urban reformers had succeeded in pressuring local governments to pass minimum sanitary, safety and construction standards, enforcement was often lacking (Bloomberg, 1951, Hays, 1985; Levy, 1994; von Hoffman, 1998, 2000). In many instances landlords would threaten to evict tenants and close buildings rather than make the necessary expenditures for improvements (Bloomberg, 1951). Unable to get action at the local level, urban reformers turned to the authority and resources of the federal government.

During the 1930s Congress debated the most efficient and effective means of providing housing assistance to poor urban working families. Liberal members of Congress advocated the construction of public rental housing while conservative members, favoring market based-approaches, pushed for tenant-based rental housing allowances that could be used in the private housing market. Public housing advocates argued that housing allowances would only contribute to landlord profits without any appreciable improvement in housing conditions. The construction of public housing, on the other hand, had the potential of stimulating the economy by creating jobs while also improving the low-income housing stock.

These arguments swayed enough legislators to pass the Housing Act of 1937 that established the public housing program. Under this Act, a federal housing authority (the

United States Housing Authority) was created to make loans and grants to authorized local housing agencies to develop and manage public housing projects. It was also stipulated that one slum unit be demolished for every public housing unit that was built (Bloomberg, 1951, Hays, 1985; von Hoffman, 1998, 2000; Winnick, 1995). An ambitious construction schedule of 50,000 public housing units a year, however, was curtailed in 1942 when legislators who opposed the program managed to cut funding for the program through the appropriations process (von Hoffman, 1998).

The next and most important housing legislation was the National Housing Act of 1949. The passage of this Act was in response to pressure from urban leaders who actively lobbied Congress for federal assistance to address a post-war urban housing shortage and a deteriorating urban infrastructure, particularly in the older cities of the Northeast and Midwest (Hays, 1985, von Hoffman, 2000). The National Housing Act of 1949 established a national housing goal and defined the role of the federal government in achieving this goal. Greater involvement of the private housing sector in federally subsidized housing programs was urged (Bratt, 1989).

Title I of the National Housing Act created the Urban Renewal Program, which was the centerpiece of the Act. Designed to remove slum and blight in the urban core, the program was touted by urban leaders as a way to revive downtown business districts and retain middle- and upper-income residents who had been moving to the suburbs. This program provided subsidies to private developers to engage in various redevelopment activities, such as the development of office buildings, stadiums, parking lots, and improvement of the infrastructure, as well as the development of public and private housing (von Hoffman, 2000).

Title III of the National Housing Act extended and modified the public housing program, authorizing a six-year 810,000 unit public housing construction program.

Although it took twenty years to produce these units, public housing continued to be the main federal housing program until 1968 (Hays, 1985; von Hoffman, 2000).

Several factors, however, worked at cross purposes to the success of the public housing program. These factors eventually led to a shift in emphasis toward market-based approaches to rental housing assistance. These include factors associated with site selection, the target population and the financing of the program. With respect to site selection, there was fierce local opposition to the program. Middle-class neighborhoods and local real estate boards actively resisted the siting of public housing developments in anything other than low-income neighborhoods, usually in the midst of large expanses of already dilapidated housing (Hays, 1985; von Hoffman, 2000). Consequently, upwardly mobile working families were dissuaded from applying for public housing, despite the financial relief it offered in terms of lower rents, leaving public housing as an enclave for the very poor (Hays, 1985).

Changes in the target population also contributed to the problems of public housing. Initially, the program was envisioned as housing for temporarily poor, working families who would move out of public housing once their financial status improved. Program regulations, however, placed severe income limits for tenant eligibility that effectively excluded households of modest incomes, ensuring that only the lowest income households could be served by the program (von Hoffman, 2000).

Additionally, as the racial composition of the poor became predominantly minority, so too did the tenant composition of public housing. It was also common practice for housing agencies to select tenants by race, a practice that continues, despite legislation barring racial discrimination in public housing. Therefore, public housing also became racially segregated (Newman & Schnare, 1993; von Hoffman, 2000).

The public housing program also faced funding difficulties. The first funding squeeze came from constant reductions in the annual appropriations for the program,

which resulted in fewer units being built than had been authorized (Hays, 1985; von Hoffman, 2000). New program regulations also increased financial difficulties of public housing. In 1968, Congress passed the Brooke Amendment which limited tenant rents to 25% (later increased to 30%) of tenant income (Schill & Wachter, 1995; von Hoffman, 2000). The public housing program operated under a funding arrangement whereby federal funds only covered the capital costs of construction, while operating and maintenance costs were to be covered by income generated from the rents charged to tenants. As a result of the Brooke Amendment, income generated from the tenant rents failed to cover rising operating and maintenance costs resulting from inflation and aging buildings. Consequently, many public housing developments fell into disrepair (Hays, 1985; von Hoffman, 2000).

A cost squeeze was also put on the design and construction of public housing developments. In an effort to control costs, Congress placed limits on construction costs which were often below the local average construction costs. These limits often resulted in the use of inferior materials and poor construction of basic elements such as doors, windows, plumbing and heating equipment. The limits also discouraged the inclusion of some basic amenities, such as elevators that stopped on every floor, larger apartment floor space, and recreation facilities (Hays, 1985). Consequently, public housing units quickly fell into disrepair.

As a result, what had once been envisioned as a temporary home for working class families became permanent housing for the very poor, marked with deteriorating conditions, racial segregation and isolation in low-income inner-city neighborhoods. Public housing became housing of last resort and captive to criminal and other anti-social elements, a legacy that has served to undermine support for the program (Orlebeke, 2000; von Hoffman, 2000).

The problems plaguing the public housing program led public officials to look for an alternative to the production of low-income housing and one that relied more on the private sector (Bratt, 1989; Hays, 1985). The Section 221(d)(3) and the Section 202 programs were the first private subsidy programs and were designed to produce rental housing for households with incomes too high for public housing but too low for standard private housing. The Section 221(d)(3) program, enacted in 1954, utilized the Federal Housing Administration (FHA) rental housing insurance to produce housing for tenants displaced under the Urban Renewal program. In 1961, the program was expanded into a below-market interest rate (BMIR) rental housing mortgage program that lowered development costs. The Section 202 program, enacted in 1959, provided low-interest government loans to nonprofit private developers of housing for the elderly (Bratt, 1989; Hays, 1985; Orlebeke, 2000).

These programs, however, lacked broad political support and the Section 221(d)(3) program was attacked as benefiting households who were too well off to deserve it. Both programs were relatively small in terms of units produced: the Section 202 produced 45,275 units between 1959 and 1968 and the Section 221(d)(3) produced approximately 31,000 units in the first five years (Bratt, 1989; Orlebeke, 2000). Most of these programs were eventually eliminated in 1974.

In 1965, the U.S. Department of Housing and Urban Development (HUD) was created to administer all of the urban housing and community development programs. The major goals for the agency were to improve the quality of life for low-income urban dwellers and increase the stock of low- and moderate-cost housing (Bratt, 1989). Three years later, in 1968, the largest federal rental housing assistance program, the Section 236 program, was enacted that subsidized market-rate mortgage interest payments for private developers who agreed to provide low-income rental housing. Many private developers

responded to this program leading to a low-income rental housing boom of \$1.1 million Section 236 subsidized units between 1969 and 1974 (Hays, 1985, von Hoffman, 2000).

The Section 236 program, however, became embroiled in financial and operational mismanagement and abuse that led to the default and foreclosure of many housing developments. Section 236 units also tended to be located in low-income neighborhoods, further concentrating low-income households (Hays, 1985; Orlebeke, 2000; von Hoffman, 2000). Moreover, the budgetary impact of the program, an estimated \$30 million for the 1970-72 fiscal year and more than \$200 billion for the ten-year contract obligations, became a major concern to policy makers (Orlebeke, 2000).

The confluence of the problems associated with public housing, Section 236 and other federal housing subsidy programs led to harsh criticisms from both opponents and advocates of federal housing assistance. In 1973 President Nixon declared a moratorium on all new commitments for federal housing programs pending a search for an alternative housing strategy (Hays, 1985; Orlebeke, 2000; von Hoffman, 2000).

In 1974 the Housing and Community Development Act was passed. Authorized under this Act were the Section 8 program that replaced all other HUD administered rental housing programs and the Community Development Block Grant (CDBG) program that replaced the urban renewal program and other existing urban development programs. The CDBG program essentially handed the responsibility of urban development to state and local governments through the provision of annual grants, based on a formula that could be used for a wide variety of community development activities, including the rehabilitation of low-income rental housing (Hays, 1985; Orlebeke, 2000; von Hoffman, 2000).

The Section 8 program had two components. The first component continued project-based subsidies through the Section 8 New Construction and Substantial Rehabilitation program, and the Moderate Rehabilitation program which was added in

1978, with a focus on preserving existing housing through rehabilitation (Hays, 1985; Orlebeke, 2000; von Hoffman, 2000). Under these programs, HUD entered into rental contracts with housing agencies or private owners for a term of 20 to 40 years under which HUD paid the owners the difference between the required tenant contribution toward the rent (30% of household income) and the asking rent. The construction and rehabilitation mortgages were insured by the Federal Housing Administration (FHA) and the developers also received substantial tax benefits (Barth and Litan, 1996). Approximately 894,000 units have been constructed or rehabilitated under these programs (Simmons, 1999).

The project-based Section 8 programs replaced public housing as the dominant federal rental assistance program. The public housing program was maintained under the 1974 Housing and Community Development Act with continued, but more limited, appropriations for the construction of new units and for the operation and modernization of existing units (Hays, 1985; von Hoffman, 2000).

The second component and centerpiece of the Section 8 program was the tenant-based housing allowance program, named the Section 8 Existing Housing program. This program directly provided eligible low-income households with rental certificates that could be used in the private housing market. The Section 8 Existing Housing program, however, was overshadowed by project-based assistance programs until the early 1980s (Hartung & Henig, 1997; Hays, 1985). According to Hartung and Henig (1997), only six certificates were issued for every ten new units of public housing or subsidized project-based housing during the latter part of the 1970s.

As with the Section 236 program, the project-based Section 8 programs were beset with problems associated with waste and mismanagement. Many developments were receiving subsidies based on rents that were significantly above the rents charged for comparable non-assisted units in the neighborhoods and some provided very poor

quality housing. Additionally, the FHA-insured mortgages on the developments were often above the market value of the buildings. This exposed the federal government to substantial risk (approximately \$18,000,000 in insurance claims from private lenders) should the owners default on the mortgages if their subsidy contracts were either reduced or not renewed (Barth & Litan, 1996; MacDonald, 2000).

In 1981, President Reagan appointed the President's Commission on Housing to review federal housing programs and make recommendations. The Commission's report, released in 1982, raised serious concerns over the high cost of contracts associated with the project-based Section 8 programs, which approached \$121 billion in 1982. Consequently, the Section 8 New Construction program was eliminated, and the Substantial and Moderate Rehabilitation programs were drastically scaled back (Orlebeke, 2000).

Although project-based housing assistance had fallen into disfavor, another project-based housing program, the Low-Income Housing Tax Credit (LIHTC) program, was authorized by Congress in 1986. Unlike the other project-based housing subsidy programs that had a direct budgetary impact, the LIHTC program used the tax system to provide incentives to real estate investors to produce low-income housing. A relatively complex program, the LIHTC allowed private investors in low-income housing to take a tax credit equal to their investment that was offset against other taxes. The LIHTC program was administered and monitored by the Internal Revenue Service (IRS) and state housing agencies (Orlebeke, 2000). The program proved to be very lucrative for both nonprofit and for-profit real estate investors and has become the dominant low-income rental housing production program (Orlebeke, 2000). As of December 1994, 332,085 LIHTC units were in service nationwide (Simmons, 1999).

Overall, project-based housing assistance has largely delivered on the goal of decent housing for many low-income households. Households living in public housing or

private subsidized housing generally enjoy more affordable and better quality housing than similar renters receiving housing welfare but not housing assistance. Assisted households have fewer physical defects in their units and since program regulations generally limit the housing cost burden to 30% of household income the household's rent-to-income ratio is generally lower (Newman & Schnare, 1993).

Nonetheless, project-based programs have been fraught with many problems including high costs, mismanagement, fraud and abuse. Project-based programs, particularly public housing, have been criticized for largely contributing to the concentration and isolation of poor and minority households in some of the most economically and socially distressed neighborhoods in U.S. cities (Hartung & Henig, 1997; Newman & Schnare, 1997; Pendall, 2000; Turner, 1998). In this respect, project-based assisted programs have largely failed to deliver on the second goal of "a suitable living environment" for families. Instead, households receiving assistance under these programs, particularly public housing residents, are even worse off than unassisted welfare households in terms of neighborhood quality (Newman & Schnare, 1997). Due to the failings of project-based housing programs, federal housing policy shifted toward an emphasis on tenant-based assistance in the belief that housing allowances would be a more efficient and effective form of assistance.

Tenant-based Assistance: The Section 8 Certificate and Voucher Program

Tenant-based housing assistance has been on the menu of housing subsidy alternatives since the advent of federal rental housing assistance. The provision for rental housing allowances was in fact included in the Housing Act of 1937 but not enacted (Maney & Crowley, 1999; Orlebeke, 2000; Winnick, 1995). The 1974 Housing and Community Development Act was essentially an amendment to the 1937 Housing Act legislating housing allowances as the Section 8 Existing Housing program.

Prior to the enactment of the Section 8 Existing Housing program, two other variants of housing allowances, the Section 23 Leased Housing program and the Rent Supplement program, had been authorized. These programs, however, did not technically operate as tenant-based assistance programs. They remained very small in scope and were eventually replaced by the Section 8 Existing Housing program (Hays, 1985; Orlebeke, 2000; Winnick, 1995).

The design of the Section 8 Existing Housing program originated from the Experimental Housing Allowance Program (EHAP) that was enacted in 1970. The purpose of the EHAP was to test a variety of housing allowance models to assess how they would function in terms of program participation, landlord response, program administration, and the housing supply and market price effects. The EHAP was implemented in 1973 in 12 sites around the nation for duration of three to five years and embraced approximately 30,000 households (Winnick, 1995). The EHAP, however, was barely underway when the Section 8 Existing Housing program was enacted in 1974 and no findings were yet available to inform the program. Nonetheless, the housing allowance models tested under the Experimental Housing Allowance Program formed the basis of the Section 8 Existing Housing program, as well as the housing voucher program that was enacted in 1983 (Hays, 1985).

As enacted in 1974, the Section 8 Existing Housing program provided monthly rental certificates to low-income households earning 80% or below the HUD-adjusted Median Family Income (HAMFI) to rent any housing unit in the private market within the issuing housing agency's jurisdiction. The certificate paid the difference between 25% of the household's gross income and the cost of the unit. Qualifying units could not exceed the HUD-established Fair Market Rents (FMR) for the area and had to meet minimum health and safety standards as determined by the local housing agencies.

The Section 8 Existing Housing program gained its prominence during the Reagan administration when the subsidized housing programs suffered major budget cuts and the rental housing programs were restructured. In 1982, the President's Commission on Housing largely endorsed housing allowances as the most efficient form of housing assistance for the poor and recommended the elimination of project-based subsidies (Hays, 1985; Orlebeke, 2000). Following these recommendations, project-based rental assistance programs were severely curtailed or eliminated and the budget allocation for the Section 8 Existing Housing program was greatly increased, making it the largest federal housing assistance program (Orlebeke, 2000).

In 1983, a new and more flexible housing allowance, the Housing Voucher Program, was also added to the Section 8 Existing Housing certificate program, first on an experimental basis and as a full program in 1987 (Hartung & Henig, 1997; Orlebeke, 2000). As with certificates, housing vouchers paid the difference between the household's contribution and a housing agency-determined payment standard (set anywhere between 90% and 100% of the HUD-established Fair Market Rent). Unlike the certificate program, the voucher program allowed recipients to choose units that rented for more than the Fair Market Rent and pay the difference out of their own pocket. Participants could also choose housing units outside the issuing housing agency's jurisdiction that met the minimum quality standards (Ards, 1991). The required household contribution for the certificate and voucher programs was increased from 25% to 30%, and both programs were restricted to households with incomes below 50% of HAMFI (Hays, 1985).

The voucher and certificate programs operated side by side until they were finally merged to form the Housing Choice voucher program under the 1998 Public Housing Reform Act. The program currently functions much the same as the original voucher program with even more flexibility. Households can choose a location anywhere in the

metropolitan area or anywhere in the United States where there is another housing agency administering the rental voucher program. Participants are given 60 days to find an acceptable unit, though the search time may expand to 120 days. The housing agency administrators pay the rent subsidy directly to the landlord on behalf of the participant (HUD, 2000b). In 1997, the Section 8 certificate and voucher program served approximately 1.47 million households compared to 586,000 for all project-based subsidized housing programs (Simmons, 1999).

According to Winnick (1995), given past trends and current popularity, housing allowances will continue to be the dominant form of rental assistance. Additionally, the Section 8 certificate and voucher program is heavily utilized by community development corporations and neighborhood housing services and has become vital to the success of neighborhood revitalization programs.

The Case for Tenant-based Assistance

The case for tenant-based assistance relative to project-based subsidies is based on several factors. The first and perhaps the most critical to policy-makers is the lower public cost associated with the use of allowances (Hays, 1995; Orlebeke, 2000; Winnick, 1995). These lower costs are achieved in several ways. The first is through sharper targeting of allowances in terms of the amount and duration of the assistance as opposed to blanket assistance as is the case with project-based subsidies. Secondly, allowances are less generous and the recipient households will not rent very costly housing. Economists theorize that vouchers resemble money and that voucher users value each dollar of a voucher subsidy more than each dollar spent on a project-subsidized housing. Therefore, vouchers satisfy recipients at a lower cost than do other in-kind subsidies (Winnick, 1995; Pendall, 2000).

Certificates and vouchers may also reduce costs in markets where vacancy rates are high. In these markets, landlords may be induced to reduce rents or maintain low

rents thereby reducing the cost of the government subsidy (Pendall, 2000). The management costs are also lower due to savings achieved through the reduced personnel required to administer the program, and by not having to contend with rent delinquencies (Winnick, 1995).

The case for reduced costs has been largely born out. It is estimated that on a per unit basis, Section 8 certificate and vouchers are approximately one-half the cost of project-based subsidies. Therefore, housing allowances help far more people than do project-based programs (Barton, 1996; McClure, 1998; Winnick, 1995). Barton (1996), on the other hand, contends that tenant-based programs require a stable and constant funding source, month after month, and year after year, making it more appropriate tool for the federal government than for state and local governments where revenue streams are less dependable. Additionally, unlike certificates and vouchers, project-based assistance builds up a stock of subsidized housing that could assist people over the course of a generation.

A second argument for allowances is that they are more suited to the current housing problem faced by low-income renters. Housing-related data and research findings provide evidence that inadequate income, not substandard housing, has become the core housing problem (Winnick, 1995). By 1970, most of the nation's worst housing had been replaced (Grigsby, Morton & Maclennan, 1983). In 1975, seven out of ten very low-income households (earning 50% or less of their area's median income) were living in uncrowded dwellings of acceptable quality; however, almost one-half (49%) were paying rents more than 30% of their household income (Winnick, 1995). Housing allowances are effective in reducing the housing cost burdens for low-income households since the required household contribution is limited to 30% of household income for recipients renting units meeting the payment standard and 40% for voucher recipients who choose housing units renting for above the payment standard.

Finally, housing allowances are also theorized to increase the effective demand for housing, and by doing so, encouraging builders to increase the supply of housing. However, there is little evidence to support this contention (Grigsby, Morton & Maclennan, 1983).

The primary research focus of this thesis has to do with the third argument: that housing allowances provide assisted households with greater housing choice in terms of the type of dwelling, location and rental cost. This argument wins favor with policy makers who are grappling with how to deal with problems associated with poverty and minority concentration in the inner-cities (Winnick, 1995).

A central goal of the 1974 Housing and Community Development Act was the reduction of the concentration and isolation of poor and minority households and the promotion of the diversity and viability of neighborhoods through spatial deconcentration of housing opportunities for lower-income households (Turner, 1998). Housing allowances are seen as an effective tool for achieving this goal. The portability of tenant-based subsidies is perceived as enabling and encouraging recipients to move out high-poverty neighborhoods to more racially/ethnically integrated, low-poverty neighborhoods that offer more and better employment opportunities, better services and amenities, and a higher quality of life (Hays, 1981; Katz & Turner, 2001; Maney & Crowley, 1999; Pendall, 2000; Rossi, 1981; Turner, 1998; Winnick, 1995). Additionally, housing allowances, being less visible, are perceived to be less vulnerable to the resistance that public housing and other subsidized projects often encountered in middle-class neighborhoods (Hays, 1985). The remainder of this chapter reviews the evidence on the performance of housing allowances with respect to achieving the goal of promoting greater economic and racial/ethnic integration among low-income assisted households.

Promoting Economic and Racial/Ethnic Integration: Program Performance
Whether or not vouchers and certificates are effective in promoting greater
economic and racial/ethnic integration has become an area of increasing research interest
with a growing body of empirical evidence. This research includes nationwide studies
and case studies of the Section 8 certificate and voucher program in several cities and
metropolitan areas. Additionally, findings from experimental programs, such as the
Experimental Housing Allowance Program and the Moving to Opportunity for Fair
Housing (MTO) demonstration program, shed valuable insights as to the effectiveness of
tenant-based programs in meeting this goal.

As noted earlier, the Experimental Housing Allowance Program (EHAP) enacted in 1970 was instrumental in the design of the Section 8 certificate and voucher program. While there were several objectives of the EHAP, an important one was to induce poor families to upgrade their inadequate housing. Another objective was to reduce economic and racial segregation (Rossi, 1981). The presumption was that the mobility afforded by housing allowances would induce recipients to seek better housing in better neighborhoods, which generally meant neighborhoods with low poverty and minority concentrations. Findings from the EHAP, however, indicated that, in general, allowances did not induce more mobility than would have otherwise occurred. Movers, regardless of whether or not they received an allowance, moved to better quality neighborhoods with fewer low-income households, lower crime rates, less litter, more public services and better transportation (Allen, Fitts & Glatt, 1981; Rossi, 1981).

More recent evaluations of the Section 8 certificate and voucher program generally indicate that, as with project-based housing (public housing and private subsidized housing), Section 8 certificates and vouchers recipient households tend to be more concentrated in neighborhoods with lower incomes and higher minority concentrations than other renters. For example, Newman and Schnare (1997) found that

almost three-fourths (73.9%) of all certificate and voucher recipients, nationally, lived in census tracts with a median income of less than \$30,000. Similarly, Pendall's (2000) research showed that Section 8 certificate and voucher recipients were 75% as likely as other poor renters to live in distressed neighborhoods but 150% more likely than all renters to live in such tracts. Hartung and Henig's (1997) analysis of locational outcomes of Section 8 certificate and voucher recipients in the Washington, DC metropolitan area also found that lower-income census tracts with a median income of less than \$25,000 had 3.4 times as many certificates and 2.1 times as many vouchers than did tracts with higher median incomes of \$75,000 or more.

Of particular interest to most housing researchers and policy makers is how the Section 8 certificate and voucher program performs in comparison to the project-based programs that it is replacing. Recent evaluations of the Section 8 certificate and voucher program (U.S. Department of Housing and Urban Development, 2000c; Turner, Popkin & Cunningham, 1999), and empirical research (Guhathakurta, 2000; Hartung & Henig, 1997; Newman & Schnare, 1997; Pendall, 2000; Turner, 1998) indicate that the program outperforms public housing. Section 8 certificate and voucher recipients generally live in neighborhoods with lower poverty rates and lower minority concentrations than do public housing residents. When compared to private subsidized housing, however, the evidence is mixed.

In their nationwide analysis of the neighborhood characteristics surrounding assisted housing units, Newman and Schnare (1997) found that households receiving Section 8 certificates and vouchers lived in neighborhoods with lower poverty and unemployment rates, lower minority concentrations and higher median incomes than did residents of public housing and private subsidized housing. Other studies have similar findings. Turner (1998) examined the locational outcomes of assisted housing recipients in six metropolitan areas: Buffalo, NY; Dallas, TX; Dayton, OH; Omaha, NE; San Hose,

CA; and Tampa, FL. In almost all the metropolitan areas, Section 8 certificate and voucher recipients lived in neighborhoods with lower poverty and unemployment rates, and lower African-American concentration than did residents of public housing. In comparison with private subsidized programs, however, Turner found that the neighborhood poverty rate for certificate and voucher recipients was lower in only three (Buffalo, Dallas and Tampa) of the six metropolitan areas. Additionally, certificates and vouchers outperformed private subsidized programs in reducing the proportion of households living in either majority African-American or majority Hispanic neighborhoods in only two metropolitan areas (Tampa and Buffalo, respectively).

In their analysis of the locational outcomes of certificates and vouchers versus project-based subsidized housing in the Washington metropolitan area, Hartung and Henig (1997) found that certificates and voucher users were more evenly spread throughout the metropolitan area than either public housing or private subsidized housing. The researchers found that, on average, low-income tracts with a median income of less than \$25,000 had about 165 times as dense a concentration of public housing units and 28 times as dense a concentration of private subsidized units than did high-income tracts with a median income of \$75,000 or more. Comparatively, low-income tracts averaged about 17 times as many certificates and 21 times as many vouchers as did high-income tracts.

Similarly, predominantly African-American census tracts had more than 15 times as many public housing units and 7.7 times as many private subsidized units as did predominantly White tracts. In contrast, predominantly African-American tracts had only 3.4 times as many certificate households and 2.1 times as many voucher households as did predominantly White tracts.

Hartung and Henig (1997) also reported that the Section 8 certificate and voucher recipients have managed to penetrate the suburbs to a much greater extent than resident

of the project-based programs. They, however, also found evidence of significant clustering of Section 8 certificate and voucher recipients in census tracts with lower median income levels and higher black populations. Turner, Popkin and Cunningham (1999) reported similar findings in Cook County, Illinois (Chicago) and Fairfax County, Virginia.

In a study of the locational outcomes of Section 8 certificate and voucher recipients in Phoenix, Arizona, Guhathakurta (2000) found that both Section 8 and public housing units tended to concentrate in the same neighborhoods, which generally had higher proportions of minorities than the city average and median income levels that were 70% of median for the entire city.

Some insights are also gained from preliminary findings of HUD's ongoing Moving to Opportunity demonstration program (MTO) that was authorized in 1992. This program was designed to measure the impact of a change in neighborhood on the employment prospects, income levels, educational achievement, and social well-being of low-income public housing residents. Public housing residents who volunteer for the program are randomly assigned to one of three groups: a treatment group where they receive Section 8 certificates or vouchers that are usable only in low-poverty areas (poverty rates of less than 10%) and intensive counseling assistance in finding a private rental unit; a Section 8 comparison group where the certificates and vouchers have no geographic restrictions and receive the regular assistance provided by the housing agency; and an in-place group that receives no certificates or vouchers, but continue to receive project-based assistance. The program currently operates in five sites across the nation (Goering, Kraft, Feins, MacInnis, & Holin, 1999).

Preliminary findings from the MTO program are instructive with respect to mobility and locational outcomes. In their examination of the MTO program across the five sites Goering et al. (1999) found that only 47% of the families in the treatment

group were able to find acceptable units in low-poverty areas within the given search period (lease-up rate), a lower rate than for families in the comparison group. Tight rental markets, capacity limitations of operating agencies, family motivation, and the greater search time to find a unit are given as reasons for these lower than expected rates.

In their analysis of the MTO program in Baltimore, Maryland, Ladd and Ludwig (1997) found that 97% of the families in the Section 8 comparison group chose to move to other parts of the city, rather than move to suburban parts of Baltimore. Consequently, the locational outcomes in terms of reduced poverty and minority concentration did not substantially improve for these families.

Also instructive are the findings of "vouchering-out" efforts of residents of distressed private subsidized housing. Beginning in 1992, HUD began closing severely distressed and mismanaged private subsidized rental housing properties that had been taken over through foreclosure. Eligible households were given Section 8 housing vouchers to obtain new accommodations. Case studies of four of these properties were conducted to examine the housing and neighborhood outcomes of the voucher recipients. The overall findings of these case studies indicated that the voucher recipients moved to neighborhoods with a higher income level. However, the majority continued to live in racially segregated neighborhoods (Varady & Walker, 2000).

Insights can also be gained from Locke, Nolden, Pocari and Finkel's (2000) analysis of 12 private subsidized properties around the nation where the owners were either opting out of an expiring project-based Section 8 contract, prepaying a HUD-assisted mortgage, or both. Tenants of these properties were eligible for housing vouchers which could be used in the same property or elsewhere. The researchers conducted a telephone survey of 941 tenants who received vouchers; 330 responded. Their findings from the survey indicated that only 20% (64 households) opted to move. The majority of these households (85%) moved to new neighborhoods that on average had poverty rates

lower or equal to the neighborhood they left and most also moved to neighborhoods with lower proportions of minority households. The movers, however, tended to cluster in certain neighborhoods.

In summary, this research suggests that the Section 8 certificate and voucher program has not affirmatively achieved the goal of promoting greater economic and racial/ethnic integration and improving the quality of life of assisted households. Nevertheless, there is positive movement in this direction. Participants in the program live in areas with better economic and social opportunities, and with greater racial and ethnic diversity than similar households living in public housing and private subsidized housing to a lesser extent. However, there are significant hurdles that have to be overcome in order to improve the program's effectiveness.

Factors Influencing the Performance of the Section 8 Certificate and Voucher Program

Several factors have been identified that influence the effectiveness of the Section 8 certificate and voucher program in improving the social and economic opportunities of the participants. These include factors associated with the administration of the program, the housing market, and the preferences of Section 8 recipient households.

Program administration

Administratively, there are several factors that limit mobility of Section 8 certificate and voucher recipients. These include the amount of assistance the recipients receive from housing agency administrators in their housing search, outreach done by housing agency administrators to recruit landlords to accept Section 8 certificates and vouchers, and administrative barriers when transferring between housing agency jurisdictions (Turner, Popkin & Cunningham, 2000).

Turner, Popkin and Cunningham (2000) report that standard Section 8 briefings fail to provide recipients with a real understanding of the opportunities available to them. They suggest that improved information regarding neighborhood amenities, services and

transportation, as well as hands-on assistance with the housing search will greatly improve mobility. In her study of Section 8 participants and their experience with the search for housing, Mulroy (1990), for example, found that use of apartment brokers to assist in the search was a major factor in the success of finding a unit. Housing agencies were able to find units for their clients 85% of the time.

Additionally, the Fair Market Rent (FMR) levels set by HUD are said to be too low to permit families access to the more desirable neighborhoods. In 1994, HUD reduced the FMR from the 45th percentile to 40th percentile of the market rent for unassisted units in the local housing market area. Housing agencies can set their payment standards between 90% and 110% of the FMR. Under special circumstances, housing agency administrators can also apply to set the payment standard at 120% of the FMR. No research, however, has been done to assess to what extent this may be a problem (Turner, Popkin & Cunningham, 2000).

The limited housing search period also affects the ability of many families to find suitable dwellings. Housing agencies normally give Section 8 recipients 60 days to find an acceptable unit, which may be extended for a further 60 days. Nonetheless, minority households, large families and employed participants generally tend to have more difficulty locating units within the given time frame (Maney & Crowley, 1999).

Housing Market Factors

The performance of the Section 8 program is constrained by the availability of affordable rental housing at or below the applicable FMR in low-poverty or low minority neighborhoods. Turner (1998) and Turner, Popkin and Cunningham (2000) contend that land-use and zoning regulations in suburbs have limited the development of rental housing, especially low-cost multi-family rental units. Consequently, the affordable rental housing stock tends to cluster in central cities and less affluent neighborhoods.

Another factor is that not all units that are available at or near local payment standards are made available to Section 8 recipients. In their research, Turner, Popkin and Cunningham (2000) found that many landlords restricted the number of units available to Section 8 recipients or avoided the Section 8 program altogether due to the bureaucratic red tape involved. Most landlords who accepted Section 8 tenants already had other Section 8 tenants. The researchers also suggested that in areas with low vacancy rates, landlords simply did not have an incentive to participate in the Section 8 program because they did not have a problem finding tenants.

Benjamin, Chinloy and Sirmans (2000) further suggest that landlords may hesitate to advertise for Section 8 tenants for fear that too many Section 8 tenants may reduce the perceived quality of their building. In their study of 81 apartment buildings in Washington D.C., the authors found that acceptance of Section 8 tenants increased rent revenues (due to a improved rent collection) and occupancy rates. Advertising for Section 8 tenants, however, had a negative and significant effect on values.

Discrimination in housing markets is also a major factor. Minorities, households with children, and the disabled in particular are most vulnerable. For example, Turner's (1998) analysis of locational outcomes for tenant-base assistance in six metropolitan areas showed that White and elderly households were less likely to live in high-poverty or high-minority neighborhoods than African-American, Hispanic, non-elderly, and disabled households. Turner concedes that this finding may be due to discrimination against these households or personal preferences of these households. Turner, Popkin and Cunningham (2000) reported that interviews with Section 8 recipients indicated that many did not even look for housing in certain neighborhoods for fear that they would be discriminated against. The researchers also stated that families with teenage children appeared to have been discriminated against for the fear that teenage boys would join gangs and teenage girls would attract boys.

Similarly, in a self-report survey of 56 low-income single women in metropolitan Boston who applied for the Section 8 voucher program, Mulroy (1990) found that minority households and larger households with four more persons were the least successful in finding housing in better quality neighborhoods. Participants who were primarily looking for lower-rent units in nearby neighborhoods were more successful.

There also seems to be discrimination against Section 8 participants in general.

According to Maney and Crowley (1999), Section 8 recipients report that many landlords do not want Section 8 holders as tenants and stereotype Section 8 tenants as irresponsible.

Household Related Factors

The personal motivations of Section 8 certificate and voucher recipients are also a major factor in the success of the program. Many recipients either opt to stay in their current residence if permitted or do not move very far from their current locations. For these households, the proximity of family and friends, services, and the availability of public transportation outweigh any advantages that might be gained by moving to neighborhoods with less poverty or to the suburbs (Maney & Crowley, 1999; Turner, 1998; Turner, Popkin & Cunningham, 1999).

In trying to explain the clustering of Section 8 recipients in the suburbs of the Washington D.C. Metropolitan area, Hartung and Henig (1996) suggested that this may be partly due a preference toward family-oriented neighborhoods. They, however, also suggested that such preferences take place within the constraints set by affordability and housing supply. Maney and Crowley (1999) add that some Section 8 participants may be uncomfortable living as a minority outside of their own racial/ethnic community. They also state that unfamiliarity with housing search methods and credit problems work against the mobility of Section 8 participants into low-poverty and low-minority neighborhoods.

There are other household variables related to a household's propensity to move that may also apply to Section 8 recipients. These include age of the household head, marital status, and gender of the household head, household size, household composition, prior mobility, income, and education. The general findings are that higher mobility rates are associated with unmarried persons, higher income levels and higher education levels (although the evidence is weak). Prior mobility is also strongly correlated with current mobility. Mobility declines with age and the presence of younger children also reduces mobility. The evidence, however, is mixed with respect to the sex of the household head and race (Porell, 1982).

Summary

In this chapter, the housing needs of low-income Americans were discussed and the necessity for government assistance explained. Since the 1930s the federal government has provided rental housing assistance to low-income households first through public housing and then through private sector approaches in the form of project-based subsidy programs and tenant-based assistance. A review of the problems associated with the federal government's major project-based programs, public housing and Section 236 provided the basis for the federal government's shift in policy emphasis away from project-based subsidies and toward tenant-based assistance. The aims of tenant-based assistance, particularly its importance as a tool for addressing the concentration and isolation of poor and minority households in urban centers, were also discussed.

Several researchers have studied the federal government's main tenant-based assistance program, the Section 8 certificate and voucher program, and its forerunner, the Experimental Housing Allowance Program, and more recent experimental programs using housing allowances. These studies investigated whether this type of assistance is really effective in encouraging Section 8 recipients to move into more economically and racially integrated neighborhoods, primarily in the suburbs, thereby reducing the poverty

and minority concentration in the inner-cities. The findings overwhelmingly indicate that Section 8 certificate and voucher recipients are more widely dispersed and live in neighborhoods with lower poverty rates and minority concentrations than do public housing residents. The findings are mixed when compared to private subsidized housing. There is no clear evidence that the Section 8 certificate and voucher recipients have better locational outcomes (lower poverty rates and minority concentration) than residents of private subsidized housing. The factors that limit the success of the program with respect to this objective were also discussed. To the extent that these factors differ across and within housing markets, the success and outcomes for the Section 8 certificate and voucher program will vary. This study will hopefully contribute to this body of research, as well as provide information that can assist local administrators of the Section 8 certificate and voucher program in improving the program's performance in the Atlanta Metropolitan Region.

CHAPTER 3

METHODS

Introduction

The purpose of this study is to examine the effectiveness of a tenant-based rental housing assistance program (Section 8 certificates and vouchers) relative to two types of project-based rental assistance programs (public housing and private subsidized housing). A major goal of the Section 8 program is to promote greater economic and racial/ethnic integration and to improve the quality of life for low-income households. To assess the effectiveness of the Section 8 program with respect to this goal, an analysis of the locational attributes of units assisted under the Section 8 certificate and voucher, public housing and private subsidized housing programs was conducted in the Atlanta Metropolitan Region in Georgia.

This chapter outlines the data analysis procedures that were used. Descriptive statistics provided a comparison of the distribution of the housing units assisted under each of the programs with respect to the location attributes. Logistic and OLS regressions were then conducted to test the following hypotheses:

- H₁: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with low- and moderate-poverty levels.
- H₂: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with higher homeownership rates.

- H₃: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with a lower minority concentration.
- H₄: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in suburban neighborhoods.
- H₅: *Ceterus paribus*, Section 8 certificate and voucher recipients living in the suburbs are likely to cluster in neighborhoods with higher poverty rates and minority concentrations.
- H₆: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with lower concentrations of other types of assisted housing.

Research Design

This study utilized an *ex post facto* multivariate cross-sectional research design to examine the performance of a tenant-based rental assistance program relative to two project-based rental housing assistance programs. The dependent variables were the housing units assisted under the three rental housing assistance programs: 1) Section 8 housing vouchers and certificates (tenant-based); 2) public housing (project-based); and 3) private subsidized housing (project-based). Private subsidized housing was treated as a single program in this study, but in reality is a mix of several programs. Table 1 provides a brief description and the target population for all three programs.

The location of units assisted under each housing program was expected to be influenced by three neighborhood characteristics that were the overarching variables of interest. These variables were the neighborhood poverty rate (percent of the population in the neighborhood that is poor), the minority concentration (the percent of the population within the neighborhood that is a racial or ethnic minority) and the homeownership rate

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Study Program Descriptions and Target Population	ind Target Population	
Program	Description	Target Population
1. Section 8 Certificate and Voucher Program.	Tenant-based assistance provided directly to the household to use in the private rental housing market. Vouchers and certificates pay the difference between the tenant's rent contribution and a	Households with incomes 50% and below HAMFI, including the elderly and disabled. Housing agencies may give preference to households
	predefined payment standard established by the HA that is set anywhere between 90% and 110% of the Fair Market Rent (FMR). Tenants pay the greater of 30% of adjusted income or 10% of gross income.	that are homeless, living in substandard housing, paying more than 50% of household income for rent, or involuntarily displaced from their home.
	Program Status: Ongoing. Approximately 1.4 million subsidized households.	
2. Public Housing	Project-based assistance program that is developed, owned and operated by authorized local public housing agencies (PHAs). HUD pays the debt service on bonds which finance the	Same as for Section 8 certificate and voucher program, but with preference given to households with incomes 30% and below HAMFI.
	construction and subsidizes project operation. Tenant rents also provide revenue for project operation and maintenance. Program Status: Ongoing. Approximately 1.3 million public housing units	
3. Private Subsidized Housing)	
a. Section 236 Direct Loan program	Provides annual interest reduction subsidies to private lenders to enable owners of low-income multi-family housing to obtain loans at one percent interest rate. Program restricted to private nonrefit limited divided or cooperative multi-family bousing	Households with incomes 80% and below the HAMFI
	developers. Program Status: Program repealed in 1974 but approximately	
b. Section 8 (project-based)New Construction andSubstantial Rehabilitation	447,466 units still receiving a subsidy. HUD enters into 20 to 40-year contracts with public housing agencies (PHAs) or private owners of newly constructed or rehabilitated rental housing under which HUD paid the owners the difference between a required tenant rent contribution and the asking rent. Financing provided by FHA-insured loans. Program	Households with incomes 80% and below HAMFI
	repeated in 1763, but mose constructed prior to this date still receive subsidies.	

Program	Description	Target Population
c. Other FHA-insured loan programs	Program Status: Ongoing. Approximately 894,330 subsidized units units Rental housing with mortgages insured by the FHA, including the Section 221 (b)(3) Below Market Interest Rate (BMIR), Loan Management Set-Aside (LMSA), Rental Assistance and Rent Supplement (RASUP), and Property Disposition programs. Program Status: Ongoing. Approximately 292,584 subsidized	Households with incomes 80% and below HAMFI
d. Low-Income Housing Tax Credit (LIHTC) program	units. Private for-profit and nonprofit developers use the tax credits to reduce their tax liability by the amount of the tax credit each year, for a 10-year period. Program Status: Ongoing. Approximately 332,085 subsidized units.	Property owners must set aside 20% of the units for households with incomes 50% and below HAMFI, <u>OR</u> 40% of the units for households with incomes 60% or below HAMFI. In practice, most property owners have chosen the latter.

Source: Complied from Allen R. Hays (1985) The Federal Government and Urban Housing. Albany, NY: State University of New York Press and the U.S. Department of Housing and Urban Development, HUD program descriptions. (On line) Available:

http://www.hud.gov/progdesc.

(the proportion of households in the neighborhood that are owner-occupants of single-family detached homes). Other variables that were expected to influence the location of each type of assisted housing were the geographic location of the neighborhood (central city versus suburbs) and the concentration of other types of assisted housing in the neighborhood.

Neighborhood, in this case, was defined as the census tract that surrounds the assisted housing units. Census tracts are sub-county areas that contain between 2,500 and 8,000 inhabitants and, when first delineated, are relatively homogeneous in terms of demographic, economic, and housing characteristics. Census tract boundaries are determined by local committees following Census Bureau guidelines and are fairly stable from one decade to the next but may be split due to large population growth or may be combined due to significant population decline. Since census tract boundaries are based on the demographic homogeneity at the time they are established, a tract's population, economic, and housing characteristics may become more diverse over time (Lavin, 1996). Therefore, census tracts may no longer truly define a neighborhood in the true sense of the word but are nonetheless the best available proxy for neighborhoods (Newman & Schnare, 1997; Rohe & Stewart, 1996).

This study utilized the official measure of poverty in the United States, which is based on a set of money income thresholds that vary by family size and composition. Families, and all individuals in the family, whose total income is less than the corresponding income threshold for the family's size and composition, are considered poor. Poverty thresholds do not vary geographically, but are adjusted annually for inflation using the Consumer Price Index (Dalaker and Proctor, 2000). Income data and poverty statistics are collected, calculated and published by the U.S. Bureau of the Census. The 1990 poverty thresholds were used in this study (see Table 2).

Table 2

Poverty Thresholds in 1990, by Size of Family and Number of Related Children Under 18 Years

	Weighted				Related	Related children under 18 vears	nder 18 ves	ırc		
Size of family unit	average				NO PROPERTY.		10 year	S ##		
	thresholds									
	(99)									
		None	One	Two	Three	Four	Five	Six	Seven	Eight or
										more
One Person (unrelated individual)	\$6,652									
Under 65 years	008'9	6,800								
65 years and over	6,268	6,268								
Two persons	8,509									
Householder under 65 years	8,794	8,752	600,6							
Householder 65 years and over	7,905	7,900	8,975							
Three persons	10,419	10,223	10,520	10,530						
Four persons	13,359	13,481	13,701	13,254	13,301					
Five persons	15,792	16,257	16,494	15,989	15,598	15,359				
Six persons	17,839	18,693	18,773	18,386	18,015	17,464	17,137			
Seven persons	20,241	21,515	21,650	21,187	20,864	20,262	19,561	18,791		
Eight persons	22,582	24,063	24,276	23,839	23,456	22,913	22,223	21,505	21,323	
Nine persons or more	26,848	28,946	29,087	28,700	28,375	27,842	27,108	26,445	26,280	25,268
		1	1	1						

Source: U.S. Census Bureau, Current Population Survey. Poverty thresholds: 1990. Retrieved March 17, 2001, from http://www.census.gov/hhes/poverty/thresh90.html

Strengths and Limitations of Research Design

The use of the *ex post facto* cross-sectional research design allows for a point-in-time direct comparison of the Section 8 certificate and voucher program to the other programs to evaluate its performance. The primary advantage of this design is that it eliminates the threat to internal validity caused by changes in conditions, such as changes in the administration of the program, or in data collection. Although the threat of history is minimized with this research design, the selection threat is a major limitation. The selection threat in this study relates to differences in the households in each of the programs, since there are different income eligibility requirements for the three programs (see Table 1).

While the three programs are designed to provide housing assistance to low-income households, the Section 8 certificate and voucher program targets low-income households with incomes 50% and below the HUD-Adjusted Median Family Income (HAMFI). Eligibility for public housing is also restricted to households with incomes 50% and below the HAMFI. Most private subsidized housing generally targets households with slightly higher incomes of 80% and below the HAMFI, with the exception of the LIHTC program that targets households with incomes 60% and below the HAMFI.

Due to these income eligibility requirements, the three housing programs may differ along certain household characteristics that correlate with income, such as race, marital status of household head, age of the household head, and whether or not the household head or spouse has a disability. While it would be desirable to control for these household variables to reduce the selection threat, the data set used in this study does not provide data on the individual household characteristics for all the programs. For privacy purposes, household characteristics are not provided for the Section 8 certificate and voucher program and the LIHTC program.

Data

Data for this study were obtained from the U.S. Department of Housing and Urban Development's Office of Policy Development and Research's data set, <u>A Picture of Subsidized Households</u>, for 1998, which is the most recent data set available. This data set provides the census tract locations and characteristics, as well as various tenant characteristics for all HUD-subsidized housing in the United States. The <u>Picture of Subsidized Households</u> data set has been collected for 1977, 1993, and 1996 to 1998. The more recent data sets provide better coverage and data on the subsidized units than the older data sets (Burke, 1999).

The 1998 data file provides an enumeration of nearly five million (4,848,978) housing units across the nation that are subsidized under the following housing programs: (1) Public Housing, (2) Indian Housing, (3) Section 8 Certificates and Vouchers, (4) Section 8 Moderate Rehabilitation, (5) Section 8 New and Substantial Rehabilitation, (6) Section 236 Direct Loan program, (7) other FHA-insured subsidy programs (including Below Market Interest Rate (BMIR), Loan Management Set-Aside (LMSA), Rental Assistance and Rent Supplement (RASUP), and Property Disposition), and (8) Low-Income Housing Tax Credits (LIHTC). Programs 1 to 3 constitute the government-owned or managed rental housing programs while programs 4 to 8 are the private subsidized housing programs. Some household characteristics are provided for these programs with the exception of the Section 8 certificate and voucher program and the LIHTC program. The data are available for the whole country, states, counties, agencies, census tracts (neighborhoods), and housing projects. To protect their privacy, data on individual households are not provided.

The data provide three types of information regarding the neighborhood (defined as the census tract) that surrounds each subsidized housing unit. This includes the percentage of poor people in the census tract (poverty rate), the percentage of

racial/ethnic minorities in the census tract (minority concentration), and the percentage of households in the census tract that own single-family detached homes (homeownership rate). The neighborhood data are based on the 1990 Census.

Various summary data on household characteristics by program (except for the LIHTC and Section 8 voucher and certificate programs) are also provided, including the average income and source of income of the households, the average size of the households, age range of household head, households that have a head or spouse with a disability, racial characteristics of the head of the households, marital status and presence of one or more children under 18 years old.

The data on housing units available and occupancy status are from HUD's own administrative records. The data on housing units is the most recent as of May 1998 for Public housing, Indian housing and Section 8 moderate rehabilitation programs, and September 1995 for the other programs, except for the LIHTC program which is based on December 1994 records. The data set eliminates double counting that result from a housing unit receiving more than one subsidy.

Data on household characteristics are sent to HUD by local public housing authorities or housing agencies for public housing, Indian housing and Section 8 vouchers and certificates, and by landlords or managers of the privately-owned subsidized housing developments. With the exception of the LIHTC program, all of the housing programs require an annual reporting to HUD on the recipient household characteristics as defined above. Penalties for not complying with the reporting requirements are not described. This information is then summarized by HUD. The household characteristics data are the most recent as of May 1998 for Public housing, Indian housing and Section 8 moderate rehabilitation programs, and July 1998 for the other programs.

Sample

This study utilized the 1998 data file to obtain data on assisted rental housing units and the locational attributes for the 424 census tracts that form the ten-county Atlanta Metropolitan Region in the state of Georgia. These counties are: Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, and Rockdale.

The rental assistance programs analyzed were the six programs found in this region: (1) the Section 8 certificate and voucher program; (2) the public housing program; (3) the Section 8 New and Substantial Rehabilitation; (4) Section 236 Direct Loan; (5) other FHA-insured subsidy programs (Below Market Interest Rate (BMIR), Loan Management Set-Aside (LMSA); and (6) the LIHTC program. The last four programs were combined and considered jointly as private subsidized housing. A total of 48,885 assisted housing units were included in the data file. The 424 census tracts formed the cases in this study.

Data Limitations

While the <u>Picture of Subsidized Households</u> data set accounts for the bulk of subsidized housing nationally, it is limited to federal housing programs, specifically those subsidized by the U.S. Department of Housing and Urban Development (HUD) and the LIHTC program. Furthermore, the data set does not include all HUD housing programs such as those assisted under the Community Development Block Grant (CDBG) program or the HOME program. Despite these limitations, to the extent that the 1998 data set is essentially an enumeration of the subsidized units, it has fairly high external validity to the units covered under the specific programs.

Another major limitation is that the data set is missing complete data on household characteristics for some households due to partial reporting or no reporting at all from public housing agencies and landlords of the private subsidized development. For example, no reporting on households is required for units subsidized under the

LIHTC program although data are available on the geographic location of the units. Also, for privacy reasons, no household data are provided for the Section 8 certificate and voucher program. Therefore, household descriptions for these two programs cannot be determined. Additionally, data on buildings with less than 11 subsidized households reported are suppressed to protect the confidentiality of the households. The number of units for which information is suppressed is not specified. Based on the information provided, the reporting rate appears to be related to development or project administration rather than program type. None of the programs have consistently higher or lower reporting rates.

To adjust for partial reporting in any project, HUD's Office of Housing Programs weights the data based on the assumption that households that are reported are representative of other occupied units in the same project or program. Unfortunately, a full description of the weighting methodology is not available.

The national data set also lacks addresses for about 16% of subsidized units (not necessarily the same units with incomplete household data). Since these units cannot be placed in any neighborhood, the neighborhood totals are underestimates. The number of missing units for the Atlanta Metropolitan Region is not specified. Based on a review of the project records, there do not appear to be any missing addresses for the public housing and private subsidized housing developments. The number missing for the Section 8 certificate and voucher program (if any) cannot be determined.

Another limitation is the use of 1990 data for the neighborhood characteristics, while the data on the housing programs are for 1998. The census tract poverty rate, minority concentration, and homeownership rate are likely to have changed over the eight years. Although some 2000 Census data on these variables have been released, they were not available at the Census Tract level at the time this study was conducted and therefore precluded any updating of the data. Economic conditions during the 1990s, however,

have been relatively stable. Therefore, changes in economic indicators such as census tract poverty rates or homeownership rates may be relatively minor (D. Bachtel, personal communication, December 12, 2001).

This study's focus on the Atlanta Metropolitan Region also limits the generalizability of the findings to other areas. The demographics, culture, attitudes of residents, and housing market characteristics, as well as the administration of the housing programs being examined, in the Atlanta Metropolitan Region may have important influences on the findings of this study that may not be representative of other geographic locations, such as rural areas or other regions of the state or country. Additionally, this study only looks at HUD-subsidized units and LIHTC assisted units. Therefore, the findings may not be true of other federal or non-federal rental assistance programs.

Data Analysis Procedures

Descriptive Analysis

A descriptive analysis of assisted units in the Atlanta Metropolitan Region by program, and by county and city/suburb location was conducted using frequencies and percentage distribution. The distribution of the assisted units by program and census tract poverty rate, minority concentration, and homeownership rate provided information on how these neighborhood characteristics differed for each program.

Statistical Techniques

Logistic and Ordinary Least Squares (OLS) regression models were used to test the six hypotheses. The statistical analysis was performed using the SPSS Base 10.0 software package. The logistic regression model was used to examine which of the factors affect the likelihood of the presence of each type of assisted housing in a census

tract, thus three logistic regressions were performed. The regression equations took the following form:

$$log(CERTVOCH/1-CERTVOCH) = \alpha + \beta_1 POVERTY + \beta_2 MINORITY +$$
 $\beta_3 OWNSFD + \beta_4 LOCATION + \beta_5 PUBLIC +$
 $\beta_6 PRIVATE + e$

$$log(PUBLIC/1-PUBLIC) = \alpha + \beta_1 POVERTY + \beta_2 MINORITY +$$
 $\beta_3 OWNSFD + \beta_4 LOCATION + \beta_5 CERTVOCH +$
 $\beta_6 PRIVATE + e$

$$log(PRIVATE/1-PRIVATE) = \alpha + \beta_1 POVERTY + \beta_2 MINORITY +$$
 $\beta_3 OWNSFD + \beta_4 LOCATION + \beta_5 CERTVOCH +$
 $\beta_6 PUBLIC + e$

Three assumptions underlie the use of logistic regression. The first is that the dependent variable is a dichotomous variable. For this analysis, the three dependent variables were coded as dichotomous variables indicating the presence or absence of assisted units in a census tract for each program. The second assumption is that there should be a minimum of five to ten subjects per independent variable. In this study there were more than 10 subjects per independent variable. The last assumption, a lack of multicollinearity between the independent variables, was also met. A correlation coefficient of .70 or greater between two variables indicates a multicollinearity problem. The correlation matrix provided in Appendix A shows that multicollinearity was not a problem.

An alpha level of .05 was used in the logistic regression model. The statistical significance of the entire model was tested using the Chi-square. The Cox and Snell R-

square and Nagelkerke's R-square (an adjustment of Cox and Snell R-square) provided a measure of the strength of the relationship. The pseudo R-square, that is most analogous to the adjusted R-square in OLS regression, indicated the improvement in the predictive efficacy of the research model over the null model (Garson, n.d.).

The Wald Chi-square tested the significance of each independent variable on the presence of a specific type of assisted housing in a census tract. The size, nature and relative strength of the association were measured using the unstandardized regression coefficient and the odds ratio. The unstandardized regression coefficient indicated the direction and size of the relationship between the independent variable and dependent variable. The odds ratio provided an indication of the strength of the relationship and clarified the meaning of the coefficients. An odds ratio of one indicates that there is no effect, while an odds ratio of greater than one indicates a positive relationship and an odds ratio of less than one indicates a negative relationship.

While the logistic regression predicts the likelihood of finding a specific type of assisted housing within a tract, it does not take into account how the concentrations of the assisted housing may be related to the neighborhood attributes. To examine the relationship between the neighborhood attributes and the concentrations of the subsidized housing three simple OLS regressions were conducted using the number of assisted units per tract for each type of program as the dependent variable. The independent variables used were the same ones used for the binomial logistic analysis. The three equations were written as follows:

$$CERTVOCH = \alpha + \beta_1 POVERTY + \beta_2 MINORITY + \beta_3 OWNSFD + \beta_4 LOCATION + \beta_5 PUBLIC + \beta_6 PRIVATE + e$$

PUBLIC =
$$\alpha + \beta_1 POVERTY + \beta_2 MINORITY + \beta_3 OWNSFD +$$

$$\beta_4 LOCATION + \beta_5 CERTVOCH + \beta_6 PRIVATE + e$$
PRIVATE = $\alpha + \beta_1 POVERTY + \beta_2 MINORITY + \beta_3 OWNSFD +$

$$\beta_4 LOCATION + \beta_5 CERTVOCH + \beta_6 PUBLIC + e$$

OLS regression tests whether some independent variables are related to and help explain the dependent variable. Several assumptions also underlie the use of OLS regression. The first is that the dependent variable is an interval level variable. This assumption is met since the measure used for the dependent variables was the number of assisted housing units per census tract. As with logistic regression, OLS regression assumes a minimum of ten subjects per independent variable. This assumption was also met. The third assumption, a lack of multicollinearity between the independent variables, was also met.

The OLS regression model also used an alpha level of .05. The F-value tested the statistical significance for the full model and the R-square indicated the proportion of variability in the dependent variable that was explained by the set of independent variables. As the name implies, the adjusted R-square adjusts the R-square for sample size and the number of independent variables used in the model.

The t-value was used to determine the significance for each independent variable. The regression coefficient (b-value) indicated the direction and size of the relationship between each independent variable and the dependent variable. The beta weights provided an indication of the relative strength of the relationship between each of the independent variables and the dependent variable.

To determine whether there is clustering or concentration of Section 8 certificate and voucher program recipients in racially and economically defined neighborhoods in

the suburbs simple linear regressions were performed for census tracts located in the suburbs. The number of certificates and vouchers was the dependent variable with the census tract poverty rate, proportion of minority population, and homeownership rate as the independent variables. For comparison, a linear regression was also conducted for census tracts located in the central city.

Study variable names, definition and coding

The study variable names, definitions and coding are provided in Table 3. The cases were the 424 census tracts that comprise the Atlanta Metropolitan Region. As indicated earlier, the dependent variables were coded as dichotomous variables for the logistic regressions and as continuous variables for the OLS regressions.

The independent variables were the locational attributes of the census tracts. The census tract poverty rate was coded as a dichotomous variable indicating whether the tract was a low- or moderate-poverty census tract, or a high-poverty census tract. A poverty rate of less than ten percent is conventionally defined as low-poverty. Poverty rates of between ten percent and 29% are considered moderate, while a poverty rate of 30% or more is considered high (Turner, 1998).

The proportion of the minority population in a census tract was also treated as a dichotomous variable indicating a minority concentration of 50% or more or a minority concentration of less than 50%. The census tract homeownership rate was coded as a continuous variable indicating the proportion of households that are owner-occupants of single-family detached homes. The census tract location was also coded as a dichotomous variable indicating whether the census tract was located in the central city or in the suburbs. Finally, the number of other assisted housing units in the census tract was coded as a continuous variable.

Table 3

Measurement of Variables:

Study Variables Names, I	Definitions and Coding		
Variable	Description and coding		
Dependent Variables:	Assisted Housing Program		
	Logistic Regression	Multiple Regression	
CERTVOCH	Section 8 certificate & voucher units 0 = not present in tract 1 = present in tract	Number of Section 8 certificate and voucher units in census tract	
PUBLIC	Public housing units 0 = not present in tract 1 = present in tract	Number of public housing units in census tract	
PRIVATE	Private-subsidized housing units 0 = not present in tract 1 = present in tract	Number of private subsidized housing units in census tract	
Independent Variables	±		
Neighborhood Characteristics			
POVERTY	Tract Poverty Rate: % population in census tract that are poor 0 = poverty 30% 1 = poverty < 0-29%		
MINORITY	Tract Minority Concentration: Minorities as a % of census tract population $0 = \text{minority} 50\%$ $1 = \text{minority} < 50\%$		
OWNSFD Tract single-family owners: % of households in the census tract that are owner-Occupants of single-family detached home			
LOCATION			
Assisted Housing Program	1 Suburb		
PUBLIC CERTVOCH	Number of public housing units in census tract Number of Section 8 certificate and voucher units in census tract		
PRIVATE	Number of private subsidized housing units in census tract		

Summary

Exploring the performance of the Section 8 certificate and voucher program in the Atlanta Metropolitan Region relative to public housing and private-subsidized housing is a useful endeavor that will hopefully add to the growing body of literature that examines this issue. In this chapter, a description of the research design, data set and statistical techniques that were used for testing the hypotheses was presented. The results of the data analysis are provided in the following chapter.

CHAPTER 4

RESULTS

Introduction

In this chapter, the findings of the descriptive and statistical analyses are presented. First, a description of the distribution of the assisted housing stock by program, neighborhood characteristics and location is provided. Next the results of each logistic regression are reported, followed by an examination of the results as they relate to the hypotheses. The OLS regressions results are then presented in the same format.

Description of Assisted Housing in the Atlanta Metropolitan Region

The data in Table 4 show the distribution of the assisted housing stock in the

Metropolitan Atlanta Region by program, county and central city/suburban location.

Private subsidized housing constitutes the largest category of assisted housing,

accounting for 42% of the total assisted housing stock. Public housing and certificates

and vouchers each comprise just under one-third (29%) of the assisted housing stock.

Assisted housing units can be found in over three-fourths of the census tracts in the Atlanta Metropolitan Region, an average of 146 assisted housing units per tract. Certificates and vouchers are spread over 308 census tracts, with an average of 46 voucher and certificate recipients per tract. Public housing units, however, are concentrated in 55 tracts, with an average of 258 units per tract, while private developments can be found in 104 tracts with an average of 198 units per tract.

Table 4

Distribution of Assisted Housing by County and Central City/Suburban Location in Atlanta Metropolitan Region

	Census Tracts	Public Housing	्र व्य	Certificates & Vouchers		Private Subsidized Housing	sidized <u>B</u>	Total Assisted Housing	isted 1 <u>g</u>	Total Rental Housing	ntal B
		Z	%	Z	%	Z	%	Z	%	Z	%
Census Tracts	424	55	13.0^{a}	308	72.6 ^a	104	24.5 ^a	335	79.0^{a}	417	98.3^{a}
County											
Cherokee	18	152	1.1	09	0.4	109	0.5	321	0.7	5,656	1.5
Clayton	24	0	0.0	1,609	11.4	1,631	7.9	3,240	9.9	24,498	9.9
Cobb	59	840	5.9	992	7.0	1,457	7.1	3,289	6.7	61,634	16.7
DeKalb	92	437	3.1	3,261	23.1	4,125	20.1	7,823	16.0	89,384	24.2
Douglas	11	120	8.0	180	1.3	249	1.2	549	1.1	5,525	1.5
Fayette	10	0	0.0	74	0.5	82	0.4	156	0.3	2,909	8.0
Fulton	146	12,171	85.7	7,376	52.3	11,897	57.8	31,444	64.3	131,371	35.5
Gwinnett	46	363	2.6	287	2.0	029	3.3	1,320	2.7	40,925	11.1
Henry	11	118	8.0	61	0.4	221	1.1	400	8.0	3,428	6.0
Rockdale	7	0	0.0	215	1.5	128	9.0	343	0.7	4,666	1.3
Region Total	424	14,201	29.0^{b}	14,115	28.9^{b}	20,569	42.1^{b}	48,885	100.0	366,698	100.0
Location											
Central City	115	11,241	79.2	6,370	45.1	12,375	60.2	29,986	61.3	91,457	24.7
Suburban	309	2,960	20.8	7,745	54.9	8,194	39.8	18,899	38.7	278,539	75.3
Region Total	424	14,201	100.0	14,115	100.0	20,569	100.0	48,885	100.0	366,698	100.0

^a Percent of total census tracts

^b Percent of assisted housing stock

With respect to the distribution by county, over three-fourths (80.3%) of the assisted housing stock in the Atlanta Metropolitan Region is located in two counties, DeKalb (16%) and Fulton (64.3%). An examination of the distribution of the assisted housing stock by program type indicates that 85.7% of public housing units are concentrated in Fulton County alone. All of the other counties have less than six percent of public housing units. Private subsidized housing units are also concentrated in two counties, Fulton (57.8%) and DeKalb (20.1%). Similarly, three-fourths of certificates and vouchers are concentrated in Fulton County (52.3%) and DeKalb (23.1%).

An examination of the distribution of assisted housing by central city and suburban location shows that approximately two-thirds (61.3%) of the assisted housing stock is concentrated in the central city (Atlanta). An examination of the distribution of the assisted housing stock by city/suburban location reveals considerable differences among the three programs. Over three-fourths (79.2%) of the public housing stock and a little under two-thirds (60.2%) of private subsidized housing units are located within the City of Atlanta. Certificates and vouchers, on the other hand, have managed to penetrate the suburbs. Over one-half (54.9%) of certificates and vouchers are located in the suburbs, while only 45.1% are located in Atlanta.

Neighborhood Characteristics of Assisted Housing

Table 5 shows the distribution of assisted housing units by the census tract poverty rate. For comparison, the distribution of all rental units is also shown. The mean poverty rate for census tracts with public housing is 24%, while that for tracts with private subsidized housing is 14%. The mean poverty rate for tracts with certificates and vouchers is relatively lower at 11% and comparable to that for all rental housing (ten percent).

Table 5

Subsidized Units by Poverty Rate in Census Tract (percent)

			9		% Poverty in Census Tract	in Census	s Tract				
Housing Program											
	6-0		10-19%	%	20-29		+%08		Total		Mean
	Z	%	Z	%	Z	%	Z	%	Z	%	%
Public housing	829	5.84	1,624	11.44	435	3.06	11,313	99.62	14,201	100.00	24
Certificates & vouchers	2,922	20.70	4,569	32.37	3,723	26.38	2,901	20.56	14,115	100.00	11
Private developments	3,841	18.67	6,934	33.71	2,600	12.64	7,194	34.97	20,569	100.00	14
Total rental units	197,975	53.51	99,285	26.83	28,033	7.58	44,703	12.08	366,698	100.00	10

In general, public housing is concentrated in high-poverty census tracts. Over three-fourths (79.7%) of the public housing stock is located in census tracts with poverty rates of 30% or more, compared to 35% for private subsidized housing and 20.6% for certificates and vouchers. The concentration of public housing in high-poverty tracts is almost seven times as large as it is for all rental units. Conversely, less than 6% of public housing units are located in low-poverty tracts and 14.5% are located in moderate-poverty census tracts. The proportion of certificates and vouchers and private subsidized units in low- and moderate-poverty census tracts is considerably higher than the proportion of public housing. Approximately one-fourth of certificates and vouchers and private subsidized housing units are located in low-poverty tracts, while 58% of certificates and vouchers and 46.5% of private subsidized units are located in moderate-poverty census tracts.

The distribution of assisted housing units by the proportion of households who are owner occupants of single-family detached homes (i.e. the homeownership rate) in the census tract is presented in Table 6. As indicated in the table, the public housing and private subsidized housing stock is located in tracts where the mean homeownership rate is low (41% and 42%, respectively) relative to that for certificates and vouchers and all rental housing (53%). Less than 15% of public housing units are located in tracts where the majority (over 50%) of households are homeowners, while 60.9% are located in tracts with a homeownership rate of less than 25%. A higher proportion of private subsidized housing units (27.7%) are in tracts with a homeownership rate of 50% or more and just over one-fourth (25.3%) are found in tracts with a homeownership rate of less than 25%.

Comparatively, 44.9% of certificate and vouchers are in tracts with a homeownership rate of over 50%, and 15% are in tracts with a homeownership rate of less than 25%. This is

Table 6

Subsidized Units by Percent of Owner-occupied Housing in Census Tract

				O %	wner-occu	pied Hous	6 Owner-occupied Housing in Trac	ct			
Housing Program	0-24		25-49	_	50-74		75+		Total		Mean
	Z	%	Z	%	Z	%	Z	%	Z	%	%
Public housing	8,642	60.85	3,723	26.22	1,810	12.75	26	0.18	14,201	100.00	41
Certificates & vouchers	2,169	15.37	5,611	39.75	5,466	38.72	698	6.16	14,115	100.00	52
Private developments	5,204	25.30	9,658	46.95	5,194	25.25	513	2.49	20,569	100.00	42
Total rental units	106,507	28.79	144,930	39.17	89,419	24.17	29,140	7.88	366,698	100.00	53

higher than the proportion of all renter households (32.1%) that live in neighborhoods with homeownership rates of over 50%.

Table 7 provides data on the distribution of assisted housing by minority concentration in the census tract. The vast majority (85.3%) of public housing units are located in tracts with a minority concentration of over 50% and slightly over two-thirds are in tracts with a minority concentration of over 75%. The majority of certificates and vouchers are also located in census tracts with high minority concentrations. Almost two-thirds (71.9%) are in tracts with a minority concentration of over 50% and over one-half (59.6%) are in tracts with a minority rate of over 75%. A slightly lower proportion of private subsidized housing units is found in tracts with high minority concentrations. Less than two-thirds (59.6%) are located in tracts with a minority rate of 50% or greater, although just over one-half are located in tracts with a minority rate of over 75%. Just under one-third (32.2%) of all rental units are located in census tracts with a minority rate of 50% or more. Comparatively, only one-third (32.1%) of all rental units are located in tracts with a minority concentration of over 50% and only one-fifth (21.%) are located in tracts with a minority concentration of over 75%.

In summary, the data show that relatively high proportions of certificates and vouchers and private subsidized housing units are found in low- or moderate-poverty census tracts and in tracts with higher homeownership rates. Certificates and vouchers are also more dispersed than either of the project-based programs, with the majority living in suburban neighborhoods. This suggests that the majority of certificate and voucher recipient households and residents of private subsidized housing reside in better quality neighborhoods than do public housing residents.

Table 7

Subsidized Units by Minority Concentration in Census Tract (percent)

					%	Minorit	% Minority in Census Tract	us Tract					
Housing Program	6-0		10-24%	%	25-49	6	50-74	4	75+		Total	Mean	an
,	% N	%	Z	%	Z	%	Z	%	Z	%	% N	%	, 0
Public housing	618	618 4.35	704	4.96	092	5.35	1,347	9.49	10,772	75.85	14,201 100.00	00.	52
Certificates &	591	591 4.19	1,982	14.04	1,386	9.82	1,741 12.33	12.33	8,415	59.62	14,115 100.00	00.	37
vouchers													
Private developments	2,173 10.56	10.56	3,487	16.95	2,650	12.88	1,687	8.20	10,572	51.40	20,569 100.00	00.	43
Total rental units	62,976 17.02 118	17.02	118,838	32.12	69,349	18.74 3	39,425	10.66	79,408	21.46	369,996 100.00	00.	31

Logistic Regression Results

To test the hypotheses, three logistic regressions were estimated using the three types of assisted housing as the dependent variables. The dependent variables were dichotomous variables indicating the presence of housing units for each program in each of the 424 census tracts in the Atlanta Metropolitan Region. The independent variables used in the models were the census tract poverty level, the minority concentration in the census tract, the homeownership rate, the location of the census tract and the presence of other assisted housing units in the census tract.

The logistic regression model tests the overall null hypothesis that the set of independent variables does not predict the presence of each type of assisted housing in a census tract when compared to the null model. The individual null hypotheses state that there is no significant relationship between the independent variable and the presence of a specific type of assisted housing in a census tract. The results of the logistic regressions are provided in Table 8.

Factors Affecting the Presence of Certificates and Vouchers in a Census Tract

The test of the null hypothesis for the full model explaining the presence of certificates and vouchers produced a log likelihood of 452.938 and Chi-square of 44.662 (p=.000). Therefore, the overall null hypothesis that the set of independent variables do not predict the presence of certificates and vouchers in a census tract is rejected at α = .05. The pseudo R-square of 0.09 indicates that the predictive efficacy of the model is improved by 9% over the model without the independent variables.

Table 8

Binomial Logistic Regression Results of Assisted Housing in the Atlanta Metropolitan Region

							I	Dependent Variables	'ariables
	Certifica	tificates and Vouchers	chers	Pul	Public Housing		Private Su	Private Subsidized Housing	ousing
Independent Variables		(N=424)			(N=424)			(N=424)	
	В	Wald	Exp(B)	В	Wald	Exp(B)	В	Wald	Exp(B)
Intercept	1.800	13.035		0.413	1.431		0.009	0.001	
Poverty $(1=0-29\%)$	-0.315	0.356	1.370^{a}	-1.708	13.948***	5.524^{a}	-0.325	0.607	1.385^{a}
Minority $(1 = 0.49\%)$	-1.909	22.473***	6.757^{a}	-0.023	0.003	1.024^{a}	0.357	1.015	1.430
Homeownership (%)	0.001	0.046	1.001	-0.013	3.070	1.013^{a}	-0.027	23.180***	1.028^{a}
Location (1=suburbs)	1.029	8.152**	2.797	-0.705	2.822	2.273^{a}	-0.348	1.143	1.316^{a}
Assisted Housing									
Certificate &voucher units				0.002	0.505	1.002	0.012	23.303***	1.013
Public housing units	-0.002	2.37	1.002^{a}				-0.001	1.252	1.001^{a}
Private subsidized units	0.004	5.599*	1.004	-0.002	2.661	1.002^{a}			
2LOGL	452.938			263.380			395.057		
Chi Square with 3 df	44.662***			63.820***	*		77.359***	*	
Cox & Snell R-square	0.100			0.140			0.167		
Nagelkerke R-square	0.145			0.260			0.248		
Pseudo R-square	0.090			0.195			0.164		

p<.05, **p<.01, **p<.001

^a Inverse values of Exp(B)

Only three independent variables, minority concentration (χ = 22.473, p=.000), location (χ = 8.152, p=.004), and the concentration of private subsidized units (χ = 5.599, p=.018), are significantly related to the odds of having certificates and vouchers in the tract. Census tracts with a minority concentration of less than 50% are 6.76 times less likely to have certificate and voucher recipients than are census tracts where the minority population is 50% or greater.

As expected, census tracts that are located in the suburbs are 2.8 times more likely to have certificates and vouchers than are census tracts in the central city (Atlanta). Certificate and voucher households are also 1.004 times more likely to reside in census tracts that also have a higher concentration of private subsidized housing units. The two other variables of interest, poverty and homeownership, are not significant.

Factors Affecting the Presence of Public Housing in a Census Tract

The null hypothesis for the full model with public housing as the dependent variable is also rejected (Chi-square=63.820, p=.000) at α = .05. The pseudo R-square of .195 indicates that the predictive efficacy of the model is improved by 19.5% over the model without the factors. Only one independent variable, poverty (χ = 13.948, p=.000), is significantly related to the odds of having public housing units in the census tract. Low- or moderate-poverty census tracts are 5.52 times less likely to have public housing units than are high-poverty census tracts.

Factors Affecting the Presence of Private Subsidized Housing in a Census Tract

The null hypothesis of the full model with private subsidized housing as the dependent variable is also rejected. The Chi-square of 77.359 is significant (p=.000) at α

= .05. The set of factors improves the predictive efficacy of the model by 16.4% over the model without the factors as indicated by a pseudo R-square of .164.

Only two independent variables, homeownership ($\chi = 23.18$, p=.000) and the concentration of certificates and vouchers ($\chi = 23.303$, p=.000), are significantly related to the odds of having private subsidized housing located in the census tract. A one percent increase in the tract homeownership rate decreases the odds of finding certificates and vouchers in the tract by 1.03 and having certificates and vouchers increase the odds of having private subsidized housing in the tract by almost 1.01 times.

Comparison Across Programs

H₁: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with low- and moderate-poverty levels.

The results from the logistic regression only show that low- to moderate-poverty census tracts are less likely to have public housing units. The relationship between neighborhood poverty rates and certificate and vouchers and between neighborhood poverty rates and private subsidized housing was not significant. This hypothesis, therefore, cannot be accepted or rejected.

H₂: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with higher homeownership rates.

Again, this hypothesis cannot be accepted or rejected. The relationship was significant only with respect to private subsidized housing. Although the relationship between the tract homeownership rate and public housing and certificates and vouchers was in the predicted direction, the relationship was not significant.

H₃: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with a lower minority concentration.

The logistic regression results do not support this hypothesis. A significant result was found only between the census tract minority concentration and the presence of certificates and vouchers indicating that certificate and voucher recipients were less likely to live in neighborhoods with a minority concentration of less than 50%. The relationship between the census tract minority concentration and the presence of public housing or private subsidized housing units was not significant.

H₄: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in suburban neighborhoods.

A significant relationship was found only between the census tract location and the presence of certificates and vouchers. This relationship, however, was not significant for the presence of public housing or private subsidized housing. Therefore, the fourth hypothesis can neither be accepted nor rejected.

H₆: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with lower concentrations of other types of assisted housing.

This hypothesis is rejected. The results indicate that certificate and voucher recipients are attracted to census tracts with higher concentrations of private subsidized housing and vise versa. There were no significant findings to suggest that certificate and voucher recipients are either attracted to or avoid neighborhoods with public housing.

OLS Regression Results

To examine the relationship between the neighborhood factors and the concentration of assisted housing three linear regressions were performed using the number of units per tract for each of the assisted housing programs. The independent variables used are the same ones used for the binomial logistic analysis. The results are presented in Table 9.

Factors Affecting the Concentration of Certificates and Vouchers in a Census Tract

The results for this regression show a significant relationship for three variables, tract poverty rate (t=3.44, p=.001), minority concentration (t=-9.42, p=.000), and the concentration of private subsidized housing (t=5.01, p=.000). Low- to moderate-poverty census tracts, on average, have 37 more certificate and voucher recipients than do high-poverty census tracts. The tract minority concentration is negatively related to the number of certificates and vouchers in the tract: census tracts with a minority concentration of less than 50% have 71 fewer certificates and vouchers than census tracts with a minority concentration greater than 50%. The concentration of private subsidized housing in a tract also increases the concentration of certificates and vouchers. On average, a ten-unit increase in private subsidized housing in a tract increases the number of certificates and vouchers by 12 units. The regression results also show that there is a statistically significant relationship between the set of independent variables and the concentration of certificates and vouchers (F=24.747, p=.000). The adjusted R-square value of .252 suggests that the set of variables explain 25.2% of the variability in the dependent variable.

Table 9

Multiple Regression Results of Assisted Housing in the Atlanta Metropolitan Region

<u>Dependent Variables</u>	Public Housing Private Subsidized Housing	(N=424)	b-value Beta t-value b-value Beta t-value	216.675 13.244 139.476 7.398	-141.127 -0.398 -7.264*** -51.062 -0.148 -2.427*	-1.327 1.20E+01 0.045	-0.533 -0.115 -2.339* -0.580 -0.129 -2.477*				-0.146 -0.15 -2.925**	-1.38E-01 -2.925 -2.925**	25.305***	0.267 0.179	0.256 0.167
	Certificates and Vouchers	(N=424)	b-value Beta	42.572	36.975 0.197	-71.042 -0.497	6.90E-02 0.028	-1.597 -0.011			-2.25E-02 -0.043	0.123 0.226	24.747***	0.263	0.252
		Independent Variables		Intercept	Poverty $(1=0-29\%)$	(0	Homeownership (%)	Location (1=suburbs)	Assisted Housing	Certificate & Voucher units	Public housing units	Private subsidized units	Ľ	R-square	Adjusted R-square

p<.05, **p<.01, **p<.001

Factors Affecting the Concentration of Public Housing in a Census Tract

In this regression, three independent variables, poverty (t=-7.26, p=.000), homeownership (t=-2.34, p=.020), and private subsidized housing (t=-2.93, p=.004), are significantly related to the concentration of public housing in a census tract. Low- to moderate-poverty census tracts have an average of 141 fewer public housing units than high-poverty census tracts. Higher homeownership rates and higher concentrations of private subsidized units lower the concentration of public housing. A ten percent increase in the homeownership rate reduces the number of public housing units in the tract by five, while a ten unit increase in private subsidized housing reduces the number of public housing units by 14.

The relationship between the set of independent variables and the concentration of public housing was also significant (F=25.305, p=.000) at α = .05. The adjusted R-square value of .256 suggests that the set of variables explain about 25.6% of the variability in the number of public housing units by census tract.

Factors Affecting the Concentration of Private Subsidized Housing in a Census Tract

The full model with the set of independent variables is also significant (F=15.139, p=.000) at α = .05. The low adjusted R-square value of .167 suggests that these variables together explain only 16.7% of the variability in the number of private subsidized housing units by census tract.

Factors affecting the Clustering of Section 8 Certificates and Vouchers in the Suburbs

Table 10 presents the linear regression results between the census tract poverty rate and minority concentration and the number of certificate and vouchers in the census tract for census tracts located in the central city and the suburbs. There was a significant and positive relationship between the census tract poverty rate (t=3.15, p=.002) and the proportion of the minority population in the tract (t=9.87, p=.000), as well as the number

Table 10
Certificates and Vouchers Units by Suburban and Central City Location

Certificates and vouc	mers Omis by	Subulbai	i anu Centiai	City Locatio	<u> </u>	
			Dependent '	<u>Variables</u>		
Independent Variables	<u>Sub</u>	urbs (N=:	<u>309)</u>	<u>Central</u>	l City (N	=115)
	В	Beta	t-value	В	Beta	t-value
Intercept	-12.226		-1.539	13.983		0.516
Poverty (%)	0.932	0.169	3.316**	-2.127	-0.473	-3.445**
Minority (%)	0.935	0.519	9.663***	1.617	0.581	
						5.114***
Homeownership (%)	1.24E-	0.065	1.239	-0.152	-0.035	-0.322
	01					
F						
	49.999***			10.213***		
R-square	0.33			0.216		
Adjusted R-square	0.323			0.195		

^{*}p<.05, **p<.01, ***p<.001

of certificate and voucher units. A ten percent increase in the census tract poverty rate or proportion of minorities is associated with a nine-unit increase in the number of certificates and vouchers in the tract. The F-value was significant and the adjusted R-square value of .323 suggests that these two variables together explain 32.3% of the variation in the number of certificates and vouchers in a census tract.

Interestingly, a significant but negative relationship was found between the poverty rate (t=-4.24, p=.000) and the number of certificates and vouchers for census tracts located in the central city. A ten percent increase in the census tract poverty rate results in a 12 unit decrease in the number of certificates and vouchers in tract. The relationship between the proportion of minorities in the census tract and the number of certificates and vouchers was significant and positive (t=5.41, p=.000). A ten percent increase in the proportion of minorities results in a 16 unit increase in the number of certificates and vouchers in the tract.

Comparison Across Programs

H₁: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with low- and moderate-poverty levels.

The findings lend support to the first hypothesis. The results for the multiple regression show that certificates and vouchers are more concentrated in census tracts with low- to moderate-poverty levels than are public housing or private subsidized housing units.

H₂: Ceterus paribus, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with higher homeownership rates.

The relationship between the tract homeownership rate and certificates and vouchers was not significant although the relationship was significant and negative for both public and private subsidized housing. Consequently, this hypothesis can neither be accepted nor rejected.

H₃: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with a lower minority concentration.

The relationship between the minority concentration in a tract and the concentration of certificates and vouchers was significant but negative. The relationship between the minority concentration and public and private subsidized housing was not significant. This indicates that certificate and voucher recipients are not likely to live in neighborhoods with a low minority concentration. Therefore, this hypothesis is rejected.

H₄: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in suburban neighborhoods.

The results also do not support nor contradict this hypothesis. There was a significant and negative relationship between location and the number of private subsidized housing units. The relationship, however, was not significant for the number of certificate and voucher units or for public housing units.

H₅: *Ceterus paribus*, Section 8 certificate and voucher recipients living in the suburbs are likely to cluster in neighborhoods with higher poverty rates and minority concentrations.

The results from the OLS regression support this hypothesis. The relationship between the neighborhood poverty rate and the number of certificate and voucher units in the tract, as well as the minority concentration and the number of certificate and voucher units in the tract, was positive and significant.

H₆: *Ceterus paribus*, compared to residents of public housing and private subsidized housing, Section 8 certificate and voucher recipients are more likely to live in neighborhoods with lower concentrations of other types of assisted housing.

The hypothesis is rejected. The results indicate that certificate and voucher recipients are concentrated in census tracts that also have higher concentrations of private subsidized housing and vise versa. The results also show that tracts with higher concentrations of private subsidized housing also have higher concentrations of public housing units.

CHAPTER 5

SUMMARY AND IMPLICATIONS

Summary of Findings

Over the past three decades, the federal government's project-based rental housing assistance programs for low-income households have come under harsh criticism. While it is acknowledged that these programs have resulted in improved housing conditions and affordability for many low-income households, this has come at great expense to the public purse and to the quality of life for households living in urban areas where assisted housing developments have concentrated. These housing programs, according to critics, have contributed to or intensified the isolation and concentration of poor families and minority households in the most socially and economically distressed inner city neighborhoods.

Many housing advocates now contend that tenant-based rental housing assistance spatially deconcentrates the housing opportunities of lower-income households thereby reducing the concentration and isolation of poor and minority households. This form of housing assistance is supposedly designed to move low-income households from innercity areas with inadequate services, jobs, high crime and racial minority concentration to neighborhoods with low-poverty, middle-income residents, racial diversity, good services and more job opportunities (Galster & Zobel, 1998). In response, there has been a shift in federal rental housing policy away from project-based assistance toward tenant-based assistance. The effectiveness of this form of assistance is now a subject of great interest among housing researchers.

The purpose of this study was to assess the performance of a tenant-based rental assistance program (the Section 8 certificate and voucher program) relative to two types of project-based rental assistance programs (public housing and private subsidized housing) with respect to the goal of promoting greater economic and racial/ethnic integration and quality of life of low-income households. An *ex post facto* multivariate cross-sectional research design was used to examine the locational attributes for units assisted under each of the three programs in the Atlanta Metropolitan Region.

Data for this study were obtained from the 1998 A Picture of Subsidized

Households data set. The sample for this study consists of 424 cases which represent the census tracts that form the ten-county Atlanta Metropolitan Region.

Based on the proposed goals of tenant-based rental assistance and findings from the previous studies, it was hypothesized that households receiving assistance under the Section 8 certificate and voucher program were more likely than residents of public housing and private subsidized housing to live in neighborhoods with low- and moderate-poverty rates, lower minority concentrations and higher homeownership rates. It was further hypothesized that Section 8 certificate and voucher recipients are more likely to live in suburban neighborhoods, although Section 8 certificate and voucher recipients living in the suburbs were expected to cluster in neighborhoods with higher poverty rates and minority concentrations. Finally, it was hypothesized that Section 8 certificate and voucher recipients were more likely than residents of public housing and private subsidized housing to live in neighborhoods with lower concentrations of other types of assisted housing.

Descriptive data analysis provided information on the distribution of the assisted housing stock under each of the three programs. Logistic and OLS regressions were used for further analysis of the data. The independent variables were locational attributes of

the census tracts, which were the census tract poverty rate, minority concentration, homeownership rate, location (central city/suburbs), and the number of other assisted housing units in the census tract. The logistic regression predicted the likelihood of the presence of an assisted unit in a census tract given the locational attribute of the census tract. OLS regression was used to examine the relationship between the locational attributes and the concentration of assisted units in the census tract. A simple linear regression was also used to determine if Section 8 certificate and vouchers in the suburbs clustered in neighborhoods with higher poverty rates and minority concentrations.

Analysis of the descriptive data show that the majority of certificate and voucher units, as well as private subsidized housing units, are located in census tracts with low-to moderate-poverty census tracts, while public housing units are concentrated in high-poverty census tracts. The OLS regression results show also that census tracts with low-and moderate-poverty levels, on average, have higher concentrations of certificates and vouchers, but fewer public housing and private subsidized housing units. The logistic regression results only showed that low- and moderate-poverty census tracts were less likely to have public housing units.

These findings are consistent with what other researchers have found in similar studies (Guhathakurta, 2000; Hartung & Henig, 1997; Newman & Schnare, 1997; Pendall, 2000; Turner, 1998). The findings generally support the contention that tenant-based rental assistance expands the housing opportunities of lower income households in better quality neighborhoods. Unlike public housing residents, certificate and voucher recipients in the Atlanta Metropolitan Region have managed to find affordable housing in neighborhoods with low- to moderate-poverty levels.

Additionally, over one-half of certificate and voucher recipients in the Atlanta Metropolitan Region live in suburban neighborhoods with the possibility of expanded and improved job opportunities. Almost one-half also live in neighborhoods with a homeownership rate of 50% or greater which suggests neighborhood stability and access to better services and amenities that are often associated with increased homeownership (Rohe & Stewart, 1996). Comparatively, the majority of public housing and private subsidized housing residents live in the central city. Less than one-third of private subsidized housing and less than 15% of public housing units are located in tracts with a high homeownership rate. Hays (1985) reasons that tenant-based assistance is less visible than project-based assisted housing and is thus less likely to be resisted in lower poverty and suburban neighborhoods.

There is, however, evidence that certificate and voucher recipients in suburban neighborhoods tend to cluster in neighborhoods with higher poverty rates and minority concentrations. This finding is similar to that found in other parts of the country by Hartung and Henig (1997) and Turner, Popkin and Cunningham (1999). Hartung and Henig (1997) suggest that this may be a reflection of the location of the affordable housing stock, personal preferences, or both.

Tenant-based subsidies are also perceived as enabling and encouraging recipients to move into more racially/ethnically integrated neighborhoods. The descriptive data for the Atlanta Metropolitan Region, however, show that the overwhelming majority of certificate and voucher recipients live in census tracts where the minority population comprises at least one-half or more of the tract's population. Over one-half live in tracts with a minority concentration of over 75%. Similarly, the results of the logistic and OLS regressions indicate that census tracts with minority concentrations of less than 50% are less likely to have certificate and voucher units. The overwhelming majority of public housing residents also live in census tracts with high minority concentrations. A

comparatively lower proportion of private subsidized housing units, however, is found in tracts with high minority concentrations.

This finding suggests that tenant-based assistance has not encouraged recipients to move to more racially/ethnically integrated neighborhoods in the Atlanta Metropolitan Region. Racial and ethnic discrimination and discrimination against assisted housing, as well as personal preferences are factors that work against greater racial/ethnic integration and are very hard to overcome (Turner, Popkin, & Cunningham, 1999). Alternatively, this finding may due to a lack of integrated neighborhoods in the Atlanta Metropolitan Region. In 1990 the Atlanta metropolis had a segregation index of 73, which indicates that the residential neighborhoods are highly segregated (Farley, Fielding, & Krysan, 1997).

The logistic and OLS regressions also indicate that certificate and voucher recipients are attracted to neighborhoods where there are private subsidized housing units. Additionally, higher concentrations of private subsidized housing are found in census tracts with higher concentrations of public housing. A possible explanation for these findings is that the housing stock and landlords participating in the program are concentrated in specific locations.

Implications

The findings of this study suggest that tenant-based rental assistance has been relatively effective in expanding the housing opportunities of low-income households receiving housing assistance in the Atlanta Metropolitan Region. In comparison to residents of public housing and private subsidized housing, more Section 8 certificate and voucher recipients have found affordable housing in the suburbs and in desirable neighborhoods featuring low- to moderate-poverty levels with relatively high

homeownership rates. These neighborhood features suggest improved neighborhood stability, services and amenities as well as greater job opportunities.

The findings, however, also indicate significant clustering of Section 8 certificate and voucher recipients in neighborhoods with higher concentrations of assisted housing, as well as in suburban neighborhoods with higher poverty rates. This means greater action is needed by the local housing agencies to further promote the geographic deconcentration of Section 8 certificate and voucher recipients. The following suggestions are derived from the policy recommendations that emerged from a 1999 symposium on the issues of Section 8 mobility and the impacts on neighborhood health and are compiled in the 1999 report entitled, Section 8 Mobility and Neighborhood Health, by Turner, Popkin and Cunningham.

The first step that the local housing agencies in the Atlanta Metropolitan Region need to take is to compile an inventory and the geographic location of the affordable housing stock region-wide that meets the Fair Market Rent limits. If eligible units are widely dispersed, housing agencies would need to increase their outreach efforts to landlords in different geographic locations to encourage their participation in the program. Earlier research (Turner, Popkin & Cunningham, 1999) suggests that key to increasing landlord participation in the program is to strengthen program administration by reducing bureaucratic delays in terms of inspecting units, approving leases, and making payments. An area for future research would be a survey of landlords in this region to determine their awareness of the Section 8 program, the key barriers to their participation in the program and what incentives would increase their participation in the program.

A more difficult hurdle to overcome is the possible discrimination by landlords against Section 8 certificate and voucher recipients due to their race or ethnic origin or

family size. Additional research is needed to examine the locational outcomes of Section 8 certificate and voucher recipients in the Atlanta Metropolitan Region while controlling for household factors, such as racial/ethnic background, family size, age, and disability. To the extent that these household factors significantly affect the locational outcomes, it would provide a clue that housing discrimination may be a problem in this housing market. Another area of research would be to investigate the extent to which landlords in this region use non-participation in the Section 8 program to avoid renting to minority households or families with children. Educating recipient households of their rights under the Fair Housing Act and encouraging them to register complaints against landlords who violate the Act's anti-discrimination provisions will be important in combating housing discrimination.

There is also the concern that an influx of certificate and voucher recipients may precipitate or hasten economic or social decline in transitioning neighborhoods.

Transitioning neighborhoods are generally non-poor racially mixed or predominantly minority middle-class neighborhoods that are undergoing racial change from predominantly white to predominantly minority households. According to Turner, Popkin and Cunningham (1999), these neighborhoods are more accepting of Section 8 certificate and vouchers than predominantly white middle-class neighborhoods and creates the potential for geographic clustering. An area for future research would be investigate what types of neighborhoods are at risk of being adversely affected by an influx of Section 8 certificate and voucher recipients.

Housing agency administrators may need to improve their administrative procedures in terms of increasing the housing search assistance provided to Section 8 recipients. Providing program participants with easy to understand information regarding their location options and encouraging participant to consider other neighborhoods may

help to counter geographic clustering. Additionally, administrators may need to simplify their application procedures and reduce bureaucratic delays that impede the portability of Section 8 certificate and vouchers across jurisdictional boundaries.

If eligible units are geographically clustered, there are also a few alternatives that housing agency administrators can pursue to achieve greater geographic distribution. The local housing agencies can increase their payment standards to increase the number eligible units. Currently, housing agencies can set their payment standards anywhere between 90% and 110% of the Fair Market Rents. Housing agencies can also apply for HUD approval to increase the payment standard to 120% of the Fair Market Rent if it is determined that the maximum payment standard substantially restricts the number of eligible units. Housing agencies can also partner with local nonprofit housing developers to build more low and moderate cost housing units. A local housing agency (the Housing Authority of Fulton County) has already taken this approach by forming a nonprofit housing organization to develop low-income rental housing.

Greater geographic dispersion of the affordable housing stock, however, can only succeed to the extent that local zoning laws permit the development of more affordable multi-family housing or that there is no significant community opposition against the building of lower cost housing in certain neighborhoods. Therefore, another area of research would be to investigate local zoning laws in the Atlanta Metropolitan Region to examine the extent to which they pose barriers to the development of lower cost housing.

Recently, legislation was passed that authorizes the use of Section 8 Housing
Choice vouchers toward the purchase of a home. Under the Section 8 Homeownership
Program, households can use the amount of the voucher toward their monthly mortgage
payments and can use up to one year's worth of vouchers toward the down-payment on a
home. Lenders can also treat the amount of the voucher as income when determining a

home buyer's qualifying ratios (U.S. Department of Housing and Urban Development (HUD), 2001a; U.S. Department of Housing and Urban Development (HUD), 2001b; U.S. Department of Housing and Urban Development (HUD), New York Office of Public Housing, 2001). Local housing agencies may opt to dedicate a portion of their current Housing Choice voucher funding toward this homeownership program.

The Section 8 Homeownership Program has the potential of further expanding the housing opportunities and geographic distribution of low-income households in the Atlanta Metropolitan Region. However, the end result of this program is to further reduce the already limited rental assistance available to low-income households. For many low-income households renting is the most desirable housing option yet few who need rental assistance are receiving it.

In conclusion, the findings of this study show that tenant-based rental assistance is relatively effective in dispersing low-income assisted households from the central city and enabling them to move to lower poverty neighborhoods that offer the potential of improved social and economic opportunities. The program however, is not as effective in decreasing minority concentrations and there is evidence showing that Section 8 certificates and vouchers and private subsidized housing are concentrated in the same neighborhoods. Further investigation is needed to determine the factors that limit the program's effectiveness and to provide guidance for improving the program's performance.

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APPENDIX A

Appendix A

Correlation Coefficient Matrix	atrix						
	Poverty	Minority	Home- ownership	Location	Public Housing	Certificates & Vouchers	Private Subsidized
Poverty							giiisnou
Minority	**859.						
Homeownership	534**	487**					
Location	621**	576**	.439**				
Public Housing	.575**	.327**	306**	310**			
Certificates & Vouchers	.162**	.449**	129**	202**	600.		
Private Subsidized Housing	.215**	.217**	240**	294**	.004	.295**	1.000

Note: A correlation coefficient of .70 or greater indicates a multicollinearity problem.