

# WORST CASE HOUSING NEEDS 2011

REPORT TO CONGRESS



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# **WORST CASE HOUSING NEEDS 2011**

REPORT TO CONGRESS

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Prepared for  
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and Urban Development  
Washington, D.C.

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# SUMMARY

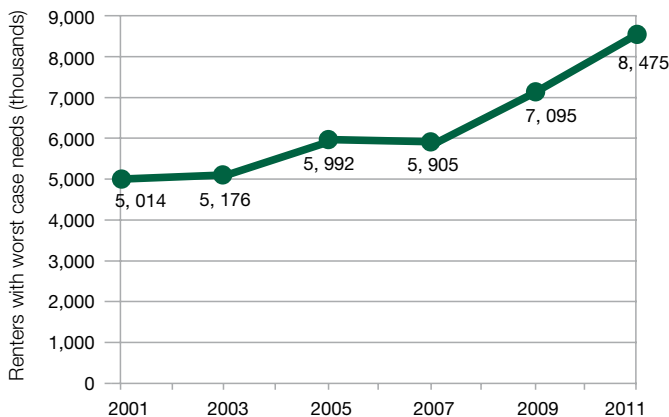
## WORST CASE HOUSING NEEDS 2011: SUMMARY

The U.S. Department of Housing and Urban Development (HUD) finds dramatic increases in worst case housing needs during the 2009 to 2011 period<sup>1</sup> that cut across demographic groups, household types, and regions. This rise in hardship among renters is due to substantial increases in rental housing demand and weakening incomes that increase competition for already-scarce affordable units.

Given the severely challenged economic conditions that the United States confronted during this period, particularly surrounding the housing market, it is not surprising that the need for housing assistance continues to outpace the ability of federal, state, and local governments to supply it. *Worst Case Housing Needs 2011: Report to Congress* examines the causes of and trends in worst case needs for affordable rental housing.

### Continued Increases in Worst Case Needs

**EXHIBIT 1. GROWTH IN WORST CASE HOUSING NEEDS,  
2001–2011**



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

<sup>1</sup> The term “worst case needs” is defined as very low-income renters with incomes below 50 percent of the Area Median Income (AMI) who do not receive government housing assistance and who either paid more than half of their income for rent or lived in severely inadequate conditions, or who faced both of these challenges. HUD’s estimates of worst case needs are based primarily on data from the American Housing Survey (AHS).

Worst case needs continue to grow at record rates. The number of renter households with worst case needs increased to 8.48 million in 2011, up from a previous high of 7.10 million in 2009.

The high rate of growth in worst case needs observed in 2009 continues unabated. The number of worst case needs has grown by 2.57 million households since 2007—a striking 43.5 percent increase.

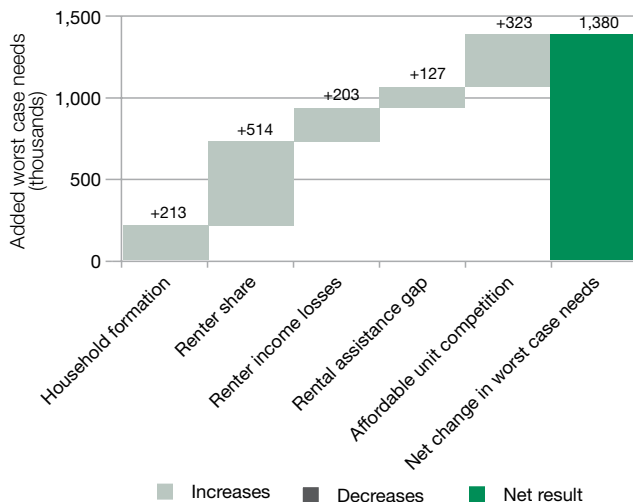
The vast majority of these renters had worst case needs because of their severe rent burdens—paying more than half of their income for rent—while inadequate housing caused only three percent of worst case needs.

## Worst Case Needs Affect All Demographic Groups and Household Types

Worst case needs affect all major racial and ethnic groups. Hispanic and non-Hispanic white households experienced the largest increases in the number of both very low-income renters and worst case needs since 2009. As a result, 48 percent of new cases of worst case needs were found among white, 28 percent among Hispanic, and 13 percent from black households.

Most household types experienced increases in worst case needs from 2009 to 2011.<sup>2</sup> In 2011, worst case needs affected 3.24 million families with children, 1.47 million elderly households, 2.97 million other “nonfamily” households (unrelated people sharing housing), and 0.80 million “other family” households.

**EXHIBIT 2. DEMOGRAPHIC AND ECONOMIC CAUSES OF INCREASING WORST CASE NEEDS, 2009 TO 2011**



Source: HUD-PD&R analysis of American Housing Survey data

Regardless of household type, one-third to one-half of very low-income renters of each type experienced worst case needs in 2011.

Almost one in six renters with worst case needs included a nonelderly person with disabilities. The number of households with worst case needs having at least one nonelderly person with disabilities increased from 990,000 in 2009 to 1.31 million households in 2011, an increase of 320,000 households.

## Context and Discussion

Estimates of worst case needs are based on the biennial American Housing Survey (AHS). Because the 2011 data were collected from May through September 2011, they do not capture changes arising since then. Nevertheless, the data show that while the economy has been slowly recovering from the 2007 to 2009 recession, the economic benefits of recovery had not yet reached millions of very low-income renters in 2011.

The likelihood that a very low-income renter household had worst case needs increased from 41.4 percent in 2009 to 43.9 percent in 2011. However, this higher prevalence rate did not account for all of the increase in worst case needs. An increase in the number of renters had a greater effect (Exhibit 2).

The number of renter households increased primarily because a substantial number of homeowners became renters as a result of the nation’s economic and housing market problems—unemployment and foreclosures—and also because of new household formation. Household formation and increasing renter share account for 210,000 and 510,000 new cases of worst case needs, or 53 percent of the total increase of 1.38 million.

The rest of the increase in worst case needs during 2009 to 2011 can be attributed to falling incomes among renters, a continuing shortage of housing assistance, and increased scarcity of affordable housing. The income of the median renter declined by 1.5 percent during this period, even as the median rent increased by 4.1 percent.

Even when households that change tenure from owning to renting have incomes that keep them from having worst case needs, they nevertheless occupy rental units. As a result, they increase the demand for such units and cause rents to rise for more vulnerable renters.

Conversion of numerous owner-occupied units to rental units following foreclosure helped offset some of the sharp increase in rental demand from the former occupants of those units. The stock of owner-occupied housing decreased by almost 760,000 units during 2009 to 2011,<sup>3</sup> while the rental stock increased by 3.33 million units (8.4 percent). The 3.47 million new renter households absorbed all the net increase of rental units while also occupying 140,000 previously vacant units.

<sup>2</sup> The estimated increase in worst case needs among elderly households is not statistically significant.

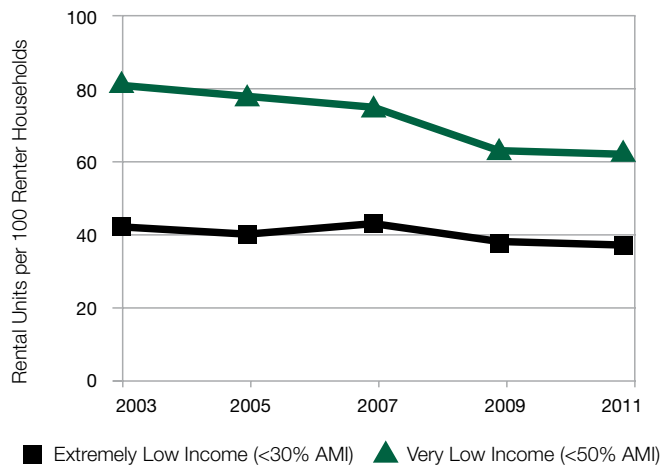
<sup>3</sup> The net loss of owner-occupied units reflects changes from new construction, demolition, and conversion. Construction was completed on 943,000 new single-family detached homes during 2010 and 2011. See U.S. Housing Market Conditions, table 4, [http://www.huduser.org/portal/periodicals/ushmc/fall12/USHMC\\_3q12\\_historical.pdf](http://www.huduser.org/portal/periodicals/ushmc/fall12/USHMC_3q12_historical.pdf).

<sup>4</sup> Rental units that are affordable at a specific income level are considered available if they are either currently vacant or already occupied by households whose incomes do not exceed that income level.



The national scarcity of affordable units available for the renters who need them most<sup>4</sup> continued to worsen (Exhibit 3), despite these substantial shifts in supply. The number of affordable and available rental units decreased to 65 units per 100 very low-income renters and 36 units per 100 extremely low-income renters.

### EXHIBIT 3. SHRINKING SUPPLY OF AFFORDABLE RENTAL UNITS AVAILABLE FOR OCCUPANCY BY LOWER-INCOME RENTERS



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

## Conclusion

The worsening situation for the nation's 19.3 million very low-income renters clearly reflects the severe economic dislocation of the recession and the associated collapse of the housing market, which reduced homeownership through foreclosures and increased demand for rental housing. The scale of the problem requires major strategic decisions. As worst case housing needs continue to increase and the level of housing assistance remains relatively flat, the gap between the number of assisted units and the number of households with severe housing needs has never been wider. There are approximately two very low-income households with worst case needs for every very low-income household with rental assistance. A broad strategy is to continue to rebuild the economy and provide assistance to those families most in need. While the nation's economic woes affected everyone, those with very low incomes were least able to weather its effects.



# EXTENT AND NATURE OF WORST CASE NEEDS

# 1

## SECTION

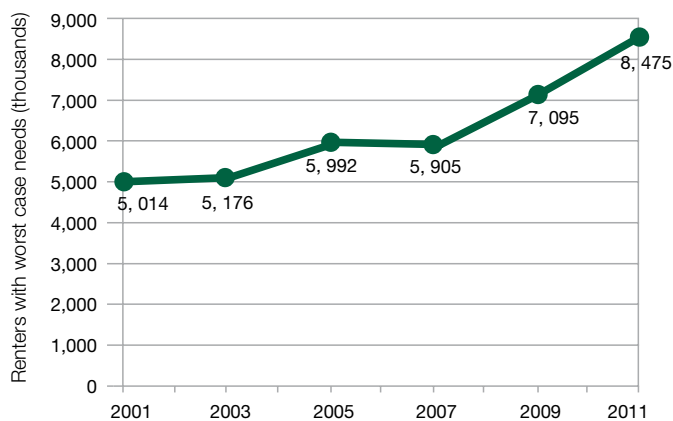
### Extent of Worst Case Needs in 2011

In the context of the recent upheaval in the homeownership market and economic recession, we examined the 2011 AHS data to understand the current dimensions of what was already a growing problem. The basic facts presented and examined in the following pages are—

- In 2011, 8.48 million renters had worst case needs, as shown in Exhibit 1–1. These renters have very low incomes,<sup>6</sup> lack housing assistance, and have either severe rent burdens or severely inadequate housing (or both).

The U.S. Department of Housing and Urban Development (HUD) is the largest federal provider of affordable rental housing. In response to a request by Congress in 1991, HUD's Office of Policy Development and Research (PD&R) periodically reports to Congress on the severity of worst case needs for affordable rental housing, as collected in the biennial American Housing Survey (AHS). This report is the 14th in the series of core reports.<sup>5</sup>

**EXHIBIT 1–1. GROWTH IN WORST CASE HOUSING NEEDS, 2001–2011**



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

<sup>5</sup> PD&R supplements the core reports on worst case needs with periodic topical reports. For a list of previous titles, see Appendix D.

<sup>6</sup> *Very low income* and *extremely low income* refer throughout this report to the income levels of renters. Very low incomes are those incomes of no more than 50 percent of the Area Median Income (AMI), and extremely low incomes are those incomes of no more than 30 percent of AMI—typically below the poverty line. HUD programs use AMI calculated on the basis of local family incomes, with adjustments for household size, more precisely known as HUD-Adjusted Median Family Income, or HAMFI (see Appendix E). On a nationwide basis, the AMI was \$64,000 per year in 2009, placing the very low-income level at \$32,000 per year and the extremely low-income level at \$19,200 per year. All these income levels are for a family of four. Families with fewer than four people or who live in areas with lower median family incomes can have incomes of much less than these national thresholds if they qualify as very low- or extremely low-income households in their areas.

**WHICH HOUSEHOLDS CAN HAVE WORST CASE NEEDS?**

By definition, households that can have worst case needs are households that—

- Are renters.
- Have *very low incomes*; that is, incomes of no more than 50 percent of the Area Median Income (as adjusted for family size).
- Do not receive federal housing assistance.

**PRIORITY PROBLEMS TRIGGER WORST CASE NEEDS**

Two types of priority problems determine whether households have worst case needs.

1. *Severe rent burden* means a renter household is paying more than one-half of its income for gross rent (rent and utilities).
2. *Severely inadequate housing* refers to units having one or more serious physical problems related to heating, plumbing, and electrical systems or maintenance. (Problems are listed in Appendix E.)

- The rapid growth of worst case needs continues unabated. The number of worst case needs in 2011 was 19 percent greater than 2009 levels and 43 percent greater than 2007 levels.
- The primary problem is *rent burden*—insufficient tenant incomes relative to rents. Severely inadequate housing accounts for only 3 percent of worst case needs.
- The dramatic increase in worst case needs since 2007 reflects the impact of the economic and housing crises. Mortgage foreclosures, widespread unemployment, and shrinking renter incomes during the recession added many new very low-income renters—those vulnerable to worst case needs.
- Lower incomes led directly to increased worst case needs by increasing the number of renters with very low incomes and increasing rent burdens among very low-income renters. Income losses also exacerbated worst case needs indirectly by rapidly increasing demand and competition for the most affordable units, thereby raising rents. Therefore,

the population of vulnerable very low-income renters grew substantially, and the prevalence of worst case needs simultaneously increased for this population during the 2009-to-2011 period.

- The supply of affordable housing increased between 2009 and 2011, but not enough to serve the increased number of very low-income renters. Housing assistance continued to help fill the gap and prevent millions of housing problems. The sum total of affordable housing units and assisted units fell further behind the need, however, resulting in a new surge in worst case housing needs.

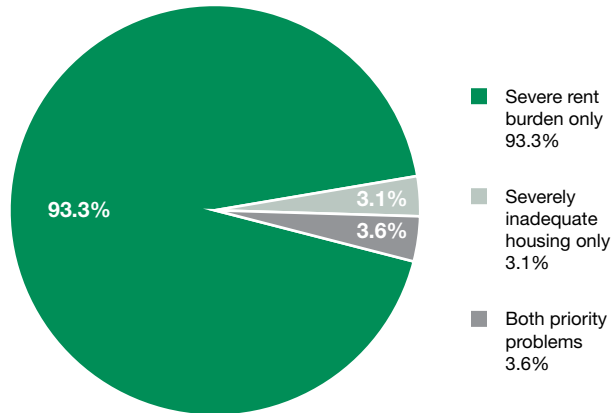
With these key facts in mind, Section 1 explores the current extent and the demographic characteristics of worst case needs—which households have such needs and what their situations actually are.

**WHAT IS A TYPICAL WORST CASE NEED HOUSEHOLD?**

The typical renter with worst case housing needs is a family with two children, most often a minority family headed by either a single female or a husband and wife. The family resides in adequate or good-quality housing in a suburb of a southern metropolitan area. Earnings are the family's primary source of income, yet their low wages place them below the poverty line and in the extremely low-income category. Their rent plus utilities cost almost \$800 per month, consuming all their reported income. They meet other needs with food stamps from the Supplemental Nutrition Assistance Program, Medicaid, gifts from friends and relatives, and Earned Income Tax Credits.

**Inadequate Housing and Inadequate Income**

Of the two types of priority problems that make up worst case needs, severe rent burden is, by far, the more frequent problem. As Exhibit 1–2 illustrates, 96.4 percent of all worst case needs renters, or 8.21 million households, had severe rent burdens in 2011. Paying one-half of a limited total income for rent leaves very little income for other essentials, such as food, medical care, transportation expenses, education, and childcare.

**EXHIBIT 1–2. PRIORITY PROBLEMS CAUSING WORST CASE NEEDS, 2011**

N = 14.675 million unassisted very low-income renters  
 Source: HUD-PD&R tabulations of American Housing Survey data

Severely inadequate housing alone triggers only 3.1 percent of worst case needs. If renters with severe rent burdens are included, 6.7 percent of worst case renters (570,000) had severely inadequate housing units.

That severely inadequate housing causes such a small fraction of worst case needs is the result of a decades-long trend of improvements to the nation's housing stock. More stringent building codes prevent the construction of units without complete plumbing or heating systems, and obsolete units are demolished each year. Nevertheless, the housing stock is continually aging, and severely inadequate units continue to pose threats to the life and health of thousands of renters.

### PROGRESS IN REDUCING HOMELESSNESS

Homeless individuals and families clearly have worst case needs for affordable or assisted housing. Homeless people, however, are not included in official estimates of worst case needs because the American Housing Survey covers only housing units and the households that live in them, and homeless populations are notoriously difficult to survey or count.

In the most recent *Annual Homeless Assessment Report to Congress*, HUD estimated that 634,000 sheltered and unsheltered homeless people were in the United States at a single point in time during January 2012. Homelessness remained stable from the previous year but has declined 5.7 percent since 2007, including a decrease of 19.3 percent in chronic homelessness during the same period (HUD-CPD 2012).

### Prevalence of Worst Case Needs by Income

The insufficiency of income relative to rents is the primary cause of worst case needs, affecting 44.0 percent of the 19.27 million very low-income renters, including 52.7 percent of extremely low-income renters, in 2011 (Exhibit 1–3). Because extremely low-income households also constitute by far most (61.1 percent) very low-income renters, nearly three out of four (73.3 percent) households with worst case needs had extremely low incomes during 2011.

**EXHIBIT 1–3. WORST CASE NEEDS IN 2011**

	Very Low-Income Renters		
	0–30% AMI	30–50% AMI	Total
Number (thousands)	11,774	7,492	19,266
Number that are worst case needs renters (thousands)	6,209	2,266	8,475
Percent that are worst case needs renters	52.7	30.2	44.0

AMI = Area Median Income (HUD-adjusted).

Note: *Very low-income* and *extremely low-income* refer throughout this report to the income levels of renters. Very low incomes are those incomes of no more than 50 percent of the Area Median Income (AMI), and extremely low incomes are those incomes of no more than 30 percent of AMI—typically below the poverty line

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

### Increase in Worst Case Needs

Worst case needs continue to increase at a record pace. The 8.48 million worst case needs in 2011 were 19 percent more than the 2009 estimate<sup>7</sup> and 44 percent more than the 2007 estimate. The increase of 1.38 million from 2009 to 2011 easily satisfies the basic test for statistical significance.<sup>8</sup> The continuing increase of worst case needs extends the decade-long period of growth.

Between 2001 and 2011, the number of renters with worst case needs increased by 3.46 million, or 69 percent.

Worst case needs also are increasing as a percentage of U.S. households (Exhibit 1–4). During the most recent 2-year period, the prevalence again increased by more than a full percentage point, from 6.3 percent in 2009 to 7.4 percent in 2011. This increase is statistically significant as well.<sup>9</sup>

EXHIBIT 1–4. PREVALENCE OF WORST CASE NEEDS OVER TIME

	2001	2003	2005	2007	2009	2011
All households (millions)	105.44	105.87	108.90	110.72	111.86	115.08
Renters with worst case needs (millions)	5.01	5.18	5.99	5.91	7.10	8.48
Worst case needs as percent of all households	4.76	4.89	5.50	5.33	6.34	7.36

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

Because the problem of worst case needs is primarily one of a scarcity of units with affordable rents relative to the number of renters with very low incomes, the balance of Section 1 examines the demographics of the renters who have these problems. Section 2 explores the dimensions of the inadequate supply of affordable rental units, and Section 3 summarizes and integrates supply and demand issues to shed light on the root causes of this growing problem.

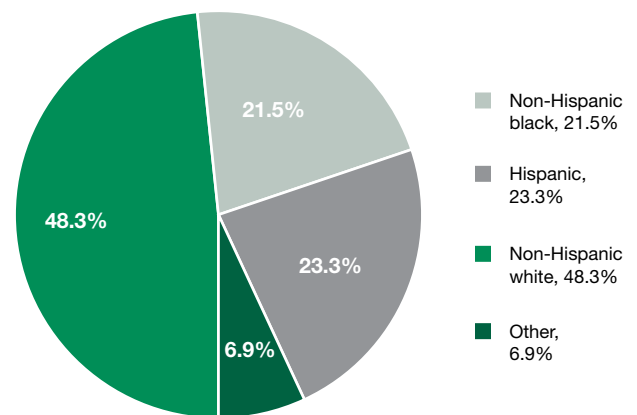
## Demographics of Worst Case Needs

### Race, Ethnicity, and Immigration Status

Worst case needs are found across all types of communities, racial groups, and ethnic lines. Among the three largest groups as defined by race and ethnicity, however, both similarities and differences emerge.

During 2011, most worst case needs continued to be experienced by non-Hispanic white renters, with smaller shares experienced by non-Hispanic black renters, Hispanic renters, and other renters. The shares approximate the representation of these groups among very low-income renters. Together, the three largest race and ethnicity groups accounted for 93.1 percent of worst case needs in 2011.

EXHIBIT 1–5. SHARE OF WORST CASE NEEDS, BY RACE AND ETHNICITY, 2011



N = 8.475 million renters with worst case needs  
Source: HUD-PD&R tabulations of American Housing Survey data

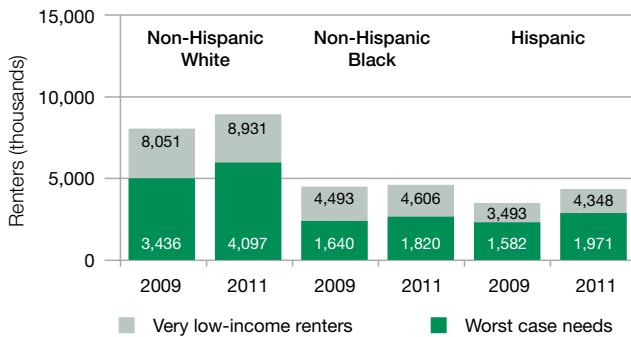
<sup>7</sup> All estimates of worst case needs in 2009 refer to previously published estimates (HUD-PD&R, 2011). The estimates are based on 2009 AHS data that the Census Bureau benchmarked to household control totals from the 2000 census. By contrast, 2011 AHS data were benchmarked to the 2010 census. HUD examined the effect on worst case needs of rebenchmarking the 2009 AHS to the 2010 control totals. Rebenchmarking increases the 2009 estimate of 7.095 million worst case needs to 7.167 million. Because the difference of 72,000 households is modest, HUD did not attempt to amend the 2009 estimates. See Appendix F for further discussion.

<sup>8</sup> The 95 percent confidence interval for the 2011 estimate is 8.173 million to 8.777 million. This likely range for the true value does not overlap with the 2009 confidence interval of 6.801 million to 7.389 million. Also see footnote 9 for a fuller discussion.

<sup>9</sup> In analyzing 2011 results, HUD was unable to conduct sophisticated tests of statistical significance that would take into account the AHS panel design. Because the AHS samples the same housing units in multiple years, the samples are not independent from year to year, and confidence intervals for the change in means are greater than simple statistical tests imply. HUD and the Census Bureau previously used the more stringent method in assessing the 2003-to-2005 change, however. That test indicated that a 2003-to-2005 change in incidence across all U.S. households was significant at the 95-percent confidence level if it exceeded 0.294 percentage points (HUD 2007: 13). The result is strongly suggestive but not conclusive that the 2009-to-2011 increase of 1.02 percentage points in overall incidence easily is statistically significant. HUD and the Census Bureau provide replicate weights with the AHS public use files beginning with 2009, which should enhance the ability of researchers to estimate standard errors (HUD-PD&R, 2012b; <http://www.huduser.org/portal/datasets/ahs/ahsdata09.html>).

Exhibit 1–6 illustrates that the prevalence of worst case needs among very low-income renters during 2011 was greatest for non-Hispanic whites, at 45.9 percent. Hispanics had the next greatest rate, at 45.3 percent, and the rate for blacks was 39.5 percent. An increase of 1.2 percentage points in the prevalence among whites moved them ahead of Hispanics, for whom the prevalence did not change. Prevalence among blacks with very low incomes surged by 3.0 percentage points between 2009 and 2011.

**EXHIBIT 1–6. VERY LOW-INCOME RENTERS AND WORST CASE NEEDS, BY RACE AND ETHNICITY, 2009 AND 2011**



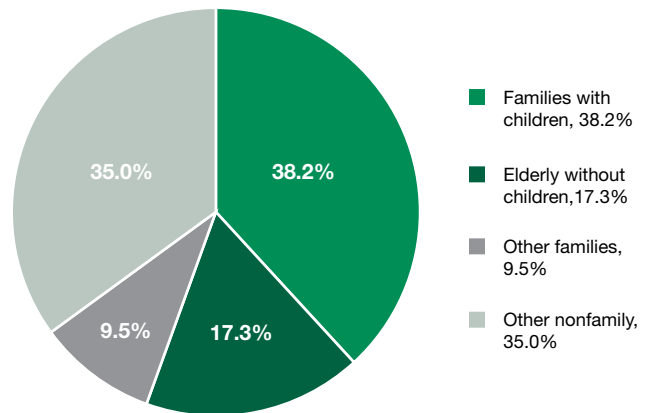
Source: HUD-PD&R tabulations of American Housing Survey data

The variations in the experiences of these race and ethnicity groups during different phases of the Great Recession<sup>10</sup> and the ensuing recovery period suggest that differences in their geographic distribution and economic status create different vulnerabilities to economic stressors.<sup>11</sup> As Exhibit 1–6 shows, the base of vulnerable very low-income renters increased for all three groups, but it did so at very different rates. During the 2009-to-2011 span, the number of very low-income renters increased 24.5 percent among Hispanics, 10.9 percent among non-Hispanic whites, and 2.5 percent among non-Hispanic blacks. This pattern of growth among very low-income renters differs markedly from that of the preceding, 2007-to-2009 period, when growth was more modest among both whites and Hispanics but four times greater among blacks.

### Worst Case Needs by Household Type

The composition of different households reflects variations in their stage of life, income and resources, and housing needs. Families with children constitute the most worst case needs households (Exhibit 1–7), followed by nonfamily renter households, elderly renters, and other families.

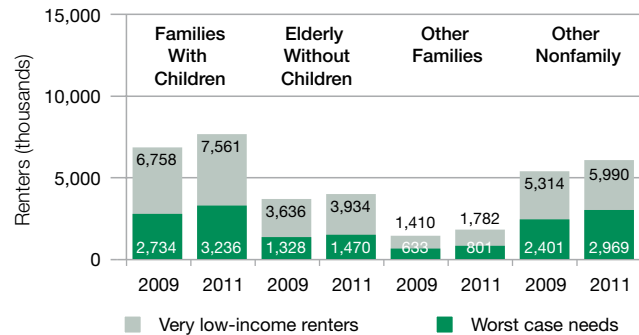
**EXHIBIT 1–7. SHARE OF WORST CASE NEEDS, BY HOUSEHOLD TYPE, 2011**



N = 4.475 million renters with worst case needs  
Source: HUD-PD&R tabulations of American Housing Survey data

Exhibit 1–8 provides greater detail, showing the number of very low-income renters and instances of worst case needs for these household types in 2009 and 2011.

**EXHIBIT 1–8. VERY LOW-INCOME RENTERS AND WORST CASE NEEDS, BY HOUSEHOLD TYPE, 2009 AND 2011**



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

### Families With Children

Worst case needs continue to increase among families with children. Families with children accounted for 500,000 new cases of worst case needs during the 2009-to-2011 period. This growth reflects both an increase of 800,000 very low-income

<sup>10</sup> The United States endured a Great Recession from December 2007 to June 2009 (NBER, 2010) that was caused in large part by a financial and mortgage crisis.

<sup>11</sup> Other factors that might have contributed to differences in worst case needs prevalence among groups during the recessionary period include involvement with the subprime mortgage market, prevalence of foreclosures, and variations in occupations and industries (for example, construction). A detailed analysis of such factors is beyond the scope of this report.



renters with children and greater prevalence of worst case needs among these households. The 42.8-percent rate of worst case needs in 2011 built on the striking increase from 34.6 percent in 2007 to 40.5 percent in 2009.

In the absence of housing assistance, worst case needs would be substantially more. Among very low-income renters with children, 1.87 million (24.7 percent) receive rental assistance and therefore, by definition, cannot have worst case needs. On the other hand, although very low-income renters with children account for the greatest share of worst case needs (a situation that therefore has great significance for the nation's future), only one in four receives housing assistance.

### Elderly Households

During 2011, 1.47 million elderly<sup>12</sup> renters had worst case needs, an increase of 140,000 from the 2009 estimate. The prevalence rate among elderly very low-income renters was 37.4 percent in 2011, less than the rate for families with children but more than the rate of 36.5 in 2009.

### Other Families

After considering families with children and elderly-headed households, other renter households can be divided into those that include multiple members of a given family and those that do not. "Other families" include households such as married couples who are childless or have adult children at home, adult siblings sharing an apartment, and householders boarding an elderly parent. As such, other families may include people who otherwise would choose to live independently but who instead "double up" by moving in with relatives because of economic distress.

Other families constituted the smallest category in Exhibits 1–7 and 1–8, representing 1.78 million very low-income renters, of whom 800,000 had worst case needs in 2011. Other families thus accounted for only 9.5 percent of worst case needs, although their share expanded from 8.9 percent in 2009. After a dramatic increase (from 33.8 percent in 2007), however, the 44.9 percent of very low-income other family renters that had worst case needs continued to exceed the prevalence among families with children and elderly households.

### Other Nonfamily Households

About 5.99 million very low-income renters in 2011 were "other nonfamily" households, making this category the second largest after families with children, and the number grew by 680,000 households from 2009 to 2011.

Worst case needs households included 2.97 million other nonfamily households. The prevalence of 49.6 percent among very low-income renters of this type was the greatest among the

four household categories. This proportion was 4.4 percentage points greater than the 2009 level, which was up 2.3 points from the 2007 level.

Evidence suggests that other nonfamily households are doubling up as a way to cope with shrinking incomes and increasing rents. Most renters in this group are single individuals, and the rest are unrelated people sharing a housing unit. The 78.4 percent share of single individuals in 2011 was a decrease from 82.1 percent 2 years earlier, however, suggesting that more individuals may be living with friends or taking a roommate.

Further, individuals with very low incomes who begin to share housing may jointly surpass the very low-income threshold, thereby reducing the number of very low-income renters by two. Neither the 11-percent increase in this household category nor the 3.7-point increase in the share comprising unrelated roommates includes such cases of doubling up that cause an upward shift in income categories.

### Households Including People With Disabilities

Worst case needs can be especially difficult for renter households that include people with disabilities. Disabilities can reduce employment options and create difficulties in finding suitable housing at reasonable cost.

#### QUESTIONS ABOUT DISABILITIES INTRODUCED IN THE 2009 AMERICAN HOUSING SURVEY

- Is anyone in this household deaf or do they have serious difficulty hearing?
- Is anyone in this household blind or do they have serious difficulty seeing, even when wearing glasses?
- Because of a physical, mental, or emotional condition, does anyone in this household have serious difficulty concentrating, remembering, or making decisions?
- Does anyone in this household have serious difficulty walking or climbing stairs?
- Does anyone in this household have serious difficulty dressing or bathing?
- [For all persons 15 years and older] Because of a physical, mental, or emotional condition, does anyone in this household have difficulty doing errands alone such as visiting a doctor's office or shopping?

Source: HUD-PD&R, 2009: 172–174.

<sup>12</sup> HUD defines elderly households as those having a household head or spouse who is at least 62 years of age and that include no children younger than 18 years of age.



Beginning with the 2009 AHS, respondents were asked directly whether household members have any of six types of disabilities, including four basic functional limitations—visual, hearing, cognitive, and ambulatory—and two types of difficulties with activities of daily living—self-care and independent living. Ambulatory limitations are the most frequently occurring type of disability, affecting 53 percent of very low-income renter households that include a nonelderly person with a disability, followed by cognitive limitations, which affect 48 percent of these

households.<sup>13</sup> People with disabilities are found among all four household types discussed previously. As Exhibit 1–9 shows,<sup>14</sup> 15.9 percent of renter households contain nonelderly individuals<sup>15</sup> reporting at least one of the six measures of disability. Of the 8.48 million renters with worst case needs in 2011, 1.31 million, or 15.4 percent, contained one or more nonelderly people with disabilities.<sup>16</sup> Worst case needs increased 32 percent from the 986,000 such households in 2009.

**EXHIBIT 1–9. WORST CASE NEEDS AND PRESENCE OF NONELDERLY PEOPLE WITH DISABILITIES, BY HOUSEHOLD TYPE, 2011**

	Families With Children	Elderly Families Without Children	Other Family	Other Nonfamily	Total
Very low-income renters (thousands)	7,561	3,934	1,782	5,990	19,267
Worst case needs (thousands)	3,236	1,470	801	2,969	8,476
Percent with worst case needs	42.8	37.4	44.9	49.6	44.0
Percent having people with disabilities	16.7	2.4	22.6	21.9	15.9
Very low-income renter households having nonelderly people with disabilities (thousands)	1,259	94	403	1,312	3,068
Worst case needs (thousands)	544	31	207	524	1,306
Percent with worst case needs	43.2	33.0	51.4	39.9	42.6

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

The prevalence of worst case needs among very low-income renter households having nonelderly people with disabilities averaged 42.6 percent in 2011, up from 38.2 percent in 2009. This increase of 4.4 percentage points exceeds the 2.6-point increase observed among very low-income renters overall, a difference that may reflect both greater vulnerability to income shocks and reduced ability to change the housing situation among people with disabilities. The prevalence of worst case needs among very low-income renters with disabilities ranges from one-third for elderly households without children to more than one-half for “other family” households. The largest household categories, however, account for most worst case needs affecting people with disabilities: 42 percent of affected households are families with children and 40 percent are “other nonfamily.”

## Summary

Worst case needs for affordable rental housing are a significant and growing problem. Of the 19.27 million very low-income renters susceptible to severe rent burdens and severely inadequate housing, 8.48 million—44.0 percent—faced one or both problems without housing assistance during 2011. The number of worst case needs increased sharply and significantly from 2009, when 7.10 million renters experienced worst case needs, and has been climbing for a decade. The number of worst case needs in 2011 was 19 percent greater than in 2009, 43 percent greater than in 2007, and 69 percent greater than in 2001. Since 2001, worst case needs have expanded from 4.8 to 7.4 percent of all households in the nation.

<sup>13</sup> The data about types of limitations are summarized in Appendix A, Table A–15. Also see HUD-PD&R 2008.

<sup>14</sup> The reader who compares estimates across worst case needs reports should be aware that, in the 2009 report, the lower half of Exhibit 1–9 displays erroneous values, because it was corrupted during production. Correct values can be obtained from Appendix A, Table A–5B.

<sup>15</sup> The analysis is limited to nonelderly people with disabilities because many elderly people suffer from impairments and activity limitations as a predictable consequence of aging. Note, however, that nonelderly people with disabilities may be found in elderly person-headed households, as Exhibit 1–9 demonstrates. Households headed by an elderly person with disabilities are not excluded if they also have a nonelderly person with disabilities.

<sup>16</sup> As previously reported, American Community Survey data in previous years suggested that AHS data undercount very low-income renters with disabilities, producing corresponding estimates 30 to 60 percent greater.

Worst case needs have grown even as severely inadequate housing continues to become less prevalent. In 2011, severely inadequate housing alone triggered only 3.1 percent of worst case needs, whereas 96.9 percent of worst case needs households had severe rent burdens and 3.6 percent had both problems. The importance of severe rent burdens in causing worst case needs accounts for the fact that nearly three out of four (73.3 percent) households with worst case needs had extremely low incomes during 2011.

Among very low-income renters, no racial or ethnic group and no household composition examined are exempt from worst case needs. From 2009 to 2011, the rate of worst case needs increased among non-Hispanic whites (1.2 points, to 45.9 percent of very low-income renters) and non-Hispanic blacks (3.0 points, to 39.5 percent), whereas the rate did not change for Hispanics (45.3 percent).

The differing experiences of racial and ethnic groups during the postrecessionary period may result from differences in location, subprime mortgage involvement, and employment situations. Increases in the population of very low-income renters were roughly similar for the three groups from 2007 to 2009, with growth ranging from 5.9 to 11.1 percent. From 2009 to 2011, however, the number of very low-income black renters increased only 2.5 percent compared with increases of 10.9 percent for whites and 24.5 percent for Hispanics.

Among very low-income renters, worst case needs are prevalent among families with children (42.8 percent), elderly households without children (37.4 percent), other family households (44.9 percent), and other nonfamily households (49.6 percent), which include single adults and roommates. Families with children account for the greatest share of worst case needs, 38.2 percent, followed by other nonfamily renters, 35.0 percent, who continue to multiply.

Worst case needs occurred for 42.6 percent of very low-income renters reporting nonelderly people with disabilities in 2011, as these households close the gap with the 44.0 percent prevalence among very low-income renters overall.

Section 2 examines how the broad problem of worst case needs is caused by shortages of affordable housing and is mitigated by assisted housing in national and regional markets.

# SECTION 2

## SHORTAGE OF AFFORDABLE HOUSING

The supply of rental units that are affordable to very low-income renters, especially those with extremely low incomes, is inadequate. Nationally, only 58 affordable units exist for every 100 extremely low-income renters. The presence of higher income renters in units that extremely low-income renters could afford worsens this shortage. Fewer than 36 affordable units are available for occupancy for every 100 extremely low-income renters. A final blow is that a significant portion of the affordable and available stock is physically inadequate and may pose threats to occupants. The geography of worst case needs and housing assistance sets a foundation for understanding competition for affordable rental housing and the shortages that result.

### Geography of Worst Case Needs

Housing markets are local markets. Even more than wealthier renters, very low- and extremely low-income renters find their choice of housing units limited to those in their current communities and neighborhoods.

As a national survey, the American Housing Survey does not support biennial estimates of worst case needs for many individual metropolitan areas.<sup>17</sup> It does, however, support an examination of three types of metropolitan locations—central city, suburb, and nonmetropolitan or rural areas—and of four geographic regions—the Northeast, Midwest, South, and West. This analysis by regional and metropolitan status, although at a macro level, provides considerable detail to the national picture of worst case needs.

### Worst Case Needs and Housing Assistance by Region and Metropolitan Location

A key aspect of the definition of “worst case needs” is that it can be understood as an indicator of need for affordable housing. Because rental housing with deep public subsidies falls into the “affordable” range, the definition of worst case needs excludes renters with housing assistance. Therefore, examining the spatial distribution of housing assistance and of worst case needs together provides information about the extent to which assistance is mitigating severe housing problems.

<sup>17</sup> Through 2009, HUD and the Census Bureau conducted periodic AHS metropolitan surveys to supplement the national AHS. Beginning in 2011, the national AHS incorporates metropolitan oversamples to provide metropolitan data more frequently.

Exhibit 2–1 shows the distribution of the nation’s 19.27 million very low-income renters across the four census regions and three metropolitan categories. On a regional basis, most very low-income renters, 6.49 million, are found in the South, 4.98 million are found in the West, and similar shares of 3.94 million and 3.86 million are found in the Northeast and Midwest, respectively.

Central cities are home to most (8.80 million) very low-income renters, followed closely by suburbs<sup>18</sup> (7.10 million) and nonmetropolitan areas (3.36 million).<sup>19</sup>

**EXHIBIT 2–1. NUMBER OF VERY LOW-INCOME RENTERS AND PREVALENCE OF WORST CASE NEEDS AND HOUSING ASSISTANCE, BY REGION AND METROPOLITAN LOCATION, 2011**

Region	Metropolitan Location			Total
	Central Cities	Suburbs	Nonmetropolitan Areas	
<b>Midwest (thousands)</b>	<b>1,787</b>	<b>1,237</b>	<b>841</b>	<b>3,864</b>
Percent with worst case needs	40.0	44.2	35.0	40.2
Percent with housing assistance	25.2	20.0	31.3	24.9
<b>Northeast (thousands)</b>	<b>2,186</b>	<b>1,354</b>	<b>399</b>	<b>3,939</b>
Percent with worst case needs	39.9	43.3	36.6	40.7
Percent with housing assistance	36.0	23.3	36.1	31.7
<b>South (thousands)</b>	<b>2,610</b>	<b>2,390</b>	<b>1,488</b>	<b>6,487</b>
Percent with worst case needs	46.7	47.5	41.0	45.7
Percent with housing assistance	25.6	15.6	22.6	21.2
<b>West (thousands)</b>	<b>2,222</b>	<b>2,125</b>	<b>630</b>	<b>4,977</b>
Percent with worst case needs	45.4	50.4	43.2	47.3
Percent with housing assistance	21.5	17.3	25.1	20.2
<b>Total (thousands)</b>	<b>8,804</b>	<b>7,105</b>	<b>3,358</b>	<b>19,267</b>
Percent with worst case needs	43.3	47.0	39.4	44.0
Percent with housing assistance	27.1	18.4	26.9	23.8

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

Like very low-income renters, worst case needs are common in every region and metropolitan category across the nation. As a national average, 44.0 percent of very low-income renters have worst case needs. The prevalence of worst case needs is slightly more than the national average in the West, about the same as the national average in the South, and marginally less than the national average in the Northeast and Midwest.

As compared with the nation as a whole, the prevalence of worst case needs among very low-income renters is slightly more in the suburbs and somewhat less in nonmetropolitan areas.

Exhibit 2–1 also demonstrates the important role housing assistance plays in reducing worst case needs. On a national basis, 4.59 million very low-income renters—23.8 percent—report receiving housing assistance<sup>20</sup> and 44.0 percent have worst case needs. Thus, 1.8 very low-income renters have worst case needs for every 1 that is assisted.<sup>21</sup>

<sup>18</sup> Suburbs include a small number of respondents from unspecified areas within metropolitan areas (metro3 = 9).

<sup>19</sup> Changes in annual estimates of very low-income renters in nonmetropolitan areas should be viewed with caution, because HUD assigns average income limits to less populated areas to accommodate AHS data suppression. See the discussion of “Income cutoffs in association with AHS geography” in Appendix E.

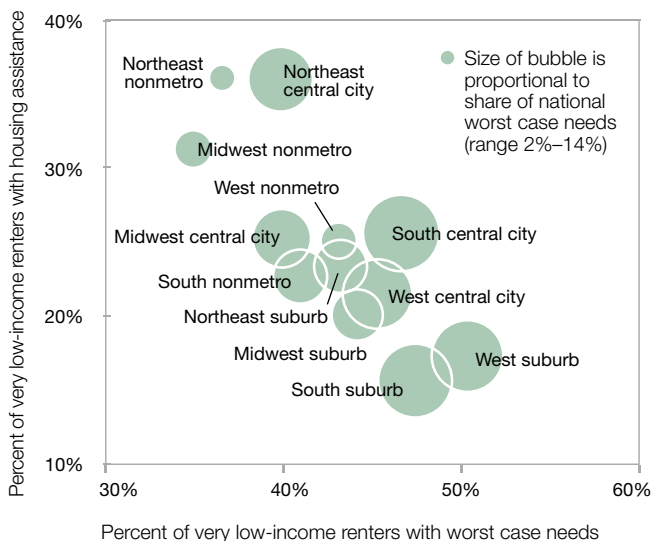
<sup>20</sup> In this report, housing assistance status is determined by self-report in the AHS, as discussed in Appendix E. HUD matched administrative data for HUD’s public housing, Housing Choice Voucher, and assisted multifamily housing programs with the 2011 AHS to validate self-reported assistance status.

<sup>21</sup> AHS estimates of assisted very low-income renters rely on self-reported data, but they reflect recent improvements in data reliability. By comparison, HUD administrative data for 2009 show 4.60 million assisted households, based on 3.38 million units of Section 8-assisted housing, 1.05 million units of public housing (net of 7 percent vacancy), 0.15 million units of housing for elderly and disabled people, and 0.02 million units of tenant-based assistance through the HOME Investment Partnerships Program (HUD, 2009: 349). Some HUD-assisted renters may have incomes above the very low-income threshold if their incomes increased after program admission.

Housing assistance is relatively less common in the suburbs, where only 18.4 percent of very low-income renters are assisted, and especially in the newer suburbs of the South and the West. The prevalence of housing assistance for very low-income renters also varies on a regional basis, ranging from 20.2 percent in the West to 31.7 percent in the Northeast. Areas that developed during an earlier period continue to draw benefits from an established but aging stock of public housing.

Exhibit 2–2 charts the same data to illustrate the vital role of housing assistance in preventing households from falling into worst case needs. The prevalence of worst case needs among very low-income renters is less in rural, nonmetropolitan areas and in the Northeast and Midwest, where housing assistance is relatively more available. Even in Northeast central cities, however, only 36.1 percent of eligible very low-income renters benefit from assistance.

**EXHIBIT 2-2. GEOGRAPHIC SHARES OF WORST CASE NEEDS, BY PREVALENCE OF HOUSING ASSISTANCE AND OF WORST CASE NEEDS, 2011**



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

Worst case needs are more prevalent in the West and the South, especially in suburbs, where housing assistance is scarcer—although high rents in the West also shape this picture.<sup>22</sup> Several areas having greater relative scarcity of housing assistance and an abundance of worst case needs account for substantial fractions of the national problem, as shown by the size of the bubbles in the lower right quadrant of Exhibit 2–2.

Although worst case needs increased in every region from 2009 to 2011, the West made the greatest contribution to the national increase. The number of very low-income renters increased by a substantial 26.0 percent in the West compared with more modest increases of 9.7 percent in the South, 8.6 percent in the Northeast, and 6.5 percent in the Midwest. Further, the West experienced the greatest prevalence of worst case needs in both 2009 and 2011. As a result, the West accounted for 47.7 percent of the increase in worst case needs in the most recent period, the South contributed 26.7 percent, the Northeast contributed 14.6 percent, and the Midwest contributed 11.0 percent.

### Interaction of Race and Ethnicity With Metropolitan Location

Despite differing distributions of minority and nonminority very low-income renters within metropolitan areas, suburban areas are emerging as the place where very low-income renters are most likely to experience worst case needs. Exhibit 2–3 shows the number of very low-income renters, both overall and with worst case needs, by the major race and ethnicity groups and their metropolitan location.

Across the nation, 3.81 million instances of worst case needs were in central cities (45.0 percent of the total), another 3.34 million were in suburban areas (39.4 percent), and 1.32 million were in nonmetropolitan areas (15.6 percent). The distribution of worst case needs by metropolitan location parallels the distribution of very low-income renters across these areas.

The most common areas in which to find worst case needs differ for white renters<sup>23</sup> as compared with minority renter populations. White households continue to account for the greatest share of very low-income renters and of worst case needs in every metropolitan category. The greatest proportion of white very low-income renters (40.4 percent) live in suburbs, and the greatest share of their worst case needs (41.4 percent) are found there, as well.

<sup>22</sup> High rents introduce the question of whether enough rental units are available at Fair Market Rents (FMR) to make housing vouchers an adequate policy response to affordable housing shortfalls. Appendix B, Exhibit B–3, addresses the extent of housing supply on a regional basis. Although enough affordable units exist in each region, the number of available units in each region is sufficient to house only 82 to 86 percent of the renters that can afford rents no greater than the FMR. For renters who attempt to find a unit with a housing choice voucher, the housing quality standards of that program imply that their success will depend on the prevalence of “adequate” units in their area—not merely affordable and available units.

<sup>23</sup> In this discussion, “white” refers to non-Hispanic whites, and “black” refers to non-Hispanic blacks.

**EXHIBIT 2–3. NUMBER OF VERY LOW-INCOME RENTERS OVERALL AND WITH WORST CASE NEEDS, BY RACE AND ETHNICITY AND METROPOLITAN LOCATION, 2011**

Region	Metropolitan Location			Total
	Central Cities	Suburbs	Nonmetropolitan Areas	
<b>Non-Hispanic White (thousands)</b>	<b>2,964</b>	<b>3,612</b>	<b>2,355</b>	<b>8,931</b>
Percent with worst case needs	47.8	46.9	41.8	45.9
<b>Non-Hispanic African American (thousands)</b>	<b>2,749</b>	<b>1,407</b>	<b>450</b>	<b>4,606</b>
Percent with worst case needs	37.1	44.8	37.8	39.5
<b>Hispanic (thousands)</b>	<b>2,425</b>	<b>1,590</b>	<b>333</b>	<b>4,348</b>
Percent with worst case needs	44.5	49.1	33.3	45.3
<b>Other (thousands)</b>	<b>666</b>	<b>496</b>	<b>220</b>	<b>1,381</b>
Percent with worst case needs	44.4	47.2	25.9	42.5
<b>Total (thousands)</b>	<b>8,804</b>	<b>7,105</b>	<b>3,358</b>	<b>19,267</b>
Percent with worst case needs	43.3	47.0	39.4	44.0

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

By contrast, minority very low-income renters and minority worst case needs households are most commonly found in central cities. Central cities are home to 59.6 percent of black very low-income renters and 56.0 percent of black worst case needs. Similarly, 55.8 percent of Hispanic very low-income renters and 54.8 percent of Hispanic worst case needs occur in central cities. A similar story can be told for “other” minority households. As Exhibit 2–3 shows, however, despite minority very low-income renters being more prevalent in central cities, they are more likely to experience worst case needs if they live in suburbs.

### How the Market Allocates Affordable Housing on a National Basis

The competition for good quality, affordable housing is fierce. Competition affects whether the neediest households can live in the most affordable units, the vacancy rate at different rent levels, and how quickly new units are occupied. Exhibit 2–4 shows the distribution of rental units and their occupancy by the affordability of their rents relative to the Area Median Income (AMI). A unit is considered affordable for a renter if the gross rent (rent plus utilities) does not exceed 30 percent of income. Any given renter may live in a unit renting for less than, the same as, or more than that threshold, however.<sup>24</sup>

**EXHIBIT 2–4. OCCUPANCY OF AFFORDABLE UNITS, 2011**

Occupancy Status	Rental Units by Income Needed to Make the Rent Affordable (thousands)				Total
	0–30% of AMI	30–50% of AMI	50–80% of AMI	>80% of AMI	
Higher income occupants	2,635	3,765	5,384	NA	11,783
Same-or-lower income occupants	3,850	6,124	10,786	6,324	27,084
Vacant	369	1,058	1,825	955	4,208
Total	6,854	10,947	17,995	7,279	43,075

AMI = Area Median Income. NA = not applicable.

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

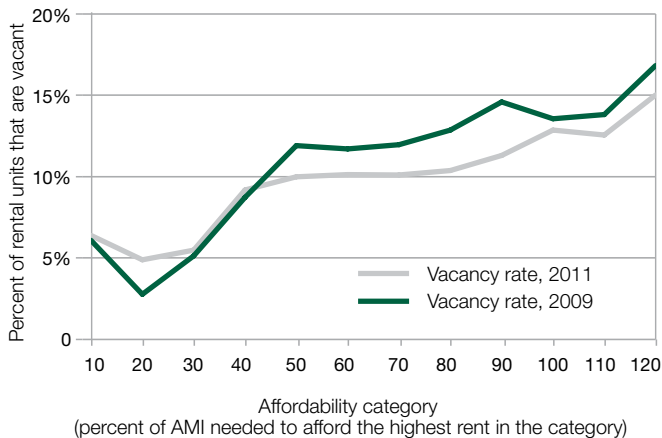
<sup>24</sup> Note that renters whose incomes place them at the bottom of an income range would not be able to afford rents at the top of their range. More detailed presentations of these data appear in Appendices A and B, where Exhibits A–12 and B–2 show unit affordability and occupancy status using 10-point income breaks.



The extent of competition for the most affordable housing, portrayed in Exhibit 2–4, is striking. Higher income renters occupy 2.64 million, or 38.4 percent, of the units affordable to extremely low-income renters. Similarly, higher income renters occupy 34.4 percent of units affordable at incomes of 30 to 50 percent of AMI and 29.9 percent of units affordable at incomes of 50 to 80 percent of AMI.

The varying proportions of vacant units across the affordability categories further demonstrate the competition for affordable units. The vacancy rate increases as the affordability of the rent decreases (Exhibit 2–5). Among the least costly units—those with rents affordable at incomes of 0 to 30 percent of AMI—only 5.4 percent are vacant. The vacancy rate jumps to 9.7 percent among units affordable at incomes of 30 to 50 percent of AMI, to 10.1 percent among units affordable at incomes of 50 to 80 percent of AMI, and to 13.1 percent among the highest rent units. Overall, the average rental vacancy rate declined from 10.9 percent in 2009 to 9.8 percent in 2011.<sup>25</sup>

**EXHIBIT 2–5. DISPARITIES IN RENTAL VACANCIES BY AFFORDABILITY LEVEL, 2009 AND 2011**



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

The gradient in national vacancy rates seen in Exhibit 2–5 became less steep between 2009 and 2011. Nevertheless, the market for units affordable at extremely low income levels remains very tight. Increasingly slack market conditions are found at higher rent levels (which include numerous vacation homes). The availability of units at higher rent levels shows that in many markets, rental assistance in the form of vouchers could reduce worst case needs to the extent landlords are willing to participate.

The shifts in vacancy from 2009 to 2011 reflect in part the expansion of the rental stock by a significant 3.33 million units, or 8.4 percent. Vacancies decreased, however, because the net

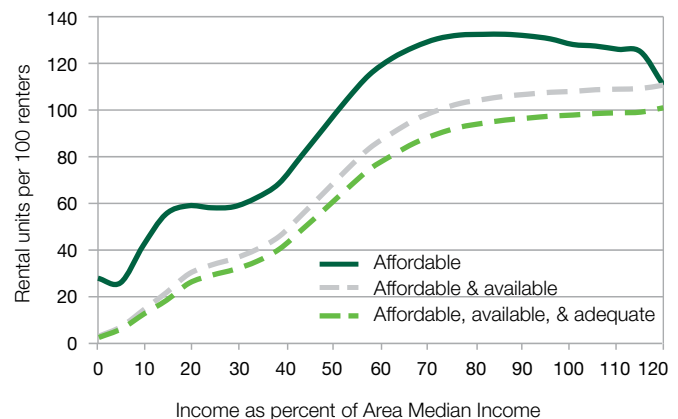
increase in the stock was entirely absorbed by the concurrent increase of 3.47 million rental households.

Although vacancy rates provide a valuable indication of the balance between supply and demand, they do not directly compare the number of affordable units with the number of renters. The remainder of Section 2 makes such comparisons, employing three increasingly stringent concepts to assess whether the rental housing stock is sufficient for the need.

### Affordability, Availability, and Adequacy of the National Rental Stock

The scarcity of affordable units is greatest for the poorest renters, but, because of the rapid increase in renter households and greater competition, that scarcity is reaching higher up the income scale. Exhibit 2–6 describes the U.S. rental housing stock in 2011 using AHS data. These aggregate data portray how well the overall stock could meet the need for affordable housing if location did not matter.<sup>26</sup>

**EXHIBIT 2–6. THREE MEASURES OF THE SUFFICIENCY OF THE U.S. RENTAL HOUSING STOCK, 2011**



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

The cumulative number of affordable units is shown to equal the cumulative number of renters only when incomes approaching 55 percent of AMI are included. Beyond this point, more than 100 affordable units exist per 100 renters—enough, with perfect allocation, to provide affordable housing to every renter with an income of more than 55 percent of AMI. This threshold moved higher from the 2009 level of 50 percent of AMI and the 2007 level of 45 percent of AMI, meaning that the scarcity of affordable units is reaching higher up the income scale.

<sup>25</sup> Comparable estimates of the rental vacancy rate based on the Current Population Survey are 10.5 percent in 2009 and 9.6 percent in 2011. See Exhibit 26, “U.S. Housing Market Conditions,” [http://www.huduser.org/portal/periodicals/ushmc/winter12/USHMC\\_4q12\\_historical.pdf](http://www.huduser.org/portal/periodicals/ushmc/winter12/USHMC_4q12_historical.pdf).

<sup>26</sup> Measures of affordability, availability, and adequacy compare the entire housing stock with the entire renter population, and they do not reflect small-scale geographic detail or the complexities of local housing markets.

The ratio of affordable units per renter peaks at income levels of slightly more than 80 percent of AMI. On a cumulative basis, there is a significant surplus of units affordable at higher levels of household income. As income increases, renters are increasingly likely to spend less than 30 percent of their incomes on housing.<sup>27</sup>

The situation is completely different at the low end of the income scale. Enough affordable units existed to house only 58 percent of extremely low-income renters in 2011, even if those units somehow could have been perfectly allocated. The affordable stock for extremely low-income renters continues to grow scarcer, as the comparable figures were 61 percent in 2009 and 76 percent in 2007.

### MEASURING WHETHER AFFORDABLE HOUSING STOCK IS SUFFICIENT FOR NEED

- *Affordability* measures the extent to which enough rental housing units of different costs can provide each renter household with a unit it can afford (based on the 30-percent-of-income standard). Affordability, which is the broadest measure of the relative supply of the housing stock, addresses whether sufficient housing units would exist 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 renters within a particular income range. Availability is a more restrictive concept, because units that meet the definition must be available and affordable. Some renters choose to spend less than 30 percent of their incomes on rent, occupying housing that is affordable to renters of lower incomes. These units thus are not available to lower income renters. A unit is available at a given level of income if it is affordable at that level and either (1) occupied by a renter at that income level or less, or (2) vacant.
- *Adequacy* extends the concept of availability by considering whether sufficient rental units are physically adequate, affordable, and available. Adequacy thus is the most restrictive of the three measures.

Considering availability in addition to affordability adds an important dimension—whether higher income renters currently occupy affordable units. Availability poses an important additional constraint on renters seeking affordable units;<sup>28</sup> only about 36 percent of extremely low-income renters could actually find an affordable and available unit, even if location were not a factor.

The paucity of affordable and available units is worsened by the occupancy of a considerable proportion of the most affordable housing stock by renters who could afford to spend more (as shown previously in Exhibit 2–4). The affordable stock is nominally sufficient to house every renter with an income greater than 55 percent of AMI, yet the affordable and available stock does not match the number of renters until household incomes reach about 75 percent of AMI.

Exhibit 2–6 also illustrates that adding a third criterion—that units should be physically adequate—further reduces the supply of the rental housing stock. For renters even with low incomes (up to 80 percent of AMI), only 93 adequate units are available for every 100 renters. The physically adequate stock does not fully match the need until it includes units affordable only to renters with incomes exceeding 110 percent of AMI.

### Rental Stock by Income

We have seen that relatively few rental units are affordable, and—because of occupancy by higher income renters and limited vacancies—even fewer are available to renters with the lowest incomes. Exhibit 2–7 summarizes the three housing stock measures for the standard income groups used in this report.

A severe mismatch exists between the number of extremely low-income renters and the number of affordable units available to them. For every 100 extremely low-income renters, only 61 affordable units exist, and fewer than 36 are affordable and available. If physically adequate units are required, only 31 units are available for every 100 extremely low-income renters.<sup>29</sup>

<sup>27</sup> Exhibit A–1A shows that only 10.8 percent of renters with incomes above 80 percent of AMI have either moderate or severe rent burdens.

<sup>28</sup> 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, units provided for caretakers) or because relatives or friends of the occupants own the units. The 2007 AHS data indicate that 2.4 million renter households (6.2 percent) occupied their units while paying no rent. The AHS does not provide estimates of the number of households paying a positive but less-than-market rent because of employment or other reasons.

<sup>29</sup> Previous research based on the Residential Finance Survey indicates that 12 percent of units with gross rents of \$400 or less produced negative net operating income, suggesting they are heading for demolition or conversion to nonresidential use (JCHS, 2006).



EXHIBIT 2-7. RENTAL HOUSING STOCK BY INCOME CATEGORY, 2011

Income Category	Rental Units per 100 Renters		
	Affordable	Affordable and Available	Affordable, Available, and Adequate
Extremely low-income renters (0–30% AMI)	58.2	35.8	31.1
Very low-income renters (0–50% AMI)	92.4	64.6	57.1
Low-income renters (0–80% AMI)	132.5	102.9	92.7

AMI = Area Median Income.

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

Renters with very low incomes find 92 affordable units, 65 affordable and available units, and only 57 affordable, available, and physically adequate units per 100 renters. Renters with low incomes find that the affordable and available rental stock is sufficient to house them all, although a minimal proportion of units have physical problems.

Overall, the supply of affordable housing continued to worsen through 2011, but at a slackened pace from the 2007-to-2009 period. Exhibit 2–8 illustrates that the supply of affordable housing stock for extremely low-income renters fell by 3 units per 100 renters from 2009 to 2011, from 61 to 58 units per 100 renters. For very low-income renters, affordable units fell by 6 units per 100 renters.

EXHIBIT 2-8. TREND IN RENTAL HOUSING STOCK BY INCOME CATEGORY, 2007 TO 2011

Income Category	Rental Units per 100 Renters				
	2007	2009	2011	Change	
				2007–09	2009–11
<b>Extremely low-income renters (0–30% AMI)</b>					
Affordable	76.2	61.0	58.2	–15.2	–2.8
Affordable and available	44.2	35.7	35.8	–8.5	0.2
<b>Very low-income renters (0–50% AMI)</b>					
Affordable	112.9	98.7	92.4	–14.2	–6.3
Affordable and available	73.9	67.2	64.6	–6.7	–2.6

AMI = Area Median Income.

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

Affordable and available units did not decline as much from 2009 to 2011 (by about 3 units per 100 very low-income renters) as did the broader affordable unit measure. Further, availability did not worsen significantly for extremely low-income renters, although the affordable stock ratio declined. Considering the significant increase in extremely low-income renters, stable availability estimates might be found if some renters who had incomes of slightly more than 30 percent of AMI and occupied extremely low-income units in 2009 lived in the same units but had incomes of less than 30 percent of AMI 2 years later. This change would flip the units from “unavailable” to “available” for extremely low-income households.

## Geography of Supply

The preceding discussion shows that worst case needs are dispersed across the nation, yet can be concentrated in certain geographic areas, and that spatial variation is affected in part by the availability of housing assistance.

Affordable rental housing includes both units that receive public rent assistance and units that for-profit and nonprofit housing providers offer at modest rents. The examination of affordable housing supply on a national basis reveals, first, that the supply of rental units that are affordable to very low-income and poorer

households is simply inadequate; second, that this shortage is worsened by the natural preference of higher income renters for more affordable units; and third, that the shortage is further worsened by the physical inadequacy of some of the stock.

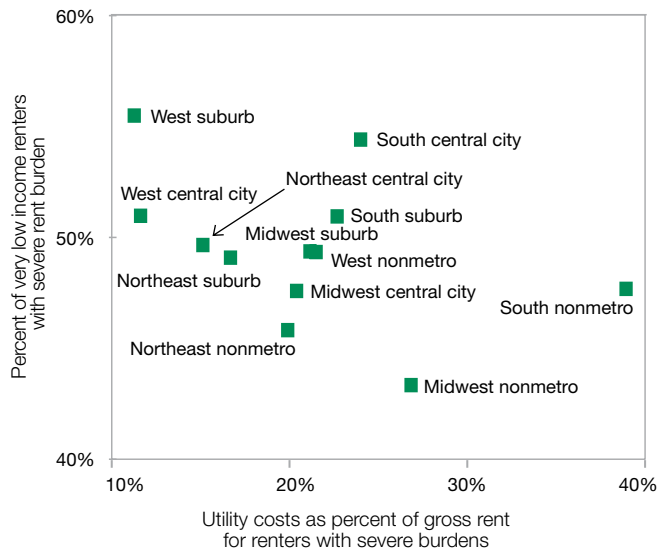
The following discussion sharpens that picture by showing how shortages vary by geography.

### Geographic Variation in Utility Costs

It is important to recognize that rent burdens are measured using gross rent, which is the sum of contract rent (the amount specified on the lease) plus any separate utility costs. Utility costs account for 17 percent of gross rent for the average very low-income renter. Variations in climate across regions can cause utility costs to constitute significantly different percentages of gross rent, and make different contributions to severe rent burdens.

Exhibit 2–9 presents a distribution of major U.S. geographies in 2011 by the prevalence of worst case needs and the percentage of gross rent that renters with severe cost burdens pay for utilities.

**EXHIBIT 2–9. PREVALENCE OF SEVERE RENT BURDENS AND MEAN CONTRIBUTION OF UTILITY COSTS TO SEVERE RENT BURDENS, BY REGION AND METRO LOCATION, 2011**



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

Among very low-income renters with severe rent burdens, the variation in average utility costs is not great. Mean utility costs reported in the AHS were least in the West, at \$105 per month, followed by \$125 in the Northeast, \$146 in the Midwest, and \$180 in the South.<sup>30</sup> In every region, however, utility costs for

very low-income renters who face severe rent burdens averaged 38 percent, or \$42 per month, more than utility costs for renters without severe burdens.

Utility costs account for a relatively small fraction—as little as 11 percent—of severe rent burdens in metropolitan areas of the West, where newer housing stock, high contract rents, and temperate climate tend to coexist. By contrast, utility costs contribute more than 20 percent of the average severe rent burden of very low-income renters in the South, the Midwest, and nonmetropolitan areas, and they reach 39 percent in nonmetropolitan areas in the South, where contract rents are relatively low. Although contract rents may be less in these regions, utility costs frequently are high enough to create severe rent burdens and thus add to worst case needs.

### Rental Stock by Metropolitan Location

Deficiencies in the affordable and available stock are less severe in nonmetropolitan areas. Exhibit 2–10 summarizes the affordable housing supply for cities, suburbs, and nonmetropolitan areas. Notably, although cities and suburbs display comparable available-unit ratios—with 31 to 36 units per 100 extremely low-income renters and 60 to 64 units per 100 very low-income renters—the underlying supply of affordable units is more constrained in central cities than in suburbs.

<sup>30</sup> The AHS questions about utility costs produce different results from other surveys, such as the U.S. Energy Information Administration's Residential Energy Consumption Survey (RECS). RECS data do not include nonenergy utility costs as the AHS does, but RECS 2009 indicates that renters pay \$157 per month for energy in the Northeast, \$90 in the West, \$119 in the Midwest, and \$126 in the South. See the "Consumption and Expenditures by End Use" tables at <http://www.eia.gov/consumption/residential/data/2009/index.cfm>.

**EXHIBIT 2-10. RENTAL HOUSING STOCK, BY INCOME CATEGORY IN CENTRAL CITIES, SUBURBS, AND NONMETROPOLITAN AREAS, 2011**

Income Category	Housing Units per 100 Renters		
	Affordable	Affordable and Available	Affordable, Available, and Adequate
<b>Central cities</b>			
Extremely low-income renters (0–30% AMI)	49.4	35.9	30.5
Very low-income renters (0–50% AMI)	84.7	64.1	55.8
Low-income renters (0–80% AMI)	127.1	102.7	91.0
<b>Suburbs</b>			
Extremely low-income renters (0–30% AMI)	56.1	30.9	28.0
Very low-income renters (0–50% AMI)	88.3	59.8	54.1
Low-income renters (0–80% AMI)	135.4	101.0	92.9
<b>Nonmetropolitan areas</b>			
Extremely low-income renters (0–30% AMI)	86.9	45.8	38.8
Very low-income renters (0–50% AMI)	121.2	76.0	66.8
Low-income renters (0–80% AMI)	139.6	107.5	96.3

AMI = Area Median Income.

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

Further, the relationship between the ratios for affordable units and affordable-and-available units highlights differences by metropolitan location. The difference between the measures reflects the joint effect of the two factors presented in Exhibit 2-4: low vacancy rates for affordable units and the occupancy of affordable units by higher income renters.

Exhibit 2-10 reveals that losses of affordable units to unavailability are less severe in denser, more urban areas. In central cities, about 23 otherwise-affordable units are unavailable per 100 very low-income renters.<sup>31</sup> By comparison, 35 affordable units are unavailable per 100 renters in suburbs, and 47 affordable units are unavailable per 100 renters in nonmetropolitan areas.

A smaller reduction of availability in central city areas may flow from the benefits of the more robust and efficient housing markets within cities. Such markets can offer a better range of unit features and price points that offer appealing value to higher income renters. More and better choices for higher income renters can affect the availability of affordable housing for very low-income renters by reducing the occupancy of the most affordable units by higher income renters or by increasing vacancy rates and causing rents of adequate units to filter down to affordable levels.

Also worth consideration in Exhibit 2-10 is the extent of differences between the ratios of available units and adequate units. Suburban areas do better in this analysis, likely reflecting less age in the housing stock. Adding the adequacy test reduces the affordable-and-available ratio by 6 units per 100 very low-income renters in the suburbs compared with reductions of 8 units in central cities and 9 units in nonmetropolitan areas.

Adjusting the affordable-and-available ratio for differences in adequacy nearly eliminates the city-versus-suburb difference in the affordable rental stock.<sup>32</sup> The adequacy test also considerably reduces the affordable housing advantage of nonmetropolitan areas relative to denser areas. Even in nonmetropolitan areas, fewer than 7 of every 10 very low-income renters could find an adequate unit that was affordable and available for their use.

### Rental Stock by Region

Rental markets are constrained for extremely low-income renters across all four census regions despite substantial variation in the availability of affordable rental units. Exhibit 2-11 illustrates that the Midwest shows the best availability, with 81 units per 100 very low-income renters. The West is worst off, with 53 units per 100 very

<sup>31</sup> These estimates of unavailable units reflect the difference between the estimates of affordable units and affordable-and-available units presented in Exhibit 2-10, and they differ from the estimates of units occupied by higher income renters shown in Exhibit 2-4 by covering the full very low-income category: units affordable at incomes of 0 to 50 percent of AMI rather than of only 30 to 50 percent of AMI.

<sup>32</sup> Only 13 percent of suburban rental units were built before 1940 compared with 27 percent of central-city units and 20 percent of nonmetropolitan units (Census Bureau, 2008: table 4-1).

low-income renters, and the Northeast and South have 65 and 63 units available, respectively, per 100 very low-income renters. For extremely low-income renters, the availability of affordable units is far from adequate in any region. In two regions, the West and the Northeast, not even enough affordable units are available for low-income renters with incomes up to 80 percent of AMI.

**EXHIBIT 2-11. RENTAL HOUSING STOCK, BY REGION AND INCOME CATEGORY, 2011**

Income Category	Housing Units per 100 Renters		
	Affordable	Affordable and Available	Affordable, Available, and Adequate
<b>Northeast</b>			
Extremely low-income renters (0–30% AMI)	62.9	40.3	33.2
Very low-income renters (0–50% AMI)	89.5	65.3	55.7
Low-income renters (0–80% AMI)	122.7	96.6	83.5
<b>Midwest</b>			
Extremely low-income renters (0–30% AMI)	61.6	37.8	33.8
Very low-income renters (0–50% AMI)	120.2	80.8	73.4
Low-income renters (0–80% AMI)	141.9	110.5	101.2
<b>South</b>			
Extremely low-income renters (0–30% AMI)	59.2	36.0	30.9
Very low-income renters (0–50% AMI)	91.6	63.1	55.4
Low-income renters (0–80% AMI)	139.1	106.8	96.3
<b>West</b>			
Extremely low-income renters (0–30% AMI)	50.1	30.3	27.3
Very low-income renters (0–50% AMI)	74.2	53.4	47.7
Low-income renters (0–80% AMI)	123.5	96.4	87.8

AMI = Area Median Income.

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

On a metropolitan basis, adding the adequacy test raised the hurdle for renters highest in nonmetropolitan areas. On a regional basis, adding the adequacy test restricts supply most substantially in the South and in the Northeast.

Nevertheless, the primary point in Exhibit 2-11 is that extremely low-income renters continue to face severely constrained markets across all four regions. No more than two in five extremely low-income renters have an affordable unit available to them in any region. No more than one in three extremely low-income renters can expect to find a unit that is affordable, available, and physically adequate.

## Dynamics of Supply

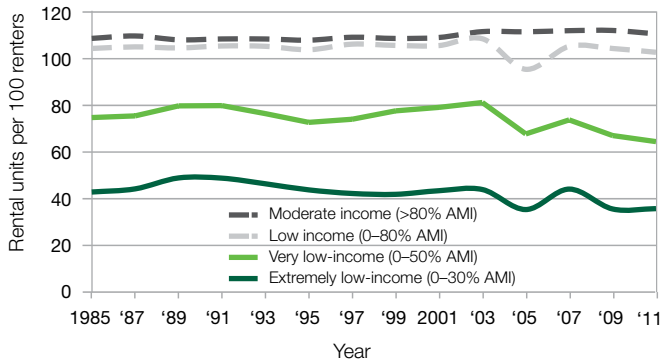
In addition to understanding the spatial aspects of affordable housing supply, considering the trends in supply over time is useful, both nationally and by metropolitan location.

### Trends in National Rental Stock

The availability of the affordable rental stock has shown a degree of stability for 25 years. As Exhibit 2-12 illustrates, however, that stability is waning and housing shortages are approaching new extremes. The number of affordable and available rental units per 100 renters is shown for the four standard income categories from 1985 to 2011. Since 2005, the most vulnerable renters—the very

low-income majority and the extremely low-income subset—have faced the tightest market for affordable housing since HUD first estimated this measure in 1985.

**EXHIBIT 2-12. AVAILABILITY OF AFFORDABLE RENTAL UNITS, 1985 TO 2011**



AMI = Area Median Income.

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

The availability of affordable housing continued to decrease to a record low for very low-income renters in 2011. Extremely low-income renters first experienced their severely deteriorating conditions in 2005 and 2009. Middle-income renters, by contrast, continue to experience a stable and adequate supply of affordable rental units. The unusual variations observed in rental housing during the 2003-through-2009 period may be tied to the gyrations of the homeownership market in recent years—a topic explored further in Section 3.

### Trends in Rental Stock by Metropolitan Location

Exhibits 2-13 and 2-14 show how affordability-and-availability ratios have changed across central cities, suburbs, and nonmetropolitan areas.

Exhibit 2-13 presents significant declines in the stock of affordable units relative to the number of renters. From 2007 to 2011, the affordability ratio declined by 18 to 22 units per 100 very low-income renters in central cities, suburbs, and nonmetropolitan areas. The greatest declines occurred during the first half of the period, from 2007 to 2009, but declines continued between 2009 and 2011.

**EXHIBIT 2-13. TRENDS IN SUPPLY OF AFFORDABLE UNITS, BY METROPOLITAN LOCATION, 2007-11**

Metropolitan Status	Affordable Units per 100 Renters				
	2007	2009	2011	Change 2007-11	Change 2009-11
<b>Central cities</b>					
Extremely low-income renters (0-30% AMI)	60.7	48.5	49.4	-11.3	0.9
Very low-income renters (0-50% AMI)	102.7	88.8	84.7	-18.0	-4.1
Low-income renters (0-80% AMI)	133.9	129.8	127.1	-6.8	-2.7
<b>Suburbs</b>					
Extremely low-income renters (0-30% AMI)	79.1	60.9	56.1	-22.9	-4.8
Very low-income renters (0-50% AMI)	110.6	97.0	88.3	-22.3	-8.7
Low-income renters (0-80% AMI)	146.5	139.4	135.4	-11.1	-4.0
<b>Nonmetropolitan areas</b>					
Extremely low-income renters (0-30% AMI)	108.3	97.0	86.9	-21.5	-10.1
Very low-income renters (0-50% AMI)	139.7	127.6	121.2	-18.5	-6.5
Low-income renters (0-80% AMI)	141.5	143.9	139.6	-1.9	-4.3

AMI = Area Median Income.

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

The affordable stock for extremely low-income renters fell behind the most in suburbs and nonmetropolitan areas. In the most recent 2-year AHS period, the overall stock for extremely low-income renters edged upward in central cities.

Despite the substantial declines in the affordable stock ratio from 2007 to 2011, declines in the affordable-and-available ratio were less dramatic. Exhibit 2-14 shows that the available units ratio declined by 8 to 11 units per 100 very low-income renters during

the 4 years from 2007 to 2011 compared with the affordable units ratio decline of 18 to 22 units. During the most recent 2-year AHS period, the availability of affordable housing continued to drift downward in most areas, with the notable exception of a slight improvement for extremely low-income renters living in central cities and a minimal change for extremely low-income renters in nonmetropolitan areas. Suburbs, which already had the worst availability of affordable rental stock in 2007, experienced continuing declines in availability during the following 2 years.

**EXHIBIT 2-14. TRENDS IN SUPPLY OF AFFORDABLE AND AVAILABLE UNITS, BY METROPOLITAN LOCATION, 2007-11**

Metropolitan Status	Affordable and Available Units per 100 Renters				
	2007	2009	2011	Change 2007-11	Change 2009-11
<b>Central cities</b>					
Extremely low-income renters (0-30% AMI)	41.4	34.4	35.9	-5.5	1.5
Very low-income renters (0-50% AMI)	72.3	65.9	64.1	-8.3	-1.8
Low-income renters (0-80% AMI)	105.5	104.8	102.7	-2.7	-2.1
<b>Suburbs</b>					
Extremely low-income renters (0-30% AMI)	42.7	32.4	30.9	-11.9	-1.5
Very low-income renters (0-50% AMI)	68.1	61.9	59.8	-8.2	-2.1
Low-income renters (0-80% AMI)	104.3	102.2	101.0	-3.3	-1.2
<b>Nonmetropolitan areas</b>					
Extremely low-income renters (0-30% AMI)	53.0	45.6	45.8	-7.2	0.2
Very low-income renters (0-50% AMI)	86.7	81.0	76.0	-10.8	-5.0
Low-income renters (0-80% AMI)	107.4	108.6	107.5	0.1	-1.1

AMI = Area Median Income.

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

## Summary

Worst case needs are common in every region and metropolitan category across the United States. Nationally, 43.9 percent of very low-income renters had worst case needs in 2011, with slightly greater prevalence in the West, in the South, and in suburbs. The number of worst case needs increased significantly in every region from 2009 to 2011, with the West accounting for 47.7 percent of the increase, the South 26.7 percent, the Northeast 14.6 percent, and the Midwest 11.0 percent.

New analysis shows that utility costs play a significant role in causing the severe rent burdens that trigger worst case needs. On average, very low-income renters who face severe rent burdens report utility costs 38 percent greater than very low-income renters who do not face severe burdens.

Housing assistance, including that provided by HUD, is an important preventer of worst case needs among very low-income renters. Nationwide, 23.8 percent of very low-income renters, or 4.59 million households, report receiving housing assistance. For every very low-income renter who is assisted, however, 1.8 renters have worst case needs for such assistance.

With 92 rental units affordable for every 100 very low-income renters, the nation no longer has enough affordable units to house this population even if allocation were perfect. Many fewer affordable units are actually available to renters with the lowest incomes, because vacancy rates are low for the lowest rent units and many affordable units are rented to higher income families. In 2011, the vacancy rate for units affordable at extremely low incomes was only 5.4 percent compared with 13.1 percent for

units affordable at more than 80 percent of AMI. The disparity in vacancy rates across rent affordability categories diminished between 2009 and 2011, however, as the rental stock expanded to meet a surge in rental demand.

Because of competition for affordable units, when a simple ratio of affordable units per very low-income renter is made more stringent by adding availability as a constraint, the ratio decreases from 92 affordable units to only 65 affordable and available units per 100 very low-income renters, and it decreases from 58 to 36 per 100 extremely low-income renters. Higher income families occupy 38.4 percent of units affordable to extremely low-income renters.

In addition, a substantial proportion of available units are not in standard physical condition. The number of affordable, available, and adequate units in 2011 is only 57 per 100 very low-income renters and only 31 per 100 extremely low-income renters.

The long trend of market stability in the national availability of affordable units began weakening in 2003, and the availability of affordable units has significantly worsened. During the 2007-to-2011 period, the number of affordable and available units per 100 very low-income renters decreased by 8 in central cities and suburbs and by 11 in nonmetropolitan areas, although the greatest part of those losses occurred from 2007 to 2009.

Given the scarcity of affordable, available, and adequate units for the poorest renters, the efficacy of housing assistance in preventing worst case needs, and the surplus of units available at higher rent levels, housing vouchers continue to offer an important policy option for addressing the growing problem of worst case needs using the existing housing stock.





## UNDERSTANDING THE TREND IN WORST CASE NEEDS

### SECTION

# 3

Section 2 demonstrated that the expansion of worst case needs is related to decreasing availability of adequate, affordable rental units relative to the number of very low-income renters who need them. Section 3 elaborates how the changes in numbers of units, numbers of renters, and rents during the 2009-to-2011 period underlie this result.

We find that the lingering homeownership crisis and sluggish economic recovery after the 2007-to-2009 recession continue to cause increases in worst case needs. The principal factors have shifted significantly, however. Of the 1.38 million cases of worst case needs that emerged from 2009 to 2011, 76.6 percent can be attributed to demographic changes that affected the population of unassisted very low-income renters, and 23.4 percent can be attributed to changes in incidence that resulted from the new market pressures those renters generated.

The formation of new households, changes of tenure from homeownership to renting, and falling tenant incomes added many households to the category of very low-income renters with worst case needs. As a secondary effect, new competition for affordable rental units increased the presence of higher income renters in affordable units, absorbed vacant units, and drove up rents. The housing market accommodated a substantial portion of new rental demand, which already was building in 2009, through the construction of new housing and conversion of homeowner units, however.

### Changes in Affordable Housing Demand

This report has shown that the increase in the number of households with worst case needs reflects both changes in the population vulnerable to worst case needs—unassisted very low-income renters—and changes in the prevalence of the severe problems that trigger worst case needs among that population. The population of vulnerable renters is affected primarily by demographic factors (including their incomes), and this population substantially determines the demand for affordable housing. The prevalence of severe problems or worst case needs, by contrast, reflects the economic response of the housing market to the change.

The following analysis sorts out these factors. First, we distinguish between the effects of population change and the effects of the prevalence of worst case needs

to estimate their relative importance. Then we identify how much various demographic factors affected the population change.

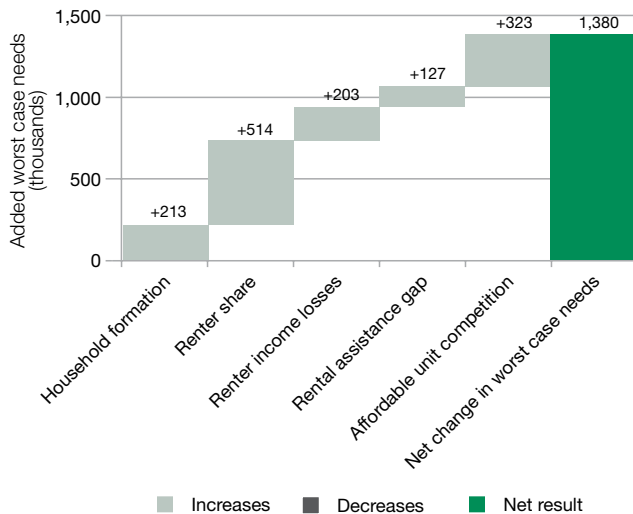
### Household Formation, Tenure, and Income Factors

The population of unassisted very low-income renters increased 14.3 percent from 2009 to 2011, from 12.84 million to 14.67 million. During the same period, the prevalence of worst case needs in this population increased from 55.2 to 57.8 percent.

From these facts, we can attribute 1.06 million new cases of worst case needs (76.6 percent) to demographic changes and 320,000 new cases (23.4 percent) to changes in the prevalence of severe problems, together totaling the 1.38 million new instances of worst case needs observed in the American Housing Survey between 2009 and 2011.<sup>33</sup>

The 1.06 million new worst case needs resulting from demographic shifts can be further broken down, as illustrated by the first four columns of Exhibit 3-1.

**EXHIBIT 3-1. DEMOGRAPHIC AND ECONOMIC CAUSES OF INCREASING WORST CASE NEEDS, 2009 TO 2011**



Source: HUD-PD&R analysis of American Housing Survey data

- **Household formation.** We attribute more than 210,000 new cases of worst case needs, or 15.4 percent of the increase, to household formation. The nation added 3.22 million new households between 2009 and 2011.<sup>34</sup> The household formation rate of 2.9 percent during this 2-year

period exceeded the average biennial increase of 1.8 percent observed in AHS samples since 2001.

- **Renter share of households.** We attribute a substantial 510,000 new cases of worst case needs, or 37.3 percent of the increase, to shifts in tenure between homeownership and renting. The nation added 3.47 million renter households from 2009 to 2011, an increase of 9.8 percent, which surpassed the increase in households. By comparison, the average biennial growth rate in renter households since 2001 is 2.9 percent.
- **Renter income losses.** Reductions of renters' incomes account for 200,000 new cases of worst case needs, or 14.7 percent of the increase from 2009 to 2011. Shrinking incomes accounted for 2.15 million new very low-income renters, and the growth rate of 12.5 percent exceeded growth in renters on a proportional basis. The average biennial change in the number of very low-income renters since 2001 is 5.4 percent.
- **Rental assistance gap.** We attribute a 9.2-percent increase in worst case needs, or 130,000 new cases, to lack of rental assistance. The 2009-to-2011 increase in very low-income renters who lack housing assistance was 1.83 million. The 14.3-percent increase exceeded the 12.5-percent increase in very low-income renters. Biennial changes in unassisted very low-income renters average 11.4 percent since 2001.

This analysis shows that demographic factors were the primary cause of increases in worst case needs between 2009 and 2011, unlike the market-driven increases of 2007 to 2009. Tenure shift alone explains 37.3 percent of new worst case needs in 2011, and the other demographic factors that increased the number of unassisted very low-income renters explain 38.4 percent. Only 23.4 percent of new problems remain to be attributed to an inadequate market response that increased prevalence of worst case needs.

### Aftermath of the Homeownership Crisis and Recession

The Great Recession that the United States endured from December 2007 to June 2009 (NBER, 2010) was caused in large part by a financial and mortgage crisis. By September 2009, 15.0 million workers (9.8 percent of the labor force) were unemployed, and economic troubles persisted in September 2011, with 13.9 million workers (9.0 percent) unemployed.<sup>35</sup>

<sup>33</sup> The demographic effect equals the new prevalence times the numerical increase in renters, and the prevalence effect is the increase in prevalence times the baseline number of renters.

<sup>34</sup> The Census Bureau benchmarked the 2011 AHS by assigning new weights so specified subgroup totals correspond with those found in the 2010 census. The 2009 AHS was benchmarked to the 2000 census. Rebenchmarking may account for a significant portion of reported household formation and especially of the significant change in renter share in the AHS between 2009 and 2011. A more detailed analysis is presented in Appendix F.

<sup>35</sup> Labor force statistics from the Current Population Survey. Data were extracted on April 4, 2013, from <http://www.bls.gov/cps/>.

Numerous homeowners became renters in the aftermath of the recession and mortgage crisis, and the tenure shift accelerated from 2009 to 2011. Homeownership rates declined by 0.6 points, from 68.1 percent in 2007 to 67.4 percent in 2009, and then they declined by another 1.3 points, to 66.1 percent, in 2011. Homeownership losses generally occurred earlier for households with incomes of less than the Area Median Income, with the homeownership rate among those households declining by 0.9 points from 2007 to 2009 before stabilizing at 51.1 percent between 2009 and 2011.

Some shifts in tenure are driven by the underlying demographics. Despite the net formation of 570,000 households annually during the 4 years from 2008 through 2011, the number of independent households of prime age for homeownership declined substantially. Households with heads ages 35 through 44 years declined by 410,000 annually, and family households comprising a husband, a wife, and children declined by 330,000 annually (HUD-PD&R, 2012a).

Falling household incomes added to the number of very low-income renters between 2009 and 2011. The income of the median renter declined 1.5 percent during this period, even as the median rent increased 4.1 percent.

Some households that change tenure from owning to renting are likely to have incomes that keep them from having worst case needs. Nevertheless, they occupy and increase demand for rental units and thereby put upward pressure on rents for more vulnerable renters.

The market accommodated some of the increased rental demand through more productive use of the existing housing stock, however. Exhibit 3–2 shows the significant increase in renter households, which was made greater by the decreasing number of owner households. The net increase in total housing units was less than the net increase in total households, as 310,000 vacant units and 480,000 seasonal units entered into year-round occupancy or were demolished. These data, although not directly addressing housing affordability, do directly influence it.

**EXHIBIT 3–2. HOUSEHOLD AND HOUSING UNIT CHANGE, 2009 TO 2011**

	Households and Units (thousands)		
	2009	2011	Change
Renter households (occupied year-round units)	35,378	38,816	3,438
Owner households (occupied year-round units)	76,428	76,091	–337
Total households (occupied year-round units)	111,806	114,907	3,101
Vacant units (year round)	13,688	13,379	–309
Seasonal units	4,618	4,133	–485
Total units (occupied, vacant, or seasonal)	130,112	132,419	2,307

Source: Census Bureau (2011); Census Bureau (2013).

## Affordable Housing Supply and Demand

Exhibits 2–8 and 2–13 presented the continuing decline in the availability of affordable rental units, but it also is clear that such affordability metrics are affected by multiple demographic and market factors. Some additional data, including key numbers underlying the changes in available unit ratios, will shed light on the issue.

Exhibit 3–3 examines the factors responsible for the change in the availability of affordable units. In addition to vacant and seasonal

housing being used more completely, rental construction also accelerated from 2009 to 2011.<sup>36</sup> The number of rental units increased by 3.33 million (8.4 percent), from 39.74 to 43.08 million. The stock of owner-occupied housing decreased by nearly 760,000 units from 2009 to 2011, suggesting that the number of homeowner units converted to rental units following foreclosure helped offset some of the sharp increase in rental demand from former owner occupants of those units.<sup>37</sup> The 3.47 million new renter households absorbed all the net increase of rental units and also occupied 140,000 previously vacant units.<sup>38</sup>

<sup>36</sup> HUD tabulations of units for housing mismatch analysis show 78.351 million total homeowner units in 2011 compared with the 79.107 million units recorded in 2009.

<sup>37</sup> The net loss of owner-occupied units reflects changes from new construction, demolition, and conversion. Construction was completed on 943,000 new single-family detached homes during 2010 and 2011. See HUD-PD&R (2012a: Exhibit 4).

<sup>38</sup> HUD estimates, presented in Exhibit A–12, suggest that 140,000 units of the 310,000-unit reduction in vacant units shown in Exhibit 3–2 for 2009 to 2011 were vacant rental units.

EXHIBIT 3–3. FACTORS EXPLAINING CHANGES IN RENTAL HOUSING AVAILABILITY RATE, 2009 TO 2011

	Extremely Low Income (0–30% AMI)	Very Low Income (0–50% AMI)	Low Income (0–80% AMI)	Total
<b>Cumulative households (thousands)</b>				
2009	10,270	17,427	24,595	35,396
2011	11,774	19,267	27,017	38,867
Percent change	+14.6%	+10.6%	+9.8%	+9.8%
<b>Cumulative affordable &amp; available rental units (thousands)</b>				
2009	3,665	11,710	25,715	39,744
2011	4,220	12,444	27,806	43,075
Percent change	+15.1%	+6.3%	+8.1%	+8.4%
<b>Income limit (median, current dollars)</b>				
2009	16,300	27,150	43,450	—
2011	17,150	28,580	44,950	—
Percent change	+5.2%	+5.3%	+3.5%	—
<b>Median household income (all renters, current dollars)</b>				
2009	—	—	—	28,400
2011	—	—	—	27,984
Percent change	—	—	—	–1.5%
<b>Median monthly housing cost (all renters, current dollars)</b>				
2009	—	—	—	784
2011	—	—	—	816
Percent change	—	—	—	+4.1%

AMI = Area Median Income.

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

Further, unlike the 2007-to-2009 period, the number of units affordable at extremely low incomes increased from 6.27 million to 6.85 million, whereas the number of units affordable at incomes of 30 to 50 percent of AMI was essentially unchanged at 10.95 million. The numbers of units both affordable and available increased for both these groups, as shown in Exhibit 3–3.

Some of the increase in renters with extremely low and very low incomes is explained by a shift in income limits. HUD calculates income limits on the basis of AMIs including both owners and renters, and then uses the income limits to define the boundaries of the extremely low-, very low-, and low-income categories. Exhibit 3–3 shows that these threshold values increased between 3.5 and 5.3 percent, thereby capturing higher income renters in 2011 than in 2009. During the same 2-year period, the median

renter's income decreased 1.5 percent, suggesting a generalized decline in incomes.

These dual shifts explain the increases in lower income renters from 2009 to 2011. The extremely low-income category experienced the greatest increase, 14.6 percent. Very low-income renters increased 10.6 percent, and low-income renters increased 9.8 percent. These increases, in the aggregate, exceeded the increase in the rental stock resulting from construction, tenure conversion, and vacant-unit absorption.

The excess of demand relative to supply explains why competition for the most affordable units gained strength and why the median gross rent increased 4.1 percent from 2009 to 2011, causing rent burdens to be more prevalent and more severe.

## Concluding Summary

An analysis of the effects of incidence and of population change during the 2009-to-2011 period indicates that 1.06 million new cases of worst case needs (76.6 percent) resulted from demographic changes, and 320,000 new cases (23.4 percent) resulted from increases in prevalence.

Four demographic factors continue to increase the number of unassisted, very low-income renters who are susceptible to worst case needs. National household formation accounts for a sizable 15.4 percent of the worst case needs that emerged from 2009 to 2011. Because of a significant decline of 1.3 points in the homeownership rate, an increase in the renter share of households was great enough to account for 37.3 percent of new cases of worst case needs. Renter income losses (and changes in income limits) that caused renters to slip into the very low-income population accounted for 14.7 percent of new cases. Finally, the gap in rental assistance relative to the growing need accounts for 9.2 percent of new cases.

Increases in the number of unassisted, very low-income renters represent greater demand for affordable housing that, unless met by a greater supply of affordable units, will intensify competition, drive up rents, and increase the prevalence of worst case needs.

The 23.4 percent of new cases that are attributable to increased prevalence suggest that the housing market from 2009 to 2011 was much more responsive to the increased demand than it was from 2007 to 2009, when the prevalence of worst case needs among very low-income renters increased 41.0 percent. Existing housing stock was used more productively between 2009 and 2011, as the supply of year-round vacant units and seasonally occupied units decreased. A significant loss of 760,000 homeowner units from 2009 to 2011 suggests that the conversion of foreclosed homeowner units to rental units helped offset some of the sharp increase in rental demand from former owner occupants of those units. The number of units affordable at extremely low incomes actually increased more than the number of renters needing them, so availability was stable for the poorest group, although it worsened for those with higher incomes.<sup>39</sup> Overall, the 3.47 million new renter households absorbed all the net increase of rental units and also occupied 140,000 previously vacant units.

The median renter's income decreased 1.5 percent from 2009 to 2011, whereas the median gross rent increased 4.1 percent. The broad strokes of the most recent substantial (19-percent) increase in the number of worst case needs should not be obscured, therefore, by the nuances of the story. The recession and foreclosure crisis continue to have major import for the affordable rental housing market, and the problem of worst case needs now affects 7.4 percent of all households in the United States. Increases

in the number of very low-income renters continue to exceed increases in the affordable rental stock from all sources, even when that stock is augmented by rental assistance and subsidies. The 69-percent increase in worst case needs since 2001 reflects the central fact that the number of extremely low-income renters has increased by 3.0 million, and that increase has not been matched by increases in affordable units or housing assistance.

<sup>39</sup> Units will switch from "unavailable" to "available" for extremely low-income renters if occupied by a household of which income declines from the 30-to-50 percent of AMI category to the 0-to-30 percent of AMI category.



APPENDIX

A

DETAILED DATA ON HOUSING PROBLEMS AND SUPPLY OF AFFORDABLE HOUSING

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TABLE A-1A. HOUSING CONDITIONS OF RENTER HOUSEHOLDS BY RELATIVE INCOME, 2009 AND 2011

2011	Household Income as Percentage of HUD-Adjusted Area Median Family Income					All Incomes
	0-30%	30-50%	50-80%	80-120%	>120%	
<b>Total Households (thousands)</b>	11,774	7,492	7,750	5,799	6,051	38,867
Unassisted with severe problems	6,209	2,266	683	210	180	9,548
Unassisted with nonsevere problems only	934	3,264	3,218	1,174	604	9,194
Unassisted with no problems	984	1,019	3,447	4,218	5,159	14,828
Assisted	3,648	943	403	196	108	5,298
<b>Any with severe problems</b>	<b>7,716</b>	<b>2,386</b>	<b>712</b>	<b>226</b>	<b>181</b>	<b>11,220</b>
Rent burden 50%+ of income	7,534	2,196	494	98	68	10,391
Severely inadequate housing	479	256	226	130	114	1,204
<b>Any with nonsevere problems only</b>	<b>2,022</b>	<b>3,682</b>	<b>3,380</b>	<b>1,199</b>	<b>612</b>	<b>10,895</b>
Rent burden 30-50% of income	1,663	3,465	2,880	830	287	9,124
Moderately inadequate housing	443	403	417	299	268	1,830
Crowded housing	220	350	300	117	85	1,072
<b>Any with no problems</b>	<b>2,037</b>	<b>1,424</b>	<b>3,659</b>	<b>4,374</b>	<b>5,259</b>	<b>16,753</b>
<b>2009</b>						
<b>Total Households (thousands)</b>	9,961	7,157	7,168	5,658	5,452	35,396
Unassisted with severe problems	5,069	2,026	644	203	143	8,085
Unassisted with nonsevere problems only	768	3,082	2,747	1,089	544	8,229
Unassisted with no problems	784	1,115	3,424	4,220	4,668	14,211
Assisted	3,340	934	354	146	97	4,871
<b>Any with severe problems</b>	<b>6,536</b>	<b>2,139</b>	<b>662</b>	<b>208</b>	<b>144</b>	<b>9,688</b>
Rent burden 50%+ of income	6,407	1,985	469	97	41	9,000
Severely inadequate housing	387	194	204	111	102	998
<b>Any with nonsevere problems only</b>	<b>1,692</b>	<b>3,467</b>	<b>2,851</b>	<b>1,115</b>	<b>552</b>	<b>9,678</b>
Rent burden 30-50% of income	1,486	3,205	2,381	728	181	7,981
Moderately inadequate housing	323	392	407	287	274	1,684
Crowded housing	161	302	290	130	111	993
<b>Any with no problems</b>	<b>1,732</b>	<b>1,551</b>	<b>3,655</b>	<b>4,335</b>	<b>4,757</b>	<b>16,030</b>

Source: HUD-PD&amp;R tabulations of American Housing Survey data



TABLE A-1B. HOUSING CONDITIONS OF OWNER HOUSEHOLDS BY RELATIVE INCOME, 2009 AND 2011

2011	Household Income as Percentage of HUD-Adjusted Area Median Family Income					All Incomes
	0-30%	30-50%	50-80%	80-120%	>120%	
<b>Total Households (thousands)</b>	7,576	8,427	12,571	14,910	32,724	76,209
Unassisted with severe problems	4,887	2,771	1,980	940	591	11,169
Unassisted with nonsevere problems only	1,300	2,432	3,982	3,824	3,346	14,885
Unassisted with no problems	1,390	3,223	6,609	10,146	28,787	50,155
Assisted						
<b>Any with severe problems</b>	4,887	2,771	1,980	940	591	11,169
Rent burden 50%+ of income	4,791	2,647	1,811	767	373	10,390
Severely inadequate housing	185	155	187	177	218	922
<b>Any with nonsevere problems only</b>	1,300	2,432	3,982	3,824	3,346	14,885
Rent burden 30-50% of income	1,195	2,235	3,549	3,401	2,864	13,245
Moderately inadequate housing	149	187	280	294	393	1,303
Crowded housing	94	137	287	201	132	851
<b>Any with no problems</b>	1,390	3,223	6,609	10,146	28,787	50,155
<b>2009</b>						
<b>Total Households (thousands)</b>	7,028	8,201	12,383	15,097	33,755	76,465
Unassisted with severe problems	4,390	2,612	2,128	1,231	812	11,174
Unassisted with nonsevere problems only	1,316	2,226	3,757	3,943	3,754	14,996
Unassisted with no problems	1,322	3,363	6,498	9,923	29,189	50,295
Assisted	—	—	—	—	—	—
<b>Any with severe problems</b>	4,390	2,612	2,128	1,231	812	11,174
Rent burden 50%+ of income	4,309	2,511	1,946	1,090	602	10,458
Severely inadequate housing	159	146	202	149	213	868
<b>Any with nonsevere problems only</b>	1,316	2,226	3,757	3,943	3,754	14,996
Rent burden 30-50% of income	1,183	1,999	3,383	3,598	3,225	13,388
Moderately inadequate housing	180	156	299	255	440	1,331
Crowded housing	85	159	224	171	156	795
<b>Any with no problems</b>	1,322	3,363	6,498	9,923	29,189	50,295

Source: HUD-PD&amp;R tabulations of American Housing Survey data

**TABLE A-2A. HOUSING CONDITIONS OF RENTERS AND OWNERS, 2001 TO 2011:  
NUMBER OF HOUSEHOLDS**

	2001	2003	2005	2007	2009	2011
<b>Total Households (thousands)</b>	105,435	105,868	108,901	110,719	111,861	115,076
Unassisted with severe problems	13,494	13,398	16,142	16,944	19,259	20,717
Unassisted with nonsevere problems only	19,217	19,790	20,849	22,752	23,225	24,079
Unassisted with no problems	66,445	66,468	65,362	65,862	64,506	64,983
Assisted	6,279	6,211	6,547	5,161	4,871	5,298
Cost burden >50% of income	13,330	13,188	16,433	17,140	19,458	20,781
Cost burden 30–50% of income	16,923	17,856	19,403	21,153	21,818	22,369
Severely inadequate housing	2,108	1,971	2,023	1,805	1,866	2,126
Moderately inadequate housing	4,504	4,311	4,177	3,954	3,884	3,133
Crowded housing	2,631	2,559	2,621	2,529	2,509	1,923
<b>Renter Households (thousands)</b>	33,727	33,614	33,951	35,054	35,396	38,867
Unassisted with severe problems	5,758	5,887	6,860	6,993	8,085	9,548
Unassisted with nonsevere problems only	7,283	7,557	7,303	8,445	8,229	9,194
Unassisted with no problems	14,407	13,958	13,240	14,455	14,211	14,828
Assisted	6,279	6,211	6,547	5,161	4,871	5,298
Cost burden >50% of income	6,412	6,477	7,891	7,793	9,000	10,391
Cost burden 30–50% of income	6,916	7,468	7,502	8,340	8,240	9,124
Severely inadequate housing	1,168	1,038	1,100	1,073	998	1,204
Moderately inadequate housing	2,508	2,525	2,542	2,400	2,264	1,830
Crowded housing	1,658	1,615	1,635	1,511	1,499	1,072
<b>Owner Households (thousands)</b>	71,708	72,254	74,950	75,665	76,465	76,209
Unassisted with severe problems	7,736	7,511	9,282	9,951	11,174	11,169
Unassisted with nonsevere problems only	11,934	12,233	13,546	14,307	14,996	14,885
Unassisted with no problems	52,038	52,510	52,122	51,407	50,295	50,155
Assisted	—	—	—	—	—	—
Cost burden >50% of income	6,918	6,711	8,542	9,347	10,458	10,390
Cost burden 30–50% of income	10,007	10,388	11,901	12,813	13,578	13,245
Severely inadequate housing	940	933	923	732	868	922
Moderately inadequate housing	1,996	1,786	1,635	1,554	1,620	1,303
Crowded housing	973	944	986	1,018	1,010	851

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

**TABLE A-2B. HOUSING CONDITIONS OF RENTERS AND OWNERS, 2001 TO 2011:  
PERCENT OF HOUSEHOLDS**

	2001	2003	2005	2007	2009	2011
<b>Total Households</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unassisted with severe problems	12.8%	12.7%	14.8%	15.3%	17.2%	18.0%
Unassisted with nonsevere problems only	18.2%	18.7%	19.1%	20.5%	20.8%	20.9%
Unassisted with no problems	63.0%	62.8%	60.0%	59.5%	57.7%	56.5%
Assisted	6.0%	5.9%	6.0%	4.7%	4.4%	4.6%
Cost burden >50% of income	12.6%	12.5%	15.1%	15.5%	17.4%	18.1%
Cost burden 30–50% of income	16.1%	16.9%	17.8%	19.1%	19.5%	19.4%
Severely inadequate housing	2.0%	1.9%	1.9%	1.6%	1.7%	1.8%
Moderately inadequate housing	4.3%	4.1%	3.8%	3.6%	3.5%	2.7%
Crowded housing	2.5%	2.4%	2.4%	2.3%	2.2%	1.7%
<b>Renter Households</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unassisted with severe problems	17.1%	17.5%	20.2%	19.9%	22.8%	24.6%
Unassisted with nonsevere problems only	21.6%	22.5%	21.5%	24.1%	23.2%	23.7%
Unassisted with no problems	42.7%	41.5%	39.0%	41.2%	40.1%	38.2%
Assisted	18.6%	18.5%	19.3%	14.7%	13.8%	13.6%
Cost burden >50% of income	19.0%	19.3%	23.2%	22.2%	25.4%	26.7%
Cost burden 30–50% of income	20.5%	22.2%	22.1%	23.8%	23.3%	23.5%
Severely inadequate housing	3.5%	3.1%	3.2%	3.1%	2.8%	3.1%
Moderately inadequate housing	7.4%	7.5%	7.5%	6.8%	6.4%	4.7%
Crowded housing	4.9%	4.8%	4.8%	4.3%	4.2%	2.8%
<b>Owner Households</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unassisted with severe problems	10.8%	10.4%	12.4%	13.2%	14.6%	14.7%
Unassisted with nonsevere problems only	16.6%	16.9%	18.1%	18.9%	19.6%	19.5%
Unassisted with no problems	72.6%	72.7%	69.5%	67.9%	65.8%	65.8%
Assisted	—	—	—	—	—	—
Cost burden >50% of income	9.6%	9.3%	11.4%	12.4%	13.7%	13.6%
Cost burden 30–50% of income	14.0%	14.4%	15.9%	16.9%	17.8%	17.4%
Severely inadequate housing	1.3%	1.3%	1.2%	1.0%	1.1%	1.2%
Moderately inadequate housing	2.8%	2.5%	2.2%	2.1%	2.1%	1.7%
Crowded housing	1.4%	1.3%	1.3%	1.3%	1.3%	1.1%

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

**TABLE A-3. HOUSING CONDITIONS OF UNASSISTED RENTER HOUSEHOLDS,  
BY RELATIVE INCOME, 2009 AND 2011**

2011	Household Income as Percentage of HUD-Adjusted Area Median Family Income					
	0-30%	30-50%	50-80%	80-120%	>120%	All Incomes
<b>Total Unassisted Households (thousands)</b>	8,127	6,549	7,348	5,602	5,943	33,569
<b>Any with severe problems</b>	6,209	2,266	683	210	180	9,548
Rent burden 50%+ of income	6,103	2,106	483	92	68	8,853
Severely inadequate housing	343	223	207	120	114	1,007
<b>Any with nonsevere problems only</b>	934	3,264	3,218	1,174	604	9,194
Rent burden 30-50% of income	719	3,102	2,749	814	287	7,671
Moderately inadequate housing	242	348	388	290	263	1,531
Crowded housing	158	312	279	116	81	946
<b>Any with no problems</b>	984	1,019	3,447	4,218	5,159	14,828
<b>2009</b>						
<b>Total Unassisted Households (thousands)</b>	6,621	6,223	6,814	5,512	5,355	30,525
<b>Any with severe problems</b>	5,069	2,026	644	203	143	8,085
Rent burden 50%+ of income	4,996	1,896	469	97	41	7,500
Severely inadequate housing	278	165	186	107	101	837
<b>Any with nonsevere problems only</b>	768	3,082	2,747	1,089	544	8,229
Rent burden 30-50% of income	647	2,869	2,317	712	175	6,720
Moderately inadequate housing	192	348	371	280	273	1,464
Crowded housing	124	288	282	126	111	930
<b>Any with no problems</b>	784	1,115	3,424	4,220	4,668	14,211

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

**TABLE A-4. PREVALENCE OF HOUSING PROBLEMS AMONG RENTERS,  
BY RELATIVE INCOME, 2009 AND 2011**

	Number		Percentage	
	2009	2011	2009	2011
<b>Renter Households (thousands)</b>	35,396	38,867	100.0%	100.0%
Unassisted with severe problems	8,085	9,548	22.8%	24.6%
Unassisted with nonsevere problems only	8,229	9,194	23.2%	23.7%
Unassisted with no problems	14,211	14,828	40.1%	38.2%
Assisted	4,871	5,298	13.8%	13.6%
<b>Any with severe problems</b>	9,688	11,220	27.4%	28.9%
Rent burden 50%+ of income	9,000	10,391	25.4%	26.7%
Severely inadequate housing	998	1,204	2.8%	3.1%
[Rent burden only]	8,110	9,243	22.9%	23.8%
<b>Any with nonsevere problems only</b>	9,678	10,895	27.3%	28.0%
Rent burden 30–50% of income	7,981	9,124	22.5%	23.5%
Moderately inadequate housing	1,684	1,830	4.8%	4.7%
Crowded housing	993	1,072	2.8%	2.8%
[Rent burden only]	7,094	8,090	20.0%	20.8%
<b>Any with no problems</b>	16,030	16,753	45.3%	43.1%
<b>Income 0–30% HAMFI (thousands)</b>	9,961	11,774	100.0%	100.0%
Unassisted with severe problems	5,069	6,209	50.9%	52.7%
Unassisted with nonsevere problems only	768	934	7.7%	7.9%
Unassisted with no problems	784	984	7.9%	8.4%
Assisted	3,340	3,648	33.5%	31.0%
<b>Any with severe problems</b>	6,536	7,716	65.6%	65.5%
Rent burden 50%+ of income	6,407	7,534	64.3%	64.0%
Severely inadequate housing	387	479	3.9%	4.1%
[Rent burden only]	5,712	6,613	57.3%	56.2%
<b>Any with nonsevere problems only</b>	1,692	2,022	17.0%	17.2%
Rent burden 30–50% of income	1,486	1,663	14.9%	14.1%
Moderately inadequate housing	323	443	3.2%	3.8%
Crowded housing	161	220	1.6%	1.9%
[Rent burden only]	1,230	1,380	12.3%	11.7%
<b>Any with no problems</b>	1,732	2,037	17.4%	17.3%

(continued)

**TABLE A-4. PREVALENCE OF HOUSING PROBLEMS AMONG RENTERS,  
BY RELATIVE INCOME, 2009 AND 2011**

	Number		Percentage	
	2009	2011	2009	2011
<b>Income 30–50% HAMFI (thousands)</b>	7,157	7,492	100.0%	100.0%
Unassisted with severe problems	2,026	2,266	28.3%	30.2%
Unassisted with nonsevere problems only	3,082	3,264	43.1%	43.6%
Unassisted with no problems	1,115	1,019	15.6%	13.6%
Assisted	934	943	13.1%	12.6%
<b>Any with severe problems</b>	2,139	2,386	29.9%	31.8%
Rent burden 50%+ of income	1,985	2,196	27.7%	29.3%
Severely inadequate housing [Rent burden only]	194	256	2.7%	3.4%
	1,815	2,015	25.4%	26.9%
<b>Any with nonsevere problems only</b>	3,467	3,682	48.4%	49.1%
Rent burden 30–50% of income	3,205	3,465	44.8%	46.2%
Moderately inadequate housing	392	403	5.5%	5.4%
Crowded housing [Rent burden only]	302	350	4.2%	4.7%
	2,811	2,975	39.3%	39.7%
<b>Any with no problems</b>	1,551	1,424	21.7%	19.0%
<b>Income 50-80% HAMFI (thousands)</b>	7,168	7,750	100.0%	100.0%
Unassisted with severe problems	644	683	9.0%	8.8%
Unassisted with nonsevere problems only	2,747	3,218	38.3%	41.5%
Unassisted with no problems	3,424	3,447	47.8%	44.5%
Assisted	354	403	4.9%	5.2%
<b>Any with severe problems</b>	662	712	9.2%	9.2%
Rent burden 50%+ of income	469	494	6.5%	6.4%
Severely inadequate housing [Rent burden only]	204	226	2.8%	2.9%
	446	460	6.2%	5.9%
<b>Any with nonsevere problems only</b>	2,851	3,380	39.8%	43.6%
Rent burden 30–50% of income	2,381	2,880	33.2%	37.2%
Moderately inadequate housing	407	417	5.7%	5.4%
Crowded housing [Rent burden only]	290	300	4.0%	3.9%
	2,173	2,678	30.3%	34.6%
<b>Any with no problems</b>	3,655	3,659	51.0%	47.2%

(continued)

**TABLE A-4. PREVALENCE OF HOUSING PROBLEMS AMONG RENTERS,  
BY RELATIVE INCOME, 2009 AND 2011**

	Number		Percentage	
	2009	2011	2009	2011
<b>Income 80–120% HAMFI (thousands)</b>	5,658	5,799	100.0%	100.0%
Unassisted with severe problems	203	210	3.6%	3.6%
Unassisted with nonsevere problems only	1,089	1,174	19.2%	20.2%
Unassisted with no problems	4,220	4,218	74.6%	72.7%
Assisted	146	196	2.6%	3.4%
<b>Any with severe problems</b>	208	226	3.7%	3.9%
Rent burden 50%+ of income	97	98	1.7%	1.7%
Severely inadequate housing	111	130	2.0%	2.2%
[Rent burden only]	96	89	1.7%	1.5%
<b>Any with nonsevere problems only</b>	1,115	1,199	19.7%	20.7%
Rent burden 30–50% of income	728	830	12.9%	14.3%
Moderately inadequate housing	287	299	5.1%	5.2%
Crowded housing	130	117	2.3%	2.0%
[Rent burden only]	705	793	12.5%	13.7%
<b>Any with no problems</b>	4,335	4,374	76.6%	75.4%
<b>Income &gt;120% HAMFI (thousands)</b>	5,452	6,051	100.0%	100.0%
Unassisted with severe problems	143	180	2.6%	3.0%
Unassisted with nonsevere problems only	544	604	10.0%	10.0%
Unassisted with no problems	4,668	5,159	85.6%	85.3%
Assisted	97	108	1.8%	1.8%
<b>Any with severe problems</b>	144	181	2.6%	3.0%
Rent burden 50%+ of income	41	68	0.8%	1.1%
Severely inadequate housing	102	114	1.9%	1.9%
[Rent burden only]	41	66	0.8%	1.1%
<b>Any with nonsevere problems only</b>	552	612	10.1%	10.1%
Rent burden 30–50% of income	181	287	3.3%	4.7%
Moderately inadequate housing	274	268	5.0%	4.4%
Crowded housing	111	85	2.0%	1.4%
[Rent burden only]	175	264	3.2%	4.4%
<b>Any with no problems</b>	4,757	5,259	87.3%	86.9%

Source: HUD-PD&amp;R tabulations of American Housing Survey data

**TABLE A-5A. PREVALENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS, BY HOUSEHOLD TYPE, 2009 AND 2011**

Household Type	Number		Percentage	
	2009	2011	2009	2011
<b>All Household Types (thousands)</b>	17,118	19,267	100.0%	100.0%
<b>Elderly Without Children (thousands)</b>	3,636	3,934	100.0%	100.0%
Unassisted with severe problems	1,328	1,470	36.5%	37.4%
Unassisted with nonsevere problems only	551	611	15.2%	15.5%
Unassisted with no problems	440	450	12.1%	11.4%
Assisted	1,316	1,403	36.2%	35.7%
<b>Any with severe problems</b>	1,747	1,891	48.0%	48.1%
Rent burden 50%+ of income	1,694	1,817	46.6%	46.2%
Severely inadequate housing	103	138	2.8%	3.5%
[Rent burden only]	1,555	1,631	42.8%	41.5%
<b>Any with nonsevere problems only</b>	921	1,028	25.3%	26.1%
Rent burden 30–50% of income	878	965	24.1%	24.5%
Moderately inadequate housing	97	125	2.7%	3.2%
Crowded housing	0	1	0.0%	0.0%
[Rent burden only]	824	902	22.7%	22.9%
<b>Any with no problems</b>	967	1,015	26.6%	25.8%
<b>Families With Children (thousands)</b>	6,758	7,561	100.0%	100.0%
Unassisted with severe problems	2,734	3,236	40.5%	42.8%
Unassisted with nonsevere problems only	1,704	1,883	25.2%	24.9%
Unassisted with no problems	630	577	9.3%	7.6%
Assisted	1,691	1,866	25.0%	24.7%
<b>Any with severe problems</b>	3,444	3,979	51.0%	52.6%
Rent burden 50%+ of income	3,337	3,847	49.4%	50.9%
Severely inadequate housing	225	269	3.3%	3.6%
[Rent burden only]	2,963	3,404	43.8%	45.0%
<b>Any with nonsevere problems only</b>	2,250	2,532	33.3%	33.5%
Rent burden 30–50% of income	2,020	2,209	29.9%	29.2%
Moderately inadequate housing	260	329	3.8%	4.4%
Crowded housing	448	545	6.6%	7.2%
[Rent burden only]	1,602	1,719	23.7%	22.7%

(continued)



**TABLE A-5A. PREVALENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS,  
BY HOUSEHOLD TYPE, 2009 AND 2011**

Household Type	Number		Percentage	
	2009	2011	2009	2011
<b>Other Family Households (thousands)</b>	1,410	1,782	100.0%	100.0%
Unassisted with severe problems	633	801	44.9%	44.9%
Unassisted with nonsevere problems only	372	465	26.4%	26.1%
Unassisted with no problems	168	223	11.9%	12.5%
Assisted	236	293	16.7%	16.4%
<b>Any with severe problems</b>	697	903	49.4%	50.7%
Rent burden 50%+ of income	671	877	47.6%	49.2%
Severely inadequate housing	53	57	3.8%	3.2%
[Rent burden only]	618	764	43.8%	42.9%
<b>Any with nonsevere problems only</b>	453	573	32.1%	32.2%
Rent burden 30–50% of income	434	547	30.8%	30.7%
Moderately inadequate housing	45	73	3.2%	4.1%
Crowded housing	10	12	0.7%	0.7%
[Rent burden only]	399	490	28.3%	27.5%
<b>Any with no problems</b>	259	306	18.4%	17.2%
<b>Other Nonfamily Households (thousands)</b>	5,314	5,990	100.0%	100.0%
Unassisted with severe problems	2,401	2,969	45.2%	49.6%
Unassisted with nonsevere problems only	1,222	1,238	23.0%	20.7%
Unassisted with no problems	662	754	12.5%	12.6%
Assisted	1,030	1,029	19.4%	17.2%
<b>Any with severe problems</b>	2,786	3,329	52.4%	55.6%
Rent burden 50%+ of income	2,689	3,189	50.6%	53.2%
Severely inadequate housing	199	270	3.7%	4.5%
[Rent burden only]	2,392	2,828	45.0%	47.2%
<b>Any with nonsevere problems only</b>	1,535	1,571	28.9%	26.2%
Rent burden 30–50% of income	1,360	1,407	25.6%	23.5%
Moderately inadequate housing	314	319	5.9%	5.3%
Crowded housing	5	12	0.1%	0.2%
[Rent burden only]	1,217	1,244	22.9%	20.8%
<b>Any with no problems</b>	993	1,090	18.7%	18.2%

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

**TABLE A-5B. PREVALENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS HAVING NONELDERLY PEOPLE WITH DISABILITIES,<sup>1</sup> BY HOUSEHOLD TYPE, 2009 AND 2011**

Household Type	Number		Percentage	
	2009	2011	2009	2011
<b>All Household Types (thousands)</b>	2,583	3,068	100.0%	100.0%
Unassisted with severe problems	986	1,306	38.2%	42.6%
Unassisted with nonsevere problems only	456	545	17.7%	17.8%
Unassisted with no problems	177	219	6.9%	7.1%
Assisted	964	997	37.3%	32.5%
<b>Any with severe problems</b>	1,343	1,656	52.0%	54.0%
Rent burden 50%+ of income	1,292	1,588	50.0%	51.8%
Severely inadequate housing	115	175	4.5%	5.7%
[Rent burden only]	1,054	1,325	40.8%	43.2%
<b>Any with nonsevere problems only</b>	762	893	29.5%	29.1%
Rent burden 30–50% of income	687	756	26.6%	24.6%
Moderately inadequate housing	122	193	4.7%	6.3%
Crowded housing	45	108	1.7%	3.5%
[Rent burden only]	597	609	23.1%	19.9%
<b>Any with no problems</b>	478	518	18.5%	16.9%
<b>Elderly Without Children (thousands)</b>	88	94	100.0%	100.0%
Unassisted with severe problems	29	31	33.0%	33.0%
Unassisted with nonsevere problems only	29	29	33.0%	30.9%
Unassisted with no problems	6	9	6.8%	9.6%
Assisted	24	24	27.3%	25.5%
<b>Any with severe problems</b>	38	39	43.2%	41.5%
Rent burden 50%+ of income	38	34	43.2%	36.2%
Severely inadequate housing	0	9	0.0%	9.6%
[Rent burden only]	32	29	36.4%	30.9%
<b>Any with nonsevere problems only</b>	38	40	43.2%	42.6%
Rent burden 30–50% of income	38	37	43.2%	39.4%
Moderately inadequate housing	9	6	10.2%	6.4%
Crowded housing	0	0	0.0%	0.0%
[Rent burden only]	29	34	33.0%	36.2%
<b>Any with no problems</b>	12	15	13.6%	16.0%

(continued)

**TABLE A-5B. PREVALENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS HAVING NONELDERLY PEOPLE WITH DISABILITIES,<sup>1</sup> BY HOUSEHOLD TYPE, 2009 AND 2011**

Household Type	Number		Percentage	
	2009	2011	2009	2011
<b>Families With Children (thousands)</b>	1,002	1,259	100.0%	100.0%
Unassisted with severe problems	416	544	41.5%	43.2%
Unassisted with nonsevere problems only	201	260	20.1%	20.7%
Unassisted with no problems	62	71	6.2%	5.6%
Assisted	323	384	32.2%	30.5%
<b>Any with severe problems</b>	556	700	55.5%	55.6%
Rent burden 50%+ of income	542	680	54.1%	54.0%
Severely inadequate housing	44	57	4.4%	4.5%
[Rent burden only]	427	570	42.6%	45.3%
<b>Any with nonsevere problems only</b>	307	388	30.6%	30.8%
Rent burden 30–50% of income	282	299	28.1%	23.7%
Moderately inadequate housing	40	93	4.0%	7.4%
Crowded housing	40	99	4.0%	7.9%
[Rent burden only]	229	208	22.9%	16.5%
<b>Any with no problems</b>	139	170	13.9%	13.5%
<b>Other Family Households (thousands)</b>	303	403	100.0%	100.0%
Unassisted with severe problems	112	207	37.0%	51.4%
Unassisted with nonsevere problems only	62	71	20.5%	17.6%
Unassisted with no problems	29	33	9.6%	8.2%
Assisted	100	92	33.0%	22.8%
<b>Any with severe problems</b>	136	242	44.9%	60.0%
Rent burden 50%+ of income	134	233	44.2%	57.8%
Severely inadequate housing	9	24	3.0%	6.0%
[Rent burden only]	122	182	40.3%	45.2%
<b>Any with nonsevere problems only</b>	106	106	35.0%	26.3%
Rent burden 30–50% of income	101	99	33.3%	24.6%
Moderately inadequate housing	12	21	4.0%	5.2%
Crowded housing	0	0	0.0%	0.0%
[Rent burden only]	94	85	31.0%	21.1%
<b>Any with no problems</b>	61	55	20.1%	13.6%

(continued)

**TABLE A-5B. PREVALENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS HAVING NONELDERLY PEOPLE WITH DISABILITIES,\* BY HOUSEHOLD TYPE, 2009 AND 2011**

Household Type	Number		Percentage	
	2009	2011	2009	2011
<b>Other Nonfamily Households (thousands)</b>	1,190	1,312	100.0%	100.0%
Unassisted with severe problems	429	524	36.1%	39.9%
Unassisted with nonsevere problems only	164	185	13.8%	14.1%
Unassisted with no problems	80	106	6.7%	8.1%
Assisted	517	497	43.4%	37.9%
<b>Any with severe problems</b>	613	675	51.5%	51.4%
Rent burden 50%+ of income	578	641	48.6%	48.9%
Severely inadequate housing	62	85	5.2%	6.5%
[Rent burden only]	473	544	39.7%	41.5%
<b>Any with nonsevere problems only</b>	311	359	26.1%	27.4%
Rent burden 30–50% of income	266	321	22.4%	24.5%
Moderately inadequate housing	61	73	5.1%	5.6%
Crowded housing	5	9	0.4%	0.7%
[Rent burden only]	245	282	20.6%	21.5%
<b>Any with no problems</b>	266	278	22.4%	21.2%

\* Nonelderly household members reporting one or more of six measures of disability.  
 Source: HUD-PD&R tabulations of American Housing Survey data

**TABLE A-6A. HOUSING PROBLEMS AND CHARACTERISTICS OF VERY LOW-INCOME RENTERS, BY HOUSEHOLD TYPE, 2011**

	Total	Elderly, No Children	Families With Children	Other Families	Other Nonfamily
<b>Renter Households (thousands)</b>	19,267	3,934	7,561	1,782	5,990
Number of Children	15,535	0	15,535	0	0
Number of Persons	46,331	5,181	29,152	4,283	7,714
Children/Household	0.81	0.00	2.05	0.00	0.00
Persons/Household	2.40	1.32	3.86	2.40	1.29
Unassisted with severe problems	8,475	1,470	3,236	801	2,969
Unassisted with nonsevere problems only	4,198	611	1,883	465	1,238
Unassisted with no problems	2,003	450	577	223	754
Assisted	4,591	1,403	1,866	293	1,029
<b>Any with severe problems</b>	10,102	1,891	3,979	903	3,329
Rent burden 50%+ of income	9,730	1,817	3,847	877	3,189
Severely inadequate housing	734	138	269	57	270
[Rent burden only]	8,628	1,631	3,404	764	2,828
<b>Any with nonsevere problems only</b>	5,704	1,028	2,532	573	1,571
Rent burden 30–50% of income	5,128	965	2,209	547	1,407
Moderately inadequate housing	846	125	329	73	319
Crowded housing	570	1	545	12	12
[Rent burden only]	4,354	902	1,719	490	1,244
<b>Any with no problems</b>	3,462	1,015	1,050	306	1,090

(continued)

**TABLE A-6A. HOUSING PROBLEMS AND CHARACTERISTICS OF VERY LOW-INCOME RENTERS, BY HOUSEHOLD TYPE, 2011**

	Total	Elderly, No Children	Families With Children	Other Families	Other Nonfamily
<b>Other Characteristics</b>					
One person in household	7,613	2,904	9	0	4,699
Husband-wife family	3,943	595	2,582	766	0
Female head	11,736	2,579	5,310	968	2,878
Minority head	10,336	1,531	5,041	1,069	2,695
AFDC/SSI income	3,642	830	1,594	380	837
Social Security income	4,220	3,023	499	223	474
Income below 50% poverty	4,862	654	2,264	340	1,604
Income below poverty	10,805	1,861	4,906	761	3,277
Income below 150% of poverty	15,915	2,981	6,934	1,300	4,701
High school graduate	13,942	2,400	5,241	1,292	5,009
Two+ years post high school	3,479	603	988	303	1,586
Earnings at minimum wage:					
At least half time	8,338	335	4,393	988	2,622
At least full time	5,742	180	3,251	724	1,586
Earnings main source of income	9,353	319	4,739	1,068	3,227
Housing rated poor	1,159	144	564	111	340
Housing rated good+	14,334	3,195	5,338	1,351	4,450
Neighborhood rated poor	1,894	230	918	183	563
Neighborhood rated good+	11,986	2,988	4,409	972	3,617
In central cities	8,804	1,647	3,336	848	2,973
Nonmetro	3,358	766	1,301	235	1,057
Suburbs	7,105	1,521	2,925	700	1,960
Midwest	3,864	837	1,350	268	1,409
Northeast	3,939	1,099	1,383	350	1,107
South	6,487	1,126	2,702	622	2,038
West	4,977	872	2,127	542	1,437

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

**TABLE A-6B. HOUSING PROBLEMS AND CHARACTERISTICS  
OF EXTREMELY LOW-INCOME RENTERS, BY HOUSEHOLD TYPE, 2011**

	Total	Elderly, No Children	Families With Children	Other Families	Other Nonfamily
<b>Renter Households (thousands)</b>	11,774	2,563	4,505	860	3,846
Number of children	9,687	0	9,687	0	0
Number of persons	27,471	3,205	17,396	2,057	4,813
Children/household	0.82	0.00	2.15	0.00	0.00
Persons/household	2.33	1.25	3.86	2.39	1.25
Unassisted with severe problems	6,209	1,054	2,413	535	2,207
Unassisted with nonsevere problems only	934	196	394	48	295
Unassisted with no problems	984	207	223	85	470
Assisted	3,648	1,106	1,475	192	875
<b>Any with severe problems</b>	7,716	1,433	3,118	626	2,539
Rent burden 50%+ of income	7,534	1,395	3,055	621	2,463
Severely inadequate housing	479	96	181	20	180
[Rent burden only]	6,613	1,232	2,677	539	2,165
<b>Any with nonsevere problems only</b>	2,022	524	827	107	563
Rent burden 30–50% of income	1,663	487	647	98	431
Moderately inadequate housing	443	76	160	19	188
Crowded housing	220	0	215	2	4
[Rent burden only]	1,380	448	473	86	372
<b>Any with no problems</b>	2,037	606	560	127	744

(continued)

**TABLE A-6B. HOUSING PROBLEMS AND CHARACTERISTICS OF EXTREMELY LOW-INCOME RENTERS, BY HOUSEHOLD TYPE, 2011**

	Total	Elderly, No Children	Families With Children	Other Families	Other Nonfamily
<b>Other Characteristics</b>					
One person in household	5,169	2,011	9	0	3,149
Husband-wife family	1,906	312	1,232	362	0
Female head	7,474	1,704	3,365	493	1,911
Minority head	6,603	1,110	3,098	539	1,856
AFDC/SSI income	2,875	717	1,187	242	729
Social Security income	2,621	1,880	282	107	353
Income below 50% poverty	4,862	654	2,264	340	1,604
Income below poverty	10,036	1,850	4,244	711	3,231
Income below 150% of poverty	11,677	2,509	4,502	853	3,812
High school graduate	8,086	1,455	2,925	600	3,106
Two+ years post high school	1,882	339	510	133	900
Earnings at minimum wage:					
At least half time	3,057	86	1,761	287	922
At least full time	1,131	15	860	102	154
Earnings main source of income	4,345	118	2,234	408	1,585
Housing rated poor	768	99	386	55	228
Housing rated good+	8,594	2,060	3,081	661	2,792
Neighborhood rated poor	1,295	169	621	103	402
Neighborhood rated good+	8,071	1,966	2,919	587	2,599
In central cities	5,607	1,148	2,063	442	1,954
Nonmetro	2,036	469	767	120	679
Suburbs	4,132	946	1,675	298	1,213
Midwest	2,388	521	824	126	917
Northeast	2,538	739	886	170	743
South	3,885	744	1,542	294	1,306
West	2,964	559	1,254	270	880

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



**TABLE A-7. HOUSING PROBLEMS AND CHARACTERISTICS  
OF VERY LOW-INCOME, WORST CASE RENTERS, BY HOUSEHOLD TYPE, 2011**

	Total	Elderly, No Children	Families with Children	Other Families	Other Nonfamily
<b>Renter Households (thousands)</b>	8,475	1,470	3,236	801	2,969
Number of children	6,784	0	6,784	0	0
Number of persons	20,659	1,960	12,741	1,943	4,014
Children/household	0.80	0.00	2.10	0.00	0.00
Persons/household	2.44	1.33	3.94	2.43	1.35
Unassisted with severe problems	8,475	1,470	3,236	801	2,969
Unassisted with nonsevere problems only	—	—	—	—	—
Unassisted with no problems	—	—	—	—	—
Assisted	—	—	—	—	—
<b>Any with severe problems</b>	8,475	1,470	3,236	801	2,969
Rent burden 50%+ of income	8,209	1,426	3,150	779	2,855
Severely inadequate housing	566	97	189	52	227
[Rent burden only]	7,284	1,275	2,796	672	2,541
<b>Any with nonsevere problems only</b>	—	—	—	—	—
Rent burden 30–50% of income	—	—	—	—	—
Moderately inadequate housing	—	—	—	—	—
Crowded housing	—	—	—	—	—
[Rent burden only]	—	—	—	—	—
<b>Any with no problems</b>	—	—	—	—	—

(continued)

**TABLE A-7. HOUSING PROBLEMS AND CHARACTERISTICS  
OF VERY LOW-INCOME, WORST CASE RENTERS, BY HOUSEHOLD TYPE, 2011**

	Total	Elderly, No Children	Families With Children	Other Families	Other Nonfamily
<b>Other Characteristics</b>					
One person in household	3,291	1,062	6	0	2,222
Husband-wife family	1,752	230	1,152	370	0
Female head	5,107	997	2,213	422	1,475
Minority head	4,378	541	2,128	480	1,229
AFDC/SSI income	1,328	213	638	181	295
Social Security income	1,635	1,131	211	92	201
Income below 50% poverty	2,518	363	1,088	211	857
Income below poverty	5,612	817	2,450	477	1,868
Income below 150% of poverty	7,510	1,194	3,084	680	2,553
High school graduate	6,399	979	2,261	575	2,584
Two+ years post high school	1,782	272	460	161	889
Earnings at minimum wage:					
At least half time	3,548	130	1,782	376	1,259
At least full time	1,982	65	1,128	228	562
Earnings main source of income	4,456	146	2,043	468	1,799
Housing rated poor	484	48	231	45	159
Housing rated good+	6,329	1,163	2,326	599	2,241
Neighborhood rated poor	767	80	331	98	258
Neighborhood rated good+	6,105	1,154	2,289	549	2,112
In central cities	3,813	593	1,374	376	1,469
Nonmetro	1,323	282	435	95	510
Suburbs	3,340	594	1,427	329	989
Midwest	1,554	314	502	95	642
Northeast	1,604	336	576	147	546
South	2,964	470	1,138	309	1,049
West	2,352	350	1,020	250	732

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

**TABLE A-8. HOUSING PROBLEMS AND CHARACTERISTICS  
OF EXTREMELY LOW-INCOME, WORST CASE RENTERS, BY HOUSEHOLD TYPE, 2011**

	Total	Elderly, No Children	Families With Children	Other Families	Other Nonfamily
<b>Renter Households (thousands)</b>	6,209	1,054	2,413	535	2,207
Number of children	5,242	0	5,242	0	0
Number of persons	15,224	1,373	9,643	1,290	2,919
Children/household	0.84	0.00	2.17	0.00	0.00
Persons/household	2.45	1.30	4.00	2.41	1.32
Unassisted with severe problems	6,209	1,054	2,413	535	2,207
Unassisted with nonsevere problems only	—	—	—	—	—
Unassisted with no problems	—	—	—	—	—
Assisted	—	—	—	—	—
<b>Any with severe problems</b>	6,209	1,054	2,413	535	2,207
Rent burden 50%+ of income	6,103	1,035	2,383	530	2,154
Severely inadequate housing	343	67	117	20	139
[Rent burden only]	5,346	906	2,088	454	1,898
<b>Any with nonsevere problems only</b>	—	—	—	—	—
Rent burden 30–50% of income	—	—	—	—	—
Moderately inadequate housing	—	—	—	—	—
Crowded housing	—	—	—	—	—
[Rent burden only]	—	—	—	—	—
<b>Any with no problems</b>	—	—	—	—	—

(continued)

**TABLE A-8. HOUSING PROBLEMS AND CHARACTERISTICS  
OF EXTREMELY LOW-INCOME, WORST CASE RENTERS, BY HOUSEHOLD TYPE, 2011**

	Total	Elderly, No Children	Families With Children	Other Families	Other Nonfamily
<b>Other Characteristics</b>					
One person in household	2,489	784	6	0	1,699
Husband-wife family	1,200	141	805	253	0
Female head	3,806	718	1,658	292	1,137
Minority head	3,267	412	1,597	311	946
AFDC/SSI income	1,178	192	569	149	269
Social Security income	1,155	796	153	62	143
Income below 50% poverty	2,518	363	1,088	211	857
Income below poverty	5,362	809	2,260	452	1,841
Income below 150% of poverty	6,167	1,040	2,410	529	2,188
High school graduate	4,535	678	1,582	379	1,896
Two+ years post high school	1,153	173	290	97	594
Earnings at minimum wage:					
At least half time	2,008	39	1,096	190	683
At least full time	686	3	506	68	109
Earnings main source of income	2,993	70	1,387	290	1,247
Housing rated poor	393	39	193	32	129
Housing rated good+	4,553	810	1,705	406	1,633
Neighborhood rated poor	589	65	250	61	213
Neighborhood rated good+	4,410	816	1,693	365	1,536
In central cities	2,831	428	1,033	261	1,109
Nonmetro	1,005	214	336	72	383
Suburbs	2,374	413	1,044	203	715
Midwest	1,233	231	405	79	518
Northeast	1,189	240	452	90	407
South	2,126	347	804	199	775
West	1,661	236	752	167	506

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

**TABLE A-9. INCIDENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS,  
BY RACE AND ETHNICITY, 2009 AND 2011**

	Number		Percentage	
	2009	2011	2009	2011
<b>Non-Hispanic White (thousands)</b>	8,051	8,931	100.0%	100.0%
Unassisted with severe problems	3,436	4,097	42.7%	45.9%
Unassisted with nonsevere problems only	1,905	2,081	23.7%	23.3%
Unassisted with no problems	1,105	1,127	13.7%	12.6%
Assisted	1,606	1,625	19.9%	18.2%
<b>Any with severe problems</b>	3,938	4,593	48.9%	51.4%
Rent burden 50%+ of income	3,832	4,437	47.6%	49.7%
Severely inadequate housing	232	296	2.9%	3.3%
[Rent burden only]	3,453	4,007	42.9%	44.9%
<b>Any with nonsevere problems only</b>	2,404	2,615	29.9%	29.3%
Rent burden 30–50% of income	2,223	2,425	27.6%	27.2%
Moderately inadequate housing	320	351	4.0%	3.9%
Crowded housing	104	81	1.3%	0.9%
[Rent burden only]	2,001	2,190	24.9%	24.5%
<b>Any with no problems</b>	1,708	1,724	21.2%	19.3%
<b>Non-Hispanic Black (thousands)</b>	4,493	4,606	100.0%	100.0%
Unassisted with severe problems	1,640	1,820	36.5%	39.5%
Unassisted with nonsevere problems only	806	759	17.9%	16.5%
Unassisted with no problems	338	323	7.5%	7.0%
Assisted	1,710	1,704	38.1%	37.0%
<b>Any with severe problems</b>	2,359	2,514	52.5%	54.6%
Rent burden 50%+ of income	2,258	2,401	50.3%	52.1%
Severely inadequate housing	183	225	4.1%	4.9%
[Rent burden only]	2,020	2,072	45.0%	45.0%
<b>Any with nonsevere problems only</b>	1,322	1,297	29.4%	28.2%
Rent burden 30–50% of income	1,202	1,121	26.8%	24.3%
Moderately inadequate housing	204	256	4.5%	5.6%
Crowded housing	77	102	1.7%	2.2%
[Rent burden only]	1,051	953	23.4%	20.7%
<b>Any with no problems</b>	812	795	18.1%	17.3%

(continued)

**TABLE A-9. INCIDENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS, BY RACE AND ETHNICITY, 2009 AND 2011**

	Number		Percentage	
	2009	2011	2009	2011
<b>Hispanic (thousands)</b>	3,493	4,348	100.00%	100.00%
Unassisted with severe problems	1,582	1,971	45.3%	45.3%
Unassisted with nonsevere problems only	932	1,095	26.7%	25.2%
Unassisted with no problems	308	391	8.8%	9.0%
Assisted	672	892	19.2%	20.5%
<b>Any with severe problems</b>	1,841	2,294	52.7%	52.8%
Rent burden 50%+ of income	1,787	2,221	51.2%	51.1%
Severely inadequate housing	135	153	3.9%	3.5%
[Rent burden only]	1,578	1,951	45.2%	44.9%
<b>Any with nonsevere problems only</b>	1,151	1,423	33.0%	32.7%
Rent burden 30–50% of income	1,016	1,254	29.1%	28.8%
Moderately inadequate housing	148	179	4.2%	4.1%
Crowded housing	256	338	7.3%	7.8%
[Rent burden only]	776	941	22.2%	21.6%
<b>Any with no problems</b>	501	631	14.3%	14.5%

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

TABLE A-10. INCIDENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS,  
BY REGION, 2009 AND 2011

	Number		Percentage	
	2009	2011	2009	2011
<b>Northeast (thousands)</b>	3,626	3,939	100.0%	100.0%
Unassisted with severe problems	1,415	1,604	39.0%	40.7%
Unassisted with nonsevere problems only	678	715	18.7%	18.2%
Unassisted with no problems	421	372	11.6%	9.4%
Assisted	1,112	1,247	30.7%	31.7%
<b>Any with severe problems</b>	1,831	2,060	50.5%	52.3%
Rent burden 50%+ of income	1,739	1,933	48.0%	49.1%
Severely inadequate housing	184	232	5.1%	5.9%
[Rent burden only]	1,531	1,656	42.2%	42.0%
<b>Any with nonsevere problems only</b>	1,003	1,112	27.7%	28.2%
Rent burden 30–50% of income	914	978	25.2%	24.8%
Moderately inadequate housing	146	220	4.0%	5.6%
Crowded housing	67	126	1.8%	3.2%
[Rent burden only]	793	789	21.9%	20.0%
<b>Any with no problems</b>	791	767	21.8%	19.5%
<b>Midwest (thousands)</b>	3,628	3,864	100.0%	100.0%
Unassisted with severe problems	1,410	1,554	38.9%	40.2%
Unassisted with nonsevere problems only	811	927	22.4%	24.0%
Unassisted with no problems	422	421	11.6%	10.9%
Assisted	986	962	27.2%	24.9%
<b>Any with severe problems</b>	1,735	1,897	47.8%	49.1%
Rent burden 50%+ of income	1,672	1,827	46.1%	47.3%
Severely inadequate housing	127	129	3.5%	3.3%
[Rent burden only]	1,516	1,638	41.8%	42.4%
<b>Any with nonsevere problems only</b>	1,131	1,214	31.2%	31.4%
Rent burden 30–50% of income	1,051	1,109	29.0%	28.7%
Moderately inadequate housing	136	146	3.7%	3.8%
Crowded housing	60	73	1.7%	1.9%
[Rent burden only]	951	1,003	26.2%	26.0%
<b>Any with no problems</b>	762	753	21.0%	19.5%

(continued)

**TABLE A-10. INCIDENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS, BY REGION, 2009 AND 2011**

	Number		Percentage	
	2009	2011	2009	2011
<b>South (thousands)</b>	5,912	6,487	100.0%	100.0%
Unassisted with severe problems	2,479	2,964	41.9%	45.7%
Unassisted with nonsevere problems only	1,416	1,432	24.0%	22.1%
Unassisted with no problems	678	713	11.5%	11.0%
Assisted	1,338	1,378	22.6%	21.2%
<b>Any with severe problems</b>	3,020	3,464	51.1%	53.4%
Rent burden 50%+ of income	2,944	3,348	49.8%	51.6%
Severely inadequate housing	145	221	2.5%	3.4%
[Rent burden only]	2,636	2,995	44.6%	46.2%
<b>Any with nonsevere problems only</b>	1,813	1,907	30.7%	29.4%
Rent burden 30–50% of income	1,645	1,723	27.8%	26.6%
Moderately inadequate housing	287	286	4.9%	4.4%
Crowded housing	115	156	1.9%	2.4%
[Rent burden only]	1,427	1,486	24.1%	22.9%
<b>Any with no problems</b>	1,079	1,116	18.3%	17.2%
<b>West (thousands)</b>	3,951	4,977	100.0%	100.0%
Unassisted with severe problems	1,791	2,352	45.3%	47.3%
Unassisted with nonsevere problems only	945	1,124	23.9%	22.6%
Unassisted with no problems	378	498	9.6%	10.0%
Assisted	838	1,003	21.2%	20.2%
<b>Any with severe problems</b>	2,088	2,681	52.8%	53.9%
Rent burden 50%+ of income	2,037	2,622	51.6%	52.7%
Severely inadequate housing	124	152	3.1%	3.1%
[Rent burden only]	1,843	2,339	46.6%	47.0%
<b>Any with nonsevere problems only</b>	1,213	1,471	30.7%	29.6%
Rent burden 30–50% of income	1,081	1,318	27.4%	26.5%
Moderately inadequate housing	146	195	3.7%	3.9%
Crowded housing	221	215	5.6%	4.3%
[Rent burden only]	870	1,077	22.0%	21.6%
<b>Any with no problems</b>	650	825	16.5%	16.6%

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



TABLE A-11. INCIDENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS,  
BY METROPOLITAN LOCATION, 2009 AND 2011

	Number		Percentage	
	2009	2011	2009	2011
<b>Central Cities (thousands)</b>	7,915	8,804	100.0%	100.0%
Unassisted with severe problems	3,344	3,813	42.2%	43.3%
Unassisted with nonsevere problems only	1,752	1,849	22.1%	21.0%
Unassisted with no problems	695	759	8.8%	8.6%
Assisted	2,125	2,383	26.8%	27.1%
<b>Any with severe problems</b>	4,206	4,692	53.1%	53.3%
Rent burden 50%+ of income	4,054	4,489	51.2%	51.0%
Severely inadequate housing	341	402	4.3%	4.6%
[Rent burden only]	3,584	3,902	45.3%	44.3%
<b>Any with nonsevere problems only</b>	2,363	2,631	29.9%	29.9%
Rent burden 30–50% of income	2,131	2,349	26.9%	26.7%
Moderately inadequate housing	423	396	5.3%	4.5%
Crowded housing	225	303	2.8%	3.4%
[Rent burden only]	1,749	1,973	22.1%	22.4%
<b>Any with no problems</b>	1,346	1,481	17.0%	16.8%
<b>Suburbs (thousands)</b>	6,119	7,105	100.0%	100.0%
Unassisted with severe problems	2,632	3,340	43.0%	47.0%
Unassisted with nonsevere problems only	1,470	1,615	24.0%	22.7%
Unassisted with no problems	715	846	11.7%	11.9%
Assisted	1,303	1,305	21.3%	18.4%
<b>Any with severe problems</b>	3,093	3,793	50.5%	53.4%
Rent burden 50%+ of income	3,028	3,673	49.5%	51.7%
Severely inadequate housing	146	233	2.4%	3.3%
[Rent burden only]	2,783	3,327	45.5%	46.8%
<b>Any with nonsevere problems only</b>	1,890	2,076	30.9%	29.2%
Rent burden 30–50% of income	1,765	1,919	28.8%	27.0%
Moderately inadequate housing	154	236	2.5%	3.3%
Crowded housing	195	186	3.2%	2.6%
[Rent burden only]	1,568	1,663	25.6%	23.4%
<b>Any with no problems</b>	1,135	1,237	18.5%	17.4%

(continued)

**TABLE A-11. INCIDENCE OF HOUSING PROBLEMS AMONG VERY LOW-INCOME RENTERS, BY METROPOLITAN LOCATION, 2009 AND 2011**

	Number		Percentage	
	2009	2011	2009	2011
<b>Nonmetropolitan (thousands)</b>	3,084	3,358	100.00%	100.00%
Unassisted with severe problems	1,119	1,323	36.3%	39.4%
Unassisted with nonsevere problems only	628	734	20.4%	21.9%
Unassisted with no problems	490	399	15.9%	11.9%
Assisted	847	903	27.5%	26.9%
<b>Any with severe problems</b>	1,376	1,617	44.6%	48.2%
Rent burden 50%+ of income	1,310	1,568	42.5%	46.7%
Severely inadequate housing	94	99	3.0%	2.9%
[Rent burden only]	1,160	1,399	37.6%	41.7%
<b>Any with nonsevere problems only</b>	906	997	29.4%	29.7%
Rent burden 30–50% of income	795	859	25.8%	25.6%
Moderately inadequate housing	138	215	4.5%	6.4%
Crowded housing	43	81	1.4%	2.4%
[Rent burden only]	725	718	23.5%	21.4%
<b>Any with no problems</b>	802	744	26.0%	22.2%
<b>U.S. Total (thousands)</b>	17,118	19,267	100.0%	100.0%
Unassisted with severe problems	7,095	8,475	41.4%	44.0%
Unassisted with nonsevere problems only	3,849	4,198	22.5%	21.8%
Unassisted with no problems	1,900	2,003	11.1%	10.4%
Assisted	4,274	4,591	25.0%	23.8%
<b>Any with severe problems</b>	8,675	10,102	50.7%	52.4%
Rent burden 50%+ of income	8,392	9,730	49.0%	50.5%
Severely inadequate housing	581	734	3.4%	3.8%
[Rent burden only]	7,527	8,628	44.0%	44.8%
<b>Any with nonsevere problems only</b>	5,159	5,704	30.1%	29.6%
Rent burden 30–50% of income	4,691	5,128	27.4%	26.6%
Moderately inadequate housing	715	846	4.2%	4.4%
Crowded housing	463	570	2.7%	3.0%
[Rent burden only]	4,041	4,354	23.6%	22.6%
<b>Any with no problems</b>	3,284	3,462	19.2%	18.0%

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

**TABLE A-12. HOUSEHOLDS OCCUPYING U.S. RENTAL UNITS,  
BY AFFORDABILITY OF RENT AND INCOME OF OCCUPANTS, 2009 AND 2011**

Relative Income of Households	Occupied and Vacant Rental Units (thousands) by Unit Affordability Category (percent of HAMFI needed to afford the highest rent in the category)												
	2011	10*	20	30	40	50	60	70	80	90	100	110	120+
Extremely low-income (<30% HAMFI)	794	1,778	1,278	1,473	2,134	1,953	1,068	588	226	135	100	247	11,774
Very low-income (30–50%)	235	371	437	948	1,570	1,575	1,115	577	218	111	109	227	7,492
Low-income (50–80%)	184	262	276	601	1,427	1,748	1,278	884	392	193	188	317	7,750
Middle-income or higher (>80%)	234	287	349	563	1,173	1,986	1,753	1,645	1,112	780	476	1,491	11,850
<b>Total occupied units</b>	<b>1,446</b>	<b>2,699</b>	<b>2,340</b>	<b>3,585</b>	<b>6,304</b>	<b>7,261</b>	<b>5,214</b>	<b>3,694</b>	<b>1,948</b>	<b>1,219</b>	<b>873</b>	<b>2,284</b>	<b>38,867</b>
Vacant units for rent	98	137	134	361	697	815	584	426	248	180	125	403	4,208
<b>2009</b>													
Extremely low-income (<30% HAMFI)	646	1,569	1,180	1,355	1,841	1,517	805	515	149	85	75	224	9,961
Very low-income (30–50%)	210	390	477	1,017	1,583	1,378	910	507	204	136	109	235	7,157
Low-income (50–80%)	175	250	337	733	1,403	1,664	1,086	605	252	171	153	338	7,168
Middle-income or higher (>80%)	222	272	266	573	1,261	1,928	1,802	1,559	977	581	455	1,215	11,110
<b>Total occupied units</b>	<b>1,253</b>	<b>2,482</b>	<b>2,260</b>	<b>3,679</b>	<b>6,088</b>	<b>6,487</b>	<b>4,604</b>	<b>3,187</b>	<b>1,582</b>	<b>972</b>	<b>792</b>	<b>2,011</b>	<b>35,396</b>
Vacant units for rent	80	69	121	350	821	858	624	469	270	152	127	407	4,348

HAMFI = HUD-adjusted area median family income.  
 \* The 10 percent of HAMFI category includes units occupied with no cash rent.  
 Source: HUD-PD&R tabulations of American Housing Survey data

**TABLE A-13. RENTERS AND RENTAL UNITS AFFORDABLE AND AVAILABLE TO THEM,  
BY RELATIVE INCOME, 1999 TO 2011**

	1999	2001	2003	2005	2007	2009	2011
<b>Renter Households (thousands)</b>	<b>34,007</b>	<b>34,042</b>	<b>33,614</b>	<b>33,951</b>	<b>35,054</b>	<b>35,396</b>	<b>38,867</b>
Extremely low-income (<30% HAMFI)	8,513	8,739	9,077	9,729	9,243	9,961	11,774
Very low-income (30–50%)	6,243	6,315	6,581	6,342	6,697	7,157	7,492
Low-income (50–80%)	7,270	7,251	7,460	7,488	7,650	7,168	7,750
Middle-income or higher (>80%)	11,981	11,737	10,496	10,392	11,464	11,110	11,850
<b>Affordable Units</b>	<b>37,018</b>	<b>37,197</b>	<b>37,577</b>	<b>37,924</b>	<b>39,330</b>	<b>39,744</b>	<b>43,075</b>
Extremely low-income (<30% HAMFI)	6,683	6,870	7,098	6,747	7,280	6,265	6,854
Very low-income (30–50%)	12,089	12,366	12,863	12,368	11,071	10,938	10,947
Low-income (50–80%)	14,222	13,634	13,518	14,044	15,063	16,228	17,995
Middle-income or higher (>80%)	4,023	4,328	4,099	4,765	5,916	6,313	7,279
<b>Affordable and Available Units</b>	<b>37,018</b>	<b>37,197</b>	<b>37,577</b>	<b>37,924</b>	<b>39,330</b>	<b>39,744</b>	<b>43,075</b>
Extremely low-income (<30% HAMFI)	3,573	3,803	3,996	3,982	4,224	3,665	4,220
Very low-income (30–50%)	7,905	8,132	8,744	8,549	7,786	8,045	8,225
Low-income (50–80%)	11,841	11,665	12,396	12,865	13,196	14,004	15,361
Middle-income or higher (>80%)	13,700	13,597	12,441	12,528	14,123	14,029	15,270

HAMFI = HUD-adjusted area median family income.

Source: HUD-PD&amp;R tabulations of American Housing Survey data

**TABLE A-14. AVERAGE INCOME AND AVERAGE GROSS RENT OF RENTER HOUSEHOLDS, BY RELATIVE INCOME, 2009 AND 2011**

2011	Household Income as Percentage of HUD-Adjusted Area Median Family Income					
	0-30%	30-50%	50-80%	80-120%	>120%	All Incomes
<b>Total Households (thousands)</b>	11,774	7,492	7,750	5,799	6,051	38,867
Unassisted with severe problems	6,209	2,266	683	210	180	9,548
Unassisted with nonsevere problems only	934	3,264	3,218	1,174	604	9,194
Unassisted with no problems	984	1,019	3,447	4,218	5,159	14,828
Assisted	3,648	943	403	196	108	5,298
<b>Average Monthly Income</b>	\$743	\$1,970	\$3,096	\$4,452	\$8,989	\$3,286
Unassisted with severe problems	788	1,878	2,964	4,562	8,734	1,435
Unassisted with nonsevere problems only	1,057	2,042	3,139	4,427	8,965	3,085
Unassisted with no problems	391	2,046	3,095	4,493	9,011	5,300
Assisted	681	1,857	3,000	3,596	8,504	1,335
<b>Average Gross Rent</b>	\$681	\$797	\$861	\$957	\$1,275	\$874
Unassisted with severe problems	797	1,086	1,490	1,870	2,924	979
Unassisted with nonsevere problems only	571	691	930	1,265	1,908	920
Unassisted with no problems	648	563	669	826	1,147	884
Assisted	515	644	749	878	995	580
<b>2009</b>						
<b>Total Households (thousands)</b>	9,961	7,157	7,168	5,658	5,452	35,396
Unassisted with severe problems	5,069	2,026	644	203	143	8,085
Unassisted with nonsevere problems only	768	3,082	2,747	1,089	544	8,229
Unassisted with no problems	784	1,115	3,424	4,220	4,668	14,211
Assisted	3,340	934	354	146	97	4,871
<b>Average Monthly Income</b>	\$717	\$1,917	\$3,006	\$4,319	\$8,459	\$3,191
Unassisted with severe problems	764	1,820	2,860	3,945	8,723	1,416
Unassisted with nonsevere problems only	1,072	2,005	3,017	4,338	8,498	2,993
Unassisted with no problems	362	1,947	3,031	4,344	8,459	4,972
Assisted	647	1,799	2,951	3,959	7,832	1,278
<b>Average Gross Rent</b>	\$646	\$755	\$805	\$920	\$1,166	\$825
Unassisted with severe problems	766	1,061	1,495	2,178	2,155	958
Unassisted with nonsevere problems only	491	664	872	1,205	1,481	845
Unassisted with no problems	536	444	611	789	1,099	823
Assisted	514	647	719	774	1,119	574

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

**TABLE A-15. HOUSING CONDITIONS OF HOUSEHOLDS HAVING NONELDERLY PEOPLE WITH DISABILITIES,<sup>a</sup> BY DISABILITY TYPE, 2009 AND 2011**

2011	Functional Limitations					ADL/IADL Limitations <sup>b</sup>	
	Any Limitation	Hearing	Visual	Cognitive	Ambulatory	Self-Care	Independent Living
<b>Households (thousands)</b>	<b>9,995</b>	<b>2,272</b>	<b>1,808</b>	<b>4,018</b>	<b>5,020</b>	<b>1,480</b>	<b>2,877</b>
Renter households	4,570	838	862	2,036	<b>2,380</b>	<b>682</b>	<b>1,335</b>
Owner households	5,425	1,434	946	1,982	2,640	797	1,542
<b>Renters (thousands)</b>	<b>4,570</b>	<b>838</b>	<b>862</b>	<b>2,036</b>	<b>2,380</b>	<b>682</b>	<b>1,335</b>
Unassisted with severe problems	1,377	218	254	647	705	223	414
Unassisted with nonsevere problems only	955	188	190	406	501	108	234
Unassisted with no problems	1,141	296	238	440	543	123	292
Assisted	1,097	135	180	544	631	228	396
<b>Very Low-Income Renters (thousands)</b>	<b>3,068</b>	<b>481</b>	<b>548</b>	<b>1,474</b>	<b>1,661</b>	<b>502</b>	<b>974</b>
Unassisted with severe problems	1,307	204	232	620	684	218	403
Unassisted with nonsevere problems only	545	107	104	238	304	52	132
Unassisted with no problems	219	59	47	111	99	33	89
Assisted	997	111	164	506	574	199	349
<b>Any with severe problems</b>	<b>1,656</b>	<b>243</b>	<b>299</b>	<b>791</b>	<b>879</b>	<b>283</b>	<b>519</b>
Rent burden 50%+ of income	1,589	234	287	766	840	274	491
Severely inadequate housing	175	34	34	77	83	34	67
[Rent burden only]	1,325	188	221	640	690	209	384
<b>Any with nonsevere problems only</b>	<b>893</b>	<b>136</b>	<b>156</b>	<b>423</b>	<b>505</b>	<b>121</b>	<b>252</b>
Rent burden 30–50% of income	756	112	114	368	435	107	222
Moderately inadequate housing	192	28	48	107	110	24	59
Crowded housing	108	20	19	63	49	10	24
[Rent burden only]	609	94	92	264	358	87	179
<b>Any with no problems</b>	<b>519</b>	<b>102</b>	<b>92</b>	<b>260</b>	<b>277</b>	<b>98</b>	<b>203</b>

<sup>a</sup> Includes elderly-headed households.

<sup>b</sup> ADL = Activities of Daily Living. IADL = Instrumental Activities of Daily Living

(continued)

**TABLE A-15. HOUSING CONDITIONS OF HOUSEHOLDS HAVING NONELDERLY PEOPLE WITH DISABILITIES,<sup>a</sup> BY DISABILITY TYPE, 2009 AND 2011**

2009	Functional Limitations					ADL/IADL Limitations <sup>b</sup>	
	Any Limitation	Hearing	Visual	Cognitive	Ambulatory	Self-Care	Independent Living
<b>Households (thousands)</b>	<b>9,293</b>	<b>2,142</b>	<b>1,412</b>	<b>3,779</b>	<b>4,942</b>	<b>1,304</b>	<b>2,669</b>
Renter households	3,886	779	633	1,817	2,000	509	1,136
Owner households	5,407	1,363	779	1,962	2,941	795	1,533
<b>Renters (thousands)</b>	<b>3,886</b>	<b>779</b>	<b>633</b>	<b>1,817</b>	<b>2,000</b>	<b>509</b>	<b>1,136</b>
Unassisted with severe problems	1,059	175	199	499	572	152	328
Unassisted with nonsevere problems only	815	198	147	373	363	77	199
Unassisted with no problems	987	248	125	412	476	112	254
Assisted	1,025	159	162	533	590	169	355
<b>Very Low-Income Renters (thousands)</b>	<b>2,584</b>	<b>434</b>	<b>401</b>	<b>1,280</b>	<b>1,399</b>	<b>369</b>	<b>835</b>
Unassisted with severe problems	987	164	181	475	537	143	315
Unassisted with nonsevere problems only	457	101	59	221	206	32	121
Unassisted with no problems	178	27	13	80	101	37	66
Assisted	963	143	148	504	555	157	333
<b>Any with severe problems</b>	<b>1,342</b>	<b>224</b>	<b>238</b>	<b>676</b>	<b>728</b>	<b>207</b>	<b>443</b>
Rent burden >50% of income	1,292	218	230	648	710	197	428
Severely inadequate housing [Rent burden only, adequate housing]	115	19	25	66	57	25	34
<b>Any with nonsevere problems only</b>	<b>762</b>	<b>146</b>	<b>108</b>	<b>376</b>	<b>391</b>	<b>84</b>	<b>210</b>
Rent burden 30–50% of income	687	121	93	336	365	75	188
Moderately inadequate housing	123	38	28	78	54	12	33
Crowded housing [Rent burden only]	45	7	12	21	14	2	12
<b>Any with no problems</b>	<b>479</b>	<b>63</b>	<b>55</b>	<b>229</b>	<b>280</b>	<b>78</b>	<b>183</b>

<sup>a</sup> Includes elderly-headed households.

<sup>b</sup> ADL = Activities of Daily Living. IADL = Instrumental Activities of Daily Living

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

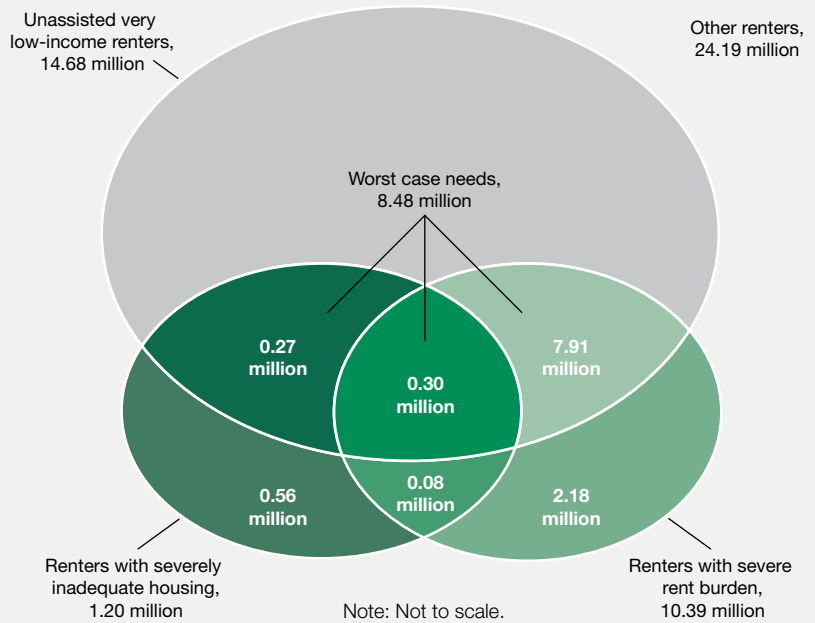




## SUPPLEMENTAL EXHIBITS

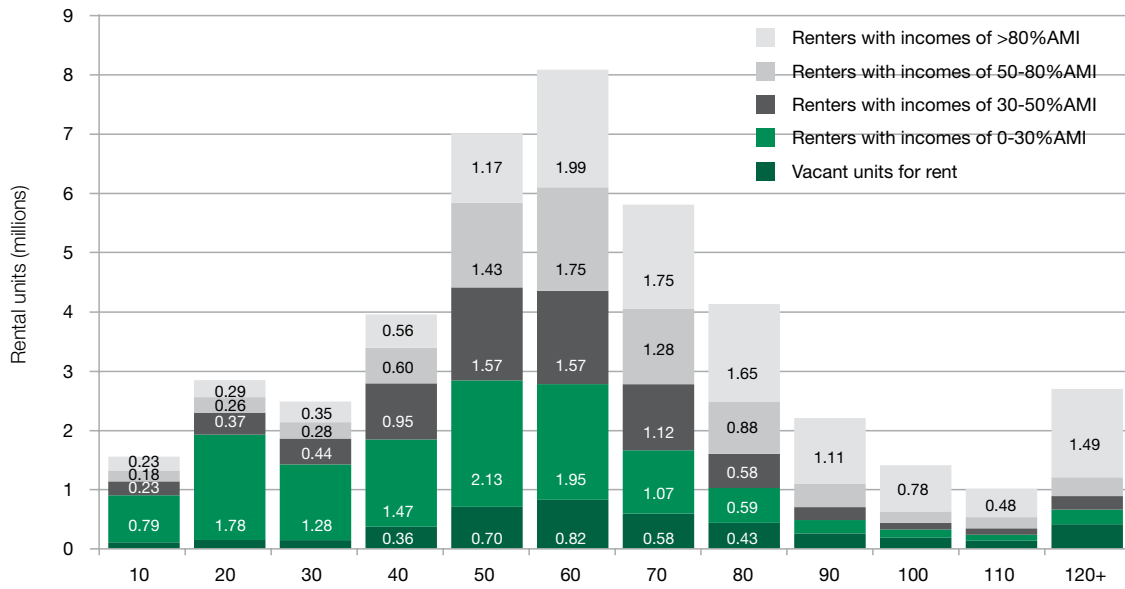
# APPENDIX B

EXHIBIT B-1. BIRD'S EYE VIEW OF WORST CASE HOUSING NEEDS IN 2011



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

EXHIBIT B-2. AFFORDABLE RENTAL UNITS OCCUPIED BY HIGHER INCOME RENTERS, 2011



Unit affordability: percent of AMI needed to afford the highest rent in the category

AMI = Area Median Income.  
Source: HUD-PD&R tabulations of American Housing Survey data

EXHIBIT B-3. RENTAL STOCK OF BELOW-FMR UNITS, 2011

	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	24,785	27,169	21,006	18,839	109.6	84.8	76.0
Northeast	4,993	5,255	4,186	3,596	105.2	83.8	72.0
Midwest	4,503	5,018	3,690	3,366	111.4	81.9	74.7
South	8,482	9,505	7,263	6,526	112.1	85.6	76.9
West	6,807	7,391	5,867	5,351	108.6	86.2	78.6
Cities	11,063	11,702	9,459	8,350	105.8	85.5	75.5
Suburbs	9,536	10,561	7,956	7,301	110.7	83.4	76.6
Nonmetropolitan areas	4,186	4,906	3,590	3,188	117.2	85.8	76.2

FMR = Fair Market Rent.  
Source: HUD-PD&R tabulations of American Housing Survey data

## APPENDIX

## C

## FEDERAL HOUSING ASSISTANCE AND AFFORDABLE HOUSING PROGRAMS

HUD provides rental housing assistance through three key programs.

- **Public housing.** Provides affordable housing to 1.1 million families through units owned and managed by local public housing agencies. Families are required to pay 30 percent of their incomes for rent.
- **Project-based assisted housing.** Provides assistance to 1.3 million families living in privately owned rental housing. The assistance is attached to the units, which are reserved for low-income families who are required to pay 30 percent of their incomes for rent.
- **Tenant-based rental assistance.** The Section 8 voucher program supplements the rent payments of more than 2.0 million families in the private rental market. The program is administered through state and local housing agencies. Although 30 percent of income is the rent baseline, families often pay more and use these portable subsidies to locate housing of their choice.

Several other federal housing programs produce affordable housing, typically with shallower subsidies. These units are often more affordable than market-rate units, yet extremely low-income families that do not have additional rent subsidies would often have to pay much more than 30 percent of their incomes under these programs.

- **Low-Income Housing Tax Credit (LIHTC) Program.** Tax credits offered to investors by the U.S. Department of the Treasury subsidize the capital costs of units that have rents affordable to households with incomes not exceeding 60 percent of Area Median Income.
- **HOME Investment Partnerships Program.** Provides annual formula grants to state and local governments that can be used to assist homeowners, first-time homebuyers, or renters. Qualifying rents must be affordable to households with incomes not exceeding 65 percent of AMI or must be less than the local Fair Market Rent (FMR), whichever is less.

- **Housing Opportunities for Persons with AIDS.** Annual formula and competitive grants available to state and local governments and nonprofits for rental assistance targeted to a special-needs population.
- **Older rental subsidy programs.** Programs named for sections of the National Housing Act, primarily the Section 221(d)(3) Below Market Interest Rate Program and the Section 236 mortgage assistance program, were active from the early 1960s through the early 1970s. They were designed to produce housing affordable for families with incomes greater than the public housing income limits.

For further detail on HUD program requirements, see HUD-PD&R (2006).

## APPENDIX

## D

PREVIOUS REPORTS TO CONGRESS  
ON WORST CASE NEEDS

- *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).
- *Trends in Worst Case Needs for Housing, 1978–1999* (December 2003).
- *Affordable Housing Needs: A Report to Congress on the Significant Need for Housing* (December 2005).
- *Affordable Housing Needs 2005: Report to Congress* (May 2007).
- *Housing Needs of Persons With Disabilities: Supplemental Findings to the Affordable Housing Needs 2005 Report* (February 2008).
- *Worst Case Housing Needs 2007: A Report to Congress* (May 2010).
- *Worst Case Housing Needs 2009: Report to Congress* (February 2011).

These publications are available online at [www.huduser.org](http://www.huduser.org).



## DATA AND METHODOLOGY

### APPENDIX

# E

### Using the American Housing Survey Data

This report uses data from the most recent available American Housing Survey, conducted in 2011. The AHS is sponsored by HUD, is conducted by the Census Bureau, and 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 units, and recent moves. National data are collected every 2 years from a sample of about 53,000 housing units. The survey, which started in 1973, has sampled the same housing units since 1985; it also samples newly constructed units 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 existing resources, determining the need for additional resources, and the form housing assistance should take.

To estimate worst case needs for federal rental assistance from AHS data accurately, 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 Area Median Income), 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).

**Weighting.** 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 and better represent the full housing stock. The Census Bureau weights up responses to account for undercoverage of households (about 2.2 percent) and household nonresponse (about 11 percent). The weights for 2001-through-2009 AHS data used in this report are based on the 2000 Census of Housing, with adjustments for estimated change since then. The 2011 AHS data are reweighted to 2010 census benchmarks.

**Exclusions.** Households reporting incomes that are zero or negative are excluded from estimates of worst case needs, although they are included in counts of total households. If such households pay rents greater than the Fair Market Rent and report zero or negative incomes, then their income situation is presumably temporary, and so they are included and higher incomes are imputed to them.

### Household and Family Types

In this report, the terms “family” and “household” are not interchangeable, because not all households are families. *Families* refers only to a subset of households that have one or more people in the household related to the *householder* (the first household member age 18 years or older who is listed as an owner or renter of the housing unit) by birth, marriage, or adoption.

**Families with children.** Households with a child younger than age 18 present are presumed to meet the definition of family through relation by birth or adoption (including grandparents as parents).

**Elderly households.** Households in which the householder or spouse is age 62 or older and in which no children are present. Elderly households may be either family or nonfamily households.

**Other families.** Households with a nonelderly householder and no children in which either (1) one or more people is related to the householder by birth, marriage, or adoption; or (2) one or more subfamilies reside there that have members related to each other by birth, marriage, or adoption.

**Other nonfamilies.** Households with a single nonelderly person living alone or with only nonrelatives. Most of these households comprise single people living alone rather than unrelated people sharing housing.

**Households with disabilities.** Before 2009, no questions in the AHS were designed to ascertain directly whether individuals suffered from disabilities. Worst case needs reports for 2007 and earlier identified households containing people with disabilities using various forms of income-based proxies. Households with disabilities (1) were not families with children, (2) were not elderly households, and (3) received some form of income or government assistance that is very likely to indicate that an adult with disabilities is present in the household. Beginning with the 2009 AHS, the survey now asks direct questions about impairments and difficulties with activities of daily living about each household member, including children. This report therefore addresses disability on the basis of people identified with these problems. In this report, elderly people with disabilities do not increase the number of households with disabilities because of the prevalence of disabilities associated with aging.

### 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 previously. 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 with pre-1997 data. These questions were further refined in 2007, as a result of additional cognitive research.

- Determine whether the household must recertify to determine the rent it pays.
- Determine whether the rent is less because of a federal, state, or local government housing program.
- Determine whether the household has a housing voucher, and, if so, whether it can be used to move to another location.
- Determine whether the housing authority is the household’s landlord.
- Determine whether the household was assigned to its housing unit or allowed to choose it.

### Housing Problems

**Rent or cost burden.** A ratio of housing costs (including utilities) to 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 qualify as potential worst case needs only if they are severe. 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 and modified from time to time to reflect changes in the survey. Severe inadequacies constitute potential worst case needs, but moderate inadequacies do not. The 2007 AHS eliminated the questions about hallways (common stairways and light fixtures) in multiunit structures in the section on selected physical problems, which affects the classification of units having severe or moderate physical problems. Briefly, a unit is defined as having severe physical inadequacies if it has any one of the following four problems.

- **Plumbing.** Lacking piped hot water or a flush toilet or lacking both bathtub and shower, all for the exclusive use of the unit.
- **Heating.** Having been uncomfortably cold during the past winter for 24 hours or more, or three times for at least 6 hours each, because of broken-down heating equipment.



**Electrical.** Having no electricity or having all the following three electrical problems: exposed wiring, a room with no working wall outlet, and three or more blown fuses or tripped circuit breakers in the past 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 1 square foot of peeling paint or plaster, or rats in the past 90 days.

A unit has moderate inadequacies if it has any of the following four problems, but none of the severe problems listed previously.

- **Plumbing.** Having all toilets break down simultaneously at least three times in the past 3 months for at least 3 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 associated with 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 counted as a moderate problem rather than 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, including 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. These problems informed the original definition of worst case needs. Because the AHS sample tracks housing units and thus cannot count homeless people, AHS estimates of priority problems are limited to the two severe problems described previously: (1) rent burdens greater than 50 percent of income, or (2) severe physical problems. In accordance with the intention to estimate the number of unassisted very low-income renters with priority problems, the tables in Appendix A classify households with a combination of moderate problems and severe problems as having severe problems.

## Income Measurement

**Income sources.** *Income* means gross income reported by AHS respondents for the 12 months preceding the interview. Beginning with the 2007 AHS, the previous combined question on interest, dividend, and rental income was split into separate

items. The “other income” question was also modified to no longer include child support or alimony. For each person in the family, the AHS questionnaire collects the amounts of 13 different types of income. Income 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 before deductions for taxes or any other purpose. Imputed income from equity is not included as income in this report. In accordance with HUD rules for determining income eligibility for HUD programs, the earnings of teenagers ages 17 years and younger are not counted as income for this report.

**Supplemental and in-kind income sources.** Poorer renters with high rent burdens are asked several questions about whether people outside the household contributed to household expenses such as rent, food, and childcare. The supplemental questions are asked of assisted renters who paid more than 35 percent of their reported income for rent and of unassisted renters with household incomes of less than \$10,000 who paid more than 50 percent of their income for rent. (These questions were not asked in the 2007 AHS, because the module could not be translated to the Census Bureau’s new computer language [Blaise] in time.)

**Family income.** Reported income from all sources for the householder and other household members related to the householder.

**Household income.** Reported income from all sources for all household members ages 18 years or older.

## Income Categories

**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 HAMFI. HAMFI is more commonly referred to as AMI, although the latter term may be subject to misinterpretation. Note that income limits are based on median family income (MFI), not median household income. HUD determines base income limits for a household of four. Income limits are further adjusted by household size: one person, 70 percent of base; two people, 80 percent; three people, 90 percent; five people, 108 percent; six people, 116 percent; and so on. Each household is assigned to an income category using the income limit appropriate to its area and the number of household members.<sup>40</sup>

**Income cutoffs in association with 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 with area income limits. Very low- and low-income

<sup>40</sup> For details about how HUD sets income limits, see <http://www.huduser.org/portal/datasets/il.html>.

household of four are defined for each unit of geography identified in the AHS national microdata files. 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.

Because developing estimates of official income limits for the geography identified in the AHS microdata was time consuming, before the 2003 AHS release, HUD prepared income limits to use with AHS geography for only 3 years: 1978, 1986, and 1995. Income cutoffs for the 2003 AHS release and each subsequent dataset have been based on HUD's current income limits for those years, weighted by AHS weights. The Census Bureau adds these cutoffs to the AHS public use file. Additional detail about income limits can be found in the AHS Codebook (HUD-PD&R, 2013: 1051–1052).

**Categorizing households by income.** For this report, when households are categorized using the extremely low-, 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 of slightly more than AMI if their monthly housing costs exceed the FMR 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.

- **Extremely low income.** Income not in excess of 30 percent of HAMFI, as determined by the extremely low-income cutoff.
- **Very low income.** Income not in excess of 50 percent of HAMFI, as determined by the very low-income cutoff. 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 of between 30 and 50 percent of HAMFI.
- **Low income.** Reported income not in excess of 80 percent of HAMFI, as determined by the low-income cutoff.
- **Poor.** Household income of less than the U.S. national poverty cutoff 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 the income of households rather than the income of families or individuals, and AHS income questions are much less detailed and refer to income during the past 12 months rather than during a fixed period. The poverty cutoff for a family of four approximates 33 percent of HAMFI.

- Comparisons of income limits with poverty thresholds are presented in Tables A–6A, A–6B, A–7, and A–8.
- **Middle income.** For this report, income exceeding 80 percent and less than 120 percent of HAMFI.
- **Upper income.** For this report, income exceeding 120 percent of HAMFI.

## Location

**Metropolitan Statistical Area.** From 1973 to 1983, the definitions of metropolitan location in AHS 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.

## 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 program, 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 sizes to define three categories of affordability (extremely low income, very low income, and low income) based on the incomes that are sufficient for the rents: at or less than 30 percent of HAMFI, more than 30 and not more than 50 percent of HAMFI, and more than 50 percent of HAMFI. Gross rents for each unit, including payments for utilities, are compared with 30 percent of HUD's extremely low-income and very low-income cutoffs.

The income limits used to define rent affordability are adjusted for number of bedrooms using the formula codified at 26 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; and plus 12 percent of base for every additional bedroom. This formula assumes that an efficiency unit houses one person, a one-bedroom unit houses 1.5 people, and each additional bedroom houses another 1.5 people. For vacant units, 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.** Section 2 uses three measures to analyze the supply of the rental housing stock in relation to household incomes.

**Categorizing rental units by affordability and households by income.** For the analysis of mismatches between affordability and income in Section 2, we compared household incomes and housing unit rents with the current income limits (for income and rent categories up to and including 80 percent of HAMFI) and to a ratio of HAMFI (for categories exceeding 80 percent of HAMFI). As in the analysis of household income, households reporting negative income were redefined as having incomes slightly greater than MFI if their monthly housing costs were more than the FMR and they lived in adequate and uncrowded housing. 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**

In 2003, the AHS began using revised Census Bureau categories of race and ethnicity that are not directly comparable with the categories used in the AHS from 2001 and earlier. Survey respondents may now select more than one racial group, causing slight but significant decreases in the size of previously monolithic categories.



## F

## COMPARISON OF DATA SOURCES

### Overview

Three federal surveys collect data on occupancy and tenure: the American Community Survey (ACS), the American Housing Survey (AHS), and the Current Population Survey/Housing Vacancy Survey (CPS/HVS). Each of these surveys uses an estimate of total housing units from the same data source, meaning as a practical matter that all three surveys show nearly the same number of total housing units. Recent updates to estimates of total housing units for the period of 2001 to 2009 (to reflect the 2010 decennial census), however, make calculations of annual changes in housing unit counts problematic when comparing surveys.

Moreover, each survey produces different estimates of *occupied housing units* (and their opposite, *vacant units*) and *renter-occupied housing units* (and their opposite, *owner-occupied housing units*). Housing researchers are well aware of this issue and the multiple factors that contribute to it, such as survey question design and sample design. Given that the ACS and the AHS produce different estimates of renter-occupied housing units, it stands to reason that subgroups within renter-occupied housing units, including those based on income and housing costs, will be different.

### Housing Unit Counts

The Population Division of the Census Bureau produces independent quarterly estimates of total housing units that serve as control totals for housing units in each of the aforementioned surveys. The specific quarterly estimate used for each survey depends on which quarter best represents when the data collection for the survey was conducted. In some cases, a survey might use an estimate that represents a halfway point between quarters.

From 2000 through 2009, the quarterly estimates of total housing units were derived from the 2000 decennial census count of housing units and updated using building permit data, estimates of housing loss, and other administrative data. In other words, the count of total housing units from the 2000 decennial census was accepted as truth, and subsequent changes in the count for 2001 through 2009 were estimated using alternative data sources and statistical modeling. The set of estimates produced for 2000 through 2009 based on the 2000 decennial census was called *Vintage 2009*.

Beginning in 2010, the quarterly estimates of total housing units were based on the 2010 decennial census count of housing units. The subsequent estimate for 2011 was based on the 2010 decennial census count of housing units and updated using building permit data, estimates of housing loss, and other administrative data. The 2010 decennial census was also used to revise the 2000-through-2009 estimates of total housing units. These estimates are referred to as *Vintage 2010*.

The 2010 decennial census revealed more housing units than the Census Bureau estimated in the years leading up to the 2010 decennial census. The Vintage 2010 count of total housing units exceeded the Vintage 2009 estimate by 1.3 million units. The 2009 AHS used the Vintage 2009 estimate. Exhibit F-1 shows the differences between the two vintages from 2000 through 2010.

**EXHIBIT F-1. ANNUAL HOUSING UNIT ESTIMATES BASED ON CPS/HVS, 2009 AND 2010 VINTAGES (THOUSANDS)**

Year	Vintage 2009	Vintage 2010	Difference
2000	116,236	116,264	28
2001	117,831	117,994	163
2002	119,396	119,697	301
2003	121,023	121,466	443
2004	122,766	123,355	589
2005	124,600	125,363	763
2006	126,383	127,296	913
2007	128,017	129,064	1,047
2008	129,211	130,415	1,204
2009	129,944	131,269	1,325
2010	130,599	131,806	1,207
2011	N/A	132,291	N/A

CPS/HVS = Current Population Survey/Housing Vacancy Survey.  
 Source: HUD-PD&R tabulations of CPS/HVS data

The difference between vintages does not affect estimates of worst case needs in 2011, but it does affect estimates for previous years. The AHS data show an increase of 2.3 million housing units between 2009 and 2011. This increase is consistent with changes in the CPS/HVS data in Exhibit F-1, as is apparent by comparing the Vintage 2009 estimate for 2009 with the Vintage 2010 estimate for 2011. More than one-half of this increase, however, is illusory. The actual increase in housing units is closer to 1 million, as can be seen by comparing the Vintage 2010 estimates for 2009 and 2011.

This rebenchmarking of AHS total housing units in 2010 poses challenges for comparing estimates of worst case needs for 2009 and 2011. For this report, HUD chose not to update the 2009 estimates, because the resulting revisions to worst case needs totals were minimal.

**Vacancy and Tenure**

It is well documented that the ACS, AHS, and CPS/HVS produce different estimates of vacancy and tenure.<sup>41</sup> Exhibit F-2 shows the occupancy rates for each survey for 2009 and 2011 and the change between 2009 and 2011. The differences generally exhibit no pattern, other than that the ACS has the highest occupancy rate for both years.

<sup>41</sup> See <http://www.census.gov/housing/> for an additional explanation.

**EXHIBIT F-2. OCCUPANCY RATES OF HOUSING UNITS FOR CPS/HVS, AHS, AND ACS DATASETS, 2009 AND 2011**

	2009	2011	Change 2009–11
CPS/HVS	85.5%	85.8%	0.3%
AHS	85.9%	86.8%	0.8%
ACS	87.4%	86.9%	–0.5%

ACS = American Community Survey. AHS = American Housing Survey. CPS/HVS = Current Population Survey/Housing Vacancy Survey.

Exhibit F-3 shows the percentage of occupied housing units that were renter occupied in 2009 and 2011. All three surveys showed an increase in the renter-occupied housing units between 2009 and 2011. The ACS, however, showed a much higher renter occupancy rate for both 2009 and 2011 compared with the rates shown in the AHS or CPS/HVS.

**EXHIBIT F-3. PROPORTION OF RENTERS IN OCCUPIED HOUSING UNITS FOR CPS/HVS, AHS, AND ACS DATASETS, 2009 AND 2011**

	2009	2011	Change 2009–11
CPS/HVS	32.6%	33.9%	1.2%
AHS	31.7%	33.8%	2.1%
ACS	34.1%	35.4%	1.3%

ACS = American Community Survey. AHS = American Housing Survey. CPS/HVS = Current Population Survey/Housing Vacancy Survey.  
Source: HUD-PD&R tabulations of CPS/HVS, ACS, and AHS data

The ACS's higher occupancy rate and renter-occupied housing rate relative to the AHS resulted in about 2 million more rental housing units in the ACS than in the AHS in 2011.

From this discrepancy, it can reasonably be expected that the ACS would show more households experiencing severe rent burdens than the AHS, simply because the ACS data show more renter households.

The ACS-based estimate of the Joint Center for Housing Studies of Harvard University (JCHS) that 11.224 million renters had severe rent burdens in 2011 bears this difference out (JCHS, 2013: Table A-3). This estimate is 8.0 percent more than HUD's estimate of 10.391 million renters with severe burdens (Table A-1A). The JCHS estimate of 40.615 million renters, however, is also 4.5 percent more than the HUD estimate of 38.867 million renters (Table A-1A). Therefore, the differences in tenure-share estimates resulting from different data sources presumably account for more than one-half of the difference in severe rent

burden estimates. Variations in the rent and income questions of the survey instruments, without doubt, have a significant role as well.





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