



AFFORDABLE HOUSING NEEDS:

**A Report to Congress on the
Significant Need for Housing**

Annual Compilation of a
Worst Case Housing Needs Survey



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U.S. Department of Housing and Urban Development
Office of Policy Development and Research

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EXECUTIVE SUMMARY: MAJOR FINDINGS

In 1990, the U.S. Senate Appropriations Committee directed HUD to “resume the annual compilation of a worst case housing needs survey of the United States ... [to estimate] the number of families and individuals whose incomes fall 50 percent below an area’s median income, who either pay 50 percent or more of their monthly income for rent, or who live in substandard housing.”

Households with “worst case needs” are defined as unassisted renters with very low incomes (below 50 percent of area median income—AMI) who pay more than half of their income for housing or live in severely substandard housing.

This report is the ninth in a series of Worst Case Needs reports to Congress. The report is organized into four basic sections. Chapter 1 provides an introduction, including a discussion of terms and sources. Chapter 2 outlines the findings of worst case needs by various categories such as demographics and geography. Chapter 3 presents a new analysis using data from the Census Bureau’s Survey of Income and Program Participation to compare estimates of severe rent burden and examine the duration of those rent burdens. Chapter 4 assesses the supply of affordable rental housing.

Throughout this report, the following definitions of HUD income limits are used:

- Low Income (LI). Not more than 80 percent of area median income.
- Very Low Income (VLI). Not more than 50 percent of area median income.
- Extremely Low Income (ELI). Not more than 30 percent of area median income.

The Extent of Worst Case Needs

Finding 1. In 2003, 5.18 million very-low-income households in the United States have worst case needs. Between 2001 and 2003, there was a small increase in the number of households with worst case needs, but this difference was not statistically significant.

Finding 2. The proportion of American families that have these worst case needs is 4.89 percent.

The Population with Worst Case Needs

Finding 3. The great majority (77 percent) of families with worst case needs are at the bottom end of the income scale, qualifying as extremely-low-income households because their incomes are below 30 percent of area median income.

Finding 4. Nearly two-thirds of extremely-low-income renter households have worst case needs. Over one-fifth of renter households with incomes between 30 and 50 percent of area median income have worst case needs, and fewer than 7 percent of renter households with incomes between 50 and 80 percent of area median income either experience severe rent burdens or live in severely inadequate housing.

Finding 5. More than one-third (36 percent) of households with worst case housing needs are families with children.

Finding 6. A substantial proportion of households with worst case needs experience these problems despite being fully employed. Of families with children that have worst case housing needs, 41 percent have earnings consistent with full-time year-long work at low wages. One-third (33 percent) of extremely-low-income renter households with children have earnings consistent with full-time work.

Finding 7. Elderly households with very low incomes are more likely than other family types with comparable incomes to have worst case needs. Elderly households make up 22 percent of the population with worst case needs.

Finding 8. Persons with disabilities have a greater likelihood of having worst case housing needs than other family types with very low incomes. About ten percent of households with worst case needs are families with non-elderly members with disabilities. More than one-third (36.4 percent) of very-low-income renter households that have non-elderly family members with disabilities also have worst case needs.

Finding 9. Of the 5.18 million households with worst case needs, 2.76 million are white non-Hispanic households, 1.04 million are black non-Hispanic households, and 1.04 million are Hispanic households.

The Character of Worst Case Needs

Finding 10. Severe rent burden, not severely inadequate housing, is the only priority housing problem for most (91 percent) households with worst case needs.

Finding 11. The share of households with worst case needs who live in severely inadequate housing declined from 4.6 percent in 2001 to 3.9 percent in 2003.

The Trend in Worst Case Needs

Finding 12. There were 5.20 million total households with worst case needs in 1995, 5.38 million in 1997, 4.86 million in 1999, 5.01 million in 2001, and 5.18 million in 2003.

Finding 13. The proportion of households with worst case needs has been about 5 percent in most years since 1991, the year of the first worst case needs report. As a proportion of all U.S. households, those with worst case needs were 4.73 percent, 4.76 percent, and 4.89 percent in 1999, 2001 and 2003, respectively.

Finding 14. The number of Hispanic households with worst case needs rose from 2001 to 2003 by about 250,000 households, roughly in parallel with overall dramatic growth of Hispanic very-low-income renters during those two years. There was no comparable increase in the number of non-Hispanic white households with worst case needs. The number of non-Hispanic black households with worst case needs decreased by 110,000.

The Geography of Worst Case Needs

Finding 15. All regions of the country share in worst case needs, with over 30 percent of very-low-income renters in each region—the Northeast, Midwest, West and South—experiencing worst case needs. Very-low-income renters in the West are less likely to receive housing assistance (24 percent), and more likely to experience worst case housing needs (38 percent).

Finding 16. Central city, suburban, and rural areas of the country all have significant numbers of worst case needs. Over one-third of very-low-income renters in both central cities and suburbs have worst case needs and in rural areas the proportion is approximately one-fourth. Very-low-income renters are less likely to receive housing assistance (24 percent) and more likely to experience worst case needs (36 percent) if they live in suburbs.

The Duration of Rent Burden

As discussed above, this report contains a section with a new analysis relying on data from the Census Bureau's Survey of Income and Program Participation.

Finding 17. Among very-low-income renters who reported a severe rent burden in 2001, close to half (47.1 percent) continued to have a severe rent burden in 2002, 10.2 percent had a rent burden between 40 and 50 percent of income and 8.5 percent received housing assistance in the second year (and thus would not be counted in the definition of worst case needs).

Of the remaining group, 12.7 percent had a rent burden between 30 and 40 percent of income, 15.2 percent saw their rent burden drop below 30 percent of income and 6.4 percent moved to owner-occupied housing

(thus removing them from the population with worst case needs, which by definition only includes renters).

The data also show a large number of very-low-income renters that did not have a severe rent burden in 2001 but did have such a burden in 2002. These include: 829,000 renters who had a rent burden of 40–50 percent of their income for rent in 2001; 808,000 who had previously received government housing assistance in 2001; and 1,365,000 who had either paid 30–40 percent of income for rent (597,000) or less than 30 percent of income for rent (768,000) in 2001.

Availability of Affordable Rental Housing and Worst Case Needs

In addition to examining the experiences of renters, their incomes and the amounts they pay in rent, this report also looks at the availability of affordable rental housing and how these supply issues may affect worst case needs. For purposes of this section, “affordable units” are those rental units that households at various income levels (VLI and ELI) can afford based on 30 percent of their income. “Available units” are those units affordable to these income groups that either become vacant or are actually occupied by families at those income levels (that is, they are not occupied by higher income families). Units are considered “not available” to lower income families if they either are not affordable, or are affordable but are currently occupied by higher income families.

Finding 18. There continues to be a shortage of affordable housing that is available to very-low-income and, more significantly, extremely-low-income renters. In 2003, there were 78 rental units affordable to extremely-low-income renters for every 100 such households, but only 44 were available for these households (the remainder being occupied by higher-income households).

Housing Problems Not Counted in Worst Case Needs

The definition of worst case needs excludes many persons with serious housing needs. The homeless are omitted from estimates of worst case needs in this and earlier reports because the American Housing Survey counts only persons in housing units.¹ In addition, families experiencing overcrowding (defined as more than one person per room) are not counted as having worst case needs, in part because of a lack of clear evidence that crowding consistently poses a hardship. Despite these limitations, some findings on crowding are presented based on data from the American Housing Survey.

¹ HUD is assessing the potential of supplementing future estimates of worst case needs with estimates of persons who experience homelessness from local Homeless Management Information Systems.

Finding 19. Five percent of renter households experience crowding. This level shows little change from previous reports.

Finding 20. Certain populations have more crowding than the national average: 8 percent of renter households in the West and 44 percent of renter households with five or more persons. Even among very-low-income Hispanic households with no severe housing problems, 35 percent are overcrowded.

Comparative Estimates and Issues of Interpretation

HUD's Office of Policy Development and Research (PD&R) notes that the Joint Center for Housing Studies recently issued a report, *The State of the Nation's Housing: 2005* that found a substantial increase in the number and incidence of low-income renter families with a severe housing cost burden between 2000 and 2003. The Joint Center relied on the American Community Survey (ACS) rather than the AHS. As explained in Appendix C of this report, expanding the Joint Center/ACS analysis to cover the years 2001–2003 also shows a significant increase in families with a severe housing burden. The causes of the difference between this estimate and the AHS-based estimates in this report are believed to include differences in survey methodology between the ACS and the AHS. However, not all the causal factors are known. The ACS estimates and differences between the ACS and the AHS are discussed in more detail in Appendix C.

There are complexities inherent in an analysis of this nature, as evidenced by the above discussion. For example, further analysis is necessary to understand the dynamics of the duration of severe rent burden, as in any year a number of families pass into and out of a severely burdened condition. In addition, the number of households experiencing worst case needs may not be a direct measure of the need for housing assistance; other means of assistance, such as those that help families increase their income through education or job training, may provide more effective assistance. Appendix D discusses issues to consider when interpreting the findings of this report and developing policy responses to the need for affordable housing.

CHAPTER 1. INTRODUCTION

Since 1991, the Department of Housing and Urban Development (HUD) has issued regular reports to Congress on “worst case needs” for housing assistance among the nation’s very-low-income renters. These reports developed from requests from Congressional Committees in the 1980s for information on housing needs. In 1990, the U.S. Senate Appropriations Committee directed HUD to “resume the annual compilation of a worst case housing needs survey of the United States ... [to estimate] the number of families and individuals whose incomes fall 50 percent below an area’s median income, who either pay 50 percent or more of their monthly income for rent, or who live in substandard housing.”² This report is the ninth in a series of Worst Case Needs reports to Congress.³

To assess changes over time, HUD has used a consistent definition of “worst case needs” for affordable housing. Households with “worst case needs” are defined as unassisted renters with very low incomes (below 50 percent of area median income) who pay more than half of their income for housing or live in severely substandard housing.

The basic source of information for this report is the American Housing Survey (AHS), which is sponsored by HUD and conducted by the U.S. Census Bureau. The AHS is the only detailed periodic national housing survey in the United States. It provides nationally representative data on a wide range of housing subjects including apartments, single-family homes, mobile homes, vacant homes, family composition, income, housing and neighborhood quality, housing costs, equipment, fuel type, size of housing unit, and recent moves. National data are collected every two years from a sample of about 63,000 housing units. The survey, which started in 1973, has sampled the same housing units since 1985, while newly constructed units are also sampled to ensure both continuity and timeliness of the data. Information from the Worst Case Needs reports has helped inform public policy decisions, including decisions on targeting of existing resources, the need for additional resources, and the form such assistance should take.

² Committee Report to accompany H.R. 5158, The VA-HUD Appropriations Act for FY 1991 (S. Rpt. 101-474).

³ HUD's previous reports to Congress are: Priority Problems and "Worst Case" Needs in 1989 (June 1991, HUD-1314-PDR), The Location of Worst Case Needs in the Late 1980s (December 1992, HUD-1387-PDR), Worst Case Needs for Housing Assistance in the United States in 1990 and 1991 (June 1994, HUD-1481-PDR), Rental Housing Assistance at a Crossroads: A Report to Congress on Worst Case Housing Needs (March 1996), Rental Housing Assistance – The Crisis Continues (April 1998); Rental Housing Assistance – The Worsening Crisis: A Report to Congress on Worst Case Housing Needs, (March 2000); A Report on Worst Case Housing Needs in 1999: New Opportunity Amid Continuing Challenges, Executive Summary (January 2001); and Trends in Worst Case Needs for Housing, 1978–1999 (December 2003). These publications are available online at <http://www.huduser.org>.

HUD originally developed the definition of worst case needs in consultation with OMB and Congressional Committees. It was based on the federal preference rules that prioritized admissions for housing assistance programs in the 1980s and early 1990s. While Congress has repealed the requirement to use federal preferences in targeting admissions to housing assistance, HUD believes that the current definition of worst case needs retains several important advantages. These advantages include the comparability of the measurement over time and the continued viability of rent burden and physical inadequacy as indicators of housing need.⁴

Terms and Sources

This report uses data from 2003—the latest available from the American Housing Survey.

For the first time, this report also includes a chapter analyzing data from the Census Bureau’s Survey of Income and Program Participation (SIPP). These data are used to augment the report’s findings in order to verify the robustness of worst case needs estimates from the AHS and to estimate the duration of rent burden.

Income Categories Used in Housing Programs

Many HUD programs and other federal housing programs use income limits as eligibility criteria. HUD determines income limits on the basis of area median incomes for each metropolitan area and non-metropolitan county. Area median incomes are adjusted for family size before income limits are determined.⁵

The income categories used in housing programs and in this report are as follows:

- **Low Income.** *Not more than 80 percent of area median income.*⁶ Defined as low income by the United States Housing Act of 1937 and used as an income limit for many rental and homeownership programs.

⁴ HUD’s previous reports to Congress are: Priority Problems and “Worst Case” Needs in 1989 (June 1991); The Location of Worst Case Needs in the Late 1980s (December 1992); Worst Case Needs for Housing Assistance in the United States in 1990 and 1991 (June 1994, HUD-1481-PDR); Rental Housing Assistance at a Crossroads: A Report to Congress on Worst Case Housing Needs (March 1996); Rental Housing Assistance—The Crisis Continues (April 1998); Rental Housing Assistance—The Worsening Crisis (March 2000); A Report on Worst Case Housing Needs in 1999: New Opportunity Amid Continuing Challenges (January 2001); Trends in Worst Case Needs for Housing, 1978–1999 (December 2003). These reports are available at <http://www.huduser.org>.

⁵ The HUD-adjusted Area Median Family Income (HAMFI) is based on the area median family income for all families, with percentage adjustments for households of different sizes as required by law. See Appendix B for further information.

⁶ Or, if lower, the national median family income.

- Very Low Income.** *Not more than 50 percent of area median income.* Defined as very low income by the United States Housing Act of 1937 and used as an income limit for many rental programs. (Note: the HOME program and the Low Income Housing Tax Credit program also use 60 percent of median income as a threshold for some eligibility criteria).
- Extremely Low Income.** *Not more than 30 percent of area median income.* Defined as extremely low income by HUD, and used as an income limit for many rental programs as provided in the United States Housing Act of 1937.

Exhibit 1-1 presents Fiscal Year 2003 income limits for selected large metropolitan areas.

Exhibit 1-2 describes the primary forms of federally subsidized housing.⁷

Exhibit 1-1. HUD Income Limits for Families of Four in Selected U.S. Cities, FY 2003

	30% Median	50% Median	80% Median	Median
New York ^b	\$18,850	\$31,400	\$50,250	\$51,900
Los Angeles	\$16,900	\$28,200	\$45,100	\$50,300
Chicago	\$22,600	\$37,700	\$56,500 ^a	\$68,700
Houston	\$17,900	\$29,800	\$47,700	\$59,100
Philadelphia	\$20,450	\$34,100	\$54,550	\$68,200
Phoenix	\$17,500	\$29,150	\$46,650	\$58,300
Jacksonville	\$16,700	\$27,800	\$44,500	\$54,900
Washington, DC	\$26,100	\$43,500	\$56,500 ^a	\$84,800
Denver	\$20,950	\$34,950	\$55,900	\$68,000
Atlanta	\$21,350	\$35,600	\$56,500 ^a	\$68,800
Seattle	\$23,350	\$38,950	\$56,500 ^a	\$71,900

^a When the low-income threshold (80 percent of median income) for a locality exceeds the national U.S. median family income level (\$56,500 for FY 2003), the national median level is used for purposes of HUD programs.

^b New York City's median income limits were granted an "historical exception" due to the large decrease reported in 2003 median income (from \$62,800 to \$51,900) in part due to the use of 2000 Census data. To avoid disruption in HUD programs and to account for statistical reasons underlying this change, the median income limits for the low-income thresholds from 2002 were retained.

⁷ For further detail, see "Programs of HUD, 2005: Major Mortgage, Grant, Assistance and Regulatory Programs," (HUD 2005.)
<http://www.huduser.org/intercept.asp?loc=/whatsnew/ProgramsHUD05.pdf>

Exhibit 1-2. Housing Assistance and Affordable Housing Programs

Federal rental assistance programs operate in three basic ways:

- *Public housing.* These units are owned and managed by local public agencies. From 1937 to the mid-1980s, public housing was built to provide affordable housing for low-income families. Today, there are 1.1 million occupied units of public housing. Public housing continues to provide affordable housing to the most diverse and lowest income population of all HUD programs. Families are generally required to pay 30 percent of their income for rent.
- *Project-based assisted housing.* Through a variety of programs in the 1960s through the 1980s, the Federal government produced 1.3 million affordable rental units that are now supported by project-based Section 8 rental assistance contracts, which are reserved for low-income families who usually pay 30 percent of their income for rent.
- *Tenant-based housing assistance.* These programs provide rental assistance vouchers to 1.9 million households in affordable privately owned housing units selected by the household. In general, families are required to pay 30 percent of their income for rent, but are allowed to pay more if they choose.

A number of other Federal housing programs produce affordable housing, typically with less costly subsidies. While these units are often more affordable than market-rate units, without additional rental subsidies (such as vouchers), extremely-low-income families would often have to pay well over 30 percent of their income for units in these programs. These programs include:

- *Low Income Housing Tax Credit.* This tax credit program subsidizes the capital costs of units that will have rents affordable to households with incomes at or below 60 percent of area median income.
- *HOME Investment Partnership (HOME).* This is a formula grant to States and local governments that can be used to assist homeowners, first-time homebuyers, or renters. Between 1992 and early 2005, HOME produced 211,000 affordable rental units. Qualifying rents must be affordable to households with incomes at or below 65 percent of area median income, or below local FMRs, whichever is less.
- *Older rental subsidy programs.* The Section 221(d)(3) below market interest rate (BMIR) program and the Section 236 program were active from the early 1960s through the early 1970s. They were designed to produce housing affordable by families with incomes above the public housing income limits. Over time, many projects or portions of projects developed through these programs became “project-based Section 8 assisted housing” as deep rental subsidies were attached to the units. There remain 300,000 units subsidized by these older programs that do not have deep rental subsidies.

CHAPTER 2. INCIDENCE OF WORST CASE NEEDS FOR HOUSING ASSISTANCE—2003

Snapshot of Worst Case Needs in 2003

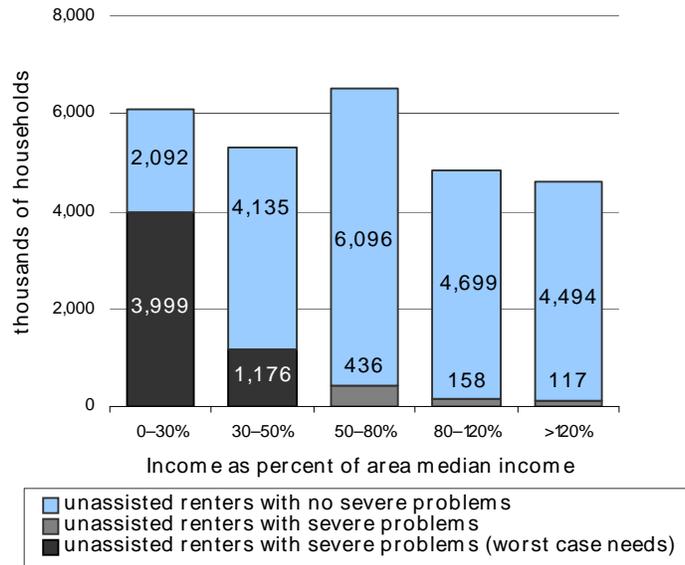
Basics about Worst Case Needs

In 2003, 5.18 million households, comprising 11.4 million individuals, have worst case housing needs. These are renter households whose incomes are no greater than 50 percent of area median income (that is, “very low income” or VLI) and who do not receive housing assistance, and who have a severe housing problem known as a “priority” problem.⁸

HUD recognizes two types of priority problems: living in severely inadequate housing,⁹ or having severe cost burdens because housing costs exceed 50 percent of household income. In the case of renters, the latter means severe rent burdens.¹⁰

In Exhibit 2-1, households with worst case needs are shown by the dark areas in the first two columns—illustrating that severe problems do not count as worst case needs if households have incomes greater than 50 percent of area median income. By definition, worst case needs result from the combination of very low income and severe problems among unassisted renters.¹¹

Exhibit 2-1. Worst Case Needs Are Severe Housing Problems Experienced by Unassisted Very-Low-Income Renters, 2003



Source: HUD-PD&R tabulations of the 2003 American Housing Survey.

⁸ Priority problems initially received the designation because they were conditions that qualified unassisted households for federal preference in admission to assisted housing programs between 1988 and 1996. See Appendix B for discussion of this and other terms.

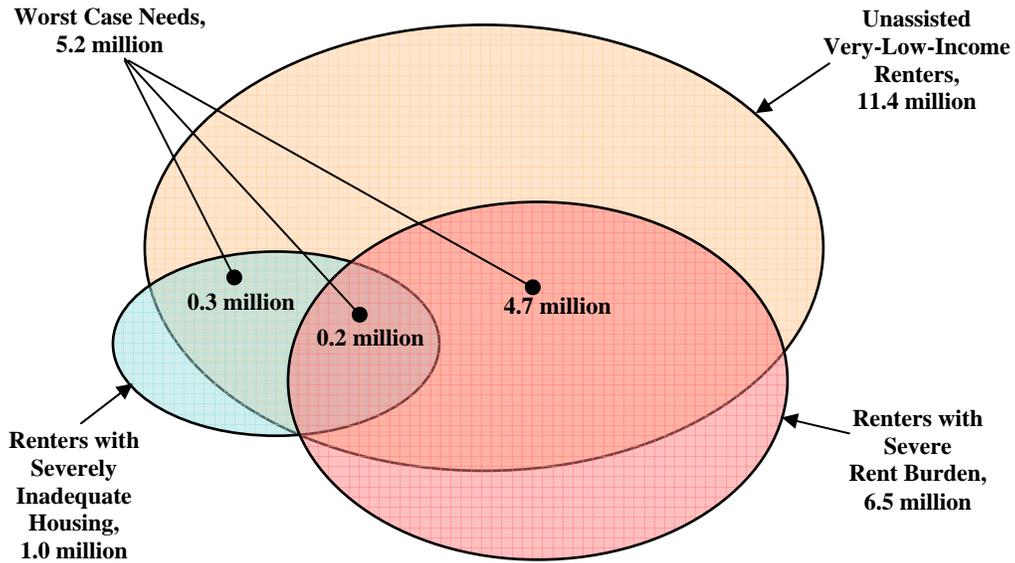
⁹ The homeless are omitted from estimates of worst case needs in this and earlier reports because the American Housing Survey counts only persons in housing units. HUD is assessing the potential of supplementing future estimates of worst case needs with estimates of persons who experience homelessness from local Homeless Management Information Systems.

¹⁰ Rent-to-income ratios are calculated on the basis of gross rent, which is the sum of rent plus tenant-paid utilities.

¹¹ Note that these estimates identify whether households receive rental assistance on the basis of survey responses, which are not entirely reliable for determining actual assistance (Shroder 2002).

Exhibit 2-2 shows how the two severe problems, represented by the smaller ovals, combine with very low income to constitute worst case housing

Exhibit 2-2. Birds-Eye View of Worst Case Housing Needs in 2003



Source: HUD-PD&R tabulations of the 2003 American Housing Survey.

needs. The large oval represents the 11.4 million unassisted very-low-income renters, of whom 6.2 million are free of either severe problem. The approximately 5.2 million households with worst case needs are represented by the intersection of the large oval with the smaller ovals.

Although there are a total of 33.6 million renter households, the diagram does not show the 20.2 million renters who are outside the largest oval because they have incomes above the very-low-income threshold or receive some form of housing assistance. A significant number of these households—those represented by the overhanging portions of the small ovals—also face severe problems, especially severe rent burden. Among all renters, 7.3 million have one or both severe problems.¹²

Severe rent burdens. Very-low-income households who have worst case housing needs in 2003 reported incomes averaging \$10,600 per year, or \$883 per month. In comparison, their average gross rent (including utilities) is \$669 monthly. The ratio of the average rent to average income suggests a typical rent burden of 76 percent, substantially above the 50 percent rent-to-income ratio that qualifies as worst case need. Such rent

¹² Table A-1 in the appendix provides additional data about households with higher incomes or with “moderate problems,” which include rent-to-income ratios exceeding 30 percent, less severe physical inadequacies with units, and overcrowding.

burdens substantially limit the income that households have available to spend on other necessities such as adequate nutrition, medical care, and education.

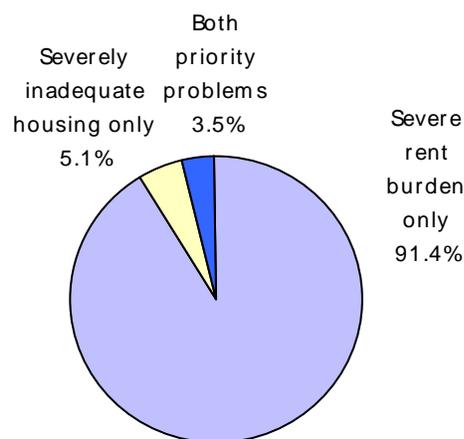
Among households with worst case needs, over three-fourths (77 percent) report extremely low incomes (that is, less than 30 percent of area median income). Rent burdens are even more severe for these poorer households than for all very-low-income renters with worst case needs. Extremely-low-income (ELI) renters have incomes averaging \$8,080 annually or \$673 per month, and pay rents averaging \$607. The ratio of these averages implies a typical rent-to-income ratio of 90 percent among extremely-low-income renters with worst case needs.

Severe rent burden continues to be the dominant cause of worst case needs, as severe rent burdens alone account for 91.4 percent of worst case households. Exhibit 2-3 illustrates this relationship, as the entire chart represents the sum of worst case needs in 2003.

Severely inadequate housing. Physical housing problems have declined dramatically in past decades. In 1978, 9 percent of all very-low-income renters had severely inadequate housing, decreasing to 3 percent in 1999 (HUD 2003, A-8). The estimated incidence of severely inadequate housing rose to 4.6 percent of very-low-income renters in 2001 but declined again to 3.9 percent in 2003.

Among worst case households in 2003, 8.6 percent have severely inadequate housing. Only 5.1 percent are worst case households based on severely inadequate housing alone. Thus, 40 percent of unassisted very-low-income renters who are living in units with severe physical problems also face severe rent burdens, representing 3.5 percent of households with worst case needs.

Exhibit 2-3. Severe Rent Burden Remains the Most Common Cause of Worst Case Needs Among Unassisted VLI Renters in 2003



Change in Worst Case Needs Since 2001

The number of households with worst case needs is estimated to be 5.18 million households in 2003. This is not significantly different from the estimate of 5.01 million households in 2001.¹³ The 2001 estimate is an insignificant change from the 4.86 million worst case households in 1999.

Source: HUD-PD&R tabulations of the 2003 American Housing Survey.

¹³ These estimates were created using new weights based on 2000 Census data, and thus are not strictly comparable with earlier estimates. Worst case needs in 2001 previously were estimated as 5.07 million on the basis of 1990 weights.

Exhibit 2-4. The Overall Incidence of Worst Case Needs Is Stable, 1999–2003

	1999 ^a	2001	2003
All households (million) ^b	102.80	105.44	105.87
Renter households with worst case needs (million) ^b	4.86 ^c	5.01	5.18
Worst case needs as percent of all households	4.73%	4.76%	4.89%

Source: HUD-PD&R tabulations of the American Housing Survey. Changes shown are not statistically significant.

^a Estimates for 1999 are based on 1990 Census weights, while 2001 and 2003 figures reflect 2000 weights.

^b Households reporting negative or zero incomes are excluded from estimates of total households in this table as well as from the rent burden estimates that account for most worst case needs. Such households represented 2.2 percent of all households in 2003.

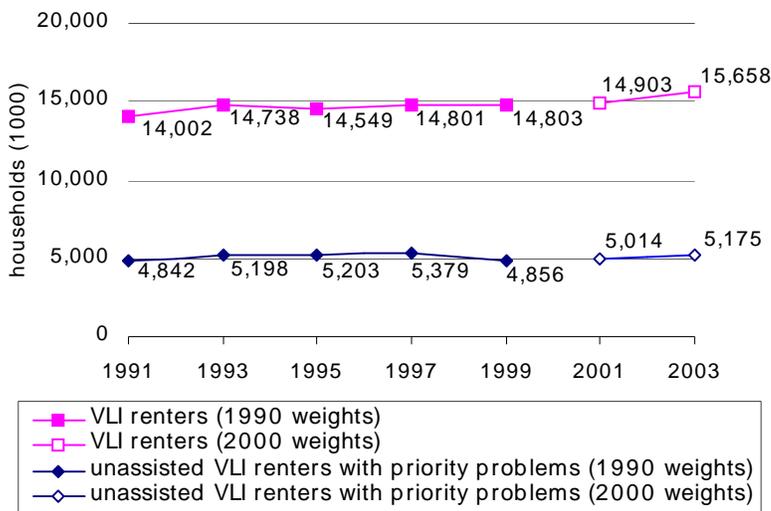
^c 4.856 million households represents the best estimate for 1999 based on 1999 income limits. See HUD 2003 (page 2 and footnote 6).

A primary cause of the increase in worst case needs since 2001 was an increase in the number of very-low-income renters. The 14.90 million renters in 2001 increased to 15.66 million in 2003. Because higher-income renters were moving rapidly into homeownership during this period, the growth in the number of very-low-income renters also increased their proportion of all renters from 44.2 percent in 2001 to 46.6 percent in 2003.

A countervailing factor was a 0.5 percentage point decrease in the incidence of worst case needs among very-low-income renters. The incidence of worst case needs among very-low-income renters is 33.1 percent in 2003, down from 33.6 percent in 2001.

PD&R notes that the Joint Center for Housing Studies recently issued a report, *The State of the Nation's Housing: 2005* that found a substantial increase in the number and incidence of low-income renter families with a severe housing cost burden between 2000 and 2003. The Joint Center relied on the American Community Survey (ACS) rather than the AHS. As explained in Appendix C of this report, conducting the Joint Center/ACS analysis for the years 2001–2003 also shows a significant increase in families with a severe housing burden. The causes of the difference between this estimate and the AHS-based estimates in this report are believed to include

Exhibit 2-5. Overall Trend in the Number of Very-Low-Income Renters and Those with Worst Case Needs, 1991–2003



Source: HUD-PD&R tabulations of the American Housing Survey.

differences in survey methodology between the ACS and the AHS. However, not all the causal factors are known. The ACS estimates and differences between the ACS and the AHS are discussed in more detail in Appendix C.

Factors Affecting Worst Case Needs

Among all U.S. households, the proportion that has worst case housing needs has been relatively stable for over a decade (HUD 2003). The incidence of worst case needs as a percentage of households overall increased slightly but insignificantly in relation to the record low level of 4.73 percent observed in 1999.

As a proportion of unassisted very-low-income renters, worst case needs climbed from 48.1 percent in 1991 to 51.0 percent in 1997, before declining to 46.0 percent in 1999 and 45.4 percent in 2003. Exhibit 2-5 shows that the 11.8 percent increase in very-low-income renters between 1991 and 2003 was accompanied by a lesser 6.9 percent increase in very-low-income renters with worst case needs.

The shortage of affordable rental housing persists despite vacancy rates that average nearly 10 percent during 2003. In comparison, vacancy rates remained below 8 percent during most of the 1990s. Vacancy rates remain low in the Northeast and West regions where worst case needs are greatest. Exhibit 2-6 displays a weak negative relationship between vacancy rates and worst case needs.

The association between regional vacancy rates and worst case needs points to the importance of the market supply of rental housing. Supply issues are covered in detail in Chapter 4. Another regional factor that affects the incidence of worst case needs is the distribution of housing assistance across regions, which is discussed later in this chapter.

**Exhibit 2-6. Regional Variation in Worst Case Needs
Mirrors Regional Vacancy Rates, 1999–2003**

	1999	2001	2003
Northeast			
Rental vacancy rates	6.3%	5.3%	6.6%
Worst case needs as percent of unassisted VLI renters	47%	50%	49%
Midwest			
Rental vacancy rates	8.6%	9.7%	10.8%
Worst case needs as percent of unassisted VLI renters	43%	44%	42%
South			
Rental vacancy rates	10.3%	11.1%	12.5%
Worst case needs as percent of unassisted VLI renters	45%	46%	42%
West			
Rental vacancy rates	6.2%	6.2%	7.7%
Worst case needs as percent of unassisted VLI renters	48%	50%	50%

Source: HUD-PD&R tabulations of the American Housing Survey, and Census (2004a).

Importance of Income

The incidence of worst case needs is substantially higher among extremely-low-income renters, who have incomes no greater than 30 percent of area median income, than among very-low-income renters. Because severe rent burden—not inadequate housing—is the predominant cause of worst case needs among very-low-income renters, the importance of income for households seeking affordable housing cannot be overstated.

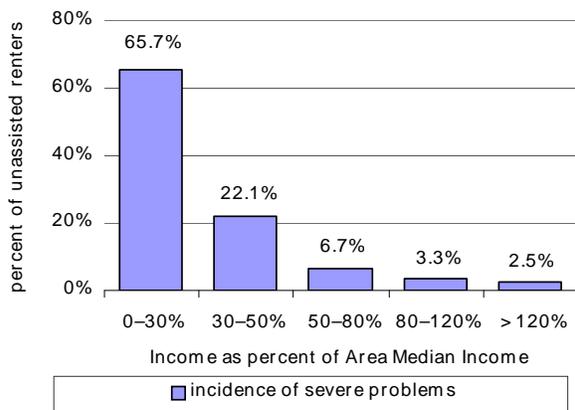
The pool of affordable rental units that are available in the market becomes progressively smaller as available income decreases. The 2001 American Housing Survey revealed 6.5 million renter households who had incomes below \$10,000. Only 2.5 million rental units would have been affordable to these households based on 30 percent of a \$10,000 income (Census Bureau 2002). The following sections show that this shortage persists in 2003.

There also were 2.2 million occupied units with “no cash rent” in 2001, suggesting that a significant number of households have special housing arrangements. Such arrangements may include housing provided both as non-wage compensation for work and as in-kind assistance from families or charities. It is likely that non-wage compensation in the form of workforce housing accounts for a significant proportion of no-cash-rent households, as the median income of these households was \$17,947.

Effect of Income on Incidence of Worst Case Needs

Most worst case needs are experienced by extremely-low-income renters. By definition, worst case needs households must have very low income, but households with extremely low incomes are much more likely than very-low-income households overall to have worst case needs. In 2003, 77 percent of worst case needs are experienced by extremely-low-

Exhibit 2-7. Incidence of Severe Housing Problems Among Unassisted Renters Varies Greatly by Household Income Relative to Area Median Income, 2003



Source: HUD-PD&R tabulations of the 2003 American Housing Survey.

income renters, even though they account for only 58 percent of households below the very-low-income threshold. The extremely-low-income share of worst case needs has remained above three-fourths for decades (HUD 2003, 23), and has remained at 77 percent since 1997. As Exhibit 2-7 shows, two-thirds (65.7 percent) of unassisted extremely-low-income renters have worst case needs in 2003.

Fewer very-low-income and low-income renters have worst case needs.

Very-low-income renters are substantially less likely to have worst case needs than renters whose incomes fall below 30 percent of area median income. Almost one-fifth (22.1 percent) of unassisted renters with incomes from 30 to 50 percent of AMI have severe housing problems.

Among low-income households, who have incomes from 50 percent through 80 percent of area median income, only 6.7 percent have the severe housing problems that would constitute worst case needs if their incomes placed them in the lower brackets. Among all unassisted renters,

21.5 percent have severe problems in 2003—reflecting the fact that almost half of all renters (46.6 percent) have incomes below 50 percent of area median.

Housing assistance mitigates the effect of very low income. By definition, families with housing assistance do not have worst case needs. Housing assistance from various sources plays a substantial role in reducing worst case housing needs. Among the 6.21 million¹⁴ households who report receiving housing assistance in 2003, 69 percent have incomes below the very-low-income threshold. There are 2.99 million households with extremely low incomes, and another 1.27 million assisted households with incomes that are very low. Thus, nearly half of assisted households have extremely low incomes that would place them at a very substantial risk of experiencing worst case housing needs if they had no assistance.

Working Households with Worst Case Needs

Almost one-third (31 percent) of households with worst case needs presumptively would not be expected to be working because of age or disability. (These household types are discussed further below.) For households that do not face either of these presumed barriers to work, their work participation and housing problems are issues of substantial policy interest. Numerous federal and state policies and programs focus on helping citizens by promoting their long-term self-sufficiency and material progress while providing short-term assistance for daily needs.

Extremely-low-income renters with significant work participation

The AHS does not directly measure work participation. However, by using a proxy measure, HUD estimates that during 2003 about 1.64 million renter households with extremely low incomes (18 percent of extremely-low-income renters) have earnings consistent with full-time employment.¹⁵ Of these working households, 690,000 (42 percent) have worst case housing needs.

A more inclusive proxy for working households counts those whose earnings are their primary source of income.¹⁶ Based on this measure, the number of working extremely-low-income renters is 3.85 million in 2003. Of these, 2.04 million or 53 percent have a severe housing problem causing worst case needs.

¹⁴ Note that the 6.21 million figure substantially exceeds the 4.4 million assisted in HUD rental programs. Some of the difference represents inaccurate respondent reporting, and inclusion of less deeply targeted programs like the Low Income Housing Tax Credit.

¹⁵ HUD's proxy for full-time employment is household earned income of \$10,300, equivalent to 40 hours per week for 50 weeks at the national minimum wage of \$5.15.

¹⁶ "Primary source of income" means their earnings represent 50 percent or more of household income.

These statistics show that affordable housing is a substantial problem for the Nation’s extremely-low-income workforce. The picture is somewhat better for renters with incomes between 30 percent and 50 percent of area median income. Among these households, 78 percent are working under the full-time employment proxy—about the same as the 79 percent counted as working on the basis of their primary income source. Among households in this income group whose primary source of income is their wages, 16 percent, or 840,000, have worst case needs in 2003.

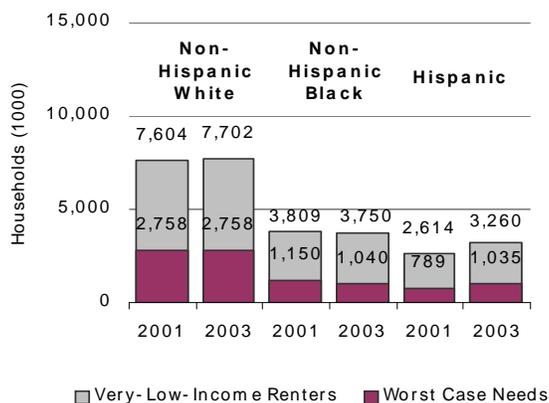
Worst case needs among families with children and earnings

Among households with children and worst case needs, the proportion who are working full time according to HUD’s proxy changed insignificantly from 40 percent in 1999 to 41 percent in 2003.

About 1.17 million extremely-low-income renter households with children (33 percent) are working full time in 2003 as measured by the proxy. Of these working households, 440,000 have worst case housing needs.

Demographic Factors Affecting Worst Case Needs

Exhibit 2-8. Growth in Worst Case Needs Among Hispanics Tracked Growth in Hispanic VLI Renters, 2001–2003



Source: HUD-PD&R tabulations of the American Housing Survey.

Race and Ethnicity

Worst case needs for housing cut across lines of race and ethnicity. Minority status depends on definitions that are fluctuating as the nation’s population becomes more diverse.¹⁷

Among very-low-income renters in 2003, 35.8 percent of non-Hispanic whites have severe housing problems. This level exceeds the incidence of 27.7 percent for non-Hispanic blacks and 31.7 percent for Hispanics. (For further detail, see Appendix, Table A-9.)

The three major race and ethnic groups experienced contrasting trends between 2001 and 2003.

Compared with 2001 levels, worst case needs in 2003 were unchanged for non-Hispanic whites, decreased by 10 percent among non-Hispanic black households, which is slightly short of a statistically

significant change, and increased significantly and dramatically by 31 percent among Hispanic households. The differences point to interplay among several factors.

¹⁷ For 2003, the American Housing Survey used revised Census Bureau categories of race and ethnicity, which are not directly comparable with the 2001 and earlier AHS. Survey respondents in 2003 were allowed to select more than one racial group, causing small but significant decreases in the size of the single-race categories.

The rapid growth in worst case needs among Hispanic households reflects the overall growth in this population between 2001 and 2003. Exhibit 2-8 illustrates that the number of Hispanic very-low-income renters increased by 25 percent during this period, accounting for most of the increase in worst case needs. The incidence of severe problems among those renters remained stable.

Non-Hispanic black households, in contrast, have fewer worst case needs in 2003 than in 2001. The decrease is caused by a reduction (although not statistically significant) in the incidence of severe problems among non-Hispanic black very-low-income renters. Non-Hispanic whites experienced little change in the incidence of severe problems.

Severely inadequate housing also varies by demographic group. Focusing again on very-low-income renters, only 3.2 percent of non-Hispanic whites experience severe physical problems with their units, compared with 4.5 percent of non-Hispanic blacks and 5.0 percent of Hispanics. Among very-low-income renters with severe problems, 11 percent of blacks and 12 percent of Hispanics, but only 8 percent of whites live in severely inadequate housing. These differences reflect the influence of regional patterns, which are discussed below, on worst case housing needs.

Families with Children

Among the 38 million households with one or more children under 18 years of age in 2003, 6.38 million are renters with very low incomes. This represents an increase of 6.6 percent from the 2001 estimate. These very-low-income renters with children include 1.85 million households (29 percent) with worst case needs. Almost as many, 1.80 million families with children, receive housing assistance.

More than one-third (36 percent) of households with worst case needs are families with children.

Elderly Households

Among the 5.18 million households with worst case housing needs in 2003, 1.13 million are elderly households without children. In other words, about 22 percent of worst case households are elderly households. Elderly households are those with either a head or spouse at least 62 years of age.

There are 3.27 million elderly renters with very low incomes in 2003, so the incidence of worst case needs among elderly very-low-income renters is 34.5 percent. Along with the 1.13 million elderly households with worst case needs are another 1.13 million elderly households who have housing assistance.

Persons with Disabilities

Among the 5.18 million households with worst case housing needs in 2003, 0.51 million have disabilities using HUD's proxy measure (see discussion in the Appendix). Based on this measure, 1.40 million very-low-income renter households have members with disabilities, which puts the incidence of worst case needs at 36.4 percent among this group.¹⁸

Worst Case Needs by Region

Exhibit 2-5 presented the association between regional variation of rental vacancy rates and prevalence of worst case needs. Other geographic factors also play a role.

Housing assistance, which reduces the incidence of worst case needs, is distributed unevenly across the nation relative to the population most likely to need it. This occurs primarily because of differences in the historical allocation of Federal assistance that are sustained through successive

Congressional appropriations. Public housing and subsidized private multifamily housing constitute about 60 percent of HUD-assisted housing. These project-based programs represent geographically fixed investments. Little public housing has been constructed in recent decades,¹⁹ which makes it proportionately scarcer in high-growth areas such as the West.

Exhibit 2-9 shows that western states in particular have a lower proportion of very-low-income renters who receive housing assistance and a higher proportion who have worst case needs. The incidence of worst case needs in 2003 is nearly 5 percentage points higher in the West than in the Northeast region, which ranks second in incidence of worst case needs. The percentage of very-low-income renters who report housing assistance is lowest in the West, only slightly below the fast-growing South, but 8 percentage points

Exhibit 2-9. Worst Case Needs and Housing Assistance, by Region

	2001	2003
Northeast		
VLI renters (1000)	3,446	3,444
Percent with housing assistance	33.8%	32.3%
Percent with worst case needs	33.2%	33.3%
Midwest		
VLI renters (1000)	3,005	3,327
Percent with housing assistance	30.8%	28.6%
Percent with worst case needs	30.5%	30.3%
South		
VLI renters (1000)	4,860	5,294
Percent with housing assistance	26.0%	25.1%
Percent with worst case needs	32.9%	31.1%
West		
VLI renters (1000)	3,592	3,592
Percent with housing assistance	24.4%	24.1%
Percent with worst case needs	37.7%	38.2%

Source: HUD-PD&R tabulations of the American Housing Survey.

¹⁸ See the next chapter for a test, using alternative data, of the quality of our AHS-based estimate of households with disabilities who had worst case needs.

¹⁹ HUD has not provided new funding for public housing development since FY 1994. However, public housing authorities could use Modernization and HOPE VI funding flexibly for development. See <http://www.hud.gov/progdsc/pdev.cfm> (accessed April 2005).

lower than the Northeast.

Worst case needs: metro status

The location of very-low-income renters in terms of metropolitan status—central cities, suburbs, and non-metropolitan areas—also helps explain variation in housing assistance and worst case housing needs.

As Exhibit 2-10 illustrates, of every six very-low-income renters, three live in central cities, two live in suburbs and one lives in a non-metropolitan area. In 2003, 31 percent of very-low-income renters in non-metropolitan areas receive housing assistance, compared with 28 percent in central cities and only 24 percent in suburban areas. Moreover, the incidence of worst case needs among very-low-income renters is substantially lower in rural areas, at 24.5 percent, than the 33.9 percent in cities and the 36.1 percent in suburbs.

Another dimension of the greater need in suburban areas is revealed by the change between 2001 and 2003. In central cities, worst case needs did not change significantly during this period, as the number of very-low-income renters grew an insignificant 2 percent. In contrast, suburbs experienced 7 percent growth in the number of very-low-income renters. The number of suburban worst case needs increased from 1.80 million in 2001 to 1.99 million in 2003. This growth in worst case needs occurred without a significant change in the incidence of needs among very-low-income renters.

The number of very-low-income renters grew about 9 percent in non-metropolitan areas between 2001 and 2003. Despite this increase in non-metropolitan renters who are potentially vulnerable to worst case needs, the number of worst case needs held steady and the incidence of needs declined significantly. It is likely that very-low-income renters in non-metropolitan areas benefited from lower housing costs relative to urban and suburban areas. Still, about one-fourth (24.5 percent) of very-low-income renters in non-metro areas have worst case needs. See Appendix Table A-11 for additional data on variations of need by metropolitan location.

Exhibit 2-10. Worst Case Needs in Central Cities, Suburbs, and Non-Metro Areas

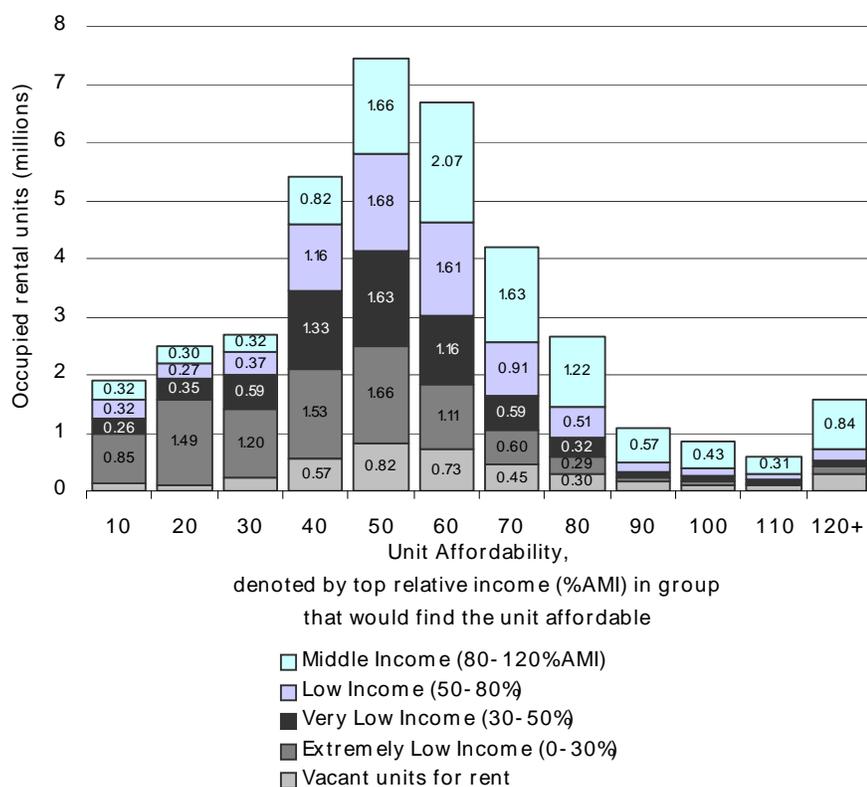
	2001	2003
Central Cities		
VLI renters (1000)	7,287	7,446
Percent with housing assistance	29.8%	28.1%
Percent with worst case needs	34.6%	33.9%
Suburbs		
VLI renters (1000)	5,147	5,506
Percent with housing assistance	25.3%	24.3%
Percent with worst case needs	34.9%	36.1%
Non-Metropolitan Areas		
VLI renters (1000)	2,470	2,685
Percent with housing assistance	30.8%	30.7%
Percent with worst case needs	28.3%	24.5%

Source: HUD-PD&R tabulations of the American Housing Survey.

Markets and Housing Mismatch

The previous discussion highlighted the importance of income in relation to rents of units available in local markets. Affordable rental units frequently are occupied by higher income households. To illustrate, the columns of Exhibit 2-11 show the distribution of occupied rental units by the level of income (relative to area median) at which they are affordable.²⁰ Within each column are “income segments” that show the relative incomes of the households who live in those units.

Exhibit 2-11. Affordable Rental Units Frequently Are Occupied by Higher Income Households, 2003



Source: HUD-PD&R tabulations of the 2003 American Housing Survey.

Examining the segments of each column reveals that a substantial number of units are unavailable to the income groups that would most benefit from their affordability because households with higher relative incomes occupy them. The upper income segments in the 0–30 percent unit affordability category show that about 3 million households with incomes above the extremely-low-income threshold are living in units affordable to extremely-low-income renters in 2003. Similarly, 5 million households with incomes above the very-low-income threshold are living in units affordable to very-low-income renters.

Comparing the height of the third and fourth columns shows that there

are twice as many units in the 40 percent affordability category

²⁰ Note that the column for each unit affordability category is identified by the income level, as percent of area median income, that is necessary to afford the highest-rent unit in the group. (Affordability means the rent does not exceed 30 percent of monthly family income.) In other words, not every household in an income segment will be able to afford every unit classified as affordable for their segment. For example, a household with income between 20-29 percent of AMI would not find a unit “affordable” if it rented at 30 percent of 30 percent (in other words, 9 percent) of AMI, which defines the most costly units affordable to any extremely-low-income renter.

Incidence of Worst Case Needs

(5.4 million) as in the 30 percent category (2.7 million). This discontinuity in the distribution of units—that is, the failure of the affordability categories to outline a smooth curve—is a reflection of the challenges the market faces in providing rental housing of adequate quality that is affordable to extremely-low-income renters.

The exhibit also illustrates the paucity—less than 500,000—of vacant units available for rents that extremely-low-income households can afford. The supporting data for this chart are presented in Appendix Table A-12.

The issue of housing mismatch and affordable housing supply is explored in greater detail in Chapter 4, as well as in the 2003 Worst Case Needs report (HUD 2003).

CHAPTER 3. RENT BURDEN: ROBUSTNESS OF ESTIMATES AND DURATION

Introduction—the Survey of Income and Program Participation

This chapter presents a new analysis of rent burden not included in previous worst case needs reports.²¹ It uses rent and income data from the Census Bureau’s Survey of Income and Program Participation (SIPP) to compare with data used to estimate rent burden from the American Housing Survey (AHS), and to examine multiple year data of severe rent burden experiences of very-low-income persons. The SIPP is a highly regarded and useful set of data that can be compared to the AHS not only to confirm our estimates of worst case needs (WCNs), but also to examine the persistence of severe rent burden, an important component of worst case needs. Conducted for over 20 years, the SIPP is an ongoing survey program. Each survey follows approximately 40,000 households for three years. It is an important national source of data on income and participation in government programs.

Exhibit 3-1. Comparative Advantages of AHS and SIPP for Assessing Rental Housing Needs

	AHS	SIPP
Sample design	Panel design tracks housing units every two years since 1985.	Panel design tracks individuals, every 4 months over several years.
Sample size	Larger sample allows more precise estimates.	Sample about half the size.
Weighting	Based on housing units; probably slightly more accurate.	Based on households; probably less accurate.
Income data	Asks about sources of income, but uses very general questions. However, the procedures are currently being changed.	Asks more detailed questions about income sources and amounts.
Rental assistance data	Improved since 1997, but still known to have misreporting.	Known to have misreporting.
Housing conditions data	Asks specifically about crowded and physically inadequate housing.	Generally does not ask about housing conditions.
Rent data	Asks about rent and rent discounts; has detailed questions about utilities. Utilities data benchmarked to independent estimate.	Asks about rent and total utilities. Uses less detailed questions than AHS.

The aim of this chapter is two-fold. First, SIPP data can be used to calculate estimates of households with rent burdens, and these can be compared with AHS estimates of households with rent burdens that were presented in Chapter 2.²² This report compares the two data sets to see whether they yield similar results for rent burden. In addition to comparing the total

²¹ This chapter summarizes significant findings from a paper written by Scott Susin of the Census Bureau under contract to HUD.

²² SIPP and AHS are not entirely comparable. In particular, SIPP does not observe housing quality, an important factor in estimating WCN. However, the SIPP and the AHS can both produce estimates of very-low-income families with severe rent burdens.

number of households and persons with severe rent burdens, this chapter compares estimates from both the AHS and SIPP along important demographic breakdowns such as age, ethnicity, race, and disability.

Second, the longitudinal nature of the SIPP allows the data to be used to track the persistence of rent burdens over time. This important aspect allows us to determine whether those with high rent burdens in one year continue to have high rent burdens the following year.

Robustness of Rent Burden Estimates

This section compares the incidence of severe rent burden among the nation's renters as measured by the SIPP and the AHS.²³ It compares numbers of households with moderate or severe rent burden, as well as severe rent burden among different income groups, among family types, and by race, ethnicity and geographic location. This comparison can help verify worst case needs estimates based on the AHS data in light of the fact that severe rent burdens alone account for 91 percent of worst case needs (Exhibit 2-3).

Rent Burdens Among Different Income Groups

SIPP finds comparable number of renters paying more than 30 percent of income for rent

Overall, the SIPP finds a fairly similar count of unassisted renter households paying more than 30 percent of their income for rent, as shown in the bottom rows of Exhibit 3-2. About 31 percent of all unassisted renters have some degree of rent burden.

²³ Both the SIPP and the AHS estimates are based on gross rent including utility costs. For the purposes of this report, the SIPP utility data were adjusted for consistency with the AHS.

Duration of Rent Burden

Estimates of moderate and severe rent burden based on the SIPP vary slightly from AHS estimates. Under the SIPP, the estimated share of households with severe rent burdens is two percentage points less than estimates of households with severe rent burdens from the AHS. This is somewhat offset by the SIPP's higher estimated share of renters with a moderate rent burden (30-50 percent of income) with 18 percent of renters having such a burden versus 16 percent in the AHS. Taken together, both data sets show about the same percentage of renter households (31 percent) have rent burdens greater than 30 percent.

SIPP finds fewer very-low-income renters with severe rent burdens

As stated, the SIPP shows a comparable number of unassisted renter households paying more than 30 percent of income for rent. However, the SIPP shows fewer very-low-income renter households paying more than 50 percent of income for rent. As shown in Exhibit 3-3, the SIPP estimates 672,000 fewer such households nationwide paying more than half their income for rent.

Exhibit 3-2. Number of Unassisted Renters with Moderate and Severe Rent Burden, 2001

	Households with Rent Burdens (thousands)		
	SIPP	AHS	Difference
Severe rent burden (rent >50% income)	4,475	5,053	-578
Percent of all renters	12.9	15.0	-2.1
Moderate rent burden (rent 30-50% income)	6,340	5,544	+796
Percent of all renters	18.3	16.4	1.9
Total (rent >30% income)	10,815	10,597	+218
Percent of all renters	31.1	31.4	0.3

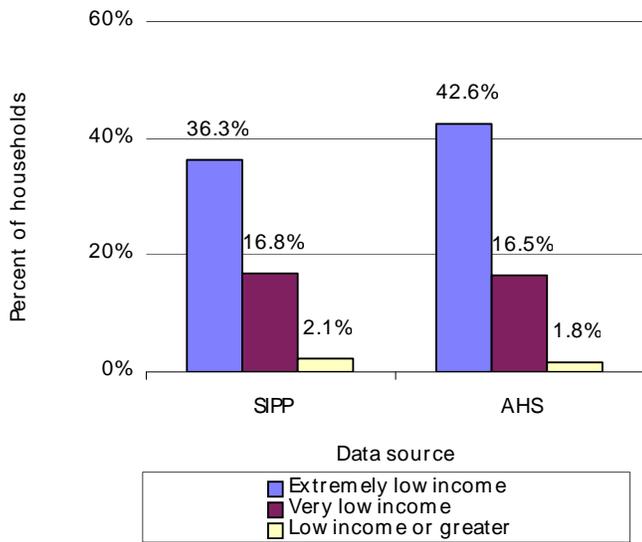
Source: Census Bureau tabulations of SIPP and HUD-PD&R tabulations of AHS.

Exhibit 3-3. Unassisted Very-Low-Income Renters With Severe Rent Burden, 2001

	Unassisted VLI households paying rents over 50 percent of income (thousands)		
	SIPP	AHS	Difference
ELI (<30% AMI)	2,959	3,692	-733
VLI (31-50% AMI)	1,090	1,029	+61
Total	4,049	4,721	-672

Source: Census Bureau tabulations of SIPP and HUD-PD&R tabulations of AHS.

Exhibit 3-4. SIPP and AHS Confirm Similar Incidence of Severe Rent Burdens by Income in 2001



Extremely-low-income renters are much more likely to have severe rent burdens

The SIPP confirms a key aspect of the worst case needs analysis. Households with extremely low incomes are much more likely to have severe rent burden than other income groups. As demonstrated by Exhibits 3-4 and 3-5, SIPP data show that more than one-third (36 percent) of extremely-low-income renter families have severe rent burdens.

Nearly one-fifth (17 percent) of households in the 30 to 50 percent of median income range also had severe rent burden. Only 2 percent of renter households above HUD’s very-low-income threshold (50 percent of median) have severe rent burdens.

Source: Census Bureau tabulations of SIPP and HUD-PD&R tabulations of AHS.

Exhibit 3-5. Likelihood of Severe Rent Burden By Income, 2001

Household Income	SIPP		AHS	
	Households (thousands)	Percent	Households (thousands)	Percent
ELI (0-30% AMI)	8,143	100	8,659	100
With Severe Rent Burden	2,959	36	3,692	43
VLI (30-50% AMI)	6,493	100	6,244	100
With Severe Rent Burden	1,090	17	1,029	16
LI and higher (50% AMI +)	20,039	100	18,824	100
With Severe Rent Burden	425	2	332	2

Source: Census Bureau tabulations of SIPP and HUD-PD&R tabulations of AHS.

Rent Burden by Family Type

Analysis of SIPP data largely confirms most of the findings of worst case needs based on rent burdens of various family types. The family types considered include: elderly without children, families with children, “other families” (usually singles without children), non-elderly disabled, and “other households” (often unrelated individuals living in the same housing).

SIPP confirms incidence of severe rent burden for most household types

The incidence of severe rent burdens among these various family types, as reflected in the SIPP data, is very similar to the estimates of rent burden from the AHS, with a few noteworthy exceptions. Importantly, the incidence of severe rent burdens was similar in the two data sets among very-low-income families with children, “other families” and “other households.”

Exhibit 3-6 demonstrates that incidence estimated with the SIPP compared to the AHS differs by no more than 4 percentage points for these household types, and not in a consistent direction. Estimates for the two remaining household types—elderly without children and nonelderly disabled—vary considerably more.

Exhibit 3-6. Incidence of Severe Rent Burden Among VLI Renters by Household Type, 2001

Household Type	SIPP		AHS	
	Households (thousands)	Percent	Households (thousands)	Percent
Elderly without children	3,276		3,407	
With Severe Rent Burden	709	22	1,124	33
Families with children	6,062		5,984	
With Severe Rent Burden	1,520	25	1,701	28
Other families	549		825	
With Severe Rent Burden	159	29	223	27
Nonelderly disabled	1,631		1,206	
With Severe Rent Burden	397	24	389	32
Other households	3,119		3,479	
With Severe Rent Burden	1,266	41	1,284	37

Source: Census Bureau tabulations of SIPP and HUD-PD&R tabulations of AHS.

SIPP Estimates Show Lower Likelihood of Severe Rent Burden For Elderly Families

Compared with the AHS, the SIPP counts 672,000 fewer households with very low incomes and rent burdens above 50 percent. Exhibit 3-7 shows that most (415,000) of this difference is made up of elderly households without children.

Exhibit 3-7. Elderly Households Account for Much of the Difference in Estimates of Severe Rent Burden, 2001

VLI Renter Households	SIPP		AHS		Difference	
	Households (thousands)	Percent	Households (thousands)	Percent	Households (thousands)	Percent
VLI Elderly without children	3,276	100	3,407	100	-131	
With Severe Rent Burden	709	22	1,124	33	-415	-11
All VLI renters	14,636	100	14,903	100	-267	
With Severe Rent Burden	4,049	28	4,721	32	-672	-4

Source: Census Bureau tabulations of SIPP and HUD-PD&R tabulations of AHS.

In the SIPP, 22 percent of elderly very-low-income renter households had a severe rent burden versus 33 percent of such households in the AHS. At least some of this difference is likely due to the different survey methods employed in the SIPP versus the AHS. The SIPP employs a more rigorous set of survey questions to measure household income and is more likely to count sources of income often received by elderly persons than the AHS (for example, certain types of pensions). On the other hand, the SIPP does not employ as much survey rigor to the measurement of rent.

Severe Rent Burden by Race, Ethnicity and Region

When the presence of severe rent burdens among very-low-income renters are disaggregated by race and ethnicity as in Exhibit 3-8, the AHS counts 399,000 more non-Hispanic whites and 201,000 non-Hispanic blacks with rent burdens of 50 percent or more. The SIPP estimates show very similar numbers of very-low-income Hispanic and other renter households with severe rent burden.

Exhibit 3-8. Comparison of VLI Renters Who Have Severe Rent Burdens, By Race and Ethnicity, 2001

VLI households with severe rent burden	SIPP		AHS		Difference	
	Households (thousands)	Percent	Households (thousands)	Percent	Households (thousands)	Percent
Non-Hispanic white	2,255	30	2,654	35	-399	-5
Non-Hispanic black	852	24	1,053	28	-201	-4
Hispanic	695	26	717	27	-22	-2
Other	247	32	297	34	-50	-2

Source: Census Bureau tabulations of SIPP and HUD-PD&R tabulations of AHS.

Duration of Rent Burden

Exhibit 3-9 indicates that the AHS counts more very-low-income renter households in the Northeast and West than does the SIPP, although this might simply be due to the fact that income limits are aggregated to a different level of geography that is not the same in the two data sets. The SIPP counts more very-low-income renter households in the Midwest and South, a relatively modest additional 330,000. For all regions, the AHS counts more renter households with severe rent burden.

Exhibit 3-9. Comparison of Regional Estimates of Severe Rent Burden, 2001

	SIPP		AHS		Difference	
	Households (thousands)	Percent	Households (thousands)	Percent	Households (thousands)	Percent
Northeast	3,131	100	3,446	100	-315	
With Severe Rent Burden	906	29	1,060	31	-154	-2
Midwest	3,173	100	3,006	100	167	
With Severe Rent Burden	745	23	847	28	-102	-5
South	4,990	100	4,860	100	130	
With Severe Rent Burden	1,306	26	1,534	32	-228	-5
West	3,342	100	3,592	100	-250	
With Severe Rent Burden	1,093	33	1,280	36	-187	-3

Source: Census Bureau tabulations of SIPP and HUD-PD&R tabulations of AHS.

Duration of Rent Burden

This section uses data from the Survey of Income and Program Participation (SIPP) to shed further light on the duration of severe rent burdens. This section focuses on issues related to the duration of severe rent burden for individuals over time, and is included for the first time in the Worst Case Needs report. It draws heavily from research performed by Scott Susin of the Census Bureau under contract to HUD (Susin 2005).

It should be noted that the originality of this analysis has a drawback. Without an established body of research literature to draw upon, efforts to highlight important findings should be approached with a certain level of caution.²⁴

²⁴ While the type of analysis using the SIPP to examine rent burden duration and dynamics is new, there is additional existing research on income level fluctuations in the U.S. For instance, over the 48-month span between January 1996 to December 1999, 34 percent of the US population had incomes below the Federal poverty line for at least two months; only 2 percent had subpoverty incomes over all 48 months. Of those who were poor in 1996 in terms of annual income, 65 percent were still poor in 1997, 56 percent were poor in 1998, and 51 percent were poor in 1999. Of those who were not poor in 1996, 3.5 percent were poor in 1999. About half of poverty spells (defined in terms of monthly income) end within

In addition, as noted in the Susin paper and discussed below, there are important caveats to keep in mind with regard to the data source itself. Data used to analyze the duration of severe rent burden are only available from SIPP for a two-year time frame, so long-term analysis is not possible at this time. And, as discussed below, there are some findings from this initial duration analysis that appear to suggest the need for additional data and more extensive analysis than that presented here.

For these reasons, this section presents a series of exhibits containing a fair amount of data. This will allow the reader to consider a variety of possible interpretations of the survey data, rather than pinpoint a few limited findings that have been selectively chosen from the wider array of significant possibilities. The reader should also note that this section focuses on persons (or in some exhibits, “householders”) rather than families or households. This is because there is no clear way to accurately assign or track household rent burden over time when an individual is not part of the same household in both years.

Two-Year Experience of Very-Low-Income Renters with Severe Rent Burden

Exhibit 3-10 looks at the change in rent burden between 2001 and 2002 of very-low-income persons who were renters in 2001. It also identifies whether very-low-income renters received housing assistance in either of those years or lived in owner-occupied housing units in the second year. This latter item is important to consider, as a very-low-income person who receives housing assistance or moves to owner-occupied housing is not considered to have worst case needs (WCN only includes unassisted renters).

four months, and about four-fifths of month-to-month poverty spells end within one year (Iceland 2003).

Duration of Rent Burden

Exhibit 3-10 presents some estimates that are of interest for considering the persistence of severe rent burdens. Close to half of very-low-income renters (47.1 percent) who had severe rent burdens in the 2001 continued to have a severe rent burden in 2002. Another 10.2 percent had rent burden between 40 to 50 percent of income in 2002, while 8.5 percent received housing assistance (and thus would not be counted as having worst case needs). These categories combined for about two-thirds (65.8 percent) of the total.

**Exhibit 3-10. Persistence of Rent Burdens of VLI Persons
in Rental Housing during 2001, by Housing Problems in 2002
(thousands and percent)**

Rent Burden Status in 2001 (thousands)	Rent Burden Status in 2002				Assisted	Owner	Total
	Rent Burden >50%	Rent Burden 40-50%	Rent Burden 30-40%	Rent Burden < 30%			
Rent Burden >50% income	3,421	740	924	1,102	616	466	7,268
Rent Burden 40-50%	829	560	718	759	224	310	3,400
Rent Burden 30-40%	597	591	1,194	1,364	178	258	4,182
No Rent Burden (<30% inc.)	768	297	632	3,779	678	649	6,803
Assisted	808	220	356	724	6,290	307	8,706
Total	6,424	2,408	3,825	7,727	7,985	1,990	30,359
(percent)							
Rent Burden >50% income	47.1	10.2	12.7	15.2	8.5	6.4	100.0
Rent Burden 40-50%	24.4	16.5	21.1	22.3	6.6	9.1	100.0
Rent Burden 30-40%	14.3	14.1	28.6	32.6	4.3	6.2	100.0
No Rent Burden (<30% inc.)	11.3	4.4	9.3	55.6	10.0	9.5	100.0
Assisted	9.3	2.5	4.1	8.3	72.3	3.5	100.0
Total	21.2	7.9	12.6	25.4	26.3	6.6	100.0

Source: Susin 2005.

Note: Sample is restricted to very low income renters in 2001.

Additional Note: The reader should note that Exhibit 3-10 may undercount the number of very-low-income renters who had a severe rent burden in 2002, because it only includes those renters who had incomes at that level in 2001. Additional persons whose incomes dropped from a higher level in 2001 are not included. This was done for consistency in both years, but may result in a downward bias.

Of the remaining group, 12.7 percent had rent burden between 30 to 40 percent of income, 15.2 percent experienced a drop in rent burden below 30 percent of income and 6.4 percent moved to owner-occupied housing.

Additional Severe Rent Burden in 2002

In addition to tracking the experience of persons with severe rent burden in 2001, Exhibit 3-10 also presents data on very-low-income renters who did not have a severe rent burden in 2001, but did have such a burden in 2002. In effect, these data can provide further evidence on the dynamics of severe rent burden over the period from 2001 to 2002.

The exhibit shows a large number of very-low-income renters that did not report a severe rent burden in 2001, but who did have such a burden in 2002. Of those very-low-income renters that paid 40–50 percent of their income for rent in 2001, 829,000 became severely rent burdened in 2002. Of those very-low-income persons in 2001 who had a severe rent burden in 2002, 808,000 moved to that status after they had previously received government housing assistance in 2001. An additional 1,365,000 renters became severely burdened in 2002 after either paying 30–40 percent of income for rent (597,000) or less than 30 percent of income for rent (768,000) in 2001. It must be noted that Exhibit 3-1 understates the number of cases with severe rent burden in 2002 because families that did not have very low incomes in 2001 are omitted from the analysis.

Again, these data should be considered carefully as they are highly dependent on accurate reporting in both years of the survey. A mistake or misreporting of data in either year for some survey respondents will introduce possible bias and one should proceed with caution when interpreting the data (Susin, 2005). In addition, attrition of families over time may introduce bias if the families that remain in the survey are more stable.

Reasons for Change in Rent Burden

Further analysis of the outcomes for very-low-income renters with severe rent burdens in 2001 is shown in Exhibit 3-11. For those persons who saw a decline in their rent burden below 50 percent of income in 2002, the exhibit provides several categories of possible reasons for this decline: their gross rent fell, their income rose, or both.

The exhibit shows that the most common reason for a drop from a severe rent burden to a rent burden of less than 50 percent of income was an increase in reported income (1.518 million persons). The next most common reason was a decrease in reported rent (1.021 million persons). For 140,000 persons, both an increase in reported income and a decrease in reported rent were required (as neither event by itself would have been sufficient to include them in this group). A smaller group of 86,000 persons reported either zero or negative income in 2002.

Duration of Rent Burden

It may be somewhat surprising that a decline in reported rent accounted for such a large percentage of those who moved out of severe rent burden. In addition, while some outside research has found a large impact of decreased rent on rent burden dynamics (Hill 2003), as discussed below there may be a need for additional research on this issue before reaching firm conclusions on its significance.

Exhibit 3-11. Reason for Change in Severe Rent Burden Status by Age and Disability Status

Age and Disability Status in 2001 (thousands)	Rent Burden Fell Below 50% in 2002 due to Change in Rent or Income				Other Outcome in 2002			Total
	Gross Rent Fell, Alone	Income Rose, Alone	Income rose and rent fell	Income Fell to Zero or Negative	Rent Burden Stayed >50%	Became Assisted	Became Owner	
Child	317	427	54	21	1,107	280	141	2,345
Elderly	118	91	0	0	426	38	46	718
Disability (self-rpt.)	38	68	11	4	272	33	22	448
Other	548	932	76	62	1,617	265	257	3,756
Total	1,021	1,518	140	86	3,421	616	466	7,268
(percent)								
Child	13.5	18.2	2.3	0.9	47.2	11.9	6.0	100.0
Elderly	16.4	12.6	0.0	0.0	59.3	5.3	6.4	100.0
Disability (self-rpt.)	8.5	15.2	2.4	0.8	60.6	7.5	5.0	100.0
Other	14.6	24.8	2.0	1.7	43.0	7.0	6.9	100.0
Total	14.0	20.9	1.9	1.2	47.0	8.5	6.4	100.0

Source: Susin 2005.

Note: Sample is restricted to very low income renters with rent burdens > 50% in 2001.

Reasons for Change in Rent Burden Status: Movers versus Stayers

Exhibit 3-12 examines very-low-income renters with a severe rent burden in 2001, their experiences in 2002, and whether or not they stayed in the same housing unit.

Those who had a severe rent burden in 2001 and stayed in the same housing unit were much more likely to continue to remain unassisted and have a severe rent burden. Of the stayers, 52.6 percent continued to have a severe rent burden versus only 33 percent of movers (who were a much smaller group).

A larger percentage of movers either became assisted (10.5 percent versus 6.0 percent of stayers) or moved to owner-occupied housing (20.9 percent versus only 2.2 percent of stayers). It is this large difference in the latter category that accounts for most of the overall difference, rather than a move to a unit with lower rent.

Exhibit 3-12. Persistence of Rent Burdens by Mobility Status - VLI Householders With Rent Burdens > 50% in 2001

Mobility, 2001-2002 ^a	Rent Burdens in 2002						
	Rent Burden > 50%	Rent Burden 40-50%	Rent Burden 30-40%	No Rent Burden	Assisted	Owner	Total
(thousands)							
Stayed in Same Housing Unit	1,449	322	361	397	164	60	2,754
Moved	297	65	107	148	95	188	899
Total	1,746	387	468	546	258	248	3,653
(percent)							
Stayed in Same Housing Unit	52.6	11.7	13.1	14.4	6.0	2.2	100.0
Moved	33.0	7.2	11.9	16.5	10.5	20.9	100.0
Total	47.8	10.6	12.8	14.9	7.1	6.8	100.0

Source: Susin 2005.

Note: Sample is restricted to very-low-income householders with rent burdens > 50% in 2001.

^a Comparing 12th month of SIPP panel to 24th month.

It is important to keep in mind that those living in owner-occupied housing are by definition not included in worst case needs estimates and this exclusion by itself does not address their housing costs. Note also that the unit of analysis for this exhibit is “householders” rather than persons, in an attempt to more closely track the experience of a family.²⁵ This helps

²⁵ Because the SIPP is designed to track individuals rather than households over time, it is difficult to make comparisons with AHS-based estimates, many of which are at the household level. It is possible, using the SIPP, to track “householders,” defined as individuals whose names are on a lease or mortgage. This allows for a closer approximation of household-level estimates produced using the AHS.

provide an estimate that is closer to the AHS-based estimates using households as the unit of analysis.

Exhibit 3-13 provides additional detail for very-low-income renters that had a severe rent burden in 2001 and whose rent burden dropped below 50 percent of income in 2002. The exhibit compares movers versus stayers for three categories: those whose rent burden dropped as a result of gross rent falling; and those whose burden declined as a result of rising income and for whom either 1) the number of adults present rose; or 2) the number of adults present was the same or fewer. The latter categories allow examination of whether rising income was a result of additional family members being present, or was a result of an increase in income for individuals.

Exhibit 3-13. Reason for Change in Severe Rent Burden Status—VLI Persons With Rent Burdens > 50% in 2001 and < 50% in 2002

	Gross Rent (including utilities) Decreased	Income Increased		Total
		Adults Rose	Adults Same or Fewer	
Movers	336	10	178	524
Stayers	685	70	1,261	2,016
Total	1,021	80	1,439	2,539

Source: Susin 2005.

Note: Sample is restricted to very low income renters with rent burdens > 50% in 2001. Estimates may not sum to totals because of rounding.

Exhibit 3-13 also shows that well over half of those whose rent burden declined as a result of reduced rent stayed in the same unit for both years, while there were far fewer persons in this category who had moved. Of the 1.021 million persons reporting a reduced rent that accounted for their move out of a severe rent burden status, 685,000 (67 percent) stayed in the same unit in 2002. Only 336,000 persons in this category (33 percent) moved to a different rental unit in 2002. This is a somewhat surprising result—that 67 percent of those renters who reported a reduced rent stayed in the same housing unit. There are some possible valid explanations for why gross rent might decline from one year to the next, including a possible decline in utility costs because the SIPP’s gross rent estimate includes utilities (for example, a warmer winter in the second year). However, the magnitude of the difference suggests it may be more likely due to misreporting reporting errors in either of the two years could significantly impact the results. Thus, more data and analysis are needed to further understand the reasons for changes in severe rent burden status.

Conclusion

The findings above indicate the need for additional research using the Census Bureau’s SIPP database. The exhibits highlight the dynamic nature of the data and present interesting issues. However, given the preliminary nature of the analysis and findings, it would be problematic to reach firm conclusions based on the data available at this time. The innovative nature of this initial duration analysis seems to hold promise for shedding further

light on the nature and dynamics of serious housing affordability issues in the United States. Additional future research should be encouraged to better understand the nature of these issues.

CHAPTER 4. AVAILABILITY OF AFFORDABLE HOUSING STOCK

Why Housing Supply is An Issue

Most of the analysis in this report focuses on the demand side of the housing markets: the distribution of households by income and demographic characteristics, what they can afford to pay, and what they do pay as a proportion of their incomes. This chapter examines the question of housing supply. The chapter's most important conclusions are summarized in the sidebar.

Affordability, Availability and Adequacy

This chapter uses three concepts to assess the rental housing stock, *Affordability*, *Availability* and *Adequacy*.

- *Affordability* measures the extent to which there are enough rental housing units of different costs to provide each household with a unit it can afford (based on the 30 percent of income standard). Affordability is the broadest measure of housing stock sufficiency, addressing whether there are sufficient housing units if allocated solely on the basis of cost. The *affordable* stock includes both vacant and occupied units.
- *Availability* measures the extent to which affordable rental housing units are available to households within a particular income range. Some households choose to spend less than 30 percent of their incomes on rent, occupying housing that is affordable to households of lower income. These units are thus not available to the lower-income households.²⁶ A unit is *available* at a given level of income if it is affordable at that level and either 1) occupied by a household with that income or less or 2) vacant.

Key Findings about Housing Supply

- The number of rental housing units is sufficient to provide affordable housing to households with incomes above 40 percent of area median income (AMI).
- There are fewer affordable units actually available to households with the lowest incomes, and a substantial proportion of available units are physically inadequate.
- Nonmetropolitan areas have more available rental units than cities or suburbs.
- There has been very little change in the ratio of affordable, available rental housing units to the number of households over the past two decades.
- Occupancy by higher-income households restricts the supply of units renting for less than the Fair Market Rent to only about 80 percent of households who can afford only such units.
- Larger households are much more likely than smaller households to be crowded.

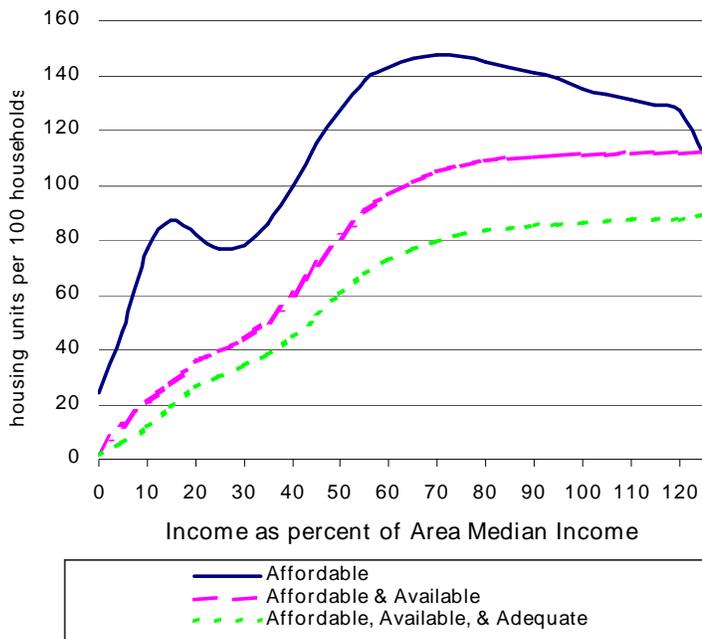
²⁶ The availability measure also removes units from consideration if they have artificially low rents because they are occupied as a benefit of employment (for example, by caretakers) or because they are owned by relatives or friends of the occupants. The 2003 AHS data indicate that 2.2 million renter households (6.6 percent) occupied their units while paying no rent. The AHS does not provide estimates of the number of households paying a positive but below-market rent because of employment or other reasons.

- *Adequacy* extends the concept of availability by considering whether sufficient rental units are physically adequate as well as available and affordable.²⁷

Measures of Affordability and Availability

Exhibit 4-1 describes the U.S. rental housing stock in 2003 using data from the AHS.²⁸ For purposes of this analysis, income and affordability are divided into intervals representing 5 percent of area median income (AMI).

Exhibit 4-1. Three Measures Characterize the Sufficiency of the U.S. Rental Housing Stock, 2003



Source: HUD-PD&R tabulations of the American Housing Survey.

The point at which the Affordability line crosses 100 is where there is an affordable rental unit for every household. This occurs at 40 percent of AMI, meaning the number of rental housing units is sufficient to provide affordable housing to households with incomes above 40 percent of area median income. Affordable units peak at an income level of 75 percent of AMI. Beyond this, more households than housing units are being added. The downward slope beyond 75 percent of AMI represents a reduction in housing need, because the households with incomes greater than each successive threshold are more and more likely to spend less than 30 percent of their incomes on housing.

The Affordable and Available line shows a different story. Its position below and to the right of the Affordable line indicates that availability is a substantial additional constraint. For example, about 78 percent of

²⁷ The AHS rates housing units using a three-level measure: adequate, moderately inadequate, and severely inadequate. For detail, see the entry for the variable ZADEQ in the *Codebook for the American Housing Survey, Public Use File: 1997 and Later* (U.S. Department of Housing and Urban Development 2004).

²⁸ Measures of affordability and availability do not reflect small-scale geographic detail. The results presented in this chapter reflect large-scale measures that compare the entire housing stock with the entire rental population. Although this chapter presents more geographically restricted measures below, they are still too large to fairly represent housing demand and supply as owners and renters experience them, as these are local phenomena. Thus, these results should be viewed with some caution as national or regional indicators based on underlying local housing markets. More severe shortages or generous surpluses can occur in specific housing markets, despite these national and regional findings. For an overview of issues related to local markets, see Khadduri, Burnett and Rodda (2003).

Availability of Affordable Housing Stock

households with incomes below 30 percent of AMI could be housed in affordable units if such units somehow could be perfectly allocated, but in reality only 44 percent could actually find a unit available for their occupancy. A considerable proportion of even the most affordable housing stock is occupied by households who could afford to spend more. Thus, many units that are affordable to lower-income renters are not available to them. The affordable stock is nominally sufficient to house every household above 40 percent of AMI, yet the available stock does not match the number of renters until household incomes reach 65 percent of AMI.²⁹

Rental Stock by Income

As suggested by Exhibit 2-11, there are fewer affordable units available to households with the lowest incomes. Exhibit 4-2 illustrates this by presenting the housing stock measures for the standard income groups used in this report. There is a mismatch between the number of extremely-low-income renters and the number of

affordable units available to them. There are only 78.2 affordable units for every 100 extremely-low-income households. The ratio of available units is about half as great, at 44 units per 100 households, and even among these available units, only three-fourths are physically adequate.³⁰

While there are enough units to house all households at the very low income level, there are only about eight available units for every ten very-low-income households, and only six of them are physically adequate. At the higher levels of income, the available rental stock is sufficient to house all renters.

Exhibit 4-2. Rental Housing Stock by Income, 2003

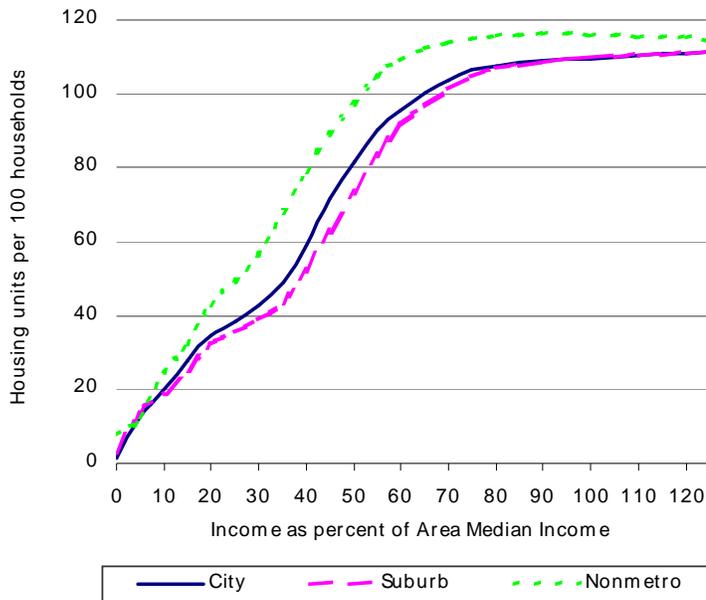
Income	Housing Units per 100 Households		
	Affordable	Affordable and Available	Affordable, Available, and Adequate
ELI (<30% AMI)	78.20	44.03	33.88
VLI (30-50% AMI)	127.48	81.37	60.52
LI (50-80% AMI)	144.81	108.73	83.43

Source: HUD-PD&R tabulations of the American Housing Survey.

²⁹ This statement interprets the horizontal difference between the Affordable and the Affordable/Available line, which can be understood as showing the income levels of families who are “displaced” by higher income households. The preceding example reflects the vertical difference between the lines, which represents the difference between nominal and available supply of affordable units for households of a given income level.

³⁰ Research based on the American Community Survey indicates that 10 percent of vacant units with gross rents of \$400 or less have been empty for at least two years, suggesting they are heading toward abandonment (Joint Center for Housing Studies 2005, 23).

Exhibit 4-3. Nonmetropolitan Areas Have More Available Rental Units than Cities and Suburbs



Source: HUD-PD&R tabulations of the American Housing Survey.

Exhibit 4-4. Rental Housing Stock by Metropolitan Status and Income Class, 2003

	Housing Units per 100 Households		
	Affordable	Affordable and Available	Affordable, Available, and Adequate
Central Cities			
ELI (<30% AMI)	65.59	42.95	32.40
VLI (30-50% AMI)	120.34	81.49	59.96
LI (50-80% AMI)	137.39	107.71	81.74
Suburbs			
ELI (<30% AMI)	74.53	39.08	30.97
VLI (30-50% AMI)	121.17	73.29	56.82
LI (50-80% AMI)	149.56	106.87	84.54
Nonmetropolitan			
ELI (<30% AMI)	121.45	56.74	43.80
VLI (30-50% AMI)	160.26	97.60	69.64
LI (50-80% AMI)	155.13	115.58	85.72

Source: HUD-PD&R tabulations of the American Housing Survey.

Rental Stock by Location

Nonmetropolitan areas tend to have the best match of rental housing stock to households, as is illustrated by Exhibit 4-3. The available stock is larger in nonmetropolitan areas at all levels of income, reaching the one-to-one ratio at the very-low-income limit, 50 percent of AMI.

Central cities have fewer units affordable to extremely-low-income households than suburbs, but slightly more available units. One factor affecting the mismatch in suburbs is the significant increase in very-low-income renter population within suburbs during the 2001–2003 period (Exhibit 2-10).

The same patterns between cities, suburbs and nonmetropolitan areas are seen using the Affordable, Available, and Adequate measures, as illustrated with the standard income categories in Exhibit 4-4.

**Availability of
Affordable Housing Stock**

Exhibit 4-5 details the affordable, available, and physically adequate stock relative to renter populations in the four regions for each of the standard income categories. The West has the greatest mismatch, with considerably fewer units per 100 households than the other three regions.

**Exhibit 4-5. Rental Housing Stock
by Census Region and Income Category, 2003**

	Housing Units per 100 Households		
	Affordable	Affordable and Available	Affordable, Available, and Adequate
Northeast			
ELI (<30% AMI)	80.10	48.09	38.58
VLI (30-50% AMI)	120.76	79.42	62.89
LI (50-80% AMI)	136.85	101.93	81.66
Midwest			
ELI (<30% AMI)	81.41	46.86	36.31
VLI (30-50% AMI)	157.60	98.03	72.99
LI (50-80% AMI)	149.54	116.11	89.12
South			
ELI (<30% AMI)	82.80	45.89	33.93
VLI (30-50% AMI)	134.80	86.57	60.49
LI (50-80% AMI)	153.12	114.08	82.68
West			
ELI (<30% AMI)	65.24	33.49	26.00
VLI (30-50% AMI)	95.23	60.14	46.74
LI (50-80% AMI)	136.04	100.76	81.08

Source: HUD-PD&R tabulations of the American Housing Survey.

Sufficiency Relative to Fair Market Rent

HUD establishes a Fair Market Rent (FMR) for every housing market, which is intended to represent the cost of decent existing housing that is neither new, nor luxury, nor subsidized. The FMR is used in the largest housing assistance program, Housing Choice Vouchers, to determine the maximum level of subsidy for assisted households.³¹ It is also used in other contexts as an indicator of reasonable housing costs in a given area. A natural question is whether the stock of below-FMR housing is adequate to meet the needs of households who can afford to pay no more than the FMR.

As Exhibit 4-6 illustrates, the answer is “no.” While enough affordable units exist for each region, the number of available units is

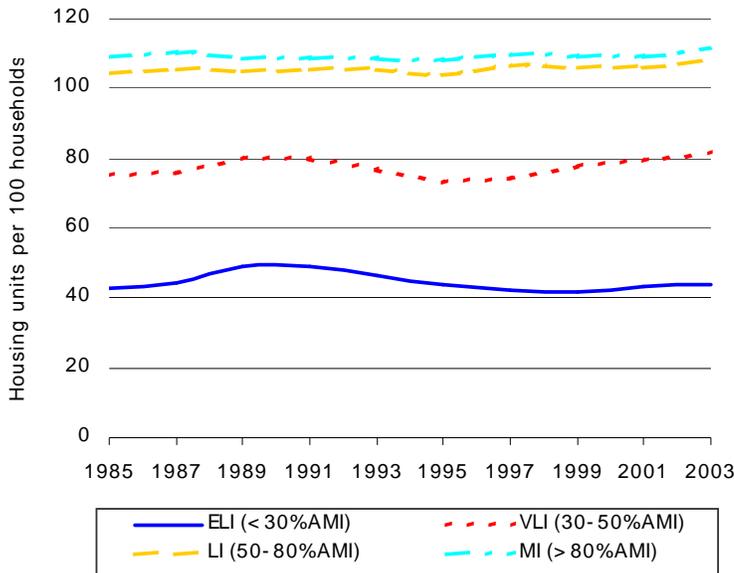
Exhibit 4-6. Rental Stock of Below-FMR Units, 2003

	Households (thousands)	Housing Units (thousands)		Housing Units per 100 Households			
		Affordable	Affordable and Available	Affordable, Available, and Adequate	Affordable	Affordable and Available	Affordable, Available, and Adequate
All	18,745	21,997	14,750	12,923	117.35	78.69	68.94
Northeast	4,333	5,107	3,608	3,145	117.87	83.28	72.58
Midwest	3,362	3,968	2,461	2,233	118.01	73.19	66.43
South	6,132	7,325	4,837	4,129	119.45	78.87	67.34
West	4,918	5,597	3,844	3,416	113.82	78.16	69.46
City	9,009	10,237	7,190	6,171	113.63	79.81	68.50
Suburb	6,923	8,268	5,414	4,892	119.42	78.19	70.65
Nonmetropolitan	2,813	3,492	2,146	1,861	124.16	76.30	66.15

Source: HUD-PD&R tabulations of the American Housing Survey.

sufficient to house only 73–83 percent of the households, depending on location.

Exhibit 4-7. Availability of Affordable Rental Units Displays Substantial Stability over Time



Source: HUD-PD&R tabulations of the American Housing Survey.

Exhibit 4-8. Geographic Pattern of Crowded Renter Households

	Households (thousands)	Incidence Per 100 HH
All Renters	1,615	4.81
Metropolitan Status		
City	837	5.54
Suburb	594	4.60
Nonmetropolitan	185	3.29
Region		
Northeast	328	4.56
Midwest	149	2.26
South	431	3.76
West	708	8.44

Source: HUD-PD&R tabulations of the American Housing Survey.

Trends in Rental Stock

The availability of the affordable rental stock has changed very little over the past two decades. Exhibit 4-7 shows the available rental units per 100 households for the four standard income categories, over the period 1985–2003.³²

There was a slight increase in the availability of rental units for extremely-low and very-low-income households in the period 1985–1991, followed by a reversal in 1993–1995.

Crowding

While crowding (defined as more than one person per room) is not a component of the definition of worst case needs,³³ it can be a symptom of affordability problems and housing-related stress. Households may double up, and young adults or couples may delay forming new households, because of an inability to afford their own units. This section examines the extent of crowding by income and location as well as the supply of large units relative to the number of large households.

About 5 percent of renter households are crowded, as is shown in Exhibit 4-8. Households in nonmetropolitan areas have the lowest incidence of crowding, followed by suburban and then central city areas. The highest incidence of crowding is in the West. The other three regions are more

³² This figure is based on custom tabulations of the American Housing Survey national datasets, for odd-numbered years in the period.

³³ Crowding is classified as a moderate problem rather than a severe problem.

Availability of Affordable Housing Stock

similar to one another, with the Midwest being the region with the lowest incidence.

Larger households are much more likely than smaller households to be crowded. Exhibit 4-9 shows a substantially greater incidence of crowding among households with five or more persons, with 44 percent of such large households being crowded. Indeed, a renter household with five or more members is about eight times more likely to be crowded than a renter household with four persons.

Despite the inverse relationship between income and crowding, extremely-low-income households show less crowding than very-low-income households do. The explanation is that extremely-low-income households are disproportionately likely to be one-person households, which cannot be crowded.

Crowding experienced by large families is not caused simply by a lack of large units. The number of affordable large units is abundant relative to the number of large households. In Exhibit 4-10 the Affordable line is entirely above the 100-units-per-large-household line that denotes sufficient stock. The number of affordable units with five or more rooms is two to five times larger than the number of households with five or more persons. The main cause of crowding must be the lack of available affordable units. Thus, crowding does not appear to be caused by a lack of large units, but by the fact that smaller households prefer these units as well and keep them off the market.

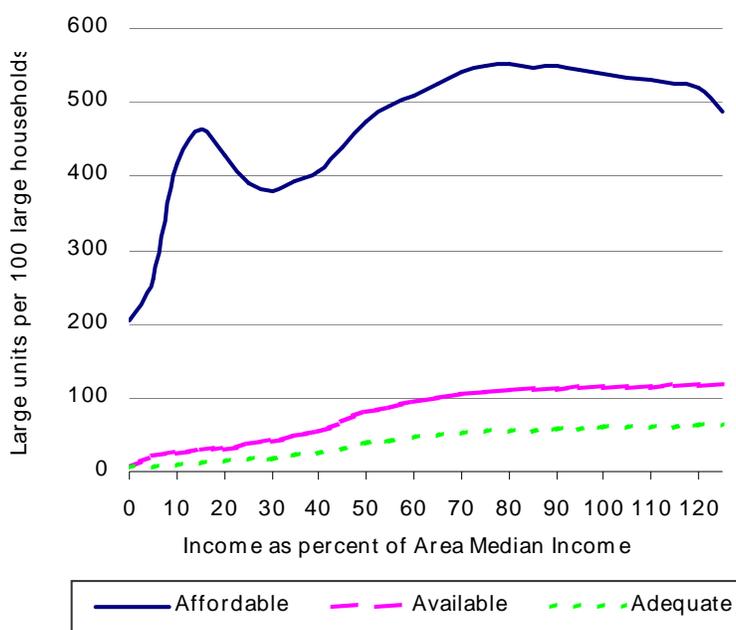
Exhibit 4-11 summarizes the supply of rental units with five or more rooms relative to households with five or more persons. Even at 30 percent of AMI, there are almost four large units for every household, and this increases to five or more units per household at higher incomes. However, only four units are *available* for each ten extremely-low-income households that need large units. Even for very-low-

Exhibit 4-9. Household Characteristics of Crowded Renter Households

	Households (thousands)	Incidence Per 100 HH
All Renters	1,615	4.81
Income		
ELI (<= 30% AMI)	522	5.75
VLI (30-50% AMI)	464	7.05
LI (50-80% AMI)	366	4.91
MI (GT 80% AMI)	263	2.51
Household Size		
1 Person	NA	NA
2 Persons	54	0.61
3 Persons	44	0.85
4 Persons	205	5.39
5+ Persons	1,312	44.34

Source: HUD-PD&R tabulations of the American Housing Survey.

Exhibit 4-10. Insufficiency of Large Units is Primarily a Problem of Availability for Large Families, not Affordability



Source: HUD-PD&R tabulations of the American Housing Survey.

income renters, there are only nine units for every ten households.

Exhibit 4-11. Metropolitan Patterns of Supply of Large Units for Large Households (5+ persons and 5+ rooms only)

Income	Units per 100 Large Households		
	Affordable	Affordable and Available	Affordable, Available, and Adequate
Nation			
ELI (<30% AMI)	379.80	41.10	16.82
VLI (30-50% AMI)	508.78	94.28	45.81
LI (50-80% AMI)	551.30	109.27	54.05
Central Cities			
ELI (<30% AMI)	267.30	37.36	17.95
VLI (30-50% AMI)	421.34	86.87	45.13
LI (50-80% AMI)	467.69	98.54	51.14
Suburbs			
ELI (<30% AMI)	349.81	39.56	13.84
VLI (30-50% AMI)	510.14	85.42	42.91
LI (50-80% AMI)	566.89	105.79	53.33
Nonmetropolitan			
ELI (<30% AMI)	928.68	60.94	20.89
VLI (30-50% AMI)	792.21	140.23	55.18
LI (50-80% AMI)	769.02	150.49	64.71

Source: HUD-PD&R tabulations of the American Housing Survey.

Hispanic renter households are more likely to be crowded. In 2003, 35 percent of very-low-income Hispanic households have no severe problems yet are overcrowded according to the one-person-per-room benchmark (Appendix, Table A-9). Hispanic families are more likely to live in multi-generational households in non-caregiving relationships (Census 2003). Non-Hispanic blacks, and especially whites, are less likely to live in this arrangement³⁴ and much less likely to be overcrowded. Thus the availability of large units in regions where the Hispanic population is large is worthy of consideration.

The importance of this association is increased by the fact that Hispanics represent the fastest-growing segment of the U.S. population. The Hispanic population increased by 58 percent between 1990 and 2000, and is projected to increase another 34 percent by 2010 (U.S. Census Bureau 2004b).

Hispanics are concentrated in the West, as 43 percent of the Hispanic population lived there in 2000 (U.S.

Census Bureau 2001). The West also is the region where the incidence of crowding is twice as great as other regions (Exhibit 4-8) and that has the most severe shortage of VLI-affordable units, with only 60 units available per 100 very-low-income renters (Exhibit 4-5).

³⁴ While 8 percent of both black and Hispanic adults over 30 were grandparents living with their grandchildren in 2000 (compared with 2 percent of non-Hispanic whites over 30), only 35 percent of these Hispanic grandparents lived there to care for the grandchildren, compared with 52 percent of the black grandparents (U.S. Census Bureau 2003).

Availability of
Affordable Housing Stock

Exhibit 4-12 shows that for every 100 large very-low-income renter households in the West, only 48 large units are available. The availability of large affordable units is substantially more limited in the West than in other regions. Available large units for very-low-income renters are fully adequate in the Midwest and South, at least on a regional basis.

Exhibit 2-8 demonstrated that the number of Hispanic very-low-income renters increased by 25 percent between 2001 and 2003, which could account for most of the increase in worst case needs.

**Exhibit 4-12. Regional Patterns of Supply
of Large Units for Large Households
(5+ persons and 5+ rooms only)**

Income	Units per 100 Large Households		
	Affordable	Affordable and Available	Affordable, Available, and Adequate
Northeast			
ELI (<30% AMI)	419.11	45.77	26.48
VLI (30-50% AMI)	557.92	85.97	51.89
LI (50-80% AMI)	573.06	94.65	54.00
Midwest			
ELI (<30% AMI)	436.55	57.55	21.97
VLI (30-50% AMI)	716.76	150.61	63.09
LI (50-80% AMI)	744.47	160.67	69.99
South			
ELI (<30% AMI)	403.18	44.73	16.26
VLI (30-50% AMI)	620.25	115.11	48.74
LI (50-80% AMI)	678.78	135.06	56.91
West			
ELI (<30% AMI)	271.05	19.35	6.27
VLI (30-50% AMI)	258.98	48.26	30.27
LI (50-80% AMI)	323.38	67.79	43.58

Source: HUD-PD&R tabulations of the American Housing Survey.

APPENDIX

Works Cited

Committee on Ways and Means, U.S. House of Representatives.
*2000 Green Book: Background Material and Data on Programs within the
 Jurisdiction of the Committee on Ways and Means.* Washington, DC.
 U.S. Government Printing Office.

Hill, Martha S. 2003. "Who Has Severe Housing Cost Burdens and How
 Persistent Over Time are They?" Unpublished Manuscript, Survey
 Research Center, Institute for Social Research, University of Michigan.

Iceland, John. 2003. "Dynamics of Economic Well-Being: Poverty 1996–
 1999." *Current Population Report*, P-70-91. U.S. Census Bureau.
 Available at <http://www.census.gov/prod/2003pubs/p70-91.pdf>.

Joint Center for Housing Studies of Harvard University. 2005. "State of
 the Nation's Housing: 2005." Cambridge, MA. www.jchs.harvard.edu

Khadduri, Jill, Kimberly Burnett and David Rodda. 2003. "Targeting
 Housing Production Subsidies: Literature Review." U.S. Department of
 Housing and Urban Development, Office of Policy Development and
 Research. <http://www.huduser.org/publications/pdf/targetinglitreview.pdf>

Shroder, Mark.. 2002. "Does housing assistance perversely affect self-
 sufficiency? A review essay." *Journal of Housing Economics*.
 11: 381–417.

Susin, Scott. 2003. "Discrepancies Between Measured Income in the
 American Housing Survey (AHS) and the Current Population Survey
 (CPS): Final Report." U.S. Census Bureau Staff Papers on Income.
<http://www.census.gov/hhes/income/papers.html>

Susin, Scott. 2005. Working paper. "Comparison of Rent Burdens and
 Housing Assistance in the Survey of Income and Program Participation
 (SIPP) and the American Housing Survey (AHS): Cross-Sectional and
 Dynamic Analyses."

U.S. Census Bureau. 2001. "The Hispanic Population: 2000."
 Census 2000 Brief C2KBR/01-3.

U.S. Census Bureau. 2002. Current Housing Reports, Series H150/01,
American Housing Survey for the United States: 2001. U.S. Government
 Printing Office, Washington, DC.

U.S. Census Bureau. 2003. "Grandparents Living with Grandchildren:
 2000." Census 2000 Brief C2KBR-31.

U.S. Census Bureau. 2004a. "Housing Vacancies and Homeownership (CPS/HVS): Annual Statistics 2003 (Table 1)." Retrieved March 4, 2005, from <http://www.census.gov/hhes/www/housing/hvs/prevann.html>.

U.S. Census Bureau. 2004b. "U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin." Retrieved March 3, 2005, from <http://www.census.gov/ipc/www/usinterimproj/>.

U.S. Census Bureau. 2005. "American Housing Survey for the United States: 2003." Series H150/03, Housing and Household Economic Statistics Division. Retrieved June 16, 2005, from http://www.census.gov/hhes/www/housing/ahs/ahs01_2000wts/ahs01_2000wts.html.

U.S. Department of Health and Human Services (HHS), Administration for Children and Families, Office of Family Assistance. 2004. "Temporary Assistance for Needy Families: Sixth Annual Report to Congress." <http://www.acf.dhhs.gov/programs/ofa/indexar.htm>

U.S. Department of Housing and Urban Development, Office of Policy Development and Research. 2005a. "Programs of HUD, 2005: Major Mortgage, Grant, Assistance and Regulatory Programs." <http://www.huduser.org/intercept.asp?loc=/whatsnew/ProgramsHUD05.pdf>

U.S. Department of Housing and Urban Development, Office of Policy Development and Research. 2005b. "FY 2005 HUD Income Limits Briefing Material." <http://www.huduser.org/datasets/il/il05/index.html>

U.S. Department of Housing and Urban Development, Office of Policy Development and Research. 2004. *Codebook for the American Housing Survey, Public Use File: 1997 and Later*. <http://www.huduser.org/datasets/ahs/ahsprev.html>

U.S. Department of Housing and Urban Development, Office of Policy Development and Research. December 2003. *Trends in Worst Case Needs for Housing, 1978–1999: A Report to Congress on Worst Case Housing Needs—Plus Update on Worst Case Needs in 2001*.

Appendix A. Data on Housing Problems and Supplies of Affordable Housing

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**Table A-1a. Housing Conditions of Renter Households
by Relative Income, 2001 and 2003**

2003	Household Income as Percentage of HUD-Adjusted Area Median Family Income					All Incomes
	0-30%	31-50%	51-80%	81-120%	>120%	
Total Households (1000)	9,077	6,581	7,460	5,416	5,080	33,614
Unassisted with Severe Problems ^a	3,999	1,176	436	158	117	5,887
Unassisted with non-Severe Problems Only ^a	1,145	2,860	2,254	757	542	7,557
Unassisted with No Problems ^a	947	1,275	3,842	3,942	3,952	13,958
Assisted	2,986	1,270	929	558	469	6,211
Any with Severe Problems	5,136	1,344	476	186	131	7,273
Rent Burden >50% of Income	4,945	1,160	280	64	29	6,477
Severely Inadequate Housing	401	213	199	122	102	1,038
Any with non-Severe Problems Only ^b	1,936	3,458	2,529	855	607	9,385
Rent Burden 30-50% of Income	1,664	3,059	1,872	413	200	7,207
Moderately Inadequate Housing	364	474	497	349	331	2,017
Crowded Housing	216	403	349	148	104	1,220
Any with No Problems	2,005	1,779	4,455	4,375	4,342	16,956
2001						
Total Households (1000)	8,659	6,244	7,200	6,313	5,311	33,727
Unassisted with Severe Problems ^a	3,825	1,189	391	233	120	5,758
Unassisted with non-Severe Problems Only ^a	1,020	2,611	2,296	884	473	7,283
Unassisted with No Problems ^a	872	1,152	3,660	4,515	4,208	14,407
Assisted	2,942	1,292	853	681	510	6,279
Any with Severe Problems	5,063	1,376	457	271	143	7,310
Rent Burden >50% of Income	4,838	1,184	271	114	5	6,412
Severely Inadequate Housing	449	231	192	157	139	1,168
Any with non-Severe Problems Only ^b	1,713	3,125	2,570	1,010	539	8,957
Rent Burden 30-50% of Income	1,398	2,670	1,914	540	156	6,679
Moderately Inadequate Housing	411	441	476	333	298	1,960
Crowded Housing	219	409	343	171	120	1,262
Any with No Problems	1,882	1,744	4,173	5,032	4,629	17,460

Source: HUD-PD&R tabulations of the American Housing Surveys.

^a See Table A-3 for housing problems experienced by unassisted renters.

^b See Table A-2 for estimates of the incidence of non-severe problems without regard to whether severe problems are also present.

Data on Housing Problems

**Table A-1b. Housing Conditions of Owner Households
by Relative Income, 2001 and 2003**

2003	Household Income as Percentage of HUD-Adjusted Area Median Family Income					All Incomes
	0-30%	31-50%	51-80%	81-120%	>120%	
Total Households (1000)	6,677	7,832	12,278	14,281	31,186	72,254
Unassisted with Severe Problems	3,392	1,596	1,313	642	568	7,511
Unassisted with non-Severe Problems Only	1,517	2,232	3,226	2,844	2,413	12,233
Unassisted with No Problems	1,769	4,004	7,738	10,795	28,204	52,510
<hr/>						
Any with Severe Problems	3,392	1,596	1,313	642	568	7,511
Cost Burden >50% of Income	3,273	1,481	1,148	502	308	6,711
Severely Inadequate Housing	198	148	182	145	260	933
Any with non-Severe Problems Only	1,517	2,232	3,226	2,844	2,413	12,233
Cost Burden 30-50% of Income	1,338	1,891	2,780	2,400	1,837	10,246
Moderately Inadequate Housing	227	304	323	278	444	1,576
Crowded Housing	64	148	214	226	166	817
Any with No Problems	1,769	4,004	7,738	10,795	28,204	52,510
<hr/>						
2001						
Total Households (1000)	6,830	7,381	11,403	15,215	30,879	71,708
Unassisted with Severe Problems	3,715	1,655	1,111	772	484	7,736
Unassisted with non-Severe Problems Only	1,485	2,013	3,278	3,038	2,120	11,934
Unassisted with No Problems	1,629	3,713	7,015	11,406	28,275	52,038
<hr/>						
Any with Severe Problems	3,715	1,655	1,111	772	484	7,736
Cost Burden >50% of Income	3,590	1,553	976	585	214	6,918
Severely Inadequate Housing	208	115	160	187	270	940
Any with non-Severe Problems Only	1,485	2,013	3,278	3,038	2,120	11,934
Cost Burden 30-50% of Income	1,313	1,767	2,794	2,568	1,444	9,886
Moderately Inadequate Housing	221	237	390	347	500	1,695
Crowded Housing	69	128	239	206	205	847
Any with No Problems	1,629	3,713	7,015	11,406	28,275	52,038

Source: HUD-PD&R tabulations of the American Housing Surveys.

Table A-2a. Housing Conditions of Renters and Owners, 1978–2003
—Number of Households

	1978	1987	1991	1993	1995	1997	1999	2001	2003
Total Households (1000)	77,389	90,887	93,147	94,723	97,694	99,487	102,802	105,435	105,868
Unassisted with Severe Problems	7,692	8,180	10,430	10,350	11,744	12,206	12,203	13,494	13,398
Unassisted with non-Severe Problems Only	11,877	15,969	16,612	16,399	17,693	17,900	18,237	19,217	19,790
Unassisted with No Problems	54,714	61,939	61,302	62,950	63,023	63,682	66,163	66,445	66,468
Assisted	3,103	4,790	4,801	5,025	5,230	5,697	6,168	6,279	6,211
Cost Burden >50% of Income	5,696	8,434	8,925	9,725	11,158	12,223	12,141	13,330	13,188
Cost Burden 30–50% of Income	7,669	12,888	14,145	14,333	15,481	15,115	15,862	16,923	17,856
Severely Inadequate Housing	2,778	1,227	2,874	1,901	2,022	1,797	2,056	2,108	1,971
Moderately Inadequate Housing	4,295	5,181	4,531	4,225	4,348	5,191	4,821	4,504	4,311
Crowded Housing	3,266	2,436	2,527	2,386	2,554	2,807	2,570	2,631	2,559
Renter Households (1000)	26,919	32,724	33,351	33,472	34,150	34,000	34,007	33,727	33,614
Unassisted with Severe Problems	4,695	5,075	5,580	5,671	5,777	6,024	5,591	5,758	5,887
Unassisted with non-Severe Problems Only	5,976	7,428	7,342	7,287	7,651	7,451	7,560	7,283	7,557
Unassisted with No Problems	13,519	15,429	15,627	15,489	15,492	14,827	14,657	14,407	13,958
Assisted	2,730	4,794	4,801	5,025	5,230	5,697	6,203	6,279	6,211
Rent Burden >50% of Income	3,664	5,638	5,478	5,947	6,236	6,686	6,301	6,412	6,477
Rent Burden 30–50% of Income	4,765	6,852	6,964	7,157	7,424	6,778	7,141	6,916	7,468
Severely Inadequate Housing	1,677	861	1,347	909	849	1,072	1,183	1,168	1,038
Moderately Inadequate Housing	2,100	2,831	2,375	2,254	2,277	3,021	2,768	2,508	2,525
Crowded Housing	1,548	1,512	1,644	1,503	1,673	1,891	1,666	1,658	1,615
Owner Households (1000)	50,470	58,163	59,796	61,251	63,544	65,487	68,795	71,708	72,254
Unassisted with Severe Problems	2,524	3,112	4,850	4,678	5,967	6,182	6,604	7,736	7,511
Unassisted with non-Severe Problems Only	5,501	8,538	9,270	9,112	10,042	10,449	10,684	11,934	12,233
Unassisted with No Problems	42,445	46,531	45,675	47,461	47,531	48,855	51,507	52,038	52,510
Cost Burden >50% of Income	1,645	2,798	3,447	3,778	4,922	5,537	5,841	6,918	6,711
Cost Burden 30–50% of Income	2,428	6,037	7,181	7,176	8,057	8,337	8,716	10,007	10,388
Severely Inadequate Housing	939	349	1,527	992	1,173	725	867	940	933
Moderately Inadequate Housing	2,054	2,356	2,156	1,971	2,071	2,170	2,064	1,996	1,786
Crowded Housing	1,625	931	883	883	881	916	894	973	944

Source: HUD-PD&R tabulations of the American Housing Surveys

Data on Housing Problems

Table A-2b. Housing Conditions of Renters and Owners, 1978–2003
—Percentage of Households

	1978	1987	1991	1993	1995	1997	1999	2001	2003
Total Households	100.0%								
Unassisted with Severe Problems	9.9%	9.0%	11.2%	10.9%	12.0%	12.3%	11.9%	12.8%	12.7%
Unassisted with non-Severe Problems Only	15.3%	17.6%	17.8%	17.3%	18.1%	18.0%	17.7%	18.2%	18.7%
Unassisted with No Problems	70.7%	68.2%	65.8%	66.5%	64.5%	64.0%	64.4%	63.0%	62.8%
Assisted	4.0%	5.3%	5.2%	5.3%	5.4%	5.7%	6.0%	6.0%	5.9%
Cost Burden >50% of Income	7.4%	9.3%	9.6%	10.3%	11.4%	12.3%	11.8%	12.6%	12.5%
Cost Burden 30–50% of Income	9.9%	14.2%	15.2%	15.1%	15.8%	15.2%	15.4%	16.1%	16.9%
Severely Inadequate Housing	3.6%	1.4%	3.1%	2.0%	2.1%	1.8%	2.0%	2.0%	1.9%
Moderately Inadequate Housing	5.6%	5.7%	4.9%	4.5%	4.5%	5.2%	4.7%	4.3%	4.1%
Crowded Housing	4.2%	2.7%	2.7%	2.5%	2.6%	2.8%	2.5%	2.5%	2.4%
Renter Households	100.0%								
Unassisted with Severe Problems	17.4%	15.5%	16.7%	16.9%	16.9%	17.7%	16.4%	17.1%	17.5%
Unassisted with non-Severe Problems Only	22.2%	22.7%	22.0%	21.8%	22.4%	21.9%	22.2%	21.6%	22.5%
Unassisted with No Problems	50.2%	47.2%	46.9%	46.3%	45.4%	43.6%	43.1%	42.7%	41.5%
Assisted	10.1%	14.7%	14.4%	15.0%	15.3%	16.8%	18.2%	18.6%	18.5%
Rent Burden >50% of Income	13.6%	17.2%	16.4%	17.8%	18.3%	19.7%	18.5%	19.0%	19.3%
Rent Burden 30–50% of Income	17.7%	20.9%	20.9%	21.4%	21.7%	19.9%	21.0%	20.5%	22.2%
Severely Inadequate Housing	6.2%	2.6%	4.0%	2.7%	2.5%	3.2%	3.5%	3.5%	3.1%
Moderately Inadequate Housing	7.8%	8.7%	7.1%	6.7%	6.7%	8.9%	8.1%	7.4%	7.5%
Crowded Housing	5.8%	4.6%	4.9%	4.5%	4.9%	5.6%	4.9%	4.9%	4.8%
Owner Households	100.0%								
Unassisted with Severe Problems	5.0%	5.4%	8.1%	7.6%	9.4%	9.4%	9.6%	10.8%	10.4%
Unassisted with non-Severe Problems Only	10.9%	14.7%	15.5%	14.9%	15.8%	16.0%	15.5%	16.6%	16.9%
Unassisted with No Problems	84.1%	80.0%	76.4%	77.5%	74.8%	74.6%	74.9%	72.6%	72.7%
Cost Burden >50% of Income	3.3%	4.8%	5.8%	6.2%	7.7%	8.5%	8.5%	9.6%	9.3%
Cost Burden 30–50% of Income	4.8%	10.4%	12.0%	11.7%	12.7%	12.7%	12.7%	14.0%	14.4%
Severely Inadequate Housing	1.9%	0.6%	2.6%	1.6%	1.8%	1.1%	1.3%	1.3%	1.3%
Moderately Inadequate Housing	4.1%	4.1%	3.6%	3.2%	3.3%	3.3%	3.0%	2.8%	2.5%
Crowded Housing	3.2%	1.6%	1.5%	1.4%	1.4%	1.4%	1.3%	1.4%	1.3%

Source: HUD-PD&R tabulations of American Housing Surveys

**Table A-3. Housing Conditions of Unassisted Renter Households
by Relative Income, 2001 and 2003**

2003	Household Income as Percentage of HUD-Adjusted Area Median Family Income					All Incomes
	0-30%	31-50%	51-80%	81-120%	>120%	
Total Unassisted Households (1000)	6,093	5,309	6,531	4,858	4,611	27,402
Any with Severe Problems	3,996	1,180	436	158	117	5,887
Rent Burden >50% of Income	3,875	1,039	256	57	29	5,255
Severely Inadequate Housing	280	164	182	101	88	816
Any with non-Severe Problems Only	1,150	2,855	2,254	757	542	7,557
Rent Burden 30-50% of Income	966	2,525	1,665	372	180	5,709
Moderately Inadequate Housing	253	392	435	307	302	1,690
Crowded Housing	153	338	310	133	87	1,022
Any with No Problems	947	1,275	3,842	3,942	3,952	13,958
2001						
Total Unassisted Households (1000)	5,716	4,952	6,347	5,631	4,801	27,448
Any with Severe Problems	3,825	1,189	391	233	120	5,758
Rent Burden >50% of Income	3,692	1,029	233	94	5	5,053
Severely Inadequate Housing	292	195	163	139	115	904
Any with non-Severe Problems Only	1,020	2,611	2,296	884	473	7,283
Rent Burden 30-50% of Income	806	2,245	1,719	461	135	5,366
Moderately Inadequate Housing	287	370	417	297	265	1,635
Crowded Housing	151	353	312	151	100	1,067
Any with No Problems	872	1,152	3,660	4,515	4,208	14,407

Source: HUD-PD&R tabulations of the American Housing Surveys.

Data on Housing Problems

Table A-4. Incidence of Housing Problems among Renters by Relative Income, 2001 and 2003—Number and Percentage

	2001	2003	2001	2003
Renter Households (1000)	33,727	33,614	100.0%	100.0%
Unassisted with Severe Problems	5,758	5,887	17.1%	17.5%
Unassisted with non-Severe Problems Only	7,283	7,557	21.6%	22.5%
Unassisted with No Problems	14,407	13,958	42.7%	41.5%
Assisted	6,279	6,211	18.6%	18.5%
Any with Severe Problems	7,310	7,273	21.7%	21.6%
Rent Burden >50% of Income	6,412	6,477	19.0%	19.3%
Severely Inadequate Housing	1,168	1,038	3.5%	3.1%
Rent Burden Only ^a	5,595	5,727	16.6%	17.0%
Any with non-Severe Problems Only	8,957	9,385	26.6%	27.9%
Rent Burden 30–50% of Income	6,679	7,207	19.8%	21.4%
Moderately Inadequate Housing	1,960	2,017	5.8%	6.0%
Crowded Housing	1,262	1,220	3.7%	3.6%
Rent Burden Only	5,896	6,294	17.5%	18.7%
Any with No Problems	17,460	16,956	51.8%	50.4%
Income 0-30% HAMFI (1000)	8,659	9,077	100.0%	100.0%
Unassisted with Severe Problems	3,825	3,999	44.2%	44.1%
Unassisted with non-Severe Problems Only	1,020	1,145	11.8%	12.6%
Unassisted with No Problems	872	947	10.1%	10.4%
Assisted	2,942	2,986	34.0%	32.9%
Any with Severe Problems	5,063	5,136	58.5%	56.6%
Rent Burden >50% of Income	4,838	4,945	55.9%	54.5%
Severely Inadequate Housing	449	401	5.2%	4.4%
Rent Burden Only ^a	4,172	4,317	48.2%	47.6%
Any with non-Severe Problems Only	1,713	1,936	19.8%	21.3%
Rent Burden 30–50% of Income	1,398	1,664	16.1%	18.3%
Moderately Inadequate Housing	411	364	4.7%	4.0%
Crowded Housing	219	216	2.5%	2.4%
Rent Burden Only	1,111	1,383	12.8%	15.2%
Any with No Problems	1,882	2,005	21.7%	22.1%

	2001	2003	2001	2003
Income 30-50% HAMFI (1000)	6,244	6,581	100.0%	100.0%
Unassisted with Severe Problems	1,189	1,176	19.0%	17.9%
Unassisted with non-Severe Problems Only	2,611	2,860	41.8%	43.5%
Unassisted with No Problems	1,152	1,275	18.4%	19.4%
Assisted	1,292	1,270	20.7%	19.3%
Any with Severe Problems	1,376	1,344	22.0%	20.4%
Rent Burden >50% of Income	1,184	1,160	19.0%	17.6%
Severely Inadequate Housing	231	213	3.7%	3.2%
Rent Burden Only ^a	1,072	1,059	17.2%	16.1%
Any with non-Severe Problems Only	3,125	3,458	50.0%	52.5%
Rent Burden 30–50% of Income	2,670	3,059	42.8%	46.5%
Moderately Inadequate Housing	441	474	7.1%	7.2%
Crowded Housing	409	403	6.6%	6.1%
Rent Burden Only ^a	2,323	2,632	37.2%	40.0%
Any with No Problems	1,744	1,779	27.9%	27.0%
Income 50-80% HAMFI (1000)	7,200	7,460	100.0%	100.0%
Unassisted with Severe Problems	391	436	5.4%	5.8%
Unassisted with non-Severe Problems Only	2,296	2,254	31.9%	30.2%
Unassisted with No Problems	3,660	3,842	50.8%	51.5%
Assisted	853	929	11.8%	12.5%
Any with Severe Problems	457	476	6.3%	6.4%
Rent Burden >50% of Income	271	280	3.8%	3.8%
Severely Inadequate Housing	192	199	2.7%	2.7%
Rent Burden Only ^a	236	265	3.3%	3.6%
Any with non-Severe Problems Only	2,570	2,529	35.7%	33.9%
Rent Burden 30–50% of Income	1,914	1,872	26.6%	25.1%
Moderately Inadequate Housing	476	497	6.6%	6.7%
Crowded Housing	343	349	4.8%	4.7%
Rent Burden Only	1,800	1,716	25.0%	23.0%
Any with No Problems	4,173	4,455	58.0%	59.7%

Data on Housing Problems

	2001	2003	2001	2003
Income 80-120% HAMFI (1000)	6,313	5,416	100.0%	100.0%
Unassisted with Severe Problems	233	158	3.7%	2.9%
Unassisted with non-Severe Problems Only	884	757	14.0%	14.0%
Unassisted with No Problems	4,515	3,942	71.5%	72.8%
Assisted	681	558	10.8%	10.3%
Any with Severe Problems	271	186	4.3%	3.4%
Rent Burden >50% of Income	114	64	1.8%	1.2%
Severely Inadequate Housing	157	122	2.5%	2.3%
Rent Burden Only ^a	110	61	1.7%	1.1%
Any with non-Severe Problems Only	1,010	855	16.0%	15.8%
Rent Burden 30–50% of Income	540	413	8.6%	7.6%
Moderately Inadequate Housing	333	349	5.3%	6.4%
Crowded Housing	171	148	2.7%	2.7%
Rent Burden Only	518	376	8.2%	6.9%
Any with No Problems	5,032	4,375	79.7%	80.8%
Income >120% HAMFI (1000)	5,311	5,080	100.0%	100.0%
Unassisted with Severe Problems	120	117	2.3%	2.3%
Unassisted with non-Severe Problems Only	473	542	8.9%	10.7%
Unassisted with No Problems	4,208	3,952	79.2%	77.8%
Assisted	510	469	9.6%	9.2%
Any with Severe Problems	143	131	2.7%	2.6%
Rent Burden >50% of Income	5	29	0.1%	0.6%
Severely Inadequate Housing	139	102	2.6%	2.0%
Rent Burden Only ^a	5	25	0.1%	0.5%
Any with non-Severe Problems Only	539	607	10.1%	11.9%
Rent Burden 30–50% of Income	156	200	2.9%	3.9%
Moderately Inadequate Housing	298	331	5.6%	6.5%
Crowded Housing	120	104	2.3%	2.0%
Rent Burden Only	145	187	2.7%	3.7%
Any with No Problems	4,629	4,342	87.2%	85.5%

Source: HUD-PD&R tabulations of the American Housing Surveys

^a The estimates for "rent burden only" exclude households with any non-severe problem.

Table A-5. Incidence of Housing Problems among Very-Low-Income Renters by Household Type, 2001 and 2003—Number and Percentage

	2001	2003	2001	2003
Elderly (1000)	3,407	3,273	100.0%	100.0%
Unassisted with Severe Problems	1,182	1,129	34.7%	34.5%
Unassisted with non-Severe Problems Only	524	519	15.4%	15.9%
Unassisted with No Problems	465	496	13.6%	15.2%
Assisted	1,236	1,129	36.3%	34.5%
Any with Severe Problems	1,557	1,431	45.7%	43.7%
Rent Burden >50% of Income	1,472	1,349	43.2%	41.2%
Severely Inadequate Housing	133	128	3.9%	3.9%
Rent Burden Only ^a	1,316	1,222	38.6%	37.3%
Any with non-Severe Problems Only	842	869	24.7%	26.6%
Rent Burden 30–50% of Income	782	810	23.0%	24.7%
Moderately Inadequate Housing	121	99	3.6%	3.0%
Crowded Housing	17	2	0.5%	0.1%
Rent Burden Only	704	769	20.7%	23.5%
Any with No Problems	1,007	974	29.6%	29.8%
Families with Children (1000)	5,985	6,379	100.0%	100.0%
Unassisted with Severe Problems	1,807	1,849	30.2%	29.0%
Unassisted with non-Severe Problems Only	1,757	1,901	29.4%	29.8%
Unassisted with No Problems	605	834	10.1%	13.1%
Assisted	1,816	1,795	30.3%	28.1%
Any with Severe Problems	2,435	2,448	40.7%	38.4%
Rent Burden >50% of Income	2,256	2,307	37.7%	36.2%
Severely Inadequate Housing	300	241	5.0%	3.8%
Rent Burden Only ^a	1,907	2,007	31.9%	31.5%
Any with non-Severe Problems Only	2,315	2,493	38.7%	39.1%
Rent Burden 30–50% of Income	1,818	2,101	30.4%	32.9%
Moderately Inadequate Housing	395	375	6.6%	5.9%
Crowded Housing	597	592	10.0%	9.3%
Rent Burden Only	1,397	1,603	23.3%	25.1%
Any with No Problems	1,235	1,439	20.6%	22.6%

Data on Housing Problems

	2001	2003	2001	2003
Non-elderly Disabled (expanded; 1000)	1,207	1,403	100.0%	100.0%
Unassisted with Severe Problems	407	511	33.7%	36.4%
Unassisted with non-Severe Problems Only	177	224	14.7%	16.0%
Unassisted with No Problems	108	100	8.9%	7.1%
Assisted	514	568	42.6%	40.5%
Any with Severe Problems	569	653	47.1%	46.5%
Rent Burden >50% of Income	543	606	45.0%	43.2%
Severely Inadequate Housing	53	76	4.4%	5.4%
Rent Burden Only ^a	450	495	37.3%	35.3%
Any with non-Severe Problems Only	315	385	26.1%	27.4%
Rent Burden 30–50% of Income	290	335	24.0%	23.9%
Moderately Inadequate Housing	62	94	5.1%	6.7%
Crowded Housing	2	0	0.2%	0.0%
Rent Burden Only	251	291	20.8%	20.7%
Any with No Problems	323	364	26.8%	25.9%
Other Households (1000)	4,304	4,603	100.0%	100.0%
Unassisted with Severe Problems	1,618	1,686	37.6%	36.6%
Unassisted with non-Severe Problems Only	1,172	1,361	27.2%	29.6%
Unassisted with No Problems	846	792	19.7%	17.2%
Assisted	669	764	15.5%	16.6%
Any with Severe Problems	1,878	1,948	43.6%	42.3%
Rent Burden >50% of Income	1,752	1,843	40.7%	40.0%
Severely Inadequate Housing	194	170	4.5%	3.7%
Rent Burden Only ^a	1,570	1,652	36.5%	35.9%
Any with non-Severe Problems Only	1,366	1,647	31.7%	35.8%
Rent Burden 30–50% of Income	1,180	1,476	27.4%	32.1%
Moderately Inadequate Housing	275	271	6.4%	5.9%
Crowded Housing	13	26	0.3%	0.6%
Rent Burden Only	1,081	1,351	25.1%	29.4%
Any with No Problems	1,060	1,008	24.6%	21.9%

Source: HUD-PD&R tabulations of the American Housing Surveys.

^a The estimates for "rent burden only" exclude households with any non-severe problem.

**Table A-6a. Housing Problems and Characteristics
of Very-Low-Income Renters by Household Type, 2003**

	Total	Elderly, No Children	Families with Children	Other Families	Nonfamily Reporting SSI Income	Other Non- family
Renter Households (1000)	15,658	3,273	6,379	992	1,403	3,611
Number of Children	13,000	0	13,000	0	0	0
Number of Persons	36,386	4,145	23,523	2,278	1,839	4,600
Children/Household	0.83	0.00	2.04	0.00	0.00	0.00
Persons/Household	2.32	1.27	3.69	2.30	1.31	1.27
Unassisted with Severe Problems	5,176	1,129	1,849	296	511	1,390
Unassisted with non-Severe Problems Only	4,004	519	1,901	363	224	998
Unassisted with No Problems	2,222	496	834	150	100	642
Assisted	4,256	1,129	1,795	183	568	581
Any with Severe Problems	6,480	1,431	2,448	358	653	1,590
Rent Burden >50% of Income	6,105	1,349	2,307	335	606	1,508
Severely Inadequate Housing	615	128	241	41	76	129
Rent Burden Only ^a	5,376	1,222	2,007	299	495	1,353
Any with non-Severe Problems Only	5,394	869	2,493	432	385	1,215
Rent Burden 30-50% of Income	4,722	810	2,101	398	335	1,078
Moderately Inadequate Housing	839	99	375	61	94	210
Crowded Housing	619	2	592	15	0	11
Rent Burden Only	4,014	769	1,603	356	291	995
Any with No Problems	3,784	974	1,439	202	364	806

Data on Housing Problems

	Total	Elderly, No Children	Families with Children	Other Families	Nonfamily Reporting SSI Income	Other Non- family
Other Characteristics						
One Person in Household	6,563	2,501	129	0	1,040	2,894
Husband-Wife Family	3,318	468	2,148	571	130	0
Female Head	9,561	2,182	4,367	446	779	1,787
Minority Head	7,956	1,089	4,180	605	556	1,526
AFDC/SSI Income	2,751	504	1,359	0	888	0
Social Security Income	4,011	2,815	479	0	716	0
Income Below 50% Poverty	3,023	414	1,486	128	196	799
Income Below Poverty	7,668	1,417	3,550	291	905	1,504
Income Below 150% of Poverty	12,151	2,493	5,479	621	1,218	2,339
High School Graduate	10,241	1,690	4,015	673	840	3,023
Two+ Years Post High School	2,297	371	646	220	191	870
Earnings at Minimum Wage:						
At Least Half Time	8,609	415	4,570	837	275	2,512
At Least Full Time	6,778	220	3,790	725	132	1,911
Earnings Main Source of Income	9,063	326	4,750	895	205	2,888
Housing Rated Poor	1,063	79	570	75	107	232
Housing Rated Good+	11,060	2,684	4,245	675	981	2,475
Neighborhood Rated Poor	1,344	88	742	92	141	281
Neighborhood Rated Good+	10,603	2,613	4,005	685	928	2,372
In Central Cities	7,466	1,395	3,080	451	633	1,907
Suburbs	5,506	1,236	2,306	399	418	1,147
Northeast	3,444	1,018	1,221	218	388	599
South	5,294	892	2,315	336	445	1,306
West	3,592	576	1,629	293	261	833

Source: HUD-PD&R tabulations of the 2003 American Housing Survey.

^a The estimates for "rent burden only" exclude households with any non-severe problem.

**Table A-6b. Housing Problems and Characteristics
of Extremely-Low-Income Renters by Household Type, 2003**

	Total	Elderly, No Children	Families with Children	Other Families	Nonfamily Reporting SSI Income	Other Non- family
Renter Households (1000)	9,077	2,199	3,546	370	1,062	1,900
Number of Children	7,419	0	7,419	0	0	0
Number of Persons	20,019	2,709	12,810	854	1,298	2,349
Children/Household	0.82	0.00	2.09	0.00	0.00	0.00
Persons/Household	2.21	1.23	3.61	2.30	1.22	1.24
Unassisted with Severe Problems	3,999	862	1,474	186	460	1,017
Unassisted with non-Severe Problems Only	1,145	203	560	67	84	231
Unassisted with No Problems	947	272	286	36	45	308
Assisted	2,986	862	1,226	81	473	344
Any with Severe Problems	5,136	1,134	2,016	219	590	1,176
Rent Burden >50% of Income	4,945	1,086	1,954	216	552	1,137
Severely Inadequate Housing	401	94	154	13	66	75
Rent Burden Only ^a	4,317	969	1,681	188	454	1,025
Any with non-Severe Problems Only	1,936	435	882	88	221	309
Rent Burden 30-50% of Income	1,664	395	767	73	200	228
Moderately Inadequate Housing	364	58	139	22	43	103
Crowded Housing	216	2	206	6		3
Rent Burden Only	1,383	376	564	61	179	203
Any with No Problems	2,005	630	648	63	250	414

Data on Housing Problems

	Total	Elderly, No Children	Families with Children	Other Families	Nonfamily Reporting SSI Income	Other Non- family
Other Characteristics						
One Person in Household	4,290	1,751	106	0	866	1,566
Husband-Wife Family	1,421	262	886	208	66	0
Female Head	5,913	1,502	2,629	186	613	982
Minority Head	4,668	774	2,422	229	421	823
AFDC/SSI Income	2,129	415	1,012	0	702	0
Social Security Income	2,649	1,844	293	0	512	0
Income Below 50% Poverty	3,023	414	1,486	128	196	799
Income Below Poverty	7,209	1,405	3,163	277	904	1,460
Income Below 150% of Poverty	8,924	2,143	3,527	357	1,047	1,849
High School Graduate	5,557	1,055	2,096	238	612	1,557
Two+ Years Post High School	1,209	233	289	83	136	467
Earnings at Minimum Wage:						
At Least Half Time	3,122	104	1,853	225	68	872
At Least Full Time	1,639	37	1,161	118	7	316
Earnings Main Source of Income	3,845	119	2,115	286	58	1,267
Housing Rated Poor	667	51	362	41	92	121
Housing Rated Good+	6,361	1,811	2,285	247	761	1,257
Neighborhood Rated Poor	815	56	477	29	107	147
Neighborhood Rated Good+	6,043	1,743	2,096	257	720	1,226
In Central Cities	4,474	977	1,755	194	501	1,046
Suburbs	3,040	829	1,211	130	300	570
Northeast	2,138	712	699	87	316	323
South	3,085	593	1,330	139	338	685
West	1,894	367	809	101	183	435

Source: HUD-PD&R tabulations of the 2003 American Housing Survey .

^a The estimates for "rent burden only" exclude households with any non-severe problem.

Table A-7a. Housing Problems and Characteristics of Worst-Case Renters by Household Type, 2003

	Total	Elderly, No Children	Families with Children	Other Families	Nonfamily Reporting SSI Income	Other Non- family
Renter Households (1000)	5,176	1,129	1,849	296	511	1,390
Number of Children	3,732	0	3,732	0	0	0
Number of Persons	11,390	1,490	6,733	666	654	1,847
Children/Household	0.72	0.00	2.02	0.00	0.00	0.00
Persons/Household	2.20	1.32	3.64	2.25	1.28	1.33
Unassisted with Severe Problems	5,176	1,129	1,849	296	511	1,390
Unassisted with non-Severe Problems Only	5,176	1,129	1,849	296	511	1,390
Unassisted with No Problems Assisted						
Any with Severe Problems	5,176	1,129	1,849	296	511	1,390
Rent Burden >50% of Income	4,914	1,067	1,764	279	486	1,318
Severely Inadequate Housing	444	97	167	27	50	103
Rent Burden Only ^a	4,330	969	1,517	252	398	1,194
Any with non-Severe Problems Only	0	0	0	0	0	0
Rent Burden 30-50% of Income	0	0	0	0	0	0
Moderately Inadequate Housing	0	0	0	0	0	0
Crowded Housing	0	0	0	0	0	0
Rent Burden Only	0	0	0	0	0	0
Any with No Problems	0	0	0	0	0	0

Data on Housing Problems

	Total	Elderly, No Children	Families with Children	Other Families	Nonfamily Reporting SSI Income	Other Non- family
Other Characteristics						
One Person in Household	2,337	821	50	0	386	1,080
Husband-Wife Family	984	185	584	178	36	0
Female Head	3,082	717	1,281	138	271	674
Minority Head	2,417	352	1,160	176	193	536
AFDC/SSI Income	953	154	492	0	307	0
Social Security Income	1,430	992	187	0	252	0
Income Below 50% Poverty	1,310	177	619	60	102	351
Income Below Poverty	3,322	577	1,417	137	395	796
Income Below 150% of Poverty	4,556	941	1,739	241	489	1,145
High School Graduate	3,494	642	1,132	204	318	1,197
Two+ Years Post High School	918	153	202	79	78	405
Earnings at Minimum Wage:						
At Least Half Time	2,368	90	1,116	220	61	880
At Least Full Time	1,508	46	763	162	25	513
Earnings Main Source of Income	2,877	95	1,252	271	57	1,202
Housing Rated Poor	385	40	197	21	41	87
Housing Rated Good+	3,529	890	1,156	201	327	955
Neighborhood Rated Poor	402	26	198	25	40	114
Neighborhood Rated Good+	3,516	883	1,180	207	320	925
In Central Cities	2,532	505	840	151	235	801
Suburbs	1,987	470	776	120	177	444
Northeast	1,146	358	369	76	136	207
South	1,649	318	585	87	168	491
West	1,371	185	596	108	111	370

Source: HUD-PD&R tabulations of the 2003 American Housing Survey .

^a The estimates for "rent burden only" exclude households with any non-severe problem.

**Table A-7b. Housing Problems and Characteristics
of Extremely-Low-Income Worst-Case Renters by Household Type, 2003**

	Total	Elderly, No Childrer	Families with Children	Other Families	Nonfamily Reporting SSI Income	Other Non- family
Renter Households (1000)	3,999	862	1,474	186	460	1,017
Number of Children	3,056	0	3,056	0	0	0
Number of Persons	8,738	1,111	5,351	414	564	1,297
Children/Household	0.76	0.00	2.07	0.00	0.00	0.00
Persons/Household	2.18	1.29	3.63	2.23	1.23	1.28
Unassisted with Severe Problems	3,999	862	1,474	186	460	1,017
Unassisted with non-Severe Problems Only	3,999	862	1,474	186	460	1,017
Unassisted with No Problems	0	0	0	0	0	0
Assisted	0	0	0	0	0	0
Any with Severe Problems	3,999	862	1,474	186	460	1,017
Rent Burden >50% of Income	3,878	822	1,446	183	444	982
Severely Inadequate Housing	280	73	102	8	40	57
Rent Burden Only ^a	3,379	734	1,224	160	363	898
Any with non-Severe Problems Only	0	0	0	0	0	0
Rent Burden 30-50% of Income	0	0	0	0	0	0
Moderately Inadequate Housing	0	0	0	0	0	0
Crowded Housing	0	0	0	0	0	0
Rent Burden Only	0	0	0	0	0	0
Any with No Problems	0	0	0	0	0	0

Data on Housing Problems

	Total	Elderly, No Childrer	Families with Children	Other Families	Nonfamily Reporting SSI Income	Other Non- family
Other Characteristics						
One Person in Household	1,883	647	50	0	369	817
Husband-Wife Family	684	125	423	109	27	0
Female Head	2,416	553	1,049	89	236	489
Minority Head	1,889	284	926	112	171	397
AFDC/SSI Income	860	139	443	0	279	0
Social Security Income	1,122	745	151	0	226	0
Income Below 50% Poverty	1,310	177	619	60	102	351
Income Below Poverty	3,236	572	1,349	137	395	783
Income Below 150% of Poverty	3,924	840	1,467	180	458	980
High School Graduate	2,622	477	866	125	287	869
Two+ Years Post High School	651	109	137	49	67	290
Earnings at Minimum Wage:						
At Least Half Time	1,486	38	774	110	33	530
At Least Full Time	689	13	442	52	5	176
Earnings Main Source of Income	2,039	54	929	160	36	860
Housing Rated Poor	295	29	151	13	38	64
Housing Rated Good+	2,724	679	913	135	304	692
Neighborhood Rated Poor	298	21	153	13	38	73
Neighborhood Rated Good+	2,689	661	919	134	292	683
In Central Cities	1,992	398	681	108	218	587
Suburbs	1,458	351	582	60	148	317
Northeast	891	283	285	48	126	149
South	1,317	253	488	56	153	367
West	960	120	433	67	87	253

Source: HUD-PD&R tabulations of the 2003 American Housing Survey.

^a The estimates for "rent burden only" exclude households with any non-severe problem.

Table A-9. Incidence of Housing Problems among Very-Low-Income Renters by Race and Ethnicity, 2001 and 2003—Number and Percentage

	2001	2003	2001	2003
Non-Hispanic White (1000)	7,604	7,702	100.0%	100.0%
Unassisted with Severe Problems	2,758	2,758	36.3%	35.8%
Unassisted with non-Severe Problems Only	1,772	1,780	23.3%	23.1%
Unassisted with No Problems	1,257	1,306	16.5%	17.0%
Assisted	1,817	1,858	23.9%	24.1%
Any with Severe Problems	3,329	3,260	43.8%	42.3%
Rent Burden >50% of Income	3,196	3,113	42.0%	40.4%
Severely Inadequate Housing	242	248	3.2%	3.2%
Rent Burden Only ^a	2,866	2,795	37.7%	36.3%
Any with non-Severe Problems Only	2,261	2,380	29.7%	30.9%
Rent Burden 30–50% of Income	2,004	2,162	26.4%	28.1%
Moderately Inadequate Housing	353	310	4.6%	4.0%
Crowded Housing	105	105	1.4%	1.4%
Rent Burden Only	1,820	1,989	23.9%	25.8%
Any with No Problems	2,015	2,062	26.5%	26.8%
Non-Hispanic Black (1000)	3,809	3,750	100.0%	100.0%
Unassisted with Severe Problems	1,150	1,040	30.2%	27.7%
Unassisted with non-Severe Problems Only	786	921	20.6%	24.6%
Unassisted with No Problems	388	443	10.2%	11.8%
Assisted	1,485	1,346	39.0%	35.9%
Any with Severe Problems	1,692	1,501	44.4%	40.0%
Rent Burden >50% of Income	1,546	1,398	40.6%	37.3%
Severely Inadequate Housing	231	169	6.1%	4.5%
Rent Burden Only ^a	1,282	1,186	33.7%	31.6%
Any with non-Severe Problems Only	1,212	1,343	81.6%	99.8%
Rent Burden 30–50% of Income	996	1,147	67.1%	85.2%
Moderately Inadequate Housing	294	292	19.8%	21.7%
Crowded Housing	120	100	8.1%	7.4%
Rent Burden Only	822	962	55.4%	71.5%
Any with No Problems	904	906	23.7%	24.2%

Data on Housing Problems

	2001	2003	2001	2003
Hispanic (1000)	2,614	3,260	100.00%	100.00%
Unassisted with Severe Problems	789	1,035	30.2%	31.7%
Unassisted with non-Severe Problems Only	838	1,070	32.1%	32.8%
Unassisted with No Problems	301	346	11.5%	10.6%
Assisted	685	809	26.2%	24.8%
Any with Severe Problems	1,024	1,301	39.2%	39.9%
Rent Burden >50% of Income	921	1,195	35.2%	36.7%
Severely Inadequate Housing	159	162	6.1%	5.0%
Rent Burden Only ^a	779	1,053	29.8%	32.3%
Any with non-Severe Problems Only	1,054	1,370	135.3%	130.1%
Rent Burden 30–50% of Income	817	1,147	104.9%	108.9%
Moderately Inadequate Housing	148	194	19.0%	18.4%
Crowded Housing	342	372	43.9%	35.3%
Rent Burden Only	595	840	76.4%	79.8%
Any with No Problems	536	588	20.5%	18.0%

Source: HUD-PD&R tabulations of the American Housing Surveys

^a The estimates for "rent burden only" exclude households with any non-severe problem.

Table A-10. Incidence of Housing Problems among Very-Low-Income Renters by Region, 2001 and 2003—Number and Percentage

	2001	2003	2001	2003
Northeast (1000)	3,446	3,444	100.0%	100.0%
Unassisted with Severe Problems	1,143	1,146	33.2%	33.3%
Unassisted with non-Severe Problems Only	684	701	19.8%	20.4%
Unassisted with No Problems	453	485	13.1%	14.1%
Assisted	1,166	1,111	33.8%	32.3%
Any with Severe Problems	1,541	1,507	44.7%	43.8%
Rent Burden >50% of Income	1,406	1,392	40.8%	40.4%
Severely Inadequate Housing	227	184	6.6%	5.3%
Rent Burden Only ^a	1,212	1,218	35.2%	35.4%
Any with non-Severe Problems Only	1,020	1,043	29.6%	30.3%
Rent Burden 30–50% of Income	864	899	25.1%	26.1%
Moderately Inadequate Housing	169	150	4.9%	4.4%
Crowded Housing	97	103	2.8%	3.0%
Rent Burden Only	768	797	22.3%	23.1%
Any with No Problems	885	895	25.7%	26.0%
Midwest (1000)	3,005	3,327	100.0%	100.0%
Unassisted with Severe Problems	916	1,009	30.5%	30.3%
Unassisted with non-Severe Problems Only	709	858	23.6%	25.8%
Unassisted with No Problems	454	510	15.1%	15.3%
Assisted	927	950	30.8%	28.6%
Any with Severe Problems	1,188	1,266	39.5%	38.1%
Rent Burden >50% of Income	1,105	1,217	36.8%	36.6%
Severely Inadequate Housing	130	81	4.3%	2.4%
Rent Burden Only ^a	970	1,105	32.3%	33.2%
Any with non-Severe Problems Only	973	1,182	32.4%	35.5%
Rent Burden 30–50% of Income	855	1,063	28.5%	32.0%
Moderately Inadequate Housing	186	152	6.2%	4.6%
Crowded Housing	56	73	1.9%	2.2%
Rent Burden Only	735	972	24.5%	29.2%
Any with No Problems	844	879	28.1%	26.4%

Data on Housing Problems

	2001	2003	2001	2003
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South (1000)	4,860	5,294	100.00%	100.00%
Unassisted with Severe Problems	1,601	1,649	32.9%	31.1%
Unassisted with non-Severe Problems Only	1,256	1,470	25.8%	27.8%
Unassisted with No Problems	738	847	15.2%	16.0%
Assisted	1,265	1,328	26.0%	25.1%
Any with Severe Problems	2,039	2,063	42.0%	39.0%
Rent Burden >50% of Income	1,953	1,951	40.2%	36.9%
Severely Inadequate Housing	136	195	2.8%	3.7%
Rent Burden Only ^a	1,691	1,683	34.8%	31.8%
Any with non-Severe Problems Only	1,624	1,906	33.4%	36.0%
Rent Burden 30–50% of Income	1,325	1,649	27.3%	31.1%
Moderately Inadequate Housing	355	391	7.3%	7.4%
Crowded Housing	200	198	4.1%	3.7%
Rent Burden Only	1,106	1,339	22.8%	25.3%
Any with No Problems	1,196	1,324	24.6%	25.0%
<hr/>				
West (1000)	3,592	3,592	100.0%	100.0%
Unassisted with Severe Problems	1,354	1,371	37.7%	38.2%
Unassisted with non-Severe Problems Only	981	975	27.3%	27.1%
Unassisted with No Problems	380	380	10.6%	10.6%
Assisted	877	866	24.4%	24.1%
Any with Severe Problems	1,670	1,644	46.5%	45.8%
Rent Burden >50% of Income	1,560	1,546	43.4%	43.0%
Severely Inadequate Housing	186	155	5.2%	4.3%
Rent Burden Only ^a	1,370	1,370	38.1%	38.1%
Any with non-Severe Problems Only	1,221	1,263	34.0%	35.2%
Rent Burden 30–50% of Income	1,024	1,112	28.5%	31.0%
Moderately Inadequate Housing	142	146	4.0%	4.1%
Crowded Housing	276	246	7.7%	6.8%
Rent Burden Only	825	907	23.0%	25.3%
Any with No Problems	701	686	19.5%	19.1%

Source: HUD-PD&R tabulations of the American Housing Surveys

^a The estimates for "rent burden only" exclude households with any non-severe problem.

Table A-11. Incidence of Housing Problems among Very-Low-Income Renters by Metropolitan Location, 2001 and 2003—Number and Percentage

	2001	2003	2001	2003
Central Cities (1000)	7,287	7,466	100.0%	100.0%
Unassisted with Severe Problems	2,518	2,532	34.6%	33.9%
Unassisted with non-Severe Problems Only	1,769	1,869	24.3%	25.0%
Unassisted with No Problems	828	968	11.4%	13.0%
Assisted	2,172	2,096	29.8%	28.1%
Any with Severe Problems	3,270	3,194	44.9%	42.8%
Rent Burden >50% of Income	3,039	2,951	41.7%	39.5%
Severely Inadequate Housing	405	373	5.6%	5.0%
Rent Burden Only ^a	2,580	2,560	35.4%	34.3%
Any with non-Severe Problems Only	2,410	2,546	33.1%	34.1%
Rent Burden 30–50% of Income	1,998	2,216	27.4%	29.7%
Moderately Inadequate Housing	478	401	6.6%	5.4%
Crowded Housing	327	332	4.5%	4.4%
Rent Burden Only	1,659	1,841	22.8%	24.7%
Any with No Problems	1,607	1,727	22.1%	23.1%
Suburbs (1000)	5,147	5,506	100.0%	100.0%
Unassisted with Severe Problems	1,797	1,987	34.9%	36.1%
Unassisted with non-Severe Problems Only	1,272	1,415	24.7%	25.7%
Unassisted with No Problems	776	767	15.1%	13.9%
Assisted	1,302	1,337	25.3%	24.3%
Any with Severe Problems	2,280	2,438	44.3%	44.3%
Rent Burden >50% of Income	2,164	2,342	42.0%	42.5%
Severely Inadequate Housing	167	176	3.2%	3.2%
Rent Burden Only ^a	1,976	2,108	38.4%	38.3%
Any with non-Severe Problems Only	1,620	1,852	31.5%	33.6%
Rent Burden 30–50% of Income	1,419	1,657	27.6%	30.1%
Moderately Inadequate Housing	205	237	4.0%	4.3%
Crowded Housing	197	225	3.8%	4.1%
Rent Burden Only	1,227	1,425	23.8%	25.9%
Any with No Problems	1,247	1,216	24.2%	22.1%

Data on Housing Problems

	2001	2003	2001	2003
Non-metropolitan (1000)	2,470	2,685	100.00%	100.00%
Unassisted with Severe Problems	699	657	28.3%	24.5%
Unassisted with non-Severe Problems Only	590	720	23.9%	26.8%
Unassisted with No Problems	420	486	17.0%	18.1%
Assisted	761	823	30.8%	30.7%
Any with Severe Problems	888	848	36.0%	31.6%
Rent Burden >50% of Income	820	812	33.2%	30.2%
Severely Inadequate Housing	108	65	4.4%	2.4%
Rent Burden Only ^a	688	709	27.9%	26.4%
Any with non-Severe Problems Only	808	996	32.7%	37.1%
Rent Burden 30–50% of Income	651	850	26.4%	31.7%
Moderately Inadequate Housing	170	200	6.9%	7.4%
Crowded Housing	104	63	4.2%	2.3%
Rent Burden Only	547	748	22.1%	27.9%
Any with No Problems	773	841	31.3%	31.3%
U.S. Total (1000)	14,903	15,658	100.0%	100.0%
Unassisted with Severe Problems	5,014	5,176	33.6%	33.1%
Unassisted with non-Severe Problems Only	3,631	4,004	24.4%	25.6%
Unassisted with No Problems	2,024	2,222	13.6%	14.2%
Assisted	4,235	4,256	28.4%	27.2%
Any with Severe Problems	6,439	6,480	43.2%	41.4%
Rent Burden >50% of Income	6,023	6,105	40.4%	39.0%
Severely Inadequate Housing	680	615	4.6%	3.9%
Rent Burden Only ^a	5,244	5,376	35.2%	34.3%
Any with non-Severe Problems Only	4,838	5,394	32.5%	34.4%
Rent Burden 30–50% of Income	4,069	4,722	27.3%	30.2%
Moderately Inadequate Housing	853	839	5.7%	5.4%
Crowded Housing	628	619	4.2%	4.0%
Rent Burden Only	3,433	4,014	23.0%	25.6%
Any with No Problems	3,626	3,784	24.3%	24.2%

Source: HUD-PD&R tabulations of the American Housing Surveys

^a The estimates for "rent burden only" exclude households with any non-severe problem.

**Table A-12. Households Occupying U.S. Rental Units,
by Affordability of Rent and Income of Occupants, 2003**

Relative Income of Households	Households (thousands) by Unit Affordability Category (percent of HAMFI needed to afford the highest rent in the category)												Total
	10	20	30	40	50	60	70	80	90	100	110	120+	
Extremely Low Income (≤30% HAMFI)	845	1,490	1,197	1,533	1,664	1,109	603	289	81	71	61	134	9,077
Very Low Income (30-50%)	255	351	590	1,330	1,632	1,165	588	325	86	93	62	104	6,581
Low Income (50-80%)	319	269	371	1,165	1,676	1,612	914	510	182	145	90	207	7,460
Middle Income (>80%)	324	303	320	818	1,656	2,068	1,632	1,221	571	431	308	844	10,496
Total	1,744	2,413	2,478	4,846	6,629	5,954	3,737	2,345	920	740	521	1,289	33,614
Vacant units for rent	147	91	226	569	820	727	451	303	159	99	86	285	3,963

Source: HUD-PD&R tabulations of the American Housing Surveys

Data on Housing Problems

**Table A-13. Renters and Rental Units Affordable and Available to Them,
by Relative Income, 1985-2003**

	1985	1987	1989	1991	1993	1995	1997	1999	2001 ^c	2003
Renter Households (1000)	32,280	32,724	33,767	33,351	33,472	34,150	34,000	34,007	34,042	33,614
Extremely Low Income (≤30% HAMFI)	8,147	7,488	7,890	8,392	8,761	8,637	9,215	8,513	8,739	9,077
Very Low Income (30-50%)	5,148	5,444	5,429	5,770	5,995	5,897	5,889	6,243	6,315	6,581
Low Income (50-80%)	6,452	6,650	6,903	6,933	6,383	7,205	6,591	7,270	7,251	7,460
Middle Income (>80%)	12,534	13,141	13,546	12,256	12,334	12,411	12,305	11,981	11,737	10,496
Affordable Units^a (1000)	35,147	35,970	36,562	36,232	36,361	36,924	37,186	37,018	37,197	37,577
Extremely Low Income (≤30% HAMFI)	6,194	6,268	7,090	7,160	7,033	6,633	6,937	6,683	6,870	7,098
Very Low Income (30-50%)	9,362	9,289	10,052	10,693	10,340	9,933	10,826	12,089	12,366	12,863
Low Income (50-80%)	14,003	14,391	13,823	13,880	14,284	15,389	15,012	14,222	13,634	13,518
Middle Income (>80%)	5,588	6,022	5,597	4,499	4,704	4,969	4,411	4,023	4,328	4,099
Affordable and Available Units^b (1000)	35,147	35,970	36,562	36,232	36,361	36,924	37,186	37,018	37,197	37,577
Extremely Low Income (≤30% HAMFI)	3,500	3,318	3,866	4,104	4,074	3,790	3,901	3,573	3,803	3,996
Very Low Income (30-50%)	6,459	6,462	6,779	7,231	7,230	6,799	7,304	7,905	8,132	8,744
Low Income (50-80%)	10,687	10,830	10,545	10,947	10,994	12,026	11,882	11,841	11,665	12,396
Middle Income (>80%)	14,500	15,361	15,372	13,949	14,063	14,310	14,100	13,700	13,597	12,441

Source: HUD-PD&R tabulations of the American Housing Surveys.

^a Affordable units are rental units, whether vacant or occupied, that rent for no more than 30 percent of specified income levels (relative to the HUD-adjusted area median family income).

^b Affordable and available units are rental units that are affordable as described above, and also either currently available for rent or already occupied by a household with the specified income level.

^c 2001 estimates are based on 1990 Census weights rather than the 2000 weights used elsewhere in this report.

Appendix B. Concepts and Methodology Used to Estimate Worst Case Needs

To accurately estimate worst case needs for federal rental assistance from American Housing Survey (AHS) data, it is essential to determine whether household incomes fall below HUD's official very-low-income limits (50 percent of HUD-adjusted area median family income (HAMFI, also termed AMI)), whether a household already receives housing assistance, and whether an unassisted income-eligible household has one or more of the priority problems that formerly conferred preference in tenant selection for assistance (rent burdens exceeding 50 percent of income, substandard housing, or being involuntarily displaced).

This appendix discusses the essential concepts and methods used to produce estimates and tabulations of worst case needs using 2001 and 2003 AHS microdata. The discussion also highlights limitations of the data and issues relating to the consistency of estimates in this report with those in previous reports on worst case needs.

Household and Family Types

Family—The “families” eligible for HUD rental assistance programs have traditionally included households with relatives, households with children, elderly single persons age 62 or older, and single persons with disabilities. The Cranston-Gonzalez National Affordable Housing Act of 1990 broadened the statutory definition of “family” in a way that makes all households eligible, including households comprising only nonelderly singles living alone or with other unrelated singles. In this report, however, the term “family” refers only to “family households” in which one or more persons in the household are related to the householder by birth, marriage, or adoption.

Families with children—Households with a child under age 18 present.

Elderly—Household in which the householder or spouse is age 62 or older, and no children are present.

Other families—Households with a nonelderly householder and no children in which at least one person is related to the householder by birth, marriage, or adoption; or with subfamilies whose members are related to each other by birth, marriage, or adoption.

Nonfamily households—Households with a single nonelderly person living alone or only with non-relatives.

Households having adult members with disabilities—This category conceptually ought to include all nonelderly households with adults with significant physical or mental disabilities. Unfortunately, no available data source counts these households perfectly. The AHS proxy used in previous

reports was an underestimate because it counted only non-elderly single persons living alone or with non-relatives who report receiving Supplemental Security Income (SSI) income.

Based on research with the 1995 AHS supplement on physical disabilities, this report uses an expanded proxy. HUD program data suggest that this expanded proxy likewise undercounts disabled households, as the program data show appreciably more households (without children) having members with disabilities receiving rental assistance.³⁵ These issues are discussed extensively in the previous worst case needs report (HUD 2003, A-46). The SIPP data presented in Chapter 3 of this report measure disability directly, and estimates of non-elderly households with disabilities produced with the SIPP data are similar to estimates produced with the AHS.

Housing Problems

Rent or cost burden—A ratio between housing costs (including utilities) and household income that exceeds 30 percent, which is a conventional standard for housing affordability. To the extent that respondents underreport total income, the AHS estimates may overcount the number of households with cost burden. A “severe” cost burden exceeds 50 percent of reported income. A “moderate” cost burden exceeds 30 percent but is less than or equal to 50 percent of reported income. Cost burdens only qualify as potential worst case needs if they are severe rent burdens. Households reporting zero or negative income are defined as having no cost burden.

Inadequate housing—Housing with severe or moderate physical problems, as defined in the AHS since 1984.³⁶ Severe inadequacies constitute potential worst case needs but moderate inadequacies do not. Briefly, a unit is defined as having severe physical inadequacies if it has any one of the following five problems:

- *Plumbing.* Lacking piped hot water or a flush toilet or lacking both bathtub and shower, all for the exclusive use of the unit.

³⁵ Social Security Administration (SSA) data on SSI recipients who are blind or have other disabilities provide a basis for making more complete estimates of the number of very-low-income renters with SSI income who receive HUD assistance or have a severe rent burden. But even the SSA data are incomplete because they exclude very-low-income persons with disabilities who have incomes above SSI cutoffs. HUD (2001) estimated that 1.1 million worst case households included persons with disabilities. This estimate was made by increasing the AHS expanded proxy estimates to account for both known sources of undercount.

³⁶ The AHS rates housing units using a three-level measure: adequate, moderately inadequate, and severely inadequate. The questions underlying definitions of inadequate housing were changed in the 1997 AHS questionnaire to improve accuracy. For detail, see the entry for the variable ZADEQ in the *Codebook for the American Housing Survey, Public Use File: 1997 and Later*. The most recent version is available for download at <http://www.huduser.org/datasets/ahs/ahsprev.html>.

- *Heating.* Having been uncomfortably cold last winter for 24 hours or more, or three times for at least six hours each, due to broken-down heating equipment.
- *Electrical.* Having no electricity or having all of the following three electrical problems: exposed wiring, a room with no working wall outlet, and three blown fuses or tripped circuit breakers in the last 90 days.
- *Upkeep.* Having any five of the following six maintenance problems: leaks from outdoors, leaks from indoors, holes in the floor, holes or open cracks in the walls or ceilings, more than a square foot of peeling paint or plaster, or rats in the last 90 days.
- *Hallways.* Having all of the following four problems in public areas: no working light fixtures, loose or missing steps, loose or missing railings, and no elevator.

A unit has moderate inadequacies if it has any of the following five problems, but none of the severe problems:

- *Plumbing.* Having all toilets break down simultaneously at least three times in the last three months for at least three hours each time.
- *Heating.* Having unvented gas, oil, or kerosene heaters as the main source of heat (because these heaters may produce unsafe fumes and unhealthy levels of moisture).
- *Upkeep.* Having any three of the six upkeep problems mentioned under severe inadequacies.
- *Hallways.* Having any three of the four hallway problems mentioned under severe inadequacies.
- *Kitchen.* Lacking a sink, range, or refrigerator for the exclusive use of the unit.

Overcrowding—The condition of having more than one person per room in a residence. Overcrowding is not counted as a severe problem that constitutes a potential worst case need.

“Priority” problems—Problems qualifying for federal preference in admission to assisted housing programs between 1988 and 1996: paying more than one-half of income for rent (severe rent burden), living in severely substandard housing (including being homeless or in a homeless shelter), or being involuntarily displaced. Because the AHS sample tracks housing units and thus cannot count the homeless, AHS estimates of priority problems are limited to the two severe problems described above: severe rent burdens greater than 50 percent of income or severe physical problems.

It should be noted that because the primary intention conventionally has been to estimate the number of unassisted very-low-income renters with

priority problems, a number of tables in Appendix A classify households who have moderate problems in combination with severe problems as having severe problems.

Income

Income sources—Income means gross income reported by AHS respondents for the 12 months preceding the interview. It includes amounts reported for wage and salary income, net self-employment income, Social Security or railroad retirement income, public assistance or welfare payments, and all other money income, prior to deductions for taxes or any other purpose. Imputed income from equity is not included as income in this report. Following HUD rules for determining income eligibility for HUD programs, the earnings of teenagers aged 17 years and younger are not counted as income for this report.

Comparison to independent sources of data on total household income in 1983 suggests that AHS respondents underreport income by some 10 to 15 percent, with income from interest and dividends most likely to be underreported. Susin (2003) also found, in a comparison of the 1999 AHS with the Current Population Survey, that average household income is 9 percent lower, family earnings are about the same, and non-wage income is 32 percent lower in the AHS.

Supplemental and in-kind income sources—Beginning with the 1999 AHS, poorer renters with high rent burdens were asked several new questions about whether persons outside the household contributed to household expenses such as rent, food, and child care. The supplemental questions were asked of assisted renters who paid more than 35 percent of their reported income for rent, and of unassisted renters with household income below \$10,000 who paid more than 50 percent of their income for rent.

When they were asked these additional questions at the end of the interview, a small number of renters corrected their earlier income and/or rent responses in the 1999 AHS. Analysis by the Census Bureau shows that respondents representing at most 250,000 unassisted very-low-income renters changed either their income or rent responses in ways that would tend to reduce their rent burden. Although the revised responses should provide more accurate estimates of worst case needs, the results would not be directly comparable to earlier worst case estimates. The previous worst case needs report (HUD 2003) assumed that all of the 250,000 renters changing their responses in 1999 would otherwise have had severe rent burdens. The estimates in this report likewise are based on original rather than revised survey responses.

Family income—Reported income from all sources for the householder (the first household member 18 years or older who is listed as an owner or

renter of the housing unit) and other household members related to the householder.

Household income—Reported income from all sources for all household members 18 or older.

Income Categories

HUD-adjusted area median family income (HAMFI) and official income limits—HUD is required by law to set income limits each year that determine the eligibility of applicants for assisted housing programs. In 1974, Congress defined “low income” and “very low income” for HUD rental programs as incomes not exceeding 80 and 50 percent, respectively, of the area median family income, as adjusted by HUD.³⁷

It should be noted that income limits are based on median *family* income, not median household income. Each base income cutoff is assumed to apply to a household of four, and official income limits are further adjusted by household size: one person, 70 percent of base; two persons, 80 percent; three persons, 90 percent; five persons, 108 percent; six persons, 116 percent; and so on.

Statutory adjustments to official income limits in 1999 included upper caps and lower floors for areas with low or high ratios of housing costs to income and, for each nonmetropolitan county, a lower floor equal to its state’s nonmetropolitan average. These statutory adjustments do not apply for 2001 and 2003.

Income cutoffs for AHS geography—To categorize households in relation to “local” income limits as accurately as possible within the limitations of the geography given on the AHS public use files, HUD compares household incomes to area income limits. Very-low- and low-income cutoffs for a household of four are defined for each unit of geography identified on the AHS national microdata tapes. For housing units outside these metropolitan areas, the AHS geography identifies only four regions, metropolitan status, and six climate zones. Average income limits were estimated for each of these 48 locations, weighting by population based on the decennial census.

Because developing estimates of official income limits for the geography identified on the AHS microdata is time-consuming, HUD has prepared income limits to use with AHS geography only for four years: 1978, 1986, 1995, and 2003.³⁸ AHS estimates for other years have used these limits adjusted for inflation rather than the official income limits.

³⁷ See HUD (2005b) for a description of current adjustments.

³⁸ For each of these years, HUD revised income limits for all locations in the country based on income data from the most recent decennial Census of Population and Housing.

Income cutoffs used to produce 2001 estimates in this report are based on 1995 income limits, weighted by 1990 census data, and adjusted for inflation by the CPI-U as well by the factor by which average income exceeded inflation over this period, 1.1238. Income cutoffs used for 2003 estimates are based on 2003 official income limits weighted by 2000 census data.

Categorizing households by income—For this report, when households are categorized using the very-low- and low-income cutoffs, the cutoffs are adjusted for household size using the same adjustment factors used by HUD programs.

In addition, households reporting negative income are attributed incomes just above the area median income if their monthly housing costs exceed the Fair Market Rent and they lived in adequate and uncrowded housing. The justification for imputing higher incomes is that many households in this situation live in housing with amenities such as dining rooms, balconies, and off-the-street parking and thus may be reporting temporary accounting losses.

For housing needs estimates using AHS data since 1985, HUD has classified households with incomes above median income by comparing their income to the actual median family income for the location, rather than to 80 percent of the low-income cutoff, as was the only approach possible for estimates made through 1983.

- **Extremely low income**—Income not in excess of 30 percent of HAMFI. In 2003, 15 percent of AHS households reported income below 30 percent of HAMFI.
- **Very low income**—Income not in excess of 50 percent of HAMFI. Very low income thus includes extremely low income, although the term sometimes is used loosely in specific contexts, such as mismatch analysis, to mean incomes between 30 and 50 percent of HAMFI. In 2003, 28 percent of AHS households reported income below the very-low-income cutoffs.
- **Low income**—Reported income not in excess of 80 percent of HAMFI or, if lower, the national median family income. In 2003, 47 percent of AHS households reported incomes that fell below the low-income cutoffs.
- **Poor**—Household income below the national poverty cutoffs for the United States for that household size. (As discussed in Appendix A of the Census Bureau’s AHS publications, AHS poverty estimates differ from official poverty estimates made from the Current Population Survey. AHS poverty estimates are based on income of households rather than income of families or individuals, and AHS income questions are much less detailed and refer to income during the past 12 months rather than a fixed period.) The poverty cutoff for a family

of four approximates 33 percent of HAMFI. In 2003, 49 percent of very-low-income households and 79 percent of extremely-low-income households were poor.

- **Middle income**—For this report, incomes above 80 percent and below 120 percent of HAMFI. In 2003, 19 percent of AHS households were in this category.
- **Upper income**—For this report, households with income above 120 percent of HAMFI. In 2003, 34 percent of households were in this category.

Housing Assistance Status

In 1997 the AHS questions intended to identify households receiving rental assistance were changed in both content and order from those used earlier. After careful review, HUD and the Census Bureau adopted the following procedure to identify assisted units in a way that produces results that are more comparable to pre-1997 data.

- Units are “owned by a public housing authority” if the respondent answers yes to “Is the building owned by a public housing authority?”
- Units receive “government subsidy” if the respondent was assigned to that unit or answers yes that “a public housing authority, or some similar agency, [gave them] a certificate or voucher to help pay the rent for the unit.”
- Units are identified as “other, income verification” units if the respondent answers yes to “As part of your rental agreement do you need to answer questions about your income whenever your lease is up for renewal?” and, as a follow-up says that they report their income to either “a building manager or landlord” or “a public housing authority or a state or local housing agency.”
- Units are included if the respondent answers “yes” to “Does the state or local government pay some of the cost of the unit?”
- Units are included if the respondent answers yes to one of the three questions: “Is the building owned by a public housing authority? Does the federal government pay some of the cost of the unit? Do the people living here have to report the household’s income to someone every year so they can set the rent?”

Location

Metropolitan Statistical Area—From 1973 to 1983, the definitions of metropolitan location in Annual Housing Survey data corresponded to the 243 Standard Metropolitan Statistical Areas used in the 1970 census. Since 1984, metropolitan location in the AHS has referred to the MSAs defined in 1983, based on the 1980 census.

Region—The four census regions are the Northeast, Midwest, South, and West.

Longitudinal Analysis

This worst case report includes, for the first time, an exploratory, longitudinal analysis that assesses whether very-low-income renters who have severe rent burdens in one year remain in similar status a year later. The analysis, presented in Chapter 3, uses data from the Survey of Income and Program Participation (SIPP).

The SIPP design does not accurately assign or track household rent burden over time. Rent and income are tracked at the level of the individual, who may or may not be a part of the same household in both years. Therefore, rather than using “households” as the unit of analysis, the longitudinal analysis in Chapter 3 focuses on persons who were in the data file and were heads of households in both years. Persons were assigned to income categories on the basis of their incomes during the first year.

Mismatch of Supply and Demand for Affordable Rental Housing

Mismatch—The discrepancy between the number of rental units needed by renters of various income categories and the number provided by the market that are affordable at those income levels.

Affordability—Several federal rental programs define “affordable” rents as those requiring not more than 30 percent of an income cutoff defined in relation to HAMFI. Under the Low Income Housing Tax Credit (LIHTC), for example, housing units with rents up to (30 percent of) 60 percent of HAMFI qualify as affordable and eligible for the credit.

This report generalizes the approach developed to define LIHTC maximum rents for units of different size to define three categories of affordability (ELI, VLI, and LI) based on the incomes that are sufficient for the rents: at or below 30 percent of HAMFI, above 30 and up to 50 percent of HAMFI, and above 50 percent of HAMFI. Gross rents for each unit, including payments for utilities, are compared to 30 percent of HUD’s 30 percent and 50 percent of HAMFI income limits.

The income limits used to define rent affordability are adjusted for number of bedrooms using the formula codified at U.S.C. 42(g)(2)(C): no bedrooms, 70 percent of base; one bedroom, 75 percent; two bedrooms, 90 percent; three bedrooms, 104 percent; four bedrooms, 116 percent, plus 12 percent of base for every additional bedroom.³⁹ This formula assumes that an efficiency houses 1 person, a one-bedroom unit houses 1.5 persons, and each additional bedroom houses another 1.5 persons. For vacant units,

³⁹ Note that this adjustment procedure is similar to, but distinct from, the adjustment of income limits described under Income Categories.

the costs of any utilities that would be paid by an occupant were allocated using a hot deck technique based on a matrix of structure type, AHS climate code, and eight categories of gross rent.

Three measures of affordability— Three measures are used in Chapter 4 to analyze the sufficiency of the rental housing stock in relation to household incomes.

- *Affordability* measures the extent to which there are enough rental housing units of different costs to provide each household with a unit it can afford (based on the 30 percent of income standard). Affordability is the broadest measure of housing stock sufficiency, addressing whether there are sufficient housing units if allocated solely on the basis of cost. The *affordable* stock includes both vacant and occupied units.
- *Availability* measures the extent to which affordable rental housing units are available to households within a particular income range. Some households choose to spend less than 30 percent of their incomes on rent, occupying housing that is affordable to households of lower income. These units are thus not available to the lower-income households. A unit is *available* at a given level of income if it is affordable at that level and either 1) occupied by a household with that income or less or 2) vacant.

The availability measure removes units from consideration if they have artificially low rents because they are occupied as a benefit of employment (for example, by caretakers) or because they are owned by relatives or friends of the occupants. The 2003 AHS data indicate that 2.2 million renter households (6.6 percent) occupied their units while paying no rent. The AHS does not provide estimates of the number of households paying a positive but below-market rent because of employment or other reasons.

- *Adequacy* extends the concept of availability by considering whether sufficient rental units are physically adequate as well as available and affordable.

Categorizing rental units by affordability and households by income—

For the analysis of mismatches between affordability and income in Chapter 4, household incomes and housing unit rents were compared to 2003 income limits (for income and rent categories up to and including 80 percent of HAMFI) and to the actual median family incomes (for categories above 80 percent of HAMFI). As in the analysis of household income, households reporting negative income were redefined as having incomes just above median income if their monthly housing costs were above the FMR and they lived in adequate and uncrowded housing.

This approach provides more accurate estimates than in previous reports of the numbers of housing units qualifying as affordable under rules such as

those regulating the HOME and low-income housing tax credit (LIHTC). For the LIHTC, housing that is affordable to incomes at 60 percent of median income must have rents that are no more than 30 percent of 120 percent of HUD's applicable VLI limits (with appropriate adjustments for number of bedrooms). For ease of calculation, analyses of shortages of affordable housing in previous worst case reports had compared income and rents to multiples of HAMFI. However, the statutory adjustments made in deriving HUD's official VLI limits on average make the actual VLI limits higher than "50 percent" of median income. Therefore, the previous data tended to undercount both the number of renters and the number of units defined as affordable to them.

For purposes of mismatch analysis, units with "no cash rent" reported are categorized solely on the basis of utility costs. Utility costs are allocated to vacant units through "hot-deck" imputation based on units that are comparable on the basis of cost, number of units, region, and tenure.

Race and Ethnicity

For 2003, the American Housing Survey used revised Census Bureau categories of race and ethnicity that are not directly comparable with the 2001 and earlier AHS. Survey respondents in 2003 were allowed to select more than one racial group, causing slight but significant decreases in the size of previously monolithic categories.

Worst Case Needs for Rental Assistance

Unassisted very-low-income renters with the priority housing problems that formerly gave them preference for admission to federal rental assistance programs. Because AHS questions do not distinguish federal from state or local assistance, assisted renters include those with state or local assistance.

Weighting the AHS

Because the AHS is based on a sample of housing units rather than a census of all housing units, estimates based on the data must be weighted up so that totals for each year match independent estimates of the total housing stock. The AHS weights used in this report for 2001 and 2003 AHS data are based on the 2000 Census of Housing, which the Census Bureau began using for weighting the AHS in 2003. The Bureau determines 2000-based AHS weights from independent estimates (control totals) based on the Census 2000 with an estimate of change since then.⁴⁰ Estimates of worst case needs in 2001 in this report differ from those that HUD previously

⁴⁰ For information on weighting, see "American Housing Survey for the United States: 2003," Series H150/03, Housing and Household Economic Statistics Division, U.S. Census Bureau.
http://www.census.gov/hhes/www/housing/ahs/ahs01_2000wts/ahs01_2000wts.html.

published because they were based on 1990 Census weights (see HUD 2003).⁴¹

⁴¹ In addition to different weights, HUD has determined that 2001 estimates of worst case needs published in the 2003 report also were affected by failure to exclude, consistent with historical practice, households with zero or negative incomes.

Appendix C. Worst Case Needs Methodology Compared to Recent Joint Center for Housing Studies Report

A recent report issued by Harvard University’s Joint Center for Housing Studies (Joint Center), *The State of the Nation’s Housing: 2005* explored issues similar to those discussed in this report.

As discussed in Chapter 2 of this report, the Joint Center Report contains a finding that would seem to be in conflict with the finding in this report that the number of households facing worst case needs did not increase by a statistically significant amount between 2001 and 2003. Specifically, the Joint Center report finds that “the number of severely cost-burdened households in the bottom income quartile increased by 1.5 million in 2000-3, raising the share with such steep burdens to 44 percent.”

This Appendix discusses some of the possible reasons for differences between estimates contained in the Joint Center report and the estimates provided in this report.

Part I – Methodology

As discussed in Chapter 1 and Appendix A of this report, HUD’s Worst Case Needs analysis is based on a long-standing methodology using set definitions and terms. The methodology used in HUD’s worst case needs estimates differs from that used in the Joint Center’s report in several important respects. The differences should be considered by the reader when making comparisons between the two.

WCN focuses on unassisted renter households that meet HUD’s very-low income definition. These households can have worst case needs if either 1) they pay more than half of their income for rent; or 2) they live in severely inadequate housing. The Joint Center report focused only on severe housing cost burden – whether households in this larger group paid more than half their income for housing costs – and considered both renters and homeowners as well as households receiving any form of government housing assistance.

Comparing estimates from the two reports

The Joint Center report found that, “the number of severely cost-burdened households in the bottom income quartile increased by 1.5 million in 2000-3.” This is in contrast to the finding in this report that there was not a statistically significant increase in worst case needs between 2001 to 2003. Some of the difference can be explained by the different methodologies used in each report.

Excluding Homeowners - Narrows Difference by 555,000

The Joint Center analysis includes homeowners while the analysis in this report focuses solely on renters. The Joint Center report found that the number of households in the lowest income quartile with severe cost burdens increased from 10,510,000 (out of 26,176,000 in this income category) in 2000 to 12,095,000 (out of 27,107,000). Of this 1,575,000 increase, 1,029,000 were renter households and 555,000 were owners.

Exhibit C-1 focuses solely on renter households showing estimates of severe rent burden by income group drawn from data from the American Community Survey.

Exhibit C-1. American Community Survey Estimates of Severe Rent Burden 2000, 2001 and 2003

Renters, by Income Group	2000		2001		2003		Change 2001- 2003		Pct Change 2001-2003	
	Sev Burden	All	Sev Burden	All	Sev Burden	All	Sev Burden	All	Sev Burden	All
Bottom Quintile	6,204	11,563	6,552	12,079	7,049	12,444	497	365	7.6%	3.0%
<i>Incidence</i>	<i>53.6%</i>		<i>54.2%</i>		<i>56.6%</i>		<i>2.4%</i>			
Bottom Quartile	6,497	13,994	6,901	14,569	7,536	15,028	625	459	9.1%	3.2%
<i>Incidence</i>	<i>46.4%</i>		<i>47.4%</i>		<i>50.1%</i>		<i>2.7%</i>			

Source: Joint Center for Housing Studies (JCHS) tabulations of the 2001 and 2003 American Community Survey and the 2000 Census Supplemental Survey. Counts of households are in 1,000's. 2000 and 2003 estimates are from the JCHS Report, *State of the Nation's Housing: 2005* (see Table A-11); and 2001 estimates provided by JCHS to HUD's Office of Policy Development and Research by request. Income quartiles and quintiles are calculated based on incomes of all households, including owners and renters. As a result, 42 percent of renters are in the bottom income quartile and 35 percent of renters are in the bottom quintile income groups in the 2003 ACS. Households reporting zero and negative incomes are included in the lowest income groups and are assumed to have severe housing cost burdens.

Timeframe: 2000-2003 vs. 2001-2003 - Narrows Difference by 404,000

As shown in Exhibit C-1, some of the increase reported by the Joint Center report occurred in the 2000-2001 period. The worst case needs estimate did not cover the 2000-2001 period because the AHS is conducted every two years. Exhibit C-1 shows that a large part of the reported increase in severe cost burdens based on the ACS occurred in the 2000-2001 time period – an

increase of 404,000 households in the lowest income quartile (from 6,497,000 to 6,901,000) with such cost burdens. In the remaining 2001-2003 period, there was an increase of 635,000 renter households with severe burdens, from 6,901,000 to 7,536,000 households.

Exhibit C-2. American Housing Survey Estimates of Severe Rent Burden, 2001 and 2003

Renters, by Income Group	2001		2003		Change 2001-2003		Pct Change 2001-2003	
	Sev Burden	All	Sev Burden	All	Sev Burden	All	Sev Burden	All
<i>AHS, Incomes >0</i>								
Bottom Quintile	5,277	9,559	5,350	10,020	73	461	1.4%	4.8%
<i>Incidence</i>	55.2%		53.4%		-1.8%			
Bottom Quartile	5,766	12,130	5,793	12,416	27	286	0.5%	2.4%
<i>Incidence</i>	47.5%		46.7%		-0.8%			
Very Low Income	6,022	14,903	6,105	15,658	83	755	1.4%	5.1%
<i>Incidence</i>	40.4%		39.0%		-1.4%			
<i>AHS, including zero/neg</i>								
Bottom Quintile	6,510	10,816	6,477	11,173	-33	357	-0.5%	3.3%
<i>Incidence</i>	60.2%		58.0%		-2.2%			
Bottom Quartile	7,000	13,387	6,921	13,569	-79	182	-1.1%	1.4%
<i>Incidence</i>	52.3%		51.0%		-1.3%			

Zero and Negative Incomes

The Joint Center estimates include households reporting zero and negative incomes and assumes they are in the lowest income categories and have severe housing cost burdens. This WCN report, using a methodology consistent with past reports, does not include households reporting zero and negative incomes in the estimate of worst case needs. This is in part based on a policy assumption that many such families may be reporting one-time losses (from small businesses for example) and as such may be more likely to be considered as higher income (than the very-low income adjusted family income measure).

While the data are not available to exclude zero and negative incomes from the ACS (to develop a more comparable estimate to the WCN

methodology), these households can be added to the WCN estimate based on data from the AHS. The result is shown in Exhibit C-2 under the subheading, “AHS, including zero/neg” with a larger number of households with severe rent burdens in both years but still no statistically significant trend (upward or downward) from 2001 to 2003. This adjustment does not seem to reconcile the discrepancy in trends between the two reports, although it may reduce single-year “point in time” differences between the two estimates. It is nonetheless important to keep in mind this specific difference in the approach used in each report.

Reconciling Methodological Differences - Conclusion

Much of the difference between the estimates from the Joint Center report and this report can be reconciled after taking into account the different methodological approaches in the two reports. Nonetheless, even after reconciling the major differences, the Joint Center ACS-based estimates continue to show an upward trend in housing cost burdens among lower-income renter households from 2001 to 2003, while this report’s AHS-based estimates show no statistically significant increase. Comparing the underlying differences between the ACS and AHS may yield further light on the reasons for this difference.

Part II – Data Sources (Survey Methodologies)

The remaining difference in housing cost trends between the two reports may be the result of differences in the surveys used in each report - the American Housing Survey and the American Community Survey.

American Community Survey. The survey is the largest household survey in the United States (800,000 housing units per year during the test phase). Like the decennial census long form it is designed to replace, the ACS provides information on money income and poverty, as well as a range of other social and economic indicators.

American Housing Survey. The American Housing Survey (AHS) collects data on the Nation’s housing, including apartments, single-family homes, mobile homes, vacant housing units, household characteristics, income, housing and neighborhood quality, housing costs, equipment and fuels, size of housing unit, and recent movers. National data are collected in odd numbered years, and data for each of 47 selected Metropolitan Areas are collected currently about every six years. The national sample surveys an average of 55,000 housing units. Each metropolitan area sample surveys 4,100 or more housing units. The survey is conducted by the Bureau of the Census for the Department of Housing and Urban Development (HUD).

Current Population Survey. Data from the Current Population Survey (CPS) are included in Exhibit C-3 for purposes of comparison with the AHS and ACS data from 2003. The CPS is the primary source of information on the labor force characteristics of the U.S. population. The

CPS produces national estimates for employment, unemployment, earnings, hours of work, and other indicators. In addition, the CPS, augmented by the Housing Vacancy Survey is used to estimate vacancy rates and homeownership rates. The CPS produces estimates for a variety of demographic characteristics including age, sex, race, marital status, and educational attainment. The CPS is a monthly survey of about 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The survey has been conducted for more than 50 years.

**Exhibit C-3. Comparison of AHS, ACS and CPS
for Selected Criteria – 2003**

	AHS	ACS	CPS
Total Occupied Units	105,842,000	108,430,000	105,560,000
Owners	72,238,000	72,423,984	72,054,000
Renters	33,604,000	36,004,362	33,506,000
Vacant Units	14,935,000	12,456,661	15,274,000

Exhibit C-3 shows a few housing unit estimates from the AHS, ACS and CPS data. The ACS estimates about 2.4 million more renter households nationwide than the AHS – 36.0 million in the ACS versus 33.6 million in the AHS. The ACS counts 2.4 million fewer vacant units than the AHS – 12.5 million vacant units in the ACS versus 14.9 million vacant units in the AHS. The AHS and CPS counts are nearly identical for most categories.

In addition to these differences, there are numerous other reasons why estimates of the same group – severely burdened renters in the lowest quintile of income – could differ between the two surveys:

- The ACS and the AHS are different probability samples and have differences in the way they are weighted, thus the two samples could give different results even for the same population.
- The ACS is a fairly new survey. As noted by the Bureau, the 2000 ACS or Census 2000 Supplemental Survey (C2SS) is characterized as “... an operational feasibility test of collecting census long form data.... It is part of the development program....” The AHS has been conducted for the past 32 years since 1973. It is a mature and settled survey, and the Worst Case Needs methodology has also been used for decades. During those decades the methods have been scrutinized and subjected to review by critics.
- The AHS 2001 survey was conducted about three months later, on average, than the ACS. As a result 2001 to 2003 differences cover 24 months in the ACS and only 21 months in the AHS (thus the time period used to measure change is somewhat longer in the Joint Center report).

- Survey methods are different. ACS is a self-administered, mail-out questionnaire with telephone follow-up of all mail non-respondents, and in-person interview follow-up of a sample of telephone non-respondents and vacant units. All AHS data is collected by trained interviewers, either in person or by telephone for households previously interviewed.
- The ACS and the AHS may have a different cutoff for classifying units as group quarters and thus excluded from the universe of housing units. The AHS uses eight or fewer unrelated individuals as the cut off. The ACS has no such cutoffs and would include large non-family households such as might be found near colleges and universities.
- The ACS and AHS have dealt with congregate housing in different ways. Until 2004, living arrangements that included congregate meals were not considered to be housing units in the AHS. The ACS does include these units. The AHS sample is now being revised to include such living arrangements that are common for senior housing. The Census Bureau's Survey of Construction is also being changed to include such units.
- The AHS also returns to the same housing units each survey year, and uses previous responses to improve the current year responses where possible and feasible.
- Income questions are different. The ACS collects income data for each adult in the household. As a result, the ACS has additional questions compared with the AHS. The AHS collects earnings data for each adult in the household but collects other income as totals for the family. The AHS has nine categories of non-wage income and the ACS has seven categories.
- Rent and utility questions are different. The ACS asks for last month's cost for electricity and gas and the last year's cost for water/sewer and oil/coal/kerosene/wood. The AHS asks for utility data for four specific months which are then used with Department of Energy data to arrive at annual utility costs. The AHS uses five questions and also sends the respondent a letter in advance asking them to locate utility bills for January, April, August and December.

Conclusion

Much of the difference between the finding in the Joint Center report showing an increase in severe housing cost burden and this report's finding of no statistically significant increase can be explained by the different method of analyses used in each report. The remaining difference is likely due to differences in survey methodology used in the American Housing

Survey and the American Community Survey. Additional examination of these issues may be warranted given the importance of the underlying issue.

Appendix D. Issues of Interpretation

Although the estimates of worst case needs are helpful in understanding the extent of need for housing assistance or other public interventions to help families meet their housing needs, there are issues to consider in this area. In particular, the number of households experiencing worst case needs should not necessarily be taken alone as a direct measure of the extent of need for additional housing assistance.

First, as noted above in this report's analysis of the Survey of Income and Program Participation, episodes of severe rent burden can vary widely in terms of duration. As the report indicates, further analysis is necessary to understand the dynamics of duration. Future policy discussions concerning affordable housing needs should consider new research on the duration of rent burdens.

Second, adding to the number of public rental subsidies is only one way – and may not be the most efficient way in all cases – to help families who lack income or face other challenges to locating affordable housing that meets their needs. A shortage of affordable housing can be addressed by constructing new subsidized housing – as with Low Income Housing Tax Credits and other public programs – or by providing a housing subsidy to the household in the form a housing voucher. However, an increase in the number of subsidized households may not translate one for one into a reduction of worst case needs. For example, additional subsidies may not reduce worst case needs on a one for one basis as the market adjusts to new construction of subsidized units. Supply problems can be addressed in other ways – for example, by addressing local regulatory barriers to the development of housing. Over time, such policies can increase supply relative to demand and thereby keep rents lower than they would be otherwise.

Third, affordability problems also can be addressed through policies designed to increase incomes. Lack of income can be addressed by a variety of public programs, other than housing assistance, aimed at helping families increase their opportunities for work and their earning potential. Some of these public interventions may be more cost-effective in some cases than housing assistance would be at reducing rent burdens.

Contributors

This report was prepared under the overall supervision of Assistant Secretary for Policy Development and Research (PD&R) Darlene Williams and her predecessor, Dennis Shea. The following analysts contributed to the report:

David Hardiman, PD&R

Marge Martin, PD&R

Mark Shroder, PD&R

Barry Steffen, PD&R

Scott Susin, Bureau of the Census

David Vandenbroucke, PD&R

David Yao, Computer Sciences Corporation