## National Analysis of Housing Affordability, Adequacy, and Availability: A Framework for Local Housing Strategies

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# National Analysis of Housing Affordability, Adequacy, and Availability: A Framework for Local Housing Strategies 

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## FOREWORD

Local communities are in a better position than HUD to diagnose their housing needs and allocate available resources among them However, in order to make informed choices, policymakers and cıtizens must be able to acquire, analyze, and apply timely data on housing conditions and trends in their communities. National Analysis of Housing Affordability, Adequacy, and Availabiltty: A Framework for Local Housing Strategıes, prepared for HUD by the Urban Institute, blends information and guidance to help develop this capacity.

This report provides a statistical overview of U.S. housing markets and problems that draws upon some of the most authoritative, up-to-date information available To assist local planning efforts, HUD and the U.S Bureau of the Census recently provided States and entitlement communities with special tabulations from 1990 Census data that describe key local demographic and housing stock characteristics. This volume presents national aggregations of these data The profile of national and regional housing conditions they yield is valuable both in itself and as a set of statistical benchmarks to which data on local conditions may be compared.

However, Nattonal Analysis is not intended to be merely descriptive By framing a series of basic questions about a communty's housing conditions and illustrating how data from the special tabulations and other sources may be used to answer them, it helps guide communities through the process of conducting a thorough, critical assessment of housing needs that may serve as the basis for formulating appropriate local strategies and guiding public investment. A forthcoming companion volume will provide detalled examples of this type of housing market analysis for five prototype jurisdictions.

An mformed citizenry and a responsive local government are both essential to successful community action. This publication reflects HUD's commitment to ensuring that local governments, private groups, and individuals have access to the information and expertise they need to participate effectively in the planning process.


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## 1. BACKGROUND AND INTRODUCTION

The National Affordable Housing Act (NAHA) of 1990 requires states and localities to develop a Comprehensive Housing Affordability Strategy (CHAS), identifying a community's current and anticipated needs for affordable and supportive housing and outlining a strategy for addressing those needs. ${ }^{1}$ The starting point for a CHAS is a systematic analysis of the local housing market, including characteristics of households and the housing stock, estimates of housing problems--particularly among low- and moderate-income households,--and diagnosis of market mbalances underlyng these problems. The housing market analysis is intended to serve as a factual basis for a community's programmatic strategy and spending priorities. It should also provide evidence to inform local decisions about which housing market problems warrant intervention, and how scarce resources should be allocated among different housing needs and activities. ${ }^{2}$

This report analyzes national housing conditions and needs, using special tabulations of 1990 decennial Census data. ${ }^{3}$ Its purpose is twofold. First, it provides basic information about housing conditions and trends at the national and regional levels, to serve as context against which states and localities can compare their situations. Second, by highlighting key national conditions and trends and regional variations in housing circumstances, it illustrates ways m which communities throughout the U.S. may describe and then analyze their local housing markets in order to develop strategles for addressing housing problems and needs. The report analyzes

[^0]housing market conditions and dynamics, including population and households, the housing stock, and problems confronting low- and moderate-income households. ${ }^{4}$

State and local CHAS preparers will draw on a wide range of data sources to prepare meaningful analyses of their local housing markets. The 1990 Census should be a key startung point, providing much of the data required to assess housing conditions and problems, particularly among low- and moderate-income households. ${ }^{5}$ The Department of Housing and Urban Development (HUD) has collaborated with the Census Bureau to develop special tabulations of the 1990 Census data essential to preparing a CHAS. These special tabulations have been made avalable to state and local junsdictions in two forms. A limited set of key data items have been printed on a state-by-state basis, with entries for all counties and for cities with populations of 25,000 or more. In addition, more extensive tabulations are available on CD-ROM for jurisdictions that wish to conduct more detailed analysis than the data book tables will support.

The special Census tabulations were made available in July 1993. This report utilizes the special tabulations from the CD-ROM, also referred to as the CHAS database, to illustrate housing market analysis with national and regional averages. ${ }^{6}$ After showing how the data tabulations can be employed to document significant housing market conditions and housing problems, we discuss ways in which systematic housing market analyses can inform local debate and decisions about housing needs, community priorities, and mechanisms for public sector intervention.

[^1]
## The National Affordable Housing Act and the CHAS Requirement

The National Affordable Housing Act (NAHA) of 1990 provides funding to address a wide variety of housing needs, and offers local jurisdictions more discretion over the design of housing programs to meet those needs than previous federal programs. Title I of the Act reaffirms the "national goal that every American family be able to afford a decent home in a suitable environment." In addition, it identifies five specific purposes of the legislation:

1) to help families not owning a home to save for a down payment for the purchase of a home,
2) to retain wherever feasible as housing affordable to low-income famulies those dwelling units produced for such purpose with Federal assistance;
3) to extend and strengthen partnerships among all levels of government and the private sector, including for-profit and nonprofit organizations, in the production and operation of housing affordable to low-income and moderate-income families;
4) to expand and improve Federal rental assistance for very low-income families; and
5) to increase the supply of supportive housing, which combines structural features and services needed to enable persons with special needs to live with dignity and independence. ${ }^{7}$

NAHA terminates some existing HUD programs and creates new ones, such as HOPE and HOME, that enable jurisdictions to preserve and rehabilitate existing affordable housing and to produce new housing for low- and moderate-income households.

A key feature of the NAHA legislation is the increased flexibility it offers to local jurisdictions. Under previous federal housing programs, a jurisdiction or private developer would apply to HUD for approval of specific projects. Under NAHA, each participating jurisdiction lays out an overall housing strategy in its Comprehensive Housing Affordability Strategy (CHAS). Once a jurisdiction has received HUD approval of its CHAS, it can utilize NAHA programs within the strategy outlined in its CHAS, and under some programs, may not require project-by-project approvals. In other words,

[^2]state and local jurisdictions have greater authority to decide how best to utilize federal resources (in conjunction with other federal, state, and local programs). ${ }^{8}$

The rationale for this approach is that state and local governments are more familiar than federal agencies with market conditions and housing needs in their jurisdictions. Consequently, the legislation designates local governments as the primary architects of their respective housing programs. For example, the new HOME program created by NAHA is essentially a housing block grant that permits junisdictions to engage in a wide array of efforts (including housing production and tenant-based rental assistance) to benefit low-income households. ${ }^{9}$ While encouraging flexbblity, NAHA also seeks to ensure that local programs are effectuve in addressing housing needs. By requiring jurisdictions to document housing problems and analyze housing demand and supply, CHAS is intended to improve the skill of jurisdictions in identifymg needs that are not adequately met by the housing market. It is also intended to make them better able to craft strategies that target federal, state, and local resources to address those needs.

8 Under programs that still require project-by-project approval, applicants must certify that their proposals are consistent with the local CHAS Morton J. Schussheim, The Cranston-Gonzalez Natronal Affordable Housing Act: Key Provisions and Analysis, Congressional Research Service: Washington, D.C. January 31, 1991, p. 2.

Among the 13 stated purposes of HOME are the following.
"(1) to expand the supply of decent, safe, sanitary, and affordable housing, with primary attention to rental housing, for very low-income and low-income Americans;
(2) to mobilize and strengthen the abilities of States and units of general local government throughout the United States to design and implement strategies for achieving an adequate supply of decent, safe, sanitary and affordable housing,
(3) to provide participating jurisdictions, on a coordinated basis, with the various forms of Federal housing assistance, including capital investment, mortgage insurance, rental assistance, and other Federal assistance, needed --
(A) to expand the supply of decent, safe and affordable housing,
(B) to make new construction, rehabilitation, substantial rehabilitation, and acquisition of such housing feasible; and
(C) to promote the development of partnerships among the Federal Government, States and units of general local government, private industry, and nonprofit organizations able to utilize effectively all available resources to provide more of such housing;
(4) to make housing more affordable for very low-income and low-income families through the use of tenant-based rental assistance;
(5) to develop and refine, on an ongoing basis, a selection of model programs incorporating the most effective methods for providing decent, safe, sanitary, and affordable housing, and accelerate the application of such methods where appropriate throughout the United States to achieve the prudent and efficient use of funds made available under this title;..."

In addition to improving the technical expertise of local agencres, CHAS will increase jurisdictions' accountability to local constituents. The CHAS planning process stipulates that jurisdictions hold public hearings and solicit the written suggestions of citizens and housing advocates during a public comment period. This is expected to result in housing programs and strategies that are responsive to the diverse needs of individuals, organizations, and neighborhoods at the local level. At the same time, CHAS allows HUD to monitor housing activities in a jurisdiction that are intended to address local housing needs. To obtain funding under federal housing programs such as HOME, HOPE, CDBG, Supportive Housing Programs for the Elderly and Disabled (Sections 202 and 811), among others, applicants must certfy that their proposed activity is in accordance with the priorities identified in the local CHAS. ${ }^{10}$ Thus, in return for expanding the discretion granted to state and local governments, NAHA mandates the CHAS process, making local jurisdictions accountable for using their new authority in a manner consistent with the goal of NAHA, to serve the urgent needs of low- and moderate-income households.

By increasing accountability and documenting public policies, CHAS should strengthen the system of checks and balances among the local actors in the housing sector. Local citizens, nonprofit developers, and fair-housing groups have opportunitıes to articulate needs of various groups in society and to participate in policy development. Local governments must reconcile the needs of various constituent groups and craft equitable policies that serve all groups in proportion to their needs. CHAS itself aids in this reconcilation process by objectively documenting the extent of housing problems among various constituencies. HUD, as a final arbiter, can review the CHAS for completeness and consistency with the purposes of NAHA.

## History of Federally Mandated Housing Plans

Although Congress mandated development of local housing plans prior to CHAS, those planning requirements were less comprehensive. Precursors to CHAS included the Housing Assistance Plan (HAP), which outlined how jurisdictions would use their Section 8 and CDBG allocations for housing projects, and the Comprehensive Homeless

[^3]Assistance Plan (CHAP), which indicated how McKinney Act funds would be used to support homeless programs. In contrast to HAP and CHAP, CHAS encompasses spending and assistance priorities under a wide range of federal programs, ${ }^{11}$ as well as state and local initiatives. CHAS has the potential to generate broad strategic plans indicating how jurisdictions will combine various federal and non-federal subsidies to systematically address local housing problems and needs.

As a planning document, CHAS's predecessor, HAP, improved the analytical capacities of local governments, but did not provide an effective mechanısm for implementing policy choices. Like CHAS, it surveyed housing conditions, estimated housing assistance needs of lower income households, and developed annual and multiyear housing strategies based on housing market and needs analysis. According to a HUD-commissioned survey of ten cities, the HAP process gave mayors and city councils greater awareness and understanding of housing needs. HAP also increased partıcipation by citizens and communities in the planning of housing assistance, thereby developing a consensus and avoiding "political problems." ${ }^{12}$

Apparently, however, the HAP process was less effective as a guide'to resource allocation and program implementation than as a tool for identifyng needs and building a local consensus for program priorities. Critics maintain that HUD sometımes modified local housing strategies to make them consistent with federal policy onentation, not because the strategy failed to reflect local market conditions. Also, the HAP process did not mandate coordination among local housing departments, HUD area offices, and state agencies. As a result, different levels of government sometimes funded projects that thwarted each other's objectives or unnecessarily duplicated assistance. ${ }^{13}$ HAP was

11 Specifically, CHAS is required as a condition for obtaining funding under the HOME Program, all variants of the HOPE Program, the CDBG Program, the state-administered Low-Income Housing Preservation Program, the Shelter Plus Care Program, Supportive Housing Programs for the Elderly and Disabled (Sections 202 and 811), the Emergency Shelter Grants (ESG) Program, the Safe Havens Demonstration Program, the Supportive Housing Program, the Mod Rehab SRO Program, the Housing for Persons with Aids Program, and $\pm{ }^{2}$. the Rural Homelessness Grant Program.

- Paul R. Dommel and Associates, Analysis of Local Use of Housing Assistance Plans, U.S. ; Department of Housing and Urban Development: Washington, D.C. 1982, pp.4-6.

13 Dommel, 1982, pp.8-10; and Raymond J. Struyk and Jll Khadduri, "Saving the Housing Assistance Plan: Improving Incentives to Local Governments," Joumal of the American Planning Association, October 1980, pp.391-393.
intended to foster intergovernmental coordination to integrate housing assistance into a single comprehensive and coherent strategy, but appears to have failed in this regard.

- The CHAS process attempts to rectify problems afflicting HAP by encouraging consultation among levels and agencies of government. Respecting the autonomy of local government agencies, CHAS regulations seek to stimulate rather than mandate intergovernmental and inter-agency cooperation in planning a comprehensive delivery system for housing assistance.

The HAP process was also criticized for failing to provide adequate data and technical assistance. HUD did not assist jurisdictions in updating the population and household data in the decennual Census to account for migration, deaths, and births. Nor did HUD provide sufficient guidance to jurisdictions about other federal data sources containing relevant information for housing market analysis, or about how to relate housing conditions and needs to economic and demographic trends in their communitues or in the larger metropolitan area. ${ }^{14}$

To help CHAS preparers identify and utilize relevant data, HUD has developed not only the 1990 special Census tabulations, but also handbooks and trainıng materials with information about federal and non-federal data sources, and guidance about systematic analysis of housing markets and housing needs.

In sum, CHAS is the most recent and comprehensive federal effort to improve the plannıng capacities and decision-making process of local jurisdictions. It is intended to mprove local jurisdictions' ability to analyze their housing market conditions, identify priority housing needs, and design policies to address those needs. However, CHAS is much more than a technical planning document. In an era of federalism and decentralization of government services, CHAS attempts to foster regular information exchanges between government and citizens. It establishes a process whereby citizens can contribute to the development of housing strategies that serve all segments of the population, and can hold local governments accountable for carrying out these programs effectively.

[^4]
## Scope and Organization of this Report

This report presents a national profile of housing market conditions and housing problems. By outlining current conditions and recent trends at the national and regional level, it illustrates how communities can analyze their local housing market conditions in order to develop strategies for addressing housing problems and needs for assistance.

This report uses special tabulations of 1990 Census data that were made available on CD-ROM in the summer of 1993. The data have been aggregated up to the regional and national level by Urban Institute staff. ${ }^{15}$ The report distinguishes four Census regions--Northeast, Midwest, South, and West--and three types of communities--central cities, suburbs, and non-metropolitan areas. ${ }^{16}$ More precisely, metropolitan areas are dufferentiated from non-metropolitan areas, and metropolitan areas are further disaggregated into central cities and suburban areas. Therefore, communities characterized as suburban correspond to the non-central city portions of metropolitan areas.

Chapter 2 presents the illustrative national profile of housing conditions, trends, and problems. It corresponds to much of the data and analysis that a community would cover in the first two sections of the Community Profile portion of its CHAS. The purpose of this chapter is not to explain how the required CHAS data tables can be completed, but rather to illustrate how nationally available data can be used as a starting point for understanding local housing market conditions and for documenting the problems facing low- and moderate-income households. Individual communities may go well beyond the general analyses presented here, supplementing Census data with information collected locally, or focusing portions of their Community Profile on circumstances or problems of special local relevance. The CHAS database provides a useful basis for describing characteristics of households and the housing inventory, and for documenting the housing problems confronting households with low and moderate incomes. It should be emphasized that this report does not address the characteristics and needs of homeless

[^5]persons or of other persons with special needs, as required in the CHAS Community Profile.

Following the national profile of housing conditions and trends, Chapter 3 illustrates a process for analyzing market conditions and needs to develop a strategy for public sector intervention and investment. It introduces the analytic issues communities must address in preparing the Five-Year Strategy portion of CHAS. The purpose of this chapter is to illustrate how a community can diagnose the underlying causes of the housing problems documented in the CHAS Community Profile, in order to set goals for public sector intervention and to allocate resources among programs to achueve these goals. Every communty's strategy will be different, reflecting differences in local housing market conditions, financial and institutional capacities, and local political decisions. No single set of policy priorities is automatically implied by a given set of data about housing market conditions and problems. Nevertheless, hard evidence about local market conditions and problems should provide the basis for a community's spending priorities and program choices.

The Appendix provides a complete set of data tables, prepared from the CHAS database, that support the housing market analysis presented in Chapter 2. States and localities may find these tables useful as a basis for comparison as they describe and analyze their own housing market conditions and problems.

## 2. HOUSING CONDITIONS AND PROBLEMS IN 1990

The 1990 National Affordable Housing Act reaffirmed "the national goal that every American family be able to afford a decent home in a suitable envronment." Tremendous progress toward this goal has been achieved since it was first articulated in 1949. But decent housing at an affordable price is still not a reality for many households with low or very low incomes.

Excessive cost burden is the most widespread housing problem facing American households today, and is particularly prevalent among very low-income renters. Nearly three-fourths of very low-income renters pay over 30 percent of therr income for housing, and more than 4 in 10 pay over half of their income for housing. The incidence of excessive housing costs is lower among homeowners, with about half of very low-income owners paying over 30 percent of their income for their monthly housing costs, and about 3 in 10 paying over 50 percent. As household incomes rise, the incidence of excessive cost burden drops dramatically, so that very few moderate-or middle-incomehouseholds, renters or owners, pay more than 30 percent of their income for housing.

Problems of overcrowded or physically inadequate housing affect far fewer households than do affordability problems. Overall, around 5 percent of households lived in overcrowded units in 1990 and 8 percent of households lived units classified by the American Housing Survey as moderately or severely inadequate in 1989. Large households are more likely than other households to experience problems of housing inadequacy and crowding, especially large households with very low incomes.

In any market area, both observed problems and all housing outcomes are shaped by the interaction of demand and supply forces, including the number and charactenstics of households and their purchasing power, the composition of the existing housing stock, and the costs of building and maintaining housing units. During the 1980s, the total supply of housing units increased faster than the number of households, resulting in rising vacancy rates and declining real housing costs in most areas of the country. However, the benefits of more readily available and affordable housing generally did not filter down to households at the bottom of the income distribution. In particular, severe musmatches persisted between the number of renter households with extremely
low incomes and the number of rental housing units affordable for them without subsidy at rents below 30 percent of their income.

After several years in which owner-occupancy rates declined for the first time since World War II, homeownership rates appear to have stabilized in most parts of the country. Still, young families are not becoming homeowners at the same rate as their counterparts did two decades ago. Although there is little evidence of a serious affordability mismatch for current homeowners, the abilty of low-income renters to make the transition to homeownership appears limited in many markets. In many places, the number of owner units affordable to low-income households is much smaller than the number of low-income renters. Also, for many, opportunities for homeownership may be further limited by racial and ethnic discrimination. Black and Hispanic households at every income level are less likely to own their homes than Whites.

To establish priorities for assisting low-mncome residents and to decide which programs best respond to identified housing problems, the CHAS document should progress logically from an analysis of housing market conditions and needs through identification and setting of priorities for investing resources to specific proposals for programs and strategies. The first Community Profile section of a CHAS provides the information base for subsequent analysis of priority needs and assistance activities. It should describe the characteristics of local population and households, document the size and characteristics of the housing stock, and relate demand and supply conditions to the extent and types of housing problems among very low-, low- and moderate-income households as well as the homeless and populations with special needs for supportive housing. ${ }^{1}$

This chapter uses data from special tabulations of the 1990 census to describe housing market conditions and trends at the national level, and to compare patterns across the four Census regions and their central city, suburban, and non-metropolitan areas. The analysis illustrates how nationally avarlable data can be used in preparing

[^6]a Community Profile, and provides benchmarks against which communties can compare their findings.

The housing market analysis here is organized into three main sections. The first focuses on population and household characteristics, and corresponds in large part to the Community Description sub-section of a local CHAS outline. When individual communities prepare this section for their CHAS, they may go substantially beyond the analysis presented here, using a wider variety of information sources. The 1990 Census special tabulations do not provide all of the data required to complete thus section, in part because communities need to discuss important trends affecting the local housing market and analyze areas withun the community where low-income and/or minority households are concentrated. Because this report is national in scope, it cannot address the full range of historical, social, and economic factors and trends that shape a local housing market. For the same reason, this report does not focus on neighborhood concentrations of poor and minority households.

The second section of this chapter focuses on the size and charactenstics of the local housing stock, and corresponds in part to the Market and Inventory sub-section of a local CHAS outline. Again, individual communities may prepare more detanled analyses. Specifically, the Census tabulations do not provide data on the size of the assisted housing inventory, although we have provided some summary statistics on this issue, based on data avaulable from the national Amencan Housing Survey (AHS). ${ }^{2}$ In addition, communties will use this portion of their CHAS to inventory facilities and services for the homeless and persons with special supportive housing needs.

Finally, the third section of this chapter documents housing problems and needs, particularly for low- and moderate-income households. This section corresponds to the Needs Assessment sub-section of a local CHAS outline. The discussion of housing problems among low- and moderate-income households focuses on problems as of 1990, and does not attempt to update them to 1993 or to forecast future needs for housing assistance.

[^7]
## Number and Characteristics of Households

The Community Description section of a local CHAS is intended to provide basic background information about a community and the households that live in it, and to identify important factors and trends that affect housing affordability within the local market and its neighborhoods. ${ }^{3}$ In addition, this portion of a local CHAS should identify and describe nerghborhoods or areas in which low-income and minority households are concentrated. Communities can draw upon a wide range of data sources, moluding the special tabulations of the 1990 Census.

The illustrative analysis presented here uses data from the 1980 and 1990 Censuses to describe important trends in population and households for the nation as a whole. In addition, this section explores variations among regions of the country, and among the central city, suburban, and non-metropolitan portions of these regions. Specafic topics discussed in this section include the overall number (and change in number) of people and households, household size and composition, race and ethnicity, income levels, and rates of homeownership. ${ }^{4}$ HUD's "Data Book for CHAS Preparers" provides (in published form) almost all of the 1990 Census data necessary for a comparable analysis at the state or local level, although other published sources must be consulted to assemble data on trends in local population and households, and on median income levels. In addition, communities may conduct more detailed analysis of household composition, race/ethnicity, and income from the special Census tabulations in computerized form.

[^8]
## Population and Households

Because both growth and decline pose challenges for providing affordable housing, trends in population size and numbers of households are a crucial starting point in analyzing housing demand. Census data show that total U.S. population increased by 9.8 percent during the 1980 s, from 227 milhon in 1980 to 249 million in 1990. Reflecting a continued decline in average household size, households grew at a faster rate, increasing by 14.4 percent during the decade. Table 2.1 shows that household and population growth differed greatly across regions. ${ }^{5}$ Both the Northeast and Midwest experienced slow population growth, with increases of 3.4 percent and 1.4 percent, respectively, during the 1980s. Population grew more rapidly in the South and West, increasing by 13.4 percent and 22.3 percent, respectively. In the Northeast, Midwest, and South, household growth exceeded population growth. Only in the West did population growth slightly exceed household growth. Even so, of the four Census regions, the West expenenced the biggest percentage increase in households over the decade. Individual jurisdictions experienced a much wider range of growth rates than those reported at the regional level in Table 2.1.

In every region, suburbs contain the largest share of households, and nonmetropolitan areas the fewest. Exhibit 2.1 shows the distribution of households across central cities, suburbs, and non-metropolitan areas for each of the four Census regions in 1990. In the Midwest and South, central cities included only slightly more households than did non-metropolitan areas, while in the West and Northeast much smaller shares of households were located in non-metropolitan areas. ${ }^{6}$

## Household Size

Average U.S. household size has been declining over the past several decades, with the average household in 1990 containing 2.63 persons (Table 2.2). Average household

[^9]| Table 2.1 <br> Total Population by Region (Thousands) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 1980 | 1990 | Growth Rate |
| Northeast | 49,135 | 50,809 | 3.4 |
| Midwest | 58,866 | 59,669 | 1.4 |
| South | 75,372 | 85,446 | 13.4 |
| West | 43,172 | 52,786 | 22.3 |
| Total | 226,546 | 248,710 | 9.8 |
| Total Households by Region (Thousands) |  |  |  |
|  | 1980 | 1990 | Growth Rate |
| Northeast | 17,471 | 18,861 | 8.0 |
| Midwest | 20,859 | 22,326 | 7.0 |
| South | 26,486 | 31,836 | 20.2 |
| West | 15,574 | 18,970 | 21.8 |
| Total | 80,390 | 91,994 | 14.4 |
| Source: 1980 Census of Population and Housing and (1990) CHAS database |  |  |  |

size declined from 3.14 persons in 1970 to 2.76 persons by 1980 , a reduction of 12 percent. During the 1980 s , household size decreased at a slower rate, only about 5 percent. Declining household sizes explain why the total number of households grew more rapidly than total population.

Rapid growth in one- and twoperson households largely explains the

Table 2.2 Average Household Size, 1970 to 1990

Year Household Size
$1970 \quad 3.14$
$1975 \quad 2.94$
$1980 \quad 2.76$
$1985 \quad 2.69$
$1989 \quad 2.62$
$1990 \quad 2.63$

Source: Stattstical Abstract of the Unuted States 1992, Table 56. decline in average household size. Exhibit 2.2 shows the distribution of households by size from 1970 to 1990. Households with 5 or more people declined dramatically as a share of total households over this penod,

from over 20 percent in 1970 to only about 10 percent in 1990. Single-person households comprised 25 percent of all households in 1990, up from 17 percent in 1970. Two-person households also increased slightly as a share of total households, rising from 29 to 32 percent of households over the two decades. Three- and four-person households maintained their shares of total households, together comprising about one-third of all households.

At the end of the 1980s, the decline in household sizes slowed, in part because of the changing racial and ethnic composition of U.S. households. Minorities, who tend to have larger households, are growing as a share of all households. Table 2.3 shows that White non-Hispanic households were on average smaller than Black or Hispanic households. In 1990, the average White non-Hispanic household contained 2.5 people, compared to an average household size of 2.9 for Black non-Hispanic households and 3.5 for Hispanic households.

Regional trends highlight the link between racial and ethnic composition and average household size. As Table 2.4 illustrates, all four regions had nearly the same

average household size in 1980, and the lowest average household size was 2.71 people per household in the West. However, the West's average household size remained virtually unchanged during the 1980s; it now has the highest average household size of the four regions. As other exhibits

## Table 2.3 Average Household Size by Race and Hispanic Origin

| Race/Ethnicity | $\mathbf{1 9 9 0}$ |
| :--- | :--- |
|  |  |
| U.S. Total | 2.63 |
| White, non-Hispanic | 2.51 |
| Black $^{*}$ | 2.87 |
| Hispanic | 3.53 |

Source: General Population Characteristics, 1990 Census, Table 40

Includes Black Hispanic households. in this chapter will show, the West has a higher share of Hispanic households than do
other regions. This contributes to a higher than average household size in the West, since Hispanic households are larger, on average, than either White or Black nonHispanic households. In California, for example, the average household size of 2.68 people was lower than the regional average for the West in 1980. But by 1990, average household size had increased so greatly that it exceeded the average for the West as a whole. Other factors contributing to increases in household size in the West include rapıd population growth, high housing costs, and growth restrictions in some areas.

## Household Composttion

Household composition is an important determinant of demand for housing units of vanous sizes and types. For this reason, the Census special tabulations will identify four household types as required for CHAS Table 1C: elderly households, small related households, large related households, and other households. ${ }^{7}$ These four categories were chosen to facilitate consideration of both eligibility for housing programs and the relative sizes of housing units needed by different household types. Because persons aged 62 or older qualify for housing programs for the elderly such as Section 202 that provide only efficiency or one-bedroom units, "elderly households" include only households with one or two persons in which either the householder or the householder's spouse is at least 62 years of age. The second person in the household need not be related to the householder. Small related households include two to four persons, at least one of whom is related to the householder by blood, marriage, or adoption. To meet HUD occupancy standards, such households will typically require housing units with at least two bedrooms. Large related

[^10]households include five or more persons, at least one of whom is related to the householder, and will require housing with three or more bedrooms. ${ }^{8}$ Any household not included in one of the above categories is an "other" household. Four-fifths of "other" households are non-elderly one-person households; the others have two or more unrelated individuals.


Small related households account for almost half ( 48 percent) of all households. Just 11 percent of all households are classified as large related households. Elderly households account for 23 percent of all households and other households account for the remaining 18 percent. Exhibit 2.3 shows the distribution of households by type across central cities, suburbs, and non-metropolitan areas in 1989. Elderly households represent a larger share of total households in non-metropolitan areas than in central cities or suburbs. Small related households account for 42 percent of central city households and about half of suburban households. The share of households categorized as "large related" is slightly higher in the suburbs than elsewhere. Other

[^11]households account for 13 percent of households in non-metropolitan areas, 16 percent in suburbs, and 24 percent in central cities. Overall, therefore, suburban communities are most likely to have the greatest demand for large housing units.

## Household Race and Ethnucity

In all regions, central city residents are more racially and ethnically diverse than residents of suburbs or non-metropolitan areas, although White non-Hıspanic households represent the majority of households in all regions and types of places. Exhrbit 2.4 lllustrates the distribution of households by race and ethnucity for the four regions. Although White, non-Hispanic households are 80 percent of all households, they comprise a smaller share of central city households, ranging from 63 percent in the South to 72 percent in the Midwest. Minonties represent the smallest share of households in non-metropolitan areas, ranging from 2 percent of Northeastern households to 19 percent of Southern households. Black households are the largest minority group in the country and in three of the four Census regions. In the West, Hispanic households are the largest minority group, comprising 9 percent of households in non-metropolitan areas, 13 percent of households in the suburbs, and 15 percent of central city households.

Native Americans, Asians, and other racial/ethnic groups identified in the Census comprise a fairly small share of U.S. households. Their population shares are largest in the West, where Asian and Pacific Islanders comprise 6 percent of central city households and 7 percent of suburban households. Native Amencans comprise 4 percent of households in non-metropolitan areas in the West but only 1 percent or less of households in suburbs and central cities. ${ }^{9}$

During the 1980 s, minority households increased at faster rates than did total households. As table 2.5 shows, the number of Black households increased by 18 percent, the number of Hispanic households rose by nearly 50 percent, and the number of other (non-Hispanic) households grew by just over 60 percent. The rapid increase in the number of households in the latter two groups in part reflects the small number of

[^12]
such households in $1980 .{ }^{10}$

## Household Incomes

Ajurisdiction's
median income provides a summary measure of the community's wellbeing relative to its surrounding housing market and the nation as a whole. ${ }^{11}$

## Table 2.5 <br> Total Households by Race/Ethnicity

|  |  |  | Growth <br> Rate |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{1 9 8 0}$ | $\mathbf{1 9 9 0}$ |  |
| White non-Hispanic | $66,533,938$ | $73,633,749$ | $10.7 \%$ |
| Black non-Hispanic | $8,265,603$ | $9,766,771$ | $18.2 \%$ |
| Hispanic | $4,007,896$ | $6,001,718$ | $49.7 \%$ |
| Other (non-Hispanic) | $1,582,236$ | $2,545,172$ | $60.9 \%$ |
| Total | $80,389,673$ | $91,947,410$ | $14.4 \%$ |

Source: 1980 and 1990 Census of Population and Housing. households for 1985 and 1989, using constant 1989 dollars. ${ }^{12}$ In all regions, owner median incomes are significantly higher than renter incomes; the highest incomes for each tenure type are found in the suburbs. Median incomes reported in the Northeast and West tend to be higher than those in the South and Midwest.

Median incomes increased in nearly all locations between 1985 and 1989, although the size of the increases varied greatly across regions. As exhibit 2.5 shows, income changes ranged from a 20.5 percent increase in Northeastern central cities to a 0.6 percent decrease in Western non-metropolitan areas. The Northeast showed the strongest income growth in cities, suburbs, and non-metropolitan areas.

A CHAS Community Profile (and the priorities and programs that ultimately flow from it) is intended to focus primarily on households at the bottom of the income distribution, because these households are the most likely to need assistance in

[^13]|  |  | ian Inc | able 2.6 by Reg 3 dollar | n - Rent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Centra | Cities | Sub |  | Non-met | politan |
|  | 1985 | 1989 | 1985 | 1989 | 1985 | 1989 |
| Northeast | 15,478 | 20,000 | 23,048 | 25,000 | 16,134 | 17,000 |
| Midwest | 14,578 | 15,000 | 20,743 | 22,950 | 13,829 | 14,400 |
| South | 16,710 | 17,000 | 21,896 | 23,000 | 11,825 | 12,000 |
| West | 19,476 | 21,000 | 24,201 | 25,000 | 15,500 | 15,400 |
|  | Median Income by Region - Owners (1989 dollars) |  |  |  |  |  |  |
|  | Central Cities |  | Suburbs |  | Non-metropolitan |  |
|  | 1985 | 1989 | 1985 | 1989 | 1985 | 1989 |
| Northeast | 28,810 | 35,000 | 38,030 | 42,000 | 24,201 | 27,420 |
| Midwest | 29,041 | 30,000 | 36,877 | 38,000 | 24,201 | 25,270 |
| South | 31,115 | 30,175 | 33,420 | 34,825 | 21,896 | 22,000 |
| West | 36,877 | 39,000 | 38,030 | 40,000 | 24,528 | 25,700 |
| Source: Urban Institute tabulations of the 1985 and 1989 AHS. |  |  |  |  |  |  |

obtaining adequate and affordable housing. CHAS classifies households into five relative income categories based on reported household income, the number of people in the household, and geographic location. These income categories are used to reflect income limits that define eligibility for HUD's major assistance programs, as well as for other housing programs such as the Low-Income Housing Tax Credit, which vary with location and household size. The five income categories are: 1) at or below 30 percent of the HUD-adjusted median family income (HAMFI), ${ }^{13}$ 2) between 30 and 50 percent of the adjusted area median, ${ }^{14}$ 3) between 50 and 80 percent of HAMFI, 4) between 80 and 95 percent of HAMFI, and 5) above 95 percent of HAMFI. Extremely low-income households,

[^14]
those with incomes at or below 30 percent of area median, ${ }^{15}$ are reported separately because they typically have much more severe housing problems than do other income groups. ${ }^{16}$ They are also considered to be at greater risk of homelessness than households with higher incomes. Low-income households (at or below 80 percent of HAMFI) and very low-income households (at or below 50 percent of HAMFI) are elngible for HUD's two main rental programs--Section 8 rental assistance and public housing. These income cutoffs are also important for targeting resources under the HOME and CDBG programs. Moderate-income households (up to 95 percent of area median) are eligible for some federal homeownership programs.

[^15]

Unlike poverty thresholds, the five income categories vary greatly across the country. For a family of four, the 1989 very low-income cutoff ranges from $\$ 11,250$ (in non-metropolitan areas in Southeastern Missourn) to

| Table 2.7 |  |  |  |
| :--- | ---: | ---: | ---: |
| Ratios of HuD's Very Low-Income Cutoffs to <br> Weighted Average Poverty Thresholds |  |  |  |
| Household Size |  |  |  |
|  | $\mathbf{1}$ | $\mathbf{4}$ | $\mathbf{6}$ |
|  |  |  |  |
| Poverty Threshold | $\$ 6,310$ | $\$ 12,674$ | $\$ 16,921$ |
| Average Ratio | 1.93 | 1.37 | 1.19 |
| Maximum Ratio | 3.59 | 2.56 | 2.22 |
| Minimum Ratio | 1.3 | .93 | .81 | $\$ 32,400$ (in Stamford, Connecticut), that is, from 93 percent to 256 percent of the weighted average poverty threshold. ${ }^{17}$ Moreover, as Table 2.7 shows, the very lowincome cutoffs are a larger multiple of the poverty threshold for smaller households than for larger households. The average ratio of the very low-income cutoff to the poverty threshold ranges from 1.93 for a single person household to 1.19 for a six-person household.

Very low-income households comprise about one-quarter of all households. Another quarter of households have incomes between 50 and 95 percent of HAMFI, and the remaining half have incomes above 95 percent of HAMFI. Although central cities contain fewer households than do suburbs, they account for a larger share of very lowand low-income households. Exhibit 2.6 illustrates the distribution of households by income group in 1989 for central cities, suburbs, and non-metropolitan areas in each region. Higher income households are overrepresented in suburban areas while lower income households are disproportionately found in central cities. In all regions, a much larger share of central city households have incomes at or below 80 percent of median than is true for suburban households. The share of central city households that fall into the low-income category varies from about 43 to 50 percent across the four regions, while the share of suburban households that are low-income ranges from 31 to 35 percent.

When completing the Community Description section of their CHAS, jurisdictions must consider the extent to which low-income and/or minority households are concentrated in certain neighborhoods. Block- or tract-level Census data can be

[^16]represented on a map to show the location of any concentrations of minonty or lowincome households. Because this report considers the nation as a whole, no mapping is included in here. ${ }^{18}$ The analysis of concentrations of Black and Hispanuc households in the next section examines the extent of segregation in different metropolitan areas.

Minority households are more likely to have low incomes than White households. ${ }^{19}$ Exhibit 2.7 shows the percent distribution of households in the 3 lowest income categories for each of the major racial/ethnic groups in central cities, suburbs, and non-metropolitan areas nationwide. In all areas, over half of Black and Hispanic households are low-income, compared to 31 to 41 percent of White households. In central cities and non-metropolitan areas, about two-thirds of Black households are lowincome and around one-third have incomes at or below 30 percent of area median. Although only slightly fewer Hispanic than Black households have low incomes, a smaller share of Hispanc households have extremely low incomes.

## Concentrations of Munority Households

Significant racial and ethnic segregation exists in all metropolitan areas in the United States. Segregation of Black and Hispanic households tends to be particularly severe in the Northeast and Midwest. The segregation of Black households is most pronounced, but segregation of Hispanic households is also substantial in many places.

One way to assess racial or ethnic segregation across metropolitan areas is to compute dissimilarity indexes, which measure the extent to which minonty households are evenly distributed across each metropohtan area. The index is computed by calculating the share of minority households that would have to relocate in order to achieve an even spatial distribution within a metropolitan area. An index value of zero, the lowest possible value, means that minority households are evenly represented in all Census tracts. The index reaches its maximum value of 1.0 when maximum segregation exists, that is, if each Census tract contains only minority households or only majority

[^17]
## Exhibit 2.7

Distribution of Households by Race/Ethnicity and Low-Income Group




Source CHAS database; Appendix table 7B
households. ${ }^{20}$
The Census Bureau has computed dissimılarity indexes using 1990 data to compare the location of Blacks and Whites in 256 metropolitan areas, and to compare the location of Hispanic and White Anglo (nonHispanic) households in 170 metropolitan areas. ${ }^{21}$ Table 2.8 shows the five metropolitan areas with the highest segregation indexes, and Appendix Table 33 reports the indexes for all metropolitan areas for which they were computed. As the table shows, all five of the metropolitan areas with the highest dissimilarity indexes for Black and White

## Table 2.8 <br> Five Highest Dissimilarity Index Values

Black/White Segregation
Index Metropolitan Area
.899 Gary-Hammond, Indiana
.876 Detroit, Michigan
.855 Chicago, Illinois
.850 Cleveland, Ohio
. 826 Milwaukee, Wisconsin
Hispanic/Anglo Segregation
Index Metropolitan Area
. 699 Reading, Pennsylvania
. 667 Newark, New Jersey
.663 Hartford, Connecticut
. 658 New York, New York
. 649 Lancaster, Pennsylvania
Source: Appendix table 28. households are located in the Midwest. The metropolitan areas with the most severe Hispanic/Anglo segregation are all found in the Northeast.

In most areas, Black households experience more severe segregation than do Hispanic households. Of the metropolitan areas for which dissimilarity indexes were computed, only about 10 percent ( 26 areas) had Black/White dissimilarity indexes below .4, while about half (85) of the 170 Hispanic/Anglo dissimilarity indexes were below this level. In comparison, the midpoint of the distribution of Black/White dissimilanty indexes is just below .6.

[^18]
## Household Tenure Choice

Prior to the 1980s, the nation's homeownership rate had increased steadily since World War II, rising from 55 percent in 1950 to 64.4 percent at the time of the 1980 Census. ${ }^{22}$ Although the homeownership rate has remained relatively constant since 1980 , homeownership rates for young households have declined while those for

| Table 2.9 |  |  |
| :--- | :---: | :---: |
| Homeownership Rates by Region |  |  |
|  | $\mathbf{1 9 8 0}$ | $\mathbf{1 9 9 0}$ |
|  |  |  |
| Northeast | $59.0 \%$ | $61.3 \%$ |
| Midwest | 68.8 | 68.1 |
| South | 67.0 | 66.2 |
| West | 60.3 | 59.0 |
| U.S. Total | 64.4 | 64.2 |
| Source: 1980 and 1990 | Census of Population |  | older households have increased. The homeownership rate for households headed by individuals age 25 to 34 declined from 52.3 percent in 1980 to 42.9 percent in 1991; while the rate for households headed by individuals 65 or older increased from 72.3 percent to 76.8 percent. ${ }^{23}$

Although the nationwide homeownership rate was about the same in 1980 and 1990, the direction of change differed across regions. The rate increased in the Northeast and declined elsewhere (Table 2.9). Historically, homeownership rates in the West and Northeast have been noticeably lower than in the Midwest and South.

In all regions, the rate of homeownership is much higher in suburbs and nonmetropolitan areas than in central cities. In all regions except the West, homeownership rates outside of central cities exceed 70 percent. Central cities in the Northeast have the lowest homeownership rates - only 41 percent of these households own their unts.

Not surprisingly, owner-occupants tend to have higher incomes than renter households. Exhibit 2.8 compares the income distribution of owner and renter households. In the chart, the height of the unshaded area represents the number of owner households and the combined height of the shaded and unshaded areas represents the number of renter plus owner households in each income segment. Among

[^19]
households with annual incomes of less than $\$ 10,000$, renter households slightly outnumber owner households, but in all other income strata owners outnumber renters. The ratio of owners to renters rises sharply for households with incomes above $\$ 40,000$. Moreover, as appendix table 8 details, at every income level, ownership rates are highest in non-metropolitan areas and lowest in central cities.

Exhibit 2.9 illustrates differences in homeownership rates by income group, race/ethnicity, and household type. Except for extremely low-income households, over half of all households are homeowners, with the homeownership rate increasmg with relative income. Black and Hispanic households are less likely than White non-Hispanic households to be homeowners. In fact, even after adjusting for income differences, munorities are less likely to be homeowners than are Whites. Elderly households are the most likely to be homeowners, followed closely by large related and small related households. The homeownership rate for other households (37.7 percent) is around half

the rate for any of the preceding groups.

## Summary

In any community, the demand for housing depends upon complex interactions among population growth, household size, household income, and housing costs. Other factors such as housing discrimination, the location of employment, and local amenities also affect housing demand. Population growth can lead to the formation of new households or an increase in average household size. Likewise, population decline does not always decrease the total number of households.

During the 1980s, population and households grew much more rapidly in the South and West than in the Northeast or Midwest. In most places, the number of households grew more rapidly than population, due to growth in smaller households, particularly those with one or two persons.

Household incomes vary by tenure, race/ethnicity, region, and type of place. In all areas, owner median incomes are significantly higher than renter incomes, and minority households are more likely than White households to have low incomes. Median incomes reported in the Northeast and West tend to be higher than those in the South and Midwest. Overall, about one-quarter of households and 39 percent of renters are classified as very low-income, but a larger fraction of households in central cities than in suburbs or non-metropolitan areas fall into this category. Central cities contain more very low-income households and more renters than do suburbs or non-metropolitan areas.

Central cities house larger shares of minority households than do suburbs. Minority households comprise 28 to 37 percent of central city households, compared to 6 to 24 percent of suburban households in the four Census regions. Racial and ethnic segregation is still high in most metropolitan areas, but is particularly severe in the Northeast and Midwest.

Nationally, the homeownership rate rose slightly during the second half of the 1980s, after declining during the first half of the decade, but homeownership rates continued to decline for young households. Higher income households are much more likely to be homeowners than those with lower incomes, but at every income level Black and Hispanic households are less likely to own their homes than Whites.

## Size and Characteristics of the Housing Inventory

The Market and Inventory sub-section of a local CHAS focuses on the size, condition, and other characteristics of the local housing stock. It provides a systematic inventory of the amount and adequacy of housing units available for occupancy at various cost levels, trends in the availability and cost of housing, and potential barriers to the production of housing in the community. ${ }^{24}$ Among the challenges to be addressed in this analysis are defining and quantifying "substandard units," and estimating the number of units with a high probability of lead-based paint hazard.

The illustrative analysis presented here uses data from the 1980 and 1990 Census to describe the size, condition, and cost of housing for the nation, the four regions of the country, and their central city, suburban, and non-metropolitan sub-regions. Specific topics covered in this section melude the total number of housing units (both occupied and vacant), trends in vacancy rates, the distribution of units by cost, the share of units lacking complete plumbing or kitchen facilities, and the age of housing units (as an indicator of lead hazard).

HUD's "Data Book for CHAS Preparers" provides much of the 1990 Census data necessary to conduct comparable analyses at the state or local level. Individual communities will need to consult other published sources to assemble data on trends in the number of units and vacancy rates, and to define and quantify substandard housing.

## Size of the Housing Stock

During the 1980 s, the housing stock grew slightly faster in all regions than did the

[^20]| Table 2.10 <br> Total Housing Units by Region <br> (Thousands) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 1980 | 1990 | Growth Rate |
| Northeast | 19,087 | 20,810 | 9.0 |
| Midwest | 22,822 | 24,493 | 73 |
| South | 29,420 | 36,065 | 22.6 |
| West | 17,083 | 20,895 | 22.3 |
| Total | 88,411 | 102,264 | 15.7 |
| Total Owner-Occupied Housing Units by Region (Thousands) |  |  |  |
|  | 1980 | 1990 | Growth Rate |
| Northeast | 10,308 | 11,574 | 12.3 |
| Midwest | 14,351 | 15,200 | 5.9 |
| South | 17,746 | 21,078 | 18.8 |
| West | 9,391 | 11,179 | 19.0 |
| Total | 51,771 | 59,031 | 14.0 |
| Total Renter-Occupied Housing Units by Region (Thousands) |  |  |  |
|  | 1980 | 1990 | Growth Rate |
| Northeast | 7,163 | 7,298 | 1.9 |
| Mıdwest | 6,508 | 7,117 | 9.4 |
| South | 8,740 | 10,744 | 22.9 |
| West | 5,583 | 7,757 | 38.9 |
| Total | 27,994 | 32,916 | 17.6 |
| Source. 1980 and 1990 Census of Population and Housing and (1990) CHAS database. |  |  |  |

number of households. Table 2.10 provides summary data from the 1980 and 1990 Censuses showing growth in the housing stock by region. Nationwide, the number of housing units increased by 15.7 percent, whule the number of households increased by 14.4 percent. As a result, housing vacancy rates increased between 1980 and 1990 in all four Census regions. As Table 2.11 illustrates, rental vacancy rates rose from 7.1 percent in 1980 to 8.6 percent in 1990 , and owner vacancy rates increased from 1.8 percent to 2.0 percent over the same time period. The Northeast had the lowest rental vacancy rates, while in the South rental vacancy rates were

| Table 2.11 <br> Rental Vacancy Rates by Region |  |  |
| :---: | :---: | :---: |
|  | 1980 | 1990 |
| Northeast | 5.0 | 6.4 |
| Midwest | 7.4 | 8.0 |
| South | 8.7 | 11.2 |
| West | 6.7 | 7.4 |
| U.S. Total | 7.1 | 8.6 |
| Owner Vacancy Rates by Region |  |  |
|  | 1980 | 1990 |
| Northeast | 1.3 | 1.8 |
| Midwest | 1.7 | 1.4 |
| South | 1.9 | 2.4 |
| West | 2.4 | 2.1 |
| U.S. Total | 1.8 | 2.0 |
| Source 1980 Census of Population and Housing and CHAS database. |  |  | consistently higher than the national average. Owner vacancy rates vary less dramatically by region and over time, ranging from a low of 1.3 percent (in the Northeast in 1980) to a high of 2.4 percent (in the South in 1990).

## Size Distribution of Housing Units

Although the share of small households (consisting of just one or two people) increased and the share of large households (consisting of five or more people) decreased over the last two decades, the housing stock, particularly the owned stock, is composed disproportionately of units with three or more bedrooms. Exhibit 2.10 presents the distribution of owner and rental units by size for central cities, suburbs, and nonmetropolitan areas in 1990. The vast majority of homeowner units have three or more bedrooms, and almost none have fewer than two. This pattern is particularly evident in suburban communities, where three-quarters of all homeowner units have three or more

bedrooms. Among rental units, however, the pattern is quite different. In the suburbs, 32 percent of rental units are efficiency and one-bedroom units, while only 24 percent of units have three or more bedrooms. Small rental units are most prevalent in central city jurisdictions, and least prevalent in non-metropolitan areas.

## Phystcal Condition

In assessing its housing market, a community needs to consider the physical condition of the existing stock. Many different measures can be used to determine

whether a unit is habitable, or if not, whether it can be rehabilitated in a cost-effective manner. The only measure of physical inadequacy available from the special tabulations of the 1990 Census is the number of units lacking complete kitchen or plumbing. Because of this limitation of the Census data, jurisdictions need to use other data sources to determine the share of housing units are inadequate. The American Housing Survey (AHS) ${ }^{25}$ contains two composite measures of a unit's physical condition indicating whether a unit is moderately or severely inadequate. Moderately inadequate units can probably be rehabilitated cost effectively, while severely madequate units cannot. ${ }^{26}$

The Census measure shows extremely low rates of unit deficiency, reaching a high of 2.5 percent in non-metropolitan areas in the South (Exhubit 2.11). Rather than indicating that almost no units have problems, this shows the limitation of using the Census measure of inadequacy. Therefore, the AHS measures of inadequacy have been included to illustrate a more likely incidence of substandard units. Even with the broader definition, rates of severe or moderate housing inadequacy were below 10 percent in most areas in 1989. Only in non-metropolitan parts of the South and Northeastern and Southern central cities did inadequacy rates exceed 10 percent.

Although the 1989 AHS and the 1990 Census provide substantially different absolute measures of inadequacy, the relative rankings produced by the two sources can be compared. Using the share of units with problems in the non-metropolitan South, the area with the highest incidence of problems, as the benchmark, the length of the lines in the two graphs show relative differences in the incidence of problems. Central cities have comparatively higher rates of inadequacy when the AHS measure is used. The incidence of problems is particularly high in Northeastern and Southern central cities. Both the Census measure and the AHS measures show lower rates of madequacy in suburban areas than in central cities or non-metropolitan areas. In suburban areas the relative regional rankings are the same for the two measures; the South has the highest

[^21]This assumption underlies the original definitions of severe and moderate physical problems.
incidence of inadequacy and the Midwest has the lowest. The relative incidence of problems in Northeastern and Western non-metropolitan areas is noticeably higher for the Census measure.


#### Abstract

Age of Stock The age of a community's housing stock also provides clues about its condition Older units tend to be more costly to repair or renovate, may not contain the amenities desired by households, and are much more likely to contain lead pant hazards. This last hazard is of particular concern for units occupied by famılies with chuldren. Although the lead paint hazard in any individual unit will depend on the unit's condition, the allowable lead content of paint declined after 1950 and was eliminated completely in 1978, so unuts built prior to 1950 are most likely to put therr occupants at risk of being exposed to lead paint.


The histoncal timing of a communty's economic and household growth clearly affects the age of its housing stock. As Exhibit 2.12 shows, central cities, particularly those in the Northeast and Midwest, have older housing than suburbs. The Northeast has more units bult before 1950 in its central cities and suburbs than any other region. It also has the largest share of central city housing in such old units; well over half of Northeastern central city housing was built before 1950. In all parts of the country, a large fraction of the current suburban housing stock was added since 1960, reflecting the fact that a large share of recent growth occurred in the suburbs.

## Housing Costs and Housing Affordability

Median housing costs in relation to income provide a summary measure of overall housing affordability, in much the same way that median incomes provide a summary measure of a community's well-being. In line with the distribution of incomes across geographic areas, housing costs are higher in suburbs than in central cities or nonmetropolitan areas. Regionally, housing costs in the West and Northeast exceed those in the Midwest and South. Table 2.12 compares median housing costs for renters and owners. For renters, reported costs include monthly rent and utilities. For owners, costs include mortgage payments, mortgage insurance, property taxes, utilities, and related costs. The lower reported out-of-pocket housing costs for owners compared to renters


is due to the fact that many owners do not have outstanding mortgages. ${ }^{27}$

In addition to looking at current housing costs, a housing market analysis should include a review of recent trends in housing costs. Median real monthly housing costs decreased for the U.S. as a whole between 1985 and 1989, but changes in median housing costs and house values differed considerably by

| Table 2.12 |  |  |
| :--- | ---: | ---: |
| Median Monthly Housing Costs, 1989 |  |  |
| Region/Type of Place | Owners | Renters |
|  |  |  |
| Central Cities | $\$ 388$ | $\$ 402$ |
| Suburbs | 457 | 486 |
| Non-metropolitan Areas | 215 | 286 |
|  |  |  |
| Northeast | 449 | 473 |
| Midwest | 342 | 356 |
| South | 281 | 369 |
| West | 474 | 500 |
| U.S. | 364 | 411 |
| Source: Appendix tables 13 and 14. |  |  | region. The middle panel in Exhibit 2.13 shows that median gross rents in the Midwest, South, and non-metropolitan areas of the West decreased in real terms between 1985 and 1989. In other areas, median real gross rents increased. The largest increase in median real gross rents, 13.8 percent, occurred in Northeastern central cities. The largest decline occurred in non-metropolitan areas in the West, where the median real gross rent decreased by 11.7 percent.

While the center panel in Exhibit 2.13 shows how a median household's housing costs changed during the late 1980s by region and sub-region, the top and bottom panels in the same exhibit show how rents changed in the upper and lower quartiles respectively. ${ }^{28}$ Renter housing costs at the lower quartile level generally showed slightly larger percentage decreases or slightly smaller percentage increases in real rents than did the median. At the upper quartile level, housing costs tended to rise more or declune less than at the median.

[^22]

As was true for renters, median real monthly costs for homeowners decreased in most areas between 1985 and 1989, with higher income owners more likely than other owners to face increases in housing costs. Exhibit 2.14 shows changes in housing costs for owners at the lower and upper quartiles as well as at the median. At the lowest level, housing costs decreased for owners in all areas and types of places, while at the upper quartile, housing costs increased for owners in the Northeast and in suburban areas in other regions. Owner housing costs showed more volatility than did renter costs. There were few areas in which renter housing costs increased or decreased by more than 10 percent. However, there were several areas, particularly at the lower quartile level, in which owner costs decreased by 20 percent or more.


Although housing costs decreased between 1985 and 1989 in many areas, this trend is unlikely to continue in the 1990 s because of a slowdown in new construction during the latter half of the 1980 s. Exhibit 2.15 shows trends in private new housing

| Table 2.13 <br> Income Change Minus Housing Cost Change, 1985 to 1989 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Central Cities | Suburbs | Non-Metro Areas |
| Renters |  |  |  |
| Northeast | 17 | 1 | 5 |
| Midwest | 7 | 13 | 10 |
| South | 11 | 9 | 6 |
| West | 5 | 1 | 13 |
| Owners |  |  |  |
| Northeast | 18 | 13 | 13 |
| Midwest | 9 | 4 | 32 |
| South | 8 | 10 | 33 |
| West | -3 | 0 | 13 |
| Note: Differences shown are based on changes measured at the median. |  |  |  |

starts from 1964 though 1991. A combination of factors uncluding high vacancy rates, tax reform, and the savings and loan crisis led to decreases in new housing starts in every year from 1986 to 1991. Barring a dramatic decline in the growth of demand, this slower growth in supply can be expected to reduce vacancy rates and eventually increase real housing costs during the 1990s.

Changes in housing costs only describe one side of the housing market picture. They should be interpreted by comparing changes in housing costs to income changes. As previous exhibits showed, median real incomes rose in nearly all areas between 1985 and 1989. If the median housing cost change is subtracted from the median rate of income growth, the result provides a measure of the net impact of the two changes. For renters and owners, Table 2.13 reports the result of subtracting the percentage change in housing cost from the percentage change in income between 1985 and 1989. In most areas, the net impact at the median was positive. In Northeastern central cities, both owners and renters saw a net gain of over 17 percentage points. In non-metropolitan areas in the Midwest and South, net gains for owners exceeded 30 percentage points. Households in Western metropohtan areas fared worse than most other locations. A 6 percent increase in income combined with a 9 percent increase in housing costs left central city owners in the West with a net loss of 3 percentage points.

Despite the widespread decline in real monthly housing costs, real house values increased in nearly all regions, with the most striking increases occurring in the Northeast. Exhibit 2.16 shows the growth in house values between 1985 and 1989. Values increased by 30 percent or more in central cities and suburbs, and by over 25
percent in non-metropolitan areas in the Northeast. Growth exceeded 10 percent in Western central cities and suburbs, and was negative only in non-metropolitan areas in the West and Midwest.


Because a CHAS Community Profile is intended to focus primarily on households at the bottom of the income distribution, a jurisdiction's analysis of the housing stock should focus on units that are affordable to these households. Housing units can be classified by their relative affordability in a fashion similar to the classification of households by relative income groups. This can help policymakers begin to identufy mismatches between housing demand and supply. For rental units, a total housing cost of 30 percent or less of income is considered affordable. For these tabulations, an owner
unit is defined as affordable if its value does not exceed 2.5 times annual household income. ${ }^{29}$

Units are classified by affordability based on the HUD-adjusted area median incomes used in determining household income groups. Housing cost and value thresholds are computed for each relative income category defined above (e.g., 0 to 30 percent of median, 30 to 50 percent of median). Because housing costs and values vary with unit size, rent and value thresholds are also adjusted by unit size. Thresholds for efficiency and one-bedroom units are based on the income limits for a 1.5-person household, since one or two people can live in such units without being crowded. ${ }^{30}$ For two-bedroom units, affordability thresholds are computed using the income limits for a three-person household. For larger units, those with three or more bedrooms, the income limits are based on a 4.5-person household.

Only a small fraction of the total housing stock is affordable to very low-income households. Exhibit 2.17 shows the distribution of housing unuts by affordability category. About 12 percent of the housing stock is affordable to extremely low-income households; an additional 17 percent is affordable for households with incomes up to 50 percent of HAMFI. The Northeast and West have much smaller shares of affordable units in most locations than do the Midwest and South. Although more housing units are located in the suburbs than elsewhere (about 43 milhon units nationwide), smaller fractions of those units are affordable to very-low and extremely low-income households than is true in central cities or non-metropolitan areas.

Although relatively few rental unts are affordable for unassisted households with extremely low incomes, the number of units that would be affordable for households using Section 8 vouchers or certificates is much larger. Table 2.14 shows the fraction of rental units of each size with 1989 rents equal to or less than HUD's Fair Market Rent

[^23]
(FMR) for units of that size. ${ }^{31}$ Two-thirds of all rental units have rents below local FMRs, meaning that two-thurds of the rental stock would be affordable to very low-income households with vouchers or certfficates. The share of units renting for less than the FMR is lowest in

| Table 2.14 <br> Share of Units Renting for Less than the Local Fair Market Rent, 1989 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 0 or 1 BR 2 BR 3+ BR |  |  |  | Total |
| Central Cities | 69.9\% | 64.7\% | 74.1\% | 68.7\% |
| Suburbs | 58.3 | 53.5 | 658 | 58.0 |
| Non-metro | 81.9 | 75.0 | 85.3 | 79.9 |
| Total | 67.5 | 62.0 | 73.3 | 66.5 |
| Source: Appendix tables 29A and 29B. |  |  |  |  | the suburbs, 58 percent, and highest in non-metropolitan areas, 80 percent. A somewhat hugher share of large (3 or more bedrooms) than small units rent for less than the applicable FMR.

Unit affordability categones show the housing market from the supply perspective. The next section considers both the supply and demand perspectives, by comparing the number of households and housing units in different affordability categories.

## Housing Mismatch

A first step in assessing whether affordable housing is avalable for meeting household demand is to consider whether the housing stock matches the income distribution of households. For renters, Table 2.15 compares the number of units in each affordability category with the number of renter households of equivalent income, by reporting the ratio of housing units to households. Ratios of less than 1.0 indicate that there are fewer housing units affordable to households in a given income group than there are households in that income group. A unit is considered affordable for an income group if its monthly housing cost is less than or equal to 30 percent of the income of a household at the top of that income group. ${ }^{32}$

Rental units afforrdable for households with extremely low incomes are in relatively short supply in all regions, partıcularly in metropohtan areas. In 1990, units affordable

[^24]|  | Table 2.15Housing Stock Mismatch - RentersRatio of Units to Households by Affordability Category |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Affordability <br> Category | Central Cities | Suburbs | Non-Metro Areas | Total |
| Northeast | 30\% or less | 0.65 | 0.82 | 1.05 | 0.73 |
|  | 50\% or less | 1.11 | 1.18 | 1.39 | 1.16 |
|  | 80\% or less | 1.48 | 1.64 | 1.63 | 155 |
|  | Total | 1.10 | 1.12 | 1.12 | 111 |
| Midwest | 30\% or less | 0.65 | 0.81 | 1.39 | 0.85 |
|  | 50\% or less | 1.35 | 142 | 1.84 | 148 |
|  | 80\% or less | 1.54 | 1.86 | 1.70 | 1.67 |
|  | Total | 1.13 | 1.11 | 1.11 | 1.12 |
| South | 30\% or less | 0.68 | 0.92 | 1.34 | 0.92 |
|  | 50\% or less | 1.24 | 1.34 | 1.56 | 1.35 |
|  | 80\% or less | 1.66 | 1.82 | 1.67 | 1.71 |
|  | Total | 1.16 | 1.16 | 1.15 | 1.16 |
| West | 30\% or less | 0.43 | 0.58 | 1.24 | 0.59 |
|  | 50\% or less | 0.82 | 0.82 | 1.51 | 0.91 |
|  | 80\% or less | 1.38 | 1.42 | 1.68 | 1.43 |
|  | Total | 1.10 | 1.10 | 1.12 | 1.11 |
| Total | 30\% or less | 0.61 | 0.79 | 1.31 | 0.79 |
|  | 50\% or less | 1.14 | 1.17 | 1.62 | 1.24 |
|  | 80\% or less | 1.52 | 1.68 | 1.67 | 1.60 |
|  | Total | 1.12 | 1.13 | 1.13 | 1.13 |

Source: Urban Institute tabulations of the CHAS database; Appendix table 30.
at this level fell short of households by 20 percent nationwide. This trend is most severe in the West, where there are only enough affordable units for 59 percent of the extremely low-income households, and least severe in the South, where there are enough affordable units for 92 percent of extremely low-income households. Shortages of units affordable at thus lowest level are greatest in central cities where most poor renters live. Non-
metropolitan areas appear to have sufficient numbers of extremely low-cost units to match the numbers of extremely low-income households.

Although the shortage of units affordable to extremely low-income renters is severe and widespread, in most regions and sub-regions there are more than enough rental units in the affordability range that extends up to 50 percent of median income. The only exceptions are the central cities and suburbs of the West, where the numbers of units affordable at 50 percent of median income still fall short of the number of renter households.

All areas show a substantial excess of units affordable at 80 percent or less of median. Nationwide, the number of units affordable to households in this income group exceeds the number of households by over 50 percent. Overall, the surplus of units affordable to low-income households is lowest in central cities and highest in the suburbs. Regionally, the Northeast and West have the smallest percentage surplus and the South has the highest.

These shortfall estimates are actually lower bound estimates because they implicitly assume that households are matched to units in their affordability category; instead, higher income households often reside in units that could be affordable to the lowest income households. Therefore, the shortfall estimates are undoubtedly underestimates. ${ }^{33}$

There is less mismatch between the number of owner households and the potential affordability of the owner housing stock than is true for renters. Table 2.16 compares the number of very low- and low-mncome owner and renter households with the number of owner housing units in each of these affordability ranges. Owner unit affordability is estimated based on the unit's value and does not reflect actual costs faced by current owners. ${ }^{34}$ In the "total" section of Table 2.16 , ratios greater than 1.0 show that, overall, the number of owner units potentially affordable to very low-income households is larger than the number of very low-income owner households. Only in metropolitan areas in

[^25]| Table 2.16 Owner Housing Mismatch Ratio of Owner Units to Households by Affordability Category |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Owner Households |  |  | Renter Households |  |
| Northeast |  |  |  |  |
| City | 0.98 | 0.98 | 0.29 | 0.37 |
| Suburb | 0.67 | 0.87 | 0.73 | 1.18 |
| Non-metro | 1.43 | 1.36 | 1.58 | 1.98 |
| Total | 0.87 | 0.98 | 0.54 | 0.79 |
| Midwest |  |  |  |  |
| City | 2.12 | 2.07 | 0.95 | 1.27 |
| Suburb | 1.67 | 2.03 | 1.94 | 3.02 |
| Non-metro | 2.28 | 2.00 | 2.88 | 3.25 |
| Total | 2.02 | 2.03 | 1.65 | 2.22 |
| South |  |  |  |  |
| City | 1.35 | 1.73 | 0.63 | 0.99 |
| Suburb | 1.44 | 1.68 | 1.73 | 2.34 |
| Non-metro | 1.70 | 1.64 | 2.37 | 2.76 |
| Total | 1.52 | 1.68 | 1.40 | 1.84 |
| West |  |  |  |  |
| City | 0.61 | 0.94 | 0.22 | 0.43 |
| Suburb | 0.67 | 0.85 | 0.47 | 0.72 |
| Non-metro | 1.32 | 1.41 | 1.34 | 1.74 |
| Total | 0.80 | 1.00 | 0.46 | 0.71 |
| Total |  |  |  |  |
| City | 1.34 | 1.53 | 0.53 | 0.77 |
| Suburb | 1.14 | 1.41 | 1.18 | 1.76 |
| Non-metro | 1.80 | 1.70 | 2.28 | 2.66 |
| Total | 1.40 | 1.53 | 1.05 | 1.44 |
| Source: Appendix table 31. |  |  |  |  |

the Northeast and West do owner households in the very low-income group exceed owner units in the corresponding affordability category. In these areas, mismatches persist for owners with incomes up to 80 percent of area median.

Potential affordability mismatches for current renters wanting to become homeowners are quite substantral for low- and very low-income renters in many areas. By comparing the distribution of renter households and owner units, Table 2.16 can also
be used to look at the potential affordability of homeownership for current renters. In central cities, the number of owner units affordable to very low-mcome households is much smaller than the number of renter households with very low incomes. In the Northeast and West there are two times as many very low-income renters as owner units affordable to them and almost all of the owner units are occupied. Potential affordability is much better in non-metropoltan areas. Overall, there are more than twice as many affordable owner units as renter households in the low- and very low-income categories. Of course, not all renter households necessarily want to become homeowners, but this comparison is useful for showing the areas where renters will find it more difficult to make the transition to homeownership.

| Table 2.17 <br> Vacancy Rates, 1990 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rental | Units |  |  | Owner | Units |  |
|  | 0/1 BR | 2 BR | 3+ BR | Total | 0/1 BR | 2 BR | 3+ BR | Total |
| Northeast | 6.7\% | 6.7\% | 5.5\% | 6.4\% | 6.4\% | 2.9\% | 1.3\% | 1.8\% |
| Midwest | 9.2 | 8.3 | 5.6 | 8.0 | 4.4 | 2.2 | 1.1 | 1.4 |
| South | 12.1 | 12.5 | 7.8 | 11.2 | 5.0 | 3.2 | 2.0 | 2.4 |
| West | 8.0 | 8.1 | 5.1 | 7.4 | 3.3 | 2.8 | 1.8 | 2.1 |
| City | 9.1 | 9.4 | 6.6 | 8.7 | 5.6 | 3.1 | 1.8 | 2.3 |
| Suburb | 8.4 | 9.1 | 5.7 | 8.0 | 3.8 | 2.7 | 1.5 | 1.8 |
| Non-metro | 11.2 | 10.4 | 6.8 | 9.4 | 5.1 | 2.7 | 1.5 | 2.0 |
| Total | 9.1 | 9.4 | 6.3 | 8.6 | 4.7 | 2.8 | 1.6 | 2.0 |
| Source: Appendix table 32. |  |  |  |  |  |  |  |  |

There may also be mismatches between unit size and household size. As discussed above, small (one- to two-person) households have increased more rapidly than large households in the past two decades, while most units added to the housing stock have contained two or more bedrooms. If households demand only as many rooms as required to prevent overcrowding, these divergent trends in household and housing unit size could produce excess demand for small units and/or excess supply of large units.

However, relatively low vacancy rates for units with three or more bedrooms indicate that the size distribution of new construction reflects household demand. As an indicator of possible unit size mismatch, Table 2.17 reports vacancy rates in 1990 for
units of different sizes. Because many households choose to occupy more than the minimum number of rooms, the result is relatively low vacancy rates for large units. In both the rental and homeowner markets, vacancy rates are higher for smaller units. Rental units with three or more bedrooms have a vacancy rate of 6.3 percent, compared to 9.1 percent for units with zero or one bedroom.

## Summary

In the 1980s, the total supply of housing units increased faster than did the number of households, generally resulting in rising vacancy rates and declining housing costs. In the U.S. as a whole, rental vacancy rates rose from 7.1 percent in 1980 to 8.5 percent in 1990, whule owner vacancy rates rose from 1.8 percent to 2.1 percent. Median monthly housing costs for both owners and renters declined between 1985 and 1989 in most areas. The Northeast was the exception to this pattern, with increases in median housing costs for owners and renters.

Despite these increases in vacancy rates and decreases in median housing costs, there remains a severe shortage of rental units affordable to unassisted households with extremely low incomes. In central city and suburban communities in all four Census regions, numbers of units in this lowest affordability category fall far short of the numbers of renter households that need them. The problem in most of these places is not an insufficient number of housing units overall, but an insufficient number of units in the very lowest affordability range. In most areas, the rental affordability mismatch disappears when units in the affordability range that extends up to 50 percent of median are included. Also, since two-thirds of the rental stock has rents below local FMRs, these rental units could be made affordable to very low-income households with the use of Section 8 vouchers or certificates.

## Housing Problems and Needs

The Needs Assessment section of a local CHAS should document current housing problems, particularly among households that are eligible for federal assistance, and discuss whether and how problems may change over a five-year period. Focusing primanly on very low-, low-, and moderate-income households, it should cover the problems of excessive cost burden, physical inadequacy, and overcrowding, as well as
homelessness and the need for special supportive services. ${ }^{35}$ This section is also expected to assess opportunties for homeownership, as well as consider the special needs of elderly and disabled persons (even if they do not need supportive services). Communities can draw on a wide range of data sources to develop estımates of current and five-year needs, including (but not limited to) the special tabulations of the 1990 Census.

Below we look at the share of households (by income and tenure) that experience problems of excessive housing costs, physical inadequacy, or overcrowding. In chapter 3 we will examme the incidence of these problems among various household types and racial or ethnic mmorities. When individual communities prepare the Needs Assessment section for their CHAS, they may use a wider variety of information sources such as the size or composition of local waiting lists for assisted housing, or data on concentrations of housing problems in particular poor and minority neıghborhoods.

## Incidence of Housing Problems

The summary indicator of housing needs requested by the CHAS is the share of households with any of three housing problems: excessive cost burden, physical madequacy, or overcrowding. Exhıbits 2.18 and 2.19 show the incidence of one or more of these housing problems for renters and owners (respectively) by income group, region,

[^26]

Exhibit 2.19
Incidence of One or More Housing Problem by Income Group of Owners, 1990




Source Uban Institute tabulations of the CHAS database, Appendix table19A
and sub-region. Households with incomes at or below 50 percent of area median are much more likely to experience housing problems than are households with higher incomes. In all areas, most renters in the very low-income group face one or more housing problems. Although very low-income households comprase 39 percent of renter households, they account for 67 percent of renter households with housing problems. Extremely low-income households (incomes at or below 30 percent of median) comprise 23 percent of renter households but 40 percent of renter households with housing problems.

The incidence of problems declines noticeably as income rises, particularly for households with incomes above 50 percent of area median. For extremely low-income renters, the incidence of housing problems is around 80 percent in almost every location. In metropolitan areas, renters whose incomes fall between 30 and 50 percent of area medıan are just as likely to experience a housing problem as extremely low-income renters. ${ }^{36}$ In non-metropolitan areas, moving from the extremely low-income to the very low-income category reduces the incidence of problems to around 63 percent for most renters.

In most income groups, homeowners are less likely to have housing problems than renters. Also, because fewer owners fall into the lowest income groups, the overall incidence of problems among owners is only 22 percent, compared to 44 percent among all renters. Among homeowners, extremely low-mcome households in Northeastern suburban and non-metropolitan areas fare worst, with nearly; 80 percent reporting one or more housing problems. The incidence of housing problems among owners declines noticeably as incomes rise above 30 percent of area median. The incidence of one or more housing problems is below 50 percent for the great majority of owner income categories above 30 percent of area median. This contrasts with the 58 to 85 percent problem rate among renters whose incomes are between 30 and 50 percent of area median.

In examining the extent of housing problems among households with very low and low incomes, CHAS also requires junsdictions to report the number of households with \&

[^27]worst case needs. Households with worst case needs are unassisted very low-income renters that live in substandard housing, pay more than half of their income for housing, or have been involuntarily displaced. Such households meet the Federal preferences for priority for admission to assisted programs, as well as being income-eligtble. As later exhibits will show, the lowest income renters are most likely to have worst case needs since they are more likely to pay more than half of therr income for housing or to live in severely inadequate units. ${ }^{37}$

## Excessive Housing Cost Burdens

Affordability is by far the most common problem, and is particularly onerous for very low-income renter households. Thirty-eight percent of all renters reported gross rents that exceeded 30 percent of their income in 1990, and 18 percent reported housing costs which that 50 percent of their income. Exhibits 2.20 and 2.21 show the incidence of excess cost burdens (paying over 30 percent of income for housing) and severe cost burdens (paying over 50 percent of income for housing) for renters and owners regionally. Seventy-three percent of extremely low-income renter households pand over 30 percent of their income for housing, and more than half paid over 50 percent of income for housing. The share of households with excess and severe cost burdens declines as income rises. About 70 percent of renter households with incomes between 30 and 50 percent of area median paid over 30 percent of income for rent, and just under 25 percent paid over half their income for housing.

Among owners, the incidence of excess and severe cost burden is again highest for extremely low-income households. Altogether, 68 percent of extremely low-income homeowners pay excess cost burdens, and 45 percent pay severe cost burdens. Among all owners, the incidence of excess and severe cost burdens are 20 percent and 6 percent, respectively.

For both renters and owners, the incidence of housing cost burdens declines as income increases. For owners, the share with excess cost burden drops sharply as one moves from the extremely low- to the very low-income category. For renters, the sharpest drop in the share of households with excess cost burdens occurs above 50 percent of

[^28]
area median.
Excess cost burden is the predominant housing problem among households with any problem (including excess cost burden, inadequacy, or overcrowding). As Exhibit 2.22 shows, a substantial share of households with one or more housing problems report an affordability problem. Only 2 to 6 percent of extremely low-income households with one or more housing problems do not have an affordablity problem. Among homeowners, a very high percentage of households in all income groups with any housing problem pay more than 30 percent of income for housing. However, as previous exhibits showed, relatively few higher income owners have any housing problems. Also, owners

in these income groups are more likely to benefit from the favorable income tax treatment of homeownership and may thus face a lower after-tax housing cost burden than otherwise comparable renters. Among renters with one or more housing problems, the incidence of excess cost burden declines more noticeably as income increases.

## Overcrowding

For the nation as a whole, overcrowding is not a widespread problem. Only 2 percent of owners and 9 percent of renters live in units with more than one person per room. However, the incidence of overcrowding is much higher in the West than in the

other three regions. This is because of the preponderance of large households, many of them Hispanc, in communities where housing units affordable for very low-mcome households are in particularly short supply. Exhubit 2.23 shows the incidence of overcrowding among renters and owners by income group in 1990. In the West, 15 percent of all renters lived in overcrowded units. For extremely low- and very low-income renters, the rates of overcrowding were 19 and 20 percent, respectively.


## Housing Inadequacy

For both renters and owners, housing inadequacy is much less common than affordability problems. Inadequacy is also less correlated with income than are excess cost burdens. Exhibit 2.24 shows the overall incidence of moderate or severe inadequacy for owners and renters by income group as reported in the 1989 AHS. ${ }^{38}$ Overall, renters are more likely to live in physically inadequate units than are owners. Moreover, renters

[^29]
in the two lowest income groups are more likely to live in inadequate units than either owners or higher income renters. Nevertheless, even among the two lowest income groups, the incidence of inadequacy is below 20 percent overall. Rates of physical inadequacy are higher in the South than in other regions.

## Summary

Although housing vacancles rose and median housing costs declined during the late 1980 s, very low-income households contmue to experience serious housing problems. Seventy-six percent of extremely low-income renter households live in units that are physically madequate, overcrowded, and/or unaffordable. Of the three problems, excessive cost burden is by far the most prevalent. Seventy-three percent of
extremely low-income renters paid more than 30 percent of their income for housing; while only 11 percent lived in units that housed more than one person per room. Moreover, in every region more than half of these poorest renters had severe cost burdens, paying more than half of their income for housing.

At every income level, the primary housing problem is affordability. The incidence of excess or severe cost burdens is higher for renters than for owners, and among both tenure groups, is highest for extremely low- and very low-income households. In all regions, over three-fourths of very low-income renters face one or more housing problems. Over 90 percent of these very low-income households with one or more problems paid over 30 percent of their income for housing.

Although housing affordability is a serious concern in all regions, it results from different market conditions in different places. In the housing profile in this chapter, we described the range of housing market conditions in the nation's regions and subregions. Of course, there is a great deal of variation within each of these regions whuch individual jurisdictions will document in their own CHAS analyses. This overview provides CHAS preparers with a frame of reference for examining and understanding housing demand, supply, and problems in their own areas.

Both the Northeast and Midwest experienced slow growth in population and slightly faster growth in households during the 1980s. The number of housing units increased faster than the number of households, leading to increases in rental and owner vacancy rates in both regions. In Northeast and Midwest, rental housing affordability mismatches exist primarily for unassisted households in the very lowest income groups.

In contrast to the Northeast and Midwest, population and households grew rapidly in the South and West during the 1980s. Nevertheless, the more rapid growth of housing units than households increased vacancy rates between 1980 and 1990 in both regions. Rental markets in the West remain tighter than in the South. According to the 1990 Census, the rental vacancy rate was 7 percent in the West, compared to 11 percent in the South. Housing affordability mismatches extended to households with higher relative incomes in the West than in the South.

The existence of housing problems other than affordability varies by region. Metropolitan areas in the Northeast and Midwest are also among the most racially and ethnically segregated in the country. Extremely low-income households are also more
concentrated in central cities in these regions. The incidence of overcrowding is highest in the West, particularly for very low-income renters in central cities. A larger share of units in the South, particularly in central cities and non-metropolitan areas, meet the AHS definition of moderate or severe inadequacy.

In the next chapter we provide a framework for the development of local housing strategies. As part of the development of a housing strategy, we examine how the three housing problems, cost burden, physical inadequacy, and overcrowding, vary by race/ethnicity and household type.

## 3. HOUSING MARKET ANALYSIS: FRAMEWORK FOR LOCAL STRATEGY DEVELOPMENT

The primary function of a CHAS is to relate public sector programs and mvestments to documented housing needs at the local level, and to encourage communities to establish spending priorities for assisting low-mcome residents in light of hard evidence about local market conditions and trends. Specifically, the Five-Year Strategy portion of a CHAS (section II), calls for a jurisdiction to set priorities among different segments of the population based on its analysis of housing needs and market conditions. Each priority should be supported by evidence from the Communty Profile (section I). Moreover, the allocation of resources among activities should be based on (and supported by) analysis of local housing market conditions and trends. ${ }^{1}$

It may seem that once a community has described its housing problems, priorities and strategies are obvious. But this is not the case. Just as the underlyng causes of a person's physical symptoms must be diagnosed before suitable treatment can be prescribed, the underlying market imbalances that result in housing problems must be analyzed before an effective strategy for public sector intervention and investment can be devised.

This chapter discusses in general terms how a jurisdiction can diagnose the underlying causes of the housing problems it has documented, and how it can use this diagnosis to design a strategy for public sector intervention and investment. The objective is to illustrate how junsdictions may identify effective remedies for the housing problems they document for their communities, and organze these remedies into a coherent strategy. Analysis of this kind is very likely to be iterative. Successive rounds of questions will be raised and answered in the process of interpreting the Commumty

[^30]Profile, identifying priority housing needs, diagnosing underlying market imbalances, and evaluating the effectiveness of alternative interventions.

In developing a strategy, it is important for jurisdictions to recognize that they not only control the volume and allocation of subsidy resources; they also administer a wide range of regulatory policies that shape decisions and actions in the local housing market. For example, zoning and land use regulations, buulding codes, rent controls, and Community Reinvestment Act requirements all influence private decisions. Moreover, state and local governments can play critical leadership roles in mobilizing and coordmating activities by the local nonprofit and business communities to help address housing needs. Therefore, in developing its housing strategy, a communty should not immediately assume that spending money for direct housing assistance is the only remedy available for a given problem, or that it should be the first remedy to consider.

Thorough analysis of housing market dynamics and imbalances is a starting point for informed discussion about underlying causes of the problems facing very low- and low-income households. This discussion should include how the public sector might encourage and assist private market institutions to function more effectively, which groups in the community need direct assistance to resolve housing problems and needs, and how housing assistance should be allocated, given limited resources. Below we present a series of questions relevant to such a discussion, and link them to the national and regional housing conditions and trends reported in Chapter 2. Tables are provided to illustrate the types of calculations and comparisons communities might use to address these questions. With only a few exceptions, the data tables and calculations used in this chapter can be reproduced for individual communities from the pubhshed Census data provided by HUD in the CHAS Data Book.

## Which Households Experience the Most Severe or Widespread Housing Problems?

In communties nationwide, housing needs are highly concentrated among very low- and low-income households, while most middle- and upper income households live in fully adequate and affordable housing. To illustrate, Table 3.1 reports the share of households--renters and owners--with any housing problem (affordability, crowding, or lacking complete kitchen or plumbing) by income group for non-metropolitan communities nationwide. Among renters, the incidence of problems declines sharply
from a high of 72 percent among the lowest income households to less than 14 percent among households with incomes above 80 percent of area median. Similarly, the incidence of housing problems among homeowners exceeds 60 percent for the lowest income groups, but drops to below 10 percent among upper

| Table 3.1 |  |  |
| :--- | :---: | :---: |
| Incidence of Any Fiousing Problem <br> Non-Metropolitan Areas Nationwide |  |  |
| Income Group Renters | Owners |  |
|  |  |  |
| < 30\% Median | $72 \%$ | $71 \%$ |
| 30-50\% Median | 63 | 42 |
| 50-80\% Median | 33 | 26 |
| 80-95\% Median | 14 | 18 |
| $95 \%+$ Median | 6 | $*$ | income households. For both renters and owners, the few households in these higher income categories that do expenence housing problems could find affordable housing that meets their needs fully, given other evidence about the avaulability of decent housing in their affordability range. Thus, it is very lowand low-income households that most need assistance in obtaining decent and affordable housing.


| Table 3.2 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Incidence of Problems Among Very Low-Income Households by Type Nationwide |  |  |  |  |  |
|  | Eiderly | Small | Large | Other |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Any Problem | $54.0 \%$ | $74.3 \%$ | $85.5 \%$ | $75.8 \%$ |  |
| Excess Cost | 52.7 | 70.1 | 66.6 | 73.7 |  |
| Severe Cost | 26.3 | 44.5 | 37.9 | 47.1 |  |
| Overcrowding | 0.0 | 8.6 | 52.0 | 1.3 |  |

Among very low-income households, different types of families experience different housing problems. Table 3.2 summarizes the incidence of excess and severe cost burden, and overcrowding for different types of very low-income households nationwide. Among very low-income households, large households are most likely to live in overcrowded units. In fact, 52 percent of large households live in overcrowded units, compared to less than 10 percent for other types of households. ${ }^{2}$ In contrast, the problem most likely to be experienced by very low-income small households is excess cost burden. Seventy

[^31]percent of very low-income small households pay more than 30 percent of income for rent.

Nationally, the overall incidence of housing problems at every income level is significantly higher for munority households than for Whites. Table 3.3 presents the incidence of housing problems for very low-income Whites, Blacks, and Hispanıcs. ${ }^{3}$ Hispanics are the most likely to experience one or more housing problems, whule Whites are the least likely. Hispanic households are particularly likely to live in overcrowded housing units, with over 20 percent of very low-income Hispanics living in units with more than one person per room. Very low-

| Table 3.3 <br> Incidence of Housing Problems |  |  |  |
| :---: | :---: | :---: | :---: |
|  | White | Black | Hispanic |
| Any Problem | 64.9\% | 75.5\% | 80.7\% |
| Excess Cost | 60.5 | 65.4 | 69.0 |
| Severe Cost | 35.0 | 37.3 | 41.3 |
| Inadequacy | 10.3 | 25.4 | 20.2 |
| Overcrowding | 2.0 | 6.2 | 20.5 |
| Source. Urban In | stitute tab | ations of th | 1989 AHS | mome Black households are less likely to expenence overcrowding, but more likely to live in physically inadequate units. In all, one in four very low-income Black households live in inadequate housing.

Congress has designated very low-income renters who live in substandard housing or pay more than 50 percent of income for rent as having the "worst case housing needs," and has directed that these households be given priority for admission to federally assisted rental programs. HUD estimates, illustrated in Table 3.4, indicate that 38 percent of very low-income renters nationwide have worst case needs. The incidence of worst case needs (as a share of all very low-income renters) is higher in the West than in other regions, and generally lower in non-metropolitan communities than in central cities or suburban jurisdictions.

[^32]| Table 3.4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Northeast | Midwest | South | West |
| Central City | 41\% | 38\% | 32\% | 49\% |
| Suburbs | 45 | 33 | 37 | 50 |
| Non-Metro | 33 | 28 | 33 | 33 |
| Total | 42 | 34 | 34 | 47 |

Jurisdictions may use the severe cost burden data from the CHAS database as a proxy for the number of very low-income renters with worst case housing needs. Table 3.5 shows the share of very low-income renters paying over half their income for housing. Even though no measure of substandard housing is included, the share of households with severe cost burden equals or exceeds HUD estimates of worst case needs. Using either source, between one third and one half of very low-income renters have worst case needs.

| Table 3.5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Share of Very Low-Income Renters Paying Over 50\% of Income for Housing |  |  |  |  |
|  | Northeast | Midwest | South | West |
| Central City | 46\% | 44\% | 43\% | 49\% |
| Suburbs | 44 | 43 | 43 | 50 |
| Non-Metro | 41 | 33 | 35 | 40 |
| Total | 45 | 41 | 41 | 48 |
| Source Urban Institute tabulations of the CHAS database, Appendix table 21B |  |  |  |  |

## How Many Households Already Receive Housing Assistance?

As part of therr CHAS analysis, communities should determine the number and characteristics of households already receivng housing assistance and the size and charactenstics of the existing stock of assisted units in the area. Companing the total number of eligible households and the number with serious housing needs to the number
of assisted households and housing units will help determine the extent to which needs among eligible households are currently being addressed by federal, state, and local subsidy programs. Moreover, information about the size, condition, geographic distribution, and utilization of the existing stock of assisted housing may help identify available resources for meeting the housing needs of very low-income households.

Nationally, only about 30 percent ( 4.07 million) of income-eligible renter households received housing assistance in 1989. Table 3.6 reports the number and share of income-eligible renters who received federal rental assistance from HUD programs in 1989. ${ }^{4}$ Income eligible households in central cities were somewhat more likely to receive federal housing assistance than those in suburban or non-metropolitan areas. Specifically, 33 percent of eligible households in central cities received federal assistance, compared to 25 percent in the suburbs and 28 percent in non-metropolitan areas.

| Table 3.6 |  |  |
| :---: | :---: | :---: |
| Households Receiving Federal Rental Assistance Nationwide |  |  |
|  | Assisted Households | \% of IncomeEligible Hhs |
| Central Cities | 2,366 | 32.5\% |
| Suburbs | 1,066 | 25.2 |
| Non-Metro | 637 | 27.7 |
| Total | 4,069 | 29.5 |
| Source: Connie H.Casey, Characterstics of HUD- |  |  |
| Assisted Renters and Their Units in 1989, |  |  |
| Washington, D.C.: U.S. Department of Housing and Urban Development, 1992. |  |  |

Table 3.6
Households Receiving Federal Rental Assistance Nationwide

## Assisted \% of IncomeHouseholds Eligible Hhs

In all regions of the country, income-eligible Black households are more likely to be served by federal rental programs than other racial or ethnic groups (Table 3.7). Overall, 42 percent of eligible Blacks ${ }^{5}$ received assistance, compared to only 23 percent of Hispanics and 25 percent of Whites and other households. The share of eligible Hispanics served by federal rental programs is particularly low in the Midwest, where only 10 percent received assistance, compared to 40 percent of Blacks and 22 percent of Whites and other households.

Elderly renters who are eligible for federal housing subsidies are substantially more likely to receive assistance than are non-elderly renters. As Table 3.8 shows,

[^33]
## Table 3.7

Share of Eligible Households Receiving Federal Rental Assistance by Race/Ethnicty and Region

|  | Black | Hispanic | White | Total |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Northeast | $49.7 \%$ | $34.1 \%$ | $31.6 \%$ | $36.2 \%$ |
| Midwest | 39.6 | 9.5 | 21.6 | 26.2 |
| South | 40.5 | 23.7 | 25.5 | 31.8 |
| West | 42.9 | 19.1 | 20.5 | 22.3 |
| Total | 42.2 | 23.2 | 24.9 | 29.5 |

Source Connie H.Casey, Characteristics of HUD-Assisted Renters and Theur Unuts in 1989, Washington. D.C.: U S. Department of Housing and Urban Development, 1992
almost 40 percent of eligible elderly renters receive assistance, compared to only 26 percent of the non-elderly. The differential between elderly and non-elderly is about the same in central city, suburban, and non-metropolitan communities throughout the nation.

## What are the Underlying Causes of Local Housing Market Problems?

Determining whuch groups of households are experiencing housing problems and which groups are currently served by existing programs are critical first steps in developing a housing strategy. However, to bridge the gap between a Community Profile and policy priorities, a more thorough market analysis is required. This analysis should
 focus on how the size, distribution, condition, and cost of a jurisdiction's housing inventory match up with the needs and problems of various types of households, particularly those with very low or low incomes. ${ }^{6}$ Each type of housing problem--

[^34]excessive cost burden, overcrowding, physical inadequacy, or severe neighborhood segregation--represents a symptom of underlying market imbalances. The next step, therefore, is to diagnose these underlying imbalances through housing market analysis. ${ }^{7}$ Without a clear diagnosis of the market dynamics that cause housing problems, a communaty may err in its selection of priorities and remedies, resulting in a strategy that does not effectively cure the problems confronting very low- and low-income households, or one that does not make efficient use of available resources.

The objective of housing market analysis in this context is not simply to restate problems identified in the Community Profile, but to focus attention on specfic processes or dynamics that are causing those problems and on the market imbalances that warrant public sector mintervention. Nationally, 42 percent of very low-income homeowners and 68 percent of very low-income renters pay excessive housing cost burdens. Yet the underlying market dynamics that have resulted in this problem vary substantially from place to place. Different remedies are called for in high-growth communities with an absolute shortage of units from those preferable for slow-growth communities with persistently high vacancy rates, even though in both types of jurisdictions very lowincome households are observed to be paying excessive rent burdens.

Analysis of housing market imbalances may be organized by focusing in turn on four distinct (though inter-related) dimensions:

Housing Availability. Are there enough housing units in the stock to meet household needs? Is the stock growing fast enough to keep pace with increases in the number of households? Is the stock of available housing units well matched to the mix of households in the community?

Housing Adequacy. Is the existing stock of housing in adequate physical condition? Are units falling into disrepair? Are they at risk of abandonment or removal from use?

Housing Affordablity. Are rents and house values out of reach for some segments of the local population?

Housing Accessiblity. Are households of all types able to gain access to the avalable units in their affordability range? Are minority households at a

[^35]disadvantage relative to Whites due to discrimination? Are some neighborhoods inaccessible to some segments of the population because of transportation, information, or attitudinal barriers?

Each of these dimensions is explored here, with examples of methods communities can use to identify and explore the sources of housing problems, and the interventions that might be requured to address them. It is important to note that the focus of a CHAS is on the needs of very low- and low-income households, and households with special supportive service needs. However, these households obtain housing in the larger market, and the underlying causes of their housing problems cannot be properly diagnosed without understanding imbalances in the market as a whole.

## Housung Availability

In almost all housing markets throughout the country, very low-income households have difficulty finding housing units that they can afford (for less than 30 percent of their income). However, but this does not necessarily mean that there are too few units available to meet demand, or that housing production is falling short of increases in the number of households. Communities can determme whether local levels

| Table 3.9 <br> Overall Adequacy of Housing Supply by Region |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 to 1990 Change |  |  | 1990 Vacancy Rates |  |
|  | Households | Units | Units/Hhs | Renters | Owners |
| Northeast | 1,402 | 1,723 | 1.23 | 5.0\% | 1.6\% |
| Midwest | 1,458 | 1,671 | 1.15 | 6.4 | 15 |
| South | 5,336 | 6,645 | 1.25 | 9.4 | 2.3 |
| West | 3,361 | 3,812 | 1.13 | 7.0 | 1.6 |
| To conduct th units in 1980 | analysis for an ind well as 1980 va | ual comm y rates, | unity, data on th ust be obtained | er of househo ublished Cen | and housing documents |

of housing production are keeping pace with demand overall by examining: 1) change in total number of households relative to change in total number of housing units; and 2) vacancy rates for rental and homeowner units. Table 3.9 illustrates this basic approach for the four Census regions. If the ratio of housing unit change to household change is less than 1.0 , stock growth has fallen short of household growth. Conversely, if the ratio
is greater than 1.0 , the stock has increased by more than enough units overall to accommodate household growth.

As discussed in Chapter 2, the total number of households increased much more rapidly in the South and West during the 1980s than in the Northeast or Midwest. Nevertheless, in all four regions the housing stock grew faster than the number of households, and vacancy rates rose. The West exhibited the lowest rate of stock growth relative to household growth, but vacancy rates for the region in 1990 were hugher than in the Northeast and Midwest. It is considered healthy for fast-growing markets to have higher vacancy rates than slow-growing markets, m order to accommodate higher rates of mobility, greater turnover of housing units, and potential production lags. ${ }^{8}$ In addition to current vacancy rates, changes over time in the share of rental and owner units that are vacant provide useful indicators of the adequacy of housing supply. Declining vacancy rates provide a strong indication that the housing stock is not expanding fast enough to keep up with growth in housing demand.

Overall, the analysis outlined above provides no evidence of a shortage of housing units in any of the four regions. In fact, at the regional level, housing markets appear to have become considerably "looser" during the 1980s, with more housing units added to the stock than households added to the population. There are, of course, individual market areas in which production may not have kept pace with household growth, and where low-income housing problems stem--at least in part--from an inadequate supply of units. However, an absolute shortage of housing units is not the underlying cause of housing affordability problems for most of the nation.

In some circumstances, lack of available housing supply may be evidenced by households that have "doubled up" (with more than one nuclear family sharing a housing unit) or postponed the formation of new households. For example, if housing units are in short supply, adult children may live with their parents rather than forming their own households, or two related families may share a unit rather than occupying two separate units. Thus, overcrowding may serve as an additional indicator of the adequacy of

[^36]housing supply. If a large share of households is living in overcrowded conditions, there may be reason to believe that more housing units are needed.

However, this measure should be employed with caution. It is possible for some households to double up or live in crowded conditions not because units are in short supply, but because these households cannot afford the cost of the units that are available. Before

Table 3.10
Rates of Overcrowding and Vacancies for Central Cities by Region

|  | Percent <br> Crowded | Vacancy <br> Rates |
| :---: | :---: | :---: |
| Northeast | $11 \%$ | $6.1 \%$ |
| Renters | 3 | 2.3 |
| Owners | 6 | 8.7 |
| Midwest | 2 | 1.6 |
| Renters | 9 | 11.6 |
| Owners | 3 | 3.0 |
| South |  |  |
| Renters | 16 | 4.8 |
| Owners | 5 | 2.1 |
| West |  |  |
| Renters |  |  |
| Owners |  |  | concluding that the total supply of housing units is insufficient, communties should carefully analyze rates of overcrowding in conjunction with vacancy rates and rates of change in households and housing units. For example, as illustrated in Table 3.10, rates of overcrowding among renters in central city communities range from a low of 6 or 9 percent in the Midwest and South to a high of 16 percent in the West. The relatively hugh incidence of overcrowding in central cities of the West is consistent with evidence that the number of households living in the region as a whole grew rapidly during the 1980 s , and that central city populations did not decline as in other regions. ${ }^{9}$ However, when vacancy rates are considered, it is harder to conclude that housing is in short supply overall. Even in the West, about 5 percent of central city rental units are vacant. This example illustrates that it is not always clear whether additional housing unats are necessarily needed to solve the overcrowding problem.

Most communities will be able to supplement their analysis of overall housing production levels by tracking trends in housing production (measured by building permits and certificates of occupancy). Levels of new construction do not necessarily track changes in the total supply of housing, since units are constantly being lost from the stock through abandonment and demolition, and added through rehab and

[^37]conversions. If possible, communities should assemble data on all of these sources of change in the size and composition of the housing stock. Nevertheless, monitoring local rates of housing construction can provide valuable clues regarding the overall availability of housing in the market.

Whether or not the total supply of housing is keeping pace with household growth, some categories of housing may be in short supply. Data from the Community Profile can be used to determine whether the number of units in

| Table 3.11 <br> Rental Vacancy Rates by Unit Size Suburban Communties of the Northeast |  |
| :---: | :---: |
|  | Vacancy Rate |
| 3+ Bedroom Units | 3.1\% |
| 2 Bedroom Units | 5.1 |
| 0 \& 1 Bedroom Units | 6.8 | each size category is sufficient to meet demand, and to determune whether numbers of units affordable by very low-, low-, and moderate-mcome households are sufficient. The simplest method for assessing the availability of units in various size categories is to compare vacancy rates by unit size (and tenure category), as illustrated in Table 3.11 for suburban communities in the Northeast. Three percent of rental units with three or more bedrooms are vacant, compared to over 6 percent of efficiency and one-bedroom units. This suggests that large families, who need at least three bedrooms, may have difficulty finding rental units in suburban communities of the Northeast. Efficiency and one-bedroom rental units, which meet the needs of individuals and childless couples, are much more readuly avaulable.

To examine whether units in some affordability ranges are in short supply, communties can compute: 1) the cumulative number of units by affordability range; 2) the cumulative number of households by income group; and 3) the ratio of units to households in each group. In addition, communities can examine vacancy rates by affordability range. This analysis is illustrated by Tables 3.12 and 3.13 for central cities in the Midwest. Local patterns will vary, but Table 3.12 shows that the number of rental units affordable for households with incomes below 30 percent of area median falls far short of the number of renter households in this income group. In fact, there are only enough units in this affordability category for about 60 percent of the households that need them. In contrast, the number of rental units in the next affordability range (up to 50 percent of median) exceeds the number of households in this range by 35 percent. In other words, there is a severe shortage of rental units affordable for the lowest income

| Table 3.12 <br> Availability of Rental Units by Affordability Categories <br> Central City Communities in the Midwest |  |  |  |
| :--- | ---: | ---: | ---: |
| Income/Affordability Range | Households | Units | Units/Hhs |
|  |  |  |  |
| < 30\% of Median | 953,235 | 618,009 | .65 |
| < $50 \%$ of Median | $1,480,390$ | $1,996,663$ | 1.35 |
| < $80 \%$ of Medıan | $2,123,667$ | $3,279,517$ | 1.54 |
| All Units | $3,093,499$ | $3,483,923$ | 1.13 |
| Source: Appendix Table 29 |  |  |  |

group, but units with slightly higher rents appear to be in ample supply. If publicly assisted units are to be added to the stock under these circumstances, they must morease supply at the very lowest rent level (or be accompanied by rent supplements that make them affordable to the lowest income households) to have any impact on the segment of the market for whom a shortage of units exasts.

Interestingly, vacancy rates among rental units in Midwestern central citues are relatively high across all affordability ranges, as illustrated in Table 3.13. In fact, vacancy rates are highest (13.6 percent) for units in the lowest affordability range, even though the number of households that need these low-cost units far exceeds the number of

| Taßle 3.13 |  |
| :---: | :---: |
| Rental Vacancy Rates by Affordability |  |
| Central Cittes in the Midwest |  |
|  |  |
|  | Vacancy Rate |
| <30\% Median | $136 \%$ |
| $30-50 \%$ Median | 10.3 |
| $50-80 \%$ Median | 4.7 | units available. This pattern of high vacancy rates in combination with inadequate numbers of low-rent units is one of the most puzzling features of urban housing markets in the U.S. today. One possible explanation is that these units are in such poor condition or in such undesirable nerghborhoods that low-income families will not occupy them, even if the alternative is to bear an excessive rent burden. Communities that observe this phenomenon might focus ther attention on the location and characteristics of vacant, low-rent units to determine why these units are not being occupied by low-income households, and how they might be brought into active use.

In the process of analyzing the availability of some types of housing units, it may also be useful to examine rates of overcrowding by household size and income group. The households most likely to suffer from overcrowding in a tight housing market are those with very low incomes, particularly large renter households and possibly nonelderly homeowners. As discussed earlier, caution should be exercised in this process, because overcrowding does not always mean that insufficient numbers of unuts are available in the housing stock. Table 3.14 presents the incidence of overcrowding among very low-income renters and homeowners and among large very low-income households in central cities in the four Census regions.

| Table 3.14 <br> Overcrowding Among Very Low-Income Households Central Cuttes by Region |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Very Low-Income Renters | Northeast | Midwest | South | West |
| Total | 12.3\% | 7.5\% | 12 9\% | 22 1\% |
| Large Households | 64.1 | 45.9 | 62.5 | 80.7 |
| Very Low-Income Owners |  |  |  |  |
| Total | 3.0 | 2.6 | 5.1 | 69 |
| Large Households | 288 | 274 | 44.3 | 558 |

Among very low-income renter and owner households, rates of overcrowding confirm other indicators of a shortage of units in central cities of the West. Specifically, about 22 percent of very low-income renters are overcrowded in Western central cities, compared to only 12 percent in Northeastern central cities, 8 percent in Midwestern central cities, and 13 percent in Southern central cities. Similarly, rates of overcrowding among very low-income homeowners are higher in central cities of the West than in any other region, although owners are far less likely than renters to experience overcrowding. Table 3.14 also shows extremely high rates of crowding among large renter households with very low-income levels, ranging from 46 percent in central citues of the Midwest to 81 percent in central cities of the West. Large owner households with very low-incomes also experience high rates of overcrowding, ranging from 27 percent in Midwestern central cities to 56 percent in central cities in the West.

Community-wide Census data can be extremely useful for diagnosing the overall adequacy of housing supply in a community. However, after analyzing these market-wide
measures, communities may want to dig deeper, exploring the adequacy of housing supply for particular population subgroups, or in individual neighborhoods. For example, it is possible that housing production is concentrated in a few neighborhoods, whule the number of units in other neighborhoods is declining significantly. Jurisdictions may also find that housing facilities for particularly vulnerable segments of the community are not being produced in adequate numbers. Examples include transitional facilities for homeless people, or service-enriched housing for the handicapped, AIDS sufferers, the frail elderly, or recovering alcohol and drug abusers.

## Housing Adequacy

In many housing markets nationwide, the low-cost segments of the housing stock are falling into disrepair or disuse. Housung units typically decline in condition as they age, and if their rents or values decline at the same time, this process can be healthy by augmenting the stock of units in low- and moderate- cost ranges. However, this "filtering" process does not always function effectively. ${ }^{10}$ In some cases, housing deterioration and abandonment may be so extensive as to contribute to a shortage of units affordable for low- and moderate-income households. In less extreme circumstances, serious deterioration of the low-cost stock may mean that the housing units which low-income households can afford to occupy are in poor condition.

As discussed in Chapter 2 of this report, Census data provide only limited indicators of the physical condition of the existing housing stock. Communties will have to draw on AHS data or on local data sources to arrive at more meaningful estimates of the incidence of housing deficiencies. Table 3.15 presents Census and AHS data on the incidence of physical deficiencies for various types of communities in the South. These estimates indicate that non-metropolitan communities face the highest rate of housing deficiencies, with 2.5 percent of units lacking complete kitchen or plumbing, 12 percent of classified as moderately inadequate, and almost 4 percent classified as severely inadequate. Suburban communities in the South exhibit lower rates of physical inadequacy, with only 6 percent moderately inadequate units and less than 3 percent

[^38]| Table 3.15 <br> Incidence of Physical Deficiencies By Type of Community in the South |  |  |  |
| :---: | :---: | :---: | :---: |
| Cities | 0.8\% | 2.7\% | 9.8\% |
| Suburbs | 0.9 | 2.6 | 5.5 |
| Non-Metro | 2.5 | 3.6 | 12.0 |
| * Source: CH Note The se published Dat | base. <br> columns of this table, (fro because Census data do no | urce: 1989 AHS. AHS data), cannot port moderate and | nstructed from H inadequacy rates |

severely inadequate. Interestingly, central city communties in the South have a low rate (for the region) of severely madequate units--under 3 percent--but a relatively high rate of moderately inadequate units--10 percent. In both central cities and suburbs, the share of units lacking complete kitchen or plumbing is less than 1 percent.

In addition to the overall share of housing units that are physically deficient, communities should examine deficiency rates for specific segments of the housing stock, particularly units occupied by very low- and low-income households. Table 3.16 reports inadequacy rates among very low-income renters in the South, where the share of units classified as inadequate is dramatically higher than for total households. Specifically, 22 percent of very low-income renters in central cities live in inadequate units (compared to 13 percent of all households). In the suburbs, almost 15 percent of very lowincome renters live in inadequate units (compared to 8 percent for all households). And in non-metropolitan

| Table 3.16 |
| :--- |
| Incidence of Housing Deficiencies |
| Very Low-Income Renters in the South |
|  |
| Moderately |
| or Severely |
| Inadequate | communities of the South, one third of very low-income renters occupy inadequate units (compared to 16 percent for all households). More in-depth analysis conducted locally may also indicate that deficiency rates are high in particular neighborhoods, suggesting

that these neighborhoods may be at significant risk of deterioration and abandonment. Similarly, local analysis may suggest that a significant stock of low-cost housing in need of repairs offers an opportunity to expand housing availability through rehabilitation.In addition to the overall share of housing units that are physically deficient, communities should examine deficiency rates for specific segments of the housing stock, particularly units occupied by very low- and low-income households.

## Housing Affordabulity

Even in communities where overall housing supply has kept pace with demand and deficiency rates are relatively low, the majority of very low- and low-income households may be paying excessive rents, and homeownership may be out of reach for many moderate-mncome families. In these communities, the primary problem is that housing costs are simply out of reach for households at or near the bottom of the income distribution. Careful analysis of housing market conditions can mdicate which groups of households are unable to afford the prevaling costs of both rental and homeowner housing, and how much more purchasing power such households need to afford housing avaulable on the local market.

| Table 3.17 <br> Incidence of Rent Burdens by Income Group <br> Central Cuties of the Midwest |  |  |
| :---: | :---: | :---: |
| Income Group | Excess Burden | Severe Burden |
|  |  |  |
| <30\% of Median | $77 \%$ | $60 \%$ |
| 30-50\% of Median | 67 | 17 |
| $50-80 \%$ of Median | 26 | 2 |
| 80-95\% of Median | 7 | 0 |
| $95 \%+$ of Median | 2 | 0 |

For renters, the first step in diagnosing problems of housing affordability is to compute the incidence of rent burdens by income group. Table 3.17 presents the mondence of excess and severe cost burdens among renters in Midwestern central cities. Housing affordability problems are directly related to household incomes; more than three-quarters of the lowest income renters in Midwestern central cities pay excess cost burdens, and more than half pay severe cost burdens. As household incomes nse, the incidence of affordabulity problems drops quite sharply; virtually no renters with incomes
over 50 percent of area median pay more than half their incomes for rent, and among households with incomes over 80 percent of area median, the incidence of excess rent burden drops below 7 percent.

In addition to examining the incidence of housing cost burdens, it is helpful to reexamine: 1) the number of rental unts available at affordable rent levels; and 2) vacancy rates among rental units by affordabllity range. These indicators can help a community determine not only who is paying excessive rents, but also whether these households would be able to find adequate housing if they could afford to pay Fair Market Rents. In the example provided earlier for central cities of the Midwest (see Tables 3.12 and 3.13 ), evidence strongly suggests that ample units are available at moderate rent levels, and that vacancy rates are relatively high, even at the bottom of the market. Under circumstances such as these, boosting the purchasing power of lowincome renters (with tenant-based assistance, for example, or with project-based subsidies in existing properties) should enable them to obtain decent and affordable rental housing from the existing stock.

A slightly different approach can indicate the extent to which homeownership opportunities are out of reach for low- and moderate-income households. First, it makes sense simply to compare the share of households who are homeowners at different income levels and for different household types. As discussed in Chapter 2, the national

| Table 3.18 <br> Homeownership Rates <br> by Income Group <br> Central Cities Nationwide |  |
| :---: | :---: |
| Income Group | Percent <br> Homeowners |
| 30\% Median | $23.3 \%$ |
| 30-50\% Median | 35.4 |
| 50-80\% Median | 42.7 |
| 80-95\% Median | 49.5 |
| $95 \%+$ Median | 67.9 | homeownership rate rose slightly during the second half of the 1980s, after declining during the first half. However, the share of young families who own their homes continued to decline for the entire decade, dropping almost 10 full percentage points between 1980 and 1990. Not surprisingly, homeownership rates vary dramatically by income group. For example, as illustrated in Table 3.18, among central city households nationwide, two-thirds of households with incomes above 95 percent of area median are homeowners, compared to only about one-quarter of those with incomes below 30 percent of median.

To explore the issue of homeownership affordability further, a community might compare the number of homeowner units by affordability range to the number of renter households by income group. A house that is affordable by its current occupant may not be affordable by a new owner at the same income level. Therefore, it is necessary to classify homeowner units according to their affordability level if they were purchased at current interest rates and market values. This calculation provides an indication of the extent to which renters could afford to become homebuyers, as well as the gap between what low- and moderate-income renters can afford and the prevaling cost of homeownershup in the community. To illustrate, in suburban communities of the West, there are over 1 million very low-income renter households, but fewer than 500,000 owner units affordable to them (see Table 3.19). For renters with incomes up to 80 percent of median, the ratio of owner units to renter households is still below 1. Certainly, not all of these renters should be considered potental homebuyers. Nevertheless, the mismatch between renter incomes and homeownership costs suggests a significant affordability problem for some would-be homeowners.

| Table 3.19 |  |  |  |
| :--- | ---: | ---: | ---: |
| Availability of Affordable Homeowner Units in Suburbs of the West |  |  |  |
| Affordability Category | Owner Units | Owner Hhs | Renter Hhs |
|  |  |  |  |
| $<50 \%$ of Median | 494,329 | 736,098 | $1,049,541$ |
| $<80 \%$ of Median | $1,227,846$ | $1,444,159$ | $1,707,655$ |

## Housing Accessibility

In many communities nationwide, spatial segregation--rich from poor, owners from renters, and minorities from Whites--is a serious housing market problem. HUD's special tabulations of Census data do not provide information at the neighborhood or tract level, and may actually obscure some housing problems that are concentrated in particular neighborhoods of a jurisdiction. ${ }^{11}$ As discussed in Chapter 2, summary measures of the extent to which minorities are segregated from Whites are available for every major metropolitan area in the U.S., and communities can assemble local data or tract-level

[^39]Census data to assess the extent to which some groups of households are prevented from enjoying the benefits offered by all neighborhoods. Key indicators might include the share of neighborhoods (or Census tracts) with less than 10 percent mmority households, the share with less than 10 percent very low- or low-income households, and the share with less than 10 percent of housing unts affordable for very low-or low-income households. ${ }^{12}$

Racial/ethnic segregation is an indicator of the extent to which minorites may find some neighborhoods inaccessible. More specifically, even if housing in a neighborhood is affordable to a particular household, it may not be accessible if minorites cannot readily obtain information about vacant units, if they experience discrimmation when they search for units, or if they encounter (or expect to encounter) hostility when they move in. ${ }^{13}$

Access to affordable housing can also be constrained by factors other than race and ethnucity. Lack of information, attitudes and expectations, inadequate transportation linkages, and absence of accommodations for handicapped people can all create barriers that prevent some households from gaining access to neighborhoods and housing opportunities that mught meet their needs. Communities should give careful attention to evdence of access problems, because removing barriers to housing mobility and choice may enable households to improve their housing from the exasting stock of units.

## Which Housing Problems Can Be Addressed Without Subsidies or Direct Financial Assistance?

Once a community has diagnosed specific imbalances in its housing market, the next step is to explore the extent to which some of these imbalances might be corrected or moderated without subsidies. Public resources are scarce in every jurisdiction, and the private sector has generally proven to be an effective mechanism for meeting the housing needs of the majority of U.S. households. For both of these reasons, it is

[^40]essential that local, state, and federal housing strategies begin by trying to remove barriers that prevent the private sector from serving households of all types and as far down the income distribution as possible. This is not to suggest that the private sector can meet the needs of all households fully, or that public subsidies are unnecessary or undessrable. But communitıes may be able to reduce the size of the need for public subsidies by motivating or enabling private sector actors to do more.

Jurisdictions in which supply has not kept pace with demand, or in which the bulk of newer housing units is unaffordable to low- and moderate-income households, may decide to examine whether regulatory barners are slowing the pace of stock growth or unnecessarily raising the price of housing. If the existing land use and land development regulations and zoning and building codes add substantially to the costs of housing production, then the system of regulations designed to enhance and preserve housing quality may be limiting the availability of moderate- or low-cost housing.

Four components of residential development regulations, all within the purview of local governments, may significantly increase housing production costs:

Land use and zoning regulations that set minimum lot sizes and maximum development denstities;

Infrastructure standards for new subdwisions such as street widths, sidewalk requrements, and sanitary and water pipe specifications;

Bulding standards requiring costly construction materials and techniques; and
Lengthy processung times.
The first of these probably has the greatest impact on housing costs. By requiring large lot sizes and prohibiting high-density development or multifamily structures, junisdictions may substantially increase the cost of new housing within their boundanes, effectively zonung out affordable housing for low- and moderate-income households. Exclusionary zoning regulations of this type not only limit the overall supply of affordable housing, but often also perpetuate patterns of economic and racial segregation.

Regulatory barriers can also interfere with efforts to renovate deteriorated housing. Jurisdictions in which the physical condition of the housing stock is detenorating may usefully reconsider whether local regulatory barriers unnecessarily rase the cost and complexity of housing rehabiltation. Communities may also consider whether more
effective code enforcement could reduce the rate of housing deficiencies. If there is evidence that physical deficiencies are prevalent among units in moderate- to high-cost ranges, stepped-up code enforcement alone may be an effective mechansm. However, in many communities, housing deterioration is most prevalent among low-cost unts, where property owners may lack the income stream to support improvements. In these circumstances, code enforcement alone could result in either increased rent burdens for low-income households, or removal of low-cost units from the housing stock.

Jurisdictions in which racial or ethnic segregation is severe or in which housing problems are substantially more prevalent among minority households than among Whites, may focus on the extent to which discrimination is limiting the housing options available to minority households. Black and Hispanic households generally experience worse housing circumstances and more limited housing opportunties than other Americans. As shown in Chapter 2, even after controlling for income differences, Blacks and Hispanics are less likely to own their homes, more likely to live in physically deficient, overcrowded, or excessively costly housing, and more likely to live in older, inner city neighborhoods. Many of these problems are related to lower income levels among minority households, but racial and ethnic discrimination and the persistent segregation of urban neighborhoods play an important role for minorities at all income levels.

Federal law has prohibited housing market discrimination on the basis of race or ethnicity since 1968, and many states and local jurisdictions have passed fair housing statutes that are more stringent than federal law. Nevertheless, a recent nationwide study of housing discrimination concluded that Blacks and Hispanics experience some form of discrimination roughly every other time they contact a rental or sales agent to mquire about the availability of housing that has been advertised in the local newspaper. ${ }^{14}$ Communities in which discrimination remains a major problem may consider stepping up their enforcement efforts, so that landlords and real estate agents recognize that illegal discrimination is likely to be detected and punished.

Jurisdictions in which low- and moderate-income neighborhoods or neighborhoods with high minority representation are experiencing high rates of housing deterioration

[^41]and low rates of production should also examine whether these neighborhoods are being under-served by private financial and development institutions. In many urban settings, property owners in low- and moderate-income neighborhoods have difficulty obtainmg financing for home purchase or home improvements. Thus problem is particularly prevalent in many minonty neighborhoods. Lenders and developers may avord these nerghborhoods because they perceive the risks to be high and/or potential profits to be low. In some cases, direct subsidies may be necessary to attract capital to declining neighborhoods, but communities should also consider the possibility that the private sector is neglecting neighborhoods that offer opportunities for reasonable profits without undue risk. If this is the case, Community Remnvestment Act (CRA) requirements and local ants-discrimmation laws might be used to encourage lending and development institutions to expand their operations in these neighborhoods.

In addition to its role as regulator and its capacity to provide direct financial assistance, government plays a critical leadership role in the local community. It can mobilize private sector actors--employers, lenders, housing developers, landlords, nonprofit community groups--to collaborate in addressing housing problems, and it can help organize and direct their various contributions to maximum effect. Many state and local governments have organized public-private partnerships for specific projects or to address housing problems more generally. CHAS can play an important role in maximizing the effectiveness of these partnership efforts if it convincingly articulates a diagnosis of a communty's housing problems, and identifies remedies that various members of the partnership have the capacity to undertake.

## What Groups of Households Most Need Public Sector Assistance to Meet Their Housing Needs?

No matter how effectively a community streamlines its regulatory environment and mobilizes private activities to address housing market imbalances, some households will continue to face serious housing problems. In all probability, the problems of extremely low- and very low-income households cannot be resolved without the investment of direct subsidy resources. Therefore, the next step toward development of a comprehensive strategy is to decide who most needs direct assistance with housing problems, and how scarce subsidy resources should be allocated.

As discussed earlier, housing needs are highly concentrated among very low- and low-income households, while most middle- and upper-income households live in fully adequate and affordable housing. Local housing strategies may include some initiatives that enhance the quality and quantity of housing for all residents, or that enable the local market to operate more smoothly and effectively overall. However, the central focus of public policy interventions should be on the needs of very low- and low-income households. ${ }^{15}$ In general, higher income households possess the resources to meet therr housing needs independently, while lower income households are far more likely to need assistance if they are to obtain decent and affordable housing. Moreover, problems confronting middle- and upper income households are the easiest to address through changes in the regulatory envronment and unsubsidized activities by private institutions in the community.

However, it is likely that the number of very low- and low-income households that need assistance with housing will substantially exceed the resources available from federal, state, and local programs. Thus, a critical step in the development of a local housing strategy is to decide who needs assistance most, and how available resources should be targeted. Final decisions are inherently political, driven by the values and pronties of a community, as well as by its available resources. But discussion about these choices should be based on solid facts about the severity and distribution of housing problems among various segments of the communty, accompanied by analysis showing which activities can address priority problems most cost-effectively.

In particular, evidence from systematic housing market analysis can indicate which groups' needs are particularly severe or urgent, and which are most difficult to meet from the existing housing supply. For example, as mentioned earlier, Congress has classified very low-income households that pay more than 50 percent of therr income for rent or that live in severely inadequate units as having the "worst case housing needs." These households account for about 40 percent of all households currently eligible for

15 CHAS instructions specify that the five-year strategy must "establish general priorities for assisting low-income residents." See U.S. Department of Housing and Urban Development, CHAS instructions.
federal housing subsidy assistance. ${ }^{16}$ Individual communities may decide to target these "worst case" needs, or may choose to give priority to households with extremely low incomes that are at greatest risk of becoming homeless; to low-income families with children; to homeless families and/or individuals; or to people with physical or mental handicaps.

Some communities may also conclude that low- and moderate-income households need assistance to become homeowners for the first time, or to make necessary repairs to their existing homes. If so, the decision should be based on evidence of serious barriers to first-time homeownership, or of high rates of physical deficiencies among lowand moderate-income homeowners. Communities with a large share of older units may also choose to target resources to lead-based paint abatement, particularly if this portion of the housing stock is occupied by low- or moderate-income families with chuldren or if it is in poor physical condition. ${ }^{17}$

## What Housing Activities Are Best Suited to Addressing Priority Housing Needs in the Community?

The last step in the development of a local housing strategy is to select a set of programmatic mechanisms for meeting the priority housing needs of very low- and lowincome households. These mechanisms are inevitably costly, which is why the preceding steps in the strategy development process are so crucial. If a community has effectively diagnosed market imbalances, expanded the reach of the private sector through regulatory mechanisms and leadership of private sector initıatives, and identified the segments of the population whose housing problems stll persist and warrant top priority for investment, it will have a sound basis for selecting programmatic tools for assisting these households.

Below we describe a generic set of programmatic tools avalable for delivering housing assistance to households with unmet housing needs Numerous variants of each

[^42]of these tools exists; here we do not explore the details of specific housing assistance programs. Instead, we focus on the housing market issues a community should consider in deciding which mechanisms are best suited to address the priority housing needs it has identıfied for investment.

A community's approach to this decision process will be influenced by the mix of housing assistance programs it currently operates, and the programmatic resources available to it from other levels of government. Certainly, these resources are relevant to the development of a housing strategy. But communities should also assess the potential usefulness of tools that are not currently avalable, and consider the possibility that some tools that are currently available for use may be ineffective or even counterproductive.

There are only three basic mechanisms for delivering housing assistance to households that cannot find or afford adequate housing that meets their needs: 1) government can build new units earmarked for occupancy by very low- and low-income households, or can subsidize the private sector to build such units; 2) government can purchase existing units, rehabilitate them as necessary, and make them available for very low- or low-income occupancy (or subsidize the private sector to do so); and 3) government can pay the difference between what very low- and low-income households can afford and what their housing actually costs, allowing them to choose units from existing, privately owned stock. Each of these mechanisms can be used to assist homebuyers as well as renters, and can involve nonprofit organizations as well as forprofit housing providers.

CHAS instructions require communities to describe the programmatic mechanism(s) that will be used to address each of the priority assistance needs identified. Below we focus on the three basic tools available for delivering housing assistance, and discuss housing market factors that should be considered in assessing the strengths and weaknesses of each. This discussion is not intended to imply that there is a simple one-to-one relationship between a particular set of housing market conditions and the appropriate programmatic response. However, the diagnosis of market imbalances underlying observed housing problems should be a primary factor in deciding how to allocate housing investment.

## Subsidized Production of New Housing Units

Historically, the most widely used mechanism for addressing the housing needs of very low- and low-income households, particularly renters, has been to build new units, with subsidized rents. The cost of new construction is high, however, and deep subsidies are required to make rents affordable to the households with the greatest housing needs. Moreover, as discussed earlier, few markets today are experiencing an absolute shortage of housing units. In fact, housing markets are generally quite "soft," with relatively high vacancy rates, and declining rent levels. Therefore, alternatives to new construction may be available that are less costly and that make more efficient use of housing resources available from existing stock.

| Table 3.20 <br> Rental Vacancy Rates by Unit Size and Affordability Central Citues of the West |  |  |  |
| :---: | :---: | :---: | :---: |
| Units Affordable for: | $\begin{gathered} 0-1 \\ \text { Bedrooms } \end{gathered}$ | $\stackrel{2}{\text { Bedrooms }}$ | 3+ <br> Bedrooms |
| 0-30\% Median | 6.4\% | 8.6\% | 4.6\% |
| 0-50\% Median | 9.3 | 12.3 | 7.6 |
| 0-80\% Median | 81 | 8.8 | 6.5 |
| Total | 8.1 | 8.3 | 5.0 |

New construction may still make sense if there is an absolute shortage of housing units overall, or in a particular segment of the market. Because new construction is so costly, however, communities considering this mechanism should be sure that there is no good substitute in the existing stock for the type of unit needed. For example, as discussed in Chapter 2, there is a severe shortage of very low-cost rental units in central cities of the West. Specifically, the number of units affordable to very low-income households falls short of the number of renter households in this income category. The supply of affordable units is particularly tight for large rental units, as illustrated by the rental vacancy rates reported in Table 3.20. Under these circumstances, addressing the housing needs of large, very low-income households may require construction of new units with three or more bedrooms, with subsidized rents affordable to households in the extremely low- and very low-income categories. However, such a conclusion should be supported by a thorough analysis of lower cost alternatives that make use of existing housing resources.

To make a subsidized new construction program cost-effective, it is critical that the new units add drectly to the segment of the stock that is in short supply. In the example above for Western central cities, if the new units are not affordable to the lowest income households, they will do nothing to alleviate the housing problems they were intended to address. Thus, from inception through implementation, new construction initiatives should be explicitly targeted to the segment of the market where a shortage clearly exists, and where no good substitute units can be drawn from the existing stock of housing.

Several other considerations are fundamental to adopting subsidized new construction as a solution to housing problems among very low-income households. Building units that are earmarked for occupancy by the poor has important neighborhood implications. If a large number of subsidized units are located in one neighborhood, they may contribute to the concentration of poverty, and trigger dismvestment and declme in the neighborhood. These units may not be accessible to employment opportunities or to other services and facilities households need. Moreover, households that need housing assistance have little choice about where to live if all subsidized units are in one neighborhood or one type of neighborhood. On the other hand, building a significant number of new housing units in one location may help revitalize or stabilize a distressed neighborhood, if these unts make productive use of vacant land and attract residents to an area with declining population.

## Subsidızed Housing Acquisition and Rehabılitatıon

Many communities throughout the U.S. have ample numbers of housing units available for occupancy in the market as a whole, even though there are not enough units that very low- and low-income households can afford without assistance. Because new construction is generally very costly, in "soft" markets the existing housing stock represents a valuable resource. Communities may well be able to acquire (or subsidize private developers and nonprofit groups to acquire) exsting units, rehab them if necessary, and make them available for rent or sale at levels affordable to very low- and low-income households.

An acquisition and rehab strategy may be particularly effective in a market where numerous existing units are available for occupancy but are in poor condition, or where
structures suitable for residential use are standing vacant (perhaps even being held off the market by their owners). Under circumstances such as these, acquiring and rehabbing deteriorated units and making them avaulable (at subsidized rent levels) for extremely low- and very low-income households would not only expand the availability of affordable rental housing, but would also improve the condition of the existing housing stock.

Like subsidized new construction, however, housing acquisition and rehab must shift units into the segment of the stock that is in short supply. If rehabbed units are not affordable to the lowest income households, they will not alleviate the housing problems they were intended to address. Thus, an acquisition and rehab program cannot address the shortage of very low-cost rental housing if the affected units are not explicitly made affordable for the segment of the market where the shortage is concentrated. In the Southern central city example outlined above, rehabbing units that are affordable only to households with incomes above 50 percent of median would have no impact on the extremely low-income households facing the most severe affordability problems.

Neighborhood considerations are also critical to consideration of an acquisition and rehab program. Rehabbing (and subsidizing) a large number of units in a single neighborhood can support broader neighborhood revitalization efforts, leveraging additional investment from existing homeowners and landlords. However, too many units might also contribute to the concentration of poverty, and thus to neighborhood dismestment and decline.

## Durect Assistance to Households

As Chapter 2 demonstrated, most very low- and low-income households throughout the U.S. that face housing problems actually live in physically adequate units, but have to pay an excessive share of income for their housing costs. And in most markets today, even households that currently live in overcrowded or physically deficient units could probably find a decent unit if they had greater purchasing power. Under circumstances such as these, a program that provides drrect financial assistance to individual households may be the most effective mechanism for addressing their housing problems. Such a program supplements what households can afford to pay for housing, but allows recipients to choose a unit from among those available in the exasting
(privately owned) stock. Households can remain in their existing units, or can move to units that better meet their needs.

In circumstances where excessive housing cost burden is the primary housing problem facing very low- and low-income households, and where sufficient numbers of good quality units are avaulable for occupancy in the moderate cost range, a tenant-based assistance program of this type may be the most cost-effective mechanism for meeting housing needs. In the example cited earlier for central cities in the West, only large rental units seem to be in seriously short supply. Vacancy rates are relatively high among small units at moderate rent ranges, suggesting that ample units are available for occupancy. Thus, while subsidized new construction may be needed to meet the needs of large households, the needs of smaller households could probably be met with tenantbased assistance.

Housing subsidy mechanisms (such as tenant-based assistance) that are not tied to particular housing units, are sometimes thought to be less effective tools for neighborhood revitalization. This is not necessarily the case. Households that are currently paying excessive rent burdens but that live in otherwise decent housing units, are very likely to remain in their neighborhoods after they receive tenant-based assistance. This helps contribute to the stability of the community and to the financial viability of the properties in which they live. Moreover, a tenant-based assistance program gives recipients greater choice about the neighborhoods in which to live, contributing to income and racial diversity throughout the community, and facilitating access to employment opportunities.

## Summary

Housing market conditions and the housing problems facing low- and moderateincome households vary substantially from one community to the next. No single set of policy priorities applies across the nation as a whole, nor is a single set of programmatic remedies appropriate for all jurisdictions or even for all households within a single jurisdiction. Recognizing the importance of local flexibility in the allocation of resources and design of investment activities, the National Affordable Housing Act (1990) requires states and localities to systematically document housing market conditions and problems as a basis for designing public sector programs and investments.

Chapter 2 of this report illustrated how 1990 Census and other data sources can be used to develop a comprehensive picture of local housing market conditions and trends, focusing in particular on the housing problems facing those with very low and low incomes. Some may claim that priorities and strategies will be obvious once such a descriptive picture has been developed. In fact, however, careful analysis is required to progress from descriptions of current problems for various household types and income groups to a strategy for addressing them that is workable given local market conditions. Just as the underlying causes of a person's physical symptoms must be dragnosed before suitable treatment can be prescribed, the underlying market processes that have produced observed housing problems must be analyzed and understood to devise costeffective strategies for public sector intervention and investment.

This chapter presented a series of questions and examples to guide this analysis. Specifically, communities should systematically address each of the following issues in the process of developing the Five-Year Strategy portion of a CHAS:

Which households experience the most severe or widespread housing problems?
How many households already receive housing assistance?
What are the underlying causes of local housing market problems?
Which housing problems can be addressed without subsidies or direct financial assistance?

What groups of households most need public sector assistance to meet ther housing needs?

What housing activities are best suited to addressing priority needs for housing assistance in the community?
At first, the answers to some of these questions may seem obvious or even irrelevant to an individual community. However, given the complexity of housing market dynamics and the scarcity of public sector resources, it is essential that communities subject their housing priorities and programs to careful and critical analysis. In fact, the analytic process is very likely to be iterative, with successive rounds of questions raised and answered in the process of interpreting the Community Profile, identifying priority needs, diagnosing the market imbalances underlying different types of needs, allocating available resources, and evaluating the effectiveness of alternative interventions.

The National Affordable Housing Act departs from previous federal housing initiatives by designating state and local governments as the primary architects of their housing strategies. The underlying rationale is that states and localities are better qualfied than federal agencies to assess market conditions and housing needs in their jurisdictions. But the success of this new approach depends, in large part, upon the quality and completeness of data and analysis conducted at the local level and presented in the local CHAS.

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## APPENDIX ~ DEFINITIONS

## Calculation of Income Limits based on HAMFI

Households are classified into mcome groups by comparing reported household income to HUD-adjusted median family income (HAMFI). The Department of Housing and Urban Development (HUD) is required by law to establish these income limits for use in determining the eligıbility of families and persons seeking to participate in HUD housing programs. The income limits are calculated by household size for each metropolitan area and non-metropolitan county in the United States and its territories. They are based on the HUD's estimates of medıan family income, with several adjustments as required by statute.

Decennial Census data on median family income, ${ }^{1}$ updated annually by HUD, provide the starting pount for establishung the income limits. The very low-income limit is tied to 50 percent of area median income and the low-income limit is tied to 80 percent of the median income for the area. However, several adjustments are required by statute:

- Income limits for nonmetropolitan areas may not be less than limits based on the State nonmetropolitan median family income level.
- Income limits must be adjusted for family size.
- Income limits may be adjusted for areas with unusually high or low family income or housing-cost-to-income relationships.

In 1991, the very low-income limits were determined as follows:

- Limits based on 50 percent of local median income were computed for all areas. (These were the actual income limits used for 272 metropolitan areas and 743 nonmetropolitan counties.)
- If the actual 50 percent limit fell below 50 percent of the State's nonmetropolitan median family income, the (higher) State nonmetropolitan limit was used instead. (Thus adjustment raised the income limit in 31 metropolitan areas and 1,471 nonmetropolitan counties.)
- Limits were increased in areas of high housing costs. The limits were mereased such that 35 percent of a 4 -person household's very low-income limit equalled 85 percent of the Section 8 Existing Fair Market Rent for a 2-bedroom unit. (This adjustment affected the limits for 24 metropolitan areas and 102 nonmetropolitan counties.)

[^44]- Limits were decreased in areas of low housing costs. The limits were decreased such that 30 percent of a 4-person household's low-income limit equalled 120 percent of the Section 8 Existing Farr Market Rent for a 2 bedroom unit. (This adjustment affected the limits for 9 metropolitan areas and 86 nonmetropolitan counties.)
- Historical exceptions based on old policres that provided higher income limits than under current law were applied. (These exceptions raised the income limits in 5 metropolitan areas and 12 non-metropolitan countres.)

The computation of the low-income limits was analogous to that used for very low-income limits, except that the low-income limat was capped at the U.S. median family income of $\$ 38,600$. This maxmum reduced the income limit in 27 metropolitan areas and 13 nonmetropolitan countues.

All of the above limits apply to a household of four. Using the 4-person household as the base, income limits for smaller and larger households are computed by multiplying the base figure by the fraction shown below:

Multiplication factors for Adjusting Income Limits for Different Household Sizes

| Persons: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Factor: | .70 | .80 | .90 | 1.00 | 1.08 | 1.16 | 1.24 | 1.32 |

For households with more than 8 people, the 1.32 multiplication factor for an 8 person household is increased by . 08 for each person in excess of 8. (E.g., for a 10 person household, the limit is $1.32+.16=1.48$.)

## Clarification of the Terms "Household" and "Family" in the National CHAS

For many HUD programs, the term "famuly" is defined by statute to determine program eligibility, and it is typically more inclusive than the Census Bureau definition of a "family" as a "householder and one or more persons living in the same household who are related by birth, marriage, or adoption."

To approximate the statutory definition of "family" for HUD programs, the CHAS defines a famıly as "a household comprised of one or more individuals," which is equivalent to the Census Bureau definition of a "household." Because of these differences in definution and the resulting possibilities for confusion, the CHAS instructions, forms, and special tabulations of 1990 Census data use the term "famıly" as little as possible. Instead, the term "related household" is used in place of the Census Bureau term "family household" to refer to a household in which one or more persons in the household are related to the householder by birth, marriage, or adoption.

As detauled below, the definitions used in this report, and the four CHAS household types, therefore also limit use of the word family.

## Household Definitions Used in This Report:

Household: One or more persons occupying a housing unit. The occupants may be a related household, one person living alone, or a group of unrelated persons who share living arrangements.

Housing unit: A house, an apartment, a mobile home, a group of rooms or a single room that is occupied (or mtended for occupancy) as a separate living quarters. Separate living quarters are those in which the occupants live and eat separately from other persons in the building and with access from outside the building or through a common hall.

Group quarters: All persons not living in households are classified by the Bureau of the Census as living in group quarters. The two categories of persons living in group quarters are institutionalzed persons and other persons in group quarters.

Institutionalized persons: Includes persons under formally authorized, supervised care or custody in institutions at the time of enumeration. Institutions include: correctional institutions; nursing homes; mental (psychiatric) hospitals; hospitals for the chronically ill; schools, hospitals, or wards for the mentally retarded; schools, hospitals, or wards for the physically handicapped; hospitals and wards for drug/alcohol abuse; wards in general and military hospitals for patients who have no usual home elsewhere; and juvenile institutions.

Other group quarters (or non-institutional group quarters):
If 10 or more unrelated persons share the unit: roommg houses, group homes, religious group quarters and college quarters off campus (otherwise these living quarters are classified as housing units) are classified as non-institutional group quarters.

Regardless of the number of people sharing the unit, persons residing in the following types of living arrangements are classified as living in non-institutional group quarters: college dormitones, military quarters, agriculture workers' dormitories, emergency shelters for homeless persons (with sleeping facilities) and visible in street locations, dormitories for nurses and interns in general and military hospitals, crews of maritume vessels, staff residents of institutions, other non-household living situations, and living quarters for victims of natural disasters.

Householder: Generally the person in whose name the home is owned, being bought or rented and who is listed in column one of the census questionnaire. (Analogous to "head of household.")

Related household (Family household in the Census): A household containing a householder and one or more other persons living in the same household who are related to the householder by burth, marriage, or adoption. Non-relatives may also be present.

Subfamily (Census term): A married couple (with or without children under 18) or one parent with one or more never married children living in the household and related to (but not including) the householder or the householder's spouse. (E.g., A married couple living in the same housing unit as one of the couple's parents.)

Non-relatives: Includes household members categorized as roomers, boarders, foster children, housemate or roommate, unmarried partner and others not related to the householder by burth, marriage or adoption.

Unrelated Individual: Includes a householder living alone or with non-relatives only, a household member who is not related to the householder, or a person living in group quarters who is not an unmate of an institution.

Non-related household (Non-family household in the Census): Any household that is not classified as a related household.

Elderly household: A household composed of either a small elderly related household or a small elderly non-related household. A small elderly related household is a twoperson family in which the head of the household or the spouse is at least 62 years of age. A small elderly non-related household is a one- or two-person non-related household in which the householder is at least 62 years of age.

Small related household (Non-elderly small family household in the Census): A related household of 2 to 4 persons. The Census definition of family requires that at least one person must be related to the householder.

Large related household (Large family household in the Census): A related household of 5 or more persons. The Census definition of family requires that at least one person must be related to the householder.

Other household: A household of one or more persons that does not meet the definition of a small related or large related household or elderly household. This category uncludes all households with only unrelated individuals present except those qualifying as elderly households.

## Definitions of Other Terms Used in this Report

## Income Groups

In this report, household income groups are designated as follows:
Extremely low-income -- Household income less than or equal to 30 percent of HAMFI.
Very low-income -- Household income less than or equal to 50 percent of HAMFI.
Low-income -- Household income less than or equal to 80 percent of HAMFI.
Other low-income -- Household income greater than 50 percent but less than or equal to 80 percent of HAMFI.

Moderate income -- Household income greater than 80 percent but less than or equal to 95 percent of HAMFI.

## Unit Affordability

Unit affordability compares housing cost to local area HAMFI. For rental units, gross rent is compared to 30 percent of area median income categories to determine affordability. Owner units are affordable if the unit's value is less than 2.5 times the household income threshold for the area.

Affordable to extremely low-income -- Gross rent is less than 30 percent of 30 percent of HAMFI, or the value of an owner unit is less than 2.5 times 30 percent of HAMFI.

Affordable to very low-income -- Gross rent is less than 30 percent of 50 percent of HAMFI, or the value of an owner unit is less than 2.5 times 50 percent of HAMFI.

Affordable to low-income -- Gross rent is less than 30 percent of 80 percent of HAMFI, or the value of the owner unit is less than 2.5 times 80 percent of HAMFI.

Affordability levels are adjusted for various size units, based on the number of people that could occupy a unit without overcrowding. Since one or two people could occupy a unt with 0 or no bedrooms, the uncome threshold used for calculating unit affordabulity is based on a 1.5 person household, that is, 75 percent of the threshold for a 4 person household. Similarly, the income threshold for computing unit affordability for a 2 bedroom unit is based on occupancy by 3 people, and is 90 percent of the threshold for a 4 person household. Finally, for units with 3 or more bedrooms, the income threshold used for determining a unit's affordability category is 104 percent of the limit for a 4 person household and is based on a 4.5 person household.

## Creating the Data Set Used for the National Profile

The Comprehensive Housing Affordability Strategy Database, issued in July 1993 is the primary source of 1990 national and regional data used in this report. The analysis required that the data be aggregated at the metropolitan and non-metropolitan level by region. The metropolitan data were further divided into central city and suburban portions. ${ }^{2}$ This appendix briefly describes the aggregation process.

The first step in data aggregation was the creation of metropolitan and nonmetropolitan totals at the regional and national level. With the exception of New England, metropolitan areas are defined to include enture counties. ${ }^{3}$ After each county was classified as either metropolitan or non-metropolitan, the county level data were aggregated to the regional and national level by category. In New England, where metropolitan areas do not follow county boundaries, metropolitan and non-metropolitan areas were distunguished based on New England County Metropolitan Areas (NECMAs). NECMAs are defined at the county level and therefore correspond to the way metropolitan areas are delineated outside of New England. ${ }^{4}$

Central city totals by region were created next. Since the CHAS database does not identufy which places are defined as central cities of metropolitan areas, 525 central cities were identified from the STF 3C file of the 1990 Census. With the exception of Honolulu, all of the central cities identified from the STF 3C matched places included on the CHAS database. ${ }^{5}$ For all of the matched cittes, the total population of each place reported in the STF 3C was compared with the total population reported in the CHAS database. In a number of instances, the officially defined central city included only part of the place reported in the CHAS database. ${ }^{6}$ Smce most of these differences were small, the CHAS data for the entre place was included as the central city. Then, the central city records were summed at the regional and national level to create central city totals. Suburban totals were computed as the difference between metropolitan totals and central city

[^45]4 For Connecticut and Rhode Island, county level data was not provided in the CHAS database. Therefore, data for places and minor civl divisions were summed to create county level records first. HUD provided additional data for some smaller munor civil divisions and places not included on the CD-ROM files.

5 Three of the 525 central cities, (Honolulu, Hawain; Arlington, Virgina; and Framıngham, Massachusetts) were Census Designated Places (CDPs). Because CDPs are not governmental unts and therefore do not prepare CHASes, they are not meluded in the CHAS database. The CHAS database contained no close equivalent to the Honolulu CDP. For the remaming two CDPs, other data (for Arlington county and Framugham town) were included in the central city database sunce their populations were essentrally equivalent to the respective CDPs.

6 This occurred because some cities were located in more than one county but the central city was defined to be only the (major) portion of the city located in a smgle county.
totals.
At several stages in the aggregation, accuracy checks were conducted. Prior to creating the metropolitan and non-metropolitan totals, population, household, and housing unit totals for counties were confirmed to match state level totals. At the next stage, accuracy checks were performed to insure that the sum of the metropolitan and non-metropolitan data for each state equalled state level totals. Regional totals for metropolitan and non-metropolitan areas were compared with data from the STF 3C file. Totals for three of the regions matched the STF 3C data and the Northeast totals differed only slightly due to our use of the NECMA definition of metropolitan areas in New England. At the final stage, regional central city totals were matched to STF 3C data. Central city totals for the Northeast matched the STF 3C data and totals for the other three regions were close to the STF 3C totals. The mmor discrepancies in the totals for these three regions were attributable to the differences in the central city'boundaries in the CHAS database and the STF 3C.

Following is a list of the data tables in the CHAS database:

## Data for Households

T01 Total households by tenure (2) and HUD household category (5)[8]
Universe: households. Use: CHAS tables 1, 6, 7. renter

1:total household
2: elderly household
3:small related family household
4:large related family household owner

5:total household
6: elderly household
7:small related family household
8:large related family household
T02 White non hispanic households by tenure (2) and HUD household category (5) [8].
Universe: households. Use: CHAS tables 1, 6, 7. renter

1:total household
2:elderly household
3:small related family household
4:large related family household owner

5:total household
6: elderly household
7:small related famuly household
8:large related famuly household

T03 Black non-hispanic households by tenure (2) and HUD household category (5) [8] Universe: households. Use: CHAS tables 1, 6, 7.
renter
1:total household
2:elderly household
3:small related family household
4:large related family household
owner
5:total household
6:elderly household
7:small related family household
8:large related family household
T04 Hispanic households by tenure (2) and HUD household category (5) [8] Universe: households. Use: CHAS tables 1, 6, 7.
renter
1:total household
2:elderly household
3:small related family household
4:large related famuly household owner

5:total household
6:elderly household
7:small related family household
8:large related family household

T05 American indian, eskimo, aleut non-hispanic households by tenure (2) and HUD household category (5) [8]
Universe: households. Use: CHAS tables 1, 6, 7.
renter
1:total household
2:elderly household
3:small related family household
4:large related family household
owner
5:total household
6:elderly household
7:small related family household
8:large related family household
T06 Asian pacific islander non-huspanic households by tenure (2) and HUD household category (5) [8]
Universe: households. Use: CHAS tables 1, 6, 7.
renter
1:total household
2:elderly household
3:small related family household
4:large related family household
owner
5:total household
6:elderly household
7:small related famıly household
8:large related family household
T07 Total households with housing problems by tenure (2) and HUD household category (5) [8]

Universe:households. Use: CHAS table 6, 7. renter

1:total household
2:elderly household
3:small related family household
4:large related family household
owner
5:total household
6: elderly household
7:small related famuly household
8:large related famuly household
T08 White non-hispanic households with housing problems by tenure (2) and HUD household category (5) [8]
Universe: households. Use: CHAS table 6, 7.
renter
1:total household
2:elderly household
3:small related family household
4:large related family household owner

5:total household
6:elderly household
7:small related famuly household
8:large related family household
T09 Black non-hispanic households with housing problems by tenure (2) and HUD household category (5) [8]
Universe:households. Use: CHAS table 6, 7. renter

1:total household
2: elderly household
3:small related family household
4:large related famıly household owner

5:total household
6:elderly household
7:small related family household
8:large related family household

T10 Hispanic households with housing problems by tenure (2) and HUD household category (5) [8]
Universe:households. Use: CHAS table 6, 7.
renter
1:total household
2:elderly household
3:small related family household
4:large related family household owner

5:total household
6:elderly household
7:small related famuly household
8:large related famuly household
T11 Households that are overcrowded by tenure (2) and HUD household category (5) [8] Unverse:households. use CHAS table 8. renter

1:total household
2:elderly household
3:small related famuly household
4:large related famuly household owner

5:total household
6:elderly household
7:small related family household
8:large related family household
T12 Households that have $30 \%+$ cost burden by tenure (2) and HUD household category (5) [8]

Universe: households. Use: CHAS table 5.
renter
1:total household
2:elderly household
3:small related family household
4:large related family household
owner
5:total household
6:elderly household
7:small related family household
8:large related family household
T13 Households that have $50 \%+$ cost burden by tenure (2) and HUD household category
(5) [8]

Universe: households. Use: CHAS table 5. renter

1:total household
2:elderly household
3:small related family household
4:large related famuly household
owner
5:total household
6:elderly household
7:small related family household
8:large related family household

## Data for Housing Units

T26 Affordable housing units by tenure and occupancy status (5) and bedroom size (3) [15]
Universe: housing unit. use CHAS table 3
renter
1:0-1 bedroom
2:2 bedrooms
3:3+ bedrooms
owner
4:0-1 bedroom
5:2 bedrooms
6:3+ bedrooms
for rent
7:0-1 bedroom
8:2 bedrooms
9:3+ bedrooms
for sale
10:0-1 bedroom
11:2 bedrooms
12:3+ bedrooms
T27 Affordable housing units by tenure (2), income group of occupant (3) and bedroom size (3) [18]
Universe: housing units.
renter income 0-30\%

1:0-1 bedroom
2:2 bedroom
3:3+ bedroom
income 0-50\%
4:0-1 bedroom
5:2 bedroom
6:3+ bedroom
income 0-80\%
7:0-1 bedroom
8:2 bedroom
9:3+ bedroom
owner meome 0-30\%

10:0-1 bedroom
11:2 bedroom
12:3+ bedroom
income 0-50\%
13:0-1 bedroom
14:2 bedroom
15:3+ bedroom
income 0-80\%
16:0-1 bedroom
17:2 bedroom
18:3+ bedroom
T28 Aggregate contract rent/value of affordable housing units in hundreds of dollars by tenure (2) and bedroom size (3) [6]
Universe: housing units.
renter
1:0-1 bedroom
2:2 bedroom
3:3 + bedroom
owner
4:0-1 bedroom
5:2 bedroom
6:3 + bedroom
T29 Aggregate gross rent/ selected monthly owner cost of affordable housing units in hundreds of dollars by tenure (2) and bedroom size (3) [6]
Universe: housing units.
renter
1:0-1 bedroom
2:2 bedroom
3:3 + bedroom
owner
4:0-1 bedroom
5:2 bedroom
6:3+bedroom
T30 Aggregate rent asked / price asked of affordable housing units in hundreds of dollars by tenure (2) and bedroom size (3) [6] Universe: Vacant Housing units (16 positions).
renter
1:0-1 bedroom
2:2 bedroom
3:3 + bedroom
owner
4:0-1 bedroom
5:2 bedroom
6:3 + bedroom

T31 Housing problems of affordable units by tenure (2) and bedroom size (3) [6]. Universe: Housing units.
renter
1:0-1 bedroom
2:2 bedroom
3:3 + bedroom
owner
4:0-1 bedroom
5:2 bedroom
6:3 + bedroom
T33 Housing units lacking complete plumbing/kitchen by tenure (2) and bedroom size (3) [6].

Universe: Housing units.
renter
1:0-1 bedroom
2:2 bedroom
3:3 + bedroom
owner
4:0-1 bedroom
5:2 bedroom
6:3+ bedroom
T34 Housing units that are overcrowded by tenure (2) and bedroom size (3) [6].
Universe: Housing units.
renter
1:0-1 bedroom
2:2 bedroom
$3: 3+$ bedroom
owner
4:0-1 bedroom
5:2 bedroom
6:3 + bedroom
T35 Year structure built of affordable units (5) by tenure (2) and bedroom size (3) [30] Universe: Occupied housing units. Use: table 9 in CHAS. renter
$0-1$ bedroom
1:pre-1940
2:1940-1949
3:1950-1959
4:1960-1979
5:1980-1990
2 bedroom
6:pre-1940
7:1940-1949
8:1950-1959
9:1960-1979
10:1980-1990
$3+$ bedroom
11:pre-1940
12:1940-1949
13:1950-1959
14:1960-1979
15:1980-1990
owner
0-1 bedroom
16:pre-1940
17:1940-1949
18:1950-1959
19:1960-1979
20:1980-1990
2 bedroom
21:pre-1940
22:1940-1949
23:1950-1959
24:1960-1979
25:1980-1990
3 + bedroom
26:pre-1940
27:1940-1949
28:1950-1959
29:1960-1979
30:1980-1990

## Classification of States by Census Region and Division

## Northeast

New England
Connecticut
Mane
Massachusetts
New Hampshire
Rhode Island
Vermont
Midwest
East North Central
Illinois
Indiana
Michigan
Ohio
Wisconsin

Mid Atlantic
New Jersey
New York
Pennsylvania

West North Central<br>Iowa<br>Kansas<br>Minnesota<br>Missourı<br>Nebraska<br>North Dakota<br>South Dakota

## South

South Atlantic
Delaware
District of Columbia
Florida
Georgia
Maryland
North Carolina
South Carolina
Virginia
West Virginia

## West

Mountain
Arızona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyommg

East South Central
Alabama
Kentucky
Mississippı
Tennessee

West South Central
Arkansas
Louisiana
Oklahoma
Texas

Pacific
Alaska
Callfornia
Hawaii
Oregon
Washington

## DATA APPENDIX

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## APPENDIX TABLE 1

## Location of Households, 1990

|  | Cities | Suburbs | Non-metro | Total |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| Northeast | $6,409,637$ | $10,355,740$ | $2,095,809$ | $18,861,186$ |
| Midwest | $6,793,584$ | $9,168,918$ | $6,363,554$ | $22,326,056$ |
| South | $9,550,401$ | $13,115,688$ | $9,170,035$ | $31,836,124$ |
| West | $6,912,149$ | $9,118,969$ | $2,939,098$ | $18,970,216$ |
| Total |  |  |  |  |
|  | $29,665,771$ | $41,759,315$ | $20,568,496$ | $91,993,582$ |

Source: Urban Institute tabulations of the CHAS database.

## APPENDIX TABLE 2 <br> Distribution of Households by Household Size (Millions of Households)

|  | 1970 | 1975 | 1980 | 1985 | 1990 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| One person | 109 | 13.9 | 18.3 | 206 | 23.0 |
| 2 people | 183 | 218 | 25.3 | 27.4 | 30.1 |
| 3 people | 10.9 | 12.4 | 14.1 | 15.5 | 16.1 |
| 4 people | 10.0 | 111 | 12.7 | 136 | 14.5 |
| 5 or more | 13.2 | 12.0 | 10.4 | 9.7 | 96 |
| Total | 63.3 | 71.2 | 80.8 | 868 | 93.3 |

Percent Distribution of Households by Household Size

|  | 1970 | 1975 | 1980 | 1985 | 1990 |
| :--- | :---: | :--- | :--- | :--- | ---: |
|  |  |  |  |  |  |
| One person | $17.2 \%$ | $19.5 \%$ | $226 \%$ | $23.7 \%$ | $247 \%$ |
| 2 people | 28.9 | 30.6 | 31.3 | 31.6 | 323 |
| 3 people | 17.2 | 17.4 | 17.5 | 179 | 17.3 |
| 4 people | 158 | 156 | 157 | 15.7 | 155 |
| 5 or more | 20.9 | 16.9 | 12.9 | 11.2 | 10.3 |
| Total | 100.0 | 1000 | 100.0 | 100.0 | 1000 |

Source: Statistical Abstract of the United States 1992, Table 58.

## APPENDIX TABLE 3A

Distribution of Households by Household Type, 1990

## Central Cities

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $1,565,264$ | $2,611,850$ | 719,826 | $1,512,697$ | $6,409,637$ |
| Midwest | $1,577,111$ | $2,866,280$ | 704,998 | $1,645,195$ | $6,793,584$ |
| South | $2,114,394$ | $4,198,668$ | 970,064 | $2,267,275$ | $9,550,401$ |
| West | $1,391,872$ | $2,861,465$ | 844,438 | $1,814,374$ | $6,912,149$ |
| Total | $6,648,641$ | $12,538,263$ | $3,239,326$ | $7,239,541$ | $29,665,771$ |
|  |  |  |  |  |  |
|  |  |  | Suburbs |  |  |
|  |  |  |  |  |  |
|  |  | Elderly | Small | Large | Other |$\quad$ Total

## Non-metropolitan Areas

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | 572,156 | $1,006,734$ | 199,641 | 317,278 | $2,095,809$ |
| Mıdwest | $1,916,548$ | $2,942,915$ | 670,200 | 833,891 | $6,363,554$ |
| South | $2,564,172$ | $4,552,271$ | 954,560 | $1,099,032$ | $9,170,035$ |
| West | 748,247 | $1,335,595$ | 372,407 | 482,849 | $2,939,098$ |
| Total | $5,801,123$ | $9,837,515$ | $2,196,808$ | $2,733,050$ | $20,568,496$ |

## Total

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $4,669,099$ | $8,814,700$ | $2,046,111$ | $3,331,276$ | $18,861,186$ |
| Midwest | $5,453,433$ | $10,620,361$ | $2,382,598$ | $3,869,664$ | $22,326,056$ |
| South | $7,443,451$ | $15,677,432$ | $3,283,350$ | $5,431,891$ | $31,836,124$ |
| West | $3,913,897$ | $8,639,506$ | $2,469,618$ | $3,947,195$ | $18,970,216$ |
| Total | $21,479,880$ | $43,751,999$ | $10,181,677$ | $16,580,026$ | $91,993,582$ |

Source Urban Institute tabulations of the CHAS database.

APPENDIX TABLE 3B
Percent Distribution of Households by Household Type, 1990

## Central Cities

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $24.4 \%$ | $407 \%$ | $11.2 \%$ | $23.6 \%$ | $100.0 \%$ |
| Midwest | $232 \%$ | $422 \%$ | $104 \%$ | $24.2 \%$ | $1000 \%$ |
| South | $221 \%$ | $44.0 \%$ | $102 \%$ | $237 \%$ | $100.0 \%$ |
| West | $20.1 \%$ | $41.4 \%$ | $122 \%$ | $262 \%$ | $100.0 \%$ |
| Total | $224 \%$ | $423 \%$ | $109 \%$ | $244 \%$ | $100.0 \%$ |

## Suburbs

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $244 \%$ | $50.2 \%$ | $109 \%$ | $145 \%$ | $1000 \%$ |
| Midwest | $214 \%$ | $525 \%$ | $110 \%$ | $15.2 \%$ | $100.0 \%$ |
| South | $211 \%$ | $52.8 \%$ | $104 \%$ | $157 \%$ | $100.0 \%$ |
| West | $195 \%$ | $48.7 \%$ | $137 \%$ | $181 \%$ | $1000 \%$ |
| Total | $216 \%$ | $51.2 \%$ | $11.4 \%$ | $158 \%$ | $100.0 \%$ |

Non-metropolitan Areas

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $27.3 \%$ | $48.0 \%$ | $95 \%$ | $151 \%$ | $1000 \%$ |
| Midwest | $301 \%$ | $46.2 \%$ | $10.5 \%$ | $13.1 \%$ | $100.0 \%$ |
| South | $28.0 \%$ | $49.6 \%$ | $10.4 \%$ | $12.0 \%$ | $1000 \%$ |
| West | $25.5 \%$ | $454 \%$ | $127 \%$ | $164 \%$ | $1000 \%$ |
| Total | $282 \%$ | $47.8 \%$ | $10.7 \%$ | $133 \%$ | $1000 \%$ |

Total

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Northeast | $248 \%$ | $46.7 \%$ | $10.8 \%$ | $177 \%$ | $1000 \%$ |
| Midwest | $24.4 \%$ | $476 \%$ | $10.7 \%$ | $17.3 \%$ | $1000 \%$ |
| South | $23.4 \%$ | $492 \%$ | $103 \%$ | $17.1 \%$ | $100.0 \%$ |
| West | $206 \%$ | $455 \%$ | $130 \%$ | $20.8 \%$ | $1000 \%$ |
| Total | $23.3 \%$ | $476 \%$ | $111 \%$ | $18.0 \%$ | $100.0 \%$ |

Source: Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 3C

Distribution of Owner-Occupants by Household Type, 1990

## Central Cities

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | 757,973 | $1,191,032$ | 333,859 | 355,459 | $2,638,323$ |
| Midwest | $1,062,605$ | $1,736,281$ | 428,029 | 473,170 | $3,700,085$ |
| South | $1,491,652$ | $2,411,815$ | 542,607 | 636,864 | $5,082,938$ |
| West | 927,427 | $1,628,543$ | 425,414 | 517,340 | $3,498,724$ |
| Total | $4,239,657$ | $6,967,671$ | $1,729,909$ | $1,982,833$ | $14,920,070$ |

## Suburbs

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $1,917,384$ | $4,127,286$ | 939,391 | 674,417 | $7,658,478$ |
| Mıdwest | $1,561,017$ | $3,904,198$ | 859,970 | 656,239 | $6,981,424$ |
| South | $2,324,552$ | $5,225,308$ | 995,974 | 966,958 | $9,512,792$ |
| West | $1,394,533$ | $3,007,394$ | 808,288 | 679,922 | $5,890,137$ |
| Total | $7,197,486$ | $16,264,186$ | $3,603,623$ | $2,977,536$ | $30,042,831$ |

Non-metropolitan Areas

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | 446,015 | 780,937 | 157,491 | 145,976 | $1,530,419$ |
| Mıdwest | $1,570,130$ | $2,260,067$ | 511,973 | 384,873 | $4,727,043$ |
| South | $2,136,193$ | $3,415,187$ | 672,876 | 561,114 | $6,785,370$ |
| West | 620,416 | 920,301 | 256,417 | 201,729 | $1,998,863$ |
| Total | $4,772,754$ | $7,376,492$ | $1,598,757$ | $1,293,692$ | $15,041,695$ |
|  |  |  |  |  |  |
|  |  |  | Total |  |  |
|  |  |  |  |  | Olderly |
|  | Small | Large | Other | Total |  |
| Northeast | $3,121,372$ | $6,099,255$ | $1,430,741$ | $1,175,852$ | $11,827,220$ |
| Mıdwest | $4,193,752$ | $7,900,546$ | $1,799,972$ | $1,514,282$ | $15,408,552$ |
| South | $5,952,397$ | $11,052,310$ | $2,211,457$ | $2,164,936$ | $21,381,100$ |
| West | $2,942,376$ | $5,556,238$ | $1,490,119$ | $1,398,991$ | $11,387,724$ |
| Total | $16,209,897$ | $30,608,349$ | $6,932,289$ | $6,254,061$ | $60,004,596$ |

Source. Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 4

Number of Households by Race/Ethnicity, 1990*


Suburbs

|  | White | Black | Hispanic | Native Am | Asian | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Northeast | $9,521,184$ | 417,539 | 250,251 | 16,899 | 144,781 | 5,086 | $10,355,740$ |
| Mrdwest | $8,597,236$ | 338,339 | 117,898 | 25,843 | 88,245 | 1,357 | $9,168,918$ |
| South | $10,855,214$ | $1,383,761$ | 658,021 | 59,774 | 154,727 | 4,191 | $13,115,688$ |
| West | $6,933,933$ | 346,210 | $1,164,855$ | 70,272 | 595,616 | 8,083 | $9,118,969$ |
| Total | $35,907,567$ | $2,485,849$ | $2,191,025$ | 172,788 | 983,369 | 18,717 | $41,759,315$ |

Non-Metropolitan Areas

|  | White | Black | Hispanic | Native Am | Asian | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Northeast | $2,048,785$ | 18,135 | 13,350 | 7,305 | 7,264 | 970 | $2,095,809$ |
| Midwest | $6,173,705$ | 72,053 | 50,936 | 49,013 | 16,956 | 891 | $6,363,554$ |
| South | $\mathbf{7 , 4 1 5 , 4 3 8}$ | $1,406,260$ | 238,298 | 87,516 | 20,838 | 1,685 | $9,170,035$ |
| West | $2,467,722$ | 19,915 | 256,116 | 128,219 | 65,468 | 1,658 | $2,939,098$ |
| Total | $18,105,650$ | $1,516,363$ | 558,700 | 272,053 | 110,526 | 5,204 | $20,568,496$ |

Total

|  | White | Black | Hispanic | Native Am | Asian | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Northeast | $\mathbf{1 5 , 6 1 1 , 4 9 7}$ | $1,749,191$ | $1,075,298$ | 39,560 | 367,019 | 18,621 | $18,861,186$ |
| Mıdwest | $19,660,496$ | $1,916,441$ | 434,906 | 105,337 | 203,910 | 4,966 | $22,326,056$ |
| South | $24,292,260$ | $5,167,203$ | $1,877,793$ | 190,009 | 297,700 | 11,159 | $31,836,124$ |
| West | $14,183,494$ | 934,548 | $2,484,043$ | 253,920 | $1,096,450$ | 17,761 | $18,970,216$ |
| Total | $73,747,747$ | $\mathbf{9 , 7 6 7 , 3 8 3}$ | $5,872,040$ | 588,826 | $1,965,079$ | 52,507 | $91,993,582$ |

[^46]Source Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 5

Growth in Median Income, 1985-89
(in constant 1989 dollars)

|  | Central Cities |  |  |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
|  | 1985 Income | 1989 Income | Growth Rate |
| Northeast | $\$ 20,743$ | $\$ 25,000$ | $205 \%$ |
| Midwest | 22,831 | 24,000 | $51 \%$ |
| South | 23,625 | 23,800 | $07 \%$ |
| West | 26,102 | 28,200 | $8.0 \%$ |

Suburbs

|  | 1985 Income |
| :--- | ---: |
| Northeast | $\$ 34,112$ |
| Midwest | 32,268 |
| South | 28,810 |
| West | 32,268 |

Growth Rate
$\$ 36,440 \quad 68 \%$
$33,000 \quad 23 \%$
$30,000 \quad 4.1 \%$
$32,800 \quad 1.6 \%$
Non-metropolitan Areas
1989 Income Growth Rate
\$24,999
8.5\%

22,445
3.3\%

18,752
2.4\%

22,000
-0.6\%

Source• Urban Institute tabulations of the 1985 and 1989 Amencan Housing Surveys.

## APPENDIX TABLE 6A <br> Households by Income Group, 1990

|  | Central Cities |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
|  | $30 \%$ or Less | $30-50 \%$ | $50-80 \%$ | $80-95 \%$ | Above 95\% | Total |
| Northeast | $1,334,763$ | 798,727 | $1,065,353$ | 514,196 | $2,696,598$ | $6,409,637$ |
| Midwest | $1,260,619$ | 885,581 | $1,278,872$ | 591,045 | $2,777,467$ | $6,793,584$ |
| South | $1,545,011$ | $1,147,848$ | $1,646,332$ | 770,682 | $4,440,528$ | $9,550,401$ |
| West | 982,448 | 867,695 | $1,128,931$ | 579,113 | $3,353,962$ | $6,912,149$ |
| Total | $5,122,841$ | $3,699,851$ | $5,119,488$ | $2,455,036$ | $13,268,555$ | $29,665,771$ |

Suburbs

|  | 30\% or Less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | $80-95 \%$ | Above 95\% | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Northeast | 944,187 | 954,238 | $1,349,364$ | 854,888 | $6,253,063$ | $10,355,740$ |
| Midwest | 702,176 | 777,615 | $1,458,619$ | 813,910 | $5,416,598$ | $9,168,918$ |
| South | $1,238,495$ | $1,241,917$ | $2,052,322$ | $1,106,629$ | $7,476,325$ | $13,115,688$ |
| West | 866,037 | 919,602 | $1,366,175$ | 783,499 | $5,183,656$ | $9,118,969$ |
| Total | $3,750,895$ | $3,893,372$ | $6,226,480$ | $3,558,926$ | $24,329,642$ | $41,759,315$ |

## Non-metropolitan Areas

|  | $30 \%$ or Less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | $\mathbf{8 0 - 9 5 \%}$ | Above 95\% | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Northeast | 227,210 | 251,656 | 389,689 | 193,976 | $1,033,278$ | $2,095,809$ |
| Midwest | 733,121 | 791,109 | $1,194,065$ | 577,167 | $3,068,092$ | $6,363,554$ |
| South | $1,330,212$ | $1,179,200$ | $1,567,776$ | 712,226 | $4,380,621$ | $9,170,035$ |
| West | 340,668 | 368,293 | 527,047 | 251,876 | $1,451,214$ | $2,939,098$ |
| Total | $2,631,211$ | $2,590,258$ | $3,678,577$ | $1,735,245$ | $9,933,205$ | $20,568,496$ |
|  |  |  |  | Total |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | $30 \%$ or Less | $30-50 \%$ | $50-80 \%$ | $80-95 \%$ | Above $95 \%$ | Total |
| Northeast | $2,506,160$ | $2,004,621$ | $2,804,406$ | $1,563,060$ | $9,982,939$ | $18,861,186$ |
| Midwest | $2,695,916$ | $2,454,305$ | $3,931,556$ | $1,982,122$ | $11,262,157$ | $22,326,056$ |
| South | $4,113,718$ | $3,568,965$ | $5,266,430$ | $2,589,537$ | $16,297,474$ | $31,836,124$ |
| West | $2,189,153$ | $2,155,590$ | $3,022,153$ | $1,614,488$ | $9,988,832$ | $18,970,216$ |
| Total | $11,504,947$ | $10,183,481$ | $15,024,545$ | $7,749,207$ | $47,531,402$ | $91,993,582$ |

Source• Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 6B

Percent Distribution of Households by Income Group, 1990


|  | $30 \%$ or Less | $\mathbf{3 0 - 5 0 \%}$ | $50-80 \%$ | $\mathbf{8 0 - 9 5 \%}$ Above 95\% |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $208 \%$ | $125 \%$ | $166 \%$ | $80 \%$ | $421 \%$ |
| Mıdwest | $186 \%$ | $130 \%$ | $188 \%$ | $87 \%$ | $409 \%$ |
| South | $162 \%$ | $120 \%$ | $172 \%$ | $81 \%$ | $465 \%$ |
| West | $142 \%$ | $126 \%$ | $163 \%$ | $84 \%$ | $485 \%$ |
| Total | $17.3 \%$ | $12.5 \%$ | $173 \%$ | $8.3 \%$ | $44.7 \%$ |

## Suburbs

|  | $30 \%$ or Less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | $\mathbf{8 0 - 9 5 \%}$ Above 95\% |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $91 \%$ | $92 \%$ | $\mathbf{1 3 0} 0$ | $83 \%$ | $604 \%$ |
| Midwest | $77 \%$ | $85 \%$ | $15.9 \%$ | $8.9 \%$ | $59.1 \%$ |
| South | $94 \%$ | $95 \%$ | $15.6 \%$ | $8.4 \%$ | $570 \%$ |
| West | $95 \%$ | $10.1 \%$ | $15.0 \%$ | $86 \%$ | $56.8 \%$ |
| Total | $9.0 \%$ | $9.3 \%$ | $149 \%$ | $85 \%$ | $583 \%$ |

Non-metropolitan Areas

|  | $30 \%$ or Less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | $\mathbf{8 0 - 9 5 \%}$ Above 95\% |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $108 \%$ | $12.0 \%$ | $18.6 \%$ | $93 \%$ | $\mathbf{4 9} 3 \%$ |
| Mrdwest | $115 \%$ | $124 \%$ | $18.8 \%$ | $9.1 \%$ | $482 \%$ |
| South | $14.5 \%$ | $12.9 \%$ | $17.1 \%$ | $78 \%$ | $478 \%$ |
| West | $11.6 \%$ | $125 \%$ | $17.9 \%$ | $86 \%$ | $494 \%$ |
| Total | $12.8 \%$ | $126 \%$ | $17.9 \%$ | $8.4 \%$ | $483 \%$ |

## Total

|  | $30 \%$ or Less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | $\mathbf{8 0 - 9 5 \%}$ Above $95 \%$ | $0-50 \%$ | Median | $0-80 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Modian |  |  |  |  |  |  |  |
| Northeast | $133 \%$ | $10.6 \%$ | $149 \%$ | $8.3 \%$ | $52.9 \%$ | $239 \%$ | $388 \%$ |
| Midwest | $121 \%$ | $11.0 \%$ | $176 \%$ | $8.9 \%$ | $50.4 \%$ | $23.1 \%$ | $407 \%$ |
| South | $129 \%$ | $112 \%$ | $165 \%$ | $8.1 \%$ | $512 \%$ | $24.1 \%$ | $407 \%$ |
| West | $115 \%$ | $114 \%$ | $15.9 \%$ | $8.5 \%$ | $52.7 \%$ | $229 \%$ | $388 \%$ |
| Total | $125 \%$ | $111 \%$ | $16.3 \%$ | $8.4 \%$ | $51.7 \%$ | $236 \%$ | $399 \%$ |

Source Urban Institute tabulations of the CHAS database.

## APPENDIX TABLE 6C

Percent Distribution of Renter Households by Income Group, 1990


Suburbs

|  | $30 \%$ or less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | $\mathbf{8 0 - 9 5 \%}$ Above $95 \%$ | $0-50 \%$ | Median | $0-80 \%$ Median |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Northeast | $19.1 \%$ | $14.6 \%$ | 1755 | $99 \%$ | $38.9 \%$ | $337 \%$ | $512 \%$ |
| Midwest | $168 \%$ | $145 \%$ | $22.7 \%$ | $103 \%$ | $357 \%$ | $313 \%$ | $540 \%$ |
| South | $167 \%$ | $145 \%$ | $214 \%$ | $102 \%$ | $37.2 \%$ | $312 \%$ | $526 \%$ |
| West | $167 \%$ | $158 \%$ | $20.4 \%$ | $101 \%$ | $370 \%$ | $32.5 \%$ | $52.9 \%$ |
| Total | $173 \%$ | $149 \%$ | $204 \%$ | $101 \%$ | $373 \%$ | $32 \%$ | $526 \%$ |

Non-metropolitan Areas

|  | $30 \%$ or less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | $\mathbf{8 0 - 9 5 \%}$ Above $95 \%$ | $0-50 \%$ | Median | 0-80\% | Median |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Northeast | $220 \%$ | $183 \%$ | $222 \%$ | $9.2 \%$ | $283 \%$ | $40.2 \%$ | $62.4 \%$ |  |
| MIdwest | $22.6 \%$ | $185 \%$ | $222 \%$ | $89 \%$ | $27.8 \%$ | $41.1 \%$ | $633 \%$ |  |
| South | $264 \%$ | $176 \%$ | $198 \%$ | $78 \%$ | $28.4 \%$ | $440 \%$ | $638 \%$ |  |
| West | $194 \%$ | $180 \%$ | $214 \%$ | $8.8 \%$ | $324 \%$ | $374 \%$ | $5888 \%$ |  |
| Total | $236 \%$ | $180 \%$ | $21.0 \%$ | $8.4 \%$ | $289 \%$ | $416 \%$ | $62.7 \%$ |  |

Total

|  | $\mathbf{3 0 \%}$ or less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | $\mathbf{8 0 - 9 5 \%}$ | Above 95\% | 0-50\% | Median |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | 0-80\% Median

Source Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 6D

Percent Distribution of Owner Households by Income Group, 1990

|  | Central Cities |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30\% or less | 30-50\% | 50-80\% | 80-95\% | Above 95\% | 0-50\% Median | 0-80\% Median |
| Northeast | $91 \%$ | 94\% | 14 7\% | 8 2\% | 585\% | 185\% | 33 3\% |
| Midwest | 83\% | 97\% | 17 2\% | 9.3\% | 55 \% | 180\% | 35 \% |
| South | 83\% | 86\% | 14 2\% | 7.6\% | 61.4\% | 169\% | 310\% |
| West | $64 \%$ | $76 \%$ | 12 \% | $7 \mathrm{7} \mathrm{\%}$ | 65 7\% | 140\% | $267 \%$ |
| Total | 80\% | 88\% | 14.7\% | 8.1\% | 60 4\% | 16 \% | $314 \%$ |
|  |  |  |  | Suburbs |  |  |  |
|  | 30\% or less | 30-50\% | 50-80\% | 80-95\% | Above 95\% | 0-50\% Median | 0-80\% Median |
| Northeast | 5.6\% | 7.3\% | 115\% | 77\% | 67.9\% | 129\% | 24 4\% |
| Mıdwest | 48\% | 6.6\% | 138\% | 8.4\% | 66 4\% | 114\% | 25 \% |
| South | $67 \%$ | $76 \%$ | 135\% | 78\% | 64 5\% | 14 \% | 27 7\% |
| West | $56 \%$ | $69 \%$ | 12 \% | $78 \%$ | 677\% | 125\% | 24 5\% |
| Total | 58\% | 7 2\% | 12 \% | 79\% | 66 4\% | $129 \%$ | $257 \%$ |


|  | Non-metropolitan Areas |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30\% or less | 30-50\% | 50-80\% | 80-95\% | Above 95\% | 0-50\% Median | 0-80\% Median |
| Northeast | 67\% | 97\% | $173 \%$ | $93 \%$ | 57 0\% | 164\% | 33 7\% |
| Midwest | 7.7\% | $103 \%$ | 176\% | $91 \%$ | 55 3\% | 180\% | $356 \%$ |
| South | 103\% | 112\% | 16 1\% | 78\% | 54 \%\% | 215\% | 37.7\% |
| West | 7.9\% | 10.0\% | 163\% | 85\% | 57.3\% | 179\% | 34 2\% |
| Total | 88\% | 10.6\% | 167\% | 8.4\% | 55.4\% | 19 4\% | 36 1\% |
|  | Total |  |  |  |  |  |  |
|  | 30\% or less | 30-50\% | 50-80\% | 80-95\% | Above 95\% | 0-50\% Median | 0-80\% Median |
| Northeast | 65\% | 8 1\% | 12.9\% | 80\% | 64 4\% | 146\% | 27 6\% |
| Midwest | 65\% | 85\% | 15 8\% | 89\% | 60 4\% | 15.0\% | 30 8\% |
| South | 8 2\% | 9.0\% | 145\% | 7.7\% | 60 6\% | 172\% | $317 \%$ |
| West | $62 \%$ | 7.7\% | 130\% | $79 \%$ | 65 3\% | 139\% | 26.9\% |
| Total | 71\% | 84\% | 142\% | $81 \%$ | 62 \% | 155\% | $297 \%$ |

Source. Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 7A

Household Race/Ethnicity by Income Group, 1990

|  | Central Cities |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
|  | White | Black | Hispanic | Other | Total |  |
|  | $2,394,251$ | $1,746,071$ | 766,717 | 215,802 | $5,122,841$ |  |
| $30 \%$ or less | $2,145,512$ | 875,373 | 536,090 | 142,876 | $3,699,851$ |  |
| $30-50 \%$ | $3,246,166$ | $1,055,833$ | 645,428 | 172,061 | $5,119,488$ |  |
| $50-80 \%$ | $1,663,421$ | 441,398 | 266,509 | 83,708 | $2,455,036$ |  |
| $80-95 \%$ | $1,285,180$ | $1,646,496$ | 907,571 | 429,308 | $13,268,555$ |  |
| Above $95 \%$ | $19,734,530$ | $5,765,171$ | 3122,315 | $1,043,755$ | $29,665,771$ |  |

## Suburbs

|  | White | Black | Hispanic | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $30 \%$ or less | $2,847,541$ | 456,276 | 320,666 | 126,412 | $3,750,895$ |
| $30-50 \%$ | $3,138,018$ | 321,258 | 325,619 | 108,477 | $3,893,372$ |
| $50-80 \%$ | $5,218,836$ | 428,124 | 426,685 | 152,835 | $6,226,480$ |
| $80-95 \%$ | $3,034,002$ | 220,822 | 209,284 | 94,818 | $3,558,926$ |
| Above $95 \%$ | $21,669,170$ | $1,059,369$ | 908,771 | 692,332 | $24,329,642$ |
| Total | $35,907,567$ | $2,485,849$ | $2,191,025$ | $1,174,874$ | $41,759,315$ |

Non-Metropolitan Areas

|  | White | Black | Hispanic | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $30 \%$ or less | $2,009,263$ | 425,776 | 106,485 | 89,687 | $2,631,211$ |
| $30-50 \%$ | $2,162,134$ | 271,804 | 96,611 | 59,709 | $2,590,258$ |
| $50-80 \%$ | $3,194,723$ | 294,512 | 120,456 | 68,886 | $3,678,577$ |
| $80-95 \%$ | $1,546,769$ | 111,364 | 47,216 | 29,896 | $1,735,245$ |
| Above $95 \%$ | $9,192,761$ | 412,907 | 187,932 | 139,605 | $9,933,205$ |
| Total | $18,105,650$ | $1,516,363$ | 558,700 | 387,783 | $20,568,496$ |

Total

|  | White | Black | Hispanic | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $30 \%$ or less | $7,251,055$ | $2,628,123$ | $1,193,868$ | 431,901 | $11,504,947$ |
| $30-50 \%$ | $7,445,664$ | $1,468,435$ | 958,320 | 311,062 | $10,183,481$ |
| $50-80 \%$ | $11,659,725$ | $1,778,469$ | $1,192,569$ | 393,782 | $15,024,545$ |
| $80-95 \%$ | $6,244,192$ | 773,584 | 523,009 | 208,422 | $7,749,207$ |
| Above $95 \%$ | $41,147,111$ | $3,118,772$ | $2,004,274$ | $1,261,245$ | $47,531,402$ |
| Total | $73,747,747$ | $9,767,383$ | $5,872,040$ | $2,606,412$ | $9,199,358$ |

Source Urban Instıtute tabulations of the CHAS database.

## APPENDIX TABLE 7B

Percent Distribution of Households by Race/Ethnicity and Income Group, 1990

|  | Central Cities |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | White | Black | Hispanic | Other | Total |
|  | $12.13 \%$ | $3029 \%$ | $24.56 \%$ | $2068 \%$ | $1727 \%$ |
| $30 \%$ or less | $10.87 \%$ | $15.18 \%$ | $17.17 \%$ | $13.69 \%$ | $12.47 \%$ |
| $30-50 \%$ | $16.45 \%$ | $1831 \%$ | $20.67 \%$ | $16.48 \%$ | $1726 \%$ |
| $50-80 \%$ | $8.43 \%$ | $7.66 \%$ | $854 \%$ | $8.02 \%$ | $8.28 \%$ |
| $80-95 \%$ | $52.12 \%$ | $28.56 \%$ | $2907 \%$ | $41.13 \%$ | $44.73 \%$ |
| Above $95 \%$ | $100.00 \%$ | $100.00 \%$ | $10000 \%$ | $100.00 \%$ | $100.00 \%$ |

Suburbs

|  | White | Black | Hispanic | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 30\% or less | $793 \%$ | $1835 \%$ | 14.64\% | 1076\% | 8.98\% |
| 30-50\% | 874\% | 12 92\% | 14.86\% | 9 23\% | 9.32\% |
| 50-80\% | 14 53\% | 1722\% | 19.47\% | 13.01\% | 14 91\% |
| 80-95\% | 845\% | $888 \%$ | 9.55\% | 8.07\% | 852\% |
| Above 95\% | 60.35\% | 42.62\% | 4148\% | 58.93\% | 58 26\% |
| Total | 100 00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| Non-Metropolitan Areas |  |  |  |  |  |
|  | White | Black | Hispanic | Other | Total |
| 30\% or less | 1110\% | 28.08\% | 19.06\% | 23.13\% | 12 79\% |
| 30-50\% | 11.94\% | 1792\% | 17.29\% | 15.40\% | 12 59\% |
| 50-80\% | 17.64\% | 19 42\% | 21.56\% | 17.76\% | $1788 \%$ |
| 80-95\% | 854\% | 7.34\% | $845 \%$ | 7.71\% | 8.44\% |
| Above 95\% | 50.77\% | 27 23\% | 33.64\% | 36.00\% | $4829 \%$ |
| Total | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100 00\% |

Total

|  | White | Black | Hispanic | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $30 \%$ or less | $9.83 \%$ | $26.91 \%$ | $20.33 \%$ | $16.57 \%$ | $1251 \%$ |
| $30-50 \%$ | $10.10 \%$ | $15.03 \%$ | $16.32 \%$ | $1193 \%$ | $11.07 \%$ |
| $50-80 \%$ | $15.81 \%$ | $18.21 \%$ | $2031 \%$ | $15.11 \%$ | $16.33 \%$ |
| $80-95 \%$ | $8.47 \%$ | $792 \%$ | $891 \%$ | $8.00 \%$ | $8.42 \%$ |
| Above $95 \%$ | $55.79 \%$ | $31.93 \%$ | $3413 \%$ | $48.39 \%$ | $51.67 \%$ |
| Total | $100.00 \%$ | $10000 \%$ | $10000 \%$ | $100.00 \%$ | $100.00 \%$ |

Source: Urban Institute tabulations of the CHAS database.

## Central Cities

Income Level
$\$ 10,000$ or less
$\$ 10,001-20,000$
$\$ 20,001-30,000$
$\$ 30,001-40,000$
$\$ 40,001-50,000$
$\$ 50,001-60,000$
$\$ 60,001-70,000$
$\$ 70,001-100,000$
Above $\$ 100,000$
Renters
$4,581,074$
$3,777,595$
$3,121,005$
$1,746,157$
971,718
523,002
325,303
322,651
163,104
$15,531,609$

| Owners | Total |
| ---: | ---: |
| $1,701,481$ | $6,282,555$ |
| $2,135,467$ | $5,913,062$ |
| $2,705,769$ | $5,826,774$ |
| $2,113,835$ | $3,859,992$ |
| $1,752,347$ | $2,724,065$ |
| $1,276,811$ | $1,799,813$ |
| 968,587 | $1,293,890$ |
| $1,164,167$ | $1,486,818$ |
| 943,721 | $1,106,825$ |
| $14,762,185$ | $30,293,794$ |

$\%$ Owners
$271 \%$
$361 \%$
$464 \%$
$548 \%$
$643 \%$
$709 \%$
$749 \%$
$78.3 \%$
$853 \%$
$487 \%$
Income Level
$\$ 10,000$ or less
$\$ 10,001-20,000$
$\$ 20,001-30,000$
$\$ 30,001-40,000$
$\$ 40,001-50,000$
$\$ 50,001-60,000$
$\$ 60,001-70,000$
$\$ 70,001-100,000$
Above $\$ 100,000$
Renters
$2,411,592$
$2,915,144$
$2,881,146$
$1,976,503$
$1,140,806$
640,311
320,952
342,260
157,948
$12,786,662$

Suburbs

| Owners | Total | \% Owners |
| ---: | ---: | ---: |
| $2,652,129$ | $5,063,721$ | $524 \%$ |
| $3,813,236$ | $6,728,380$ | $567 \%$ |
| $4,736,469$ | $7,617,615$ | $622 \%$ |
| $4,223,166$ | $6,199,669$ | $681 \%$ |
| $3,718,428$ | $4,859,234$ | $765 \%$ |
| $3,052,821$ | $3,693,132$ | $827 \%$ |
| $2,256,699$ | $2,577,651$ | $875 \%$ |
| $3,398,778$ | $3,741,038$ | $909 \%$ |
| $2,456,386$ | $2,614,334$ | $940 \%$ |
| $30,308,112$ | $43,094,774$ | $703 \%$ |

## Non-metropolitan Areas

| Income Level | Renters | Owners | Total | \% Owners |
| :---: | :---: | :---: | :---: | :---: |
| \$10,000 or less | 2,015,302 | 2,692,654 | 4,707,956 | 572\% |
| \$10,001-20,000 | 1,642,111 | 3,128,585 | 4,770,696 | 65 \% |
| \$20,001-30,000 | 949,917 | 3,048,128 | 3,998,045 | 76 2\% |
| \$30,001-40,000 | 442,508 | 2,187,040 | 2,629,548 | 83 2\% |
| \$40,001-50,000 | 202,401 | 1,418,006 | 1,620,407 | 875\% |
| \$50,001-60,000 | 90,411 | 872,007 | 962,418 | 906\% |
| \$60,001-70,000 | 44,733 | 590,463 | 635,196 | 930\% |
| \$70,001-100,000 | 42,148 | 568,313 | 610,461 | 93 1\% |
| Above \$100,000 | 19,361 | 340,721 | 360,082 | 94 6\% |
| Total | 5,448,892 | 14,845,917 | 20,294,809 | 73 \% |
|  |  | All Househo |  |  |
| Income Level | Renters | Owners | Total | \% Owners |
| \$10,000 or less | 9,007,968 | 7,046,264 | 16,054,232 | 43 9\% |
| \$10,001-20,000 | 8,334,850 | 9,077,288 | 17,412,138 | 52.1\% |
| \$20,001-30,000 | 6,952,068 | 10,490,366 | 17,442,434 | 60 1\% |
| \$30,001-40,000 | 4,165,168 | 8,524,041 | 12,689,209 | 67 2\% |
| \$40,001-50,000 | 2,314,925 | 6,888,781 | 9,203,706 | 74 8\% |
| \$50,001-60,000 | 1,253,724 | 5,201,639 | 6,455,363 | 80 \% |
| \$60,001-70,000 | 690,988 | 3,815,749 | 4,506,737 | 847\% |
| \$70,001-100,000 | 707,059 | 5,131,258 | 5,838,317 | 879\% |
| Above \$100,000 | 340,413 | 3,740,828 | 4,081,241 | $917 \%$ |
| Total | 33,767,163 | 59,916,214 | 93,683,377 | 640\% |

Source. Urban Institute tabulations of the 1989 AHS Includes all households

Distribution of Tenure by Race

| Race/Ethnicity | Owners | Renters | Total | \% Owners |
| :--- | ---: | ---: | ---: | ---: |
| Hispanıc | $2,544,369$ | $3,327,671$ | $5,872,040$ | $433 \%$ |
| White | $51,652,924$ | $22,094,823$ | $73,747,747$ | $700 \%$ |
| Black | $4,409,824$ | $5,357,559$ | $9,767,383$ | $451 \%$ |
| Other | $1,397,479$ | $1,208,933$ | $2,606,412$ | $53.6 \%$ |
| Total | $60,004,596$ | $31,988,986$ | $91,993,582$ | $652 \%$ |

## Tenure by Household Type

| Household Type | Owners |
| :--- | ---: |
| Elderly | $16,209,897$ |
| Small | $30,608,349$ |
| Large | $6,932,289$ |
| Other | $6,254,061$ |
| Total | $60,004,596$ |


| Renters | Total |
| ---: | ---: |
| $5,269,983$ | $21,479,880$ |
| $13,143,650$ | $43,751,999$ |
| $3,249,388$ | $10,181,677$ |
| $10,325,965$ | $16,580,026$ |
| $31,988,986$ | $91,993,582$ |

\% Owners
75.5\%
70.0\%

68 1\%
37 7\%
65 2\%

Tenure by Income Group

| Income Group | Owners |
| :--- | ---: |
| $30 \%$ or less | $4,245,609$ |
| $30-50 \%$ | $5,052,975$ |
| $50-80 \%$ | $8,533,975$ |
| $80-95 \%$ | $4,859,154$ |
| Above $95 \%$ | $37,312,883$ |
| Total | $60,004,596$ |


| Renters | Total | \% Owners |
| ---: | ---: | ---: |
| $7,259,338$ | $11,504,947$ | $36.9 \%$ |
| $5,130,506$ | $10,183,481$ | $49.6 \%$ |
| $6,490,570$ | $15,024,545$ | $56.8 \%$ |
| $2,890,053$ | $7,749,207$ | $62.7 \%$ |
| $10,218,519$ | $47,531,402$ | $785 \%$ |
| $31,988,986$ | $91,993,582$ | $652 \%$ |

Source Urban Institute tabulations of the CHAS database

|  | Central Cities |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| Race/Ethnicity | Owners | Renters | Total | \% Owners |
| Hispanıc | $1,068,292$ | $2,054,023$ | $3,122,315$ | $342 \%$ |
| White | $11,213,436$ | $8,521,094$ | $19,734,530$ | $56.8 \%$ |
| Black | $2,223,867$ | $3,541,304$ | $5,765,171$ | $38.6 \%$ |
| Other | 414,475 | 629,280 | $1,043,755$ | $397 \%$ |
| Total | $14,920,070$ | $14,745,701$ | $29,665,771$ | $50.3 \%$ |
|  |  |  |  |  |
|  |  | Suburbs |  |  |
|  |  |  |  |  |
| Race/Ethnicity | Owners | Renters |  |  |
| Hispanıc | $1,146,050$ | $1,044,975$ | $2,191,025$ | $523 \%$ |
| White | $26,867,385$ | $9,040,182$ | $35,907,567$ | $748 \%$ |
| Black | $1,282,032$ | $1,203,817$ | $2,485,849$ | $516 \%$ |
| Other | 747,364 | 427,510 | $1,174,874$ | $636 \%$ |
| Total | $30,042,831$ | $11,716,484$ | $41,759,315$ | $719 \%$ |

## Non-Metropolitan Areas

| Race/Ethnicity | Owners |
| :--- | ---: |
| Hispanıc | 330,027 |
| White | $13,572,103$ |
| Black | 903,925 |
| Other | 235,640 |
| Total | $15,041,695$ |


| Race/Ethnicity | Owners | Renters | Total | \% Owners |
| :--- | ---: | ---: | ---: | ---: |
| Hispanic | $2,544,369$ | $3,327,671$ | $5,872,040$ | $43.3 \%$ |
| White | $51,652,924$ | $22,094,823$ | $73,747,747$ | $700 \%$ |
| Black | $4,409,824$ | $5,357,559$ | $9,767,383$ | $45.1 \%$ |
| Other | $1,397,479$ | $1,208,933$ | $2,606,412$ | $536 \%$ |
| Total | $60,004,596$ | $31,988,986$ | $91,993,582$ | $65.2 \%$ |

Source: Urban Institute tabulations of the CHAS database.

## APPENDIX 9C

Owner Households by Race and Household Type, 1990

|  | Central Cities |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Elderly | Small | Large | Other | Total |
|  | 139,671 | 511,578 | 328,778 | 88,265 | $1,068,292$ |
| Hispanic | $3,555,042$ | $5,197,035$ | 886,823 | $1,574,536$ | $11,213,436$ |
| White | 500,346 | $1,047,478$ | 403,168 | 272,875 | $2,223,867$ |
| Black | 44,598 | 211,580 | 111,140 | 47,157 | 414,475 |
| Other | $4,239,657$ | $6,967,671$ | $1,729,909$ | $1,982,833$ | $14,920,070$ |

Suburbs

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Hispanic | 121,844 | 596,106 | 343,681 | 84,419 | $1,146,050$ |
| White | $6,816,368$ | $14,543,127$ | $2,826,689$ | $2,681,201$ | $26,867,385$ |
| Black | 191,482 | 698,298 | 249,805 | 142,447 | $1,282,032$ |
| Other | 67,792 | 426,655 | 183,448 | 69,469 | 747,364 |
| Total | $7,197,486$ | $16,264,186$ | $3,603,623$ | $2,977,536$ | $30,042,831$ |

Non-Metropolitan Areas

|  | Elderly | Small | Large | Other | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Hispanıc | 56,670 | 162,645 | 86,771 | 23,941 | 330,027 |
| White | $4,439,665$ | $6,697,389$ | $1,276,928$ | $1,158,121$ | $13,572,103$ |
| Black | 234,924 | 404,262 | 176,831 | 87,908 | 903,925 |
| Other | 41,495 | 112,196 | 58,227 | 23,722 | 235,640 |
| Total | $4,772,754$ | $7,376,492$ | $1,598,757$ | $1,293,692$ | $15,041,695$ |
|  |  |  |  |  |  |
|  |  |  | Total |  |  |
|  |  |  |  |  |  |
|  | Elderly | Small | Large | Other | Total |
| Hispanic | 318,185 | $1,270,329$ | 759,230 | 196,625 | $2,544,369$ |
| White | $14,811,075$ | $26,437,551$ | $4,990,440$ | $5,413,858$ | $51,652,924$ |
| Black | 926,752 | $2,150,038$ | 829,804 | 503,230 | $4,409,824$ |
| Other | 153,885 | 750,431 | 352,815 | 140,348 | $1,397,479$ |
| Total | $16,209,897$ | $30,608,349$ | $6,932,289$ | $6,254,061$ | $60,004,596$ |

Source. Urban Institute tabulations of the CHAS database.

## APPENDIX TABLE 10

Distribution of Units by Unit Size, 1990

## Owner Units (Occupied and Vacant)

## Central Cities

|  | $0 / 1$ BR | 2 BRs | 3+ BRs | Total |
| :--- | ---: | ---: | ---: | ---: |
| Northeast | 226,845 | 599,962 | $1,753,433$ | $2,580,240$ |
| Midwest | 124,694 | $1,005,444$ | $2,540,903$ | $3,671,041$ |
| South | 223,251 | $1,266,564$ | $3,644,427$ | $5,134,242$ |
| West | 214,975 | 921,178 | $2,357,973$ | $3,494,126$ |
| Total | 789,765 | $3,793,148$ | $10,296,736$ | $14,879,649$ |

## Suburbs

|  | $0 / 1 \mathbf{B R}$ | $\mathbf{2}$ BRs | $\mathbf{3 +}+\mathbf{B R s}$ | Total |
| :--- | ---: | ---: | ---: | ---: |
| Northeast | 211,255 | $1,415,983$ | $6,037,687$ | $7,664,925$ |
| MIdwest | 133,420 | $1,346,255$ | $5,507,666$ | $6,987,341$ |
| South | 340,106 | $2,245,797$ | $7,024,196$ | $9,610,099$ |
| West | 322,940 | $1,355,086$ | $4,225,371$ | $5,903,397$ |
| Total | $1,007,721$ | $6,363,121$ | $22,794,920$ | $30,165,762$ |


|  | $0 / 1$ BR | 2 BRs | 3+ BRs | Total |
| :--- | ---: | ---: | ---: | ---: |
| Northeast | 42,460 | 354,858 | $1,143,263$ | $1,540,581$ |
| Midwest | 134,217 | $1,274,397$ | $3,355,783$ | $4,764,397$ |
| South | 206,729 | $1,950,241$ | $4,703,033$ | $6,860,003$ |
| West | 140,424 | 562,249 | $1,320,464$ | $2,023,137$ |
| Total | 523,830 | $4,141,745$ | $10,522,543$ | $15,188,118$ |

## Total

|  | 0/1 BR | 2 BRs | $3+$ BRs | Total |
| :--- | ---: | ---: | ---: | ---: |
| Northeast | 480,560 | $2,370,803$ | $8,934,383$ | $11,785,746$ |
| Midwest | 392,331 | $3,626,096$ | $11,404,352$ | $15,422,779$ |
| South | 770,086 | $5,462,602$ | $15,371,656$ | $21,604,344$ |
| West | 678,339 | $2,838,513$ | $7,903,808$ | $11,420,660$ |
| Total | $2,321,316$ | $14,298,014$ | $43,614,199$ | $60,233,529$ |

APPENDIX TABLE 10 (ctd.)
Distribution of Units by Unit Size, 1990

Renter Units (Occupied and Vacant)
Central Cities

|  | $\mathbf{0 / 1} \mathbf{~ B R}$ | $\mathbf{2}$ BRs | $\mathbf{3 +}$ BRs | Total |
| :--- | ---: | ---: | ---: | ---: |
| Northeast | $1,906,712$ | $1,469,349$ | 778,541 | $4,154,602$ |
| Mıdwest | $1,361,301$ | $1,406,708$ | 715,914 | $3,483,923$ |
| South | $2,064,228$ | $2,104,308$ | $1,001,798$ | $5,170,334$ |
| West | $1,808,333$ | $1,369,992$ | 593,201 | $3,771,526$ |
| Total | $7,140,574$ | $6,350,357$ | $3,089,454$ | $16,580,385$ |

Suburbs

|  | $0 / 1 \mathbf{B R}$ | $\mathbf{2}$ BRs | 3+ BRs | Total |
| :--- | ---: | ---: | ---: | ---: |
| Northeast | $1,116,080$ | $1,210,253$ | 685,646 | $3,011,979$ |
| Mıdwest | 773,862 | $1,119,448$ | 538,922 | $2,432,232$ |
| South | $1,117,034$ | $1,902,591$ | $1,167,118$ | $4,186,743$ |
| West | $1,252,568$ | $1,474,173$ | 826,719 | $3,553,460$ |
| Total | $4,259,544$ | $5,706,465$ | $3,218,405$ | $13,184,414$ |


|  | 0/1 BR | $\mathbf{2}$ BRs | 3+ BRs | Total |
| :--- | ---: | ---: | ---: | ---: |
| Northeast | 193,996 | 245,793 | 193,576 | 633,365 |
| Mıdwest | 482,809 | 732,572 | 601,685 | $1,817,066$ |
| South | 535,603 | $1,276,206$ | 927,616 | $2,739,425$ |
| West | 295,138 | 438,159 | 322,101 | $1,055,398$ |
| Total | $1,507,546$ | $2,692,730$ | $2,044,978$ | $6,245,254$ |

Northeast Midwest
South
West
Total

| 0/1 BR | $\mathbf{2 ~ B R s}$ | 3+ BRs | Total |
| ---: | ---: | ---: | ---: |
| $3,216,788$ | $2,925,395$ | $1,657,763$ | $7,799,946$ |
| $2,617,972$ | $3,258,728$ | $1,856,521$ | $7,733,221$ |
| $3,716,865$ | $5,283,105$ | $3,096,532$ | $12,096,502$ |
| $3,356,039$ | $3,282,324$ | $1,742,021$ | $8,380,384$ |
| $12,907,664$ | $14,749,552$ | $8,352,837$ | $36,010,053$ |

Source Urban Institute tabulations of the CHAS database

Units Lacking Complete Kitchen or Plumbing, 1990

|  | Renter <br> Units | Owner <br> Units | Total | Percent <br> Lacking Complete |
| :--- | ---: | ---: | ---: | ---: |
| Kitchen/Plumbing |  |  |  |  |

Source Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 11B

AHS Measures of Unit Inadequacy, 1989

*The 1989 AHS count of units exceeds the 1990 Census count
**Includes moderate and severe inadequacy.
Source. Urban Institute tabulations of the 1989 AHS, excludes units classified as inadequate

## APPENDIX TABLE 12A

Distribution of Units by Year Built, 1990

|  | Central Cities |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
|  | Before 1950 | $\mathbf{1 9 5 0 - 5 9}$ | $\mathbf{1 9 6 0 - 7 9}$ | $1980-1990$ | Total |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Northeast | $3,702,171$ | 887,001 | $1,385,455$ | 446,073 | $6,420,700$ |  |  |  |
| Mıdwest | $3,103,004$ | $1,189,044$ | $1,878,093$ | 624,884 | $6,795,025$ |  |  |  |
| South | $2,119,316$ | $1,715,487$ | $3,810,973$ | $1,904,635$ | $9,550,411$ |  |  |  |
| West | $1,808,710$ | $1,137,930$ | $2,582,886$ | $1,373,160$ | $6,902,686$ |  |  |  |
| Total | $10,733,201$ | $4,929,462$ | $9,657,407$ | $4,348,752$ | $29,668,822$ |  |  |  |
|  | Suburbs |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Before 1950 | $1950-59$ | $1960-79$ | $1980-1990$ | Total |  |  |  |
|  | $3,548,813$ | $1,859,399$ | $3,437,425$ | $1,510,781$ | $10,356,418$ |  |  |  |
| Northeast | $1,994,533$ | $1,630,159$ | $3,948,409$ | $1,593,310$ | $9,166,411$ |  |  |  |
| Mıdwest | $1,334,803$ | $1,489,333$ | $5,901,294$ | $4,381,148$ | $13,106,578$ |  |  |  |
| South | $1,184,505$ | $1,428,143$ | $4,123,781$ | $2,366,881$ | $9,103,310$ |  |  |  |
| West | $8,062,654$ | $6,407,034$ | $17,410,909$ | $9,852,120$ | $41,732,717$ |  |  |  |

Northeast Midwest
South
West
Total

## Non-Metropolitan Areas

Before 1950
$3,548,813$
$1,994,533$
$1,334,803$
$1,184,505$
$8,062,654$
1950-59

1950-59

| Before 1950 | $1950-59$ | $1960-79$ | $1980-1990$ | Total |
| ---: | ---: | ---: | ---: | ---: |
| 926,418 | 196,888 | 619,087 | 353,202 | $2,095,595$ |
| $2,544,647$ | 734,250 | $2,247,042$ | 829,600 | $6,355,539$ |
| $1,861,262$ | $1,157,335$ | $3,857,888$ | $2,288,780$ | $9,165,265$ |
| 652,070 | 334,218 | $1,240,896$ | 702,288 | $2,929,472$ |
| $5,984,397$ | $2,422,691$ | $7,964,913$ | $4,173,870$ | $20,545,871$ |

Total

Northeast
Midwest
South
West
Total

| Before 1950 | $1950-59$ | $1960-79$ | $1980-1990$ | Total |
| ---: | ---: | ---: | ---: | ---: |
| $8,177,402$ | $2,943,288$ | $5,441,967$ | $2,310,056$ | $18,872,713$ |
| $7,642,184$ | $3,553,453$ | $8,073,544$ | $3,047,794$ | $22,316,975$ |
| $5,315,381$ | $4,362,155$ | $13,570,155$ | $8,574,563$ | $31,822,254$ |
| $3,645,285$ | $2,900,291$ | $7,947,563$ | $4,442,329$ | $18,935,468$ |
| $24,780,252$ | $13,759,187$ | $35,033,229$ | $18,374,742$ | $91,947,410$ |

Source. Urban Institute tabulations of the CHAS database.

## APPENDIX TABLE 12B

Percent Distribution of Units by Year Built, 1990

## Central Cities

|  | Before 1950 | $1950-59$ | $1960-79$ | $1980-1990$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $58 \%$ | $14 \%$ | $22 \%$ | $7 \%$ | $100 \%$ |
| Midwest | $46 \%$ | $17 \%$ | $28 \%$ | $9 \%$ | $100 \%$ |
| South | $22 \%$ | $18 \%$ | $40 \%$ | $20 \%$ | $100 \%$ |
| West | $26 \%$ | $16 \%$ | $37 \%$ | $20 \%$ | $100 \%$ |
| Total | $36 \%$ | $17 \%$ | $33 \%$ | $15 \%$ | $100 \%$ |

## Suburbs

|  | Before 1950 | $1950-59$ | $1960-79$ | $1980-1990$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $34 \%$ | $18 \%$ | $33 \%$ | $15 \%$ | $100 \%$ |
| Mıdwest | $22 \%$ | $18 \%$ | $43 \%$ | $17 \%$ | $100 \%$ |
| South | $10 \%$ | $11 \%$ | $45 \%$ | $33 \%$ | $100 \%$ |
| West | $13 \%$ | $16 \%$ | $45 \%$ | $26 \%$ | $100 \%$ |
| Total | $19 \%$ | $15 \%$ | $42 \%$ | $24 \%$ | $100 \%$ |

Non-Metropolitan Areas

|  | Before 1950 | $1950-59$ | $1960-79$ | $1980-1990$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $44 \%$ | $9 \%$ | $30 \%$ | $17 \%$ | $100 \%$ |
| Midwest | $40 \%$ | $12 \%$ | $35 \%$ | $13 \%$ | $100 \%$ |
| South | $20 \%$ | $13 \%$ | $42 \%$ | $25 \%$ | $100 \%$ |
| West | $22 \%$ | $11 \%$ | $42 \%$ | $24 \%$ | $100 \%$ |
| Total | $29 \%$ | $12 \%$ | $39 \%$ | $20 \%$ | $100 \%$ |

Total

|  | Before 1950 | 1950-59 | $1960-79$ | $1980-1990$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $43 \%$ | $16 \%$ | $29 \%$ | $12 \%$ | $100 \%$ |
| Midwest | $34 \%$ | $16 \%$ | $36 \%$ | $14 \%$ | $100 \%$ |
| South | $17 \%$ | $14 \%$ | $43 \%$ | $27 \%$ | $100 \%$ |
| West | $19 \%$ | $15 \%$ | $42 \%$ | $23 \%$ | $100 \%$ |
| Total | $27 \%$ | $15 \%$ | $38 \%$ | $20 \%$ | $100 \%$ |

Source Urban Institute tabulations of the CHAS database.

APPENDIX TABLE 13
Changes in Monthly Housing Cost for Renters, 1985-89 (in 1989 dollars)


Source: Urban Institute tabulations of the 1985 and 1989 AHS. Includes all rental units, occupied and vacant. 1985 costs are expressed in constant 1989 dollars using the CPI-U.

APPENDIX TABLE 14
Changes in Monthly Housing Cost for Owners, 1985-89
(in 1989 dollars)


Source: Urban Institute tabulations of the 1985 and 1989 AHS. Includes all owner units, occupied and vacant 1985 costs are expressed in constant 1989 dollars using the CPI-U

APPENDIX TABLE 15
Private New Housing Starts, 1964-1991
(Thousands of Units)

| Year | Units in Structure <br> 2-4 Units |  |  |
| :--- | ---: | ---: | ---: |
|  | 1 Unit | 5+ Units |  |
| 1964 | 970.5 | 108.4 | 4500 |
| 1965 | 9637 | 86.6 | 422.5 |
| 1966 | 778.6 | 61.1 | 3251 |
| 1967 | 843.9 | 716 | 3761 |
| 1968 | 8994 | 809 | 527.3 |
| 1969 | 810.6 | 85.0 | 5712 |
| 1970 | 812.9 | 84.8 | 5359 |
|  |  |  |  |
| 1971 | $1,151.0$ | 1203 | 7809 |
| 1972 | $1,309.2$ | 141.3 | 906.2 |
| 1973 | $1,132.0$ | 118.3 | 795.0 |
| 1974 | 888.1 | 68.1 | 381.6 |
| 1975 | 892.2 | 64.0 | 2043 |
|  |  |  |  |
| 1976 | $1,162.4$ | 85.9 | 289.2 |
| 1977 | $1,450.9$ | 121.7 | 414.4 |
| 1978 | $1,433.3$ | 1250 | 462.0 |
| 1979 | $1,194.1$ | 122.0 | 4290 |
| 1980 | 852.2 | 109.5 | 3305 |
|  |  |  |  |
| 1981 | 705.4 | 91.1 | 287.7 |
| 1982 | 662.6 | 80.0 | 319.6 |
| 1983 | $1,067.6$ | 113.5 | 522.0 |
| 1984 | 1,0842 | 1214 | 5440 |
| 1985 | $1,072.4$ | 93.4 | 576.1 |
|  |  |  |  |
| 1986 | $1,179.4$ | 84.0 | 542.0 |
| 1987 | 1,1464 | 65.3 | 408.7 |
| 1988 | $1,081.3$ | 58.8 | 348.0 |
| 1989 | 1,0033 | 552 | 317.6 |
| 1990 | 894.8 | 375 | 260.4 |
| 1991 | 840.4 | 35.6 | 137.9 |

Source• Economic Report of the President, 1993, Table B-50.

## APPENDIX TABLE 16

Changes in Median House Value, 1985-89 (in 1989 dollars)

|  | 1985 | 1989 | Percent <br> Change |
| :--- | ---: | ---: | ---: |
| Central Cities |  |  |  |
| Northeast | $\$ 69,145$ | $\$ 100,000$ | $446 \%$ |
| Mıdwest | 51,859 | 54,000 | $41 \%$ |
| South | 64,535 | 65,000 | $0.7 \%$ |
| West | 103,717 | 125,000 | $20.5 \%$ |
| Total | 69,145 | 74,000 | $70 \%$ |
|  |  |  |  |
| Suburbs |  |  |  |
| Northeast | 92,193 | 140,000 | $51.9 \%$ |
| Midwest | 69,145 | 75,000 | $8.5 \%$ |
| South | 69,145 | 72,000 | $4.1 \%$ |
| West | 106,599 | 125,000 | $17.3 \%$ |
| Total | 80,669 | 90,000 | $11.6 \%$ |
|  |  |  |  |
| Non-Metropolitan Areas |  |  |  |
| Northeast | 56,468 | 75,000 | $32.8 \%$ |
| Mıdwest | 46,097 | 45,000 | $-24 \%$ |
| South | 43,216 | 45,000 | $41 \%$ |
| West | 63,383 | 60,000 | $-53 \%$ |
| Total | 46,097 | 48,000 | $4.1 \%$ |
|  |  |  |  |
| Total |  |  |  |
| Northeast | 86,431 | 65,000 | $446 \%$ |
| Mıdwest | 57,621 | 60,000 | $41 \%$ |
| South | 57,621 | 75,000 | $41 \%$ |
| West | 97,955 | $21 \%$ |  |
| Total | 69,145 | $85 \%$ |  |

Source• Urban Institute tabulatıons of the 1985 and 1989 AHS.

## APPENDIX TABLE 17A <br> Distribution of Housing Units by Unit Affordability, 1990

## Central Cities

|  | 30\% or less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | Above 80\% | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | 950,381 | $1,368,851$ | $1,985,330$ | $2,430,280$ | $6,734,842$ |
| Midwest | $1,167,154$ | $2,268,118$ | $2,582,750$ | $1,136,942$ | $7,154,964$ |
| South | $1,191,818$ | $2,296,633$ | $3,915,471$ | $2,900,654$ | $10,304,576$ |
| West | 461,814 | 960,232 | $2,298,511$ | $3,545,095$ | $7,265,652$ |
| Total | $3,771,167$ | $6,893,834$ | $10,782,062$ | $10,012,971$ | $31,460,034$ |

Suburbs

|  | 30\% or less | 30-50\% | 50-80\% | Above 80\% | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Northeast | 709,837 | 1,038,626 | 2,170,214 | 6,758,227 | 10,676,904 |
| Midwest | 818,443 | 1,505,843 | 3,483,235 | 3,612,052 | 9,419,573 |
| South | 1,504,511 | 1,997,598 | 4,503,637 | 5,791,096 | 13,796,842 |
| West | 583,922 | 782,688 | 2,321,786 | 5,768,461 | 9,456,857 |
| Total | 3,616,713 | 5,324,755 | 12,478,872 | 21,929,836 | 43,350,176 |
|  | Non-Metropolitan Areas |  |  |  |  |
|  | 30\% or less | 30-50\% | 50-80\% | Above 80\% | Total |
| Northeast | 294,930 | 385,660 | 604,662 | 888,694 | 2,173,946 |
| Midwest | 1,464,304 | 1,759,249 | 1,975,055 | 1,382,855 | 6,581,463 |
| South | 2,250,701 | 1,934,632 | 2,637,227 | 2,776,868 | 9,599,428 |
| West | 486,184 | 534,572 | 896,268 | 1,161,511 | 3,078,535 |
| Total | 4,496,119 | 4,614,113 | 6,113,212 | 6,209,928 | 21,433,372 |

Total

|  | $30 \%$ or less | $\mathbf{3 0 - 5 0 \%}$ | $50-80 \%$ | Above 80\% | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | 195,5148 | $2,793,137$ | $4,760,206$ | $10,077,201$ | $19,585,692$ |
| Mıdwest | $3,449,901$ | $5,533,210$ | $8,041,040$ | $6,131,849$ | $23,156,000$ |
| South | $4,947,030$ | $6,228,863$ | $11,056,335$ | $11,468,618$ | $33,700,846$ |
| West | $1,531,920$ | $2,277,492$ | $5,516,565$ | $10,475,067$ | $19,801,044$ |
| Total | $11,883,999$ | $16,832,702$ | $29,374,146$ | $38,152,735$ | $96,243,582$ |

Source Urban Institute tabulations of the CHAS database

APPENDIX TABLE 17B
Percent Distribution of Housing by Unit Affordability, 1990

|  | Central Cities |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | $30 \%$ or less | $30-50 \%$ | $50-80 \%$ | Above $80 \%$ | Total |
|  | $14 \%$ | $20 \%$ | $29 \%$ | $36 \%$ | $100 \%$ |
| Northeast | $16 \%$ | $32 \%$ | $36 \%$ | $16 \%$ | $100 \%$ |
| Mıdwest | $12 \%$ | $22 \%$ | $38 \%$ | $28 \%$ | $100 \%$ |
| South | $6 \%$ | $13 \%$ | $32 \%$ | $49 \%$ | $100 \%$ |
| West | $12 \%$ | $22 \%$ | $34 \%$ | $32 \%$ | $100 \%$ |
| Total |  |  |  |  |  |

## Suburbs

|  | $30 \%$ or less | $30-50 \%$ | $50-80 \%$ | Above $80 \%$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $7 \%$ | $10 \%$ | $20 \%$ | $63 \%$ | $100 \%$ |
| Midwest | $9 \%$ | $16 \%$ | $37 \%$ | $38 \%$ | $100 \%$ |
| South | $11 \%$ | $14 \%$ | $33 \%$ | $42 \%$ | $100 \%$ |
| West | $6 \%$ | $8 \%$ | $25 \%$ | $61 \%$ | $100 \%$ |
| Total | $8 \%$ | $12 \%$ | $29 \%$ | $51 \%$ | $100 \%$ |

Non-Metropolitan Areas

|  | $\mathbf{3 0 \%}$ or less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | Above $80 \%$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $14 \%$ | $18 \%$ | $28 \%$ | $41 \%$ | $100 \%$ |
| Midwest | $22 \%$ | $27 \%$ | $30 \%$ | $21 \%$ | $100 \%$ |
| South | $23 \%$ | $20 \%$ | $27 \%$ | $29 \%$ | $100 \%$ |
| West | $16 \%$ | $17 \%$ | $29 \%$ | $38 \%$ | $100 \%$ |
| Total | $21 \%$ | $22 \%$ | $29 \%$ | $29 \%$ | $100 \%$ |

Total

|  | $\mathbf{3 0 \%}$ or less | $\mathbf{3 0 - 5 0 \%}$ | $\mathbf{5 0 - 8 0 \%}$ | Above 80\% | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Northeast | $10 \%$ | $14 \%$ | $24 \%$ | $51 \%$ | $100 \%$ |
| MIdwest | $15 \%$ | $24 \%$ | $35 \%$ | $26 \%$ | $100 \%$ |
| South | $15 \%$ | $18 \%$ | $33 \%$ | $34 \%$ | $100 \%$ |
| West | $8 \%$ | $12 \%$ | $28 \%$ | $53 \%$ | $100 \%$ |
| Total | $12 \%$ | $17 \%$ | $31 \%$ | $40 \%$ | $100 \%$ |

Source Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 18A

Renter Households with One or More Housing Problem by Income Group, 1990*


[^47]Source Urban Institute tabulations of the CHAS database.

## APPENDIX TABLE 18B

Distribution of Renter Households by Income Group, 1990

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| Northeast |  |  |  |  |
| 30\% or less | 1,093,590 | 514,609 | 124,136 | 1,732,335 |
| 30-50\% | 550,596 | 394,332 | 103,306 | 1,048,234 |
| 50-80\% | 676,996 | 471,906 | 125,610 | 1,274,512 |
| 80-95\% | 297,715 | 266,385 | 52,111 | 616,211 |
| Above 95\% | 1,152,417 | 1,050,030 | 160,227 | 2,362,674 |
| Total | 3,771,314 | 2,697,262 | 565,390 | 7,033,966 |
| Midwest |  |  |  |  |
| 30\% or less | 953,235 | 367,643 | 370,218 | 1,691,096 |
| 30-50\% | 527,155 | 317,500 | 303,153 | 1,147,808 |
| 50-80\% | 643,277 | 495,536 | 363,132 | 1,501,945 |
| 80-95\% | 245,225 | 224,939 | 145,622 | 615,786 |
| Above 95\% | 724,607 | 781,876 | 454,386 | 1,960,869 |
| Total | 3,093,499 | 2,187,494 | 1,636,511 | 6,917,504 |
| South |  |  |  |  |
| 30\% or less | 1,122,997 | 603,187 | 630,009 | 2,356,193 |
| 30-50\% | 711,933 | 521,053 | 418,748 | 1,651,734 |
| 50-80\% | 926,976 | 770,188 | 472,680 | 2,169,844 |
| 80-95\% | 385,955 | 367,442 | 185,088 | 938,485 |
| Above 95\% | 1,319,602 | 1,341,026 | 678,140 | 3,338,768 |
| Total | 4,467,463 | 3,602,896 | 2,384,665 | 10,455,024 |
| West |  |  |  |  |
| 30\% or less | 759,511 | 537,894 | 182,309 | 1,479,714 |
| 30-50\% | 602,133 | 511,647 | 168,950 | 1,282,730 |
| 50-80\% | 684,894 | 658,114 | 201,261 | 1,544,269 |
| 80-95\% | 310,202 | 326,535 | 82,834 | 719,571 |
| Above 95\% | 1,056,685 | 1,194,642 | 304,881 | 2,556,208 |
| Total | 3,413,425 | 3,228,832 | 940,235 | 7,582,492 |
| Total |  |  |  |  |
| 30\% or less | 3,929,333 | 2,023,333 | 1,306,672 | 7,259,338 |
| 30-50\% | 2,391,817 | 1,744,532 | 994,157 | 5,130,506 |
| 50-80\% | 2,932,143 | 2,395,744 | 1,162,683 | 6,490,570 |
| 80-95\% | 1,239,097 | 1,185,301 | 465,655 | 2,890,053 |
| Above 95\% | 4,253,311 | 4,367,574 | 1,597,634 | 10,218,519 |
| Total | 14,745,701 | 11,716,484 | 5,526,801 | 31,988,986 |

Source Urban Institute tabulations of the CHAS database.

## APPENDIX TABLE 19A

Owner Households with One or More Housing Problem by Income Group, 1990*


* Housing problems are defined as paying over $30 \%$ of income for housing (excess cost burden), lacking complete kitchen or plumbing, or more than one person per room (overcrowded)
** (Number of households with problems) / (Total households in group)
Source. Urban Institute tabulations of the CHAS database

APPENDIX TABLE 19B
Distribution of Owner Households by Income Group

|  | City | Suburb | Non-metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| Northeast Total |  |  |  |  |
| 30\% or less | 241,173 | 429,578 | 103,074 | 773,825 |
| 30-50\% | 248,131 | 559,906 | 148,350 | 956,387 |
| 50-80\% | 388,357 | 877,458 | 264,079 | 1,529,894 |
| 80-95\% | 216,481 | 588,503 | 141,865 | 946,849 |
| Above 95\% | 1,544,181 | 5,203,033 | 873,051 | 7,620,265 |
| Total | 2,638,323 | 7,658,478 | 1,530,419 | 11,827,220 |
| Midwest |  |  |  |  |
| 30\% or less | 307,384 | 334,533 | 362,903 | 1,004,820 |
| 30-50\% | 358,426 | 460,115 | 487,956 | 1,306,497 |
| 50-80\% | 635,595 | 963,083 | 830,933 | 2,429,611 |
| 80-95\% | 345,820 | 588,971 | 431,545 | 1,366,336 |
| Above 95\% | 2,052,860 | 4,634,722 | 2,613,706 | 9,301,288 |
| Total | 3,700,085 | 6,981,424 | 4,727,043 | 15,408,552 |
| South |  |  |  |  |
| 30\% or less | 422,014 | 635,308 | 700,203 | 1,757,525 |
| 30-50\% | 435,915 | 720,864 | 760,452 | 1,917,231 |
| 50-80\% | 719,356 | 1,282,134 | 1,095,096 | 3,096,586 |
| 80-95\% | 384,727 | 739,187 | 527,138 | 1,651,052 |
| Above 95\% | 3,120,926 | 6,135,299 | 3,702,481 | 12,958,706 |
| Total | 5,082,938 | 9,512,792 | 6,785,370 | 21,381,100 |
| West |  |  |  |  |
| 30\% or less | 222,937 | 328,143 | 158,359 | 709,439 |
| 30-50\% | 265,562 | 407,955 | 199,343 | 872,860 |
| 50-80\% | 444,037 | 708,061 | 325,786 | 1,477,884 |
| 80-95\% | 268,911 | 456,964 | 169,042 | 894,917 |
| Above 95\% | 2,297,277 | 3,989,014 | 1,146,333 | 7,432,624 |
| Total | 3,498,724 | 5,890,137 | 1,998,863 | 11,387,724 |
| Total |  |  |  |  |
| 30\% or less | 1,193,508 | 1,727,562 | 1,324,539 | 4,245,609 |
| 30-50\% | 1,308,034 | 2,148,840 | 1,596,101 | 5,052,975 |
| 50-80\% | 2,187,345 | 3,830,736 | 2,515,894 | 8,533,975 |
| 80-95\% | 1,215,939 | 2,373,625 | 1,269,590 | 4,859,154 |
| Above 95\% | 9,015,244 | 19,962,068 | 8,335,571 | 37,312,883 |
| Total | 14,920,070 | 30,042,831 | 15,041,695 | 60,004,596 |

Source: Urban Institute tabulations of the CHAS database.

APPENDIX TABLE 20A
Owner Households Paying More than 30\% of Income for Housing by Income Group, 1990


* (Number of households with problems) / (Total households in group)

Source: Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 20B

Renter Households Paying More than 30\% of Income for Housing by Income Group, 1990


[^48]Source Urban Institute tabulatıons of the CHAS database

## APPENDIX TABLE 21A

Owner Households Paying More than 50\% of Income for Housing by Income Group, 1990


* (Number of households with problems) / (Total households in group)

Source Urban Institute tabulations of the 1990 Census database

## APPENDIX TABLE 21B

Renter Households Paying More than 50\% of Income for Housing by Income Group, 1990


[^49]Source. Urban Institute tabulations of the 1990 Census database

APPENDIX TABLE 22
Percentage of Households with One or More Housing Problems
Paying Over $\mathbf{3 0 \%}$ of Income for Housing by Income Group, 1990

|  | Renters | Owners |
| :--- | ---: | ---: |
| Northeast |  | $98 \%$ |
| $30 \%$ or less | $96 \%$ | $96 \%$ |
| $30-50 \%$ | $94 \%$ | $93 \%$ |
| $50-80 \%$ | $84 \%$ | $93 \%$ |
| $80-95 \%$ | $71 \%$ | $90 \%$ |
| Above $95 \%$ | $47 \%$ |  |
| Midwest |  |  |
| $30 \%$ or less | $97 \%$ | $98 \%$ |
| $30-50 \%$ | $95 \%$ | $95 \%$ |
| $50-80 \%$ | $85 \%$ | $89 \%$ |
| $80-95 \%$ | $64 \%$ | $86 \%$ |
| Above $95 \%$ | $40 \%$ | $79 \%$ |
|  |  |  |
| South |  |  |
| $30 \%$ or less | $94 \%$ | $94 \%$ |
| $30-50 \%$ | $91 \%$ | $90 \%$ |
| $50-80 \%$ | $81 \%$ | $86 \%$ |
| $80-95 \%$ | $64 \%$ | $83 \%$ |
| Above $95 \%$ | $41 \%$ | $79 \%$ |
|  |  |  |
| West | $95 \%$ | $94 \%$ |
| $30 \%$ or less | $91 \%$ | $91 \%$ |
| $30-50 \%$ | $77 \%$ | $87 \%$ |
| $50-80 \%$ | $65 \%$ | $85 \%$ |
| $80-95 \%$ | $46 \%$ | $84 \%$ |
| Above $95 \%$ |  |  |
|  |  | $96 \%$ |
| Total | $96 \%$ | $93 \%$ |
| $30 \%$ or less | $92 \%$ | $88 \%$ |
| $30-50 \%$ | $81 \%$ | $83 \%$ |
| $50-80 \%$ | $45 \%$ |  |

Source Urban Institute tabulations of the CHAS database

APPENDIX TABLE 23A
Owner Households in Overcrowded Units by Income Group, 1990

| Northeast | Number of Households <br> City <br> Suburb Non-Metro |  |  |  | Share of All Households in Group* |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Total | City | Suburb | Non-Metro | Total |
| 30\% or less | 6,851 | 3,592 | 1,572 | 12,015 | 3\% | 1\% | 2\% | 2\% |
| 30-50\% | 7,885 | 6,658 | 2,236 | 16,779 | 3\% | 1\% | 2\% | 2\% |
| 50-80\% | 14,432 | 12,252 | 4,700 | 31,384 | 4\% | 1\% | 2\% | 2\% |
| 80-95\% | 7,675 | 7,397 | 2,235 | 17,307 | 4\% | 1\% | 2\% | 2\% |
| Above 95\% | 37,139 | 34,225 | 6,223 | 77,587 | 2\% | 1\% | 1\% | 1\% |
| Total | 73,982 | 64,124 | 16,966 | 155,072 | 3\% | 1\% | 1\% | 1\% |
| Midwest |  |  |  |  |  |  |  |  |
| 30\% or less | 7,701 | 5,019 | 7,097 | 19,817 | 3\% | 2\% | 2\% | 2\% |
| 30-50\% | 9,853 | 8,462 | 8,972 | 27,287 | 3\% | 2\% | 2\% | 2\% |
| 50-80\% | 20,317 | 20,279 | 17,233 | 57,829 | 3\% | 2\% | 2\% | 2\% |
| 80-95\% | 9,242 | 10,290 | 7,410 | 26,942 | 3\% | 2\% | 2\% | 2\% |
| Above 95\% | 27,145 | 36,322 | 24,030 | 87,497 | 1\% | 1\% | 1\% | 1\% |
| Total | 74,258 | 80,372 | 64,742 | 219,372 | 2\% | 1\% | 1\% | 1\% |
| South |  |  |  |  |  |  |  |  |
| 30\% or less | 19,234 | 25,151 | 28,924 | 73,309 | 5\% | 4\% | 4\% | 4\% |
| 30-50\% | 24,156 | 30,774 | 31,002 | 85,932 | 6\% | 4\% | 4\% | 4\% |
| 50-80\% | 39,455 | 54,926 | 48,689 | 143,070 | 5\% | 4\% | 4\% | 5\% |
| 80-95\% | 18,721 | 25,740 | 21,625 | 66,086 | 5\% | 3\% | 4\% | 4\% |
| Above 95\% | 61,490 | 92,601 | 70,104 | 224,195 | 2\% | 2\% | 2\% | 2\% |
| Total | 163,056 | 229,192 | 200,344 | 592,592 | 3\% | 2\% | 3\% | 3\% |
| West |  |  |  |  |  |  |  |  |
| 30\% or less | 12,447 | 17,745 | 15,290 | 45,482 | 6\% | 5\% | 10\% | 6\% |
| 30-50\% | 21,352 | 29,660 | 13,405 | 64,417 | 8\% | 7\% | 7\% | 7\% |
| 50-80\% | 36,324 | 58,382 | 21,413 | 116,119 | 8\% | 8\% | 7\% | 8\% |
| 80-95\% | 20,796 | 32,833 | 9,443 | 63,072 | 8\% | 7\% | 6\% | 7\% |
| Above 95\% | 79,187 | 129,887 | 31,862 | 240,936 | 3\% | 3\% | 3\% | 3\% |
| Total | 170,106 | 268,507 | 91,413 | 530,026 | 5\% | 5\% | 5\% | 5\% |
| Total |  |  |  |  |  |  |  |  |
| 30\% or less | 46,233 | 51,507 | 52,883 | 150,623 | 4\% | 3\% | 4\% | 4\% |
| 30-50\% | 63,246 | 75,554 | 55,615 | 194,415 | 5\% | 4\% | 3\% | 4\% |
| 50-80\% | 110,528 | 145,839 | 92,035 | 348,402 | 5\% | 4\% | 4\% | 4\% |
| 80-95\% | 56,434 | 76,260 | 40,713 | 173,407 | 5\% | 3\% | 3\% | 4\% |
| Above 95\% | 204,961 | 293,035 | 132,219 | 630,215 | 2\% | 1\% | 2\% | 2\% |
| Total | 481,402 | 642,195 | 373,465 | 1,497,062 | 3\% | 2\% | 2\% | 2\% |

* (Number of households with problems) / (Total households in group)

Source Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 23B

Renter Households in Overcrowded Units by Income Group, 1990


| South |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $30 \%$ or less | 144,310 | 62,079 | 55,728 | 262,117 | $13 \%$ | $10 \%$ | $9 \%$ | $11 \%$ |
| $30-50 \%$ | 91,783 | 52,888 | 35,335 | 180,006 | $13 \%$ | $10 \%$ | $8 \%$ | $11 \%$ |
| $50-80 \%$ | 91,644 | 61,606 | 37,228 | 190,478 | $10 \%$ | $8 \%$ | $8 \%$ | $9 \%$ |
| $80-95 \%$ | 28,542 | 22,533 | 11,556 | 62,631 | $7 \%$ | $6 \%$ | $6 \%$ | $7 \%$ |
| Above $95 \%$ | 56,212 | 52,246 | 26,407 | 134,865 | $4 \%$ | $4 \%$ | $4 \%$ | $4 \%$ |
| Total | 412,491 | 251,352 | 166,254 | 830,097 | $9 \%$ | $7 \%$ | $7 \%$ | $8 \%$ |
|  |  |  |  |  |  |  |  |  |
| West |  |  |  |  |  |  |  |  |
| 30\% or less | 158,325 | 104,345 | 19,787 | 282,457 | $21 \%$ | $19 \%$ | $11 \%$ | $19 \%$ |
| $30-50 \%$ | 143,099 | 109,771 | 19,724 | 272,594 | $24 \%$ | $21 \%$ | $12 \%$ | $21 \%$ |
| $50-80 \%$ | 124,285 | 113,706 | 21,537 | 259,528 | $18 \%$ | $17 \%$ | $11 \%$ | $17 \%$ |
| $80-95 \%$ | 43,701 | 43,172 | 7,099 | 93,972 | $14 \%$ | $13 \%$ | $9 \%$ | $13 \%$ |
| Above $95 \%$ | 84,711 | 94,243 | 17,372 | 196,326 | $8 \%$ | $8 \%$ | $6 \%$ | $8 \%$ |
| Total | 554,121 | 465,237 | 85,519 | $1,104,877$ | $16 \%$ | $14 \%$ | $9 \%$ | $15 \%$ |
|  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |
| $30 \%$ or less | 506,588 | 205,305 | 93,657 | 805,550 | $13 \%$ | $10 \%$ | $7 \%$ | $11 \%$ |
| $30-50 \%$ | 344,629 | 197,787 | 70,457 | 612,873 | $14 \%$ | $11 \%$ | $7 \%$ | $12 \%$ |
| $50-8 \% \%$ | 336,558 | 214,773 | 75,886 | 627,217 | $11 \%$ | $9 \%$ | $7 \%$ | $10 \%$ |
| $80-95 \%$ | 113,998 | 82,982 | 23,884 | 220,864 | $9 \%$ | $7 \%$ | $5 \%$ | $8 \%$ |
| Above $95 \%$ | 249,625 | 188,116 | 54,144 | 491,885 | $6 \%$ | $4 \%$ | $3 \%$ | $5 \%$ |
| Total | $1,551,398$ | 888,963 | 318,028 | $2,758,389$ | $11 \%$ | $8 \%$ | $6 \%$ | $9 \%$ |

* (Number of households with problems) / (Total households in group)

Source Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 24A

Owner Households in Moderately or Severely Inadequate Housing by Income Group, 1989


[^50]
## APPENDIX TABLE 24B

AHS Count of Owner Households by Income Group, 1989

|  | City | Suburb | Non-metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| Northeast |  |  |  |  |
| 30\% or less | 250,543 | 441,349 | 143,895 | 835,787 |
| 30-50\% | 271,693 | 582,863 | 210,310 | 1,064,866 |
| 50-80\% | 397,996 | 1,005,594 | 281,717 | 1,685,307 |
| 80-95\% | 189,599 | 594,476 | 174,719 | 958,794 |
| Above 95\% | 1,521,364 | 5,038,831 | 994,481 | 7,554,676 |
| Total | 2,631,195 | 7,663,113 | 1,805,122 | 12,099,430 |
| Midwest |  |  |  |  |
| $30 \%$ or less | 350,973 | 383,683 | 397,962 | 1,132,618 |
| 30-50\% | 400,667 | 494,576 | 563,647 | 1,458,890 |
| 50-80\% | 674,194 | 1,114,735 | 841,198 | 2,630,127 |
| 80-95\% | 364,417 | 609,577 | 423,850 | 1,397,844 |
| Above 95\% | 1,847,598 | 4,448,734 | 2,523,800 | 8,820,132 |
| Total | 3,637,849 | 7,051,305 | 4,750,457 | 15,439,611 |
| South |  |  |  |  |
| 30\% or less | 502,168 | 761,512 | 729,783 | 1,993,463 |
| 30-50\% | 491,326 | 889,159 | 835,341 | 2,215,826 |
| 50-80\% | 777,527 | 1,221,182 | 1,041,824 | 3,040,533 |
| 80-95\% | 410,096 | 714,310 | 477,353 | 1,601,759 |
| Above 95\% | 2,932,709 | 6,299,599 | 3,264,940 | 12,497,248 |
| Total | 5,113,826 | 9,885,762 | 6,349,241 | 21,348,829 |
| West |  |  |  |  |
| 30\% or less | 243,465 | 368,363 | 206,204 | 818,032 |
| 30-50\% | 212,809 | 476,948 | 157,023 | 846,780 |
| 50-80\% | 437,211 | 717,194 | 267,146 | 1,421,551 |
| 80-95\% | 270,931 | 407,903 | 179,651 | 858,485 |
| Above 95\% | 2,212,671 | 3,700,710 | 1,098,895 | 7,012,276 |
| Total | 3,377,087 | 5,671,118 | 1,908,919 | 10,957,124 |
| Total |  |  |  |  |
| 30\% or less | 1,347,149 | 1,954,907 | 1,477,844 | 4,779,900 |
| 30-50\% | 1,376,495 | 2,443,546 | 1,766,321 | 5,586,362 |
| 50-80\% | 2,286,928 | 4,058,705 | 2,431,885 | 8,777,518 |
| 80-95\% | 1,235,043 | 2,326,266 | 1,255,573 | 4,816,882 |
| Above 95\% | 8,514,342 | 19,487,874 | 7,882,116 | 35,884,332 |
| Total | 14,759,957 | 30,271,298 | 14,813,739 | 59,844,994 |

Note: The 1989 AHS count of households exceeds the total from the 1990 Census.
Source• Urban Institute tabulations of the 1989 AHS, excludes households with negative incomes

APPENDIX TABLE 24C
Renter Households in Moderately or Severely Inadequate Housing by Income Group, 1989


[^51]
## APPENDIX TABLE 24D

AHS Count of Renter Households by Income Group, 1989

|  | City | Suburb | Non-metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| Northeast |  |  |  |  |
| 30\% or less | 1,039,732 | 436,193 | 109,969 | 1,585,894 |
| 30-50\% | 524,634 | 379,922 | 103,369 | 1,007,925 |
| 50-80\% | 683,237 | 469,977 | 122,636 | 1,275,850 |
| 80-95\% | 319,260 | 249,671 | 48,171 | 617,102 |
| Above 95\% | 1,245,186 | 1,067,078 | 168,371 | 2,480,635 |
| Total | 3,812,049 | 2,602,841 | 552,516 | 6,967,406 |
| Midwest |  |  |  |  |
| $30 \%$ or less | 1,062,159 | 400,749 | 355,371 | 1,818,279 |
| 30-50\% | 531,514 | 348,052 | 276,975 | 1,156,541 |
| 50-80\% | 640,610 | 503,155 | 342,110 | 1,485,875 |
| 80-95\% | 250,098 | 262,483 | 127,656 | 640,237 |
| Above 95\% | 707,079 | 758,714 | 372,938 | 1,838,731 |
| Total | 3,191,460 | 2,273,153 | 1,475,050 | 6,939,663 |
| South |  |  |  |  |
| 30\% or less | 1,169,091 | 557,412 | 504,348 | 2,230,851 |
| 30-50\% | 631,437 | 540,743 | 316,626 | 1,488,806 |
| 50-80\% | 1,023,667 | 798,505 | 344,997 | 2,167,169 |
| 80-95\% | 384,783 | 362,891 | 145,873 | 893,547 |
| Above 95\% | 1,338,487 | 1,571,750 | 479,666 | 3,389,903 |
| Total | 4,547,465 | 3,831,301 | 1,791,510 | 10,170,276 |
| West |  |  |  |  |
| 30\% or less | 725,662 | 512,119 | 191,261 | 1,429,042 |
| 30-50\% | 577,075 | 498,422 | 149,091 | 1,224,588 |
| 50-80\% | 756,055 | 633,963 | 189,993 | 1,580,011 |
| 80-95\% | 321,332 | 375,865 | 60,956 | 758,153 |
| Above 95\% | 1,130,939 | 1,262,324 | 248,131 | 2,641,394 |
| Total | 3,511,063 | 3,282,693 | 839,432 | 7,633,188 |
| Total |  |  |  |  |
| 30\% or less | 3,996,644 | 1,906,473 | 1,160,949 | 7,064,066 |
| 30-50\% | 2,264,660 | 1,767,139 | 846,061 | 4,877,860 |
| 50-80\% | 3,103,569 | 2,405,600 | 999,736 | 6,508,905 |
| 80-95\% | 1,275,473 | 1,250,910 | 382,656 | 2,909,039 |
| Above 95\% | 4,421,691 | 4,659,866 | 1,269,106 | 10,350,663 |
| Total | 15,062,037 | 11,989,988 | 4,658,508 | 31,710,533 |

Note. The 1989 AHS count of households exceeds the total from the 1990 Census Source Urban Institute tabulations of the 1989 AHS , excludes no cash renters and households with negative incomes.

APPENDIX TABLE 25A
Households with One or More Housing Problems by Income Group and Household Type, 1990*


APPENDIX TABLE 25A (ctd.)
Households with One or More Housing Problems by Income Group and Household Type, 1990*


APPENDIX TABLE 25A (ctd.)
Households with One or More Housing Problems by Income Group and Household Type, 1990*


APPENDIX TABLE 25A (ctd.)
Households with One or More Housing Problems by Income Group and Household Type, 1990*


APPENDIX TABLE 25A (ctd.)
Households with One or More Housing Problems by Income Group and Household Type, 1990*


* Housing problems are defined as paying over $30 \%$ of income for housing (excess cost burden), lacking complete kitchen or plumbing, or more than one person per room (overcrowded)
** (Number of households with problems) / (Total households in group)
Source Urban Institute tabulations of the CHAS database.

APPENDIX TABLE 25B
Households by Income Group and Household Type, 1990

|  | City | Suburb | Non-Metro | Total |
| :--- | ---: | ---: | ---: | ---: |
| Northeast |  |  |  |  |
| 30\% or less | 511,458 | 527,825 | 107,293 | $1,146,576$ |
| Elderly | 407,369 | 218,491 | 59,839 | 685,699 |
| Small | 132,500 | 48,183 | 12,812 | 193,495 |
| Large | 283,436 | 149,688 | 47,266 | 480,390 |
| Other |  |  |  |  |
|  |  |  |  |  |
| 30-50\% | 307,944 | 499,664 | 127,815 | 935,423 |
| Elderly | 245,637 | 251,823 | 66,811 | 564,271 |
| Small | 91,283 | 69,244 | 18,798 | 179,325 |
| Large | 153,863 | 133,507 | 38,232 | 325,602 |
| Other |  |  |  |  |
|  |  |  |  |  |
| 50-80\% | 275,363 | 480,053 | 136,240 | 891,656 |
| Elderly | 397,807 | 497,465 | 148,212 | $1,043,484$ |
| Small | 133,595 | 141,177 | 40,426 | 315,198 |
| Large | 258,588 | 230,669 | 64,811 | 554,068 |
| Other |  |  |  |  |
|  | 100,205 | 208,304 | 46,848 | 355,357 |
| 80-95\% | 210,294 | 385,627 | 91,646 | 687,567 |
| Elderly | 66,711 | 105,005 | 22,709 | 194,425 |
| Small | 136,986 | 155,952 | 32,773 | 325,711 |
| Large |  |  |  |  |
| Other | 370,294 | 815,833 | 153,960 | $1,340,087$ |
|  | $1,350,743$ | $3,842,710$ | 640,226 | $5,833,679$ |
| Above 95\% | 295,737 | 763,035 | 104,896 | $1,163,668$ |
| Elderly | 679,824 | 831,485 | 134,196 | $1,645,505$ |
| Small |  |  |  |  |
| Large | $1,565,264$ | $2,531,679$ | 572,156 | $4,669,099$ |
| Other | $2,611,850$ | $5,196,116$ | $1,006,734$ | $8,814,700$ |
|  | 719,826 | $1,126,644$ | 199,641 | $2,046,111$ |
| Total | $1,512,697$ | $1,501,301$ | 317,278 | $3,331,276$ |
| Elderly |  |  |  |  |

## APPENDIX TABLE 25B (ctd.)

Households by Income Group and Household Type, 1990

|  | City | Suburb | Non-Metro | Total |
| :--- | ---: | ---: | ---: | ---: |
| Midwest |  |  |  |  |
| 30\% or less | 393,804 | 319,634 | 331,904 | $1,045,342$ |
| Elderly | 409,036 | 204,239 | 205,649 | 818,924 |
| Small | 128,796 | 43,231 | 51,438 | 223,465 |
| Large | 328,983 | 135,072 | 144,130 | 608,185 |
| Other |  |  |  |  |
|  |  |  |  |  |
| 30-50\% | 329,093 | 371,332 | 410,041 | $1,110,466$ |
| Elderly | 249,123 | 220,328 | 205,155 | 674,606 |
| Small | 86,577 | 57,954 | 62,124 | 206,655 |
| Large | 220,788 | 128,001 | 113,789 | 462,578 |
| Other |  |  |  |  |
|  |  |  |  |  |
| 50-80\% | 341,661 | 462,970 | 449,544 | $1,254,175$ |
| Elderly | 452,678 | 563,817 | 430,587 | $1,447,082$ |
| Small | 142,525 | 162,492 | 137,185 | 442,202 |
| Large | 342,008 | 269,340 | 176,749 | 788,097 |
| Other |  |  |  |  |
|  | 116,980 | 170,046 | 159,390 | 446,416 |
| 80-95\% | 247,411 | 385,002 | 258,607 | 891,020 |
| Elderly | 71,089 | 112,069 | 75,599 | 258,757 |
| Small | 155,565 | 146,793 | 83,571 | 385,929 |
| Large |  |  |  |  |
| Other | 395,573 | 635,792 | 565,669 | $1,597,034$ |
|  | $1,508,032$ | $3,437,780$ | $1,842,917$ | $6,788,729$ |
| Above 95\% | 276,011 | 631,654 | 343,854 | $1,251,519$ |
| Elderly | 597,851 | 711,372 | 315,652 | $1,624,875$ |
| Small |  |  |  |  |
| Large | $1,577,111$ | $1,959,774$ | $1,916,548$ | $5,453,433$ |
| Other | $2,86,280$ | $4,811,166$ | $2,942,915$ | $10,620,361$ |
| Total | $1,64,998$ | $1,007,400$ | 670,200 | $2,382,598$ |
| Elderly | $1,390,578$ | 833,891 | $3,869,664$ |  |
| Small |  |  |  |  |
| Large | Other |  |  |  |
|  |  |  |  |  |

## APPENDIX TABLE 25B (ctd.)

Households by Income Group and Household Type, 1990

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| South |  |  |  |  |
| $30 \%$ or less |  |  |  |  |
| Elderly | 509,869 | 513,866 | 561,426 | 1,585,161 |
| Small | 489,104 | 376,551 | 414,185 | 1,279,840 |
| Large | 162,480 | 110,219 | 122,965 | 395,664 |
| Other | 383,558 | 237,859 | 231,636 | 853,053 |
| 30-50\% |  |  |  |  |
| Elderly | 367,618 | 478,286 | 547,955 | 1,393,859 |
| Small | 378,012 | 430,283 | 372,693 | 1,180,988 |
| Large | 132,327 | 127,681 | 115,620 | 375,628 |
| Other | 269,891 | 205,667 | 142,932 | 618,490 |
| 50-80\% |  |  |  |  |
| Elderly | 373,856 | 549,367 | 497,837 | 1,421,060 |
| Small | 635,729 | 885,002 | 670,244 | 2,190,975 |
| Large | 192,215 | 240,286 | 183,999 | 616,500 |
| Other | 444,532 | 377,667 | 215,696 | 1,037,895 |
| 80-95\% |  |  |  |  |
| Elderiy | 145,124 | 223,134 | 176,658 | 544,916 |
| Small | 327,263 | 543,909 | 352,448 | 1,223,620 |
| Large | 86,453 | 131,797 | 87,967 | 306,217 |
| Other | 211,842 | 207,789 | 95,153 | 514,784 |
| Above 95\% |  |  |  |  |
| Elderly | 717,927 | 1,000,232 | 780,296 | 2,498,455 |
| Small | 2,368,560 | 4,690,748 | 2,742,701 | 9,802,009 |
| Large | 396,589 | 748,743 | 444,009 | 1,589,341 |
| Other | 957,452 | 1,036,602 | 413,615 | 2,407,669 |
| Total |  |  |  |  |
| Elderly | 2,114,394 | 2,764,885 | 2,564,172 | 7,443,451 |
| Small | 4,198,668 | 6,926,493 | 4,552,271 | 15,677,432 |
| Large | 970,064 | 1,358,726 | 954,560 | 3,283,350 |
| Other | 2,267,275 | 2,065,584 | 1,099,032 | 5,431,891 |

## APPENDIX TABLE 25B (ctd.)

Households by Income Group and Household Type, 1990

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| West |  |  |  |  |
| 30\% or less |  |  |  |  |
| Elderly | 304,754 | 309,464 | 111,335 | 725,553 |
| Small | 283,283 | 274,827 | 109,260 | 667,370 |
| Large | 118,354 | 104,143 | 35,071 | 257,568 |
| Other | 276,057 | 177,603 | 85,002 | 538,662 |
| 30-50\% |  |  |  |  |
| Elderly | 252,428 | 311,099 | 148,321 | 711,848 |
| Small | 260,617 | 305,168 | 110,115 | 675,900 |
| Large | 131,954 | 140,568 | 43,522 | 316,044 |
| Other | 222,696 | 162,767 | 66,335 | 451,798 |
| 50-80\% |  |  |  |  |
| Elderly | 254,265 | 336,517 | 165,927 | 756,709 |
| Small | 392,851 | 540,465 | 194,989 | 1,128,305 |
| Large | 163,376 | 229,301 | 75,392 | 468,069 |
| Other | 318,439 | 259,892 | 90,739 | 669,070 |
| 80-95\% |  |  |  |  |
| Elderly | 105,947 | 148,567 | 63,006 | 317,520 |
| Small | 223,248 | 345,794 | 107,881 | 676,923 |
| Large | 79,869 | 129,065 | 39,749 | 248,683 |
| Other | 170,049 | 160,073 | 41,240 | 371,362 |
| Above 95\% |  |  |  |  |
| Elderly | 474,478 | 668,131 | 259,658 | 1,402,267 |
| Small | 1,701,466 | 2,976,192 | 813,350 | 5,491,008 |
| Large | 350,885 | 649,696 | 178,673 | 1,179,254 |
| Other | 827,133 | 889,637 | 199,533 | 1,916,303 |
| Total |  |  |  |  |
| Elderly | 1,391,872 | 1,773,778 | 748,247 | 3,913,897 |
| Small | 2,861,465 | 4,442,446 | 1,335,595 | 8,639,506 |
| Large | 844,438 | 1,252,773 | 372,407 | 2,469,618 |
| Other | 1,814,374 | 1,649,972 | 482,849 | 3,947,195 |

APPENDIX TABLE 25B (ctd.)
Households by Income Group and Household Type, 1990

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| Total |  |  |  |  |
| 30\% or less |  |  |  |  |
| Elderly | 1,719,885 | 1,670,789 | 1,111,958 | 4,502,632 |
| Small | 1,588,792 | 1,074,108 | 788,933 | 3,451,833 |
| Large | 542,130 | 305,776 | 222,286 | 1,070,192 |
| Other | 1,272,034 | 700,222 | 508,034 | 2,480,290 |
| 30-50\% |  |  |  |  |
| Elderly | 1,257,083 | 1,660,381 | 1,234,132 | 4,151,596 |
| Small | 1,133,389 | 1,207,602 | 754,774 | 3,095,765 |
| Large | 442,141 | 395,447 | 240,064 | 1,077,652 |
| Other | 867,238 | 629,942 | 361,288 | 1,858,468 |
| 50-80\% |  |  |  |  |
| Elderly | 1,245,145 | 1,828,907 | 1,249,548 | 4,323,600 |
| Small | 1,879,065 | 2,486,749 | 1,444,032 | 5,809,846 |
| Large | 631,711 | 773,256 | 437,002 | 1,841,969 |
| Other | 1,363,567 | 1,137,568 | 547,995 | 3,049,130 |
| 80-95\% |  |  |  |  |
| Elderly | 468,256 | 750,051 | 445,902 | 1,664,209 |
| Small | 1,008,216 | 1,660,332 | 810,582 | 3,479,130 |
| Large | 304,122 | 477,936 | 226,024 | 1,008,082 |
| Other | 674,442 | 670,607 | 252,737 | 1,597,786 |
| Above 95\% |  |  |  |  |
| Elderly | 1,958,272 | 3,119,988 | 1,759,583 | 6,837,843 |
| Small | 6,928,801 | 14,947,430 | 6,039,194 | 27,915,425 |
| Large | 1,319,222 | 2,793,128 | 1,071,432 | 5,183,782 |
| Other | 3,062,260 | 3,469,096 | 1,062,996 | 7,594,352 |
| Total |  |  |  |  |
| Elderiy | 6,648,641 | 9,030,116 | 5,801,123 | 21,479,880 |
| Small | 12,538,263 | 21,376,221 | 9,837,515 | 43,751,999 |
| Large | 3,239,326 | 4,745,543 | 2,196,808 | 10,181,677 |
| Other | 7,239,541 | 6,607,435 | 2,733,050 | 16,580,026 |
| Total | 29,665,771 | 41,759,315 | 20,568,496 | 91,993,582 |

Source: Urban Instrtute tabulations of the CHAS database.

APPENDIX TABLE 26A
Households Paying More than 30 Percent of Income for Housing by Income Group and Household Type, 1990


APPENDIX TABLE 26A (ctd.)
Households Paying More than 30 Percent of Income for Housing by Income Group and Household Type, 1990


APPENDIX TABLE 26A (ctd.)
Households Paying More than 30 Percent of Income for Housing by Income Group and Household Type, 1990


APPENDIX TABLE 26A (ctd.)
Households Paying More than 30 Percent of Income for Housing by Income Group and Household Type, 1990


APPENDIX TABLE 26A (ctd.)
Households Paying More than 30 Percent of Income for Housing by Income Group and Household Type, 1990


APPENDIX TABLE 26A (ctd.)
Households Paying More than 30 Percent of Income for Housing by Income Group and Household Type, 1990


* (Number of households with problems) / (Total households in group)

Source Urban Institute tabulations of the CHAS database

APPENDIX TABLE 26B
Households Paying More than 50 Percent of Income for Housing by Income Group and Household Type, 1990


APPENDIX TABLE 26B (ctd.)
Households Paying More than 50 Percent of Income for Housing by Income Group and Household Type, 1990


## APPENDIX TABLE 26B (ctd.)

Households Paying More than 50 Percent of Income for Housing by Income Group and Household Type, 1990


APPENDIX TABLE 26B (ctd.)
Households Paying More than 50 Percent of Income for Housing by Income Group and Household Type, 1990


## APPENDIX TABLE 26B (ctd.)

Households Paying More than 50 Percent of Income for Housing by Income Group and Household Type, 1990


* (Number of households with problems) / (Total households in group).

Source. Urban Institute tabulations of the CHAS database

APPENDIX TABLE 26C
Households Living in Overcrowded Units by Income Group and Household Type, 1990


## APPENDIX TABLE 26C (ctd.)

Households Living in Overcrowded Units
by Income Group and Household Type, 1990


APPENDIX TABLE 26C (ctd.)
Households Living in Overcrowded Units by Income Group and Household Type, 1990


APPENDIX TABLE 26C (ctd.)
Households Living in Overcrowded Units by Income Group and Household Type, 1990


APPENDIX TABLE 26C (ctd.)
Households Living in Overcrowded Units by Income Group and Household Type, 1990


* (Number of households with problems) / (Total households in group)

Source Urban Institute tabulations of the CHAS database

APPENDIX TABLE 27A
Households with One or More Housing Problems by Income Group and Race/Ethnicity, 1990*


APPENDIX TABLE 27A (ctd.)
Households with One or More Housing Problems by Income Group and Race/Ethnicity, 1990*


APPENDIX TABLE 27A (ctd.)
Households with One or More Housing Problems by Income Group and Race/Ethnicity, 1990*


APPENDIX TABLE 27A (ctd.)
Households with One or More Housing Problems by Income Group and Race/Ethnicity, 1990*


APPENDIX TABLE 27A (ctd.)
Households with One or More Housing Problems by Income Group and Race/Ethnicity, 1990*


* Housing problems are defined as paying over 30\% of income for housing (excess cost burden), lacking complete kitchen or plumbing, or more than one person per room (overcrowded).
** (Number of households in group) / (Total households in group)
Source Urban Institute tabulations of the CHAS database


## APPENDIX TABLE 27B

Households by Income Group and Race/Ethnicity

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| Northeast |  |  |  |  |
| 30\% or less |  |  |  |  |
| White | 625,911 | 816,650 | 218,644 | 1,661,205 |
| Black | 381,900 | 73,661 | 3,336 | 458,897 |
| Hispanic | 276,846 | 38,660 | 2,287 | 317,793 |
| Other | 50,106 | 62,648 | 2,943 | 68,265 |
| 30-50\% |  |  |  |  |
| White | 464,072 | 857,293 | 245,107 | 1,566,472 |
| Black | 178,965 | 51,225 | 2,611 | 232,801 |
| Hispanic | 123,470 | 33,345 | 1,683 | 158,498 |
| Other | 32,220 | 12,375 | 2,255 | 46,850 |
| 50-80\% |  |  |  |  |
| White | 633,715 | 1,243,940 | 380,544 | 2,258,199 |
| Black | 238,094 | 54,259 | 3,726 | 296,079 |
| Hispanic | 150,508 | 34,614 | 2,664 | 187,786 |
| Other | 43,036 | 16,551 | 2,755 | 62,342 |
| 80-95\% |  |  |  |  |
| White | 327,919 | 783,666 | 189,973 | 1,301,558 |
| Black | 104,269 | 35,816 | 1,618 | 141,703 |
| Hispanic | 62,748 | 24,084 | 1,179 | 88,011 |
| Other | 19,260 | 11,322 | 1,206 | 31,788 |
| Above 95\% |  |  |  |  |
| White | 1,989,911 | 5,819,635 | 1,014,517 | 8,824,063 |
| Black | 410,289 | 202,578 | 6,844 | 619,711 |
| Hispanic | 198,125 | 119,548 | 5,537 | 323,210 |
| Other | 98,273 | 111,302 | 6,380 | 215,955 |
| Total |  |  |  |  |
| White | 4,041,528 | 9,521,184 | 2,048,785 | 15,611,497 |
| Black | 1,313,517 | 417,539 | 18,135 | 1,749,191 |
| Hispanic | 811,697 | 250,251 | 13,350 | 1,075,298 |
| Other | 242,895 | 166,766 | 15,539 | 425,200 |

## APPENDIX TABLE 27B (ctd).

Households by Income Group and Race/Ethnicity

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| Midwest |  |  |  |  |
| 30\% or less |  |  |  |  |
| White | 644,464 | 619,461 | 686,025 | 1,949,950 |
| Black | 518,294 | 60,517 | 20,388 | 599,199 |
| Hispanic | 59,875 | 11,289 | 8,545 | 79,709 |
| Other | 37,986 | 63,086 | 18,163 | 67,058 |
| 30-50\% |  |  |  |  |
| White | 598,854 | 720,165 | 761,675 | 2,080,694 |
| Black | 223,310 | 37,004 | 11,323 | 271,637 |
| Hispanic | 44,050 | 11,948 | 7,125 | 63,123 |
| Other | 19,367 | 8,498 | 10,986 | 38,851 |
| 50-80\% |  |  |  |  |
| White | 927,312 | 1,361,133 | 1,157,687 | 3,446,132 |
| Black | 265,490 | 58,135 | 12,896 | 336,521 |
| Hispanıc | 62,425 | 23,099 | 11,205 | 96,729 |
| Other | 23,645 | 16,252 | 12,277 | 52,174 |
| 80-95\% |  |  |  |  |
| White | 451,206 | 764,026 | 561,885 | 1,777,117 |
| Black | 104,683 | 28,526 | 5,463 | 138,672 |
| Hispanic | 25,361 | 12,284 | 4,916 | 42,561 |
| Other | 9,795 | 9,074 | 4,903 | 23,772 |
| Above 95\% |  |  |  |  |
| White | 2,267,719 | 5,132,451 | 3,006,433 | 10,406,603 |
| Black | 394,272 | 154,157 | 21,983 | 570,412 |
| Hispanic | 74,361 | 59,278 | 19,145 | 152,784 |
| Other | 41,115 | 70,712 | 20,531 | 132,358 |
| Total |  |  |  |  |
| White | 4,889,555 | 8,597,236 | 6,173,705 | 19,660,496 |
| Black | 1,506,049 | 338,339 | 72,053 | 1,916,441 |
| Hispanic | 266,072 | 117,898 | 50,936 | 434,906 |
| Other | 131,908 | 115,445 | 66,860 | 314,213 |

APPENDIX TABLE 27B (ctd).
Households by Income Group and Race/Ethnicity

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| South |  |  |  |  |
| 30\% or less |  |  |  |  |
| White | 610,140 | 854,898 | 860,400 | 2,325,438 |
| Black | 695,080 | 265,525 | 398,096 | 1,358,701 |
| Hispanic | 207,163 | 94,852 | 51,746 | 353,761 |
| Other | 32,628 | 111,693 | 19,970 | 75,818 |
| 30-50\% |  |  |  |  |
| White | 578,192 | 939,269 | 864,717 | 2,382,178 |
| Black | 383,592 | 189,045 | 254,768 | 827,405 |
| Hispanıc | 164,200 | 90,676 | 43,305 | 298,181 |
| Other | 21,864 | 22,927 | 16,410 | 61,201 |
| 50-80\% |  |  |  |  |
| White | 948,171 | 1,632,506 | 1,222,040 | 3,802,717 |
| Black | 456,635 | 256,932 | 274,284 | 987,851 |
| Hispanic | 211,097 | 129,339 | 51,129 | 391,565 |
| Other | 30,429 | 33,545 | 20,323 | 84,297 |
| 80-95\% |  |  |  |  |
| White | 488,190 | 903,272 | 581,251 | 1,972,713 |
| Black | 185,838 | 125,311 | 102,762 | 413,911 |
| Hispanic | 83,040 | 59,544 | 19,436 | 162,020 |
| Other | 13,614 | 18,502 | 8,777 | 40,893 |
| Above 95\% |  |  |  |  |
| White | 3,396,915 | 6,525,269 | 3,887,030 | 13,809,214 |
| Black | 656,037 | 546,948 | 376,350 | 1,579,335 |
| Hispanic | 315,974 | 283,610 | 72,682 | 672,266 |
| Other | 71,602 | 120,498 | 44,559 | 236,659 |
| Total |  |  |  |  |
| White | 6,021,608 | 10,855,214 | 7,415,438 | 24,292,260 |
| Black | 2,377,182 | 1,383,761 | 1,406,260 | 5,167,203 |
| Hispanic | 981,474 | 658,021 | 238,298 | 1,877,793 |
| Other | 170,137 | 218,692 | 110,039 | 498,868 |

APPENDIX TABLE 27B (ctd.)
Households by Income Group and Race/Ethnicity

|  | City | Suburb | Non-Metro | Total |
| :--- | ---: | ---: | ---: | ---: |
| South |  |  |  |  |
| 30\% or less |  |  |  |  |
| White | 610,140 | 854,898 | 860,400 | $2,325,438$ |
| Black | 695,080 | 265,525 | 398,096 | $1,358,701$ |
| Hispanic | 207,163 | 94,852 | 51,746 | 353,761 |
| Other | 32,628 | 111,693 | 19,970 | 75,818 |
|  |  |  |  |  |
| 30-50\% | 578,192 |  |  |  |
| White | 383,592 | 939,269 | 864,717 | $2,382,178$ |
| Black | 164,200 | 189,045 | 254,768 | 827,405 |
| Hispanic | 21,864 | 90,676 | 43,305 | 298,181 |
| Other |  | 22,927 | 16,410 | 61,201 |
|  |  |  |  |  |
| 50-80\% | 948,171 | $1,632,506$ | $1,222,040$ | $3,802,717$ |
| White | 456,635 | 256,932 | 274,284 | 987,851 |
| Black | 211,097 | 129,339 | 51,129 | 391,565 |
| Hispanic | 30,429 | 33,545 | 20,323 | 84,297 |
| Other |  |  |  |  |
|  | 488,190 | 903,272 | 581,251 | $1,972,713$ |
| 80-95\% | 185,838 | 125,311 | 102,762 | 413,911 |
| White | 83,040 | 59,544 | 19,436 | 162,020 |
| Black | 13,614 | 18,502 | 8,777 | 40,893 |
| Hispanic |  |  |  |  |
| Other |  |  |  |  |
|  | $3,396,915$ | $6,525,269$ | $3,887,030$ | $13,809,214$ |
| Above 95\% | 656,037 | 546,948 | 376,350 | $1,579,335$ |
| White | 315,974 | 283,610 | 72,682 | 672,266 |
| Black | 71,602 | 120,498 | 44,559 | 236,659 |
| Hispanic |  |  |  |  |
| Other | $9,021,608$ | $10,855,214$ | $7,415,438$ | $24,292,260$ |
| Total | $2,377,182$ | $1,383,761$ | $1,406,260$ | $5,167,203$ |
| White | 981,474 | 658,021 | 238,298 | $1,877,793$ |
| Black | 170,137 | 218,692 | 110,039 | 498,868 |
| Hispanic |  |  |  |  |

APPENDIX TABLE 27B (ctd.)
Households by Income Group and Race/Ethnicity

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| West |  |  |  |  |
| $30 \%$ or less |  |  |  |  |
| White | 513,736 | 556,532 | 244,194 | 1,314,462 |
| Black | 150,797 | 56,573 | 3,956 | 211,326 |
| Hispanıc | 222,833 | 175,865 | 43,907 | 442,605 |
| Other | 95,082 | 54,973 | 48,611 | 220,760 |
| 30-50\% |  |  |  |  |
| White | 504,394 | 621,291 | 290,635 | 1,416,320 |
| Black | 89,506 | 43,984 | 3,102 | 136,592 |
| Hispanic | 204,370 | 189,650 | 44,498 | 438,518 |
| Other | 69,425 | 64,677 | 30,058 | 164,160 |
| 50-80\% |  |  |  |  |
| White | 736,968 | 981,257 | 434,452 | 2,152,677 |
| Black | 95,614 | 58,798 | 3,606 | 158,018 |
| Hispanic | 221,398 | 239,633 | 55,458 | 516,489 |
| Other | 74,951 | 86,487 | 33,531 | 194,969 |
| 80-95\% |  |  |  |  |
| White | 396,106 | 583,038 | 213,660 | 1,192,804 |
| Black | 46,608 | 31,169 | 1,521 | 79,298 |
| Hispanic | 95,360 | 113,372 | 21,685 | 230,417 |
| Other | 41,039 | 55,920 | 15,010 | 111,969 |
| Above 95\% |  |  |  |  |
| White | 2,630,635 | 4,191,815 | 1,284,781 | 8,107,231 |
| Black | 185,898 | 155,686 | 7,730 | 349,314 |
| Hispanic | 319,111 | 446,335 | 90,568 | 856,014 |
| Other | 218,318 | 389,820 | 68,135 | 676,273 |
| Total |  |  |  |  |
| White | 4,781,839 | 6,933,933 | 2,467,722 | 14,183,494 |
| Black | 568,423 | 346,210 | 19,915 | 934,548 |
| Hispanıc | 1,063,072 | 1,164,855 | 256,116 | 2,484,043 |
| Other | 498,815 | 673,971 | 195,345 | 1,368,131 |

## APPENDIX TABLE 27B (ctd.) <br> Households by Income Group and Race/Ethnicity

|  | City | Suburb | Non-Metro | Total |
| :---: | :---: | :---: | :---: | :---: |
| Total Total |  |  |  |  |
| 30\% or less |  |  |  |  |
| White | 2,394,251 | 2,847,541 | 2,009,263 | 7,251,055 |
| Black | 1,746,071 | 456,276 | 425,776 | 2,628,123 |
| Hispanic | 766,717 | 320,666 | 106,485 | 1,193,868 |
| Other | 215,802 | 292,400 | 89,687 | 431,901 |
| 30-50\% |  |  |  |  |
| White | 2,145,512 | 3,138,018 | 2,162,134 | 7,445,664 |
| Black | 875,373 | 321,258 | 271,804 | 1,468,435 |
| Hispanic | 536,090 | 325,619 | 96,611 | 958,320 |
| Other | 142,876 | 108,477 | 59,709 | 311,062 |
| 50-80\% |  |  |  |  |
| White | 3,246,166 | 5,218,836 | 3,194,723 | 11,659,725 |
| Black | 1,055,833 | 428,124 | 294,512 | 1,778,469 |
| Hispanic | 645,428 | 426,685 | 120,456 | 1,192,569 |
| Other | 172,061 | 152,835 | 68,886 | 393,782 |
| 80-95\% |  |  |  |  |
| White | 1,663,421 | 3,034,002 | 1,546,769 | 6,244,192 |
| Black | 441,398 | 220,822 | 111,364 | 773,584 |
| Hispanıc | 266,509 | 209,284 | 47,216 | 523,009 |
| Other | 83,708 | 94,818 | 29,896 | 208,422 |
| Above 95\% |  |  |  |  |
| White | 10,285,180 | 21,669,170 | 9,192,761 | 41,147,111 |
| Black | 1,646,496 | 1,059,369 | 412,907 | 3,118,772 |
| Hispanic | 907,571 | 908,771 | 187,932 | 2,004,274 |
| Other | 429,308 | 692,332 | 139,605 | 1,261,245 |
| Total |  |  |  |  |
| White | 19,734,530 | 35,907,567 | 18,105,650 | 73,747,747 |
| Black | 5,765,171 | 2,485,849 | 1,516,363 | 9,767,383 |
| Hispanic | 3,122,315 | 2,191,025 | 558,700 | 5,872,040 |
| Other | 1,043,755 | 1,174,874 | 387,783 | 2,606,412 |
| Total | 29,665,771 | 41,759,315 | 20,568,496 | 91,993,582 |

Source Urban Institute tabulations of the CHAS database

APPENDIX TABLE 28
Residential Segregation Dissimilarity Indexes for Metropolitan Areas: 1990 Black vs White, Hispanic vs White

| Metropolitan Area Papale | Total Population | Percent Black | Percent Hispanic | Black |  | Hispanic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Index | Rank | Index | Rank |
| Abilene TX MSA | 119,655 | 63 | NA | 0412 | 226 | NA | NA |
| Akron OH PMSA | 657,575 | 99 | NA | 0689 | 57 | NA | NA |
| Albany GA MSA | 112,561 | 458 | NA | 0631 | 99 | NA | NA |
| Albany-Schenectady-Troy NY MSA | 874,304 | 47 | NA | 0623 | 107 | NA | NA |
| Albuquerque NM MSA | 480,577 | 27 | 371 | 0394 | 232 | 0419 | 74 |
| Alexandria LA MSA | 131,556 | 28 | NA | 057 | 147 | NA | NA |
| Allentown-Bethlehem PA-NJ MSA | 686,668 | NA | 42 | NA | NA | 0582 | 15 |
| Amarilo TX MSA | 187,547 | 52 | 135 | 0626 | 105 | 0447 | 64 |
| Anaherm-Santa Ana CA PMSA | 2,410,554 | NA | 234 | NA | NA | 0499 | 38 |
| Anchorage AK MSA | 226,333 | 64 | 41 | 0348 | 248 | 0208 | 157 |
| Anderson IN MSA | 130,669 | 76 | NA | 074 | 24 | NA | NA |
| Anderson SC MSA | 145,196 | 166 | NA | 0426 | 221 | NA | NA |
| Ann Arbor MI PMSA | 282,937 | 112 | 83 | 0.495 | 193 | 0261 | 141 |
| Anniston AL MSA | 116,034 | 186 | NA | 0498 | 189 | NA | NA |
| Asheville NC MSA | 174,821 | 82 | NA | 0.613 | 114 | NA | NA |
| Athens GA MSA | 156,267 | 186 | NA | 0448 | 210 | NA | NA |
| Atlanta GA MSA | 2,833,511 | 26 | 2 | 0.677 | 68 | 0345 | 106 |
| Atlantic Criy NJ MSA | 319,353 | 139 | 56 | 0.643 | 90 | 0518 | 33 |
| Augusta GA-SC MSA | 396,809 | 311 | NA | 0446 | 211 | NA | NA |
| Aurora-Elgin IL. PMSA | 356,884 | 54 | 127 | 0563 | 153 | 0532 | 27 |
| Austın TX MSA | 781,572 | 92 | 205 | 0.557 | 157 | 0419 | 73 |
| Bakersfield CA MSA | 543,477 | 55 | 28 | 0.558 | 156 | 0554 | 21 |
| Baltımore MD MSA | 2,382,052 | 259 | NA | 0.713 | 40 | NA | NA |
| Baton Rouge LA MSA | 528,241 | 296 | NA | 0.639 | 93 | NA | NA |
| Battle Creek MI MSA | 135,982 | 106 | NA | 0629 | 101 | NA | NA |
| Beaumont-Port Arthur TX MSA | 361,168 | 234 | 42 | 0707 | 43 | 0371 | 97 |
| Beaver County PA PMSA | 186,093 | 56 | NA | 0.623 | 108 | NA | NA |
| Bellingham WA MSA | 127,716 | NA | 2.9 | NA | NA | 0206 | 158 |
| Benton Harbor Ml MSA | 161,377 | 15.4 | NA | 0744 | 22 | NA | NA |
| Bergen-Passaic NJ PMSA | 1,278,440 | 8.3 | 116 | 0.768 | 14 | 0588 | 14 |
| Billings MT MSA | 113,419 | NA | 28 | NA | NA | 0334 | 112 |
| Biloxi-Gulfport MS MSA | 197,110 | 178 | NA | 0463 | 207 | NA | NA |
| Brrmingham AL MSA | 907,810 | 27.1 | NA | 0717 | 38 | NA | NA |
| Bloomington IN MSA | 108,978 | 26 | NA | 0342 | 249 | NA | NA |
| Bloomington-Normal IL MSA | 129,180 | 4.3 | NA | 0368 | 241 | NA | NA |
| Boise City ID MSA | 205,775 | NA | 27 | NA | NA | 0124 | 169 |
| Boston-Lawrence-Salem MA NECMA | 3,783,207 | 62 | 49 | 068 | 63 | 0589 | 13 |
| Boulder-Longmont CO MSA | 225,339 | NA | 67 | NA | NA | 0.303 | 128 |
| Bradenton FL MSA | 211,707 | 7.7 | 45 | 0728 | 30 | 046 | 55 |
| Brazoria TX PMSA | 191,705 | 8.3 | 176 | 0468 | 205 | 0249 | 145 |
| Bremerton WA MSA | 186,221 | 24 | 31 | 0.417 | 225 | 0181 | 163 |
| Bridgeport-Stamford-Norwalk CT NECMA | A 827,645 | 98 | 86 | 0693 | 54 | 0.603 | 11 |
| Brownsville-Haringen TX MSA | 260,107 | NA | 819 | NA | NA | 0398 | 86 |
| Bryan-College Station TX MSA | 121,862 | 112 | 137 | 0474 | 203 | 0.384 | 91 |
| Buffalo NY PMSA | 968,532 | 11.3 | 23 | 0817 | 8 | 0.576 | 16 |
| Burlington NC MSA | 108,213 | 192 | NA | 0401 | 230 | NA | NA |
| Canton OH MSA | 394,106 | 64 | NA | 0.62 | 109 | NA | NA |
| Casper WY MSA | 61,226 | NA | 37 | NA | NA | 0193 | 162 |
| Champargn-Urbana-Rantoul IL MSA | 173,025 | 9.6 | 2 | 0.455 | 209 | 0.401 | 85 |

APPENDIX TABLE 28 (ctd.)

| Metropolitan Area Pa | Total Population | Percent Black | Percent Hispanic | Black |  | Hispanic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Index | Rank | Index | Rank |
| Charleston SC MSA | 501,121 | 303 | NA | 0477 | 202 | NA | NA |
| Charleston WV MSA | 250,454 | 56 | NA | 059 | 133 | NA | NA |
| Charlotte-Gastonia NC-SC MSA | 1,162,093 | 199 | NA | 0534 | 171 | NA | NA |
| Charlottesville VA MSA | 131,107 | 14.4 | NA | 0365 | 243 | NA | NA |
| Chattanooga TN-GA MSA | 433,210 | 13.4 | NA | 0723 | 32 | NA | NA |
| Cheyenne WY MSA | 73,142 | 3 | 10 | 0365 | 244 | 0306 | 126 |
| Chicago IL PMSA | 6,069,974 | 22 | 121 | 0855 | 3 | 0632 | 7 |
| Chico CA MSA | 182,120 | NA | 75 | NA | NA | 0279 | 135 |
| Cincınnatı OH-KY-IN PMSA | 1,452,645 | 131 | NA | 0757 | 17 | NA | NA |
| Clarksville-Hopkinsville TN-KY MSA | 169,439 | 205 | 33 | 0387 | 235 | 0456 | 58 |
| Cleveland OH PMSA | 1,831,058 | 194 | NA | 085 | 4 | NA | NA |
| Colorado Springs CO MSA | 397,014 | 72 | 87 | 0436 | 214 | 027 | 137 |
| Columbia MO MSA | 112,379 | 75 | NA | 0434 | 216 | NA | NA |
| Columbia SC MSA | 453,331 | 304 | NA | 0537 | 168 | NA | NA |
| Columbus GA-AL MSA | 243,072 | 376 | 3 | 0577 | 142 | 0497 | 41 |
| Columbus OH MSA | 1,377,419 | 12 | NA | 0673 | 72 | NA | NA |
| Corpus Christı TX MSA | 349,876 | 39 | 52 | 0561 | 154 | 0475 | 49 |
| Cumberland MD-WV MSA | 101,643 | 22 | NA | 0478 | 201 | NA | NA |
| Dallas TX PMSA | 2,553,362 | 161 | 144 | 0631 | 99 | 0495 | 43 |
| Danville VA MSA | 108,711 | 316 | NA | 0316 | 252 | NA | NA |
| Davenport-Rock Island-Moline IA-IL MSA | A 350,861 | 54 | 37 | 0576 | 143 | 0371 | 98 |
| Daytona Beach FL MSA | 370,712 | 9 | 4 | 0689 | 58 | 0439 | 65 |
| Dayton-Springrield OH MSA | 951,270 | 13.3 | NA | 075 | 20 | NA | NA |
| Decatur AL MSA | 131,556 | 113 | NA | 0609 | 116 | NA | NA |
| Decatur IL MSA | 117,206 | 12.1 | NA | 0589 | 137 | NA | NA |
| Denver CO PMSA | 1,622,980 | 5.9 | 13 | 064 | 91 | 0465 | 52 |
| Des Moines IA MSA | 392,928 | 38 | NA | 0645 | 89 | NA | NA |
| Detrot MI PMSA | 4,382,135 | 215 | NA | 0876 | 2 | NA | NA |
| Dothan AL MSA | 130,964 | 212 | NA | 0419 | 224 | NA | NA |
| El Paso TX MSA | 591,610 | 37 | 696 | 0366 | 242 | 0497 | 40 |
| Elkhart-Goshen IN MSA | 156,198 | 45 | NA | 0627 | 104 | NA | NA |
| Elmıra NY MSA | 95,195 | 55 | NA | 0561 | 155 | NA | NA |
| Enid OK MSA | 56,735 | 36 | NA | 037 | 239 | NA | NA |
| Erie PA MSA | 275,572 | 52 | NA | 0645 | 88 | NA | NA |
| Eugene-Springfield OR MSA | 282,912 | NA | 24 | NA | NA | 017 | 164 |
| Evansville IN-KY MSA | 278,990 | 58 | NA | 0.603 | 124 | NA | NA |
| Fayetteville NC MSA | 274,566 | 319 | 48 | 0313 | 253 | 0304 | 127 |
| Flint MI MSA | 430,459 | 196 | 21 | 0812 | 10 | 0314 | 123 |
| Florence AL MSA | 131,327 | 124 | NA | 0435 | 215 | NA | NA |
| Florence SC MSA | 114,344 | 387 | NA | 0.463 | 206 | NA | NA |
| Fort Collins-Loveland CO MSA | 186,136 | NA | 6.6 | NA | NA | 0218 | 153 |
| Fort Lauderdale-Hollywood FL MSA | 1,255,462 | 154 | 8.6 | 0683 | 60 | 0259 | 142 |
| Fort Myers-Cape Coral FL MSA | 335,110 | 66 | 45 | 0763 | 15 | 0361 | 102 |
| Fort Pierce FL MSA | 251,042 | 122 | 4.3 | 0.722 | 34 | 0418 | 76 |
| Fort Smith AR-OK MSA | 175,911 | 3.9 | NA | 0593 | 130 | NA | NA |
| Fort Walton Beach FL MSA | 143,776 | 9 | 31 | 0374 | 237 | 0221 | 151 |
| Fort Wayne IN MSA | 363,811 | 8.4 | NA | 0733 | 27 | NA | NA |
| Fort Worth-Arlington TX PMSA | 1,332,053 | 108 | 113 | 0617 | 111 | 0.451 | 62 |
| Fresno CA MSA | 667,490 | 5 | 355 | 0523 | 179 | 0478 | 47 |
| Gadsden AL MSA | 99,840 | 138 | NA | 0699 | 49 | NA | NA |
| Gainesville FL MSA | 204,111 | 19.1 | 35 | 0379 | 236 | 0222 | 150 |

APPENDIX TABLE 28 (ctd.)

| Metropoltan Area P | Total <br> Populatıon | Percent Black | Percent Hispanic | Black |  | Hispanic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Index | Rank | Index | Rank |
| Galveston-Texas City TX PMSA | 217,284 | 176 | 142 | 063 | 100 | 032 | 120 |
| Gary-Hammond IN PMSA | 604,491 | 194 | 8 | 0899 | 1 | 0512 | 34 |
| Grand Forks ND MSA | 70,683 | 2 | NA | 0556 | 159 | NA | NA |
| Grand Rapids MI MSA | 688,387 | 6 | 33 | 0723 | 33 | 0468 | 51 |
| Greeley CO MSA | 131,821 | NA | 209 | NA | NA | 0323 | 118 |
| Greensboro--Winston-Salem--Hıgh Point | t 942,091 | 193 | NA | 0609 | 117 | NA | NA |
| Greenville-Spartanburg SC MSA | 640,861 | 174 | NA | 0488 | 195 | NA | NA |
| Hagerstown MD MSA | 121,393 | 6 | NA | 0694 | 52 | NA | NA |
| Hamilton-Mıddletown OH PMSA | 291,479 | 45 | NA | 0589 | 135 | NA | NA |
| Harrisburg-Lebanon-Carlisle PA MSA | 587,986 | 67 | NA | 0755 | 19 | NA | NA |
| Hartiord-New Britain CT NECMA | 1,123,678 | 85 | 68 | 0696 | 50 | 0663 | 3 |
| Hickory NC MSA | 221,700 | 79 | NA | 0372 | 238 | NA | NA |
| Honolulu HI MSA | 831,526 | 3 | 68 | 0431 | 218 | 0324 | 117 |
| Houma-Thibodaux LA MSA | 182,842 | 146 | NA | 0459 | 208 | NA | NA |
| Houston TX PMSA | 3,301,885 | 185 | 214 | 0665 | 77 | 0493 | 44 |
| Huntington-Ashiand WV-KY-OH MSA | 312,529 | 22 | NA | 0659 | 80 | NA | NA |
| Huntsville AL MSA | 238,912 | 201 | NA | 0.573 | 144 | NA | NA |
| Indıanapolıs IN MSA | 1,249,822 | 138 | NA | 0742 | 23 | NA | NA |
| lowa City IA MSA | 96,119 | 21 | NA | 0303 | 254 | NA | NA |
| Jackson MI MSA | 149,756 | 8 | NA | 0699 | 48 | NA | NA |
| Jackson MS MSA | 395,396 | 425 | NA | 0673 | 71 | NA | NA |
| Jackson TN MSA | 77,982 | 31 | NA | 0591 | 132 | NA | NA |
| Jacksonville FL MSA | 901,351 | 20 | 2.5 | 0584 | 139 | 0214 | 154 |
| Jacksonville NC MSA | 149,838 | 199 | 5.4 | 0227 | 256 | 0237 | 146 |
| Jamestown-Dunkırk NY MSA | 141,895 | NA | 29 | NA | NA | 0522 | 31 |
| Janesville-Belort WI MSA | 139,510 | 48 | NA | 0.676 | 69 | NA | NA |
| Jersey City NJ PMSA | 553,033 | 144 | 332 | 066 | 79 | 0429 | 68 |
| Johnson City-Kingsport TN-VA MSA | 436,047 | 2 | NA | 0535 | 169 | NA | NA |
| Johet IL PMSA | 389,650 | 99 | 53 | 0706 | 44 | 0.448 | 63 |
| Kalamazoo MI MSA | 223,411 | 89 | NA | 0531 | 173 | NA | NA |
| Kankakee IL MSA | 96,255 | 15 | 2 | 0719 | 36 | 0339 | 109 |
| Kansas City MO-KS MSA | 1,566,280 | 12.8 | 29 | 0725 | 31 | 0393 | 87 |
| Kenosha WI PMSA | 128,181 | 4.1 | 44 | 0.612 | 113 | 042 | 72 |
| Killeen-Temple TX MSA | 255,301 | 195 | 122 | 041 | 227 | 0226 | 149 |
| Knoxville TN MSA | 604,816 | 6 | NA | 0607 | 118 | NA | NA |
| Kokomo IN MSA | 96,946 | 45 | NA | 0574 | 145 | NA | NA |
| Lafayette LA MSA | 208,740 | 246 | NA | 0496 | 192 | NA | NA |
| Lafayette-West Lafayette IN MSA | 130,598 | 2 | NA | 0326 | 251 | NA | NA |
| Lake Charles LA MSA | 168,130 | 229 | NA | 0636 | 98 | NA | NA |
| Lake County IL PMSA | 516,418 | 67 | 75 | 0713 | 41 | 0523 | 29 |
| Lakeland-Winter Haven FL MSA | 405,382 | 13.4 | 41 | 0563 | 151 | 0283 | 134 |
| Lancaster PA MSA | 422,822 | 24 | 37 | 064 | 92 | 0649 | 5 |
| Lansing-East Lansing MI MSA | 432,674 | 72 | 39 | 0568 | 148 | 0383 | 92 |
| Laredo TX MSA | 133,239 | NA | 939 | NA | NA | 0338 | 110 |
| Las Cruces NM MSA | 135,510 | NA | 564 | NA | NA | 0347 | 105 |
| Las Vegas NV MSA | 741,459 | 95 | 112 | 0488 | 196 | 0288 | 133 |
| Lawrence KS MSA | 81,798 | 41 | 26 | 0289 | 255 | 0166 | 165 |
| Lawton OK MSA | 111,486 | 17.9 | 62 | 0335 | 250 | 0208 | 156 |
| Lexington-Fayette KY MSA | 348,428 | 107 | NA | 0538 | 166 | NA | NA |
| Lima OH MSA | 154,340 | 8 | NA | 0658 | 82 | NA | NA |
| Lincoln NE MSA | 213,641 | 22 | NA | 0.427 | 220 | NA | NA |

APPENDIX TABLE 28 (ctd)

| Metropolitan Area | Total Population | Percent Black | Percent Hispanic | Black |  | Hispanic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Index | Rank | Index | Rank |
| Little Rock-North Little Rock AR MSA | 513,117 | 199 | NA | 0.605 | 121 | NA | NA |
| Longview-Marshall TX MSA | 162,431 | 221 | 31 | 0.472 | 204 | 0331 | 113 |
| Loran-Elyria OH PMSA | 271,119 | 78 | 5.6 | 0567 | 149 | 0598 | 12 |
| Los Angeles-Long Beach CA PMSA | 8,856,074 | 112 | 37.8 | 0.728 | 29 | 0611 | 10 |
| Loursville KY-IN MSA | 952,662 | 131 | NA | 0694 | 53 | NA | NA |
| Lubbock TX MSA | 222,636 | 7.7 | 229 | 0602 | 125 | 0468 | 50 |
| Lynchburg VA MSA | 142,199 | 212 | NA | 0395 | 231 | NA | NA |
| Macon-Warner Robins GA MSA | 281,103 | 34.6 | NA | 0524 | 177 | NA | NA |
| Madison WI MSA | 367,085 | 29 | NA | 0483 | 198 | NA | NA |
| Mansfield OH MSA | 126,137 | 79 | NA | 067 | 73 | NA | NA |
| McAllen-Edinburg-Mission TX MSA | 383,545 | NA | 852 | NA | NA | 0379 | 94 |
| Medford OR MSA | 146,389 | NA | 41 | NA | NA | 0214 | 155 |
| Melbourne-Titusville-Paim Bay FL MSA | 398,918 | 79 | 31 | 0522 | 181 | 0197 | 161 |
| Memphis TN-AR-MS MSA | 981,747 | 406 | NA | 0692 | 56 | NA | NA |
| Merced CA MSA | 178,403 | 48 | 32.6 | 0364 | 245 | 0.331 | 114 |
| Miam-Hialeah FL PMSA | 1,936,998 | 205 | 492 | 0.699 | 47 | 0503 | 36 |
| Mıddlesex-Somerset NJ PMSA | 1,019,811 | 69 | 7 | 0543 | 162 | 0499 | 37 |
| Midand TX MSA | 106,611 | 78 | 214 | 0.627 | 103 | 0487 | 45 |
| Milwaukee WI PMSA | 1,432,149 | 138 | 36 | 0826 | 5 | 0564 | 20 |
| Minneapolis-St Paul MN-WI MSA | 2,464,124 | 3.6 | NA | 0.618 | 112 | NA | NA |
| Mobile AL MSA | 476,859 | 274 | NA | 0657 | 84 | NA | NA |
| Modesto CA MSA | 370,522 | NA | 218 | NA | NA | 0334 | 111 |
| Monmouth-Ocean NJ PMSA | 985,416 | 6 | 37 | 0.658 | 83 | 0343 | 107 |
| Monroe LA MSA | 142,191 | 31 | NA | 0.713 | 37 | NA | NA |
| Montgomery AL MSA | 292,517 | 36 | NA | 0.595 | 129 | NA | NA |
| Muncie IN MSA | 119,659 | 6 | NA | 0.605 | 120 | NA | NA |
| Muskegon MI MSA | 158,983 | 13.6 | 23 | 0.768 | 13 | 0301 | 129 |
| Naples FL MSA | 152,099 | 4.6 | 13.6 | 0.655 | 85 | 0529 | 28 |
| Nashvilie TN MSA | 985,026 | 155 | NA | 0.606 | 119 | NA | NA |
| Nassau-Suffolk NY PMSA | 2,609,190 | 74 | 63 | 0761 | 16 | 0.423 | 70 |
| New Bedford-Fall River MA NECMA | 506,150 | NA | 27 | NA | NA | 0461 | 54 |
| New Haven-Waterbury CT NECMA | 804,211 | 102 | 63 | 0679 | 65 | 0571 | 17 |
| New London-Norwich CT NECMA | 251,099 | 47 | 3.3 | 0.498 | 190 | 0422 | 71 |
| New Orieans LA MSA | 1,238,676 | 347 | 43 | 0.687 | 61 | 031 | 125 |
| New York NY PMSA | 8,546,583 | 263 | 221 | 0815 | 9 | 0658 | 4 |
| Newark NJ PMSA | 1,823,993 | 232 | 10.3 | 0822 | 7 | 0.667 | 2 |
| Niagara Fails NY PMSA | 220,756 | 5.5 | NA | 0664 | 75 | NA | NA |
| Norfolk-Virginia Beach VA MSA | 1,370,100 | 286 | 2.2 | 0.501 | 186 | 0292 | 131 |
| Oakland CA PMSA | 2,074,723 | 146 | 13.1 | 0678 | 67 | 0388 | 90 |
| Ocala FL MSA | 194,833 | 128 | 3 | 0521 | 183 | 0234 | 148 |
| Odessa TX MSA | 118,934 | 4.7 | 314 | 0522 | 180 | 0408 | 83 |
| Oklahoma City OK MSA | 958,839 | 10.5 | 3.6 | 0598 | 127 | 0.33 | 115 |
| Olympia WA MSA | 161,238 | NA | 3 | NA | NA | 0163 | 166 |
| Omaha NE-IA MSA | 618,258 | 83 | 26 | 0698 | 51 | 037 | 99 |
| Orange County NY PMSA | 307,624 | 72 | 7 | 0538 | 167 | 0389 | 88 |
| Orlando FL MSA | 1,072,748 | 12.4 | 9 | 0596 | 128 | 0.265 | 140 |
| Owensboro KY MSA | 87,189 | 42 | NA | 0.543 | 163 | NA | NA |
| Oxnard-Ventura CA PMSA | 669,016 | 23 | 264 | 0.482 | 199 | 0523 | 30 |
| Panama City FL MSA | 126,912 | 10.8 | NA | 0542 | 164 | NA | NA |
| Pascagoula MS MSA | 115,107 | 20.4 | NA | 0549 | 161 | NA | NA |
| Pensacola FL MSA | 343,766 | 162 | NA | 0529 | 175 | NA | NA |

APPENDIX TABLE 28 (ctd)

| Meitropolitan Area | Total Population | Percent Black | Percent Hispanic | Black |  | Hispanic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Index | Rank | Index | Rank |
| Peoria IL MSA | 339,166 | 74 | NA | 0701 | 46 | NA | NA |
| Philadelphia PA-NJ PMSA | 4,854,492 | 19.1 | 36 | 0771 | 11 | 0626 | 9 |
| Phoenix AZ MSA | 2,122,101 | 35 | 163 | 0502 | 185 | 0481 | 46 |
| Pine Bluff AR MSA | 85,480 | 431 | NA | 0588 | 136 | NA | NA |
| Pittsburgh PA PMSA | 2,056,684 | 82 | NA | 071 | 42 | NA | NA |
| Portland OR PMSA | 1,239,746 | 31 | 36 | 0663 | 78 | 0269 | 138 |
| Poughkeepsie NY MSA | 259,462 | 84 | 38 | 0566 | 150 | 0402 | 84 |
| Providence-Pawtucket RI NECMA | 916,236 | 39 | 48 | 0667 | 74 | 0628 | 8 |
| Provo-Orem UT MSA | 263,590 | NA | 32 | NA | NA | 0204 | 159 |
| Pueblo CO MSA | 123,051 | NA | 358 | NA | NA | 033 | 116 |
| Racine WI PMSA | 175,034 | 97 | 52 | 0639 | 94 | 043 | 67 |
| Ralergh-Durham NC MSA | 735,480 | 249 | NA | 0484 | 197 | NA | NA |
| Rapid City SD MSA | 81,343 | NA | 22 | NA | NA | 0268 | 139 |
| Reading PA MSA | 336,523 | 3 | 51 | 0628 | 102 | 0699 | 1 |
| Redding CA MSA | 147,036 | NA | 38 | NA | NA | 0076 | 170 |
| Reno NV MSA | 254,667 | 22 | 9 | 0369 | 240 | 031 | 124 |
| Richland-Kennewick-Pasco WA MSA | 150,033 | NA | 133 | NA | NA | 051 | 35 |
| Richmond-Petersburg VA MSA | 865,639 | 292 | NA | 059 | 134 | NA | NA |
| Riverside-San Bernardino CA PMSA | 2,588,793 | 69 | 265 | 0439 | 213 | 0358 | 103 |
| Roanoke VA MSA | 224,477 | 123 | NA | 0688 | 59 | NA | NA |
| Rochester NY MSA | 1,002,410 | 94 | 31 | 0.674 | 70 | 0554 | 22 |
| Rockford IL. MSA | 283,719 | 82 | 3.5 | 0719 | 35 | 0429 | 69 |
| Sacramento CA MSA | 1,481,102 | 69 | 116 | 0.556 | 158 | 037 | 99 |
| Saginaw-Bay Cty-Mıdland MI MSA | 399,320 | 97 | 44 | 0822 | 6 | 0457 | 57 |
| Salem OR MSA | 278,024 | NA | 7.6 | NA | NA | 0364 | 100 |
| Salinas-Seaside-Monterey CA MSA | 355,657 | 64 | 336 | 0584 | 138 | 0569 | 18 |
| Salt Lake City-Ogden UT MSA | 1,072,227 | NA | 5.8 | NA | NA | 0322 | 119 |
| San Angelo TX MSA | 98,458 | 42 | 25.9 | 0393 | 234 | 0411 | 81 |
| San Antono TX MSA | 1,302,099 | 68 | 476 | 0539 | 165 | 0537 | 26 |
| San Diego CA MSA | 2,476,568 | 63 | 205 | 0579 | 141 | 0453 | 60 |
| San Francisco CA PMSA | 1,603,070 | 76 | 145 | 0638 | 95 | 0498 | 39 |
| San Jose CA PMSA | 1,497,577 | 38 | 21 | 043 | 219 | 0478 | 48 |
| Santa Barbara-Santa Maria CA MSA | 369,581 | 28 | 266 | 0425 | 222 | 0414 | 80 |
| Santa Cruz CA PMSA | 229,734 | NA | 204 | NA | NA | 0542 | 25 |
| Santa Fe NM MSA | 117,043 | NA | 435 | NA | NA | 0418 | 75 |
| Santa Rosa-Petaluma CA PMSA | 388,221 | NA | 106 | NA | NA | 0.25 | 143 |
| Sarasota FL MSA | 277,773 | 43 | 21 | 0737 | 26 | 0318 | 121 |
| Savannah GA MSA | 242,617 | 355 | NA | 0611 | 115 | NA | NA |
| Seattle WA PMSA | 1,972,015 | 41 | 28 | 0561 | 152 | 0203 | 160 |
| Sharon PA MSA | 121,003 | 49 | NA | 0664 | 76 | NA | NA |
| Sherman-Denison TX MSA | 95,021 | 69 | 29 | 0499 | 188 | 0289 | 132 |
| Shreveport LA MSA | 334,341 | 35 | NA | 0598 | 126 | NA | NA |
| Sioux Criy IA-NE MSA | 115,018 | NA | 32 | NA | NA | 0455 | 59 |
| South Bend-Mishawaka IN MSA | 247,052 | 98 | 21 | 0638 | 96 | 0438 | 66 |
| Springieid IL MSA | 189,550 | 76 | NA | 0651 | 86 | NA | NA |
| Springrield MA NECMA | 602,878 | 61 | 82 | 0678 | 66 | 0641 | 6 |
| State College PA MSA | 123,786 | 23 | NA | 0497 | 191 | NA | NA |
| Steubenville-Werton OH-WV MSA | 142,523 | 39 | NA | 0624 | 106 | NA | NA |
| Stockton CA MSA | 480,617 | 56 | 234 | 0604 | 123 | 0.361 | 101 |
| St Joseph MO MSA | 83,083 | 32 | 21 | 0445 | 212 | 0.149 | 167 |
| St Louis MO-IL MSA | 2,444,087 | 173 | NA | 0769 | 12 | NA | NA |

APPENDIX TABLE 28 (ctd.)

| Metropolitan Area | Total Population | Percent Black | Percent Hispanic | Black |  | Hispanic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Index | Rank | Index | Rank |
| Syracuse NY MSA | 659,864 | 5.9 | NA | 073 | 28 | NA | NA |
| Tacoma WA PMSA | 585,932 | 72 | 35 | 0482 | 200 | 027 | 136 |
| Tallahassee FL MSA | 233,598 | 301 | 24 | 0523 | 178 | 0298 | 130 |
| Tampa-St Petersburg FL MSA | 2,067,830 | 9 | 6.7 | 0693 | 55 | 0.453 | 61 |
| Terre Haute IN MSA | 130,812 | 46 | NA | 057 | 146 | NA | NA |
| Texarkana TX-Texarkana AR MSA | 120,132 | 22 | NA | 0407 | 228 | NA | NA |
| Toledo OH MSA | 614,103 | 114 | 33 | 0738 | 25 | 0375 | 96 |
| Topeka KS MSA | 160,976 | 83 | 4.8 | 0534 | 172 | 0376 | 95 |
| Trenton NJ PMSA | 325,824 | 189 | 6 | 0681 | 62 | 0545 | 24 |
| Tucson AZ MSA | 666,880 | 3.1 | 245 | 042 | 223 | 0497 | 42 |
| Tulsa OK MSA | 708,954 | 82 | 21 | 0619 | 110 | 0249 | 144 |
| Tuscaloosa AL MSA | 150,522 | 262 | NA | 0499 | 187 | NA | NA |
| Tyler TX MSA | 151,309 | 209 | 59 | 053 | 174 | 0565 | 19 |
| Utica-Rome NY MSA | 316,633 | 44 | NA | 068 | 64 | NA | NA |
| Vallejo-Fairfield-Napa CA PMSA | 450,822 | 104 | 136 | 0493 | 194 | 0218 | 152 |
| Vancouver WA PMSA | 238,053 | NA | 25 | NA | NA | 0131 | 168 |
| Victoria TX MSA | 74,361 | 66 | 341 | 0433 | 217 | 0.381 | 93 |
| Vineland-Millville-Brıdgeton NJ PMSA | 138,053 | 169 | 133 | 0406 | 229 | 0457 | 56 |
| Visalia-Tulare-Porterville CA MSA | 311,921 | NA | 388 | NA | NA | 0389 | 89 |
| Waco TX MSA | 189,123 | 156 | 125 | 0.522 | 182 | 0418 | 77 |
| Washington DC-MD-VA MSA | 3,923,573 | 266 | 5.7 | 0.659 | 81 | 0409 | 82 |
| Waterloo-Cedar Falls IA MSA | 146,611 | 59 | NA | 0704 | 45 | NA | NA |
| West Palm Beach-Boca Raton FL MSA | -863,515 | 125 | 77 | 0745 | 21 | 0417 | 78 |
| Wheeling WV-OH MSA | 159,301 | 2 | NA | 0527 | 176 | NA | NA |
| Wichrta Falls TX MSA | 122,378 | 92 | 86 | 0592 | 131 | 0357 | 104 |
| Wichita KS MSA | 485,270 | 76 | 41 | 0636 | 97 | 0341 | 108 |
| Willamsport PA MSA | 118,710 | 24 | NA | 0.648 | 87 | NA | NA |
| Wilmington DE-NJ-MD PMSA | 578,587 | 148 | 2.4 | 0.55 | 160 | 0415 | 79 |
| Wilmington NC MSA | 120,284 | 20 | NA | 0.58 | 140 | NA | NA |
| Worcester-Fitchburg MA NECMA | 709,705 | 2.1 | 46 | 0519 | 184 | 0551 | 23 |
| Yakıma WA MSA | 188,823 | NA | 239 | NA | NA | 0519 | 32 |
| York PA MSA | 417,848 | 29 | NA | 0713 | 39 | NA | NA |
| Youngstown-Warren OH MSA | 492,619 | 111 | NA | 0756 | 18 | NA | NA |
| Yuba City CA MSA | 122,643 | 28 | 141 | 0.352 | 247 | 0235 | 147 |
| Yuma AZ MSA | 106,895 | 29 | 40.6 | 0362 | 246 | 0462 | 53 |

APPENDIX TABLE 29A
Rental Units With Housing Costs Less Than or Equal to the FMR, 1989 by Unit Size

|  | $\mathbf{O B R}$ | $\mathbf{1 B R}$ | $\mathbf{2}$ BR | $\mathbf{3}$ BR | 4+ BR | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Northeast |  |  |  |  |  |  |
| C.ty | 205,914 | 936,751 | 918,695 | 577,966 | 105,676 | $2,745,002$ |
| Suburb | 64,412 | 533,342 | 574,859 | 324,228 | 110,842 | $1,607,683$ |
| Non-metro | 8,027 | 168,534 | 160,451 | 84,247 | 23,490 | 444,749 |
| Total | 278,353 | $1,638,627$ | $1,654,005$ | 986,441 | 240,008 | $4,797,434$ |


| Midwest |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Clty | 129,394 | 888,696 | 998,465 | 503,040 | 96,797 | $2,616,392$ |
| Suburb | 40,561 | 416,348 | 640,138 | 332,294 | 76,214 | $1,505,555$ |
| Non-metro | 30,669 | 383,478 | 543,822 | 367,559 | 148,610 | $1,474,138$ |
| Total | 200,624 | $1,688,522$ | $2,182,425$ | $1,202,893$ | 321,621 | $5,596,085$ |

South

| City | 124,488 | $1,284,349$ | $1,386,429$ | 606,710 | 103,185 | $3,505,161$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Suburb | 21,064 | 499,756 | $1,097,941$ | 667,324 | 133,588 | $2,419,673$ |
| Non-metro | 42,679 | 294,527 | 844,852 | 558,270 | 105,246 | $1,845,574$ |
| Total | 188,231 | $2,078,632$ | $3,329,222$ | $1,832,304$ | 342,019 | $7,770,408$ |


| West |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| City | 195,636 | $1,008,076$ | $1,021,333$ | 352,355 | 112,296 | $2,689,696$ |
| Suburb | 80,911 | 668,816 | $1,041,093$ | 488,933 | 113,260 | $2,393,013$ |
| Non-metro | 24,744 | 213,466 | 420,035 | 222,329 | 86,395 | 966,969 |
| Total | 301,291 | $1,890,358$ | $2,482,461$ | $1,063,617$ | 311,951 | $6,049,678$ |


| Total |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| City | 655,432 | $4,117,872$ | $4,324,922$ | $2,040,071$ | 417,954 | $11,556,251$ |
| Suburb | 206,948 | $2,118,262$ | $3,354,031$ | $1,812,779$ | 433,904 | $7,925,924$ |
| Non-metro | 106,119 | $1,060,005$ | $1,969,160$ | $1,232,405$ | 363,741 | $4,731,430$ |
| Total | 968,499 | $7,296,139$ | $9,648,113$ | $5,085,255$ | $1,215,599$ | $24,213,605$ |

Source Urban Institute tabulatıons of the 1989 AHS Includes occupied and vacant rental units.

APPENDIX TABLE 29B
Percent Distribution of Rental Units With Housing Costs Less Than or Equal to the FMR, by Unit Size, 1989

|  | 0 BR | 1 BR | 2 BR | 3 BR | 4+ BR | Total |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Northeast |  |  |  |  |  |  |
| City | $578 \%$ | $611 \%$ | $65.0 \%$ | $835 \%$ | $85.0 \%$ | $666 \%$ |
| Suburb | $65.3 \%$ | $538 \%$ | $484 \%$ | $688 \%$ | $73.8 \%$ | $554 \%$ |
| Non-metro | $72.8 \%$ | $77.2 \%$ | $615 \%$ | $69.4 \%$ | $81.3 \%$ | $694 \%$ |
| Total | $597 \%$ | $597 \%$ | $57.8 \%$ | $76.8 \%$ | $791 \%$ | $626 \%$ |

## Midwest

| City | $758 \%$ | $748 \%$ | $68.5 \%$ | $829 \%$ | $853 \%$ | $74.0 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Suburb | $70.6 \%$ | $587 \%$ | $51.5 \%$ | $744 \%$ | $760 \%$ | $58.9 \%$ |
| Non-metro | $78.6 \%$ | $821 \%$ | $73.2 \%$ | $917 \%$ | $90.6 \%$ | $813 \%$ |
| Total | $75.1 \%$ | $714 \%$ | $634 \%$ | $827 \%$ | $85.1 \%$ | $70.8 \%$ |

South

| City | $65.9 \%$ | $71.5 \%$ | $620 \%$ | $639 \%$ | $75.5 \%$ | $660 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Suburb | $43.9 \%$ | $52.8 \%$ | $501 \%$ | $593 \%$ | $66.1 \%$ | $536 \%$ |
| Non-metro | $892 \%$ | $76.6 \%$ | $73.2 \%$ | $81.9 \%$ | $79.6 \%$ | $76.9 \%$ |
| Total | $661 \%$ | $66.4 \%$ | $59.6 \%$ | $66.5 \%$ | $72.6 \%$ | $636 \%$ |

West

| City | $77.3 \%$ | $754 \%$ | $650 \%$ | $663 \%$ | $69.1 \%$ | $69.8 \%$ |
| :--- | ---: | ---: | :--- | :--- | :--- | :--- |
| Suburb | $58.9 \%$ | $66.8 \%$ | $63.4 \%$ | $643 \%$ | $72.1 \%$ | $64.7 \%$ |
| Non-metro | $100.0 \%$ | $92.1 \%$ | $89.9 \%$ | $88.7 \%$ | $95.3 \%$ | $90.8 \%$ |
| Total | $72.6 \%$ | $73.5 \%$ | $67.4 \%$ | $68.9 \%$ | $761 \%$ | $702 \%$ |


| Total |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| City | $676 \%$ | $70.3 \%$ | $64.7 \%$ | $734 \%$ | $779 \%$ | $687 \%$ |
| Suburb | $606 \%$ | $58.0 \%$ | $53.5 \%$ | $64.7 \%$ | $712 \%$ | $580 \%$ |
| Non-metro | $86.5 \%$ | $81.4 \%$ | $75.0 \%$ | $84.7 \%$ | $87.5 \%$ | $799 \%$ |
| Total | $67.6 \%$ | $675 \%$ | $62.0 \%$ | $72.3 \%$ | $77.8 \%$ | $665 \%$ |

Source: Urban Institute tabulations of the 1989 AHS. Includes occupled and vacant rental units.

APPENDIX TABLE 30
Rental Housing Mismatch, 1990

## Northeast

| Affordability <br> Category | Central Cities <br> Units |  |
| :--- | ---: | ---: |
|  |  |  |
| $30 \%$ or less | 706,452 | $1,093,590$ |
| $50 \%$ or less | $1,830,320$ | $1,644,186$ |
| $80 \%$ or less | $3,424,439$ | $2,321,182$ |
| Total | $4,154,602$ | $3,771,314$ |

## Units/HHs

| 065 | 424,055 | 514,609 |
| :--- | ---: | ---: |
| 111 | $1,072,152$ | 908,941 |
| 148 | $2,265,958$ | $1,380,847$ |
| 110 | $3,011,979$ | $2,697,262$ |

## Units/HHs

| 0.82 | 130,169 | 124,136 |
| :--- | :--- | :--- |
| 118 | 315,166 | 227,442 |
| 164 | 575,580 | 353,052 |
| 112 | 633,365 | 565,390 |


| Suburbs <br> Units |  |
| ---: | ---: |
| 424,055 | 514,609 |
| $4,072,152$ | 908,941 |
| $2,265,958$ | $1,380,847$ |
| $3,011,979$ | $2,697,262$ |

Non-metropolitan Areas
Units Households

Units/HHs
105
139
163
112

Total
Units Households Units/HHs

| $1,260,676$ | $1,732,335$ | 073 |
| :--- | :--- | :--- |
| $3,217,638$ | $2,780,569$ | 116 |
| $6,265,977$ | $4,055,081$ | 155 |
| $7,799,946$ | $7,033,966$ | 111 |

Total
Units Households Units/HHs
Units/HHs

139
184
170

085
1,691,096
4,205,780 $2,838,904 \quad 148$
7,241,699 4,340,849 16

7,733,221 6,917,504
12

## South

| Affordability <br> Category | Central Cities <br> Units |  |
| :--- | ---: | ---: |
|  |  |  |
| $30 \%$ or less | 764,354 | $1,122,997$ |
| $50 \%$ or less | $2,279,953$ | $1,834,930$ |
| $80 \%$ or less | $4,586,190$ | $2,761,906$ |
| Total | $5,170,334$ | $4,467,463$ |


| Units/HHs | Suburbs <br> Units |  |  | Households |
| ---: | ---: | ---: | :---: | :---: |
| 068 | 557,475 | 603,187 |  |  |
| 124 | $1,503,124$ | $1,124,240$ |  |  |
| 166 | $3,453,361$ | $1,894,428$ |  |  |
| 116 | $4,186,743$ | $3,602,896$ |  |  |


| Units/HHs | Non-metropolitan Areas <br> Units Households |  |
| ---: | ---: | ---: |
|  |  |  |
| 0.92 | 847,272 | 630,009 |
| 134 | $1,641,069$ | $1,048,757$ |
| 182 | $2,533,898$ | $1,521,437$ |
| 116 | $2,739,425$ | $2,384,665$ |

Units/HHs
Total
Units Households Units/HHs

| 134 | $2,169,101$ | $2,356,193$ | 092 |
| :--- | ---: | ---: | ---: |
| 156 | $5,424,146$ | $4,007,927$ | 135 |
| 167 | $10,573,449$ | $6,177,771$ | 171 |
| 115 | $12,096,502$ | $10,455,024$ | 116 |

## APPENDIX TABLE 30 (ctd.)

## Rental Housing Mismatch, 1990

West

| Affordability Category | Central Crties Units Households |  | Units/HHs | Suburbs Units | Households | Units/HHs | Non-metrop Units | an Areas useholds | Units/HHs | Total Units | Households | Units/HHs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30\% or less | 326,093 | 759,511 | 043 | 313,979 | 537,894 | 058 | 226,595 | 182,309 | 124 | 866,667 | 1,479,714 | 059 |
| 50\% or less | 1,112,279 | 1,361,644 | 082 | 858,621 | 1,049,541 | 082 | 530,105 | 351,259 | 151 | 2,501,005 | 2,762,444 | 091 |
| 80\% or less | 2,815,890 | 2,046,538 | 138 | 2,431,626 | 1,707,655 | 142 | 925,859 | 552,520 | 168 | 6,173,375 | 4,306,713 | 143 |
| Total | 3,771,526 | 3,413,425 | 110 | 3,553,460 | 3,228,832 | 110 | 1,055,398 | 940,235 | 112 | 8,380,384 | 7,582,492 | 111 |

## Total

| Affordability Category | Central Citıes Units Households |  | Units/HHs | Suburbs Units | Households | Units/HHs | Non-metrop Units | Iitan Areas ouseholds | Units/HHs | Total Units | Households | Units/HHs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30\% or less | 2,414,908 | 3,929,333 | 061 | 1,594,030 | 2,023,333 | 079 | 1,717,229 | 1,306,672 | 131 | 5,726,167 | 7,259,338 | 079 |
| 50\% or less | 7,219,215 | 6,321,150 | 114 | 4,406,749 | 3,767,865 | 117 | 3,722,605 | 2,300,829 | 162 | 15,348,569 | 12,389,844 | 124 |
| 80\% or less | 14,106,036 | 9,253,293 | 152 | 10,350,780 | 6,163,609 | 168 | 5,797,684 | 3,463,512 | 167 | 30,254,500 | 18,880,414 | 160 |
| Total | 16,580,385 | 14,745,701 | 112 | 13,184,414 | 11,716,484 | 113 | 6,245,254 | 5,526,801 | 113 | 36,010,053 | 31,988,986 | 113 |

[^52]
## APPENDIX TABLE 31

Owner Housing Mismatch
Number of Households and Units in each Affordability Category, 1990

|  | Owner households |  | Renter households |  | Owner Units |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50\% or less | 80\% or less | 50\% or less | 80\% or less | 50\% or less | 80\% or less |
| Northeast |  |  |  |  |  |  |
| City | 489,304 | 877,661 | 1,644,186 | 2,321,182 | 478,264 | 861,708 |
| Suburb | 989,484 | 1,866,942 | 908,941 | 1,380,847 | 664,784 | 1,629,135 |
| Non-metro | 251,424 | 515,503 | 227,442 | 353,052 | 358,673 | 698,608 |
| Total | 1,730,212 | 3,260,106 | 2,780,569 | 4,055,081 | 1,501,721 | 3,189,451 |
| Midwest |  |  |  |  |  |  |
| City | 665,810 | 1,301,405 | 1,480,390 | 2,123,667 | 1,410,568 | 2,695,079 |
| Suburb | 794,648 | 1,757,731 | 685,143 | 1,180,679 | 1,329,745 | 3,565,561 |
| Non-metro | 850,859 | 1,681,792 | 673,371 | 1,036,503 | 1,937,326 | 3,369,115 |
| Total | 2,311,317 | 4,740,928 | 2,838,904 | 4,340,849 | 4,677,639 | 9,629,755 |
| South |  |  |  |  |  |  |
| City | 857,929 | 1,577,285 | 1,834,930 | 2,761,906 | 1,161,535 | 2,725,836 |
| Suburb | 1,356,172 | 2,638,306 | 1,124,240 | 1,894,428 | 1,947,359 | 4,439,907 |
| Non-metro | 1,460,655 | 2,555,751 | 1,048,757 | 1,521,437 | 2,483,785 | 4,196,244 |
| Total | 3,674,756 | 6,771,342 | 4,007,927 | 6,177,771 | 5,592,679 | 11,361,987 |
| West |  |  |  |  |  |  |
| City | 488,499 | 932,536 | 1,361,644 | 2,046,538 | 298,765 | 878,533 |
| Suburb | 736,098 | 1,444,159 | 1,049,541 | 1,707,655 | 494,329 | 1,227,846 |
| Non-metro | 357,702 | 683,488 | 351,259 | 552,520 | 471,644 | 960,371 |
| Total | 1,582,299 | 3,060,183 | 2,762,444 | 4,306,713 | 1,264,738 | 3,066,750 |
| Total |  |  |  |  |  |  |
| City | 2,501,542 | 4,688,887 | 6,321,150 | 9,253,293 | 3,349,132 | 7,161,156 |
| Suburb | 3,876,402 | 7,707,138 | 3,767,865 | 6,163,609 | 4,436,217 | 10,862,449 |
| Non-metro | 2,920,640 | 5,436,534 | 2,300,829 | 3,463,512 | 5,251,428 | 9,224,338 |
| Total | 9,298,584 | 17,832,559 | 12,389,844 | 18,880,414 | 13,036,777 | 27,247,943 |

Source Urban Institute tabulations of the CHAS database

## APPENDIX TABLE 32

Vacancy Rates by Size and Unit Tenure, 1990

|  | 0 and 1 Bedroom | Two Bedrooms | 3 or more Bedrooms | Total | 0 and 1 <br> Bedrooms | Two Bedrooms | 3 or more Bedrooms | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Northeast |  |  |  |  |  |  |  |  |
| City | $63 \%$ | 6.2\% | 5.6\% | 6.1\% | 7.2\% | $31 \%$ | 14\% | 2.3\% |
| Suburb | 6.9\% | 6.9\% | $52 \%$ | 6.5\% | 5.8\% | 2.9\% | 1.2\% | 1.6\% |
| Non-Metro | 9.3\% | 85\% | 5.9\% | 7.9\% | 5.2\% | 2.5\% | 1.5\% | 1.8\% |
| Total | 6.7\% | 6.7\% | 5.5\% | 6.4\% | 6.4\% | 2.9\% | 1.3\% | 1.8\% |
| Midwest |  |  |  |  |  |  |  |  |
| City | $95 \%$ | 8.7\% | 6.9\% | 8.7\% | 4.4\% | 2 1\% | 12\% | 1.6\% |
| Suburb | 8.0\% | 7.7\% | $43 \%$ | 7.0\% | 3.0\% | 1.9\% | 0.9\% | 12\% |
| Non-Metro | 10.3\% | 8.6\% | 5.2\% | 7.9\% | 5.8\% | 2.5\% | 1.3\% | 1.7\% |
| Total | 9.2\% | $83 \%$ | 5.6\% | 8.0\% | 4.4\% | 2 2\% | 1.1\% | 14\% |
| South |  |  |  |  |  |  |  |  |
| City | 12.3\% | 12.7\% | 8.1\% | 11.6\% | 6.6\% | 4.1\% | 2.4\% | 30\% |
| Suburb | 11.7\% | 12.7\% | 7.3\% | 10.9\% | 4.0\% | 3.2\% | 2.1\% | 2.4\% |
| Non-Metro | 12.4\% | 11.9\% | 8.2\% | 10.8\% | 5.0\% | 2.7\% | 1.6\% | 2.0\% |
| Total | 12.1\% | 12.5\% | 7.8\% | 11 2\% | $50 \%$ | 3 $2 \%$ | 20\% | 24\% |
| West |  |  |  |  |  |  |  |  |
| City | 8.1\% | $83 \%$ | 5.0\% | 7.7\% | 3.4\% | 2.9\% | 1.7\% | 2.1\% |
| Suburb | 7.0\% | 7.5\% | 4.6\% | 6.6\% | $26 \%$ | 2.6\% | 1.8\% | 2.0\% |
| Non-Metro | 11.8\% | 9.9\% | 6.3\% | 9.3\% | $46 \%$ | $34 \%$ | 19\% | 2.5\% |
| Total | 8.0\% | 8.1\% | 5.1\% | 7.4\% | $33 \%$ | $28 \%$ | 18\% | 21\% |
| Total |  |  |  |  |  |  |  |  |
| City | 9.1\% | 9.4\% | 6.6\% | 87\% | $56 \%$ | 3.1\% | 1.8\% | 2.3\% |
| Suburb | 8.4\% | 9.1\% | 5.7\% | 8.0\% | 38\% | 2.7\% | 15\% | 1.8\% |
| Non-Metro | 11.2\% | 10.4\% | 6.8\% | 9 4\% | $51 \%$ | 2.7\% | 15\% | 20\% |
| Total | 9.1\% | 94\% | 6.3\% | 86\% | $47 \%$ | 28\% | 1.6\% | 2.0\% |

Source. Urban Institute tabulations of the CHAS database

The following tables describe assisted rental units and eligible renter households based on data collected in the 1989 American Housing Survey (AHS). The data for the tables was obtained from Characterstics of HUD-Assisted Renters and Their Unts in 1989. This volume contains tables produced by the Census Bureau at HUD's request. These tables use the same format as those published for all renters in the 1989 AHS.

To identify public housing and private assisted projects, HUD used a mailing address list of all unts in assisted projects under the management of public housing authority and all private sponsors of subsidized multufamily rental projects. The Census Bureau matched these assisted housing addresses with the renters responding to the AHS, who represent the total renter households in the United States.

Voucher and certuficate holders in the AHS were identified in a separate way. The Census Bureau matched a list of sampled AHS renter households to local agency files of certificate and voucher holders.

## Definition

"Income-Eligible Households" represent the $13,808,000$ or 41 percent of total renter households in the United States who had incomes low enough to be considered eligıble for housing assistance under various HUD subsidy programs in 1989.

APPENDIX TABLE 33A
Assisted Households by Region and Race/Ethnicity (Numbers in thousands)

| Region | All | Black $^{\star}$ | Hispanic |
| :--- | ---: | ---: | ---: |
| Northeast | 1,156 | 370 | 175 |
| Midwest | 891 | 365 | 18 |
| South | 1,391 | 768 | 104 |
| West | 632 | 137 | 145 |
| Total | 4,070 | 1,640 | 442 |

Income-Eligible Households by Region and Race/Ethnicity

| Region | All | Black $^{*}$ | Hispanic |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| Northeast | 3,191 | 745 | 513 |
| Midwest | 3,404 | 921 | 190 |
| South | 4,377 | 1,897 | 439 |
| West | 2,837 | 319 | 760 |
| Total | 13,808 | 3,882 | 1,902 |

* "Black" includes Black Hispanıc


## APPENDIX TABLE 33B

Type of Household Assistance by Region and Race/Ethnicity (numbers in thousands)

## Public Housing

| Region | All | Black* | Hispanic |
| :--- | ---: | ---: | ---: |
| Northeast | 544 | 220 | 114 |
| Mıdwest | 256 | 151 | 9 |
| South | 464 | 314 | 27 |
| West | 96 | 35 | 13 |
| Total | 1,360 | 720 | 163 |

## Certificate/Voucher

| Region | All | Black* | Hispanic |
| :--- | ---: | ---: | ---: |
| Northeast | 193 | 67 | 19 |
| Mıdwest | 235 | 80 | - |
| South | 394 | 219 | 38 |
| West | 238 | 61 | 70 |
| Total | 1,060 | 427 | 127 |

## Private Project-Based

| Region | All | Black $^{*}$ | Hispanic |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| Northeast | 418 | 83 | 42 |
| Mıdwest | 400 | 134 | 9 |
| South | 533 | 235 | 39 |
| West | 299 | 40 | 63 |
| Total | 1,650 | 492 | 153 |

Eligible but not Subsidized

| Region | All | Black $^{*}$ | Hispanic |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| Northeast | 2,035 | 375 | 338 |
| Midwest | 2,513 | 556 | 172 |
| South | 2,986 | 1,129 | 335 |
| West | 2,205 | 182 | 615 |
| Total | 9,739 | 2,242 | 1,460 |

[^53]
## APPENDIX TABLE 33C

Assisted Households by Area and Race/Ethnicity (numbers in thousands)

|  | All | Black $^{\star}$ | Hispanic |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| Central City | 2,367 | 1,259 | 301 |
| Suburb | 1,066 | 243 | 114 |
| Non-metro | 638 | 138 | 27 |
| Total | 4,070 | 1,640 | 442 |

Income-Eligible Households by Area and Race/Ethnicity

|  | All | Black* | Hispanic |
| :--- | ---: | ---: | ---: |
| Central City | 7,288 | 2,769 | 1,263 |
| Suburb | 4,223 | 703 | 525 |
| Non-metro | 2,299 | 410 | 113 |
| Total | 13,808 | 3,882 | 1,902 |

[^54]APPENDIX TABLE 33D
Households in Renter Units Built Before 1950
(Numbers in thousands)

| Decade | Assisted <br> Households | Income-Eligible <br> Households |
| :--- | ---: | ---: |
| 1919 or Earler | 159 | 1,546 |
| 1920 to 1929 | 122 | 844 |
| 1930 to 1939 | 179 | 1,178 |
| 1940 to 1949 | 345 | 1,404 |
| Total Households | 4,070 | 13,808 |

Households in Renter Units Built After 1950

| Decade | Assisted <br> Households | Income-Eligible <br> Households |
| :--- | ---: | ---: |
| 1950 to 1959 | 493 |  |
| 1960 to 1969 | 607 | 1,529 |
| 1970 to 1979 | 1,558 | 2,089 |
| 1980 to 1989 | 607 | 3,645 |
| Total Households | 4,070 | 1,574 |
| Ho | 13,808 |  |

Median Age of Rental Units

|  | Assisted <br> Households | Income-Eligible <br> Households |
| ---: | ---: | ---: |
| Medıan Age | 1971 | 1967 |

## APPENDIX TABLE 33E

Median Income of Renter Households by Region (Numbers in thousands)

| Region | Assisted <br> Households | Eligible Unassisted <br> Households |
| :--- | ---: | ---: |
| Northeast | $\$ 7,716$ | $\$ 8,062$ |
| Midwest | 6,988 | 7,913 |
| South | 6,518 | 7,580 |
| West | 8,572 | 9,199 |
|  |  | 8,145 |
| Overall Median Income | 7,320 |  |
|  |  |  |
| Median Income of Renter Households by Race/Ethnicity |  |  |
|  |  |  |
|  |  |  |
| Region | Assisted | Eligible Unassisted |
|  | Households | Households |
| All |  |  |
| Black | $\$ 7,320$ | $\$ 8,145$ |
| Hispanic | 6,495 | 7,174 |
|  | 8,350 | 9,429 |

## APPENDIX TABLE 33F

## Rent Levels

|  | Assisted <br> Households | Income-Eligible <br> Households |
| :--- | ---: | ---: |
| Median Gross Rent | 189 | 295 |
| Medıan Gross Rent |  |  |
| As Percent of <br> Current Income <br>  <br> Size Distribution of Renter Units | 39 |  |
|  |  |  |
| Number of Bedrooms | Assisted | Income-Eligible |
|  |  |  |
| Households |  |  |
| None | 190 |  |
| One | 1,593 | 713 |
| Two | 1,301 | 4,870 |
| Three | 819 | 5,310 |
| Four or More | 160 | 2,430 |
|  |  | 486 |
| Total | 4,070 | 13,809 |

U.S. Department of Housing and Urban Development Washington, D.C. 20410-6000

Official Business
Penalty For Private Use, \$300


[^0]:    1 Public Law 101-625, Title II, Section 105
    2 This report is not intended to provide comprehensive information or instructions on the CHAS process or requirements. See U.S. Department of Housing and Urban Development, "Instructions for Developing and Completing a Five-Year Comprehensive Housing Affordability Strategy (CHAS)" in CHAS and an Annual Performance Report for Local Jurisdictions, Washington, D.C.

    3 This report expands on Kathryn P. Nelson, "Housing Assistance Needs and the Housing Stock• Data for Comprehensive Housing Affordability Strategies," Journal of the Amencan Planning Association, vol 58, 1 (Winter) 1992 That paper used national data from the American Housing Survey to illustrate HUD's plans for developing special tabulations of 1990 Census data to meet basic CHAS data requirements, and to explore the implications of housing market conditions for local policy choices among programs designed to address worst case needs

[^1]:    4 For assistance in analyzing problems of homelessness and persons with special housing needs, see Martha Burt, Practical Methods for Counting Homeless People- A Manual for State and Local Jursdictions. Interagency Council on the Homeless and U.S. Department of Housing and Urban Development, Washington, D.C. 1992. Also see the Homeless and Special Needs Appendices of ICF Inc's CHAS Spring Trainung, a CRS workshop sponsored by HUD's Office of Affordable Housing Programs, 1993.

    5 In particular, special tabulations are necessary to group Census data according to HUD's income categories, so as to provide accurate estimates of needs among low- and moderate-income households that are eligible for assistance under various HUD programs. These tabulations are also necessary to obtain accurate estimates of the number and characteristics of housing units affordable for households at different income levels.

    6 For an illustration of housing market analysis in five prototype jurisdictions, see Amy Bogdon and Margery Austin Turner, Prototype Analysis of Housing Affordability, Adequacy, and Availability: A Framework for Local Housing Strategles, Washington, D.C.: U.S. Department of Housing and Urban Development, forthcoming, 1993.

[^2]:    7 Public Law 101-625 Sections 101 and 103.

[^3]:    10 The Low Income Housing Information Service, CHAS: The Final Rule, Washington DC September 1992, p 3.

[^4]:    14 Struyk and Khadduri, 1980, p. 395.

[^5]:    15 The appendix includes a brief description of the process used to aggregate the special tabulations data for this analysis.

    16 The appendix contains a list of the states included in each Census region.

[^6]:    1 "This section is to provide a portrait of the jurisdiction by describing the significant housing market and inventory characteristics and factors affecting the availability of affordable housing, discussing the estimates of current and projected needs for housing assistance, and listing the resources and programs available to address these identiffed needs (In section II - Five-Year Strategy, the jurnsdiction must descnbe how these current and anticipated market characteristics and needs will influence the use of funds made avalable for rental assistance, production of new units, rehabilitation of old units, or acquisition of existing units )" U S Department of Housing and Urban Development, CHAS instructions, p. 19.

[^7]:    2 Additional data on the assisted housing stock can be found in U.S Department of Housing and Urban Development, Charactenstics of HUD-Assisted Renters and Their Units in 1989, 1992.

[^8]:    3 U S. Department of Housing and Urban Development, CHAS instructions (p. 20) state: "In order to create a context for the formulation of the CHAS, the jurisdiction shall describe the important historical, social, and economic factors and trends affecting housing affordability in the jurisdiction. For example, economic factors and trends may include local military base or factory closings and increasing unemployment rates or lower interest rates, while social factors and trends might include increasing crime, population shifts to suburban areas or changes to the composition of neighborhoods.

    The jurisdiction must (1) present essential demographic data describing the general population (including trends in population), household, and racial and ethnic characteristics of the jurisdiction; (2) describe any areas within the jurisdiction with concentrations of racial/ethnic minorities and/or low-income families; (3) clearly define the terms 'area of racial/ethnic minority concentration' and 'area of low-income concentration' as they are used in the CHAS; and (4) identify the location and degree of these concentrations (location may be described in terms of census tract, enumeration district, or block groups while degree of concentration may be shown in terms of percentages) either in a narrative or on one or more maps."

    4 These topics are not discussed in the same order as they are listed in the CHAS outline. The sequence of topics presented here is intended to illustrate a logical process of analysis that goes beyond the completion of required CHAS tables.

[^9]:    5 For individual jurisdictions, data on total population and households in 1980 and 1990 will be recorded in CHAS Table 1A. Data on total population and household population are available in the U.S. Census publication General Population Characteristics while data on the number of households can be found in the Census publication Summary Population and Housing Characteristics.

    6 For a discussion of the importance of interstate migration and residential mobility to rates of household growth, see William H. Frey, "People in Places: Demographic Trends in Urban America," in Jack Sommer and Donald A. Hicks, eds., Rediscovering Urban Amernca, Perspectives on the 1980s. Washington, D.C.. Department of Housing and Urban Development, 1993.

[^10]:    7 As detailed in the appendix, the term "related" is used for two reasons: 1) for most HUD programs the term "famıly" is defined specifically by legislation to govern program eligibility, and does not conform to the Census Bureau definition of a "family" as a "householder and all other persons living in the same household who are related to the householder by blood, marriage or adoption;" and 2) the four CHAS categories do not correspond directly to the "family households" or "nonfamily households" as defined by the Census Bureau. The note in the appendix clarifies the relationships between the four CHAS household types and Census Bureau terminology.

[^11]:    8 Nationally, fewer than 10 percent of these "related" households had any nonrelatives present in 1989 Nelson, 1992.

[^12]:    9 Appendix tables 4A and 4B show the number and share of households in each racial and ethnic group.

[^13]:    10 Jurisdictions should similarly examine data on population growth by race/ethnicity in CHAS Table IA using data from the 1980 Census publication, General Social and Economic Characterstics, and the 1990 Census publication, Summary Population and Housing Characteristics.

    11 Median family incomes from decennial Census data for a jurisdiction, its MSA, and the U.S. are to be reported in Section D of CHAS Table 1A.

    12 Although CHAS requires that jurisdictions report the overall median income, when analyzing housing demand it is useful to compare the median incomes for renters and owners This table uses AHS data to illustrate income changes across central cities, suburbs and non-metropolitan areas because the boundanes of these areas were revised between the 1980 and 1990 Census.

[^14]:    13 Within MSAs, both the income categories used here and income eligibility for HUD programs are based on the MSA median family income as adjusted by HUD. More details on the derivation of HAMFI are provided in the appendix.

    14 Households whose incomes coincide with a threshold are grouped with the lower category For example, a household with income equal to 50 percent of area median income would be classified in the 30 to 50 percent of median category.

[^15]:    15 In this report, the phrase "extremely low-income" will be used to refer to the income category contanning households with incomes at or below 30 percent of HUD-adjusted median farmuly income.
    i6 See U.S. Department of Housing and Urban Development, Office of Policy Development and Research, Prorty Housung Problems and "Worst Case" Needs in 1989, A Report to Congress, Washington, D.C , June 1991, and U.S Department of Housing and Urban Development, The Location of Worst Case Needs in the Late 1980s, A Report to Congress, Washington, D.C., December 1992.

[^16]:    17 Weighted average poverty thresholds are reported because the actual thresholds vary with the number of related children under age 18 and, in one- or two-person households, with the age of the householder. The poverty cutoffs reported here are those used by the Census Bureau.

[^17]:    18 For an illustration of the use of mapping to highlight concentrations of minority households, see Bogdon and Turner, forthcoming, 1993.

    19 Section C of CHAS Table 1A requires jurisdictions to report the shares of each racial/ethnic group that are very low-income, other low-income, moderate-income, and above 95 percent of HAMFI

[^18]:    ${ }^{20}$ While dissimilarity indexes are often computed at the Census tract level, they could instead be computed at the block level or at other smaller units of observation. In fact, dissimilarity indexes computed at the Census tract level may understate segregation when minority and majority households are not distributed uniformly within Census tracts.

    21 Other measures of segregation have also been computed using 1990 Census data. See R.J. Harrison and Daniel Weinberg, Racual and Ethnc Residential Segregation in 1990, Washington, D.C.: Census Bureau, April 1992.

[^19]:    22 Data from Joint Center for Housing Studies of Harvard University, The State of the Nation's Housing, 1992, p. 3.
    ${ }^{23}$ The State of the Nation's Housing, 1992, p. 35. At all income levels, the decline in homeownership rates was concentrated among families with children. See Kathryn P. Nelson and Jill Khadduri, "To Whom Should Limited Housing Resources Be Directed?" Housing Policy Debate, Volume 3, Issue 1, 1992. pp. 1-55.

[^20]:    24 "Based on the data and information available to the jurisdiction, the narrative for this part must include a description of the significant general market and inventory conditions in the jurisdiction. This shall include a discussion of the jurisdiction's general housing market in terms of supply, demand, condition, and cost of housing. Data on the housing inventory must include the ownership or rental status of units, whether they are occupied or vacant, their structural condition, (i.e. substandard, substandard but suitable for rehabilitation, substandard and not suitable for rehabilitation, their cost and size by number of bedrooms, and should indicate whether units are suitable for occupancy by elderly families, disabled families (including whether modifications are necessary to enable elderly and disabled people to remain in their homes), families with children, and any other category of need identified by the jurisdiction.

    The narrative shall highlight any impediments or opportunities created by these market conditions for producing rental housing, promoting new homeownership opportunities, alleviating overcrowding, and meeting the needs of underserved population groups, such as large families." U.S. Department of Housing and Urban Development, CHAS instructions, p. 21.

[^21]:    25 The AHS is a sample survey of household and housing unit characteristics conducted by the Census Bureau for HUD. The AHS refers to two surveys, a national survey, conducted every other year, and a set of 44 metropolitan surveys. Because it is a sample, the AHS does not provide as much geographic detal as the decennial Census, but it does provide a greater wealth of information about the units and households in the sample.

[^22]:    ${ }^{27}$ Not included in reported owner cost is the "opportunity cost" that homeowners incur. Opportunity cost is defined as the cost of the best opportunity foregone. For homeowners, the money "tied up" as equity in a house cannot at the same time be earning interest or dividends in some other use.

    28 The lower quartule level shows the housing costs for that household which is higher than one-fourth of all renters, and less than three-fourths of all renters. Similarly, the upper quartile level shows the housing cost for that household which is higher than three-fourths of all renters but lower than the remaining onefourth.

[^23]:    29 The income multiple of 2.5 was determined by assuming that a household would take out a 30-year mortgage with an interest rate of 10 percent and principal equal to 100 percent of value. Further, real estate taxes were assumed to be $\$ 10$ per $\$ 1,000$ value, and property insurance $\$ 3$ per $\$ 1,000$ value. For further discussion, see Nelson, 1992, p. 101.
    ${ }^{30}$ The income limit for a 15 -person household is the average of the income limits for one- and twoperson households

[^24]:    ${ }^{31}$ The official FMRs were matched to AHS geography to produce the data in Table 214.
    32 For example, if 50 percent of area median income is $\$ 10,000$, then four-person households with incomes below 50 percent of median must pay no more than $\$ 3,000$ per year or $\$ 250$ per month (i.e , 30 percent of the income threshold of $\$ 10,000$ ) for their housing to be considered affordable.

[^25]:    33 In addition, affordablity is computed for households at the top of each income range, so that households in the lower end of the income range would need to pay more than 30 percent of their income for some units calculated as "affordable" to them.

    34 An owner unit is considered affordable if its value is less than 25 times the specified meome threshold for an area.

[^26]:    35 "The jurisdiction must (1) discuss its estimate of the significant current needs for housing assistance separately for very low-income, other low-income, and moderate-income families and households by tenure type (renter/owner) and for different family categories (such as large families and single persons); (2) describe the extent to which cost burden and severe cost burden, overcrowding (especially for large families), and substandard housing conditions are being experienced byvery low- (including those with "worst-case needs"), other low- and moderate-income renters and owners compared to the jurisdiction as a whole; and (3) to the extent that any racial or ethnic group has disproportionately greater need for any income category, family type, or tenure type, in comparison to the needs of that category as a whole, assess that specific need

    The jurisdiction shall examine and describe the local public housing agency's (PHA) section 8 , public housing (or combined) wating list(s), including such aspects as the number of households or individuals on the list(s), when the list was last open and for how long, the percentage of households who meet one or more of the Federal preferences for admission to rental assistance programs, and the factors influencing its composition. The PHA's system for applying Federal preferences, and its own local preferences, if any, shall also be described.

    In addition, the jurisdiction shall discuss the need for homeownership for first-time homebuyers and, to the extent data are available, the narrative should include an assessment of the housing needs of the elderly and persons with disabilities (both renter and owner) who do not require supportive housing services " U S. Department of Housing and Urban Development, CHAS instructions, p 24.

[^27]:    ${ }^{36}$ The former typically have only a cost burden of 30 to 50 percent of income, however, whereas households with extremely low incomes more often have severe cost burdens or multuple housing problems See Nelson, 1992.

[^28]:    37 U.S. Department of Housing and Urban Development, Prorty Housing Problems and "Worst Case" Needs in 1989, June 1991.

[^29]:    38 We use the AHS measure here since the CHAS database does not provide separate counts of the number of households in each income group whose units lack complete kitchen or plumbing, although the incidence of these problems is included in the overall measure of one or more housing problems.

[^30]:    1 Specifically, the CHAS instructions indicate that a "jurisdiction must establish general priorities for assisting low-income residents based on analysis of the jurisdiction's needs and market and inventory conditions ... and must set forth the strategy to be followed and the actions to be taken ... to address imbalances between the jurisdiction's needs for housing assistance and its affordable and supportive housing and services inventory." Congress reaffirmed the importance of linking priorities for allocating housing resources to documented problems and needs in the Housing and Community Development Act of 1992, which requires a CHAS to "describe how the jurisdiction's plan will address the housing needs identified [in the Community Profile section].. , describe the reasons for allocation pnorities, and identify any obstacles to addressing underserved needs." Public Law 102-550 Section 220(c)(2).

[^31]:    2 Because elderly households, by definition, contain only one or two people, no overcrowding is reported for them.

[^32]:    3 Although the CHAS database does show the number of households with one or more housing problems for White, Black, and Hispanic households, it does not provide tables showing the racial breakdown of households experrencing specffic problems such as excess cost burden or overcrowding. Therefore, we use 1989 American Housing Survey data to compare the incidence of housing problems by race and ethnicity CHAS preparers may wish to consult the metropolitan AHS (where available) or other Census publications for racial breakdowns of housing problems.

[^33]:    4 Renters assisted through Farmers' Home programs are not included. For this reason, the number of households assisted in non-metropolitan areas is underestimated.

    5 In these tabulations, Blacks include Black Hispanics.

[^34]:    6 An initial methodology for assessing the capacity of the existing housing inventory for meeting local "worst case" housing needs is presented in Nelson, 1992.

[^35]:    7 This diagnostic analysis may have to be repeated for different groups identified as having priority needs, or for different types of problems confronting groups of very low- and low-income households However, CHAS instructions do permit the justification for investment choices to be combined for groups with similar problems or needs.

[^36]:    8 As a rule of thumb, HUD market analysts consider rental vacancy rates of 5 to 6 percent and owner vacancy rates of 1 to 125 percent to reflect a healthy balance in slow-growing markets, while in fast-growing markets, rental vacancy rates of 8 to 10 percent and owner vacancy rates of 2 to 2.25 are considered "balanced."

[^37]:    9 In addition, as discussed in Chapter 2, Hispanics account for a large proportion of total household growth in the West, and Hispanic households are larger on average than other households.

[^38]:    10 For recent evidence on the filtering process in urban rental markets, see Margery A. Turner and John G. Edwards. "Affordable Rental Housing in Metropolitan Neighborhoods," in Kingsley and Turner (eds), Housung Markets and Residential Mobility Washington, D.C., The Urban Institute Press, 1993.

[^39]:    11 Census data can be obtained at the tract or block level, and can be used for extensive analysis of neighborhood demographic, socio-economic, and housing characteristics.

[^40]:    12 Communities may select threshold values other than 10 percent, based on the overall share of minority or very low-income households in the jurisdiction as a whole.

    13 See Margery A. Turner and R. Wienk, "The Persistence of Residential Segregation: Contributing Causes." In Kingsley and Turner (eds), Housing Markets and Residential Mobulty. Washington, D C., The Urban Institute Press, 1993

[^41]:    14 See M.A. Tumer, R. J. Struyk, and J. Yinger, Housing Discrumanation Study: Synthesws. Washington, D.C., U.S. Department of Housing and Urban Development, 1991.

[^42]:    16 See U S Department of Housing and Urban Development, Priorty Housing Problems and "Worst Case" Needs in 1989, A Report to Congress. 1991; and U.S. Department of Housing and Urban Development, The Location of Worst Case Needs un the Late 1980s, A Report to Congress. 1992

    17 See Alliance to End Childhood Lead Poisoning, Understanding Title X A Practical Gude to the Residential Lead-Based Paint Hazard Reduction Act of 1992 Washington, D.C., 1993.

[^43]:    . 1980 Census of Population: General Population Characteristics. PC80-1-B1. Washington, D.C.: Government Printing Office, August 1983.
    __. 1980 Census of Population: General Social and Economic Characteristics. PC80-1C1. Washington, D.C.: Government Printing Office, August 1983.
    __. 1990 Census of Population and Housing: Summary Population and Housing Characteristics. 1990 CPH-1-1. Washington, D.C.: Government Printing Office, March 1992.

[^44]:    1 The median family income data adjusted by HUD refer to incomes for familues as defmed by the Census Bureau. For a clarification of the definition of the terms family and household as used in the CHAS, see pages $4-5$ below.

[^45]:    2 In this report, the term "suburban" refers to the entire non-central city portion of a metropolitan area.

    3 The other exception to the definition of metropolitan areas by county boundanies is the inclusion of the part of Sullivan city located in Crawford county in the St Lous metropolitan area. For consistency with data reported by the Census Bureau, this caty has not been included as part of the metropolitan area

[^46]:    * All Hispanic households are included in the Hispanic category and all other categories include only non-Hispanic households.

[^47]:    * Housing problems are defined as paying over $30 \%$ of income for housing (excess cost burden), lacking complete kitchen or plumbing, or more than one person per room (overcrowded)
    ** (Number of households with problems) / (Total households in group)

[^48]:    * (Number of households with problems) / (Total households in group)

[^49]:    * (Number of households with problems) / (Total households in group)

[^50]:    * (Number of households with problems) / (Total households in group) Source Urban Institute tabulations of the 1989 AHS

[^51]:    * (Number of households with problems) / (Total households in group)

    Source Urban Institute tabulations of the 1989 AHS

[^52]:    Note Affordability categories match income groups to affordability according to local median income For example, " $30 \%$ or less" refers both to households with incomes at or below $30 \%$ of the median, and units affordable at that income level.

    Source Urban Institute tabulations of the CHAS database

[^53]:    * "Black" includes Black Hispanic

[^54]:    * "Black" includes Black Hispanıc

