TRENDS IN WORST CASE NEEDS FOR HOUSING, 1978–1999

A Report to Congress on Worst Case Housing Needs

Plus Update on Worst Case Needs in 2001

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Executive Summary

Trends in Worst Case Needs for Housing, 1978–1999

After having increased by one-fifth over the previous 10 years, between 1997 and 1999 the number of U.S. households with worst case needs for rental assistance fell significantly, by at least 8 percent, to 4.86 million. This reduction in worst case needs resulted from increases in income among very-low-income renters, but not from increases in the number of rental units affordable to them. Instead, the trend of decline in the number of rental units affordable to extremely-low-income households accelerated between 1997 and 1999.

The findings detailed in this report thus represent both good and bad news. Real, significant drops in numbers of households with severe rent burdens reduced the share of U.S. households with worst case needs in 1999 to 4.7 percent, a record low for the past two decades, and this marked improvement shows that progress can be made in addressing the nation's most serious housing problems. Worsening shortages of housing affordable and available to extremely-low-income renters, however, show that the underlying gap between demand and supply continues.

This report also looks more generally at trends over the past two decades in housing problems among both owners and renters at all income levels. The most notable changes are increases in affordability problems among low-income owners. Although severe affordability problems remain more common among very-low-income renters than other renters or owners at any income level, over the past two decades the number and share of very-low-income owners with affordability problems have risen more rapidly.

A brief section following this executive summary updates the trends studied in the body of the report by giving an overview of changes between 1999 and 2001. Over this two-year period, the number of households with worst case needs for rental assistance rose slightly, but insignificantly, to 5.07 million. The number of units affordable to extremely-low-income renters remained stable, so that—for the first time in the past decade—shortages of housing affordable and available to extremely-low-income renters did not worsen.

Worst case needs fell between 1997 and 1999 but rose over the past two decades

In 1999, an estimated 4.86 million unassisted very-low-income renter households, containing 10.9 million people, had worst case needs for rental assistance. "Worst case" needs are defined as unassisted renters with very low incomes (below 50 percent of area median income) who pay more than half of their income for housing or live in severely substandard housing.

- Severe rent burdens were by far the most common problem underlying worst case needs. In 1999, almost 94 percent of those with worst case needs paid more than half of their reported income for housing, while only 11 percent lived in units with severe physical problems. For over three-fourths of those with worst case needs, 3.7 million,

a severe rent burden was their only housing problem, since they lived in uncrowded housing that had neither severe nor moderate physical problems.

The number of worst case renters fell by at least 440,000 households between 1997 and 1999, a significant decrease of at least 8 percent over this 2-year period.

- The 1997–99 drop in worst case needs resulted from a reduction in the number of very-low-income renters paying more than half of their income for rent and utilities. The number of households living in severely inadequate units did not change.

- Worst case needs fell significantly between 1997 and 1999 because income growth among very-low-income renters exceeded increases in the rents they paid.

The significant decline in worst case needs between 1997 and 1999 was the first drop observed after 10 years of increasing need. Between 1987 and 1997, the number of households with worst case needs rose from 4.5 million to a record high of 5.4 million in 1997. Between 1978 and 1985, worst case needs had also increased.

- In 1999, the 4.9 million worst case households represented only 14.3 percent of renters, and 4.7 percent of U.S. households, the lowest shares observed in the 21 years for which comparable worst case data are available.

- Over the two decades between 1978 and 1999, worst case needs rose in number but fell as a share of very-low-income renters. During this period, the number of unassisted very-low-income renters with severe rent burdens rose from 3.2 to 4.6 million. By contrast, the number living in severely inadequate units fell by half, to 525,000.

Housing problems among all renters and owners

Very-low-income renters are much more likely to have housing problems, especially severe problems of severely inadequate housing or paying more than half of income for housing, than higher income renters. They are also more likely to have one or more moderate or severe housing problems (of rent burden, physically inadequate housing, or crowding) than very-low-income owners or higher income owners. Paying more than 30 percent of income for housing was by far the most common problem among all groups of low- and moderate-income renters and owners.

- Between 1997 and 1999, the drop in worst case needs was not due to changes in the number of renters reporting assistance. Instead, severe rent burdens fell among all very-low-income renters, including assisted renters, and among all renters.

- In 1999, 44 percent of very-low-income renters had severe problems, and another 34 percent had “moderate” problems, which include paying 31–50 percent of income for housing or living in housing that is moderately inadequate or crowded. Among very-low-income owners, 33 percent had severe problems and 25 percent had moderate problems.

- Housing problems were much less common among renters and owners with "low" incomes between 51 and 80 percent of median. In this income group, 6 percent of renters and 9 percent of owners had severe problems, while 31 percent of renters and 26 percent of owners had other problems.

- Very few households with moderate incomes (81–120 percent of median) had severe problems. In this income group, only 3 percent of renters and 4 percent of owners had severe problems, while 14 percent of renters and 17 percent of owners had moderate problems.

Although severe problems remain uncommon among owners with low and moderate incomes, over the past two decades these groups experienced faster growth in severe problems, from a smaller base, than renters. Despite growth in numbers with problems, the incidence of severe problems was *lower* in 1999 for unassisted renters with incomes between 60 and 120 percent of median income than it had been in 1978.

- Between 1978 and 1999, housing payments requiring an unaffordable share of income rose more rapidly among owners than among renters. The share of all owners paying more than half of income for housing rose from 3.3 percent to 8.5 percent, while the share of renters paying more than half of income for housing rose from 13.6 percent to 18.5 percent.

- For owners as for renters, affordability problems were much more common than living in inadequate or crowded housing. Among all households, 11.8 percent paid more than half of income for housing, and another 15.4 percent paid 31–50 percent of income for housing. By contrast, 2 percent lived in housing with severe physical problems and another 4.7 percent had housing with moderate problems. Nationally, only 2.5 percent of households were crowded.

Worst case needs and rental assistance among renters by income

The 1997–99 fall in the number of households with worst case needs for rental assistance all occurred among renters with extremely low incomes [below 30 percent of HUD-adjusted area median family income (HAMFI)], as income growth caused the number of such households to fall from 9 to 8.6 million.

- Yet extremely-low-income renters remained much more likely to have worst case housing problems than those with higher incomes. Over two-thirds (68 percent) of unassisted extremely-low-income renters—some 3.7 million households—had worst case housing needs in 1999.

- Renters with the lowest incomes much more often have severe housing problems than those with higher incomes. For example, over three-fourths of unassisted renters with incomes between 0 and 20 percent of HAMFI had severe problems in 1999, compared to 28 percent of unassisted renters with incomes between 31 and 40 percent of HAMFI and only 8 percent among unassisted renters with incomes between 51 and 60 percent of HAMFI.

By 1999, over one-third of extremely-low-income renters reported rental assistance, up from one-fourth in 1978, as rental assistance rose among low-income renters. Nonetheless, in both years, over two-thirds of the extremely-low-income renters without assistance had worst case problems.

Worst case needs, housing problems, and rental assistance by type of household

Needs fell most rapidly among the elderly, families with children, and "other" families. The 1997–99 drop in worst case needs was greatest among "other families," that is, nonelderly households with related family members but no children. Declines were also above average among the elderly and families with children, two groups often helped by rental assistance. Worst case needs did not drop among the remaining two household types identified in this report: households with disabled nonelderly adults or households containing only one or more single adults younger than 62.

Between 1997 and 1999, needs among the elderly fell by an above-average drop of 12 percent to 1.0 million households. Among families with children, worst case needs fell by 10 percent to 1.8 million. Among these two household types, the 1997–99 drops more than offset the decade's earlier slow growth in worst case needs.

- Despite this improvement, the likelihood of having worst case problems remained high for very-low-income elderly and families with children without assistance. In 1999, 51 percent of unassisted elderly very-low-income renters, and 42 percent of unassisted very-low-income renter families with children, had worst case problems.

- Elderly worst case renters were the very-low-income renters most likely to have only a severe rent burden, while worst case families with children more often paid more than half of their income and lived in inadequate or crowded housing.

- Among both the elderly and families with children, four-fifths of the households with worst case problems had extremely low incomes (800,000 elderly and 1.4 million families with children).

The 1997–99 fall in worst case needs was fastest among "other" families, who are nonelderly households with related family members but no children. The drop of 31 percent offset the increases in needs recorded earlier in the decade. By 1999, unmet needs were 230,000, effectively the same as the 1987 and 1989 levels of 220,000.

- This household type was least likely to have worst case problems: in 1999, only 36 percent of unassisted families without children had worst case needs for assistance.

Worst case needs did *not* fall among very-low-income renter households with disabled adult members, who also receive priority for rental assistance. Although an improved American Housing Survey (AHS) proxy for the disabled suggests that almost half of this group receive rental assistance, three-fifths of the unassisted disabled have worst case problems, the highest rate of any household type.

- The improved proxy suggests that at least 1.1 million very-low-income renter households with worst case needs had adults with physical or mental disabilities.

The number of households with worst case needs did not change between 1997 and 1999 among the residual group of single adults less than 62 years old who live alone or with other unrelated singles.

- Some of these 1.2 million households are probably disabled. Others may be temporarily experiencing a severe rent burden since, on average, this group is younger and better educated than the other household types.

The share of worst case households with earnings continues to increase

Working continued to increase among those with worst case problems. Although the number of worst case households with workers fell slightly because of the large decline in the total number with worst case needs, the share of nonelderly, nondisabled worst case households who had earnings as their primary income source rose from 73 percent in 1997 to 77 percent in 1999. This change continues the rise observed since 1991, when 67 percent of such worst case renters had earnings as their main source of income.

- Among very-low-income worst case families with children, the number with earnings as primary source of income remained at 1.2 million even though the total number of households with worst case needs fell. Among all very-low-income renters with children, the share relying on earnings rose from 66 percent to 74 percent between 1997 and 1999, both substantially above the rate of 59 percent observed in 1991.

- Among extremely-low-income worst case families with children, the share relying on earnings rose from 56 percent to 64 percent between 1997 and 1999, while the share reporting any welfare income dropped from 36 percent to 31 percent.

Worst case needs by race and ethnicity

Worst case problems dropped most sharply between 1997 and 1999 among Hispanics (16 percent) and non-Hispanic whites (14 percent). But worst case needs rose significantly for non-Hispanic blacks, increasing by 11 percent to a record high of 1.2 million.

Between 1991 and 1997, Hispanics experienced the fastest growth in worst case problems, but the 1997–99 drop offset half of the earlier rise. Between 1987 and 1999, the two recent lows in worst case needs, needs among Hispanics increased by 44 percent. Although this rate of growth in worst case problems exceeded that for either blacks or whites, it nonetheless lagged the 63-percent growth in total number of Hispanic very-low-income renters.

- In 1999, Hispanics had a lower rate of severe problems among unassisted very-low-income renters (41 percent) than any other racial/ethnic group. They were also the racial/ethnic group least likely to receive rental assistance (25 percent).

Among non-Hispanic whites, worst case needs fell by 14 percent, or 400,000, between 1997 and 1999. In 1999, they stood at a record low over the 1978–99 period of 2.5 million, well

below the 1987 level of 2.8 million. Still, 47 percent of unassisted white very-low-income renters had worst case problems in 1999.

Non-Hispanic blacks, with needs at a record high of 1.2 million in 1999, were the only racial/ethnic group with growth in worst case needs between 1997 and 1999. That growth occurred mainly among nonelderly single persons.

- In 1999, blacks had the highest rate of severe needs among unassisted very-low-income renters—49 percent. They were also the racial/ethnic group most likely to receive assistance (37 percent).

Between 1978 and 1999, worst case needs grew most rapidly among other minorities—Asian-Americans and Native Americans. In 1999, however, the housing problems of these minorities did not differ significantly in type or incidence from those of other racial/ethnic groups.

The location of households with worst case needs

In 1999, households with worst case needs were most numerous in the South (1.5 million) and the West (1.4 million). But very-low-income renters most often had worst case problems in the West and the Northeast (48 percent and 47 percent of unassisted very-low-income renters, respectively).

More than half of worst case renters (2.5 million) lived in central cities, and the likelihood of having worst case problems was highest there (48 percent of unassisted very-low-income renters). Few worst case renters lived outside of metropolitan areas (650,000), and needs among unassisted very-low-income renters were least likely there (40 percent). The 1.7 million worst case renters in suburbs represented 46 percent of the unassisted very-low-income renters living there.

Regionally, decreases in worst case problems between 1997 and 1999 were greatest in the Northeast, where needs fell by 18 percent. Needs dropped least in the Midwest (2 percent) and South (4 percent), and these small drops were not statistically significant.

In 1999, very-low-income renters were least likely to receive rental assistance in suburbs (25 percent) and most likely to be assisted in nonmetropolitan areas (32 percent).

- These differentials held throughout the 1990s, although both worst case needs and the numbers of renters receiving assistance grew most quickly in western and southern suburbs during this period.

Between 1978 and 1999, numbers of very-low-income renters, renters with worst case needs, and renters receiving rental assistance all increased most rapidly in the West. During this period, the West shifted from having the lowest incidence of unassisted very-low-income renters with worst case problems (42 percent in 1978) to the highest (48 percent in 1999).

- Between 1978 and 1999, the incidence of worst case problems fell in the Northeast (from 54 percent to 47 percent).

- In both the South and the Midwest, the share of unassisted very-low-income renters having worst case problems was the same in 1999 as it had been in 1978 (45 percent in the South; 43 percent in the Midwest).

Shortages of affordable units compared to numbers of renters needing them were worst for renters with extremely low incomes

Worst case needs were highest among extremely-low-income renters because there were severe shortages of housing affordable to them, only 78 units per 100 renters in 1999. Moreover, many of the 6.7 million units "affordable" to households with incomes at 30 percent of local median were occupied by higher income renters. Because of this, there were only 42 units both affordable and potentially "available" for every 100 extremely-low-income renters. Nationally, this represents a deficit of 4.9 million units.[1]

- Shortages of affordable housing, and of affordable and available housing, only occurred for extremely-low-income renters. Nationally, below all higher income cutoffs, there were more affordable units than renters. In particular, the 5.8-million surplus of units affordable to renters with incomes between 30 and 50 percent of median greatly outweighed the 1.8-million-unit shortage of units affordable to households with incomes below 30 percent of median. Therefore, cumulatively there were *more* units affordable to households with incomes below 50 percent of median income than renters: 127 units per 100 very-low-income renters.

- In 1999, fully 89 percent of U.S. rental units—33 million units—had rents affordable to households with incomes below 80 percent of median, whereas only two-thirds of renters—22 million households—had these "low" incomes. Thus, there was a large surplus of units affordable to households with low incomes, 150 affordable units for every 100 low-income renters. There was also a surplus of units both affordable and available to households with incomes below 80 percent of median—106 units per 100 renters.

- When other relevant factors—the number of bedrooms needed, the location of units and renters, and whether a unit's rent is less than 30 percent of the occupant's income—are considered, local shortages can be worse than these national summary measures imply. Nationally, shortages of housing affordable and available to renters with extremely low incomes were most severe for units with three or more bedrooms.

During the 1990s, numbers of affordable units fell and shortages worsened

Between 1997 and 1999, past decline in the number of units affordable to households with extremely low incomes accelerated, continuing a national pattern of loss observed since 1991. During the 1990s, the number of such units fell by 1.6 million, a drop of 19 percent.

[1] Units "affordable" to an income range have rents less than or equal to 30 percent of the highest income in the range. Affordable units that are "available" to an income range are vacant for rent or occupied by households with incomes in or below the income range.

- Units with rents affordable to households with incomes between 30 and 50 percent of HAMFI also dropped in number between 1997 and 1999. During the 1990s, these units declined by 670,000, a 5-percent rate of loss.

- By contrast, the number of units with rents affordable to households with incomes between 51 and 80 percent of HAMFI grew in number during the 1990s. The increase of 1.7 million units represented growth of 12 percent during the 1990s.

Although numbers of extremely-low-income renters fell between 1997 and 1999, shortages of rental housing affordable and available to extremely-low-income renters worsened.

- Between 1991 and 1999, the national shortage of units affordable and available to extremely-low-income renters worsened appreciably. The number of such units fell from 52 per 100 renters with incomes below 30 percent of median income to only 42 units per 100 renters.

- The expansion of 1.7 million during the 1990s in the number of units affordable to incomes between 51 and 80 percent of median greatly outpaced a small increase in renters in this income range. The large surplus of affordable units widened slightly from 147 such units per 100 low-income renters in 1991 to 150 units in 1999. The national surplus of units affordable and available to low-income renters was stable, changing only from 108 units per 100 renters in 1991 to 106 units in 1999.

Between 1985 and 1999, the median rent burden for renters with incomes below 30 percent of median in those 2 years rose slightly, to almost 58 percent of income. By contrast, median rent burdens fell for all other income groups, and in both years they were below 25 percent of income for all groups with incomes above 60 percent of median. These results confirm the persistence over time of severe shortages of units affordable to extremely-low-income renters, but show little or no need for rental subsidies for households with incomes above 60 percent of median income.

Shortages of affordable housing were most severe in the suburbs and central cities of the West and Northeast

Among the four census regions, shortages of affordable housing were worst in the West. In 1999, the West had only 31 affordable and available units for every 100 extremely-low-income renters. Regionally, shortages were least pressing in the Midwest, where there were 48 such units per 100 renters. The Northeast had 42 such units, and the South 46 units, for every 100 renters.

- Both nationally and within regions, shortages of affordable housing were consistently worse in cities and suburbs than they were outside of metropolitan areas. Shortages of units affordable and available to extremely-low-income renters were most pressing in the suburbs. Nationally, there were only 36 units available for every 100 renters; in western suburbs, there were only 27 units per 100 renters.

- Surpluses of housing affordable and available to households with incomes below 80 percent of median were greatest in the Midwest, where there were 110 units per 100

renters. There were also surpluses of such housing in the nonmetropolitan parts of all four regions.

Declines during the 1990s in the number of units affordable to households with incomes below 30 percent and below 50 percent of median income were greatest in the Midwest and South and in suburban parts of metropolitan areas. The West, by contrast, gained units affordable to households with incomes below 50 percent of median income during the 1990s.

Housing with rents below local fair market rents are least often available in metropolitan areas in the West and Northeast; there, since fair market rents tend to be high in relation to area median incomes, more renters could benefit from vouchers, but vouchers are harder to use.

Vacancy rates for units with rents below local fair market rents (FMRs) were low in the West and Northeast in 1999, particularly among units with three or more bedrooms. In the West, 5 percent of units with below-FMR rents were vacant, and in the Northeast, 6 percent of such units were vacant. In the Midwest, vacancy rates were a high 11 percent for units with below-FMR rents, and in the South, vacancy rates for such units were 10 percent.

- Among units with three bedrooms and below-FMR rents, only 3 percent were vacant in the West, and only 4 percent in the Northeast. Vacancy rates among such units were higher in the Midwest (7 percent) and South (8 percent).

- Below-FMR vacancy rates were lowest in the suburbs and central cities of the West and Northeast.

Across the country, 2002 FMRs vary widely in terms of their affordability to households with different incomes in relation to area median income. In the tightest markets FMRs can be affordable to households with incomes as high as 76 percent of area median income (AMI), while in the loosest markets they may be affordable to households with incomes as low as 35 percent of AMI.

- Almost half of the U.S. population (46 percent) lived where FMRs were affordable to households with incomes below 50 percent of AMI. In nonmetropolitan areas, fully three-fourths of the population lived in areas where FMRs were affordable to households with incomes below 50 percent of AMI.

- FMRs were most likely to be affordable to households with incomes that were relatively high in relation to AMI in northeastern and western metropolitan statistical areas (MSAs). In MSAs in the South and Midwest, by contrast, FMRs were on average affordable to households with incomes that were almost as low in relation to AMI as they were outside of metropolitan areas.

- In all regions and metropolitan areas, vacancy rates tended to be lowest in the locations where FMRs were affordable to households with incomes that were highest in relation to AMI.

Very-low-income renter households were most likely to have worst case problems in the locations with the worst shortages of housing both affordable and available to extremely-low-income renters. These locations—especially suburbs in the West and Northeast—are also those with the lowest below-FMR vacancy rates and the highest FMRs in terms of affordability to incomes in relation to AMI. By all the measures considered in this report—the shares of unassisted very-low-income renters with worst case problems, shortages of housing affordable and available to renters with extremely low incomes, and shortages of housing with rents below local FMRs—housing problems and housing market conditions are worst in metropolitan areas, particularly in the West and Northeast, and least severe outside of metropolitan areas.

Summary

The continuing shortage of units affordable without rental assistance to the income groups most likely to have worst case problems implies that the reduction in worst case needs observed between 1997 and 1999 could prove temporary. Continued progress depends crucially on whether income growth can continue to exceed rent increases and whether the number of units affordable and available to extremely-low-income renters can increase more quickly than the number of such renters. In view of the worsening shortages of units affordable to extremely-low-income renters during the 1990s, rents at the lower end of the rental distribution might well again rise at above-average rates of growth. If so, any slowing of income growth among very-low-income renters in economic downturns could easily cause worst case needs to rise again.

Examined over the past two decades, the number of households with worst case needs has grown, but more slowly than either all households or all very-low-income renters. This relative success has been achieved in large part by increasing the number and share of very-low-income renters that receive assistance. At the same time, however, growing shares of those reporting assistance also report excessive rent burdens. In addition, although housing problems among owners continue to be less common or severe in every income range than problems among renters, the number and share of very-low- and low-income owners reporting housing cost burdens have risen over the past two decades.

Because of such evidence about growing housing problems among households other than unassisted very-low-income renters, the final chapter of this report considers the implications of these trends and of evolving policy questions for future research to improve estimates of severe housing and neighborhood problems among American households.

Worst Case Needs for Housing and Shortages of Affordable Housing in 2001

In 2001, an estimated 5.07 million very-low-income renter households had worst case needs for rental assistance in the U.S. The difference between this number and the 4.86 million households estimated to have had worst case needs in 1999 is not statistically significant. Although worst case needs rose slightly among unassisted white and elderly very-low-income renters, both housing problems in general, and worst case needs in particular, changed very little among very-low-income renters between 1999 and 2001.

Shortages of affordable rental housing also did not change greatly between 1999 and 2001. Shortages remained most severe for units affordable to renters with extremely low incomes, with only 42 units affordable and available in 2001 for every 100 renters with incomes below 30 percent of area median income (AMI). The number of units affordable to renters with incomes below 50 percent of AMI, however, fell by a statistically significant 4 percent between 1999 and 2001, thus slightly worsening shortages of units affordable in this income range. Yet there remained large surpluses of housing affordable to renters with incomes above 60 percent of AMI.

Worst case needs did not change significantly between 1999 and 2001.

In 2001, an estimated 5.07 million unassisted very-low-income renter households had worst case needs for rental assistance. "Worst case" needs are defined as unassisted renters with very low incomes (below 50 percent of AMI) who pay more than half of their income for housing or live in severely substandard housing.

- Paying more than half of reported income remained by far the most common problem underlying worst case needs. Over 94 percent of those with worst case needs had these severe rent burdens, while fewer than 10 percent lived in units with severe physical problems. Over three-fourths of those with worst case needs had a severe rent burden as their *only* housing problem, since they lived in physically adequate and uncrowded housing.

- Three-fourths of those with worst case needs had extremely low incomes (below 30 percent of AMI), as has generally been the case over the past two decades.

- By household type, the number of households with worst case needs rose to 1.2 million among the elderly. This increase of 14 percent brought the number of elderly with worst case needs back to the 1997 level. Worst case needs fell by 16 percent among non-elderly single adults living alone or with other singles. Needs did not change significantly for families with children, other families, or households with disabled non-elderly adults.

- Worst case needs dropped slightly, but insignificantly, among minority renters with very low incomes. They rose significantly, by almost 10 percent, to 2.8 million households among non-Hispanic white renters.

- Worst case needs rose most, albeit insignificantly, in the Northeast. In 2001, unassisted very-low-income renters were still most likely to have worst case problems in the West and the Northeast. In both regions, 50 percent of unassisted renters had these severe problems, compared to 44 percent in the South and Midwest regions.

Severe housing problems did, however, rise significantly between 1999 and 2001 among owners with very low incomes and low incomes.

- The number of low and moderate income owners and renters with critical housing needs rose to 14.46 million between 1999 and 2001, a significant increase of 9 percent. Critical housing needs, an extension of the worst case concept, are defined to include *all* households with incomes below 120 percent of AMI, including renters reporting assistance, that have severe cost burdens or severely inadequate housing.

- The increase in critical housing needs was caused by significant rises in severe cost burdens among low-income owners. The number of owners with incomes below 80 percent of AMI who paid more than half of their reported income for housing rose by one million. The number of households with severe cost burdens did not rise significantly among other owners or renters in any income range.

Shortages of rental housing affordable and available to renters with very low incomes worsened slightly between 1999 and 2001, but for incomes above 60 percent of AMI, surpluses of affordable and available housing continued.

Shortages of housing remained most severe for units affordable and available to renters with extremely low incomes. In 2001, there were still only 42 units affordable and available for every 100 renters with income below 30 percent of AMI, a shortage of 4.9 million units. The number of units affordable to renters with incomes below 50 percent of AMI, however, fell by a statistically significant 4 percent between 1999 and 2001, thus slightly worsening shortages of units affordable in this income range. Nationally there remained a surplus of units affordable and available to renters with incomes below 80 percent of AMI, with 105 units per 100 renters.

- Between 1999 and 2001, shortages of housing affordable to renters with incomes below 30 percent of AMI remained most severe, but they did not worsen. Neither the number of renters with extremely low incomes nor the number of units affordable to them changed significantly between 1999 and 2001. The number of units affordable and available to renters with extremely low incomes also remained steady. In 2001 as in 1999, there were only 42 units affordable and available for every 100 renters with incomes below 30 percent of AMI, a national shortage of 4.9 million units.

- The number of units affordable to renters with incomes below 50 percent of AMI fell by 760,000 between 1999 and 2001, a statistically significant decline of 4 percent. In addition, more of the units in this affordability range were occupied by higher-income renters. For these reasons, the shortage of units affordable and available below 50 percent of AMI fell slightly, from 78 units to 76 units per 100 renters.

- As occurred earlier in the decade, the number of units affordable to renters with incomes between 50 percent and 80 percent of AMI rose slightly between 1999 and 2001. Nationally, the surplus of affordable units remained greatest for incomes below 80 percent of AMI, with 148 units per 100 renters. The national surplus of units affordable and available to renters with incomes below 80 percent of AMI also was essentially stable, slipping from 106 units to 105 units per 100 renters. Above this income cutoff, surpluses of affordable and available housing rose slightly.

- Regionally, declines in numbers of units affordable to renters with incomes below 50 percent of AMI were greatest in the West, and only significant there. The West was also the only region to experience a net decline in units affordable to incomes between 50 percent and 60 percent of AMI. Altogether, the total number of units affordable to renters with incomes below 60 percent of AMI fell in the West by a highly significant 600,000, or 12 percent, between 1999 and 2001, thus offsetting the increase in affordable units experienced in the West during the 1990s. Although the number of renters in this income range also dropped, the greater decline in number of units caused the shortage of units affordable and available to renters with incomes below 60 percent of AMI to fall from 85 units to 80 units per 100 renters in the West.

Chapter 1

Worst Case Needs in 1999 and Changes in Housing Problems in the United States Between 1978 and 1999

After having increased by one-fifth over the previous 10 years, between 1997 and 1999 the number of U.S. households with worst case needs for rental assistance fell significantly, by at least 8 percent, to 4.86 million. This reduction in worst case needs resulted from increases in income among very-low-income renters, not increases in the number of rental units affordable to them. Instead, the long-term trend of drops in the number of rental units affordable to extremely-low-income households accelerated between 1997 and 1999.

The findings detailed in this report thus represent both good and bad news. Real, significant drops in housing problems have reduced the share of U.S. households with worst case needs to 4.7 percent, a record low for the past two decades, and this marked improvement shows that progress can be made in addressing the nation's most serious housing problems. Severe and worsening shortages of housing affordable and available to extremely-low-income renters, however, suggest that the recent improvement may well prove vulnerable to economic downturns.

The findings of this report are presented in three chapters. This chapter answers basic questions about worst case needs: how many renter households had these severe needs for rental assistance in 1999, and how the number and share of households with worst case needs have changed since 1978. It also places worst case needs in a broader context by examining both severe and moderate housing problems over the past two decades among all U.S. renters and owners in different income ranges.

Severe and Moderate Housing Problems

Severe housing problems—Housing or rental costs exceed 50 percent of reported income, or there are severe physical problems in the plumbing, heating, electrical system, upkeep, or hallways of the unit.

Moderate housing problems—Housing or rental costs exceed 30 percent of reported income but are no more than 50 percent of income, or there are moderate physical problems in the unit, or the unit is overcrowded. See Appendix D for definitions of severe and moderate physical problems.

The second chapter examines the characteristics of renters with worst case needs in more detail—the types of households affected; their income, age, race, ethnicity, and work effort; and their location within the four census regions and the city, suburban, and nonmetropolitan parts of those regions. The third chapter examines the supply of housing at different rent levels, highlighting the severe and worsening shortages of rental housing affordable and

available to renters with extremely low incomes. The final chapter identifies some limitations of worst case needs as the current measure of the nation's most severe housing problems and discusses additional dimensions of housing and neighborhood problems that future research might consider.[1]

Worst case needs for rental assistance among very-low-income renters

In 1999, 4.86 million unassisted renter households had worst case needs for rental assistance. Households with worst case needs are defined as unassisted renters with incomes below 50 percent of the local HUD-adjusted area median family income (HAMFI) who pay more than half of their income for housing or live in severely substandard housing.[2] According to the best estimates available from the 1999 American Housing Survey (AHS), 4.86 million renter households who did not receive rental assistance had these "very low" incomes[3] and severe housing problems. They represented 32.8 percent of all very-low-income renters and 46 percent of unassisted very-low-income renters.

The 4.86 million households with worst case needs in 1999 included 10.9 million people, among them 3.6 million children, 1.4 million elderly, and some 1.1 million disabled adults. One-third of those with worst case needs were children. Indeed, as Exhibit 1–1 illustrates, almost three-fifths of the 10.9 million people with worst case needs in 1999 were elderly, children, or disabled.[4] Another one-fourth of the people with worst case needs were adults living with children. Around 4 percent of the elderly persons with worst case needs were heads of households with children present.

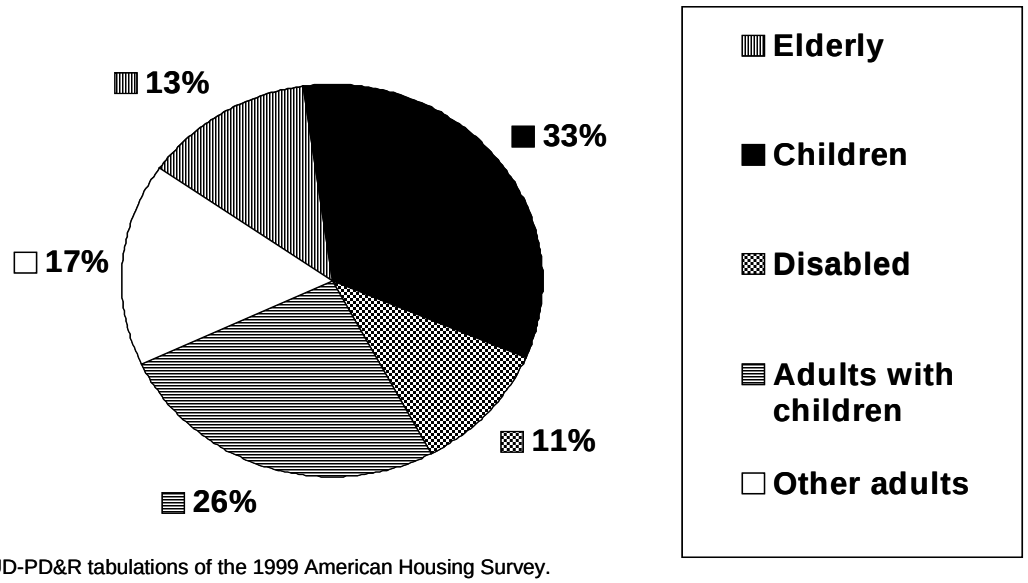
[1] HUD's previous reports to Congress are: *Priority Problems and "Worst Case" Needs in 1989* (June 1991, HUD–1314–PDR), *The Location of Worst Case Needs in the Late 1980s* (December 1992, HUD–1387–PDR), *Worst Case Needs for Housing Assistance in the United States in 1990 and 1991* (June 1994, HUD–1481–PDR), *Rental Housing Assistance at a Crossroads: A Report to Congress on Worst Case Housing Needs* (March 1996), *Rental Housing Assistance—The Crisis Continues* (April 1998), and *Rental Housing Assistance—The Worsening Crisis* (March 2000). The 1994, 1996, 1998, and 2000 reports are available online at http://www.huduser.org under the Publications heading.

[2] Although the homeless by definition have "substandard" housing and should therefore be included in any count of worst case needs, the homeless are omitted from this and earlier reports' counts of worst case needs because the AHS surveys and counts only persons in housing units.

[3] Appendix B details the statutory adjustments underlying HUD's official "very low" and "low" income cutoffs.

[4] The estimate of numbers of disabled adults living in households with worst case needs is more uncertain than the counts of elderly and children drawn directly from AHS data. This occurs because the AHS does not directly count persons who would qualify for programs that serve persons with physical or mental disabilities. Instead, as discussed in Chapter 2, the estimate is based on an improved AHS proxy for households with disabilities developed from analysis of households reporting permanent physical disabilities on the Physical Modifications Supplement of the 1995 American Housing Survey, supplemented by comparisons with data on persons receiving Supplemental Disability Income.

Exhibit 1–1 Almost 60 percent of the 10.9 million persons with worst case needs in 1999 were elderly, children, or disabled.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

The number of worst case renters fell significantly, by at least 8 percent, between 1997 and 1999

When the effects of procedural changes are controlled for, worst case needs are estimated to have dropped by at least 440,000 households between 1997 and 1999,[5] a statistically significant fall of 8 percent.[6]

The 1999 estimate of 4.86 million households with worst case needs is not directly comparable to the 1997 record high of 5.4 million households reported in the March 2000 worst case report to Congress, *Rental Housing Assistance—The Worsening Crisis*. To identify substantive change in worst case needs over the 1997–99 period, real change was distinguished from differences in counts that resulted from changed procedures.[7]

[5] As detailed in Appendix C, which discusses procedural changes in the AHS and their effects on changes in worst case needs, the "real" decline in worst case needs is some number between 440,000 and 660,000, a decline of 8 to 12 percent. All of the estimates of 1997–99 worst case declines presented in this report conservatively assume that only 440,000 of the total drop is real rather than procedural.

[6] The components of change break down as follows: In 1997, there were 5.38 million households with worst case needs. When very-low-income renters are defined using 1995 income limits in both 1997 and 1999, adjusted only for inflation (to ensure comparability across time), the number of worst case needs in 1999 represents a "real" decline of at least 440,000 and a "procedural" decline of no more than 220,000 since 1997. Using *1999* income limits to reflect the real growth in income between 1995 and 1999, however, increases the number of worst case needs by 140,000. In sum, 5.38 million households in 1997 minus 440,000 minus 220,000 plus 140,000 = 4.86 million households with worst case needs in 1999.

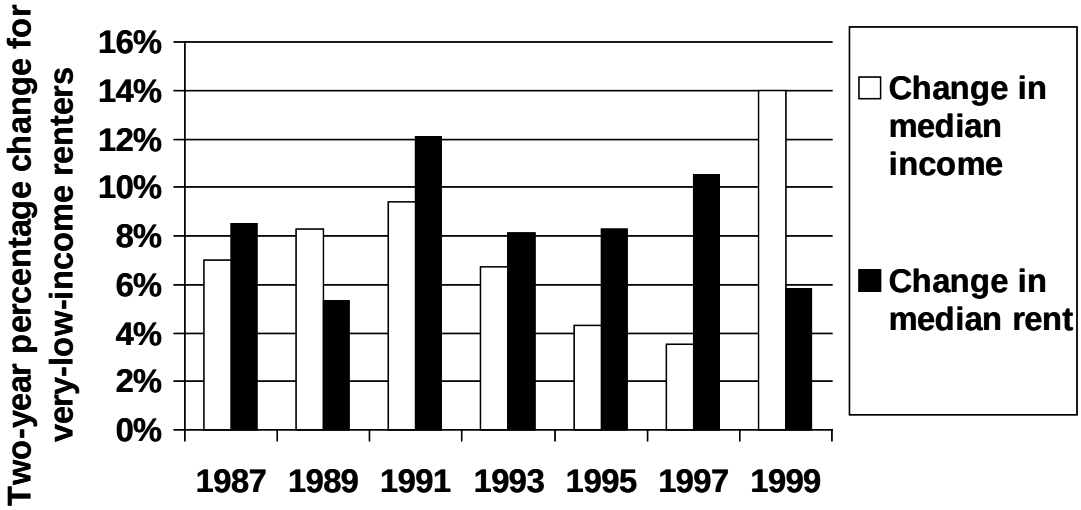
[7] As Appendix C details, new questions on the AHS questionnaire probably reduced the 1999 estimate of households with severe rent burdens, while a new procedure, adopted for this report to approximate HUD's official 1999 income limits as closely as possible, slightly raised 1999 estimates of worst case needs.

Income growth drove the 1997-99 decline in worst case needs

Worst case needs fell significantly between 1997 and 1999 because during this period income growth among very-low-income renters exceeded increases in the rents they paid. In the preceding years, by contrast, rents rose faster than incomes. Among all renters, rents rose less than incomes between 1997 and 1999: median gross rents paid increased by 6 percent between 1997 and 1999, while median income rose by 8.5 percent. Among very-low-income renters, median rents paid also rose by 6 percent, but median income rose by an above-average 14 percent.

As Exhibit 1–2 shows, during most of the 1990s the median gross rents paid by very-low-income renters rose at faster rates over each 2-year period than did their incomes. Between 1997 and 1999, however, median incomes of very-low-income renters rose by 14 percent, well above the rise of 6 percent in the median rent for this group. This faster income growth among very-low-income renters is consistent with the decline in national poverty rates from 11.8 to 10.6 percent observed over this 2-year period.[8]

Exhibit 1–2 In 1997–99, income outpaced rents among very-low-income renters for the first time since 1987–89.



Source: HUD-PD&R tabulations of the 1985, 1987, 1989, 1991, 1993, 1995, 1997, and 1999 American Housing Surveys.

[8] HUD tabulations of the Current Population Survey similarly revealed faster real income growth among the bottom quintile of the household income distribution between 1997 and 1999. Over that period, real median income grew by 6.2 percent, while mean income of the lowest quintile grew by 7.9 percent.

Fewer worst case renters had severe rent burdens

Between 1997 and 1999, the number of very-low-income renters paying more than half of their income for rent and utilities declined, while the number of households living in severely inadequate units remained constant. The 8-percent decline in worst case needs between 1997 and 1999 resulted solely from a drop in the number of very-low-income renters with severe rent burdens. Among all households with worst case needs in 1999, only 527,000 had housing with severe physical problems, far below the 4.55 million with severe rent burdens.

By definition, unassisted very-low-income renters have worst case needs for rental assistance if they pay more than half of their gross income for housing (a "severe" rent burden) or live in severely inadequate housing. In 1999, 94 percent of worst case renters paid more than half of their income for rent, while 11 percent lived in severely inadequate housing (5 percent had both problems).

In 1999, over three-fourths of worst case renters (77 percent) had a severe rent burden as their only housing problem, since they lived in adequate, uncrowded housing. For these households, paying more than half of their reported income for housing was their only housing problem. This finding implies that a large share of households with worst case needs could use vouchers in their current housing units to alleviate the severe rent burden that is their only housing problem.

The drop in worst case needs was the first since 1987

The significant decline in worst case needs between 1997 and 1999 was the first drop observed after 10 years of increasing numbers of households with worst case needs. Between 1987 and 1997, the number of households with worst case needs had risen from 4.5 million to a record high of 5.4 million in 1997.

Exhibit 1–3 summarizes changes in the number of very-low-income renter households with worst case needs between 1978 and 1999.[9] In 1997, the number of households with worst case needs was higher, at 5.4 million, than at any earlier time.

According to Annual Housing Survey data and 1970 census weights, worst case needs mushroomed between 1978 and 1983, rising more than 25 percent in those 5 years, from 4.0 to 5.1 million. Partial data show that worst case needs among elderly and family households had also risen earlier in the 1970s.[10]

Between 1985 and 1987, the number of households with worst case needs fell by a statistically significant 400,000. However, this drop was followed by a steady rise, from

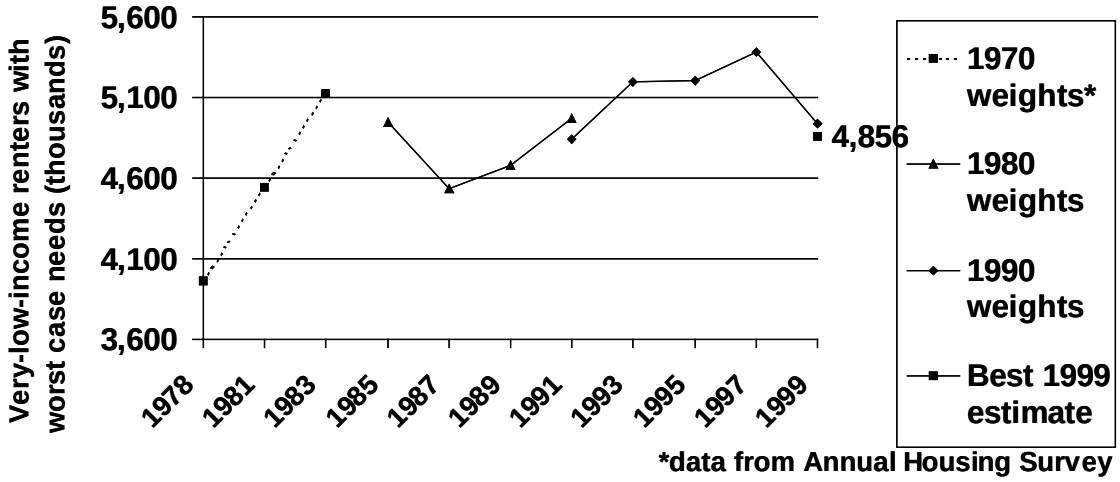
[9] Although the Annual Housing Survey was first taken in 1973, before 1978 data on household income was not collected for nonfamily households, making it impossible to estimate worst case needs for all very-low-income renters as is now the convention.

[10] According to the first report to Congress on worst case needs, *Priority Housing Problems and 'Worst Case' Needs in 1989*, before 1978 the number of elderly and family very-low-income renters with worst case needs increased from 2.5 million in 1974 to 3 million in 1978 (Figure 4 and Table 6).

4.5 to 5.4 million, over the 10 years between 1987 and 1997.[11] The drop in needs of at least 440,000 households between 1997 and 1999 is thus larger than the only significant drop previously observed.

In addition to showing the significant 1997–99 drop, Exhibit 1–3 also shows the best estimate for 1999 of 4.86 million worst case renters. This is shown separately because it is not directly comparable to the earlier data.[12]

Exhibit 1–3 After rising for 10 years, worst case needs dropped by at least 440,000 between 1997 and 1999.



Source: HUD-PD&R tabulations of the 1978, 1981, and 1983 Annual Housing Surveys and of the 1985, 1987, 1989, 1991, 1993, 1995, 1997, and 1999 American Housing Surveys.

Worst case needs at relative lows

In 1999, the 4.9 million worst case households represented 14.3 percent of all U.S. renters, or one in seven renters. Yet they comprised only 4.7 percent of U.S. households, the lowest share observed in the 21 years for which comparable worst case data are available.

The significantly lower number of households with worst case needs in 1999 is particularly impressive when considered as shares of all very-low-income renters, of unassisted very-low-income renters, or of all U.S. households. As Exhibit 1–4 details, in 1999 households with worst case needs represented less than one-third (32.8 percent) of very-low-income renters. This is not only a marked drop from the 1997 share of 36.3

[11] As the exhibit shows, in 1991 worst case needs estimated with 1990 weights were some 100,000 households lower than estimates with 1980 weights, so the true rise in needs between 1987 and 1997 was closer to 1 million than 900,000. Note also that the estimates of worst case needs given for 1985 through 1995 in this exhibit and in the appendix are lower than the time series estimates presented in Table A–4 of *Rental Housing Assistance—The Crisis Continues.* As discussed in Appendix C, worst case estimates in this report exclude households reporting assistance from state and local programs in all years in order to be comparable to post-1997 estimates.

[12] See footnote 6 above.

percent and far below the 1983 high of 42 percent, but it is also a record low over the two decades with comparable data.

Some of this long-term drop occurred because the share of very-low-income renters participating in rental assistance programs increased over the past two decades, albeit slowly in recent years. Whereas only 20 percent of very-low-income renters reported being assisted by federal, state, or local programs in 1978, 28 percent reported being assisted in 1991 and 29 percent in 1999.

But the incidence of worst case needs also fell among unassisted renters. In 1983, almost 55 percent of unassisted very-low-income renters had worst case needs for rental assistance, and in both 1995 and 1997, over half of unassisted very-low-income renters had worst case problems. By 1999, however, only 46 percent of unassisted very-low-income renters experienced worst case problems, matching the previous low in 1978.

Notably, in 1999, households with worst case problems comprised a lower share of all U.S. households than ever observed previously. The 4.7-percent share in 1999 fell below the previous lows of 5.0 percent in 1987 and 5.1 percent in 1978. Thus, even though numerically the number of households with worst case needs grew from 4.0 million in 1978 to 4.9 million in 1999, over this period worst case needs grew more slowly than did the total number of U.S. households.

Exhibit 1–4 In 1999, only 33 percent of very-low-income renters, and 4.7 percent of U.S. households, had worst case needs.

	1978	1983	1987	1991	1993	1995	1997	1999
All households	77,389	84,841	90,887	93,146	94,723	97,694	99,487	102,802
All renters	26,919	29,952	32,724	33,351	33,472	34,150	34,000	34,007
Very-low-income renters	10,682	12,138	13,273	14,002	14,738	14,549	14,801	14,803
Worst case renters	3,966	5,120	4,535	4,842	5,198	5,203	5,379	4,856
As percentage of all very-low-income renters:								
Worst case	37.1%	42.2%	34.2%	34.6%	35.3%	35.8%	36.3%	32.8%
Other problems	28.9%	23.0%	24.9%	24.8%	24.2%	23.3%	23.4%	26.1%
Assisted	19.6%	22.8%	29.0%	28.1%	28.7%	29.4%	28.7%	28.7%
As percentage of unassisted very-low-income renters:								
Worst case	46.2%	54.6%	48.1%	48.1%	49.5%	50.7%	51.0%	46.0%
As percentage of all renters:								
Worst case	14.7%	17.1%	13.9%	14.5%	15.5%	15.2%	15.8%	14.3%
As percentage of all households:								
Worst case	5.1%	6.0%	5.0%	5.2%	5.5%	5.3%	5.4%	4.7%

Source: HUD-PD&R tabulations of the 1978 and 1983 Annual Housing Surveys and of the 1987, 1991, 1993, 1995, 1997, and 1999 American Housing Surveys.

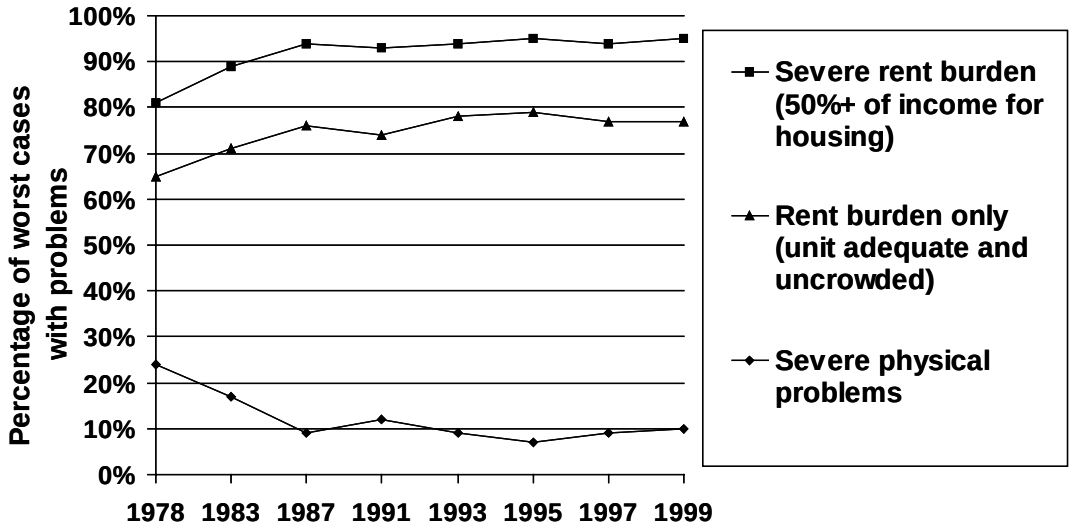
Since 1978, the number of worst case households with severely inadequate units fell by half a million, but those with severe rent burdens rose by 1.4 million

Over the two decades between 1978 and 1999, the number of unassisted very-low-income renters living in severely inadequate units fell from 960 to 460 thousand. But this drop in severe physical housing problems was more than offset by increases in severe rent burdens, as the number paying more than half of income for rent rose from 3.2 to 4.6 million.

Thus worst case needs shifted to reflect severe rent burdens much more frequently than severely inadequate housing. As Exhibit 1–5 illustrates, the share of worst case households living in severely inadequate units fell markedly between 1978 and 1999, from 24 percent in 1978 to 17 percent in 1983, 12 percent in 1991, and 7 percent in 1995.[13] A more precise definition of severely inadequate units introduced in 1997 counted 9 percent of worst case renters as living in severely inadequate housing in both 1997 and 1999, but the apparent increase between 1995 and 1997 may well reflect the new definition rather than a real rise.

Over this period, the share of worst case renters paying more than half of reported income for housing rose from 81 percent in 1978 to fluctuate between 93 percent and 95 percent after 1987. Because the "moderate" problems of crowding and moderately inadequate units also became less common over these 20 years, the share of worst case households whose only housing problem was a severe rent burden increased from 65 percent in 1978 to 76 percent in 1987 and 79 percent in 1995. With the more precise definition of severely inadequate units, 77 percent of worst case needs households had only a severe rent burden in 1999.

Exhibit 1–5 From 1978 to 1999, worst case needs reflected severe rent burdens more and severely inadequate units less.



Source: HUD-PD&R tabulations of the 1978 and 1983 Annual Housing Surveys and of the 1987, 1991, 1993, 1995, 1997, and 1999 American Housing Surveys.

[13] The 9 percent shown for 1987 is not comparable to the other values shown because units lacking plumbing were undercounted by the AHS in 1985 and 1987.

Housing problems among all renters and owners by income

The concept of worst case needs was developed in the mid-1980s to estimate how many very-low-income renters not already receiving rental assistance had the severe housing problems that then gave them "federal preferences" for admission to the deeply-subsidized rental assistance programs of public housing, tenant-based vouchers, and privately owned projects.[14]

Although these federal preferences for admission to rental assistance were replaced by income targeting in 1998,[15] the concept of worst case needs remains useful for tracking the extent of severe housing problems among unassisted very-low-income renter households. But while the share of all renters that are unassisted and have severe housing problems has fallen slightly over the past two decades, decreasing from 17.4 to 16.4 percent, the share of owners experiencing severe housing problems has almost doubled, rising from 5 percent in 1978 to 9.6 percent in 1999 (see Appendix table A–2). Before looking in more detail in Chapter 2 at the characteristics and location of unassisted very-low-income renters with worst case needs, this chapter summarizes what is known about all housing problems, both severe problems and other "moderate" problems, among all renters and owners in different income groups during the 1978–99 period.

[14] In these programs, assisted households pay rents that are a percentage of their adjusted income—usually 30 percent. These "deep" subsidies allow even the poorest households to afford assisted housing.

[15] As Exhibit 5 of *Rental Housing Assistance—The Worsening Crisis* summarizes, the Quality Housing and Work Responsibility Act of 1998 replaced federal preferences with requirements that each rental assistance program annually admit at least minimum shares of households with "extremely" low incomes. Managers and owners of public housing and project-based Section 8 buildings are required to reserve at least 40 percent of all units that become available for occupancy for families with incomes at or below 30 percent of local HAMFI. Those administering Section 8 tenant-based vouchers must give at least 75 percent of vouchers becoming available to families with extremely low incomes.

Income Categories Used in Housing Programs

For many HUD programs and housing programs of other federal agencies, eligible households have incomes below a specific percentage of the median family income for the area in which the household lives. HUD estimates median family income for each metropolitan area and nonmetropolitan county each year, and official limits vary by location and household size.

In contrast, poverty status compares income with national poverty thresholds that vary by household size but not location. Because HUD's income limits use smaller adjustments per person, they are not directly comparable to federal poverty lines. Averaged across the United States, however, 30 percent of area median income approximates poverty thresholds.

The number of households below a specified percentage of HUD's area median income varies over time and with local income distributions. In 1999, almost half (45 percent) of U.S. households and 65 percent of U.S. renters had incomes below 80 percent of their area median income. Some 28 percent of U.S. households had incomes below 50 percent of HAMFI.

The upper limits of income categories used in housing programs and in this report are as follows:
80 percent of area median income. Defined as *lower income* by the U.S. Housing Act for many rental and homeownership programs.
60 percent of area median income. Used as *low income* for the low-income housing tax credit and HOME programs.
50 percent of area median income. Defined as *very low income* by the U.S. Housing Act and used for many rental programs.
30 percent of area median income. Defined as *extremely low income* in the Quality Housing and Work Responsibility Act of 1998, which for each rental housing assistance program requires that at least a minimum share of entrants have extremely low incomes.

The table below shows U.S. renter households by income groups relevant to housing programs in 1999. To suggest the overlap between HUD income groups and poverty, it also gives the share of each income group whose cash income fell below the poverty line or below 150 percent of the poverty line, the eligibility cutoff for the U.S. Department of Agriculture Food Stamp program. This report frequently refers to specific income groups as ranges of percentages of area median income because official terms are so complex. For example, incomes 51 to 80 percent of area median are officially "low but not very low" incomes.

% of HUD-Adjusted Area Median Family Income (HAMFI)	Share of U.S. Renters 1999	Percent of U.S. households in group with income below:	
		Poverty Level	150% of Poverty
0–30	25%	83	99
31–50	18%	8	50
51–60	8%	0	8
61–80	13%	0	1

Source: HUD-PD&R tabulations from the 1999 American Housing Survey.

Extremely Low, Very Low, and Low Income: Examples for Nine Metropolitan Areas of HUD's 1999 Section 8 Income Limits for Four-Person Households*

	Extremely Low Income (30 percent of median)	Very Low Income (50 percent of median)	Low Income (80 percent of median)**	Area Median Family Income
Los Angeles	$15,400	$25,650	$41,050	$51,300
New York	$16,000	$26,700	$42,700	$53,400
Chicago	$19,150	$31,900	$47,800	$63,800
Philadelphia	$16,700	$27,800	$44,500	$55,600
Detroit	$18,150	$30,250	$47,800	$60,500
Washington, D.C.	$23,600	$39,350	$47,800	$78,900
Boston	$18,800	$31,350	$47,800	$62,700
Houston	$16,250	$27,050	$43,300	$54,100
Atlanta	$17,950	$29,950	$47,800	$59,900

*Adjustments for household size are as follows: 1 person, 70 percent of the 4-person limit; 2 persons, 80 percent; 3 persons, 90 percent; 5 persons, 108 percent; 6 persons, 116 percent; plus an additional 8 percent for each additional person.

**The "80 percent of median" limits for each area cannot exceed the national median of $47,800, unless justified by unusually high housing costs in the local area.

Source: HUD Section 8 income limits, fiscal year 1999.

Between 1997 and 1999, severe rent burdens also fell among all very-low-income renters and among all renters

Because the concept of worst case needs is defined to include only unassisted very-low-income renters, it is technically possible that worst case needs could decline only because more renters reported receiving assistance. However, the evidence shows that this is not the explanation.

Data showing a significant fall in severe rent burdens among *unassisted* very-low-income renters between 1997 and 1999 are reinforced by similar drops in the number and percentage paying more than half of their income for housing among all very-low-income renters including those reporting assistance. In 1999 as in 1997, 1.4 million assisted renters reported severe rent burdens.[16] Between 1997 and 1999, severe rent burdens also

[16] The prior worst case report highlighted a sharp rise in the number of assisted households with severe rent burdens between 1995 and 1997 and noted that the increase may have resulted from changes in the questions used to identify whether households receive rental assistance. The rise was disturbing in two respects: If the change in definition of those assisted overcounted (as assisted) some truly unassisted renters who had severe rent burdens in 1997, worst case needs were being underreported. If, on the other hand, assisted renters were counted

dropped in both number and percentage among all renters, regardless of income. In 1997, 19.2 percent of all renters (6.7 million households) paid more than half of income for rent, an all-time high. By 1999, the share of renters with severe rent burdens had dropped to 18.5 percent and the number to 6.3 million (see Appendix table A–2).

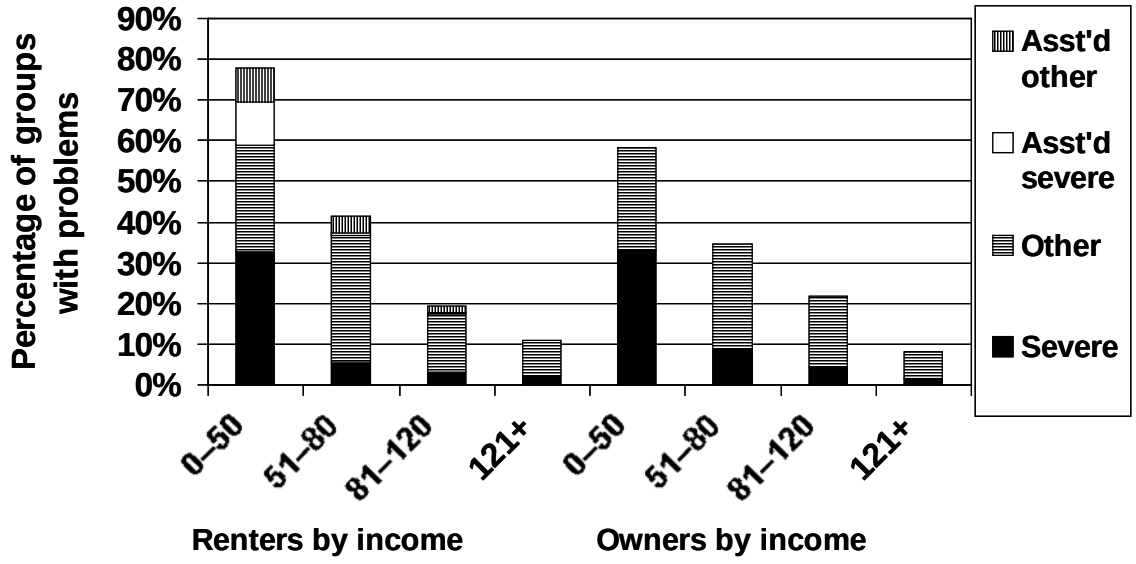
Despite the 1997–99 drop in problems, the incidence of affordability problems among all renters in 1999 (18.5 percent) remained well above that of 1978, when only 13.6 percent of renters (3.7 million households) paid more than half of their income for rent. Over these 21 years, the share of renters with moderate rent burdens (31 to 50 percent of income) rose slightly as well, from 18 to 20 percent. But housing quality improved among all renters, with the share of renters in severely inadequate units dropping from 6.2 to 3.5 percent between 1978 and 1999, while moderately inadequate units continued to trouble 8 percent of renters. Crowding among renters also dropped over the long term, from 5.8 to 4.9 percent.

Very-low-income renters remain much more likely to have housing problems, particularly severe problems, than other renters or owners

Despite improvements in the 1997–99 period, the share of unassisted households having a housing problem in 1999 remained much higher among very-low-income renters than among higher income renters or very-low-income owners. As Exhibit 1–6 summarizes, 33 percent of the 14.8 million very-low-income renters had worst case needs, since they had severe housing problems but did not receive rental assistance. Another 26 percent of these renters were also unassisted and had at least one of the "other" moderate problems of paying 31 to 50 percent of income for housing or of living in housing that had moderate physical problems or was overcrowded. In addition, more than half of the very-low-income renters who reported rental assistance had some moderate or severe housing problem: 11 percent of very-low-income renters were assisted but had severe housing problems, most often a severe rent burden, and another 8 percent were assisted and had a moderate housing problem. Less than one-fourth (22 percent) of very-low-income renters had no housing problems at all.

accurately, the implication that as many as 1.4 million of renters aided by assistance programs paid more than half of their income for housing raised basic questions about the efficacy of assistance programs in solving affordability problems.

Exhibit 1–6 Very-low-income renters and owners most often have housing problems.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Housing problems were less common among very-low-income owners

As the exhibit shows, housing problems were less common among the 14 million very-low-income owners. More very-low-income owners (42 percent) had no housing problems than was the case for very-low-income renters (22 percent). Still, housing problems were frequent among very-low-income owners. One-third (33 percent) of this group had severe problems, typically a severe cost burden, and another one-fourth had one or more moderate problems.

The 18 million households with "low" incomes (51 to 80 percent of HAMFI) were markedly less likely than very-low-income households to have any housing problem, and very few had severe problems. Only two-fifths of unassisted renters and one-third of owners in this income group had problems, and very few had severe problems. As the exhibit shows, only 6 percent of low-income renters and 9 percent of low-income owners had a severe problem, most often paying more than half of income for housing and utilities.

Both housing problems generally and severe problems specifically were very uncommon for households with incomes above 80 percent of HAMFI. Only one-fifth of the 21 million renters and owners with incomes 81 to 120 percent of HAMFI had any housing problem, with only 4 percent having severe problems. Fewer than 1 in 10 of the 35 million households with incomes above 120 percent of median had any housing problem.

The much greater incidence of housing problems, particularly severe problems, among very-low-income households can be summarized as follows: Although the 14.8 million

very-low-income renters represented only 14 percent of U.S. households in 1999, they accounted for over one-third (34 percent) of households with any housing problems and almost half (47 percent) of those with severe problems. Similarly, only 28 percent of all households have very low incomes, but these renters and owners together suffer 58 percent of all housing problems and fully 80 percent of all severe problems.

Low- and moderate-income owners rarely have severe housing problems

Increases in severe problems over the past two decades have been greatest among owners with low and moderate incomes because of large percentage growth in the number of owners paying more than half of their income for housing. But low- and moderate-income owners remain much *less* likely than very-low-income renters to have severe problems.

Concern has been expressed recently that severe housing problems have grown sharply among groups with incomes above the very-low-income cutoff. Between 1997 and 1999, the number of extremely-low-income households with severe problems dropped among both unassisted renters and owners. As renters and owners shifted into higher income brackets because of real income growth, however, the number with severe problems increased at above-average rates (from very small bases) for households with low and moderate incomes (between 50 and 120 percent of area median income).

Examination over the past two decades reveals that long-term growth in severe problems among relatively higher income groups has been concentrated among owners. As Exhibit 1–7 documents, in 1999 the incidence of severe problems was *lower* for unassisted renters with incomes 61 to 80 percent of HAMFI than it had been in 1978, falling from 6 percent to 5 percent. For renters with incomes below 50 percent of HAMFI, 1999 values were lower than they had been in 1987. Thus for renters, recent growth in severe problems among low and moderate-income households still leaves the incidence of severe problems in 1999 no higher than that observed in 1978.

For owners, however, severe problems have become more common since 1978 at each income level. Although severe problems remain less common for owners with incomes below 50 percent of HAMFI than for renters with these very low incomes, the incidence of severe problems rose markedly among such owners between 1978 and 1999, increasing from 35 to 49 percent among extremely-low-income owners. And among owners with incomes 50 to 120 percent of HAMFI, the incidence of severe problems doubled or even tripled over the past decade, to the point that owners in these income groups are now more likely to have severe problems than renters of the same income.

Yet despite the increasing incidence of severe problems among low- and moderate-income owners over the past two decades, low-income owners remain much less likely to have severe housing problems than extremely-low-income owners or renters. Indeed, the incidence of severe problems among extremely-low-income owners (49 percent) is more than four times the 12-percent rate of severe problems among owners with incomes 51 to 60 percent of HAMFI. And as Exhibit 1–7 details, severe housing problems remain most common, by far, among unassisted extremely-low-income renters.

Exhibit 1–7 Over time, the incidence of severe problems has risen most among owners, yet unassisted extremely-low-income renters remain much more likely to have severe problems than other renters and owners.

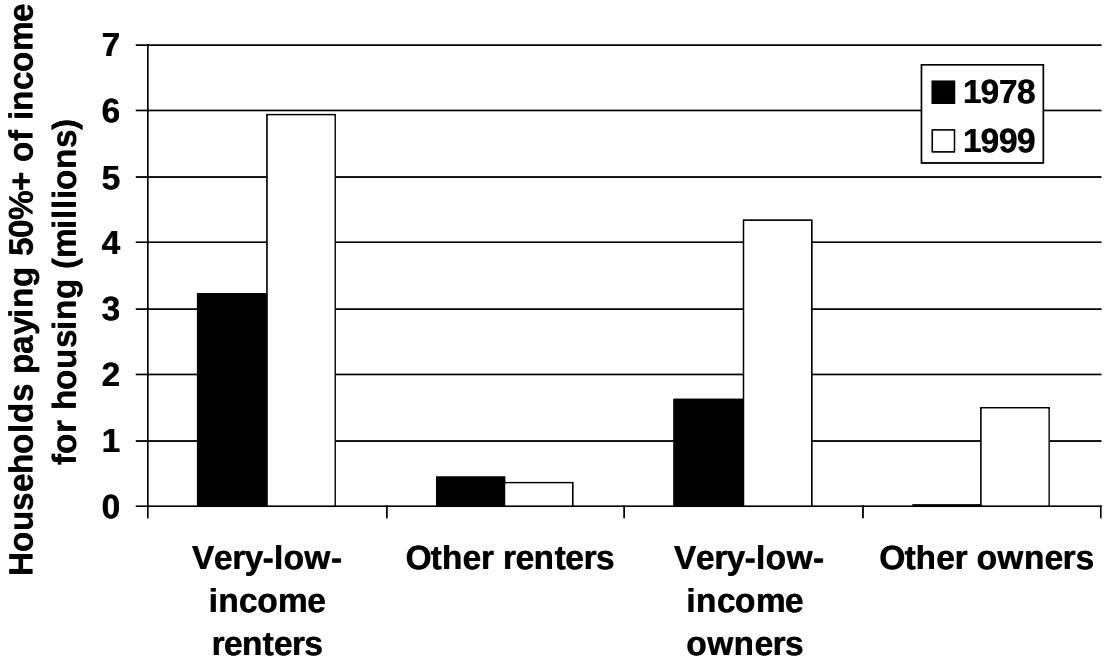
	Income:	1978	1987	1999
Unassisted renters	0–30% AMI	67%	71%	68%
	31–50%	23%	24%	22%
	51–60%	7%	8%	8%
	61–80%	6%	4%	5%
	81–100%	4%	2%	4%
	101–120%	3%	1%	3%
Owners	0–30% AMI	35%	37%	49%
	31–50%	10%	11%	18%
	51–60%	4%	6%	12%
	61–80%	3%	3%	7%
	81–100%	2%	2%	5%
	101–120%	1%	1%	4%

Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1987 and 1999 American Housing Surveys.

Housing payments as a percentage of income rose more among owners than among renters between 1978 and 1999

Among owners as well as renters, the increase in severe problems resulted from a rise in severe housing cost burdens. While the shares of all renters paying more than half of income for rent rose by 5 percentage points over this 20-year period, from 14 to 19 percent, shares of owners paying more than half of income for housing rose similarly but from a lower base, from 3 to 8 percent. Owners also experienced a steep rise in moderate cost burdens during this period, from 5 percent in 1978 to 13 percent in 1999. The rise in severe cost burdens among owners was particularly noticeable among very-low-income owners. As Exhibit 1–8 shows, by 1999, 31 percent of very-low-income owners reported paying more than half of their income for housing, compared to 17 percent in 1978. And by 1999, another 1.5 million owners with higher incomes had severe housing cost burdens. Appendix table A–3 provides more detail on changes in housing problems among owners and renters of different incomes between 1978 and 1999.

Exhibit 1–8 Between 1978 and 1999, severe housing cost burdens rose more for owners than for renters.



Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1999 American Housing Survey.

* * *

As the next chapter will show, the growth in the number of households with worst case problems over the past two decades primarily resulted from increases in the West in the number and share of very-low-income renters experiencing severe rent burdens. The same regional differences underlie the sharp growth in severe housing cost burdens among owners with very low or low incomes. As Exhibit 1–9 documents, between 1978 and 1999, the incidence of severe housing problems rose most quickly among very-low- and low-income owners in the West, followed by the Northeast. Among unassisted renters with very low or low incomes, increases in severe problems were also greatest in the West, but the total increase was much less than for owners.

Exhibit 1–9 Among both owners and renters, the 1978–99 increase in the incidence of severe problems was largest in the West.

		Unassisted renters		Owners	
		1978	**1999**	**1978**	**1999**
0–50% AMI	**U.S. total**	46%	46%	22%	33%
	Northeast	54%	47%	30%	36%
	Midwest	43%	43%	17%	30%
	South	45%	45%	23%	30%
	West	42%	48%	20%	39%
51–80% AMI	**U.S. total**	6%	6%	3%	9%
	Northeast	9%	10%	3%	12%
	Midwest	4%	4%	3%	6%
	South	7%	6%	4%	8%
	West	5%	7%	3%	13%

Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1999 American Housing Survey.

Chapter 2

Who Has Worst Case Needs, Where?

This chapter examines the types of households and the locations with the highest incidence of worst case needs in 1999, and identifies those most benefiting from the drop in worst case needs between 1997 and 1999. The chapter also examines longer-term changes since 1978. Although the share of very-low-income renters that had worst case needs was lower in 1999 at 33 percent than it had been at any time in the previous 20 years, the number has risen with growth in households from 4 million in 1978 to 4.86 million in 1999, and the characteristics and location of those with worst case problems have changed over time.

The 1997–99 drop in worst case needs occurred in large part because income growth reduced the number of extremely-low-income renter households, those with incomes below 30 percent of HUD-adjusted area median family income (HAMFI). Declines in worst case needs were greatest for the elderly, families with children, and "other families," and for Hispanics and non-Hispanic whites. Reflecting the nation's economic growth, employment—as measured by reliance on earnings—increased among worst case households whose heads were neither elderly nor disabled.

In 1999, the likelihood of having worst case problems remained highest among unassisted renters with the lowest incomes, among households with disabled adults, and among non-Hispanic blacks. Regionally, worst case needs were most frequent among very-low-income renters in the West and the Northeast, and within regions, they were most common in central cities and suburbs.

Over the past two decades, between 1978 and 1999, the share of renters receiving rental assistance increased at all income levels, but throughout this period, over three-fourths of those with worst case needs have had extremely low incomes. Over this longer time frame, rates of growth in worst case needs were highest among Hispanic renters and renters with Asian-Pacific or Native American origins. Regionally, numbers with worst case needs rose most in the West between 1978 and 1999, with growth particularly high in western suburbs.

Worst case needs and rental assistance among renters in different income ranges

The 1997–99 fall in the number of households with worst case needs for rental assistance all occurred among renters with extremely low incomes (below 30 percent of HAMFI)

Because of income growth, there were fewer extremely-low-income renters in 1999 than in 1997. Similarly, the fall in worst case renters occurred among these households with incomes below 30 percent of area median.

The number of very-low-income renter households fell by 1.2 million between 1997 and 1999, from 14.8 to 13.6 million. As Exhibit 2–1 shows, all of this decrease occurred among extremely-low-income renters. The number of extremely-low-income renters fell by 1.3 million, or 14 percent, to 7.7 million. Between 1997 and 1999, the number of households with worst case needs fell only in the category of extremely-low-income renters, dropping by

620,000, or 15 percent, to 3.5 million. But because both renters with worst case needs and the base of extremely-low-income renters dropped at similar rates, the share of all extremely-low-income renters who had worst case problems remained unchanged at 46 percent.

As renters shifted into higher income categories because of real income growth, the number of renters having incomes between 31 and 80 percent of HAMFI rose by 700,000. Real income growth reduced the number of renters with incomes below each of the income cutoffs—30, 50, and 80 percent of HAMFI—used in determining eligibility or priority for HUD rental assistance programs.

Income Targeting in Housing Assistance and Affordable Housing Programs

Under three "deeply subsidized" rental assistance programs, assisted households pay rents that are a percentage of their adjusted income—usually 30 percent.

Public housing. Produced from 1937 to the mid-1980s, 1.1 million occupied units of public housing are owned by local public housing agencies (PHAs). PHAs must reserve at least 40 percent of all units that become available for rent in any year for families with incomes at or below 30 percent of the local area median income. To "facilitate mixed income communities and decreasing concentrations of poverty," PHAs must develop admissions policies to provide for deconcentration of poverty and income-mixing.

Project-based assisted housing. From 1974 to the early 1980s, several programs supported the construction and rehabilitation of 1.4 million rental units owned by for-profit and nonprofit sponsors and now occupied by low-income households. Since then, HUD has continued to build deeply subsidized units for the elderly and disabled under Sections 202 and 811. Owners of buildings that receive project-based assistance must reserve at least 40 percent of all units that receive Section 8 assistance and become available for occupancy in any year for families with extremely low incomes.

Tenant-based assisted housing. These programs provide direct rental assistance to 1.6 million renter households to enable them to find their own housing on the open market. The maximum subsidy is the difference between the tenant contribution and the local fair market rent (FMR), an average rent for standard quality housing in the area. Begun in 1974, this type of assistance has accounted for most of the incremental units of assisted housing since the mid-1980s. PHAs and other entities administering the Section 8 tenant-based program must reserve at least 75 percent of all vouchers that become available in any year, either through new appropriations or through "turnover" of existing vouchers, for families with extremely low incomes.

In a number of other federal housing programs, renters are charged fixed or flat rents, with the maximum determined by program rules. Households pay the established rent rather than a percentage of their income. Without an additional subsidy, the poorest households often cannot afford this housing:

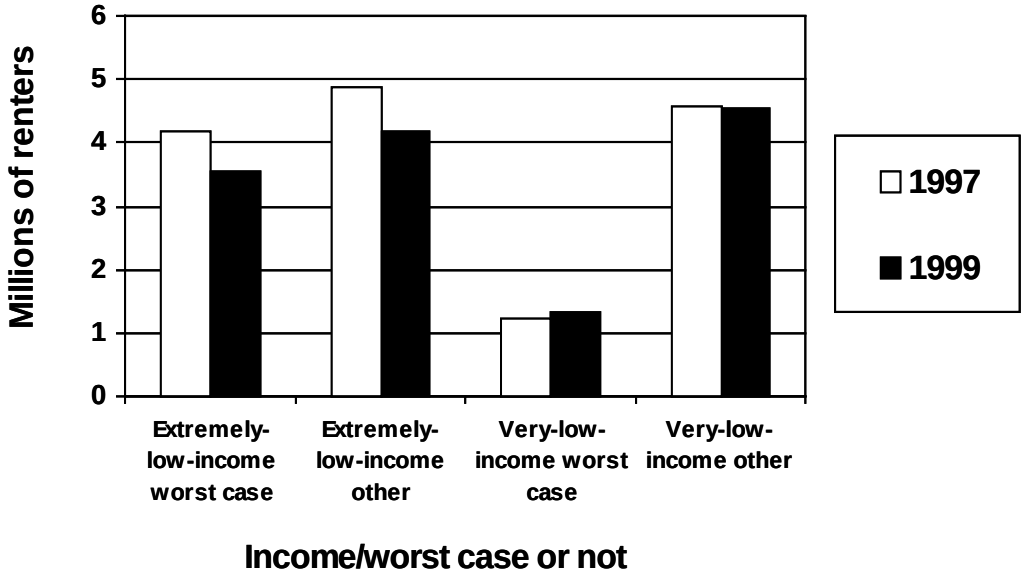
The Low Income Housing Tax Credit. This tax credit program subsidizes the capital costs of units that must bear rents affordable to households with incomes at or below 60 percent of area median income. Through 1999, HUD estimates that this program has produced more than 700,000 units since its enactment in 1986. Of these units, about 675,000 have rents at or below 30 percent of 60 percent of area median income.

The HOME Investment Partnership (HOME) program. This formula grant to states and local governments can be used to assist existing homeowners, first-time homebuyers, or renters. Between 1992 and August 1999, HOME produced 203,000 affordable rental units. Qualifying rents must be affordable to households with incomes at or below 65 percent of area median income, or below local FMRs if, as is often the case, the local FMRs are lower than rents affordable at 65 percent of area median income.

Older rental subsidy programs. The Section 221(d)(3) below market interest rate (BMIR) program and the Section 236 program were active from the early 1960s through the early 1970s. They were designed to produce housing affordable by families with incomes above the public housing income limits. Over time many projects or portions of projects in these programs became "project-based assisted housing" rather than "rental subsidy" as deep rental subsidies were attached to the units. There remain 300,000 units subsidized by these older programs that do not have deep rental subsidies.

In the short term between 1997 and 1999, therefore, real income growth clearly increased income resources among very-low-income renters and reduced the number of renters with severe rent burdens.

Exhibit 2–1 The 1997–99 fall in worst case renters was concentrated among extremely-low-income households.



Source: HUD-PD&R tabulations of the 1997 and 1999 American Housing Surveys.

Extremely-low-income renters were much more likely to have worst case housing problems than those with higher incomes

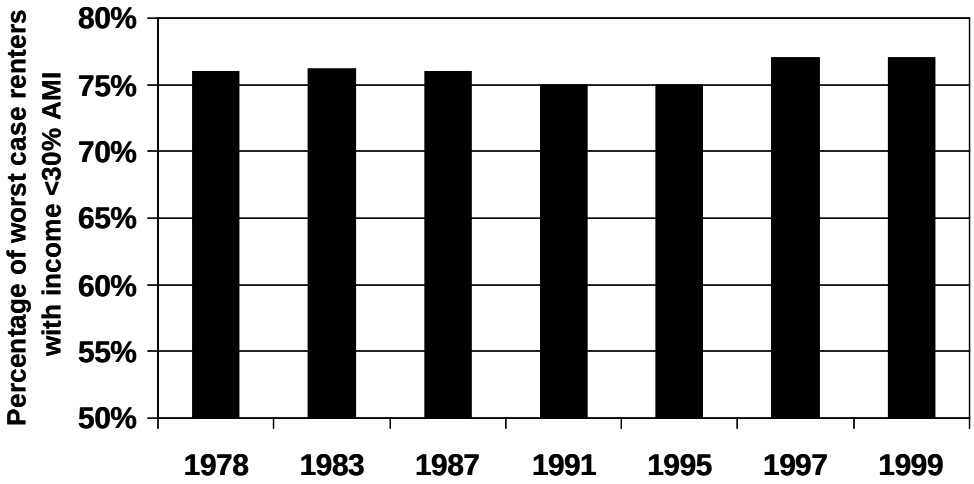
Although there were fewer renters with extremely low incomes in 1999 than in 1997, this group remained most likely to have worst case needs. In 1999, 68 percent of unassisted extremely-low-income renters had worst case problems. By contrast, only 22 percent of unassisted renters with incomes between 31and 50 percent of HAMFI had severe housing problems in 1999, as did 6 percent of renters with incomes between 51 and 80 percent of HAMFI. Over three-fourths (77 percent) of the 1999 total with worst case needs had extremely low incomes.

Throughout the past two decades, over two-thirds of unassisted renters with incomes below 30 percent of HAMFI have had severe housing problems, compared to one-fourth or less of unassisted renters with incomes between 31 and 50 percent of HAMFI. Indeed, in 1999, only 22 percent of unassisted renters with incomes between 31 and 50 percent of HAMFI had severe problems, representing a new low.

Despite publicity about fast growth in severe rent burdens among households with incomes 51 to 80 percent of HAMFI between 1997 and 1999, only 6 percent of renters in this income group had severe housing problems in 1999. As Exhibit 1–8 in the previous chapter documented, for renters in this income group, the incidence of severe problems has been low throughout the past two decades, although severe problems have risen among low-income owners.

Because of the much higher likelihood of worst case problems among extremely-low-income households, they make up the vast majority of the worst case needs group. As Exhibit 2–2 illustrates, over time the share of worst case renters who had extremely low incomes has been remarkably constant. In both 1978 and 1987, 76 percent of worst case renters had incomes below 30 percent of HAMFI. Between 1991 and 1995, the share slipped to 75 percent, but in both 1997 and 1999, 77 percent of those with worst case needs for housing assistance had extremely low incomes.

Exhibit 2–2 Over time, more than three-fourths of worst case renters have had extremely low incomes.



Source: HUD-PD&R tabulations of the 1978 and 1983 Annual Housing Surveys and of the 1987, 1991, 1995, 1997, and 1999 American Housing Surveys.

Renters with the lowest incomes have the most severe housing problems

The pattern of more serious and more frequent problems at lower incomes also holds within narrower income ranges. Renters with the lowest incomes remain much more likely to have severe housing problems than those with somewhat higher incomes. Over three-fourths of unassisted renters with incomes 0 to 20 percent of area median income (HAMFI) had worst case problems in 1999, compared to 28 percent of unassisted renters with incomes 31 to 40 percent of HAMFI and only 8 percent of unassisted renters with incomes 51 to 60 percent of HAMFI.

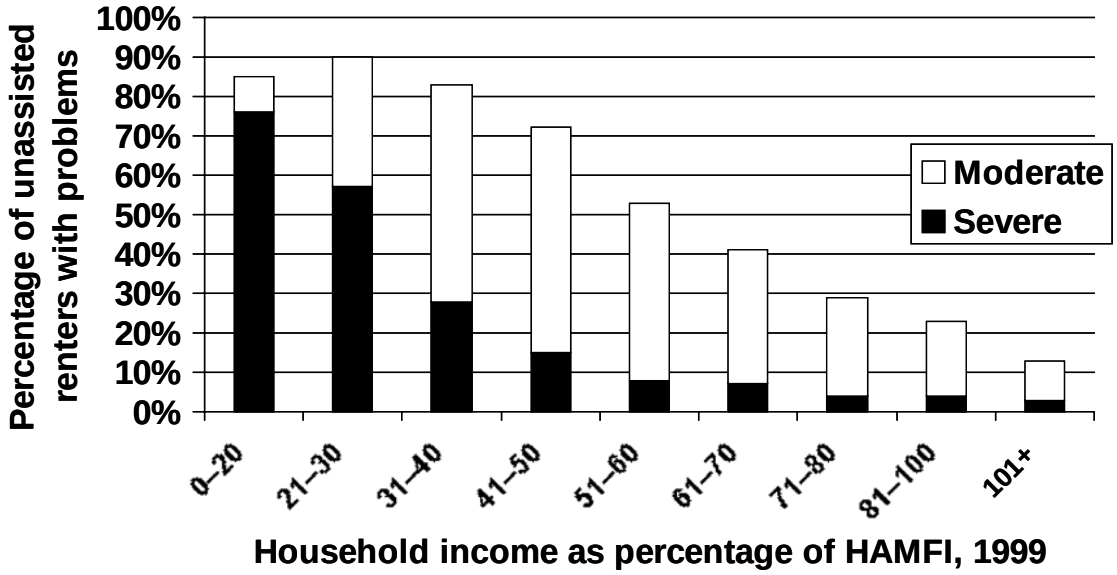
As Exhibit 2–3 details, 76 percent of unassisted renters with incomes 0 to 20 percent of HAMFI had priority problems in 1999 compared to 57 percent of those with incomes 21 to 30 percent of HAMFI. Renters with these extremely low incomes are the *only* income groups more likely than not to have severe housing problems. Fewer than one-third (28 percent) of unassisted renters with incomes 31 to 40 percent of HAMFI have severe problems, while among renters with incomes 41 to 50 percent of HAMFI, only 15 percent have severe housing problems.

Those very-low-income renters who do not have severe housing problems are likely to have other "moderate" problems, most often paying 31 to 50 percent of their income for housing. As the exhibit shows, over 80 percent of unassisted renters with incomes below 40 percent of HAMFI have either moderate or severe housing problems, as do 72 percent of those with incomes 41 to 50 percent of median.

Among renters with income above 50 percent of HAMFI, even moderate problems drop rapidly with higher income. Among unassisted renters with incomes 51 to 60 percent of HAMFI, 8 percent have severe problems and 45 percent have moderate problems. For

those with incomes 71 to 80 percent of HAMFI, only 4 percent have severe problems, and 25 percent have moderate problems.

Exhibit 2–3 Renters with income below 30 percent of median most often have severe housing problems.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

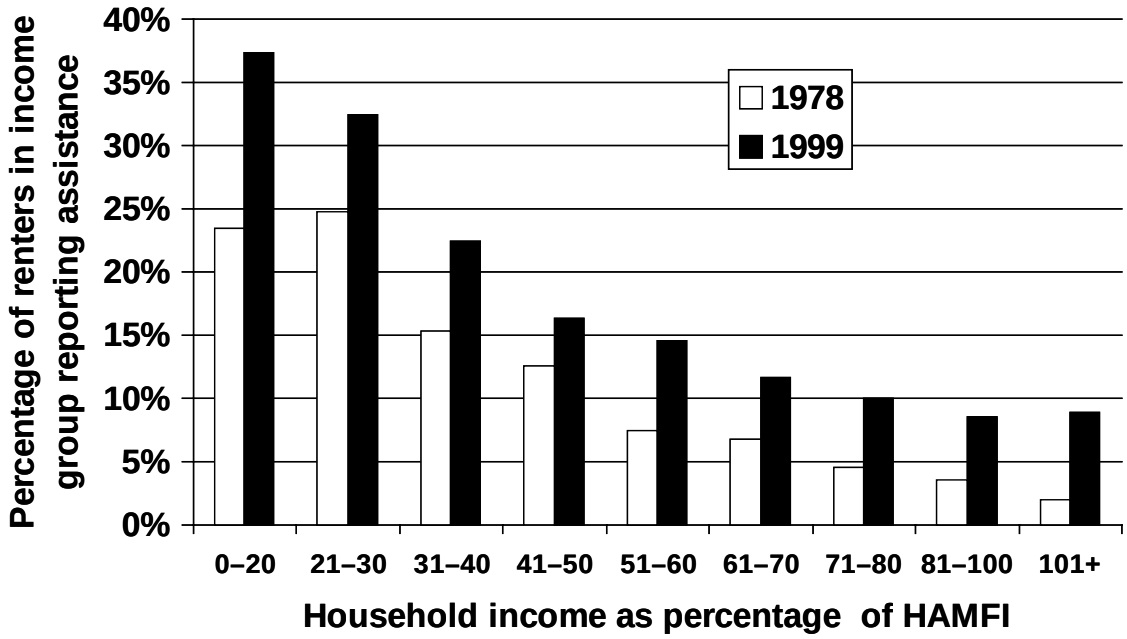
By 1999, over one-third of extremely-low-income renters reported rental assistance, up from one-fourth in 1978; yet in both years, over two-thirds of those without assistance had worst case problems

Substantial growth in rental assistance over the past two decades played an important role in returning worst case needs to their 1978 rates. As Exhibit 2–4 shows, at each income level the share of renters reporting rental assistance was decidedly higher in 1999 than in 1978. By 1999, 37 percent of the lowest income range—below 20 percent of median—participated in rental assistance programs, up from 24 percent in 1978. Assistance rose by 8 percentage points in the next two income groups, from 25 to 33 percent among those with incomes 21 to 30 percent of HAMFI, and from 15 percent to 23 percent for renters with incomes 31 to 40 percent of HAMFI. Assistance increased least among renters with incomes 41 to 50 percent of HAMFI, from 13 percent to 16 percent of the group.

Although receipt of rental assistance remains less common for renters with incomes above 50 percent of HAMFI, over the past two decades assistance has increased most rapidly for renters in these income ranges. Among renters with income 51 to 60 percent of HAMFI, the share assisted more than doubled, from 7 to 15 percent of the group, and the share receiving assistance also doubled among those with incomes 60 to 100 percent of HAMFI (from 5 to 10 percent). Because most of the increase in assistance among these relatively higher income groups occurred during the 1990s, it apparently reflects the effective shift of incremental assistance from deeply subsidized programs (such as

vouchers) to programs (like the Low-Income Housing Tax Credit and HOME) that produce housing for which renters are charged fixed rents rather than contributions to rent based on income, such as 30 percent of adjusted income.[1]

Exhibit 2–4 Between 1978 and 1999, shares reporting rental assistance rose at all income levels.



Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1999 American Housing Survey.

Worst case needs, housing problems, and rental assistance by type of household

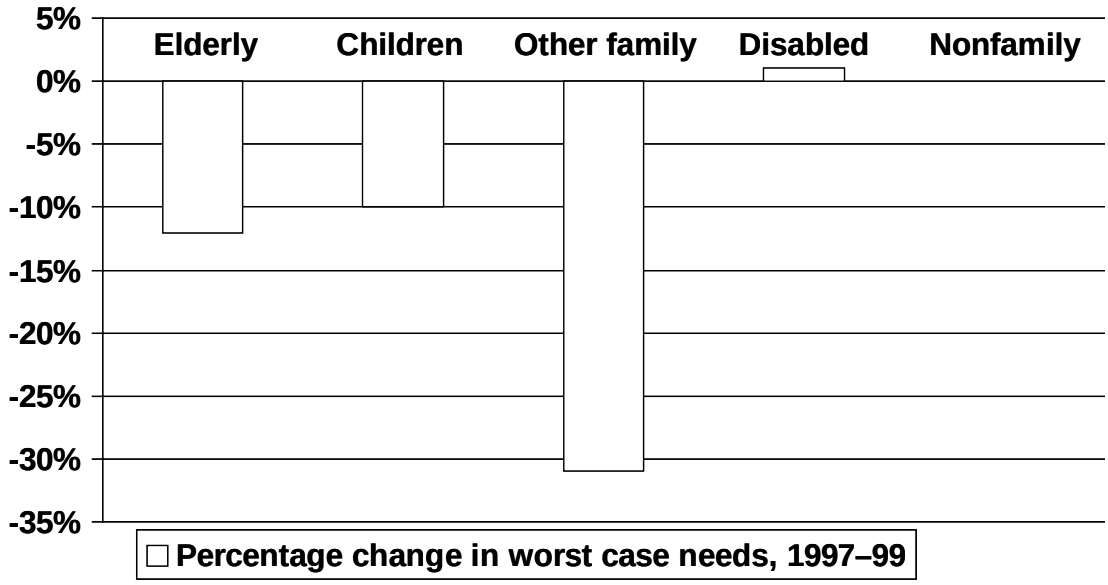
Between 1997 and 1999, needs fell most rapidly among the elderly, families with children, and other families. The 1997–99 drop in worst case needs was greatest among other families, that is, nonelderly households with related family members but no children. Above-average declines also occurred among the elderly and families with children, two groups often helped by rental assistance. Worst case needs did not drop among the other two types of households identified in this report—households with disabled nonelderly adults and households containing only one or more single adults younger than 62.

Between 1997 and 1999, the category of households identified as other families experienced the most dramatic drop in worst case needs. As Exhibit 2–5 shows, their needs fell by almost one-third. Needs also dropped at above-average rates among the elderly and families with children. The expanded American Housing Survey (AHS) proxy for households with disabled adults, however, suggests that between 1997 and 1999, worst case needs remained essentially unchanged—and relatively highest—among

[1] The increase in the 1990s may also reflect the 1997 procedural change in assistance questions.

these very-low-income renters. Needs were also unchanged among the residual group of nonfamily, nonelderly households, who are predominantly individuals living alone. This household type is least likely to be assisted by federal rental programs.

Exhibit 2–5 Between 1997 and 1999, worst case needs fell most quickly among "other" families.



Source: HUD-PD&R tabulations of the 1997 and 1999 American Housing Surveys.

Worst case housing needs fell among the elderly and families with children

Needs among the elderly fell by 140,000 (an above-average drop of 12 percent) to 1.0 million between 1997 and 1999, and needs among families with children fell by 210,000 (or 10 percent) to 1.8 million. Among these two household types, the 1997–99 drops more than offset the decade's earlier slow growth in worst case needs.

For the elderly[2] and families with children, above-average drops in worst case needs between 1997 and 1999 reduced the numbers of households with worst case problems in 1999 to levels below or near those experienced in 1987, when total worst case needs were at their previous low of 4.5 million. Indeed, as Exhibit 2–6 details, for the elderly, worst case needs were lower in 1999, at 1.0 million, than their previous lows of 1.1 million in 1987 and 1978.

Among the elderly, the record 1999 low in worst case needs results in part from a marked drop in the number qualifying as very-low-income renters, with only 3.2 million in 1999 compared to 3.7 million in 1987 and 3.5 million in 1978. This trend undoubtedly reflects continued declines in poverty among the elderly, such as the drop from 14 percent in

[2] For HUD rental assistance programs, elderly households are defined, as here, as those where either the head or spouse is age 62 or older.

1978 to 10.5 percent in 1998.[3] It also reflects increasing homeownership among the elderly as more affluent cohorts turn 62. Even among elderly households with very low incomes, ownership rates rose markedly over this period, from 62 percent in 1978 to 67 percent in 1999.

Among families with children, 1.8 million very-low-income renters had worst case needs for assistance in 1999, well below their 1993 peak of 2.2 million and equal to the 1987 level. The number of families with children experiencing worst case problems in 1999, however, remained above its 1978 low of 1.4 million.

Exhibit 2–6 For the elderly, worst case needs in 1999 were lower than in either 1987 or 1978.

	Elderly	With children
Very-low-income renters, 1999	3,190	6,223
worst case	1,028	1,793
assisted	1,172	1,910
% assisted	37%	31%
worst case as % unassisted	51%	42%
Very-low-income renters, 1987	3,727	5,558
worst case	1,110	1,793
assisted	1,381	1,796
% assisted	37%	32%
worst case as % unassisted	47%	48%
Very-low-income renters, 1978	3,455	4,166
worst case	1,140	1,383
assisted	1,209	962
% assisted	35%	23%
worst case as % unassisted	51%	43%

Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1987 and 1999 American Housing Surveys.

Despite this improvement, the likelihood of having worst case problems remained high for very-low-income elderly and families with children without rental assistance

In 1999, 51 percent of unassisted elderly very-low-income renters, and 42 percent of unassisted very-low-income renter families with children, had unmet worst case problems. The share of very-low-income elderly renters receiving rental assistance rose slightly over the 1978–99 period, from 35 percent to 37 percent (see Appendix table A–5). Among the elderly without assistance, the share with worst case needs fell from 56 percent to 51 percent between 1997 and 1999. Nevertheless, at 51 percent the probability of worst case needs among unassisted elderly renters remained higher than it had been from 1987–93 and equal to its 1978 rate.

In sharp contrast to the elderly, the number of very-low-income renter families with children grew markedly between 1978 and 1999, rising by 49 percent to outpace the 39-percent increase in total very-low-income renters. That sharp growth in numbers of very-

[3] Center on Budget and Policy Priorities, 2000, *Poverty and Income Trends: 1998*, p. 29.

low-income renter families with children makes the return of worst case needs to the 1987 level of 1.8 million especially notable. As Exhibit 2–6 showed, this success was in no small measure due to increasing assistance, as the number of very-low-income renter families with children who received rental assistance doubled between 1978 and 1999, rising from 960,000 to 1.9 million.

Because most of this increase in assistance occurred before 1987, however, the 1997–99 reduction in needs must be attributed in large part to economic growth or other external factors. Indeed, although the share of very-low-income renter families with children receiving assistance *dropped* slightly between 1987 and 1999, the incidence of worst case needs among unassisted very-low-income renter families with children fell from rates near 47 percent earlier in the 1990s to 42 percent in 1999, below the 1978 rate of 43 percent.

Elderly worst case renters were the very-low-income renters most likely to have a severe rent burden and no other housing problem

In 1999, the elderly remained more likely than other worst case renters to have only a rent burden. Almost all (97 percent) elderly households with worst case needs paid more than half of their income for rent, and most (86 percent) had no other housing problem. Only 12 percent of the elderly worst case total had more than one housing problem, mainly the 8 percent living in moderately inadequate housing. None were crowded: almost three-fourths (73 percent) lived alone, while the remaining households had on average 2.2 persons. One-fifth were husband-wife households, while another three-fifths (62 percent) had female heads. Less than one-third (31 percent) of the elderly households were minorities. More than half of the elderly household heads with worst case problems were over 75 years old.[4]

The elderly were the most likely of the five household types identified in this report to rate their housing (78 percent) and neighborhoods (77 percent) as good or excellent. Conversely, fewer than 4 percent judged their housing or neighborhoods to be of poor quality. As is typical for the elderly, rates of mobility were low, with only 8 percent moving in the past year. The general absence of problems other than severe rent burden, high rates of satisfaction with current housing and neighborhood, and low rates of mobility imply that most elderly worst case renters could be helped by vouchers to afford their current housing. Elderly renters with worst case problems most often lived in the Northeast (30 percent) or the South (30 percent). Over two-fifths (44 percent) lived in central cities, and another 42 percent lived in suburbs.

Worst case families with children more often paid more than half of their income for housing and lived in inadequate or crowded housing

Unlike the elderly, but like the disabled, worst case families with children often had more than one housing problem. While almost all (92 percent) paid more than half of their income for rent, 28 percent reported two or more housing problems. Over one-fifth (21

[4] For more detail on characteristics of worst case renters and very-low-income renters by household type, see Appendix tables A–6 through A–8.

percent) lived in housing with moderate or severe physical problems, and 14 percent lived in crowded housing. On average, worst case families with children had 3.6 persons and 2 children each. Three in eight (37 percent) were husband-wife families, half were headed by women without husbands present, and almost two-thirds (64 percent) were minorities. For a small fraction (4 percent), the household head was 62 or older.

Reflecting their more common housing problems, only three-fifths of worst case families with children rated either their housing or neighborhood good or excellent, while over one-tenth considered them of poor quality. Mobility rates during the previous year were high (30 percent). For many of the 70 percent of worst case families with children whose only housing problem was a severe rent burden, vouchers could solve their only problem in their current home. However, the relatively high levels of crowding and of dissatisfaction with current housing and neighborhoods suggest that many worst case families with children might need and prefer to move to better housing with more bedrooms. More than half (51 percent) of worst case families with children lived in central cities, and more than one-third (36 percent) lived in suburbs. Mirroring recent trends in population and shortages of affordable housing, more worst case families with children (34 percent) lived in the West than in any other region.

Four-fifths of the elderly and families with children who had worst case needs had extremely low incomes

Among both the elderly and families with children, four-fifths of the households with worst case needs had extremely low incomes (800,000 elderly and 1.4 million families with children).

As found among all household types, the elderly and families with children who had incomes below 30 percent of HAMFI were much more likely to have worst case problems than households with incomes 31 to 50 percent of HAMFI, even though these extremely-low-income households were more likely to receive assistance. Among both household types, two-fifths of extremely-low-income renters received housing assistance, but over two-thirds of those without assistance had worst case needs for assistance.

Families with children were more likely to be poor or extremely poor than other very-low-income renters with worst case problems. While 78 percent of worst case families with children were poor, over one-third (35 percent) had incomes below 50 percent of the official poverty cutoffs, and essentially all (95 percent) had incomes below 150 percent of poverty. Among the elderly with worst case needs, half (54 percent) were poor, and 81 percent had incomes below 150 percent of the poverty level. The higher rates of poverty and extreme poverty among worst case families with children reflect their larger family size and the fact that HUD's income limits have smaller per-person adjustments for household size than the poverty thresholds do.

In 1999, a new AHS supplement asked renters with incomes below $10,000 and severe rent burdens whether they received outside help with household expenses. Among the extremely-low-income renters with worst case needs, almost half of elderly renters and of families with children were asked if they received financial help from others. Although among all household types fewer than 10 percent of the households asked these questions

reported receiving financial assistance, 28 percent of the elderly worst case renters and 40 percent of families with children said that persons outside the household helped with some regular household expenses.

The 1997–99 fall in worst case needs was fastest among other families

The 1997–99 fall in worst case needs was fastest among other families, who are nonelderly households with related family members but no children. The drop of 31 percent offset the increases in needs recorded earlier in the decade: by 1999, unmet needs were 230,000, effectively back to the 1987 and 1989 levels of 220,000. This was the household type least likely to have worst case problems: in 1999, only 36 percent of unassisted families without children had worst case needs for assistance.

As their household composition might well predict, nonelderly families without children benefited more from economic and employment growth during the late 1990s than other very-low-income renters. The total number of very-low-income renters of this household type fell by 17 percent between 1997 and 1999, a greater decline than any other household type. Among the remaining very-low-income other families, 37 percent earned more than full-time minimum wage in 1999, more than in 1997. In 1999, 55 percent of these families were married couples, 30 percent had female heads, and 15 percent had male heads. Almost three-fourths (71 percent) of the heads were high school graduates, and one-fifth had completed 2 or more years of college. Almost half of the heads were in their 30s or 40s; one-third were below 30, and one-fourth were aged 50–61.

Like the elderly, almost all "other" families with worst case problems had a severe rent burden (97 percent), which was the only housing problem for most (81 percent). This may reflect the fact that other families were less likely than other household types to have extremely low incomes or to be poor. None were crowded, but 10 percent lived in severely inadequate housing, and an additional 8 percent lived in units with moderate physical problems. Reflecting this higher incidence of physical problems, these households were less satisfied with their housing than the elderly were, with only two-thirds rating their housing or neighborhoods good or excellent. But they were more mobile, with 24 percent having moved in the past year. In 1999, other families with worst case problems were more likely to live in the West (41 percent) than other household types, and they were the group most likely (90 percent) to live in metropolitan areas.

Worst case needs were most likely among disabled renters

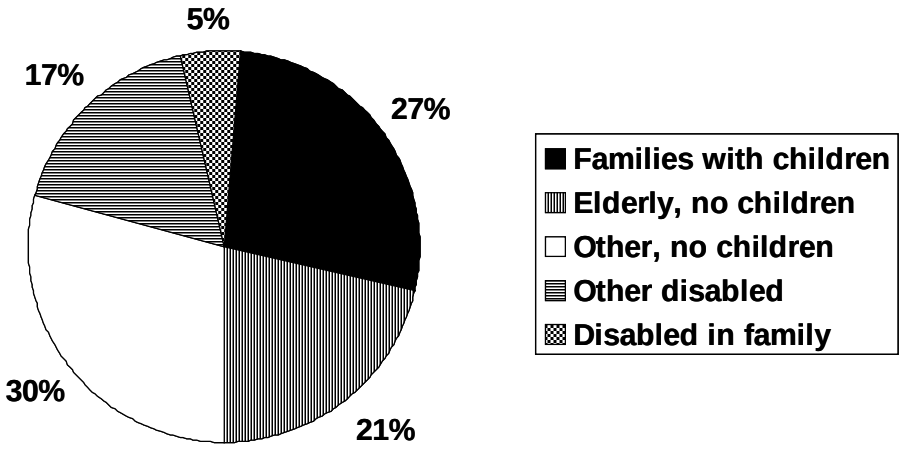
Worst case needs did *not* fall between 1997 and 1999 among households with disabled members. Although an improved AHS proxy for the disabled suggests that almost half of this group receives rental assistance, three-fifths of the unassisted disabled have worst case problems, a higher rate than that of any other household type.

As Appendix C discusses, some 1.1 million disabled nonelderly adults are estimated to have had worst case needs in 1999.[5] Some 240,000 of the disabled worst case persons live in

[5] To evaluate how many disabled households there were in 1999, the extent to which they received rental assistance, and the incidence of needs among the unassisted, this report uses an expanded AHS proxy for

families with children, with the rest in other family or nonfamily households. Altogether (Exhibit 2–7), over one-fifth (22 percent) of worst case households contain a nonelderly adult with disabilities, 5 percent of them in families with children. Another 27 percent of worst case households are families with children, and 21 percent are elderly.

Exhibit 2–7 In 1999, at least 22 percent of worst case households had nonelderly adults with disabilities.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey, adjusted with information from Supplemental Security Income program data.

Some 45 percent of disabled very-low-income renters are assisted, yet some 59 percent of unassisted, disabled, very-low-income renters have worst case problems. Thus, the disabled remain the household type most likely to have worst case needs if they are not assisted.

The new AHS proxy for disabled nonelderly renters provides a consistent estimate of how needs changed over time among disabled renters. As Appendix C discusses, it shows no drop between 1997 and 1999 but a marked drop of 18 percent between 1995 and 1997. Indeed, the 1997 and 1999 estimates of worst case needs among proxy households are quite close in both magnitude and incidence to the 1987, 1991, and 1993 estimates. This pattern suggests that the 1993–95 rise in worst case needs among the disabled that was highlighted in the 1998 worst case report[6] was reversed between 1995 and 1997, so that the total number with needs in 1999 is similar to that observed for 1993. Thus, the more detailed analysis done for this report implies that the number of nonelderly disabled worst

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households with persons with disabilities. Appendix C discusses the new proxy for the disabled and reasons why even this new proxy also produces low estimates of disabled adults. The estimates reported here inflate the proxy to correspond to estimates derived from Supplemental Security Income (SSI) program data, and also seek to include very-low-income households with incomes above SSI levels. For the best estimate of change over time, this report uses both proxy and SSI changes. For household characteristics and housing problems of the disabled, the only information available comes from the AHS proxy.

[6] See Finding 6, page 30, of *Rental Housing Assistance—The Crisis Continues.*

case households was close to 1.1 million in both 1997 and 1999 rather than in the 1.1–1.4 million range previously estimated for 1997.

Disabled worst case renters have the most serious housing problems. Over one-fourth (28 percent) have multiple housing problems, all because they pay more than half of their income for inadequate housing. Altogether, almost one-third (32 percent) of disabled worst case renters live in housing that is either moderately or severely inadequate.[7] Despite their relatively high rates of physically inadequate housing, two-thirds of disabled worst case persons have only a severe rent burden and no other problem. According to the proxy, 70 percent live alone, three-fifths are high school graduates, and half are minorities.

The disabled were the worst case household type most likely to have extremely low incomes or to be poor or extremely poor. Over 80 percent had extremely low incomes in 1999, and three-quarters were poor. As Exhibit 2–8 shows, the worst case disabled were more likely than other household types to report financial assistance from nonhousehold members. Over half (54 percent) of the extremely-low-income households identified by the disabled proxy reported receiving such help.

Exhibit 2–8 Worst case households with disabled adults were more likely than others to report receiving outside help with regular household expenses.

	Elderly	With children	Other family	Disabled	Other nonfamily
Percentage asked about outside help*	43%	42%	39%	53%	41%
Percentage reporting help	12%	17%	13%	28%	22%
Received help as percentage of those asked question	28%	40%	33%	54%	53%

* Questions about outside financial help with expenses were asked in the 1999 AHS of households with incomes below $10,000 that reported paying more than half of their income for housing.

Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Needs were unchanged among single adults

The number of households with worst case needs did not change between 1997 and 1999 among the residual group of single adults less than 62 years old who live alone or with other unrelated singles, but remained at 1.2 million in 1999.

The estimates of worst case needs among the disabled summarized in Exhibit 2–7 imply that some 850,000 nonfamily households have disabled members. By subtraction, the remaining 1.2 million households with worst case needs were single adults.

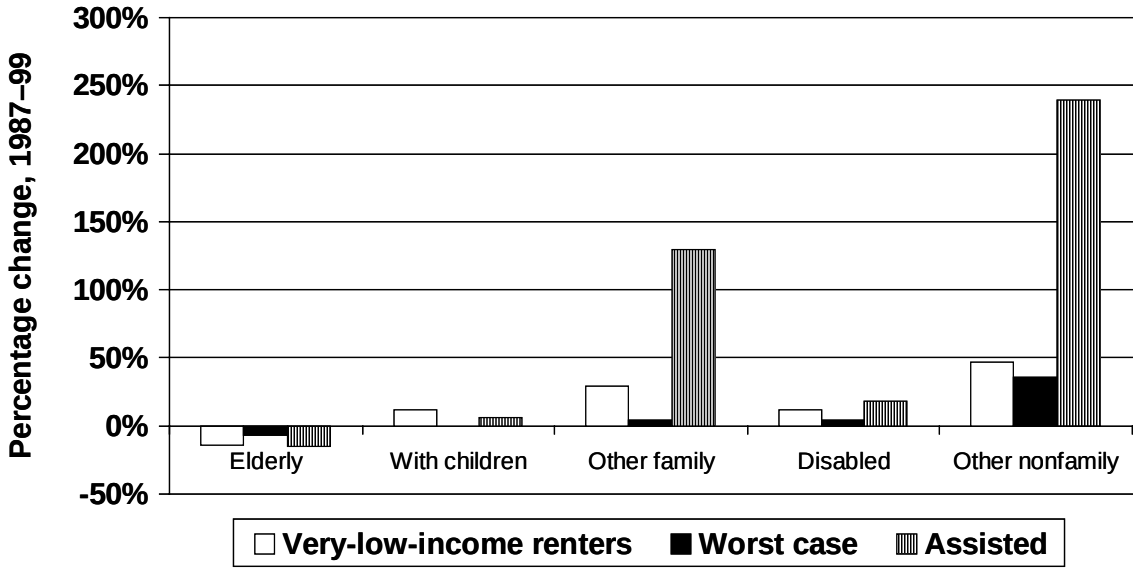
Although this is the only household type among whom worst case needs rose substantially between 1987 and 1999, several indicators suggest that many may have high rent burdens

[7] These data on physically inadequate housing do not include housing that is physically adequate but inappropriate in some way, in light of its resident's disabilities.

temporarily: 83 percent are high school graduates, 29 percent have 2 years of post-high-school education, and 52 percent are younger than 30. Over half of those asked the question report receiving outside help with household expenses.

As Exhibit 2–9 shows, this type of household had the fastest growth in worst case needs between 1987 and 1999, but its growth of 36 percent in needs was still less than the growth of 47 percent observed among all very-low-income renters of this household type. Moreover, this group also had by far the largest increase in the number of households who report receiving rental assistance (239 percent). The high share of these residual singles reporting rental assistance and the similarly high share reporting outside financial help (see Exhibit 2–8) are consistent with the assumption that many in this residual group are actually disabled but not identified by the AHS proxy (see Appendix D).

Exhibit 2–9 Between 1987 and 1999, worst case needs and assistance rose most among nonfamily households.



Source: HUD-PD&R tabulations of the 1987 and 1999 American Housing Surveys.

The share of worst case households with earnings continued to increase

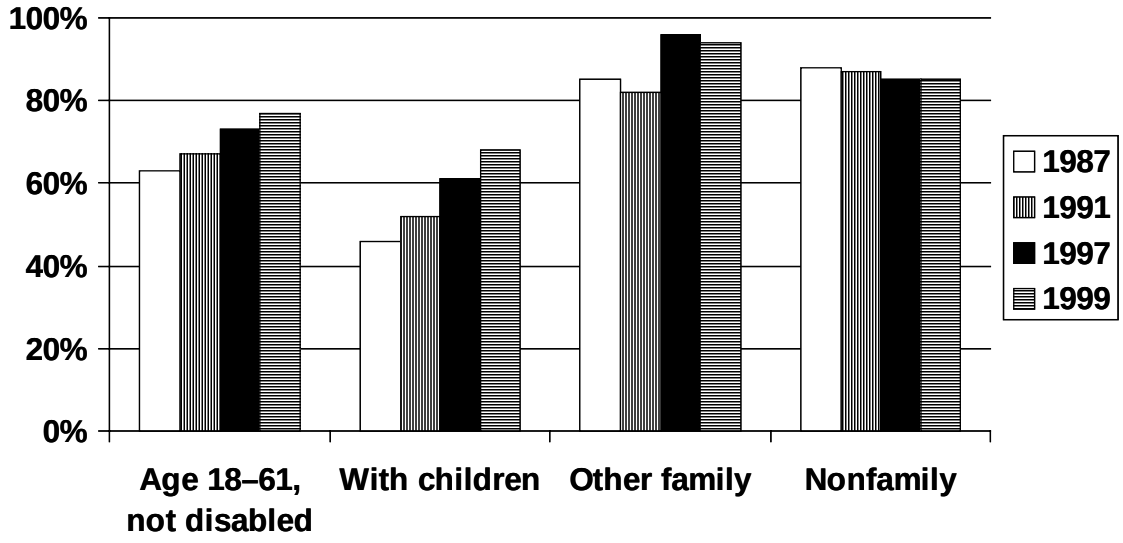
Work effort continued to increase among those with worst case problems. Although the number of worst case households with workers fell slightly between 1997 and 1999 because of the large decline in the total number with worst case needs, the share of nonelderly, nondisabled worst case households who had earnings as their primary income source rose further, from 73 percent to 77 percent. This change continues the rise in work effort observed since 1991, when 67 percent of such worst case renters had earnings as their main source of income.

Of the 4.9 million households with worst case needs for rental assistance in 1999, 2.8 million (58 percent) had earnings as their main income source. Among the 5.4 million

worst case households in 1997, earnings were the main income source for 2.9 million (55 percent).

As Exhibit 2–10 illustrates, among the worst case households that were neither elderly nor disabled, reliance on earnings rose from 73 percent in 1997 to 77 percent in 1999.[8] The long-term increase in work effort from 63 percent relying on earnings in 1987 to 77 percent in 1999 was primarily due to steady increases in reliance on earnings among worst case families with children. As the exhibit shows, nearly 90 percent of other families and single individuals with worst case problems had earnings as their main source of income, but for these households, the shares relying on earnings fluctuated over the past 12 years rather than steadily increasing.

Exhibit 2–10 Among worst case families with children, shares relying on earnings rose between 1987 and 1999.



Source: HUD-PD&R tabulations of the 1987 and 1999 American Housing Surveys.

Earnings among very-low-income families with children

Among very-low-income worst case families with children, the number with earnings as their primary source of income remained at 1.2 million, even though the total number of worst case families fell. Among all very-low-income renters with children, the share relying on earnings rose from 66 percent to 74 percent between 1997 and 1999, both substantially above the rate of 59 percent observed in 1991.

As employment rose among all very-low-income renters, it became almost as common for those with severe housing problems as for the others without severe problems. Among all very-low-income worst case families with children, the share relying on earnings (i.e., those with earnings as their primary source of income) rose from 61 percent to 68 percent

[8] These percentages are slightly lower than those reported in the previously published January 2001 executive summary of this report because they do not exclude elderly heads of families with children from the base.

between 1997 and 1999, both substantially above the rate of 46 percent observed in 1987. As reliance on earnings increased among worst case families with children, the receipt of income from welfare or SSI dropped markedly. Only 27 percent of worst case families with children reported income from welfare or SSI in 1999, well below the 49 percent with welfare or SSI income in 1987.[9]

The increased reliance on earnings was accompanied by real increases in the amount of earnings over these 12 years. The share of worst case families with children that earned more than what one would receive for half-time work at the 1999 minimum wage rose from 38 percent in 1987 to 56 percent in 1999, while the share with earnings exceeding the total from full-time minimum-wage employment rose from 19 percent in 1987 to 34 percent in 1999.

Among the 230,000 other families and 1.4 million nonfamily households with worst case needs, work effort was even higher. Almost all (94 percent of other families and 85 percent of unrelated individuals) depended on earnings in 1999. Yet these earnings were often too low to allow households to afford prevailing rents: only 43 percent of other families and 28 percent of individuals earned more than the total from full-time work at the minimum wage.

Earnings were up, and welfare down, among extremely-low-income worst case families

Among extremely-low-income worst case families with children, the share relying on earnings rose from 56 percent to 64 percent between 1997 and 1999, while the share reporting any welfare income dropped from 36 percent to 31 percent.

Despite the significant drop in numbers of extremely-low-income renters with worst case needs between 1997 and 1999, almost three-fourths of the working households with worst case problems in 1999 had extremely low incomes. As Exhibit 2–11 shows, over 900,000 of these households were families with children.

Among extremely-low-income worst case families with children, the share relying on earnings rose from 56 percent to 64 percent between 1997 and 1999. As Exhibit 2–12 illustrates, this increase in work effort continues a trend that has been under way since the late 1980s. Between 1987 and 1999, the share of extremely-low-income worst case families with children relying on earnings rose from 40 percent to 64 percent. Real earnings in constant dollars also rose: the share of families earning more than half-time work at the 1999 minimum wage rose from 29 percent to 48 percent, and those earning more than full-time work at the 1999 minimum wage rose from 9 percent to 22 percent. Over this 12-year period, the share of extremely-low-income worst case families with children reporting any welfare income dropped from 54 percent to 31 percent.

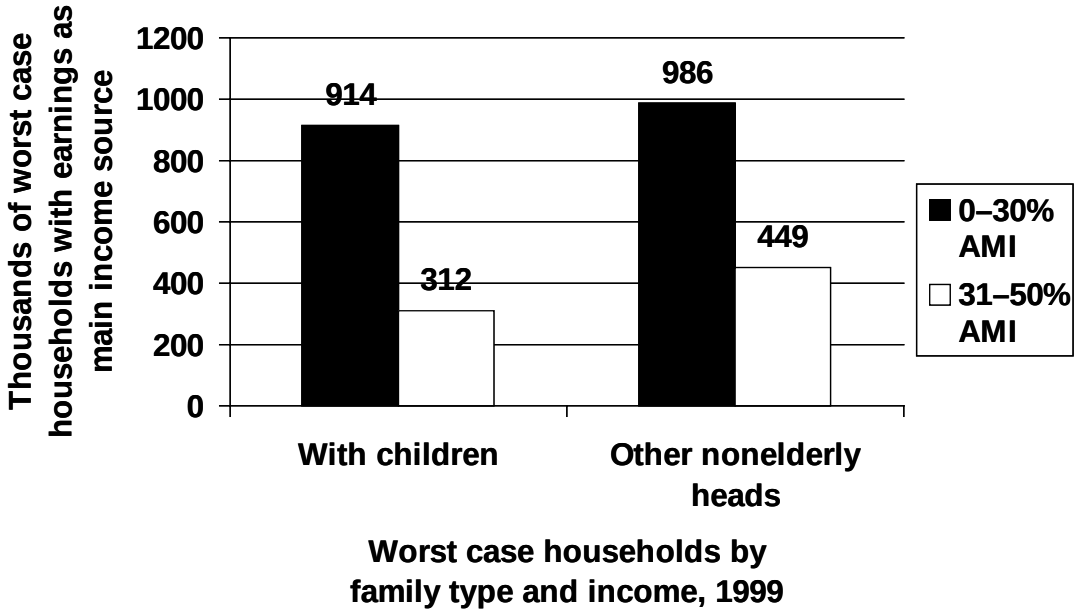
Not all of these families may have adults who are able to work. A small fraction have elderly heads—perhaps grandparents raising children—and others, such as the 8 percent reporting Social Security income in 1999, may have disabled children or adults in the

[9] As implied by the results of the 1995 Housing Modification Supplement discussed in Appendix C, some of these families may be receiving SSI for disabled family members rather than welfare income.

household. Child care concerns may also restrict the hours that can be worked: in 1999, over half of these families had children under 6, and almost four-fifths had children under 12.

Yet three other developments between 1987 and 1999 each may have facilitated employment among extremely-low-income worst case families with children: a drop in the average number of children per family; an increasing share of husband-wife families; and a higher share living in suburbs, where employment opportunities have been growing more rapidly. Because this group of worst case households has shifted toward the West (as is generally true), the rising shares of husband-wife families and of minorities among extremely-low-income worst case families with children each may reflect the past two decades' growth in worst case needs among Hispanic households. Regardless of the explanation, the rise in work effort among extremely-low-income families with children underscores their increasing efforts to take responsibility for their families.

Exhibit 2–11 More than 70 percent of unassisted working renters with worst case needs have extremely low incomes.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Exhibit 2–12 From 1987 to 1999, more extremely-low-income worst case families worked, and fewer received welfare.

	1987	1999
Worst case, in thousands	1,483	1,439
Earnings main source	40%	64%
Half-time, minimum wage	29%	48%
Full-time, minimum wage	9%	22%
Welfare or SSI income	54%	31%
Social Security income	10%	8%
Head age 62+	4%	4%
Head age 18–29	45%	41%
Head age 31–50	48%	50%
Children under 12	—	78%
Children under 6	—	55%
Children per family	2.2	2.0
Husband-wife family	27%	36%
Suburbs	27%	36%
West	20%	34%
Minority	56%	67%

Source: HUD-PDR tabulations of the 1987 and 1999 American Housing Surveys.

Worst case needs by race and ethnicity

Worst case needs dropped most among Hispanics and non-Hispanic whites

Worst case problems dropped most quickly between 1997 and 1999 among Hispanics (16 percent) and non-Hispanic whites (14 percent). But for non-Hispanic blacks, worst case needs rose significantly, increasing by 11 percent to a record high of 1.2 million.

As the previous report to Congress noted, between 1991 and 1997, worst case housing needs became more concentrated among minorities, with growth highest among Hispanics and blacks. But between 1997 and 1999, a 16-percent decrease in needs among Hispanic very-low-income renters left them the racial/ethnic group least likely to have worst case problems in 1999 (Exhibit 2–13). The incidence of worst case problems in 1999 was slightly higher among Asian-Americans and Native Americans than among Hispanics, but for neither group are such differences from other racial/ethnic groups statistically significant.[10] But unassisted blacks were significantly more likely to have worst case needs for assistance in 1999 than either non-Hispanic whites or Hispanics.

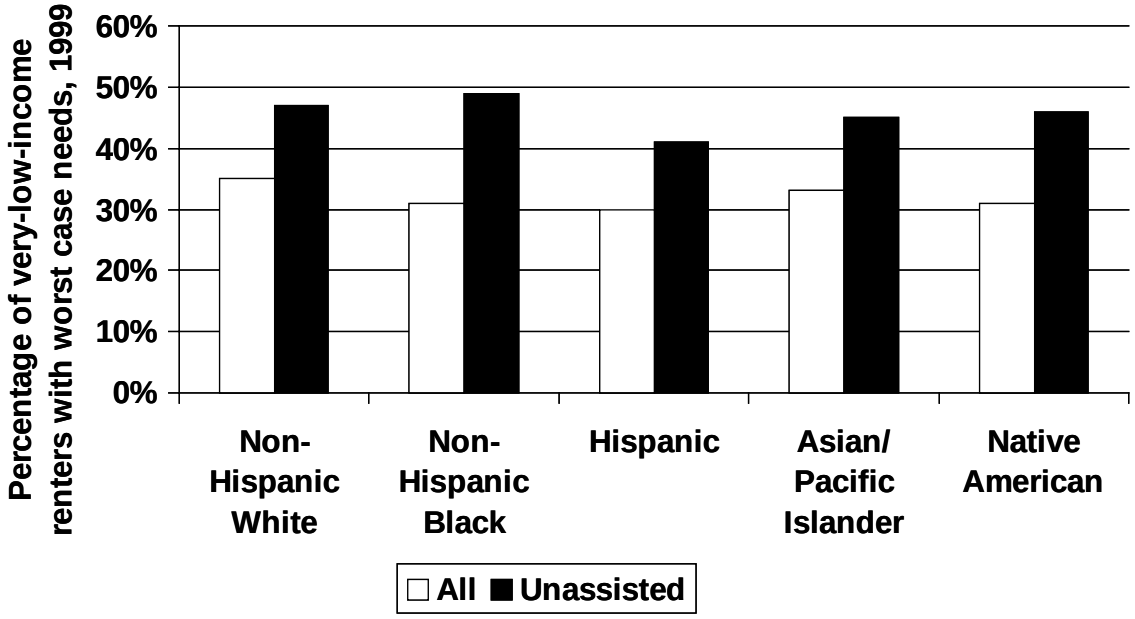
Examined over the two decades from 1978 to 1999, worst case needs for rental assistance *did* expand more quickly among minorities, as Exhibit 2–14 shows. The number of non-

[10] These estimates for Asian-Americans and Native Americans are included because they have been requested by readers of previous reports. However, because of small sample sizes for these groups, the estimates have high standard errors. The confidence interval for the rate of worst case needs among very-low-income Asian-American renters, for example, is 33 percent $\pm$ 7 percent.

Hispanic whites with worst case problems shrank slightly, falling from 2.6 million in 1978 to 2.5 million in 1999. Among blacks, needs grew by 28 percent, from 0.9 million in 1978 to 1.2 million in 1999. Among Hispanics, worst case needs more than doubled, growing from 360 to 840 thousand. And among Asian-Americans and Native Americans combined, needs more than tripled, exploding from 90 to 290 thousand.[11]

For each group, the numbers of households with worst case needs grew more slowly over this 21-year period than either total households or very-low-income renters. Among all racial/ethnic groups, this relative success occurred because very-low-income renters reporting rental housing assistance rose more quickly than the numbers of either total households or very-low-income renters.

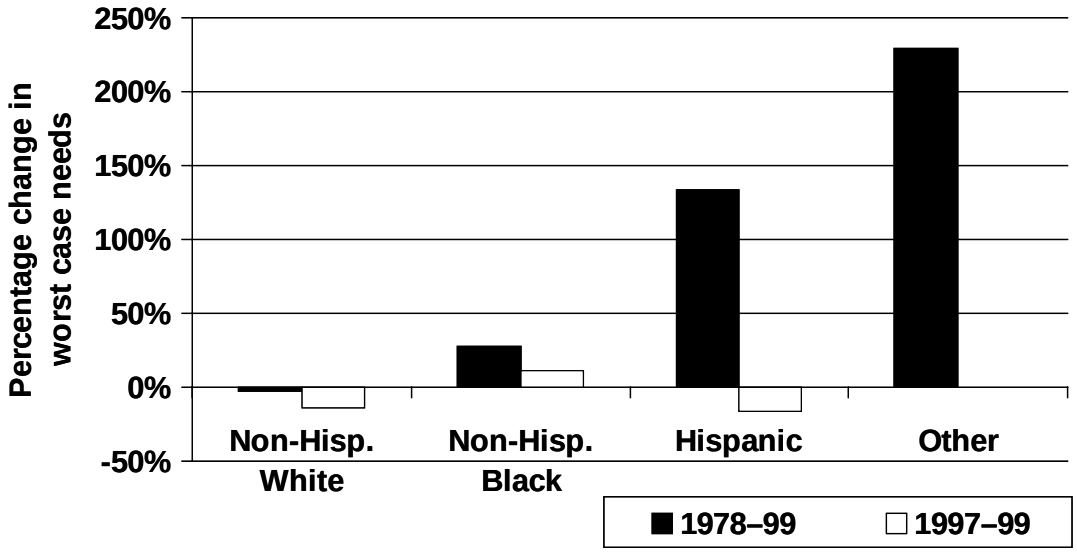
Exhibit 2–13 In 1999, worst case needs were lowest for Hispanics and highest for blacks.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

[11] Although these estimates for other races have large confidence intervals, as noted above, the change over two decades is nevertheless highly significant.

Exhibit 2–14 From 1978 to 1999, worst case needs rose most among Hispanics and other races.



Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1997 and 1999 American Housing Surveys.

Hispanics were least likely to have worst case needs despite rapid growth

Between 1991 and 1997, Hispanics had the fastest growth in worst case problems, but the substantial 1997–99 drop offset half of the decade's earlier rise. Between 1987 and 1999, the two recent years of lows in worst case needs, needs among Hispanics increased by 44 percent. Although this rate of growth in worst case problems exceeded that for either blacks or whites, it lagged the 63-percent growth in Hispanic very-low-income renters. In 1999, Hispanics had a lower rate of severe problems among unassisted very-low-income renters (41 percent) than any other racial/ethnic group, and they were the racial/ethnic group least likely to receive rental assistance (25 percent).

Three-fifths of the Hispanic renters with worst case problems, 480,000 households, are families with children, a higher share than that in any other racial/ethnic group. Reflecting this predominance of families with children, Hispanic worst case households were also slightly bigger on average, with 3 persons and 1.3 children. Almost one-third (30 percent) of Hispanic worst case families had multiple housing problems, with over 16 percent living in crowded housing and 23 percent living in inadequate housing. Nine of 10 had a severe rent burden, and two-thirds had only a severe rent burden. Half of Hispanic worst case renters lived in the West, and one-fourth lived in the South. Over half (55 percent) lived in central cities, and another one-third lived in urbanized suburbs.

The Hispanic worst case families with children, on average, had 4.1 persons and 2.2 children. Almost all of them (88 percent) had extremely low incomes. Crowding was quite common (29 percent), and 24 percent had inadequate housing, even though 90 percent paid more than half of their income for housing. Because almost two-fifths had

multiple housing problems, Hispanic worst case families with children were least likely (57 percent) to have only a severe rent burden. Hispanic worst case families with children often were husband-wife families (56 percent). They also had younger heads than other worst case families with children, with 44 percent of the heads aged below 30, compared to 39 percent among all worst case families with children.

Although Hispanic worst case heads with children had the lowest rate of high school graduation and over three-fifths had children under 6, over three-fourths depended on earnings, and only one-fourth reported any welfare or SSI income. A relatively high share, two-fifths of those asked, reported receiving some outside help with household expenses. Three-fifths of Hispanic worst case families with children live in the West, and three-fifths live in central cities. Only about three-fifths rate either their housing or their neighborhood good.

Elderly households with worst case problems were uncommon among Hispanics. There were only 100,000, almost 90 percent of them with only a severe rent burden. They also live predominantly in cities but are only half as likely as families with children to live in the West. Barely any Hispanic worst case households are identified by the AHS proxy as likely to have persons with disabilities. Because the proxy is based on receipt of Social Security or SSI income, this may reflect recent immigration rather than fewer disabilities. One-fourth (200,000) of the Hispanic worst case households are either families without children or single individuals, one-fourth of them husband-wife families and three-fifths persons living alone. Over half of these households had heads aged 31–50 years, and virtually all of the heads worked. Less than half were poor.

Worst case needs among whites fell to a record low in 1999

Among non-Hispanic whites, worst case needs fell by 14 percent, or 400,000, between 1997 and 1999. In 1999, they stood at a record low over the 1978–99 period of 2.5 million, well *below* the 1987 level of 2.8 million. Still, 47 percent of unassisted, white, very-low-income renters had worst case problems in 1999. White renters with worst case needs were evenly distributed across the four regions, with approximately one-fourth in each region. Compared to minorities with worst case needs, they were also less likely to live in central cities (43 percent) and more likely to live outside of nonmetropolitan areas (18 percent).

As Exhibit 2–15 shows, in 1999 the 2.5 million non-Hispanic whites with worst case needs comprised over half of the 4.9 million total. Of the household types identified in this report, the largest worst case group among whites was elderly (710,000), followed by 645,000 families with children. Over half of the white worst case households (54 percent) were individuals living alone, over half of them women. Because of the high number of elderly and nonfamily households, non-Hispanic white worst case renters had the smallest households, averaging only 1.9 persons. They also were least likely to have multiple housing problems and most likely (84 percent) to have only a severe rent burden.

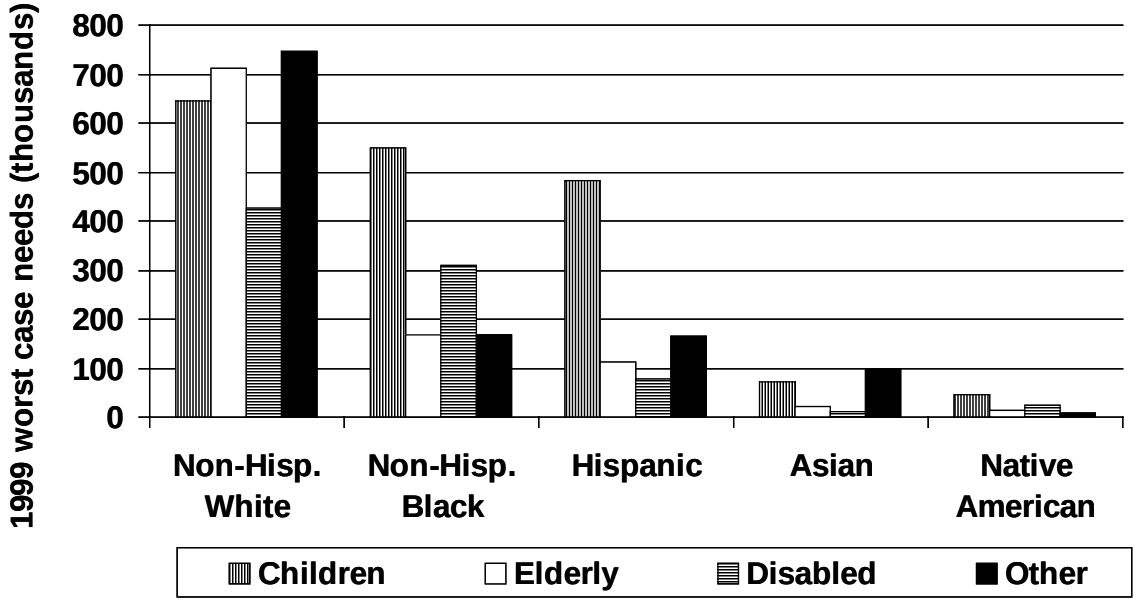
Of the 710,000 elderly whites with worst case needs, 89 percent had only a severe rent burden. One-fifth were married couples, 64 percent were women living alone, and the rest were single men. Less than half were poor, and three-fourths had incomes below 150

percent of poverty. (By contrast, more than two-thirds of the 300,000 minority elderly households with worst case problems were poor, and essentially all had incomes below 150 percent of poverty.) Four-fifths rated their homes and neighborhoods as good or excellent. One-fourth of those asked about outside help reported assistance with household expenses.

Of the 645,000 worst case white families with children, over four-fifths (81 percent) had only a severe rent burden, while 10 percent lived in severely inadequate housing. Three-fourths were poor, and 73 percent had extremely low incomes. One-third were husband-wife families, while 52 percent were headed by a woman with no husband present. One-half of those asked about outside help reported assistance with household expenses.

Two-thirds of the white worst case families with children had heads who were high school graduates, and two-thirds reported earnings as their main source of income. Seven of 10 had children younger than 12, and almost half had children 6 or younger. Over one-third lived in central cities, and 43 percent lived in suburban areas, but white worst case families with children were more likely (22 percent) to live in nonmetropolitan counties than other worst case families with children (12 percent).

Exhibit 2–15 In 1999, over half with worst case needs were non-Hispanic whites.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Among blacks, worst case needs rose to a record high in 1999

Non-Hispanic blacks, with needs at a record numerical high of 1.2 million in 1999, were the only racial/ethnic group with growth in worst case problems (11 percent) between 1997 and 1999. In 1999, they had the highest rate of severe needs among unassisted very-low-income renters (49 percent). They were also the racial/ethnic group most likely to report receiving

assistance (37 percent). Despite the record high number of black households with worst case problems, over the past two decades the long-term increase in black households was greater than growth in the number of such households with worst case needs. Between 1978 and 1999, the share of total black households that had worst case problems dropped from 12 percent to 9 percent.

Reflecting their historic population concentration, half of black worst case renters lived in the South in 1999. Almost two-thirds of the total lived in central cities.

The record high in 1999 resulted from 1997–99 growth in worst case problems among nonelderly singles, many of whom were probably disabled. Worst case needs for rental assistance among blacks were highest by far for disabled blacks: almost three of four unassisted very-low-income black renters identified by the AHS proxy as disabled (72 percent) had worst case problems. Among black very-low-income elderly renters and families with children, half of the unassisted households had worst case problems.

As Exhibit 2–15 clearly shows, almost half of black worst case households were families with children. Over four-fifths of these 550,000 households had extremely low incomes, and almost one-third had more than one housing problem. Although 95 percent paid more than half of their income for housing, one-fourth lived in inadequate units and 1 of 10 were crowded. On average, each family had 2.1 children, and half had at least one child 6 or younger. Seven of 10 black worst-case families with children had female heads without husbands present, two-thirds of the heads were high-school graduates, and earnings were the main source of income for two-thirds of the families.

Other minorities had the fastest long-term growth in worst case needs

Worst case needs grew most rapidly among other minorities between 1978 and 1999, but their housing problems do not otherwise differ significantly from those of other racial/ethnic groups.

Because of their relatively low numbers and correspondingly high sample error, little can be said about Asian-American and Native American very-low-income renters. In 1999, their rates of worst case problems and their shares of assisted renters were not significantly different from the averages for all very-low-income renters. Among both of these groups, the households with worst case needs were slightly poorer than the other three racial/ethnic groups, with higher shares of worst case households having extremely low incomes. Each experienced higher rates of growth in worst case needs during 1987–99 than those for the other groups, but the differences were not statistically significant. Over the longer period 1978–99, however, the growth of 220 percent in worst case needs among “other races,” which category represents these two groups combined, was significantly faster than that among Hispanics or non-Hispanic whites or blacks. Nevertheless, for all racial/ethnic groups, the numbers of households with worst case needs rose less rapidly than total household growth.

The location of households with worst case needs

In 1999, households with worst case needs were most numerous in the South (1.5 million) and the West (1.4 million). However, very-low-income renters most often had worst case problems in the West and the Northeast (48 percent and 47 percent of unassisted renters, respectively). As the next chapter will show, these were also the regions with the worst shortages of housing affordable and available to extreme-low-income renters.

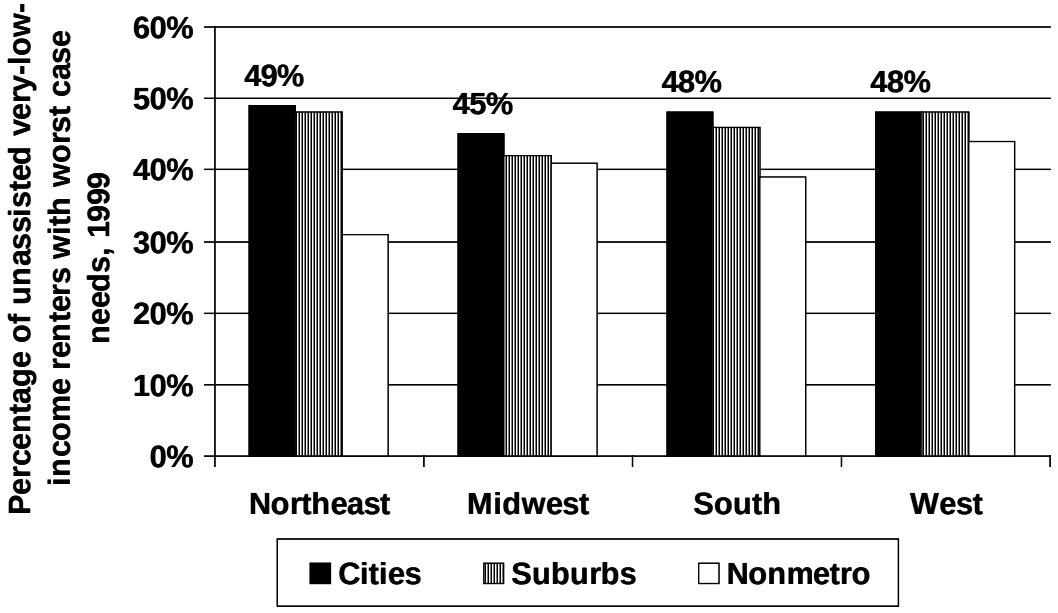
In 1999, the Midwest had the fewest households with worst case problems (900,000), and it was also the region in which the fewest unassisted very-low-income renters (44 percent) had worst case needs. The likelihood of having worst case problems was also relatively low in the South, affecting 45 percent of unassisted very-low-income renters. In the Northeast, 1 million households had worst case needs.

Very-low-income renters were most likely to have worst case needs in central cities

More than half of worst case renters lived in central cities in 1999, and the likelihood, among unassisted very-low-income renters, of having worst case problems was highest (48 percent) there. The fewest worst case renters lived outside of metropolitan areas (650,000), and needs were least likely (40 percent) there as well.

As Exhibit 2–16 shows, within each geographic region, worst case needs were most likely among unassisted renters living in central cities. On average, almost half (48 percent) of unassisted very-low-income renters in central cities had worst case problems, with the city rate highest in the Northeast (49 percent) and lowest in the Midwest (45 percent). Nationally, 2.5 million households with worst case needs, just over half of the total, lived in central cities. Southern and western cities each had 700,000 households with worst case problems.

Exhibit 2–16 Within regions, worst case needs are more common in cities and suburbs.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Needs were also common in suburbs

Worst case needs were almost as common among unassisted very-low-income renters in the suburbs (46 percent) as in central cities (48 percent), on average. In the West, 48 percent of unassisted very-low-income renters had worst case problems in both the suburbs and the cities, and worst case needs also affected 48 percent of suburbanites in the Northeast. Among suburbanites, worst case problems were least likely in the Midwest (42 percent), 3 percentage points less than the rate in midwestern cities (45 percent). Across the United States, 1.7 million, or 35 percent, of those with worst case needs lived in suburban parts of metropolitan areas. Most of those households (30 percent of the 35 percent) lived in urbanized parts of the suburbs. Indeed, worst case needs are actually more common among unassisted renters in urbanized suburbs (49 percent) than in cities or any other type of location. By contrast, unassisted renters were least likely to have worst case problems in rural parts of suburban counties (36 percent).

Needs were least likely in nonmetropolitan locations

In the nation and in every region, worst case problems were less frequent in 1999 outside of metropolitan areas than in central cities or suburban counties. Nationally, only 40 percent (650,000) of unassisted very-low-income renters in nonmetropolitan areas have severe problems. Nonmetropolitan worst case problems were least likely in the Northeast (31 percent of unassisted renters) and most common in the West (44 percent). Within nonmetropolitan locations, worst case needs were more likely in towns and urban areas (42 percent) than in rural locations (37 percent).

1997–99 drops in worst case needs were only significant in the Northeast, while longer term growth was fastest in the West and in suburbs

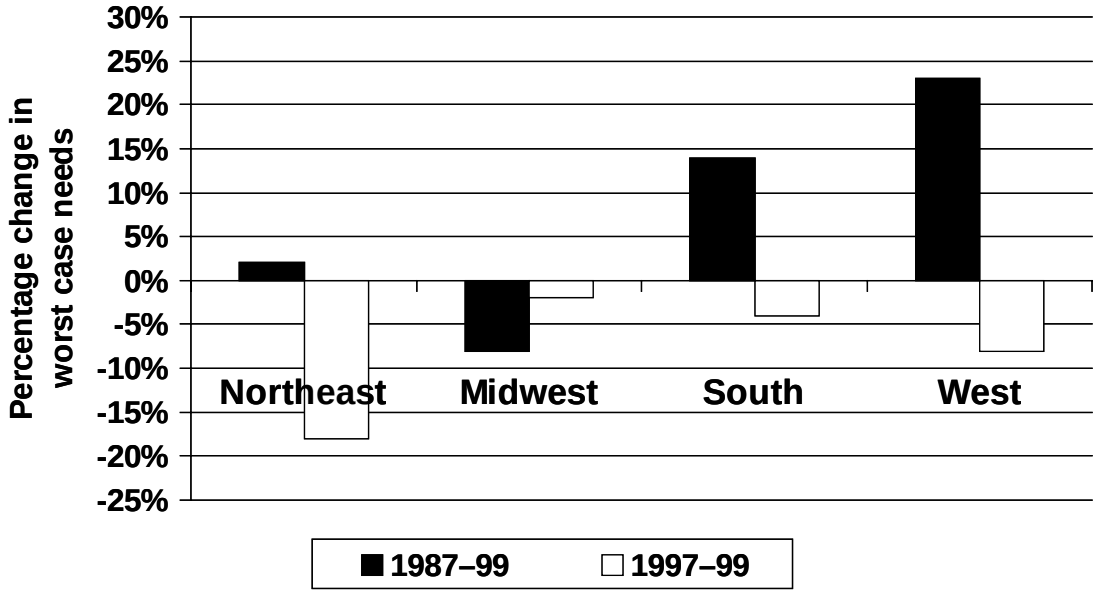
Regionally, decreases in worst case problems between 1997 and 1999 were greatest in the Northeast, where needs fell by 18 percent. Needs decreased least in the Midwest (2 percent) and the South (4 percent). Between 1987 and 1999, worst case needs also fell in the Midwest but rose in the West and the South. As Exhibit 2–17 details, worst case needs fell between 1997 and 1999 in each of the four census regions. Only in the Northeast, however, was the drop large enough to be statistically significant.

Between 1987, when worst case problems were at their previous national low of 4.6 million, and 1999, the number of households with worst case needs rose in every region except the Midwest. The rise during that 12-year period was greatest (23 percent) in the West, where needs rose from 1.1 to 1.4 million. The increase was also significant and slightly above average in the South (14 percent). In the Northeast, needs in 1999 were not significantly different from their level of 1 million in 1987. As discussed below, during this period the incidence of worst case needs rose in the West, fell in the Northeast, and was stable in the South and the Midwest.

Looking more closely at changes within regions, Exhibit 2–18 shows that in every region, 1987–99 growth in worst case needs was greatest in the suburbs. The rate of growth of worst case needs in the suburbs was highest in the West (56 percent) and the South (24 percent). Needs also grew (by 19 percent) in northeastern suburbs, whereas worst case problems

dropped by a third in northeastern locations outside of metropolitan areas. In the Midwest, similarly, drops in worst case problems were largest in nonmetropolitan locations. The West was the only region in which the number of worst case problems grew (slightly) outside of metropolitan areas between 1987 and 1999.

Exhibit 2–17 Worst case needs fell between 1997 and 1999 in all regions, but they rose most in the West and the South between 1987 and 1999.



Source: HUD-PD&R tabulations of the 1987, 1997 and 1999 American Housing Surveys.
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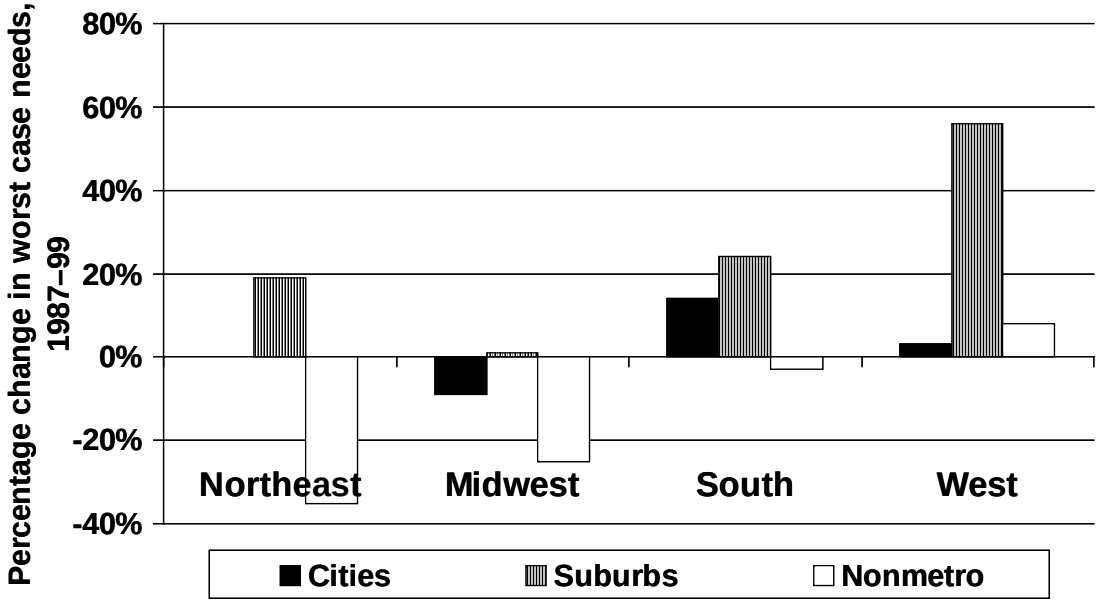
Exhibit 2–18 Between 1987 and 1999, worst case needs rose most in western and southern suburbs.



Source: HUD-PD&R tabulations of the 1987 and 1999 American Housing Surveys.

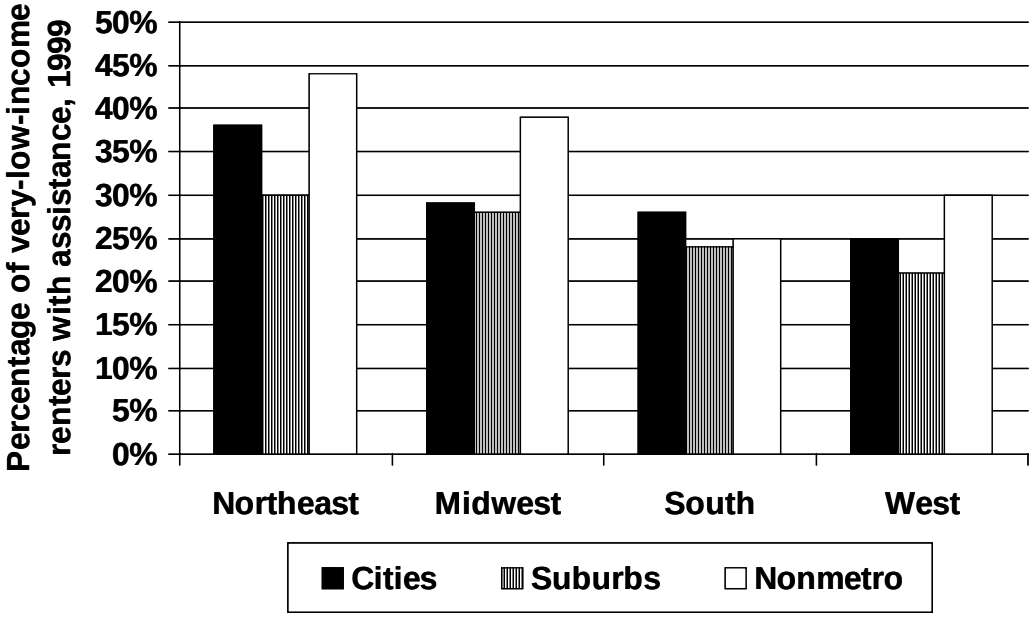
Reflecting these regional decreases in needs in nonmetropolitan areas, the probability of having worst case problems in nonmetropolitan areas dropped among unassisted very-low-income renters, from 42 percent in 1987 to 40 percent in 1999. Worst case needs also became less likely in central cities, dropping from 51 percent to 48 percent of unassisted very-low-income renters. Suburban growth in worst case problems mirrored population growth there, as the share of unassisted very-low-income renters with worst case problems remained essentially constant at 46 percent in both 1987 and 1999.

Renters were least likely to be assisted in suburbs, most likely in nonmetropolitan areas

In 1999, very-low-income renters were least likely to receive rental assistance in suburbs (25 percent) and most likely to be assisted outside of nonmetropolitan areas (32 percent). In central cities, 30 percent of these renters were assisted. These differentials were observed throughout the 1990s, although, like worst case needs, the numbers of renters receiving assistance grew most quickly in western and southern suburbs during this period.

As Exhibit 2–19 suggests, the continuing high incidence of worst case problems in suburban areas may reflect the fact that fewer very-low-income renters receive federal, state, or local rental assistance in suburban locations than in central cities or nonmetropolitan areas. In 1999, suburban renters were those least likely to be assisted in all regions of the country. Assistance reached the fewest renters in western suburbs, where only one-fifth of very-low-income renters were assisted; in northeastern suburbs, 30 percent of these renters were assisted.

Exhibit 2–19 Within regions, very-low-income renters least often are assisted in the suburbs.



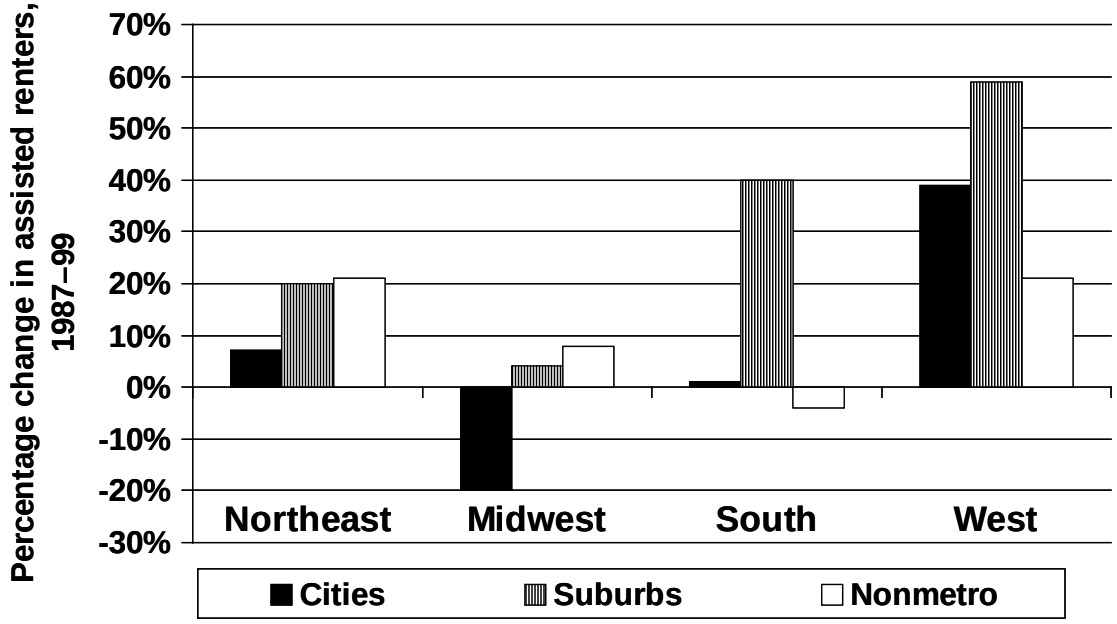
Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

In all regions but the South, renters were most likely to be assisted outside of metropolitan areas. In the South, city renters were most likely to receive assistance, while in the other three regions, the shares of city renters with assistance fell below the assistance rates in nonmetropolitan locations but above those in suburban rings.

Appendix tables A–11 and A–12 reveal that these locational differences in assistance are long-standing. Throughout the 1990s, very-low-income renters have been most likely to receive assistance if they lived outside of metropolitan areas but least likely if they lived in the suburbs.

Nonetheless, trends from 1987 to 1999 show assistance shifting among locations in directions generally paralleling shifts in worst case needs. This finding is reassuring in suggesting that the formulas used to allocate additional assistance across the country were responding to a certain extent to population migration and changing locations of serious problems, at least at this level of aggregation. As Exhibit 2–20 compared with Exhibit 2–18 shows, the numbers of households receiving assistance grew most rapidly in western suburbs and secondly in southern suburbs, the two locations with the highest growth in worst case needs. There were anomalies, however: the growth rate for assistance was third highest in western cities, where needs did not greatly increase, and also high in northeastern nonmetropolitan areas, where needs fell sharply.

Exhibit 2–20 Between 1987 and 1999, numbers assisted rose most in western and southern suburbs.



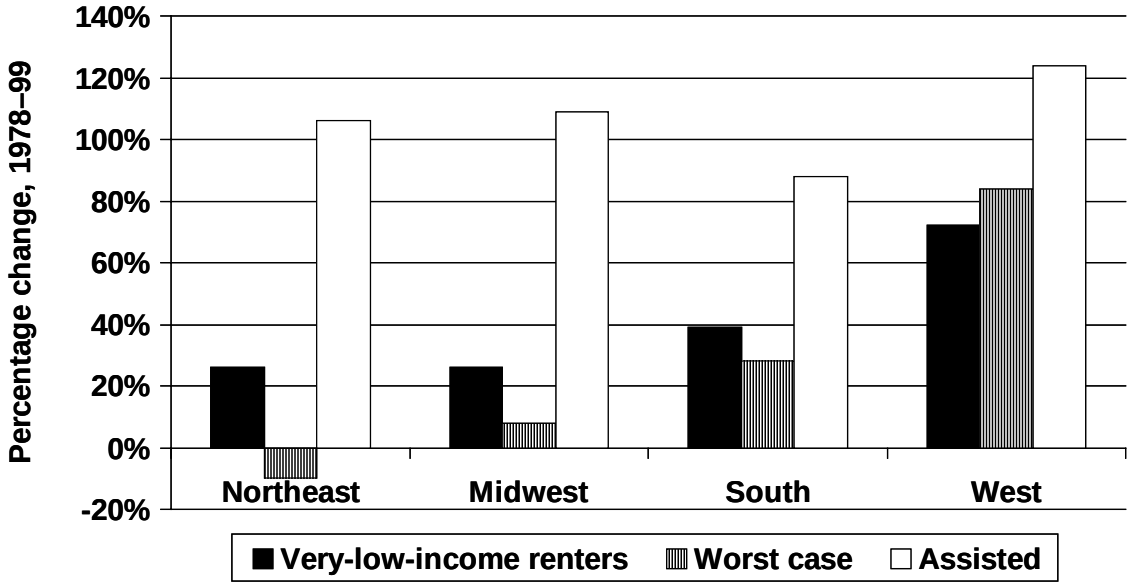
Source: HUD-PD&R tabulations of the 1987 and 1999 American Housing Surveys.

Over the long term, worst case needs grew fastest in the West

Over the two decades between 1978 and 1999, numbers of very-low-income renters, renters with worst case needs, and renters receiving rental assistance all increased most rapidly in the West. During this period, the West shifted from having the lowest incidence of unassisted very-low-income renters with worst case problems (42 percent in 1978) to the most (48 percent) in 1999. The incidence of worst case problems fell in the Northeast (from 51 percent to 47 percent). In both the South (45 percent) and the Midwest (43 percent), the shares of such renters with worst case problems were essentially the same in 1999 as they had been in 1978.

Changes for cities, suburbs, and nonmetropolitan areas cannot be examined for longer time periods than 1985 to 1999 because only since 1985 have those areas been consistently defined (based on the redefinition of metropolitan statistical areas done in 1983 based on 1980 census results). Over the period between 1978 and 1999, however, changes at the regional level show the number of households receiving assistance approximately doubling in each region (Exhibit 2–21), with growth lowest in the South (88 percent over the 21 years) and highest in the West (124 percent).

Exhibit 2–21 Between 1978 and 1999, both worst case needs and assistance rose most in the West.



Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1999 American Housing Survey.

In each region, the number assisted grew at faster rates than either all very-low-income renters or renters with worst case needs. Indeed, in the Northeast, the number of unassisted very-low-income renters with worst case needs fell by 10 percent over these two decades, even though the base of very-low-income renters rose by one-fourth. As a result, in the Northeast, the share of unassisted very-low-income renters having worst case needs fell from 54 percent in 1978 to 47 percent in 1999. In the Midwest and the South, the incidence of worst case needs in 1999 was essentially the same as in 1978, 43 percent and 45 percent, respectively. Although the number assisted grew more rapidly in the West than in the other three regions, its growth did not keep up with the relocation of very-low-income renters, and the West was the only region in which worst case needs rose more quickly than very-low-income renters, almost doubling from 750,000 to 1.4 million. As a result, in the West, the share of unassisted renters having worst case needs rose from 42 percent (the lowest regional incidence in 1978) to 48 percent, which was the highest regional rate in 1999.

The next chapter discusses losses in the stock of rental housing affordable to extremely-low-income households during the 1990s and shows how regional and subregional variations in shortages of affordable and available housing contributed to this regional shift in worst case needs.

Chapter 3

The Continuing Challenge: Severe and Worsening Shortages of Housing Affordable to Extremely-Low-Income Renters

A key factor contributing to the prevalence of worst case needs among extremely-low-income households is the shortage of units both affordable and available to them. Averaged across the nation, in 1999 there were at most 78 affordable units for every 100 extremely-low-income renter households needing them. Moreover, almost half of these most affordable units were occupied by renters with incomes *above* 30 percent of area median income, leaving fewer units both affordable and available to extremely-low-income renters. Shortages of affordable and available units were most pressing for extremely-low-income renters needing three or more bedrooms for their families. Across the United States, shortages of affordable housing were worst in cities and suburbs in the West and Northeast, the locations with the highest incidence of worst case needs among unassisted very-low-income renters.

Despite the welcome 1997–99 decreases in numbers of extremely-low-income renters and of households with worst case needs, shortages of housing affordable and available to extremely-low-income renters continued to worsen during this 2-year period. This occurred because losses in the number of units affordable to renters with extremely low incomes accelerated. In 1999, below-fair market rent (FMR) vacancy rates, like shortages of housing affordable and available to extremely-low-income renters, were lowest in suburbs in the Northeast and cities and suburbs in the West. These were also the locations where FMRs in 2002 were highest in relation to area median income (AMI). Although almost half the U.S. population, and three-fourths of the population outside metropolitan areas, lived where FMRs were affordable to incomes below 50 percent of AMI, in the tightest, most expensive, metropolitan housing markets FMRs equaled 30 percent of incomes that ranged as high as 76 percent of AMI.

Looking over a longer time frame, between 1985 and 1999 the number of units redefined by rising income limits as affordable to extremely-low-income renters almost equaled the added number of such renters, leaving the severe shortage of units affordable to renters with extremely low incomes essentially unchanged. Over the same period, however, a 3.8-million-unit increase in units affordable to incomes between 30 percent and 60 percent of AMI was almost three times as large as the number of renter households added in these income ranges. This added surplus of relatively affordable units allowed median rent burdens to fall between 1985 and 1999 for every income group except extremely-low-income renters. This analysis confirms the ongoing severe need for more housing affordable to renters with incomes below 30 percent of AMI, while demonstrating no comparable need for additional rental units affordable to families with incomes above 60 percent of AMI.

Shortages of affordable units are worst for renters with extremely low incomes

Extremely-low-income renters often pay excessive rent burdens because there are marked shortages of units with rents that they could afford. The extent of such shortages has

conventionally been measured by comparing numbers of renters below an income cutoff with numbers of units affordable[1] to households with incomes at or below that cutoff. As Exhibit 3–1 shows, in 1999 there were 8.5 million renters nationwide with incomes at or below 30 percent of AMI but only 6.7 million occupied or vacant-for-rent units with rents affordable to households with incomes at or below 30 percent of AMI. A "mismatch" ratio of 78 occupied or vacant affordable units for every 100 renters thus represents a shortage of 22 units per 100 extremely-low-income renters, or 1.8 million units.

Exhibit 3–1 1999 indicators of shortages of housing affordable to extremely-low-income renters

		Shortage of affordable units		"Mismatch" ratio
		Absolute	Per 100 renters	Affordable units per 100 renters
Renters with incomes 0–30% of AMI (in thousands)	8,513			
Units with rents 30% of 0–30% of AMI (in thousands)	6,681			
		-1,832	-22	78
Affordable units occupied by renters with income>30% AMI	3,111			
Units affordable and available to income 0–30% AMI	3,570			
		-4,943	-58	42

Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

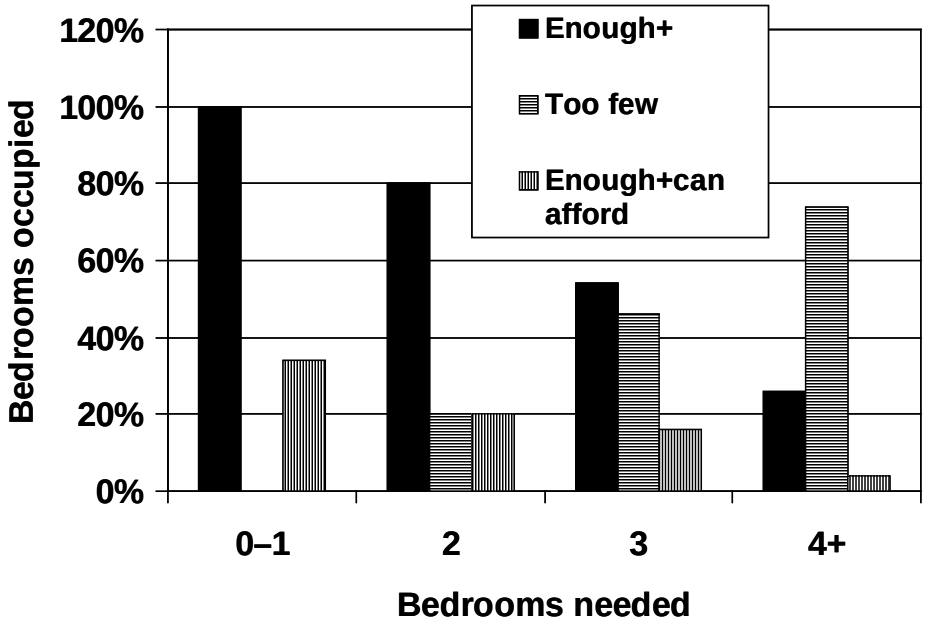
Is affordable housing available? As detailed in prior worst case reports, however,[2] such a national summary comparing all extremely-low-income renter households with all units affordable to incomes at or below the 30 percent of median cutoff has several weaknesses. First, it ignores the reality that many of the units with rents affordable to households with incomes at or below 30 percent of AMI—in 1999, 3.1 million of these units—were occupied by households with incomes above that cutoff, as the exhibit shows. The shortage of units that are both affordable and actually *available* to extremely-low-income renters is thus much more serious. Nationally, there were only 42 affordable units potentially available for every 100 renters with incomes below 30 percent of AMI, resulting in a shortfall of 58 units per 100 extremely-low-income renters, or 4.9 million units. As used here, "available" means either vacant for rent or already occupied by an extremely-low-income household.

[1] Because assisted renters must contribute 30 percent of their income for housing, this approach assumes that spending 30 percent of income for housing is "affordable." Using this approach for incomes ranging from 0 to 30 percent of AMI overestimates the number of units that are actually affordable to their occupants, however, because it includes units with rents affordable to incomes near 30 percent of AMI that are occupied by renters with much lower incomes. Appendix E shows alternative measures of the relationship between the affordable stock and extremely-low-income renters; a more conservative approach gives a mismatch ratio of 64.

[2] See "Measures of Housing Mismatch," HUD 1996, pp. 36–37.

Does the unit have enough bedrooms? A second real-life complication occurs because of mismatches by size: many units are either too small or too large for the households occupying them. When units are too small, the households living in them are crowded (and would not be allowed to use a voucher for the unit, even if they wished to); when units have more bedrooms than the occupant requires, they are not available for larger households that need more bedrooms. In 1999, almost two-fifths of the units with rents affordable to extremely low incomes were occupied by households that had more bedrooms than they needed, and many of these households paid less than 30 percent of their income for rent. As a result, as Exhibit 3–2 illustrates, more than half of the 1.3 million extremely-low-income families who needed three or more bedrooms had fewer bedrooms than they needed. And even fewer of the extremely-low-income families needing large units had ones that were both affordable and large enough. As the rightmost bar of the exhibit shows, only 4 percent of the extremely-low-income families needing four or more bedrooms had both enough bedrooms and a rent less than 30 percent of their income, as did only 16 percent of those needing three bedrooms. Thus, shortages of truly affordable and available housing are most pressing by far among large units affordable to extremely low incomes. Vacancy rates for extremely-low-rent units support this conclusion, since in 1999 average national rates ranged from 10 percent for units with zero to one bedroom down to only 5 percent for units with four or more bedrooms.

Exhibit 3–2 Most extremely-low-income renters needing three or more bedrooms do not have them, and even fewer can afford them.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

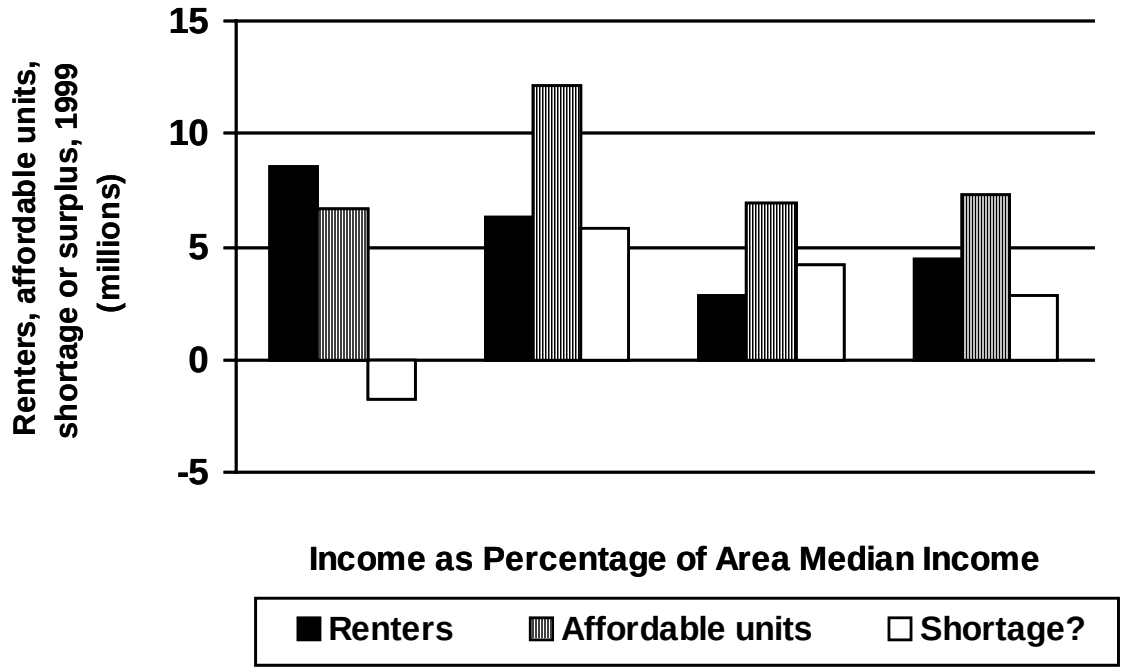
Are affordable available units in the right locations? Location is the final dimension that is not considered in any national comparison of affordable units against households needing them, even though it is critical to measuring local shortages and devising policies to reduce shortages and make truly affordable housing available where it is needed. Available

affordable units in North Dakota are useless to families needing them in California. The discussion below only hints at the importance of this factor by showing that shortages vary greatly by region and by city, suburb, or nonmetropolitan location within region. Once data from the 2000 decennial census become available, examining shortages at the level of state and local housing markets will be essential for understanding the local dimensions of the problem and developing appropriate and cost-effective policy responses.

Shortages of affordable housing only occurred for extremely-low-income renters

For federal rental assistance programs, "low" incomes are defined as incomes below 80 percent of AMI. Yet as Exhibit 3–3 illustrates, when the numbers of renters with incomes in four low-income ranges relevant to rental housing policy are compared to the numbers of units affordable to households with incomes in those ranges, an overall shortage of affordable rental housing in 1999 existed at the national level only for households with incomes below 30 percent of AMI. In every other low-income group, there were many *more* units than renters. In the income range of 31–50 percent of AMI, for example, there were 12 million affordable units but only 6.2 million renters, resulting in a 5.8 million unit surplus. In the 51–60 and 61–80 percent of AMI ranges, there were another 6.9 million more units than renters, as the exhibit shows.

Exhibit 3–3 *Only* for income below 30 percent of AMI is there a real shortage of affordable units.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

When renters in each income range are compared to units affordable to each range, below every income cutoff except 30 percent of AMI there are clearly *more* affordable units than

renters. In addition to detailing the number of renter households and affordable units in each income range in 1999, Exhibit 3–4 summarizes whether, cumulatively, there is a shortage or surplus of affordable units below each income cutoff shown. Because the 5.8 million surplus of units in the 31–50 percent of AMI range far outnumbers the 1.8-million-unit shortage of units affordable to incomes below 30 percent of median, nationally there were more units affordable below 50 percent of AMI than renters in that income category: 127 units per 100 very-low-income renters, or a cumulative surplus of 27 units per 100 renters.

Exhibit 3–4 Shortages of affordable housing are worst for renters with extremely low incomes.

			Shortage or Surplus			Shortage or Surplus		
Income range	Renter households	Affordable units	In range	Cumulative per 100 renters	Affordable and available units*	In range	Cumulative per 100 renters	"Mismatch" ratio
0-30% HAMFI	8,513	6,681	-1,832	-22	3,570	-4,943	-58	42
30.1-50%	6,243	12,092	5,848	27	7,907	1,664	-22	78
50.1-60%	2,787	6,948	4,161	47	4,916	2,129	-7	93
60.1-80%	4,483	7,274	2,790	50	6,925	2,442	6	106
80.1-100%	3,743	2,271	-1,472	37	4,523	780	8	108
100.1-120%	2,938	678	-2,259	25	3,172	234	8	108
120.1%+	5,299	1,073	-4,226	9	6,005	706	9	109
Total	34,007	37,017	3,011	9	37,017	3,011	9	109

* Units defined as available to any income range are those vacant or occupied by renters with income below the range's upper cutoff.

Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Because there are also more affordable units than renters in the ranges between 50 and 80 percent of AMI, the cumulative national surplus of units over renters becomes greater as units and renters are added in through this range. The surplus of affordable units compared to renters is greatest at and below incomes of 80 percent of AMI, where there were 150 units of affordable housing for every 100 renters. This wide surplus of 50 units per 100 renters occurs because in 1999 almost all rental units (89 percent of the U.S. total) had rents that are less than 30 percent of their area's low-income (80 percent of AMI) cutoff, whereas only 64 percent of renters had these "low" incomes. Below 60 percent of AMI, the highest rent level funded by the LIHTC program, the surplus of affordable units over renters—47 units per 100 renters—was almost as great as the surplus of 50 units per 100 renters with incomes below 80 percent of AMI.

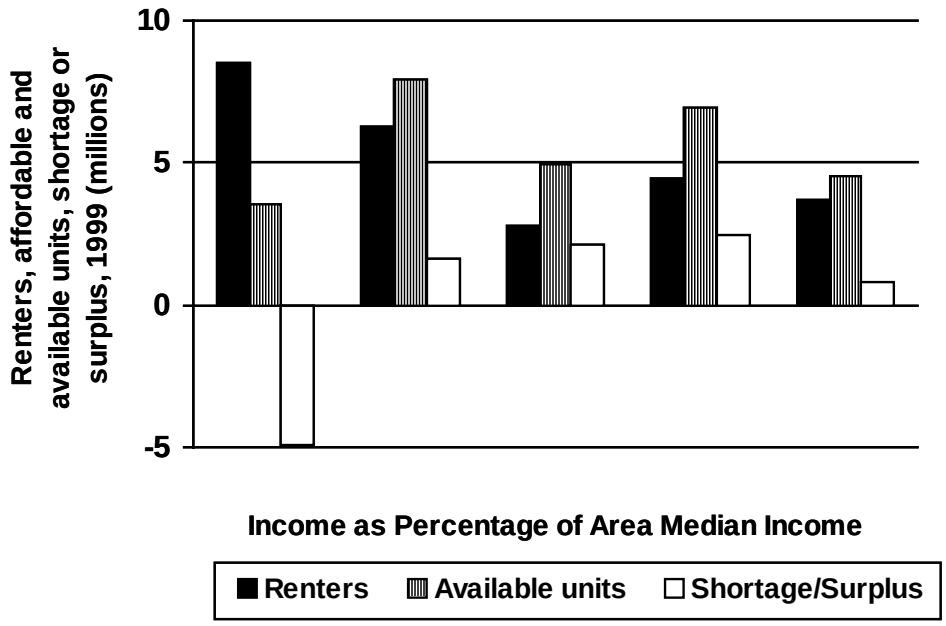
In income ranges above 80 percent of AMI, there were more renters in 1999 than units for which they would pay 30 percent of income. Therefore, as middle and upper income renters and units affordable to them are added in, the cumulative measure of affordable units per renters becomes less, dropping at incomes above 120 percent of AMI to a surplus of 9 units per 100 renters overall, which reflects the national rental vacancy rate. But the excess of renters over units within middle and upper income ranges does *not* mean that more units affordable above 80 percent of AMI are needed. Instead, almost all

renters with incomes above 80 percent are living in units with lower rents and paying less than 30 percent of their incomes for housing. In 1999, for example, the median renter with income 80–100 percent of AMI paid only 20 percent of income for gross rent.

Shortages of affordable and available housing also only occurred for extremely-low-income renters

As discussed in the previous section, nationally the shortage of units that are both affordable and available to extremely-low-income renters was decidedly worse than the shortage of affordable housing alone. Nonetheless, as Exhibit 3–5 illustrates, even when this more stringent standard of availability is considered, again nationally there is *only* a shortage of available units compared to renters for incomes below 30 percent of AMI. In sharp contrast to the deficit of 4.9 million units affordable and available to extremely-low-income renters, in each higher income range there are more affordable and available units than renters.[3]

Exhibit 3–5 Shortages of affordable and available units are worse but also occur only among units affordable to incomes below 30 percent of AMI.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

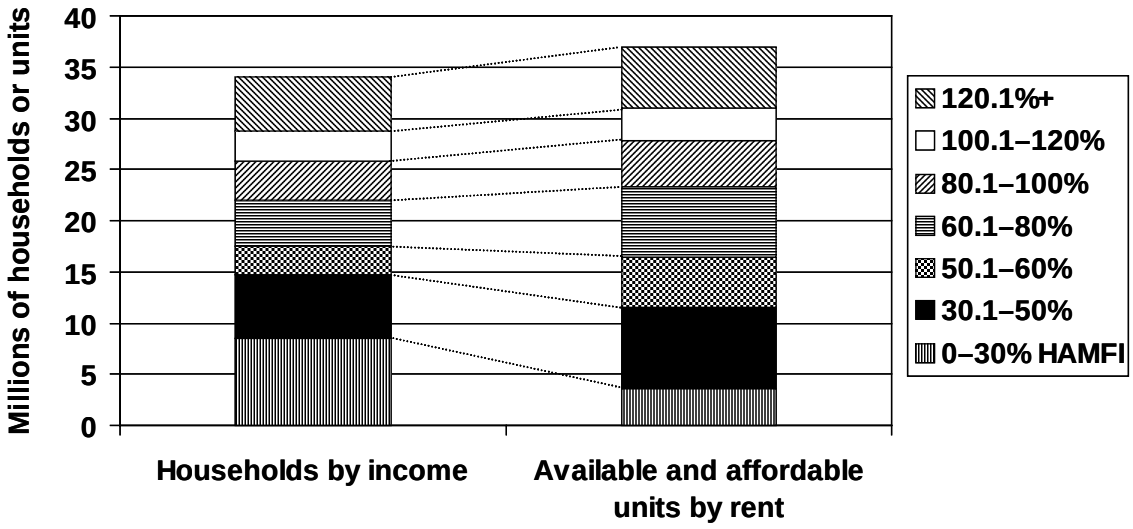
Because the shortage of 4.9 million units affordable and available to extremely-low-income renters is absolutely so much larger than the surpluses of units affordable and available to higher income ranges, cumulatively below 60 percent of AMI there are still

[3] A unit is defined as both affordable and available to a given income range if its rent is 30 percent of the incomes in that range and it is either vacant or occupied by a renter with income below the top of the range. For units in income ranges above 30 percent of AMI, available units thus include not only those occupied by renters in that income range, but also those with renters with incomes below the particular range.

fewer available units than renters (93 units per 100 renters or a modest shortage of 7 units per 100 renters, as shown in the right panels of Exhibit 3–4). Above 60 percent of AMI, however, even cumulatively there are not shortages of affordable and available rental housing. As Exhibit 3–4 details, at incomes above the 60 percent of AMI cutoff there were consistently more available and affordable units in the nation than renters. The mismatch ratios of 108 or 109 found consistently at rents affordable to incomes above 80 percent of AMI imply that national vacancy rates were a loose 8 or 9 percent among these higher rent units.

Exhibit 3–6 summarizes the severe mismatches between affordable and available units that face renters with extremely low incomes. Only for incomes below 60 percent of AMI were there nationally fewer affordable and available units than renters needing such units, with the shortage by far most pressing for renters with incomes below 30 percent of AMI. For incomes above 60 percent of AMI there were more units than renters, even though many of these renters live in less expensive units.

Exhibit 3–6 Only for incomes below 60 percent of AMI were there fewer affordable and available units than renters.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

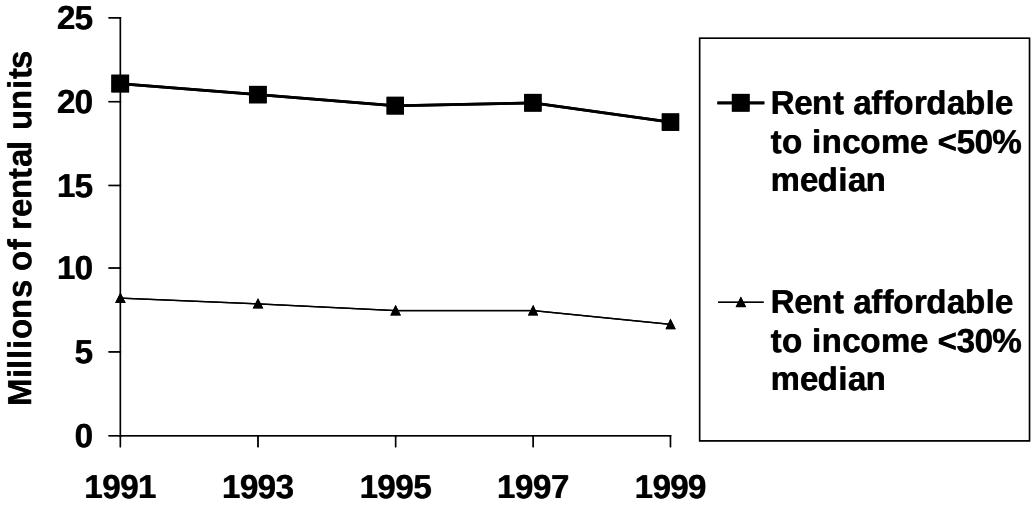
During the 1990s, numbers of affordable units dropped and shortages worsened

Between 1997 and 1999, the loss in number of units affordable to households with extremely low incomes accelerated, speeding a pattern of decline observed since 1991

Numbers of affordable units declined throughout the 1990s. As Exhibit 3–7 shows, units with rents affordable to incomes at 30 percent of 1999 AMI dropped by a highly significant 11

percent (–820,000) between 1997 and 1999.[4] This decline was almost double the previous 2-year record loss of 440,000 units (6 percent) in 1993–95. Compared to 1991, there were 1.6 million fewer units with rents affordable to incomes below 30 percent of AMI in 1999. Thus, almost one-fifth of these most affordable units had rent increases or were withdrawn from the rental inventory in the 8 years between 1991 and 1999.

Exhibit 3–7 Losses in units affordable to extremely-low-income renters accelerated between 1997 and 1999.



Source: HUD-PD&R tabulations of the 1991, 1993, 1995, 1997, and 1999 American Housing Surveys.

Reversing the slight 1995–97 increase, the number of units affordable to incomes between 31 percent and 50 percent of AMI also dropped between 1997 and 1999, falling by 340,000, or a marginally significant 3 percent. Taken together, in the 2 years between 1997 and 1999 the total number of units with rents affordable to incomes below 50 percent of AMI dropped by 1.2 million, a significant loss of 6 percent. And over the 8 years between 1991 and 1999, units with rents affordable to incomes at and below 50 percent of AMI declined by 2.2 million, a drop of 11 percent.

But numbers of units with rents affordable to incomes between 51 and 80 percent of AMI rose appreciably during the 1990s

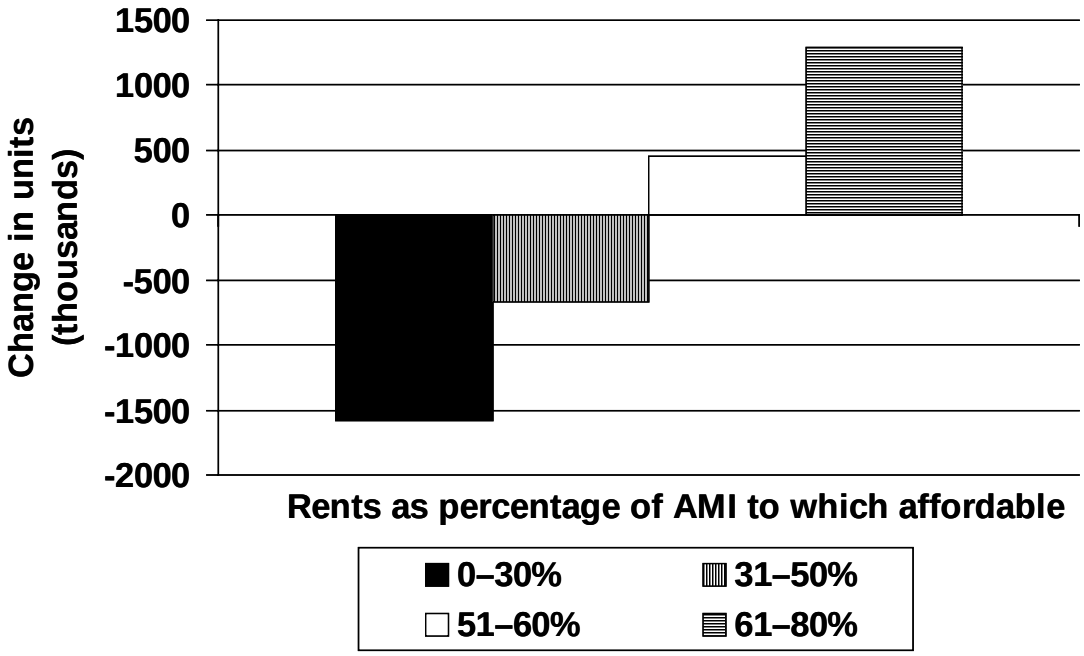
In contrast to declines in the numbers of rental units affordable to incomes below 30 percent and 50 percent of AMI, during the 1990s, numbers of units affordable to low-income renters rose by more than one-fifth. As Exhibit 3–8 summarizes, increases were greatest among units with rents affordable to incomes between 60 and 80 percent of AMI. Between 1991 and 1999, the number of units with rents in this range rose by 1.3 million,

[4] To evaluate recent changes in numbers of units by 1999 rent categories, as is most appropriate for assessing current trends in different rent ranges, these data categorize units by rent in relation to 1999 income limits adjusted only for inflation. They exclude variation in income limits over time due to changes in real income.

an increase of 22 percent. Almost half of this increase, 600,000 units, occurred in the 2 years between 1997 and 1999.

The number of units with rents affordable to incomes 51 to 60 percent of AMI also rose during the 1990s. This rent range added 460,000 units, an increase of 7 percent. Such net increases in numbers of units affordable to households with low incomes results from rent increases among existing units earlier affordable to incomes below 50 percent of AMI as well as from new construction.

Exhibit 3–8 During the 1990s, units affordable to very low incomes fell, whereas those affordable to low incomes increased in number.



Source: HUD-PD&R tabulations of the 1991 and 1999 American Housing Surveys.

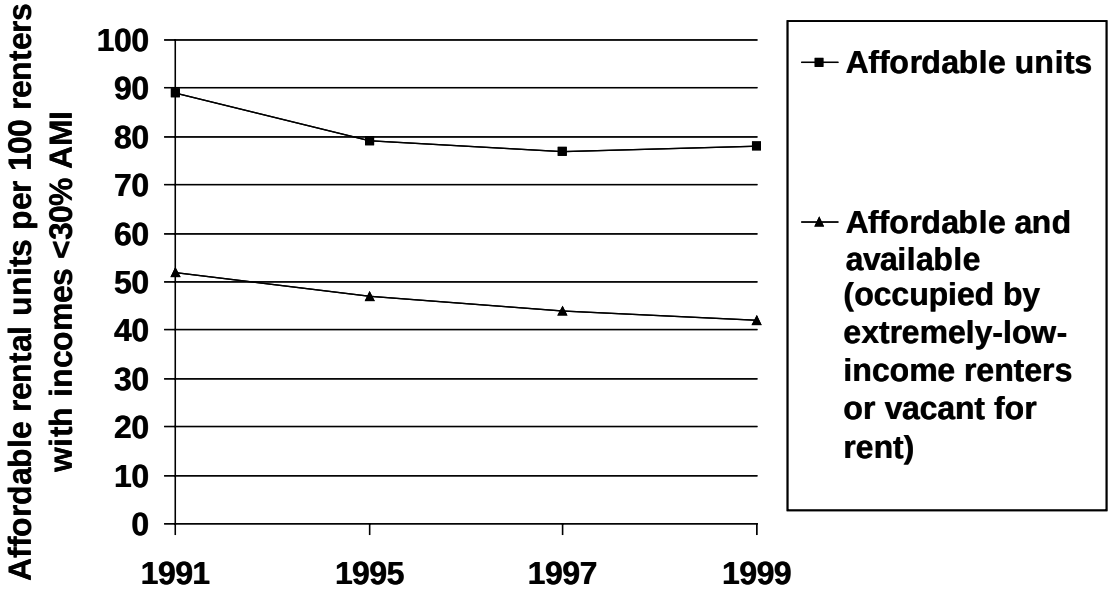
Units with rents affordable only to incomes above 80 percent of AMI also increased in number during the 1990s. Those with rents affordable to incomes 81–100 percent of AMI rose by 180,000, an increase of 9 percent. Units with rents affordable above HUD's adjusted median incomes increased markedly, although from a very small base. Over 1 million units were added between 1991 and 1999, representing growth of more than 70 percent in this highest rent range.

Despite the 1997–99 drop in numbers of extremely-low-income renters, shortages of rental housing both affordable and available to them worsened

As discussed in earlier chapters, the numbers of renters with extremely low incomes and with very low incomes fell between 1997 and 1999 because of income growth. The number of renters with incomes below 30 percent of the 1999 AMI dropped by 1.2 million, and this decrease was greater than the fall of 820,000 in numbers of units affordable to them. Because

the reduction in renters exceeded the fall in units, the relative shortage of affordable units eased slightly. Between 1997 and 1999, the "mismatch" ratio of affordable units per 100 extremely-low-income renters rose marginally from 77 units per 100 renters in 1997 to 78 units per 100 renters in 1999. Despite this slight improvement over the latest 2-year period, however, during the 1990s the ratio dropped by over one-tenth, falling from 89 units per 100 renters in 1991 (Exhibit 3–9).

Exhibit 3–9 During the 1990s, shortages of units affordable and available to extremely-low-income renters worsened.



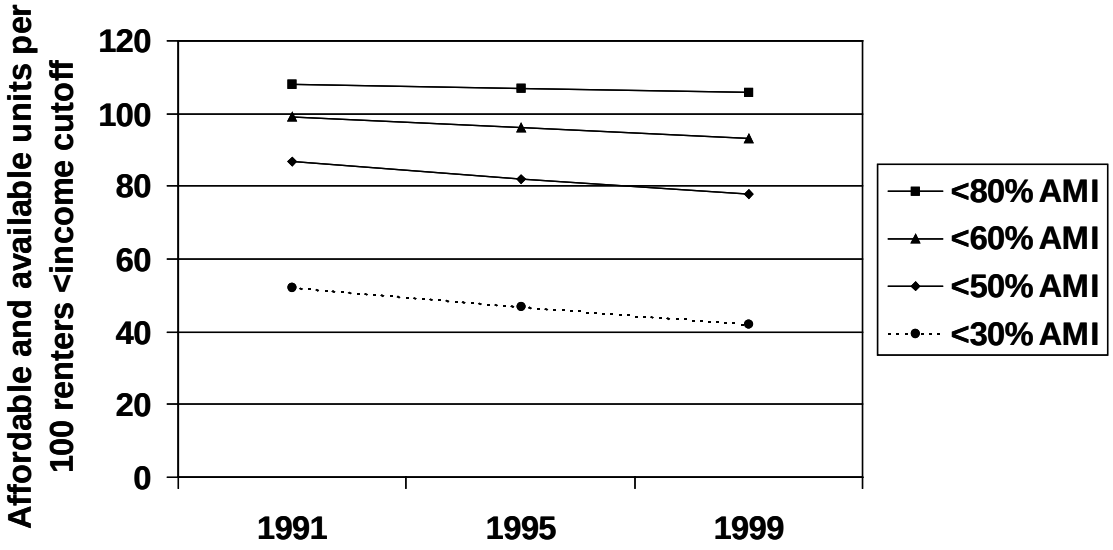
Source: HUD-PD&R tabulations of the 1991, 1993, 1995, 1997, and 1999 American Housing Surveys.

More seriously, between 1997 and 1999, the numbers of units both affordable to extremely-low-income renters *and available to them* (either vacant for rent or already occupied by extremely-low-income renters) continued to decline in number more rapidly than renters, as had occurred throughout the 1990s. By 1999, for every 100 renter households with incomes below 30 percent of AMI, there were only 42 units both affordable to and available for rent by them, a decrease from the 1997 ratio of 44 units per 100 households. This was well below the 47 units per 100 households observed in 1995. Moreover, it represented a 20-percent decline during the 1990s from 1991's 52 units per 100 households.

Because of this worsening shortage of units affordable and available to extremely-low-income renters during the 1990s, below *all* low-income cutoffs the numbers of units both affordable and available dropped compared to renters. But as Exhibit 3–10 shows, the decline of 20 percent in units affordable and available below 30 percent of AMI was greater than the relative declines below any other income limit. By 1999, for every 100 renter households with incomes below 50 percent of AMI, there were only 78 units both affordable to and available for rent by them, 10 percent below the 87 units per 100

households observed in 1991. Units affordable and available to incomes below 60 percent of AMI dropped from 99 to 93 units per 100 renters between 1987 and 1999, a drop of 6 percent. Among units affordable and available to incomes below 80 percent of AMI there was more stability, with the mismatch ratio declining only from 108 to 106 units per 100 renters.

Exhibit 3–10 From 1991 to 1999, affordable and available units per 100 renters dropped fastest (–20 percent) below 30 percent of AMI.



Source: HUD-PD&R tabulations of the 1991, 1995, and 1999 American Housing Surveys.

To summarize, when the changing numbers of affordable units are compared to numbers of renters in the income groups needing these units, as they should be to evaluate the net impact of recent changes in both supply and demand, the picture of shortages during the 1990s is one of continued deterioration, especially among units that are both affordable and available to extremely-low-income renters. Despite the welcome 1997–99 drop in numbers of renters with incomes below 30 percent of the 1999 AMI, during the 1990s shortages of affordable and available housing worsened most for this lowest income group.

Is increased low- and moderate-income rental supply needed?

These results confirm the persistence over time of severe needs for more units affordable to renters with incomes below 30 percent of AMI. But they reveal little, if any, need for additional units with rents affordable to incomes above 60 percent of AMI.

Recently, the Millennial Housing Commission (MHC) highlighted decreases between 1985 and 1999 in the number of rental units affordable to low- and moderate-income households.[5] The MHC interpreted these reductions as demonstrating "the importance of producing many more units for working families with incomes between 60 percent and 120 percent of area medians." But further analysis of their data does *not* demonstrate a need for increased housing supply affordable to renters in this income range.

The MHC did not consider two critical aspects of the 1985–99 changes.

- **Their focus on the 2.8-million drop in units affordable between 60 and 120 percent of AMI ignored the greater rise in more affordable units.** The MHC overlooked the fact that low-income renters may occupy units affordable to yet lower incomes, and often do so. As Exhibit 3–11 summarizes, the number of units affordable to incomes below 60 percent of AMI rose by 4.2 million, more than offsetting the drop in higher rent units. As the second line shows, cumulatively the number of affordable units rose below each of the MHC's income cutoffs.

- **The MHC spotlighted changes in supply without considering changes in demand.** While the cumulative supply of rental units affordable to low-income renters rose, the number of low-income renters grew more slowly. The 3.4-million increase in number of units affordable to incomes below 80 percent of AMI was almost half again as large as the 2.3 million renters added in these income ranges.

When both these factors are considered, the data reveal modest improvement for all renters with incomes above 30 percent of AMI. Rather than needing more units affordable to incomes between 60 percent and 120 percent of AMI, renters with these incomes paid lower shares of income for rent in 1999 than were paid by equivalent renters in 1985. As the last panel of the exhibit documents, over this 14-year period, median rent burdens fell for all renters except those with incomes below 30 percent of AMI. For renters with incomes over 80 percent of AMI, burdens dropped by 8 to 12 percent.

[5] *Meeting Our Nation's Housing Challenges*, report of the Bipartisan Millennial Housing Commission (2002), pp. 17–18 and Appendix table 2, p. 86. Rather than examining changes in units and renters classified by inflation-adjusted 1999 income limits, as done here, the MHC report measured changes between 1985 and 1999 in affordable rental units by adjusting income limits for both price inflation and real income growth. Because substantial real income growth raised income limits over this period, this approach reclassifies many units as more "affordable" in 1999 than they had been in 1985.

Exhibit 3–11 Changes in affordable units and renters by income in 1985 and 1999 show rent burdens increasing only for renters with incomes 0 to 30 percent of AMI.

	Income as percent of HUD-adjusted area median income						
	0–30%	31–50%	51–60%	61–80%	81–100%	101–120%	121%+
1985–99 change in units affordable to income limits in 1985 and 1999:							
-in each income category	396	2,700	1,060	(779)	(1,561)	(516)	571
-cumulative below upper income cutoff	396	3,096	4,156	3,377	1,816	1,300	1,871
1985–99 change in renters by income limits in those years:							
-in each income category	366	1,096	262	556	14	163	(729)
-cumulative below upper income cutoff	366	1,462	1,724	2,280	2,294	2,456	1,727
Median rent burden within income group—1985	57.2%	35.6%	29.3%	24.8%	21.9%	18.6%	14.2%
Median rent burden within income group—1999	57.6%	35.0%	28.2%	23.7%	20.2%	16.4%	12.5%
Percent change in rent burden	0.7%	-1.7%	-3.8%	-4.4%	-7.8%	-11.8%	-12.0%

Source: HUD-PD&R tabulations of the 1985 and 1999 American Housing Surveys done for the Millennial Housing Commission.

Shortages of affordable housing were worst in the suburbs and central cities of the West and Northeast

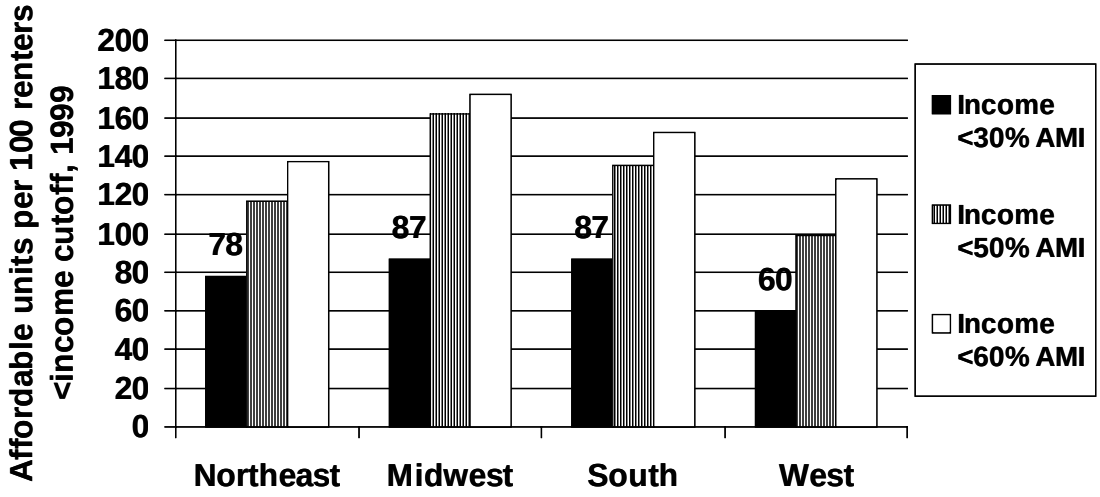
Among the four census regions, shortages of affordable housing were worst in the West

In 1999, shortages were worst in the West and Northeast at all rent levels. As Exhibit 3–12 summarizes, in every region of the country there were fewer units affordable to households with income below 30 percent of AMI than there were renter households with these incomes. In the West, there were only 60 affordable units per 100 extremely-low-income renters, well below the national average of 79 units per 100 renters. The West also had the lowest regional ratio of affordable housing units compared to renters with incomes below 50 percent of area median (99 units per 100 renters). For incomes below 60 percent of AMI, the West—like the nation—had more affordable units than renters, a ratio of 128 units per 100 renters. But this was the lowest regional average.

In the Northeast, there were 78 affordable units per 100 extremely-low-income renters, a regional shortage near the national average ratio of 79. The region had more affordable

units than renters with incomes below 50 percent of area median (117 units per 100 renters), but this ratio was below the national average of 127 units per 100 renters. Below 60 percent of AMI, there was a clear surplus, with 137 affordable units per 100 renters.

Exhibit 3–12 Shortages of affordable housing were worst in 1999 in the West and Northeast.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Shortages of affordable units were least pressing in the Midwest and South. Both regions had above-average numbers of affordable units compared to renters with incomes below 30 percent of median (87 units each per 100 extremely-low-income renters). Both regions had sizeable surpluses of affordable units compared to renters with incomes below 50 percent of AMI: 162 units per 100 very-low-income renters in the Midwest, and 135 units per 100 renters in the South. And the Midwest's surplus of units per renters at the low-income cutoff of 60 percent of AMI was, at 172, decidedly above the national average of 147 units per 100 renters.

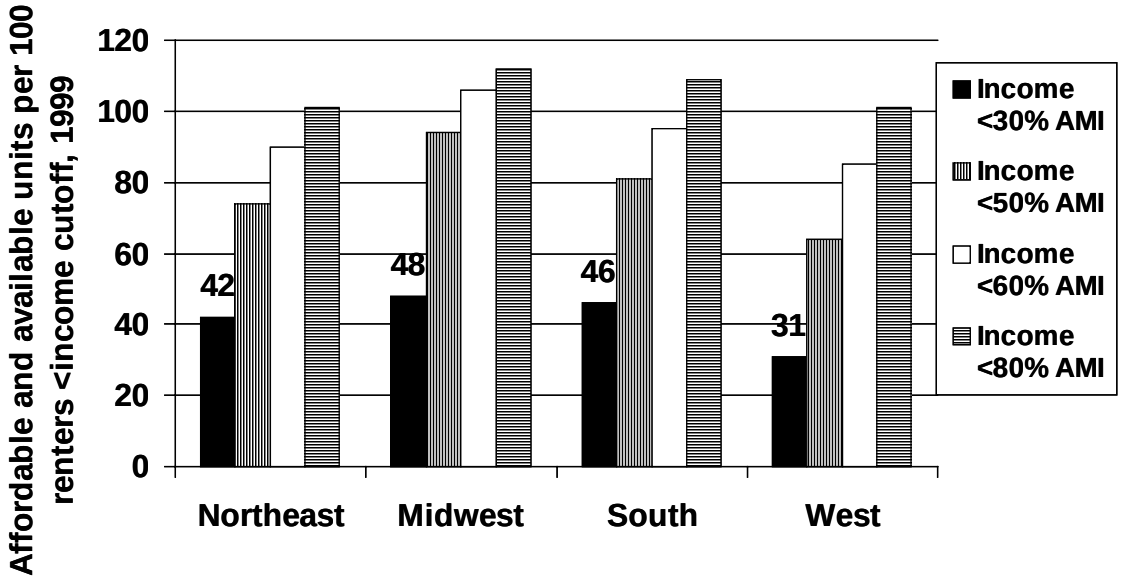
Shortages of housing affordable and available to extremely-low-income renters were also worse in the West and Northeast

As in the nation, in 1999 all four regions had more severe shortages of rental units both affordable *and available* to extremely-low-income renters, as well as to very-low-income renters. By this more realistic measure, shortages remained most pressing in the West and Northeast.

In the West, as Exhibit 3–13 details, for every 100 renter households with incomes below 30 percent of AMI there were only 31 units both affordable to them and available for rent by them, well below the national average of 42 units. And for every 100 renter households with incomes below 50 percent of AMI in the West, there were only 64 units both affordable and available for rent to them. Cumulatively, the West still had shortages

of affordable and available housing below 60 percent of AMI, with only 85 units per 100 renters. For incomes below 80 percent of AMI, however, the supply of affordable and available units roughly balanced demand, with 101 units per 100 renters.

Exhibit 3–13 Shortages of affordable and available housing were also worst for extremely-low-income renters in the West and Northeast.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

In the Northeast as in the nation, there were 42 affordable and available units for every 100 renter households with incomes below 30 percent of AMI. Below incomes of 50 and 60 percent of AMI, the Northeast had shortages slightly worse than the national averages, with 74 and 90 units per 100 renters, respectively. Like the West, the supply of available units affordable to incomes at 80 percent of AMI approximated demand, with 101 units per 100 renters.

Considering both affordability and availability, shortages were again *least* severe in the Midwest. In 1999, it had 48 affordable and available units for every 100 renter households with incomes below 30 percent of AMI, and 94 units for every 100 renter households with incomes below 50 percent of AMI. For incomes at 60 and 80 percent of AMI, there were not shortages, but instead more units than renters.

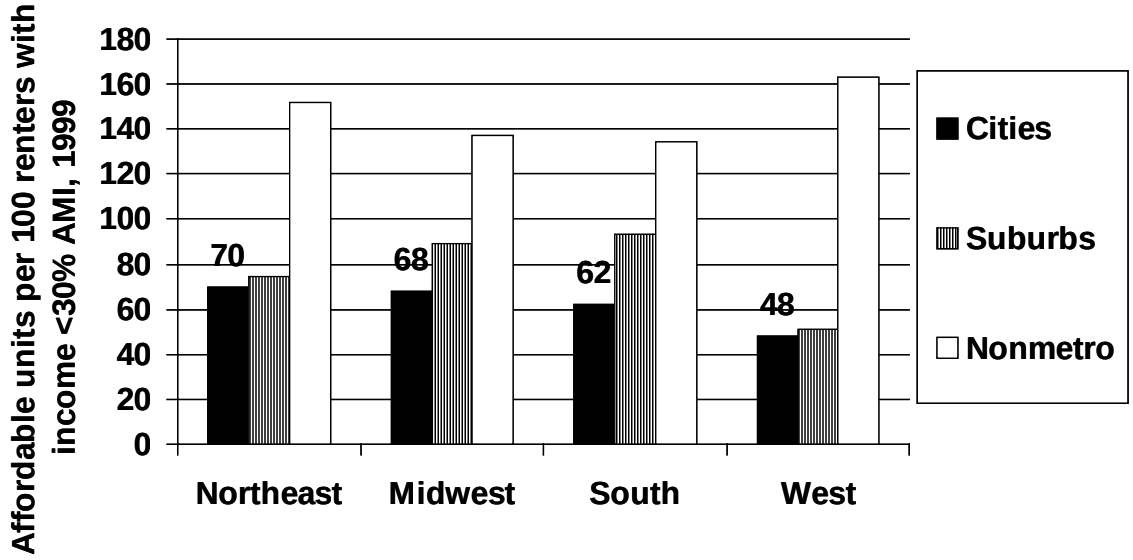
With 46 units per 100 renters, the South's shortage of available units affordable to renters with incomes below 30 percent of AMI was similar to that in the Midwest. At higher incomes, however, the ratios of affordable and available units per 100 renters were lower in the South than in the Midwest. For incomes at 80 percent of AMI, the surplus of available units was almost as large as in the Midwest, with 109 units per 100 renters.

Within regions, shortages of affordable housing were consistently worse in cities and suburbs; by contrast, outside of metropolitan areas there were surpluses of housing affordable to extremely-low-income renters in all four regions

As Appendix table A–15 documents for 1999, on average across the nation, shortages of affordable units were worst in central cities, where there were only 62 affordable units per 100 extremely-low-income renters. Shortages also characterized suburbs, where there were 75 affordable units per 100 extremely-low-income renters. These shortages within metropolitan areas stood in marked contrast to conditions outside metropolitan areas, where there were large surpluses of affordable units in every region. On average across the nation, there were 141 affordable units per 100 extremely-low-income renters in nonmetropolitan areas.

Within regions, Western cities and suburbs had the most severe shortages of units affordable to incomes below 30 percent of AMI, with 48 and 51 units per 100 renters (Exhibit 3–14). Shortages were almost as severe in cities in the South, with 62 units per 100 renters. Outside metropolitan areas, large *surpluses* of units affordable to incomes below 30 percent of AMI occurred in all four regions, varying from 134 units per 100 renters in the Midwest to 163 units per 100 renters in the West.

Exhibit 3–14 Within each region, shortages of housing affordable to extremely-low-income renters are worst in central cities.

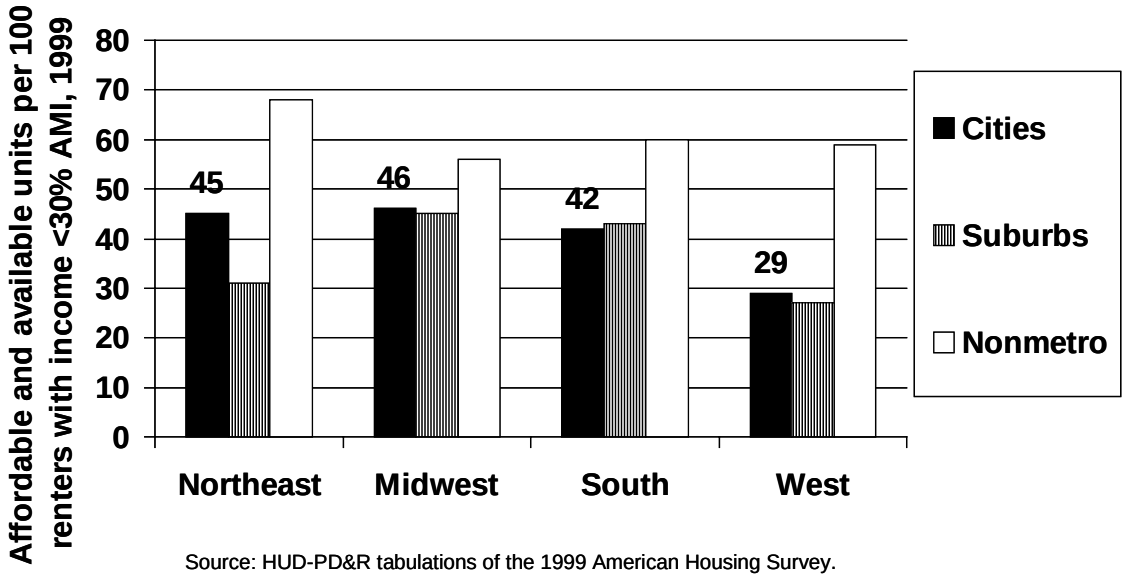


Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Shortages of rental housing both affordable and available to extremely-low-income renters were also more serious within metropolitan areas than outside them (Exhibit 3–15). Shortages of housing affordable and available to incomes below 50 and 60 percent of AMI were also markedly worse in metropolitan areas. When both the availability and affordability of units are accounted for, shortages were worse in suburbs than in cities both nationally and in most regions. This suggests that housing demand is higher relative to supply in suburbs than in cities, giving higher income households more incentive to live in lower rent units. Vacancy rates among units at different affordability levels clearly support this interpretation in both the Northeast and Midwest. In these two regions,

vacancy rates were consistently lowest in the suburbs, whereas the pattern is more mixed in the South and West. Absolutely, vacancy rates were lowest—generally at or below 5 percent—in northeastern suburbs and western suburbs and cities. This is consistent with the greater shortages of affordable and available housing, and the higher incidence of worst case needs, found there.

Exhibit 3–15 Except in the South, shortages of housing affordable *and available* to extremely-low-income renters were worst in the suburbs.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

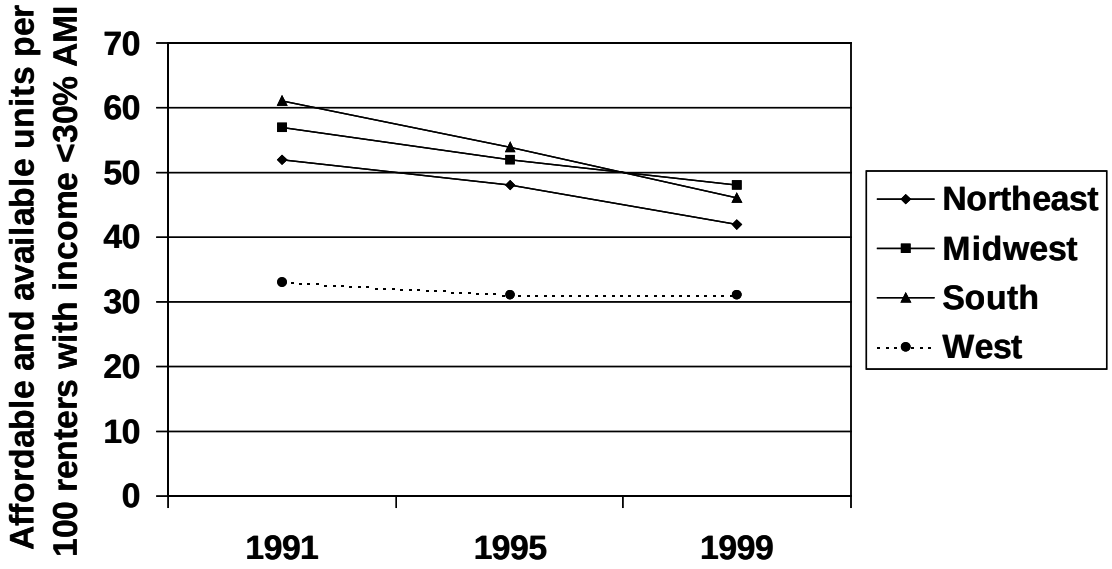
Although shortages of affordable and available housing were most severe in the West throughout the 1990s, during this period shortages worsened more in the three other regions

As Exhibit 3–16 shows, the 1991–99 deterioration in shortages of units affordable and available to incomes below 30 percent of AMI occurred in all regions outside the West. Conditions worsened most in the South, where the ratio of available units per 100 renters with incomes below 30 percent of AMI fell from 61 in 1991 to 46 in 1999. In both the Midwest and Northeast, units per renter declined by some 10 units during these 8 years, from 57 to 48 in the Midwest and from 52 to 42 in the Northeast. Although shortages of these units were clearly worst in the West throughout this period, the ratio of available units per 100 extremely-low-income renters was quite stable there, dropping only from 33 to 31 during the 1990s.

In the 1990s, the absolute shortages of units affordable to extremely low incomes worsened only in metropolitan areas. In both 1991 and 1999, shortages of affordable units compared to renters were worst in cities in all four regions. Ratios of affordable units per 100 renters were lowest in Western cities in both 1991 and 1999 (falling from 53 to 48 units per 100 renters). Over the decade, shortages worsened most in northeastern suburbs, where the ratio

plummeted from 89 to 74, and in midwestern cities, where the ratio fell from 83 to 68. Ratios of affordable units per 100 renters also fell in metropolitan areas for incomes below 50 percent and 60 percent of AMI.

Exhibit 3–16 Shortages of affordable housing available to extremely-low-income renters were worst in the West during the 1990s but worsened more elsewhere.



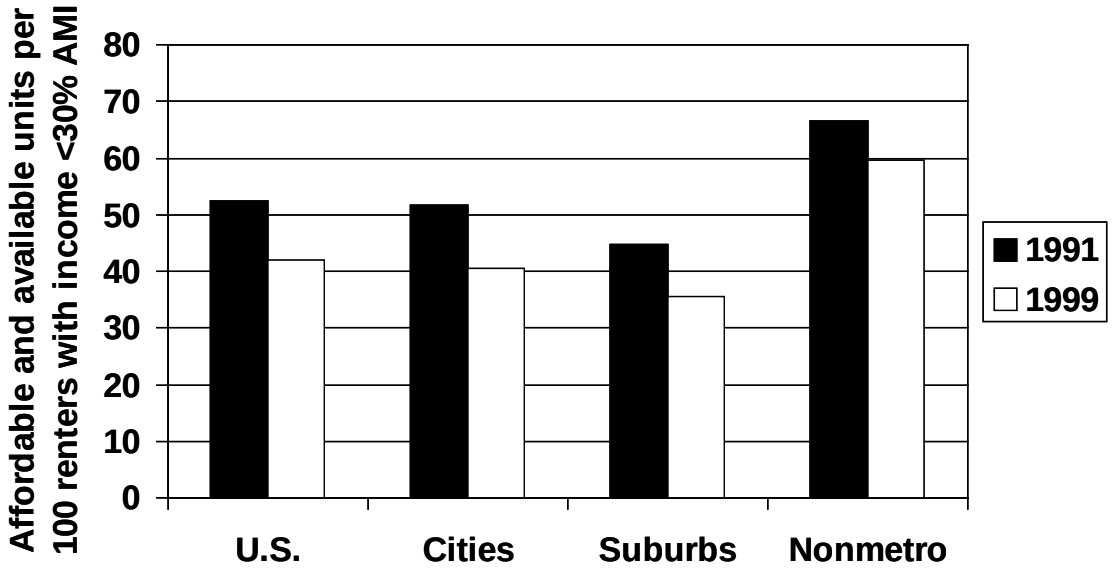
Source: HUD-PD&R tabulations of the 1991, 1995, and 1999 American Housing Surveys.

Outside of metropolitan areas, by contrast, there was nationally a surplus of 130 units per 100 extremely-low-income renters in 1991, and by 1999 that surplus had grown to 141 units per 100 renters. The extent of this nonmetropolitan surplus widened in all regions except the South, shooting up most in the Northeast (from 103 to 152). Surpluses of units compared to renters were even larger in 1991 for nonmetropolitan units affordable to incomes below 50 percent and 60 percent of AMI (161 and 157 units per 100 renters, respectively) and also widened over the decade. The increases were greatest in the Midwest and Northeast, suggesting overproduction there of units in this rent range.

During this period, as Exhibit 3–17 summarizes, shortages of housing affordable and available to incomes below 30 percent of AMI worsened both within and outside metropolitan areas. Shortages were worst in the suburbs in both 1991 and 1999, but the supply relative to demand deteriorated most quickly in central cities and least in nonmetropolitan areas. As Appendix table A–16 details, the central-city fall was greatest in southern and midwestern cities. Among units in higher rent ranges, ratios of units per renters fell less dramatically during the 1990s, but shortages were also greatest in suburban parts of metropolitan areas. At all rent levels and in all regions, shortages of affordable housing were least serious outside of metropolitan areas.

This information on increasing shortages in metropolitan areas in all regions shows clearly that affordable housing became even less available during the 1990s for those extremely-low-income and very-low-income households who did not receive rental assistance. To evaluate the availability of units for those who receive vouchers, an examination follows of the supply of units with rents below local fair market rents (FMRs).

Exhibit 3–17 Shortages of affordable housing available to extremely-low-income renters worsened most in metropolitan areas 1991–99.



Source: HUD-PD&R tabulations of the 1991 and 1999 American Housing Surveys.

Units with rents below local FMRs are least available in metropolitan areas in the West and Northeast; in such locations, FMRs also tend to be high in relation to area median incomes

Vacancy rates for units with rents below FMRs are lowest for units with three or more bedrooms, especially in the West and Northeast

In 1999, some 22.4 million rental units, three-fifths of the rental stock, had rents at or below local FMRs.[6] One-fifth of this number were inadequate, although only 4 percent were severely inadequate. Another 6.4 million units had rents between the FMR and 120 percent of

[6] Because FMRs for different areas are defined as the 40th (or in some locations, 50th) percentile of the rents in nonluxury adequate units occupied by recent movers, some expect that the share of the rental stock falling below the FMR must equal either 40 or 50 percent by definition. This, however, is unlikely to be the case. Units with long-time occupants frequently have below-average rents, as do inadequate units. Moreover, based on program experience that landlords charge a premium for larger families and that such families have the most difficulty finding units eligible for participation in the program, FMRs for three-bedroom and larger units are set at above-normal market relationships for any given payment standard level (e.g., 40th or 50th percentile). These estimates of below-FMR vacancies from the 1999 AHS are based on 1995 FMRs updated only for inflation. Nationally, the increase in average FMRs between 1995 and 1999 was quite similar to inflation during that period as measured by the Consumer Price Index.

the FMR. Because HUD can approve payment standards as high as 120 percent of FMR (or even higher) in tight markets or areas with particularly high rents, this means that almost two-thirds of the rental stock is adequate and potentially available for use with vouchers. Yet agencies that administer vouchers have reported that increasing numbers of searchers with vouchers are unable to find units that qualify. This may occur in part because vacancy rates among units with below-FMR rents are low in the West and Northeast, particularly among the multibedroom units needed by families. As Exhibit 3–18 shows, in 1999, vacancy rates were 10 percent or higher for all unit sizes except large units in the Midwest and South. In the West and Northeast, however, total vacancy rates among units with rents below local FMRs were only 5 percent and 6 percent, respectively, implying that this submarket is quite tight. And vacancy rates there were particularly low—only 3 or 4 percent—among units with three or more bedrooms.

Exhibit 3–18 Vacancy rates for units with below-FMR rents were low in the West and Northeast in 1999, particularly among units with three or more bedrooms.

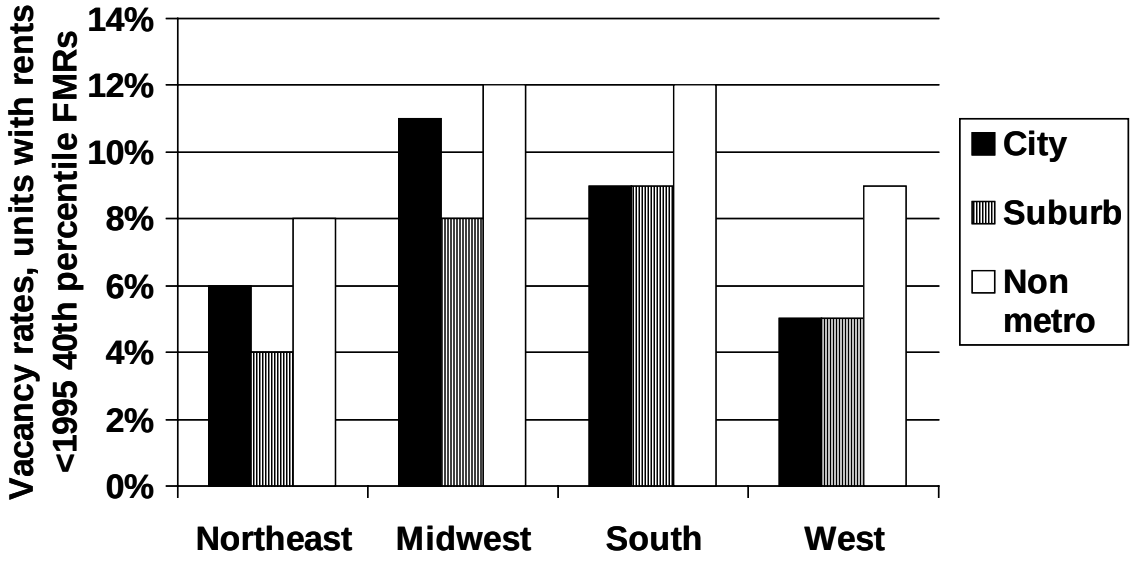
	Northeast	Midwest	South	West	U.S.
Units with below-FMR rents (in thousands)	5,460	4,363	7,099	5,469	22,390
% vacant	6%	11%	10%	5%	8%
0–1 bedrooms	2,141	1,394	1,684	1,836	7,056
% vacant	7%	12%	12%	7%	9%
2 bedrooms	2,069	1,819	3,074	2,181	9,143
% vacant	6%	11%	11%	5%	8%
3+ bedrooms	1,250	1,149	2,341	1,452	6,192
% vacant	4%	7%	8%	3%	6%

Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

In terms of location within regions, vacancy rates for units with below-FMR rents were lowest in suburbs and cities in the West and the Northeast (Exhibit 3–19). In 1999, below-FMR vacancy rates were lowest in northeastern suburbs (4 percent) and also quite low (5 percent) in western suburbs and cities. In every region, suburbs had the lowest below-FMR vacancy rates. Below-FMR vacancy rates were highest, a very loose 12 percent, in the nonmetropolitan parts of the South and West.

Thus the locations with lowest vacancy rates among units with rents below local FMRs were also those where shortages of housing both affordable and available to extremely-low-income renters were worst. These are also the locations where very-low-income renters were most likely to have worst case problems.

Exhibit 3–19 In 1999, below-FMR vacancy rates were lowest in suburbs and cities in the West and Northeast.



Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Across the United States, FMRs were affordable to incomes ranging from 35 to 76 percent of area median income in 2002

These vacancy rates imply that in 1999 there were serious shortages of below-FMR units in metropolitan areas in the West and Northeast.[7] In all locations, units with three or more bedrooms were most needed. Needs for additional units were less pressing in other locations and for units with two or fewer bedrooms.

At present, the two federal programs subsidizing production or rehabilitation of rental units are the low-income housing tax credit (LIHTC) and HOME. HOME units must have rents that are the lesser of the FMR or rents affordable to incomes at 65 percent of AMI. Thus additional units produced with HOME funds should always augment the supply of below-FMR units. Rents for the LIHTC must, at the decision of the owner, be affordable to incomes at 50 percent or 60 percent of AMI, but they are not required to be at or below the FMR. In locations where FMRs are affordable to incomes below 50 percent of AMI, LIHTC units are not likely to increase supplies of units with below-FMR rents.

[7] The analysis uses FMRs based on the 40th percentile of the distribution of rents in nonluxury, adequate units occupied by recent movers. In response to evidence of tightening supply, in 2001 HUD raised FMRs to the 50th percentile of this rent distribution in 39 tight metropolitan markets.

Exhibit 3–20 Across U.S. MSAs, 2002 FMRs were affordable to very different incomes as a percentage of area median income.

MSAs with highest ratios*	% of HAMFI where 2-bedroom FMR = 30% of income
Barnstable-Yarmouth, MA	76.3%
San Francisco, CA PMSA	76.3%
Santa Cruz-Watsonville, CA	74.0%
Yuma, AZ	72.5%
New York, NY PMSA	71.3%
San Jose, CA PMSA	71.2%
Santa Barbara-Santa Maria-Lompoc, CA	70.5%
Miami, FL PMSA	70.4%
Atlantic-Cape May, NJ PMSA	69.1%
Vallejo-Fairfield-Napa, CA PMSA	68.3%
Santa Rosa, CA PMSA	68.0%
Oakland, CA PMSA	67.7%
Chico-Paradise, CA MSA	67.2%
Medford-Ashland, OR MSA	67.1%
Jersey City, NJ PMSA	67.0%
San Diego, CA MSA	66.8%
San Luis Obispo-Atascadero-Paso Robles, CA MSA	66.6%
Nassau-Suffolk, NY PMSA	66.2%
Vineland-Millville-Bridgeton, NJ	66.1%
El Paso, TX MSA	65.6%
Dutchess County, NY PMSA	65.4%

* excludes MSAs in Puerto Rico

The relationship between local FMRs and AMIs varies greatly across the United States.[8] As Exhibit 3–20 illustrates, in some MSAs the 2002 FMRs are affordable to incomes as high as 76 percent of AMI. The MSAs where FMRs are only affordable to incomes above 65 percent of AMI are predominantly located in California and around New York City. In other MSAs, however, mainly ones in the Midwest, FMRs equal 30 percent of income for incomes as low as 35 percent of AMI.

[8] The ratio of FMR to AMI represents the percentage of the AMI at which a two-bedroom FMR equals 30 percent of the income of a three-person household. If the local payment standard is set at the FMR, this ratio may be interpreted as the point in the local income distribution above which a family with a voucher would no longer receive a rental subsidy.

Exhibit 3–20 (continued)

MSAs with lowest ratios	% of HAMFI where 2-bedroom FMR = 30% of income
Wichita, KS MSA	40.2%
Wausau, WI MSA	39.9%
Anniston, AL MSA	39.8%
Owensboro, KY MSA	39.8%
Decatur, IL MSA	39.3%
Dothan, AL MSA	39.2%
St. Joseph, MO MSA	39.2%
Appleton-Oshkosh-Neenah, WI MSA	39.0%
Des Moines, IA MSA	38.9%
Huntsville, AL MSA	38.9%
Topeka, KS MSA	38.7%
Lincoln, NE MSA	38.7%
Bloomington-Normal, IL MSA	38.6%
Columbia, MO MSA	38.5%
Decatur, AL MSA	38.4%
St. Louis, MO-IL MSA	38.2%
Springfield, IL MSA	38.1%
Dubuque, IA MSA	37.9%
Rochester, MN MSA	37.9%
Sheboygan, WI MSA	37.0%
Cedar Rapids, IA MSA	34.5%

Source: Calculated from 2002 official FMRs and 60 percent of HAMFI used to define LIHTC Difficult Development Areas.

Almost half the U.S. population, and three-fourths of the nonmetropolitan population, lived where FMRs were affordable to incomes below 50 percent of AMI

The distribution of U.S. population in relation to the ratio between FMRs and AMI (Exhibit 3–21) shows that, in 2002, two-bedroom FMRs were on average affordable to incomes around 50 percent of AMI. Approximately half of the U.S. population (54 percent) lived where FMRs were affordable to incomes higher than 50 percent of AMI, and 46 percent where FMRs were affordable to income below 50 percent of AMI.

FMRs tended to be higher in relation to AMI in metropolitan areas. In MSAs, 39 percent of the population lived where FMRs were affordable to incomes below 50 percent of AMI, while in nonmetropolitan locations, almost three-fourths of the population lived where FMRs were affordable to incomes below 50 percent of AMI. Fully four-fifths of the U.S. population, and 90 percent of the nonmetropolitan population, lived in locations where FMRs were affordable to incomes at or below 60 percent of AMI.

Exhibit 3–21 Almost one-half of the U.S. population, and three-fourths of the nonmetropolitan population, lives where 2002 FMRs are affordable to incomes below 50 percent of AMI.

% of HAMFI where 2-bedroom FMR = 30% of income	Percentage of population living where FMRs are < %AMI cutoff at left:		
	Metropolitan	Nonmetropolitan	U.S. total
75%	98%	99%	98%
70%	92%	97%	93%
65%	87%	95%	88%
60%	77%	92%	80%
55%	61%	84%	66%
50%	39%	74%	46%
45%	17%	52%	24%
40%	3%	27%	7%
35%	0%	4%	1%
30%	0%	0%	0%
Population, 1990	229,192,634	56,240,403	285,433,037

Source: Calculated from 2002 official FMRs and 60 percent of HAMFI used to define LIHTC Difficult Development Areas.

Northeastern and western MSAs had the highest FMRs in relation to AMI, while in MSAs in the South and Midwest, FMRs were almost as low in relation to AMI as they were outside of metropolitan areas

In 1999, before the 2001 increase in FMRs, the distribution of rental units also showed that FMRs were low relative to AMIs in nonmetropolitan areas. And when regional distributions are distinguished, FMRs in metropolitan areas in the South and Midwest were almost as low as nonmetropolitan FMRs.

FMRs were highest in relation to AMI in MSAs in the Northeast and West. As Exhibit 3–22 shows, in the Northeast, there were no rental units in MSAs with FMRs affordable to incomes below 50 percent of AMI, and in the West only 11 percent of rental units were in MSAs with such affordable FMRs. In the Northeast, one-third of rental units were in MSAs with FMRs affordable to incomes above 65 percent of AMI, and almost half were in MSAs with FMRs affordable above 60 percent of AMI. In the West, one fifth (22 percent) of rental units were in MSAs with FMRs affordable to incomes above 65 percent of AMI, and two-fifths were in MSAs with FMRs affordable above 60 percent of AMI.

In metropolitan areas in the South and Midwest, by contrast, over half (55 percent) of rental units were in areas where FMRs were affordable to incomes below 50 percent of AMI, and almost all (93 percent) were located where FMRs were affordable below 60 percent of AMI. In nonmetropolitan areas (which are predominantly also in the South and Midwest) the distribution of FMRs in relation to AMI was essentially the same as in southern and midwestern metropolitan areas: again 55 percent of rental units were in areas where FMRs

were affordable to incomes below 50 percent of AMI, and even more (95 percent) were located where FMRs were affordable below 60 percent of AMI.

Exhibit 3–22 FMRs are high in relation to AMI in MSAs in the Northeast and the West, and rental vacancy rates are lowest in areas with high FMRs.

Locations where FMR = 30% income at % of AMI	Metropolitan areas by region: Northeast	West	South and Midwest	Nonmetro areas	U.S. total
0–50%					
share of location stock	0%	11%	55%	55%	39%
% vacant	NA	10%	14%	16%	12%
51–60%					
share of location stock	55%	46%	38%	40%	40%
% vacant	9%	8%	13%	15%	11%
61–65%					
share of location stock	13%	21%	7%	5%	10%
% vacant	9%	6%	11%	11%	9%
> 65%					
share of location stock	32%	22%	0%	0%	11%
% vacant	4%	5%	NA	NA	5%
All units					
share of location stock	100%	100%	100%	100%	100%
% vacant	7%	7%	12%	15%	10%

Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

In each type of location, vacancy rates were lowest where FMRs were highest in relation to AMI

Examining locations in terms of their FMR-AMI ratios reveals that vacancy rates were lowest in the housing markets where FMRs were highest in relation to AMI. As discussed above, metropolitan areas in the Northeast and West had the most severe shortages of housing affordable and available to extremely-low-income renters and the lowest vacancy rates among units with rents below the FMR. As the bottom row of Exhibit 3–22 shows, total rental vacancy rates were also lowest there in 1999.

In each of the FMR-AMI ranges identified, vacancy rates are lower in MSAs in the North and West than they are in MSAs in the South and Midwest. But only in the highest range shown, where FMRs are affordable only at 65 percent or more of the local AMI, are vacancy rates very tight, averaging 5 percent or less. Although this regional summary should be investigated further with data from the 2000 census for individual MSAs and nonmetropolitan counties, this relationship suggests strongly that needs for additional rental supply, particularly units with rents below the FMR or affordable to extremely-low-income

renters, are greatest where FMRs are highest in relation to AMI. Although particular locations may differ from these subregional averages, the fact that FMR-AMI ratios are not high in nonmetropolitan locations and in MSAs in the South and Midwest, combined with uniformly high vacancy rates in these places, suggests that additional rental supply is less needed there.

Summary

To conclude, continuing and worsening shortages of units affordable without rental assistance to the income groups most likely to have worst case problems imply that the welcome reduction in worst case needs observed between 1997 and 1999 could all too easily prove temporary. Continued progress depends on whether income growth can continue to exceed rent increases. In view of the worsening shortages of units affordable and available to extremely-low-income renters, rents at the lower end of the rent distribution might well again rise at above-average rates of growth. If so, any slowing of income growth among very-low-income renters, especially in economic downturns, could easily cause worst case needs to rise again.

Close examination suggests that housing problems, and needs for additional affordable rental units, are particularly pressing in metropolitan areas in the Northeast and West. These locations not only have the highest prevalence of worst case needs among very-low-income renters, but they also have the most severe shortages of housing affordable and available to extremely-low-income renters, together with very low vacancy rates among all rental units and among units with rents below the local fair market rent.

Chapter 4

Measuring Housing Needs: Considerations For Future Research

Housing affordability remains a serious problem for millions of Americans. This report tracks severe affordability problems by presenting consistent estimates of worst case needs for rental assistance over the past two decades. This indicator counts unassisted very-low-income renters paying more than half of their reported income on housing or living in severely inadequate housing. The concept of worst case needs was developed during the 1980s to estimate the number of households eligible at that time for federal preferences in admission to public housing or Section 8 rental assistance. The estimates shown here rely on data available from the biennial national American Housing Survey (AHS) sponsored by HUD.

Estimates of the numbers of households with worst case needs were first made in the mid-1980s, and information on the incidence of these severe housing problems by household income informed deliberations on the Cranston-Gonzalez National Affordable Housing Act of 1990. In the FY 1991 appropriation bill, the Senate Appropriations Committee instructed HUD to report annually to Congress on worst case housing needs. The Committee also strongly urged HUD to develop a strategic plan that "outlines how the Federal Government, despite limited fiscal resources, can help to eliminate or substantially reduce the number of families and individuals … in this worst case needs category."[1]

Over the past decade, HUD's reports to Congress on worst case needs have raised awareness of the extent and severity of housing affordability problems among very-low-income renters, and of their concentration among extremely-low-income renters. This information has helped inform program and policy changes that more explicitly target assistance to extremely-low-income households. In 1998, federal preferences were replaced by requirements for targeting three-fourths of housing vouchers to extremely-low-income renters while encouraging better income-mixing in public housing and assisted projects. These policy changes have weakened the correlation between households with worst case needs and households qualifying for rental assistance. This is one of several reasons to consider expanding or otherwise revising the indicators of severe housing problems regularly tracked by HUD.

There are other reasons to expand the scope of measures of housing needs. Increasing affordability problems among very-low-income renters reporting housing assistance and among very-low- and low-income owners, both groups excluded by definition from worst case needs, reinforce the desirability of developing and regularly assessing meaningful measures of housing need that include *all* households rather than only unassisted very-low-income renters. In addition, because the national housing goal reaffirmed by Congress in 1990 is that "every American family be able to afford a decent home in a

[1] Senate Report 101–474, p. 37.

suitable environment," it would be desirable for measures of housing need also to consider the external social environment that comes with the housing and is a function of its location, such as access to educational and employment opportunities.

Given limited federal resources and a desire to increase the effectiveness of housing assistance programs, it is important to clearly define and measure the needs that federal housing programs should address. The current worst case housing needs measure is one of many possible approaches to the complex analytical exercise of measuring housing needs and affordability. The measure was intended to capture the number of unassisted income-eligible renters with the most severe housing problems, and thus the most pressing needs for rental assistance. But it has its limitations. Any single measure of housing affordability—particularly a point-in-time measure—can be misleading because there are many different types of households, and their relative needs will vary as their circumstances change. There is also the question of how to define "affordability." Whereas the current measure of worst case needs was based on program parameters in the early 1980s, including the expectation that even poor households can contribute 30 percent of their income to housing, in reality there are no simple answers to the questions of what level of resources different households can "afford" to spend on housing, how household income should be measured, and what housing and neighborhood quality standards should be set. Moreover, the intersection of specific housing and neighborhood problems that are most severe and should receive priority may well vary with family type and specific housing program.

Limitations of the worst case needs measure

Because the worst case needs concept was developed based on program parameters for rental assistance programs in the early 1980s, it focuses only on the renter households then eligible for preference in those programs. Estimates of qualifying households thus exclude not only very-low-income renters who report already receiving housing assistance—a self-identification that is not always accurate—but also higher income renters and all owners regardless of their housing problems. Because the former federal preferences no longer govern admission to HUD's rental housing programs, the rationale for grouping severe rent burdens and severely inadequate housing together in a single measure is less clear. The estimates of worst case needs prepared from AHS data are also flawed because of known and unknown data problems.

Conceptually, the worst case needs measure is arguably somewhat arbitrary in combining rent burden and poor physical conditions, housing problems that suggest quite different policy responses. Housing with severe physical inadequacies, a composite AHS measure developed to indicate that rehabilitation would not be cost-effective, forms a small and declining proportion of total worst case need estimates, hovering recently below 500,000 units. Some jurisdictions offer local preferences to households that are crowded, but this housing problem is not included in the current measure. The primary component of current worst case needs estimates, by far, is paying more than half of gross income for housing. This arguably is not strictly a housing problem but an indirect measure of poverty and/or high rent levels. Rent burden can vary for reasons other than the

relationship between incomes and market rents. Some poor households, especially those who believe they are temporarily poor, may prefer to pay more of their limited income for rent to obtain better housing or neighborhoods. High rent burden may then reflect housing that scores better on such location-related dimensions.

On the measurement side, each of the variables used to produce the worst case needs estimate is subject to some degree of measurement error. These variables (income of renters, rent levels, physical conditions of housing, and receipt of government assistance) have limitations related to the imprecision associated with self-reported survey instruments. Deriving reliable income data from surveys is problematic because of the underreporting of income, which in the AHS has been estimated to be as high as 14 percent.[2] So while the AHS provides valuable information on the state of housing in the country and consistent changes in housing problems over time, it may give an erroneous picture of income levels. As a result, the number of households with very low incomes and the number with excessive rent burdens may both be somewhat overstated by AHS data.[3] On the other hand, the exclusion of homeless households from worst case needs estimates—because they are not measured in the AHS or any other current data source—reflects an important omission that can lead to an understatement of worst case problems.

Another measurement issue with AHS income data is that many households report no cash income at all, while others report negative income. In the 1999 AHS, 9 percent of households fell into this category. It is puzzling to decide what to do with these households. The estimates in this report do not include households with zero or negative income as rent burdened and do not include certain households with negative income as having very low income; arguably, both should be included.

Other potential problems in the affordability measure occur because the income data in the AHS are calculated before taxes and do not include non-cash benefits. Approximately 19 million working families receive the Earned Income Tax Credit (EITC), which for some increases gross income after they pay their taxes. The precise impact of the failure to count the effects of the EITC on household income is unknown, but one recent study estimates it inflates the overall worst case need estimate by 7 percent.[4] Also, non-cash benefits, such as food stamps, that increase a household's standard of living are not counted toward income. Households that do not get these benefits are obviously less able than other households with comparable income to shoulder their housing cost burdens.

In terms of estimating potential demand for rental assistance, it is also problematic that AHS estimates of rent burden provide only a snapshot of a dynamic phenomenon.

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[2] Rameswar P. Chakrabarty, American Housing Survey: A Quality Profile. Washington, D.C.: U.S. Department of Housing and Urban Development and Bureau of the Census, H121/95–1, July 1996. The comparison between national GNP income accounts and AHS estimates summarized, however, is based on 1983 data and thus does not reflect the improved questions on nonwage income added to the AHS in 1993.

[3] Eric Belsky and Zhu Xiao Di. "How Great are the Nation's Worst Housing Needs? A Plea for Cautious Interpretation." Cambridge, MA: Joint Center for Housing Studies, Harvard University, April 2002.

[4] Michael Stegman, Walter Davis, and Roberto Quercia. "How Severe is the Housing Affordability Crisis? Using the EITC to Re-evaluate Critical Housing Needs." Brookings Institution, 2002.

Research with the Panel Study of Income Dynamics (PSID) has shown that between one-third and one-half of the instances of severe rent burden among poor families ended each year during the 1970s and early 1980s, primarily because their income increased.[5] Over the same period, the share of families developing severe rent burdens each year also increased, causing the overall point-in-time estimate to rise.[6] While consistent estimates of worst case needs in different years still may provide a good sense of the extent to which affordability problems are getting better or worse over time, the snapshot nature of the worst case needs measure may well overstate the number of households with chronically high rent burdens at any particular time.

A technical issue weakening the worst case needs measure is that past analysis of AHS data suggests substantial misreporting of HUD assistance. This may result from misunderstanding of the assistance questions by households or from household unwillingness to disclose assistance. Because the original intent of the worst case needs measure was to estimate the number eligible for preference in admission to federal rental assistance programs, renters reporting any federal, state, or local housing assistance are excluded from the worst case needs estimates regardless of their housing quality or rent burden. Analysis comparing AHS data to HUD records suggests that the errors go both ways: HUD-assisted households report on the AHS that they are unassisted, and households not assisted by HUD report that they are receiving federal assistance.[7] Some of the households reporting assistance may participate in Department of Agriculture, state, or local housing programs or live in military housing or Low-Income Housing Tax Credit projects, but the HUD-assisted households who report they are unassisted are clearly in error. For such reasons, confusion about assistance is problematic for a measure of severe problems that depends upon knowing a household's subsidy status.[8] Including households who report housing assistance in calculating worst case needs would have the effect of increasing the number of very-low-income renters with worst case needs in 1999 by 1.4 million.

Desirable improvements

The limitations described above suggest some directions for improvement and further research. Expanding the universe to assess housing problems and their severity among all households, both owners and renters, is highly desirable. In doing so, groups should be distinguished in terms of income-eligibility for housing programs, and the particular

[5] Terry K. Adams. "Poor High-Rent Status: A Preliminary Investigation of the Incidence and Persistence of High Rent Burden among Poor Renter Households," 1989. Paper prepared for OMB at the University of Michigan Institute for Social Research.

[6] HUD is supporting research with the PSID to evaluate the persistence of severe rent burden among renter households in all different income categories, rather than only the poor, during the 1990s as well as the 1970s and 1980s.

[7] Mark Shroder, Appendix A on reliability of self-reported housing assistance status in surveys, in "Does housing assistance perversely affect self-sufficiency? A review essay" *Journal of Housing Economics* 11 (2002) pp. 381–417.

[8] HUD is currently conducting research to determine whether different questions on housing subsidy status could lead to more accurate results.

problems or combinations of problems that are judged to be severe might be rethought. Because affordability problems are most common and have been growing, added attention is needed to improving current measures of affordability and exploring others. To the extent possible, tradeoffs among affordable housing, housing condition, and location and neighborhood conditions should be explored.

Recently, the Center for Housing Policy has produced a series of reports examining the extent of "critical housing needs" among households with incomes below 120 percent of area median income.[9] This concept represents one possible expansion of the worst case needs universe, in that it is defined to include all owner and renter households (including renters reporting assistance) with incomes below 120 percent of AMI that have "worst case" problems, i.e., that either pay more than half of their income for housing or live in severely inadequate housing. In 1999, 13.2 million such households had these problems, 84 percent of which had very low incomes. The Center also discusses households with excessive commuting times, although households with this problem are not included in their estimates of critical housing needs.

With regard to AHS estimates of numbers of households falling below such income eligibility criteria as the "low" income cutoff of 80 percent of AMI, comparison with the 2000 census and other surveys with more detailed questions on sources of income would be highly desirable. In particular, because the special "CHAS" tabulations of 1990 and 2000 census data categorize households responding to the census by comparing their income to the exact HUD income cutoffs for each household's location,[10] it is instructive to compare AHS data for the previous calendar year to the decennial census data.[11] Comparison between data from the 1989 AHS and the 1990 census suggested that underreporting of income was more common among owners than renters. As the first panel of Exhibit 4–1 summarizes, when the share of all households falling below different income cutoffs was examined, the 1990 census counted fewer households as having extremely low or very low incomes (13 percent and 24 percent, respectively) than the AHS (14 percent and 26 percent). If the census data are assumed to be correct, the AHS/census ratio at the right implies that the AHS overcounted the number of households in these low-income categories by some 10 percent. However, when the same comparison is restricted to renters, the census and AHS income distributions are much more similar, as the second and fourth columns show: the ratio comparison suggests that the AHS overcounts renters with extremely low or low incomes by only a factor of 2 to 3 percent. This evidence that owners are more likely than renters to underreport income on the AHS is consistent with evidence that income from interest, private pensions, and dividends is most underreported.[12]

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[9] Michael Stegman, Roberto Quercia, and George McCarthy 2000, *Housing America's Working Families,* Washington DC: Center for Housing Policy; Barbara J. Lipman 2002, *America's Working Families and the Housing Landscape, 1997–2001*, Washington, D.C.: Center for Housing Policy.

[10] For AHS tabulations, by contrast, incomes are compared to pooled averages of HUD income cutoffs for all sample cases outside the 141 MSAs explicitly identified in the AHS public use data.

[11] The decennial census data, gathered on April 1 of 1990 and 2000, request information on income for the previous calendar year. Households surveyed by the AHS in the fall (3 months centering on November) of 1989 and 1999 were asked about their income in the previous 12 months.

[12] Chakrabarty, 1996, Table 9.1.

Exhibit 4–1 Comparison of AHS and census data suggests that owners are more likely to underreport income on the AHS and that the AHS shows fewer renters with rent burdens above 30 percent or 50 percent of income than does the census.

	1990 Census		1989 AHS		Ratio: AHS/Census	
	All	Renters	All	Renters	All	Renters
Share of households with income below:						
30% AMI	13%	23%	14%	23%	1.11	1.03
50% AMI	24%	39%	26%	40%	1.10	1.02
80% AMI	40%	59%	43%	60%	1.07	1.02
95% AMI	48%	68%	55%	72%	1.13	1.06
All households	100%	100%	100%	100%	1.00	1.00
Share of renters with cost burden over:	**30% of income**	**50% of income**	**30% of income**	**50% of income**	**30% of income**	**50% of income**
Income as percentage of AMI:						
30% or less	73%	58%	72%	51%	0.98	0.88
31–50%	69%	23%	63%	19%	0.91	0.81
51–80%	36%	4%	33%	2%	0.90	0.53
80–95%	16%	1%	15%	0%	0.95	0.14
Above 95%	4%	0%	2%	0%	0.55	0.11
Total	38%	18%	36%	15%	0.96	0.87

Source: HUD-PD&R tabulations of the 1989 American Housing Survey and the 1990 Comprehensive Housing Affordability Strategy database.

Comparing AHS data with the 1990 census also suggests that AHS estimates of the number of renters with excessive rent burdens may well be *low* rather than high. As the second panel of Exhibit 4–1 shows, in each income category the 1989 AHS shows fewer renters paying more than 30 percent or 50 percent of their income than does the census. For the renters with incomes below 50 percent of AMI that would be included as worst case, this comparison suggests that the AHS may undercount the number of renters with severe rent burden by 12 percent or more. More detailed comparison of 1999 AHS data with special tabulations of the 2000 census should clearly be done, but these results imply that AHS estimates of income-eligible renters and of severe rent burdens may be more robust than those concerned about AHS income underreporting have feared.

The concept of affordability employed by the worst case needs measure relies upon a threshold percentage of income spent on securing housing services. No distinction is made between families that minimally or greatly exceed the defined threshold. In addition, a family that crosses a specific threshold—whether it is 30 percent of income, 50 percent of income, or some other fraction—may face no more absolute or relative hardship than a family that does not. For example, a family with an income of $15,000 a

year paying $5,000 in housing costs may not be considered a worst case needs household, but a family with an annual income of $25,000 paying $15,000 for their housing may be considered as having an affordability problem. Yet both families have the same amount of post-housing resources, and the family that spends more on housing may be better off if it has secured housing services in a location with beneficial amenities.

Rather than defining housing affordability as a specific ratio of housing costs to income, it may be useful to examine measures that look at other aspects of this relationship, such as approaches that focus on income available for housing services after meeting other basic needs. As with both current and recommended definitions of poverty, this approach depends on defining a basic-needs threshold that varies with household size and composition.[13] One advantage of this approach is that it would not exclude households with extremely low incomes that spend 30 percent or less of their resources on housing but still experience significant hardship. Conversely, higher on the income distribution, households may choose to spend a greater portion of their resources on housing to gain proximity to other services or opportunities they desire. Under this approach, such households would be excluded from a measure estimating housing affordability hardship if they have the residual income available to adequately cover their non-housing costs relative to other families.[14]

However "unaffordable" may be defined, rather than focusing only on unaffordable payments for housing among households, a complementary approach estimates the supply of housing affordable to households at different income levels, comparing the supply and demand for such units in different housing markets. One advantage of this approach is recognizing that housing costs are determined in a market setting, although markets are influenced by public policies. This approach recognizes that affordability is affected by restrictions on supply in addition to suppression of demand, and these influences extend well beyond the federal government. For example, exclusionary zoning policies, set at the local level, artificially restrict the supply of land and lead to higher housing prices, and similarly, locally imposed impact fees and growth controls drive up housing costs for renters and homeowners alike.

It may also be useful to consider expanding the range of measures to address policy concerns beyond affordability. For example, although it would present challenging measurement issues, it would be instructive to regularly examine the extent to which housing assistance helps nonelderly, nondisabled households increase their earnings and employment rates, or move to areas offering better employment and educational opportunities. The quality of housing provided by the different subsidized housing

[13] "Rethinking Priority Needs for Rental Assistance: Limitations of 'Worst Case Needs'" (Kathryn P. Nelson and F. Stevens Redburn, mid-year meeting of the American Real Estate and Urban Economics Association, Washington, D.C., 1994) estimates how worst case needs would change if severe affordability problems were redefined based on the National Research Council's recommendations for *Measuring Poverty* (Constance F. Citro and Robert T. Michael, Eds., Washington, D.C. National Academy Press 1995). Although the number with worst case needs is quite similar under the two approaches, more families with children and fewer small households have worst case needs under the alternate approach.

[14] For example, in calculating "core" housing needs, Canada excludes households that could afford standard housing in their area.

programs should also be examined and contrasted. It would also be useful to more closely examine the issues facing low-income homeowners, including the extent to which low-income homeowners experience increases in equity and avoid defaults.

Next steps

Because of interest in improving and extending measures of housing need, this report has examined trends in adequacy, affordability, and crowding for all households, not just unassisted very-low-income renters. Its comparisons of housing affordable to different income groups with numbers of renters in Chapter 3 also seek to supplement the worst case focus on the number of renter households with severe affordability or adequacy problems by identifying basic disparities between supply and demand.

To better understand the limitations of AHS estimates of worst case needs, HUD is supporting research on the persistence of severe cost burdens and the impact of income underreporting, as well as a more general review of alternative measures of housing needs. HUD welcomes general discussion of how measures of need can and should be improved.

Appendix A

Data on Housing Problems and Supplies of Affordable Housing

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Table A–1
Housing Conditions of U.S. Renters and Owners by Relative Income, 1999

Household Income as Percentage of HUD-Adjusted Area Median Family Income					
	(0–50%)	**(51–80%)**	**(81–120%)**	**(121%+)**	**All Incomes**
Number of Renter Households With (Thousands):	14,803	7,279	6,653	5,272	34,007
Rent Burden 50%+ of Income	5,936	257	93	15	6,301
Rent Burden 30–49% of Income	4,565	1,964	496	114	7,139
Severely Inadequate Housing	723	207	146	108	1,184
Moderately Inadequate Housing	1,463	556	447	303	2,769
Crowded Housing	1,111	285	162	108	1,677
Multiple Problems*	2,101	243	64	7	2,416
No Problems	3,302	4,259	5,372	4,631	17,564
Assisted#	4,253	903	583	464	6,203
*Priority Problems***	4,856	411	211	112	5,590
*Other Problems****	3,863	2,272	954	470	7,560
Unassisted, No Problems	1,831	3,692	4,905	4,226	14,654
Housing Rated Poor	1,127	364	327	232	2,050
Neighborhood Rated Poor	1,461	494	413	236	2,603
Number of Owner Households With (Thousands):	13,964	10,702	14,008	30,120	68,794
Cost Burden 50%+ of Income	4,350	787	465	242	5,843
Cost Burden 30–49% of Income	3,115	2,346	1,933	1,325	8,718
Severely Inadequate Housing	334	154	159	221	869
Moderately Inadequate Housing	796	391	371	497	2,056
Crowded Housing	267	234	220	184	905
Multiple Problems	706	196	108	63	1,073
No Problems	5,832	6,991	10,968	27,713	51,505
Priority Problems	4,594	932	621	460	6,608
Other Problems	3,538	2,778	2,418	1,946	10,681
Housing Rated Poor	336	185	159	232	913
Neighborhood Rated Poor	581	274	337	519	1,711
Percent of Renter Households With:					
Rent Burden 50%+ of Income	40	4	1	0	19
Cost Burden 30–49% of Income	31	27	7	2	21
Severely Inadequate Housing	5	3	2	2	3
Moderately Inadequate Housing	10	8	7	6	8
Crowded Housing	8	4	2	2	5
Multiple Problems	14	3	1	0	7
No Problems	22	59	81	88	52
Assisted	29	12	9	9	18
Priority Problems	33	6	3	2	16
Other Problems	26	31	14	9	22
Unassisted, No Problems	12	51	74	80	43
Housing Rated Poor	8	5	5	4	6
Neighborhood Rated Poor	10	7	6	4	8

Table A–1 (continued)

Household Income as % of HUD-Adjusted Area Median Family Income					
	(0–50%)	(51–80%)	(81–120%)	(121%+)	All Incomes
Percent of Owner Households With:					
Cost Burden 50%+ of Income	31	7	3	1	8
Cost Burden 30–49% of Income	22	22	14	4	13
Severely Inadequate Housing	2	1	1	1	1
Moderately Inadequate Housing	6	4	3	2	3
Crowded Housing	2	2	2	1	1
Multiple Problems	5	2	1	0	2
No Problems	42	65	78	92	75
Priority Problems	33	9	4	2	10
Other Problems	25	26	17	6	16
Housing Rated Poor	2	2	1	1	1
Neighborhood Rated Poor	4	3	2	2	2

* Two or three of the following: cost burden >30 percent of income, severe or moderate physical problems, and overcrowding.
** Housing costs >50 percent of income or severely inadequate housing among unassisted households.
*** Housing costs 31–50 percent of income, moderate physical problems, or overcrowding, but no priority problems among unassisted households.
# The four headings that are italicized –priority problems, other problems, unassisted with no problems, and assisted—sum to 100 percent. The heading "No problems" includes both assisted and unassisted renters with none of the problems of inadequacy, crowding or excessive cost burden calculated here.
Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Table A–2
Housing Conditions of All Renters and Owners, 1978, 1987, 1991, 1993, 1995, 1997, and 1999

	1978	1987	1991	1993	1995	1997	1999
Number of Households With (Thousands):	77,389	90,887	93,147	94,723	97,694	99,487	102,802
Burden >50%	5,696	8,434	8,925	9,725	11,158	12,223	12,141
Burden 31–50%	7,669	12,888	14,145	14,333	15,481	15,115	15,862
Severely Inadequate Housing	2,778	1,227	2,874	1,901	2,022	1,797	2,056
Moderately Inadequate Housing	4,295	5,181	4,531	4,225	4,348	5,191	4,821
Crowded	3,266	2,436	2,527	2,386	2,554	2,807	2,570
Priority Problems	7,692	8,180	10,430	10,350	11,744	12,206	12,203
Other Problems	11,877	15,969	16,612	16,399	17,693	17,900	18,237
Unassisted, No Problems	54,714	61,939	61,302	62,950	63,023	63,682	66,163
Assisted	3,103	4,790	4,801	5,025	5,230	5,697	6,168
Number of Renter Households With (Thousands):	26,919	32,724	33,351	33,472	34,150	34,000	34,007
Burden >50%	3,664	5,638	5,478	5,947	6,236	6,686	6,301
Burden 31–50%	4,765	6,852	6,964	7,157	7,424	6,778	7,141
Severely Inadequate Housing	1,677	861	1,347	909	849	1,072	1,183
Moderately Inadequate Housing	2,100	2,831	2,375	2,254	2,277	3,021	2,768
Crowded	1,548	1,512	1,644	1,503	1,673	1,891	1,666
Priority Problems	4,695	5,075	5,580	5,671	5,777	6,024	5,591
Other Problems	5,976	7,428	7,342	7,287	7,651	7,451	7,560
Unassisted, No Problems	13,519	15,429	15,627	15,489	15,492	14,827	14,657
Assisted	2,730	4,794	4,801	5,025	5,230	5,697	6,203
Number of Owner Households With (Thousands):	50,470	58,163	59,796	61,251	63,544	65,487	68,795
Burden >50%	1,645	2,798	3,447	3,778	4,922	5,537	5,841
Burden 31–50%	2,428	6,037	7,181	7,176	8,057	8,337	8,716
Severely Inadequate Housing	939	349	1,527	992	1,173	725	867
Moderately Inadequate Housing	2,054	2,356	2,156	1,971	2,071	2,170	2,064
Crowded	1,625	931	883	883	881	916	894
Priority Problems	2,524	3,112	4,850	4,678	5,967	6,182	6,604
Other Problems	5,501	8,538	9,270	9,112	10,042	10,449	10,684
No Problems	42,445	46,531	45,675	47,461	47,531	48,855	51,507

Table A–2 (continued)

	1978	1987	1991	1993	1995	1997	1999
Percent of Households With:							
Burden >50%	7.4%	9.3%	9.6%	10.3%	11.4%	12.3%	11.8%
Burden 31–50%	9.9%	14.2%	15.2%	15.1%	15.8%	15.2%	15.4%
Severely Inadequate Housing	3.6%	1.4%	3.1%	2.0%	2.1%	1.8%	2.0%
Moderately Inadequate Housing	5.6%	5.7%	4.9%	4.5%	4.5%	5.2%	4.7%
Crowded	4.2%	2.7%	2.7%	2.5%	2.6%	2.8%	2.5%
Priority Problems	9.9%	9.0%	11.2%	10.9%	12.0%	12.3%	11.9%
Other Problems	15.3%	17.6%	17.8%	17.3%	18.1%	18.0%	17.7%
Unassisted, No Problems	70.7%	68.2%	65.8%	66.5%	64.5%	64.0%	64.4%
Assisted	4.0%	5.3%	5.2%	5.3%	5.4%	5.7%	6.0%
Percent of Renter Households With:							
Burden >50%	13.6%	17.2%	16.4%	17.8%	18.3%	19.7%	18.5%
Burden 31–50%	17.7%	20.9%	20.9%	21.4%	21.7%	19.9%	21.0%
Severely Inadequate Housing	6.2%	2.6%	4.0%	2.7%	2.5%	3.2%	3.5%
Moderately Inadequate Housing	7.8%	8.7%	7.1%	6.7%	6.7%	8.9%	8.1%
Crowded	5.8%	4.6%	4.9%	4.5%	4.9%	5.6%	4.9%
Priority Problems	17.4%	15.5%	16.7%	16.9%	16.9%	17.7%	16.4%
Other Problems	22.2%	22.7%	22.0%	21.8%	22.4%	21.9%	22.2%
Unassisted No Problems	50.2%	47.2%	46.9%	46.3%	45.4%	43.6%	43.1%
Assisted	10.1%	14.7%	14.4%	15.0%	15.3%	16.8%	18.2%
Priority/Unassisted	19.4%	18.2%	19.5%	19.9%	20.0%	21.3%	20.1%
Percent of Owner Households With:							
Burden >50%	3.3%	4.8%	5.8%	6.2%	7.7%	8.5%	8.5%
Burden 31–50%	4.8%	10.4%	12.0%	11.7%	12.7%	12.7%	12.7%
Severely Inadequate Housing	1.9%	0.6%	2.6%	1.6%	1.8%	1.1%	1.3%
Moderately Inadequate Housing	4.1%	4.1%	3.6%	3.2%	3.3%	3.3%	3.0%
Crowded	3.2%	1.6%	1.5%	1.4%	1.4%	1.4%	1.3%
Priority Problems	5.0%	5.4%	8.1%	7.6%	9.4%	9.4%	9.6%
Other Problems	10.9%	14.7%	15.5%	14.9%	15.8%	16.0%	15.5%
No Problems	84.1%	80.0%	76.4%	77.5%	74.8%	74.6%	74.9%

Source: HUD-PD&R tabulations of the 1978, 1987, 1991, 1995, and 1999 American Housing Surveys.

Table A–3
Housing Conditions of Low- and Moderate-Income Renters and Owners, 1978, 1989, and 1999

	Renters			Owners		
	1978	**1989**	**1999**	**1978**	**1989**	**1999**
Income 0–50% of HAMFI						
Number of Households	10,682	13,378	14,803	9,525	10,997	13,964
With (Thousands):						
Burden >50%	30.2%	37.8%	40.1%	17.1%	23.3%	31.2%
Burden 31–50%	23.4%	30.2%	30.8%	18.3%	23.0%	22.3%
Severely Inadequate Housing	9.0%	6.6%	4.9%	5.4%	4.2%	2.4%
Moderately Inadequate Housing	6.5%	10.1%	9.9%	8.7%	7.6%	5.7%
Crowded	4.1%	7.6%	7.5%	3.1%	2.7%	1.9%
Priority Problems	37.1%	35.0%	32.8%	22.0%	26.7%	32.9%
Other Problems	28.9%	23.6%	26.1%	27.7%	27.5%	25.3%
Unassisted, No Problems	14.4%	12.0%	12.4%	50.3%	45.8%	41.8%
Assisted	19.6%	29.4%	28.7%	NA	NA	NA
No Problems At All	24.8%	24.4%	22.3%	50.3%	45.8%	41.8%
Income 51–80% of HAMFI						
Number of Households	6,088	6,880	7,279	9,081	8,881	10,702
With (Thousands):						
Burden >50%	1.5%	2.0%	3.5%	1.2%	4.0%	7.4%
Burden 31–50%	21.3%	30.9%	27.0%	6.3%	15.3%	21.9%
Severely Inadequate Housing	4.4%	4.2%	2.8%	2.0%	3.1%	1.4%
Moderately Inadequate Housing	6.7%	7.3%	7.6%	5.7%	4.5%	3.7%
Crowded	4.4%	5.8%	3.9%	4.6%	3.1%	2.2%
Priority Problems	5.9%	5.7%	5.6%	3.2%	7.0%	8.7%
Other Problems	30.6%	38.0%	31.2%	15.8%	20.9%	26.0%
Unassisted, No Problems	57.1%	49.2%	50.7%	81.0%	72.1%	65.4%
Assisted	6.3%	7.0%	12.4%	NA	NA	NA
No Problems At All	61.9%	54.1%	58.5%	81.0%	72.1%	65.4%
Income 81–120% of HAMFI						
Number of Households						
With (Thousands):	5,531	7,209	6,653	12,033	13,537	14,008
Burden >50%	0.2%	0.1%	1.4%	0.3%	1.4%	3.3%
Burden 31–50%	3.7%	10.4%	7.5%	1.4%	10.5%	13.8%
Severely Inadequate Housing	3.9%	3.5%	2.2%	1.1%	2.3%	1.1%
Moderately Inadequate Housing	6.5%	4.4%	6.7%	3.3%	2.4%	2.6%
Crowded	3.4%	2.6%	2.4%	3.7%	1.5%	1.6%
Priority Problems	4.1%	3.5%	3.2%	1.4%	3.7%	4.4%
Other Problems	13.2%	15.6%	14.3%	8.0%	13.9%	17.3%
Unassisted, No Problems	79.6%	77.5%	73.7%	90.6%	82.5%	78.3%
Assisted	3.0%	3.4%	8.8%	NA	NA	NA
No Problems At All	82.2%	80.3%	80.7%	90.6%	82.5%	78.3%

Table A–3 (continued)

	Renters			Owners		
	1978	**1989**	**1999**	**1978**	**1989**	**1999**
Income >120% of HAMFI						
Number of Households With (Thousands):	4,617	6,303	5,272	19,830	26,501	30,120
Burden >50%	0	0.0%	0.3%	0.2%	0.2%	0.8%
Burden 31–50%	0.5%	1.1%	2.2%	0.3%	4.0%	4.4%
Severely Inadequate Housing	3.1%	2.2%	2.0%	0.8%	2.0%	0.7%
Moderately Inadequate Housing	4.2%	4.4%	5.7%	1.6%	1.7%	1.7%
Crowded	1.8%	1.7%	2.0%	1.8%	0.7%	0.6%
Priority Problems	3.1%	2.6%	2.1%	1.0%	2.2%	1.5%
Other Problems	6.4%	6.7%	8.9%	3.6%	6.1%	6.5%
Unassisted, No Problems	88.8%	88.7%	80.2%	95.4%	91.7%	92.0%
Assisted	1.8%	2.0%	8.8%	NA	NA	NA
No Problems At All	90.4%	90.5%	87.8%	95.4%	91.7%	0.8%

Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1989 and 1999 American Housing Surveys.

Table A–4
Housing Conditions of Renters With Extremely Low, Very Low, and Low Incomes, 1978, 1987, 1991, 1995, 1997, and 1999

	Number of Households (Thousands)						As Percent of Households					
	1978	**1987**	**1991**	**1995**	**1997**	**1999**	**1978**	**1987**	**1991**	**1995**	**1997**	**1999**
Income 0–30% HAMFI	5,905	7,764	8,232	8,598	9,003	8,553						
Priority Problems	3,019	3,454	3,622	3,886	4,168	3,750	51%	44%	44%	45%	46%	44%
Severe Physical Problems	642	494	387	232	333	325	11%	6%	5%	3%	4%	4%
Rent Burden >50%	2,581	3,311	3,457	3,774	3,988	3,609	44%	43%	42%	44%	44%	42%
Rent Burden Only	2,011	2,609	2,634	3,044	3,178	2,882	34%	34%	32%	35%	35%	34%
Other Problems	969	849	930	748	927	1,061	16%	11%	11%	9%	10%	12%
Moderate Physical Problems	292	311	296	172	315	274	5%	4%	4%	2%	4%	3%
Rent Burden 31–50%	799	655	757	636	693	864	14%	8%	9%	7%	8%	10%
Crowded	165	96	132	146	216	239	3%	1%	2%	2%	2%	3%
Rent Burden Only		485	535	456	459	599	NA	6%	7%	5%	5%	7%
No Problems, Total	1,210	1,497	1,934	1,978	1,720	1,671	20%	19%	24%	23%	19%	20%
No Problems, Unassisted	488	554	659	679	774	710	8%	7%	8%	8%	9%	8%
Assisted	1,428	2,907	3,021	3,284	3,133	3,028	24%	37%	37%	38%	35%	35%
Priority As % Unassisted							67%	71%	70%	73%	71%	68%
Income 31–50% HAMFI	4,777	5,509	5,771	5,951	5,799	6,250						
Priority Problems	944	1,080	1,221	1,315	1,212	1,106	20%	20%	21%	22%	21%	18%
Severe Physical Problems	320	160	190	137	130	130	7%	3%	3%	2%	3%	3%
Rent Burden >50%	645	931	1,056	1,184	1,067	944	14%	17%	18%	20%	18%	15%
Rent Burden Only	585	848	946	1,071	974	856	12%	15%	16%	18%	17%	14%
Other Problems	2,118	2,457	2,545	2,642	2,546	2,800	44%	45%	44%	44%	44%	45%
Moderate Physical Problems	399	419	346	393	429	438	8%	8%	6%	7%	7%	7%
Rent Burden 31–50%	1,700	2,126	2,227	2,321	2,215	2,450	36%	39%	39%	39%	38%	39%
Crowded	305	331	312	399	342	369	6%	6%	5%	7%	6%	6%
Rent Burden Only		1,774	1,916	1,922	1,815	2,056	NA	32%	33%	32%	31%	33%
No Problems, Total	1,435	1,432	1,552	1,506	1,397	1,631	30%	26%	27%	25%	24%	26%
No Problems, Unassisted	1,046	1,030	1,091	994	928	1,119	22%	19%	19%	17%	16%	18%
Assisted	666	942	912	994	1,119	1,225	14%	17%	16%	17%	19%	20%
Priority As % Unassisted							23%	24%	25%	27%	26%	22%
Income 51–80% HAMFI	6,088	6,766	6,833	7,158	6,433	7,279						
Priority Problems	359	345	425	336	380	411	6%	5%	6%	5%	6%	6%
Severe Physical Problems	268	135	246	107	180	184	4%	2%	4%	2%	3%	3%
Rent Burden >50%	94	203	178	236	206	233	2%	3%	3%	3%	3%	3%
Rent Burden Only	89	196	171	215	187	218	1%	3%	3%	3%	3%	3%
Other Problems	1,863	2,571	2,542	2,863	2,393	2,271	31%	38%	37%	40%	37%	31%
Moderate Physical Problems	408	548	403	437	425	502	7%	8%	6%	6%	7%	7%
Rent Burden 31–50%	1,297	1,955	1,968	2,324	1,801	1,681	21%	29%	29%	32%	28%	23%
Crowded	268	304	342	265	354	240	4%	5%	5%	4%	6%	3%
Rent Burden Only		1,789	1,831	2,205	1,666	1,558	NA	26%	27%	31%	26%	21%
No Problems, Total	3,768	3,674	3,724	3,815	3,448	4,258	62%	54%	55%	53%	54%	59%
No Problems, Unassisted	3,476	3,322	3,375	3,458	3,036	3,690	57%	49%	49%	48%	47%	51%
Assisted	384	521	492	501	624	903	6%	8%	7%	7%	10%	12%
Priority As % Unassisted							6%	6%	7%	5%	7%	6%

Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1987, 1991, 1995, and 1999 American Housing Surveys.

Table A–5
Housing Problems of Very-Low-Income Renters by Household Type, 1987, 1991, 1993, 1995, 1997, and 1999

	Number of Households (Thousands)						**As Percent of Households**					
	1987	**1991**	**1993**	**1995**	**1997**	**1999**	**1987**	**1991**	**1993**	**1995**	**1997**	**1999**
Elderly	3,727	3,574	3,631	3,336	3,321	3,190						
Priority Problems	1,111	1,102	1,142	1,050	1,180	1,028	30%	31%	31%	31%	36%	32%
Severe Physical Problems	89	126	95	67	86	63	2%	4%	3%	2%	3%	2%
Rent Burden >50%	1,032	1,015	1,085	999	1,120	991	28%	28%	30%	30%	34%	31%
Rent Burden Only	939	923	989	933	1,005	884	25%	26%	27%	28%	30%	28%
Other Problems	704	675	665	508	521	608	19%	19%	18%	15%	16%	19%
Moderate Physical Problems	164	155	132	108	111	106	4%	4%	4%	3%	3%	3%
Rent Burden 31–50%	622	599	588	453	465	572	17%	17%	16%	14%	14%	18%
Crowded	0	0	0	0	0	0	0%	0%	0%	0%	0%	0%
Rent Burden Only	544	520	534	400	410	502	15%	15%	15%	12%	12%	16%
No Problems, Total	1,167	1,065	1,028	1,081	926	858	31%	30%	28%	32%	28%	27%
No Problems, Unassisted	529	461	476	447	415	383	14%	13%	13%	13%	13%	12%
Assisted	1,379	1,334	1,348	1,332	1,205	1,172	37%	37%	37%	40%	36%	37%
Priority As % Unassisted							47%	49%	50%	52%	56%	51%
Families With Children	5,558	6,134	6,648	6,502	6,352	6,223						
Priority Problems	1,792	1,941	2,174	2,015	2,051	1,793	32%	32%	33%	31%	32%	29%
Severe Physical Problems	172	189	165	127	179	216	3%	3%	2%	2%	3%	3%
Rent Burden >50%	1,690	1,836	2,083	1,933	1,918	1,658	30%	30%	31%	30%	30%	27%
Rent Burden Only	1,206	1,242	1,525	1,412	1,430	1,250	22%	20%	23%	22%	23%	20%
Other Problems	1,473	1,608	1,662	1,706	1,749	1,867	27%	26%	25%	26%	28%	30%
Moderate Physical Problems	333	264	266	256	321	303	6%	4%	4%	4%	5%	5%
Rent Burden 31–50%	1,150	1,299	1,382	1,416	1,448	1,528	21%	21%	21%	22%	23%	25%
Crowded	411	426	435	521	511	587	7%	7%	7%	8%	8%	9%
Rent Burden Only	828	973	1,039	1,012	991	1,078	15%	16%	16%	16%	16%	17%
No Problems, Total	989	1,497	1,880	1,481	1,152	1,273	18%	24%	28%	23%	18%	20%
No Problems, Unassisted	495	630	620	629	575	654	9%	10%	9%	10%	9%	11%
Assisted	1,795	1,952	2,185	2,151	1,976	1,910	32%	32%	33%	33%	31%	31%
Priority As % Unassisted							48%	46%	49%	46%	47%	42%
Nonelderly Disabled (Expanded)	1,047	1,088	1,065	1,127	1,093	1,170						
Priority Problems	356	381	364	459	374	371	34%	35%	34%	41%	34%	32%
Severe Physical Problems	49	81	74	47	32	56	5%	7%	7%	4%	3%	5%
Rent Burden >50%	328	347	314	431	353	342	31%	32%	30%	38%	32%	29%
Rent Burden Only	248	278	262	329	267	250	24%	26%	25%	29%	24%	21%
Other Problems	165	180	193	137	141	155	16%	17%	18%	12%	13%	13%
Moderate Physical Problems	38	50	31	32	43	45	4%	5%	3%	3%	4%	4%
Rent Burden 31–50%	141	165	184	120	120	130	13%	15%	17%	11%	11%	11%
Crowded	3	2	3	6	3	6	0%	0%	0%	1%	0%	0%
Rent Burden Only	125	128	162	104	98	104	12%	12%	15%	9%	9%	9%
No Problems, Total	212	269	277	252	253	286	20%	25%	26%	22%	23%	24%
No Problems, Unassisted	56	77	91	74	46	88	5%	7%	9%	7%	4%	8%
Assisted	470	450	417	457	531	555	45%	41%	39%	41%	49%	47%
Priority As % Unassisted							62%	60%	56%	69%	67%	60%

Table A–5 (continued)

	Number of Households (Thousands)						**As Percent of Households**					
	1987	**1991**	**1993**	**1995**	**1997**	**1999**	**1987**	**1991**	**1993**	**1995**	**1997**	**1999**
Other Households	2,941	3,206	3,401	3,583	4,035	4,220						
Priority Problems	1,275	1,420	1,518	1,679	1,774	1,664	43%	44%	45%	47%	44%	39%
Severe Physical Problems	108	185	120	128	192	192	4%	6%	4%	4%	5%	5%
Rent Burden >50%	1,198	1,309	1,424	1,598	1,665	1,561	41%	41%	42%	45%	41%	37%
Rent Burden Only	1,058	1,138	1,281	1,440	1,451	1,350	36%	35%	38%	40%	36%	32%
Other Problems	962	1,010	1,050	1,044	1,059	1,234	33%	31%	31%	29%	26%	29%
Moderate Physical Problems	190	172	167	170	268	257	6%	5%	5%	5%	7%	6%
Rent Burden 31–50%	873	920	963	971	876	1,084	30%	29%	28%	27%	22%	26%
Crowded	10	9	25	19	24	17	0%	0%	1%	1%	1%	0%
Rent Burden Only	760	829	866	861	772	968	26%	26%	25%	24%	19%	23%
No Problems, Total	553	659	630	666	782	885	19%	21%	19%	19%	19%	21%
No Problems, Unassisted	504	582	527	521	660	706	17%	18%	15%	15%	16%	17%
Assisted	205	198	305	338	542	615	7%	6%	9%	9%	13%	15%
Priority As % Unassisted							47%	47%	49%	52%	51%	46%

Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1987, 1991, 1995, and 1999 American Housing Surveys.

Table A–5a
Housing Problems of Extremely-Low-Income Renters by Household Type, 1987, 1991, 1993, 1995, 1997, and 1999

	Number of Households (Thousands)						As Percent of Households					
	1987	**1991**	**1993**	**1995**	**1997**	**1999**	**1987**	**1991**	**1993**	**1995**	**1997**	**1999**
Elderly	2,270	2,255	2,291	2,144	2,221	2,034						
Priority Problems	762	761	819	772	884	806	34%	34%	36%	36%	40%	40%
Severe Physical Problems	50	88	64	45	63	47	2%	4%	3%	2%	3%	2%
Rent Burden >50%	726	704	783	738	843	782	32%	31%	34%	34%	38%	38%
Rent Burden Only	646	629	708	686	746	685	28%	28%	31%	32%	34%	34%
Other Problems	267	246	218	159	182	207	12%	11%	10%	7%	8%	10%
Moderate Physical Problems	91	80	76	54	50	55	4%	4%	3%	3%	2%	3%
Rent Burden 31–50%	216	207	174	135	164	187	10%	9%	8%	6%	7%	9%
Crowded	0	0	0	0	0	0	0%	0%	0%	0%	0%	0%
Rent Burden Only	176	165	143	104	132	153	8%	7%	6%	5%	6%	8%
No Problems, Total	686	677	634	654	591	476	30%	30%	28%	31%	27%	23%
No Problems, Unassisted	257	232	261	234	244	167	11%	10%	11%	11%	11%	8%
Assisted	985	1,015	992	980	911	854	43%	45%	43%	46%	41%	42%
Priority As % Unassisted							59%	61%	63%	66%	67%	68%
Families With Children	3,332	3,673	4,068	3,886	3,750	3,554						
Priority Problems	1,483	1,551	1,819	1,606	1,691	1,439	45%	42%	45%	41%	45%	40%
Severe Physical Problems	103	123	110	68	116	124	3%	3%	3%	2%	3%	3%
Rent Burden >50%	1,439	1,506	1,779	1,583	1,620	1,386	43%	41%	44%	41%	43%	39%
Rent Burden Only	996	974	1,261	1,114	1,166	1,008	30%	27%	31%	29%	31%	28%
Other Problems	346	427	390	392	435	552	10%	12%	10%	10%	12%	16%
Moderate Physical Problems	123	127	126	66	112	110	4%	3%	3%	2%	3%	3%
Rent Burden 31–50%	263	340	304	334	345	456	8%	9%	7%	9%	9%	13%
Crowded	93	123	122	144	189	230	3%	3%	3%	4%	5%	6%
Rent Burden Only	167	206	182	210	172	257	5%	6%	4%	5%	5%	7%
No Problems, Total	470	808	919	838	525	604	14%	22%	23%	22%	14%	17%
No Problems, Unassisted	117	175	128	194	165	206	4%	5%	3%	5%	4%	6%
Assisted	1,385	1,521	1,730	1,692	1,462	1,358	42%	41%	43%	44%	39%	38%
Priority As % Unassisted							76%	72%	78%	73%	74%	66%
Nonelderly Disabled (Expanded)	801	789	732	853	844	858						
Priority Problems	307	323	302	373	319	322	38%	41%	41%	44%	38%	38%
Severe Physical Problems	38	63	49	34	23	41	5%	8%	7%	4%	3%	5%
Rent Burden >50%	289	301	277	357	307	306	36%	38%	38%	42%	36%	36%
Rent Burden Only	217	237	228	276	225	221	27%	30%	31%	32%	27%	26%
Other Problems	73	65	55	44	64	51	9%	8%	7%	5%	8%	6%
Moderate Physical Problems	26	29	12	9	23	8	3%	4%	2%	1%	3%	1%
Rent Burden 31–50%	59	57	49	39	51	45	7%	7%	7%	5%	6%	5%
Crowded	2	2	2	0	3	6	0%	0%	0%	0%	0%	1%
Rent Burden Only	47	35	42	36	41	37	6%	5%	6%	4%	5%	4%
No Problems, Total	149	197	183	188	187	175	19%	25%	25%	22%	22%	20%
No Problems, Unassisted	22	37	37	44	25	31	3%	5%	5%	5%	3%	4%
Assisted	400	364	337	392	435	454	50%	46%	46%	46%	52%	53%
Priority As % Unassisted							76%	76%	77%	81%	78%	80%

Table A–5a (continued)

	Number of Households (Thousands)						As Percent of Households					
	1987	**1991**	**1993**	**1995**	**1997**	**1999**	**1987**	**1991**	**1993**	**1995**	**1997**	**1999**
Other Households	1,361	1,515	1,631	1,715	2,187	2,107						
Priority Problems	902	988	1,086	1,135	1,274	1,179	66%	65%	67%	66%	58%	56%
Severe Physical Problems	302	113	79	84	131	114	22%	7%	5%	5%	6%	5%
Rent Burden >50%	856	946	1,033	1,101	1,219	1,136	63%	62%	63%	64%	56%	54%
Rent Burden Only	750	794	915	968	1,041	968	55%	52%	56%	56%	48%	46%
Other Problems	163	193	148	154	246	251	12%	13%	9%	9%	11%	12%
Moderate Physical Problems	71	60	48	43	129	101	5%	4%	3%	3%	6%	5%
Rent Burden 31–50%	117	153	124	132	134	176	9%	10%	8%	8%	6%	8%
Crowded	1	7	2	5	24	3	0%	0%	0%	0%	1%	0%
Rent Burden Only	95	127	103	106	114	151	7%	8%	6%	6%	5%	7%
No Problems, Total	193	253	270	298	416	415	14%	17%	17%	17%	19%	20%
No Problems, Unassisted	159	214	193	207	340	306	12%	14%	12%	12%	16%	15%
Assisted	137	122	203	220	324	361	10%	8%	12%	13%	15%	17%
Priority As % Unassisted							74%	71%	76%	76%	68%	68%

Source: HUD-PD&R tabulations of the 1987, 1991, 1993, 1995, 1997, and 1999 American Housing Surveys.

Table A–6
Housing Problems and Characteristics of Very-Low-Income Renters by Household Type, 1999

	Total	Elderly, No Children	Families With Children	Other Families	Nonfamily Reporting SSI Income	Other Non-family
Total Households (Thousands)	14,803	3,190	6,223	753	1,170	3,467
Number of Children	13,090	0	13,090	0	0	0
Number of Persons	35,248	4,100	23,266	1,766	1,674	4,442
Children/Household	.88	.00	2.10	.00	.00	.00
Persons/Household	2.38	1.29	3.74	2.34	1.43	1.28
Number of Households With:						
Priority Problems	4,856	1,028	1,793	226	371	1,438
Severe Physical Problems	526	63	216	24	56	167
Rent Burden >50% of Income	4,553	991	1,658	219	342	1,343
Rent Burden Only	3,737	884	1,250	183	250	1,169
Multiple Problems	969	120	499	43	104	202
Other Problems	3,863	608	1,866	237	155	997
Moderate Physical Problems	711	106	303	51	45	205
Rent Burden 31–50% of Income	3,313	572	1,527	203	129	881
Rent Burden Only	2,652	502	1,078	177	104	791
Crowded	609	0	587	11	6	5
Multiple Problems	710	70	496	28	25	90
No Problems at All	3,302	858	1,273	191	286	694
Unassisted, No Problems	1,831	382	654	157	88	549
In Assisted Housing	4,253	1,172	1,910	133	555	482
One Person in Household	6,030	2,408	120	0	805	2,697
Husband-Wife Family	3,522	588	2,277	416	127	115
Female Head	7,733	1,938	3,388	222	585	1,599
Minority Head	7,537	1,016	4,130	454	531	1,406
AFDC/SSI Income	2,814	491	1,543	0	781	0
Social Security Income	3,880	2,813	479	0	588	0
Income Below 50% Poverty	3,138	435	1,543	128	194	838
Income Below Poverty	7,514	1,326	3,624	292	772	1,501
Income Below 150% of Poverty	11,592	2,325	5,396	537	1,021	2,312
High School Graduate	9,458	1,544	3,816	534	706	2,858
Two+ Years Post High School	2,034	295	595	148	129	867
Earnings at Minimum Wage:						
At Least Half Time	7,940	417	4,300	605	236	2,382
At Least Full Time	6,115	195	3,499	518	122	1,782
Earnings Main Source of Income	8,729	394	4,618	649	238	2,830
Housing Rated Poor	1,770	231	807	118	131	483
Housing Rated Good+	10,108	2,599	3,978	435	799	2,298
Neighborhood Rated Poor	1,461	135	810	107	135	274
Neighborhood Rated Good+	9,779	2,492	3,850	449	768	2,220
In Central Cities	7,487	1,428	3,193	375	636	1,855
Suburbs	4,903	1,173	2,115	251	283	1,082
Northeast	3,422	1,018	1,238	157	338	671
South	4,632	882	1,998	248	315	1,189
West	3,765	604	1,874	238	221	827

Table A–6 (continued)

	Total	Elderly, No Children	Families With Children	Other Families	Nonfamily Reporting SSI Income	Other Non-family
Percentage of Households With:						
Priority Problems	33	32	29	30	32	41
Severe Physical Problems	4	2	3	3	5	5
Rent Burden >50% of Income	31	31	27	29	29	39
Rent Burden Only	25	28	20	24	21	34
Multiple Problems	7	4	8	6	9	6
Other Problems	26	19	30	31	13	29
Moderate Physical Problems	5	3	5	7	4	6
Rent Burden 31–50% of Income	22	18	25	27	11	25
Rent Burden Only	18	16	17	23	9	23
Crowded	4	0	9	2	0	0
Multiple Problems	5	2	8	4	2	3
No Problems at All	22	27	20	25	24	20
Unassisted, No Problems	12	12	11	21	8	16
In Assisted Housing	29	37	31	18	47	14
One Person in Household	41	75	2	0	69	78
Husband-Wife Family	24	18	37	55	11	3
Female Head	52	61	54	30	50	46
Minority Head	51	32	66	60	45	41
AFDC/SSI Income	19	15	25	0	67	0
Social Security Income	26	88	8	0	50	0
Income Below 50% of Poverty	21	14	25	17	17	24
Income Below Poverty	51	42	58	39	66	43
Income Below 150% of Poverty	78	73	87	71	87	67
High School Graduate	64	48	61	71	60	82
Earnings at Minimum Wage:						
At Least Half Time	54	13	69	80	20	69
At Least Full Time	41	6	56	69	10	51
Earnings Main Source of Income	59	12	74	86	20	82
Housing Rated Poor	12	7	13	16	11	14
Housing Rated Good+	68	81	64	58	68	66
Neighborhood Rated Poor	10	4	13	14	12	8
Neighborhood Rated Good+	66	78	62	60	66	64
In Central Cities	51	45	51	50	54	54
Suburbs	33	37	34	33	24	31
Northeast	23	32	20	21	29	19
South	31	28	32	33	27	34
West	25	19	30	32	19	24
Head Age 75+	11	52	0	0	0	0

Source: HUD-PD&R tabulations of the 1999 American Housing Survey .

Table A–6a
Housing Problems and Characteristics of Extremely-Low-Income Renters by Household Type, 1999

	Total	Elderly, No Children	Families With Children	Other Families	Nonfamily Reporting SSI Income	Other Non-family
Total Households (Thousands)	8,553	2,034	3,554	328	858	1,779
Number of Children	7,749	0	7,749	0	0	0
Number of Persons	19,874	2,565	13,162	762	1,126	2,259
Children/Household	.91	.00	2.18	.00	.00	.00
Persons/Household	2.32	1.26	3.70	2.32	1.31	1.27
Number of Households With:						
Priority Problems	3,750	806	1,439	156	322	1,027
Severe Physical Problems	325	47	124	11	41	103
Rent Burden >50% of Income	3,608	782	1,387	156	305	978
Rent Burden Only	2,883	685	1,008	129	221	840
Multiple Problems	790	107	415	27	90	151
Other Problems	1,064	208	552	56	51	198
Moderate Physical Problems	276	55	111	15	8	87
Rent Burden 31–50% of Income	866	187	456	44	46	133
Rent Burden Only	596	153	257	38	37	111
Crowded	242	0	230	6	6	0
Multiple Problems	292	34	218	8	9	22
No Problems at All	1,671	476	604	66	175	349
Unassisted, No Problems	721	166	206	51	31	258
In Assisted Housing	3,026	854	1,357	65	454	297
One Person in Household	3,720	1,574	98	0	654	1,393
Husband-Wife Family	1,714	354	1,066	170	69	55
Female Head	4,894	1,246	2,192	106	477	873
Minority Head	4,582	727	2,500	220	385	750
AFDC/SSI Income	2,218	390	1,208	0	619	0
Social Security Income	2,433	1,744	299	0	390	0
Income Below 50% of Poverty	3,138	435	1,543	128	194	838
Income Below Poverty	7,028	1,317	3,228	255	745	1,483
Income Below 150% of Poverty	8,454	1,966	3,542	326	858	1,763
High School Graduate	5,052	891	1,966	228	515	1,453
Two+ Years Post High School	1,017	177	254	57	79	449
Earnings at Minimum Wage:						
At Least Half Time	2,896	103	1,771	196	52	775
At Least Full Time	1,489	37	1,067	123	13	250
Earnings Main Source of Income	3,819	143	2,139	244	73	1,220
Housing Rated Poor	1,125	163	501	51	95	315
Housing Rated Good+	5,732	1,630	2,216	198	581	1,107
Neighborhood Rated Poor	928	80	528	46	101	173
Neighborhood Rated Good+	5,519	1,574	2,097	192	570	1,086
In Central Cities	4,487	961	1,912	178	482	954
Suburbs	2,742	750	1,150	112	190	539
Northeast	2,025	668	717	61	261	317
South	2,743	593	1,185	110	216	639
West	2,051	356	1,008	115	154	419

Table A–6a (continued)

	Total	Elderly, No Children	Families With Children	Other Families	Nonfamily Reporting SSI Income	Other Non-family
Percentage of Households With:						
Priority Problems	44	40	40	47	38	58
Severe Physical Problems	4	2	3	3	5	6
Rent Burden >50% of Income	42	38	39	47	36	55
Rent Burden Only	34	34	28	39	26	47
Multiple Problems	9	5	12	8	11	8
Other Problems	12	10	16	17	6	11
Moderate Physical Problems	3	3	3	5	1	5
Rent Burden 31–50% of Income	10	9	13	13	5	7
Rent Burden Only	7	8	7	12	4	6
Crowded	3	0	6	2	1	0
Multiple Problems	3	2	6	3	1	1
No Problems at All	20	23	17	20	20	20
Unassisted, No Problems	8	8	6	16	4	14
In Assisted Housing	35	42	38	20	53	17
One Person in Household	43	77	3	0	76	78
Husband-Wife Family	20	17	30	52	8	3
Female Head	57	61	62	32	56	49
Minority Head	54	36	70	67	45	42
AFDC/SSI Income	26	19	34	0	72	0
Social Security Income	28	86	8	0	46	0
Income Below 50% of Poverty	37	21	43	39	23	47
Income Below Poverty	82	65	91	78	87	83
Income Below 150% of Poverty	99	97	100	99	100	99
High School Graduate	59	44	55	70	60	82
Earnings at Minimum Wage:						
At Least Half Time	34	5	50	60	6	44
At Least Full Time	17	2	30	37	1	14
Earnings Main Source of Income	45	7	60	74	9	69
Housing Rated Poor	13	8	14	15	11	18
Housing Rated Good+	67	80	62	60	68	62
Neighborhood Rated Poor	11	4	15	14	12	10
Neighborhood Rated Good+	65	77	59	58	67	61
In Central Cities	52	47	54	54	56	54
Suburbs	32	37	32	34	22	30
Northeast	24	33	20	19	30	18
South	32	29	33	33	25	36
West	24	17	28	35	18	24
Head Age 75+	12	51	0	0	0	0

Source: HUD-PD&R tabulations of the 1999 American Housing Survey .

Table A–7
Housing Problems and Characteristics of Worst Case Renters by Household Type, 1999

	Total	Elderly, No Children	Families With Children	Other Families	Nonfamily Reporting SSI Income	Other Non-family
Households With Priority Problems (Thousands)	4,856	1,028	1,793	226	371	1,438
Number of Children	3,646	0	3,636	0	0	0
Number of Persons	10,881	1,357	6,520	530	512	1,962
Children/Household	.75	.00	2.03	.00	.00	.00
Persons/Household	2.24	1.32	3.64	2.34	1.38	1.36
Number of Households With:						
Severe Physical Problems	526	63	216	24	56	167
Rent Burden >50% of Income	4,553	991	1,658	219	342	1,343
Rent Burden Only	3,737	884	1,250	183	250	1,160
Multiple Problems	969	120	499	43	104	202
One Person in Household	2,116	750	62	0	260	1,045
Husband-Wife Family	1,078	209	656	117	31	65
Female Head	2,489	637	921	75	203	651
Minority Head	2,324	316	1,149	131	184	545
AFDC/SSI Income	849	122	477	0	250	0
Social Security Income	1,247	924	152	0	171	0
Income Below 50% of Poverty	1,441	230	632	52	102	426
Income Below Poverty	3,240	552	1,398	128	287	875
Income Below 150% of Poverty	4,286	831	1,697	202	355	1,201
High School Graduate	3,258	571	1,094	180	214	1,199
Two+ Years Post High School	782	121	165	44	42	410
Earnings at Minimum Wage:						
At Least Half Time	2,189	76	1,035	174	36	868
At Least Full Time	1,371	38	720	121	10	482
Earnings Main Source of Income	2,807	101	1,225	213	47	1,221
Housing Rated Poor	679	96	289	28	61	206
Housing Rated Good+	3,234	799	1,102	148	225	960
Neighborhood Rated Poor	423	38	193	26	45	120
Neighborhood Rated Good+	3,193	787	1,107	143	217	940
In Central Cities	2,504	457	919	115	215	799
Suburbs	1,703	435	642	88	89	449
Northeast	1,035	310	328	38	102	257
South	1,548	309	544	69	123	504
West	1,373	213	605	93	76	386

Table A–7 (continued)

	Total	Elderly, No Children	Families With Children	Other Families	Nonfamily Reporting SSI Income	Other Non-family
Percentage of Worst Case Households With:						
Severe Physical Problems	11	6	12	11	15	12
Rent Burden >50% of Income	94	96	92	97	92	93
Rent Burden Only	77	86	70	81	67	81
Multiple Problems	20	12	28	19	28	14
One Person in Household	44	73	3	0	70	73
Husband-Wife Family	22	20	37	51	8	5
Female Head	51	62	51	33	55	45
Minority Head	48	31	64	58	50	38
AFDC/SSI Income	17	12	27	0	67	0
Social Security Income	26	90	8	0	46	0
Income Below 50% of Poverty	30	22	35	23	27	30
Income Below Poverty	67	54	78	57	77	61
Income Below 150% of Poverty	88	81	95	89	96	84
High School Graduate+	67	56	61	80	58	83
Earnings at Minimum Wage:						
At Least Half Time	45	7	58	77	10	60
At Least Full Time	28	4	40	53	3	34
Earnings Main Source of Income	58	10	68	94	13	85
Housing Rated Poor	14	9	16	12	16	14
Housing Rated Good+	67	78	61	65	61	67
Neighborhood Rated Poor	9	4	11	12	12	8
Neighborhood Rated Good+	66	77	62	63	59	65
In Central Cities	52	44	51	51	58	56
Suburbs	35	42	36	39	24	31
Northeast	21	30	18	17	28	18
South	32	30	30	30	33	35
West	28	21	34	41	20	27
Head Age 75+	11	53	0	0	0	0

Source: HUD-PD&R tabulations of the 1999 American Housing Survey .

Table A–7a
Housing Problems and Characteristics of Extremely-Low-Income Worst Case Renters by Household Type, 1999

	Total	Elderly, No Children	Families With Children	Other Families	Nonfamily Reporting SSI Income	Other Non-family
Households With Priority Problems (Thousands)	3,750	806	1,439	156	322	1,027
Number of Children	2,995	0	2,995	0	0	0
Number of Persons	8,534	1,064	5,287	369	432	1,381
Children/Household	.80	.00	2.08	.00	.00	.00
Persons/Household	2.28	1.32	3.67	2.37	1.34	1.35
Number of Households With:						
Severe Physical Problems	325	47	124	11	41	103
Rent Burden >50% of Income	3,608	782	1,387	156	305	978
Rent Burden Only	2,883	685	1,008	129	221	840
Multiple Problems	790	107	415	27	90	151
One Person in Household	1,627	589	55	0	233	750
Husband-Wife Family	824	167	519	83	19	35
Female Head	1,978	508	758	44	180	488
Minority Head	1,891	266	969	93	157	406
AFDC/SSI Income	797	115	451	0	231	0
Social Security Income	961	711	118	0	132	0
Income Below 50% of Poverty	1,441	230	632	52	102	426
Income Below Poverty	3,140	550	1,326	119	282	862
Income Below 150% of Poverty	3,704	774	1,436	156	322	1,016
High School Graduate+	2,415	423	822	120	185	865
Two+ Years Post High School	527	84	102	25	29	287
Earnings at Minimum Wage:						
At Least Half Time	1,375	39	720	109	14	494
At Least Full Time	629	13	418	60	0	137
Earnings Main Source of Income	1,998	73	914	147	25	839
Housing Rated Poor	579	88	245	19	55	171
Housing Rated Good+	2,425	619	854	102	195	656
Neighborhood Rated Poor	352	34	161	15	41	101
Neighborhood Rated Good+	2,380	603	851	99	190	637
In Central Cities	1,960	381	744	80	196	560
Suburbs	1,301	325	520	65	69	323
Northeast	79735	257	258	23	91	168
South	1,170	251	412	38	111	358
West	1,034	155	484	72	57	266

Table A–7a (continued)

	Total	Elderly, No Children	Families With Children	Other Families	Nonfamily Reporting SSI Income	Other Non-family
Percentage of Worst Case Households With:						
Priority Problems	100	100	100	100	100	100
Severe Physical Problems	9	6	9	7	13	10
Rent Burden >50% of Income	96	97	96	100	95	95
Rent Burden Only	77	85	70	83	69	82
Multiple Problems	21	13	29	17	28	15
One Person in Household	43	73	4	0	72	73
Husband-Wife Family	22	21	36	53	6	3
Female Head	53	63	53	28	56	48
Minority Head	50	33	67	60	49	40
AFDC/SSI Income	21	14	31	0	72	0
Social Security Income	26	88	8	0	41	0
Income Below 50% of Poverty	38	29	44	33	32	41
Income Below Poverty	84	68	92	76	88	84
Income Below 150% of Poverty	99	96	100	100	100	99
High School Graduate	64	52	57	77	58	84
Earnings at Minimum Wage:						
At Least Half Time	37	5	50	70	4	48
At Least Full Time	17	2	29	39	0	13
Earnings Main Source of Income	53	9	64	95	8	82
Housing Rated Poor	15	11	17	12	17	17
Housing Rated Good+	65	77	59	65	60	64
Neighborhood Rated Poor	9	4	11	10	13	10
Neighborhood Rated Good+	63	75	59	64	59	62
In Central Cities	52	47	52	51	61	55
Suburbs	35	40	36	42	21	31
Northeast	21	32	18	15	28	16
South	31	31	29	25	34	35
West	28	19	34	46	18	26
Head Age 75+	11	52	1	0	0	0

Source: HUD-PD&R tabulations of the 1999 American Housing Survey .

Table A–8
Detailed Housing Problems of Worst Case Renters by Household Type, 1987, 1995, 1997, and 1999

	1987		1995		1997		1999	
Elderly								
Severe Physical Problems								
Only	59	5%	29	3%	42	4%	24	2%
And Rent Burden >50% Income	13	1%	15	1%	26	2%	27	3%
And Other Problem(s)	18	2%	22	2%	18	2%	13	1%
Rent Burden >50% Income								
Only	939	85%	933	89%	1,005	85%	884	86%
And Moderate Physical Problems but Uncrowded	78	7%	50	5%	86	7%	81	8%
And Moderate Physical Problems and Crowded	0	0%	0	0%	0	0%	0	0%
And Crowded but Adequate	2	0%	1	0%	3	0%	0	0%
Total	1,110	100%	1,050	100%	1,180	100%	1,028	100%
Families With Children								
Severe Physical Problems								
Only	37	2%	22	1%	53	3%	44	2%
And Rent Burden >50% Income	69	4%	45	2%	46	2%	81	5%
And Other Problem(s)	65	4%	60	3%	80	4%	91	5%
Recent Burden >59% Income								
Only	1,206	67%	1,412	70%	1,430	70%	1,250	70%
And Moderate Physical Problems but Uncrowded	201	11%	160	8%	138	7%	127	7%
And Moderate Physical Problems and Crowded	75	4%	42	2%	49	2%	31	2%
And Crowded but Adequate	140	8%	274	14%	254	12%	169	9%
Total	1,792	100%	2,015	100%	2,051	100%	1,793	100%
Disabled								
Severe Physical Problems								
Only	12	3%	13	3%	13	3%	17	4%
And Rent Burden >50% Income	21	6%	18	4%	10	3%	27	7%
And Other Problem(s)	16	4%	16	3%	9	2%	12	3%
Rent Burden >50% Income								
Only	249	70%	329	72%	267	71%	250	67%
And Moderate Physical Problems but Uncrowded	54	15%	73	16%	68	18%	58	16%
And Moderate Physical Problems and Crowded	2	1%	10	2%	8	2%	5	1%
And Crowded but Adequate	2	0%	0	0%	0	0%	3	1%
Total	356	100%	459	100%	374	100%	371	100%

Table A–8 (continued)

	1987		1995		1997		1999	
Other Households								
Severe Physical Problems								
Only	54	4%	35	2%	59	3%	66	4%
And Rent Burden >50% Income	25	2%	49	3%	84	5%	89	5%
And Other Problem(s)	29	2%	45	3%	50	3%	36	2%
Rent Burden >50% Income								
Only	1,063	83%	1,439	86%	1,451	82%	1,352	81%
And Moderate Physical Problems but Uncrowded	101	8%	104	6%	131	7%	119	7%
And Moderate Physical Problems and Crowded	0	0%	4	0%	0	0%	2	0%
And Crowded but Adequate	2	0%	2	0%	0	0%	0	0%
Total	1,275	100%	1,678	100%	1,774	100%	1,664	100%

Source: HUD-PD&R tabulations of the 1987, 1991, 1993, 1995, and 1999 American Housing Surveys.

Table A–9
Housing Problems Among Very-Low-Income Renters by Race and Ethnicity, 1978, 1987, 1991, 1993, 1995, 1997, and 1999

	Number of Households (Thousands)							As Percent of Households						
	1978	1987	1991	1993	1995	1997	1999	1978	1987	1991	1993	1995	1997	1999
Non-Hispanic White	6,673	7,849	7,908	8,127	7,579	7,564	7,266							
Priority Problems	2,602	2,765	2,888	2,971	2,851	2,947	2,532	39%	35%	37%	37%	38%	39%	35%
Severe Physical Problems	500	177	329	231	163	203	214	7%	2%	4%	3%	2%	3%	3%
Rent Burden >50%	2,215	2,645	2,690	2,825	2,731	2,812	2,391	33%	34%	34%	35%	36%	37%	33%
Rent Burden Only	1,928	2,371	2,347	2,528	2,453	2,486	2,115	29%	30%	30%	31%	32%	33%	29%
Other Problems	1,915	1,994	1,925	2,037	1,755	1,737	1,790	29%	25%	24%	25%	23%	23%	25%
Moderate Physical Problems	314	338	278	243	265	333	291	5%	4%	4%	3%	4%	4%	4%
Rent Burden 31–50%	1,682	1,774	1,732	1,855	1,604	1,517	1,603	25%	23%	22%	23%	21%	20%	22%
Crowded	133	133	90	130	97	91	100	2%	2%	1%	2%	1%	1%	1%
Rent Burden Only		1,538	1,566	1,679	1,407	1,338	1,420	NA	20%	20%	21%	19%	18%	20%
No Problems, Total	1,701	1,892	2,111	2,043	1,974	1,664	1,754	25%	24%	27%	25%	26%	22%	24%
No Problems, Unassisted	1,088	1,162	1,215	1,183	1,102	1,042	1,097	16%	15%	15%	15%	15%	14%	15%
Assisted	1,068	1,931	1,847	1,930	1,857	1,838	1,846	16%	25%	23%	24%	25%	24%	25%
Priority As % Unassisted								46%	47%	48%	48%	50%	51%	47%
Non-Hispanic Black	2,643	3,275	3,525	3,725	3,676	3,624	3,889							
Priority Problems	936	1,021	973	1,070	1,109	1,087	1,194	35%	31%	28%	29%	30%	30%	31%
Severe Physical Problems	367	164	135	99	107	130	130	14%	5%	4%	3%	3%	4%	4%
Rent Burden >50%	655	920	886	1,001	1,041	1,004	1,128	25%	28%	26%	27%	28%	28%	29%
Rent Burden Only	423	622	622	762	789	756	838	16%	19%	18%	20%	21%	21%	22%
Other Problems	673	671	771	743	698	704	911	25%	20%	22%	20%	19%	19%	23%
Moderate Physical Problems	256	269	245	228	154	194	229	10%	8%	7%	6%	4%	5%	6%
Rent Burden 31–50%	484	501	616	609	608	566	772	18%	15%	17%	16%	17%	16%	20%
Crowded	119	78	92	80	80	88	96	5%	2%	3%	2%	2%	2%	2%
Rent Burden Only		373	448	466	486	429	614	NA	11%	13%	13%	13%	12%	16%
No Problems, Total	645	668	893	1,026	882	831	821	24%	20%	25%	28%	24%	23%	21%
No Problems, Unassisted	285	219	298	283	273	318	325	11%	7%	8%	8%	7%	9%	8%
Assisted	748	1,362	1,471	1,627	1,594	1,515	1,458	28%	42%	42%	44%	43%	42%	37%
Priority As % Unassisted								49%	53%	47%	51%	53%	52%	49%
Hispanic Origin	1,123	1,690	2,010	2,214	2,584	2,762	2,754							
Priority Problems	358	582	724	872	940	1,036	837	32%	34%	36%	39%	36%	38%	30%
Severe Physical Problems	88	65	91	100	81	128	138	8%	4%	5%	5%	3%	5%	5%
Rent Burden >50%	292	529	681	809	900	953	758	26%	31%	34%	37%	35%	35%	28%
Rent Burden Only	192	338	426	557	638	661	551	17%	20%	21%	25%	25%	24%	20%
Other Problems	420	519	634	630	773	814	930	37%	31%	32%	28%	30%	29%	34%
Moderate Physical Problems	108	95	86	100	115	177	153	10%	6%	4%	5%	4%	6%	6%
Rent Burden 31–50%	279	409	521	505	600	653	746	25%	24%	26%	23%	23%	24%	27%
Crowded	190	174	223	211	342	325	364	17%	10%	11%	10%	13%	12%	13%
Rent Burden Only		281	354	354	366	373	468	NA	17%	18%	16%	14%	14%	17%
No Problems, Total	226	274	346	376	476	460	516	20%	16%	17%	17%	18%	17%	19%
No Problems, Unassisted	118	159	181	185	233	266	286	11%	9%	9%	8%	9%	10%	10%
Assisted	227	430	473	527	638	645	700	20%	25%	24%	24%	25%	23%	25%
Priority As % Unassisted								40%	46%	47%	52%	48%	49%	41%

Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1987, 1991, 1995, 1997, and 1999 American Housing Surveys.

Table A–10
Housing Problems Among Very-Low-Income Renters by Region, 1978, 1987, 1991, 1993, 1995, 1997, and 1999

	Number of Households (Thousands)							As Percent of Households						
	1978	1987	1991	1993	1995	1997	1999	1978	1987	1991	1993	1995	1997	1999
Northeast	2,723	3,068	3,062	3,278	3,305	3,369	3,422							
Priority Problems	1,147	1,034	1,061	1,218	1,229	1,286	1,033	42%	34%	35%	37%	37%	38%	30%
Severe Physical Problems	288	102	166	136	120	153	154	11%	3%	5%	4%	4%	5%	5%
Rent Burden >50%	956	966	973	1,143	1,158	1,195	934	35%	31%	32%	35%	35%	35%	27%
Rent Burden Only	762	784	787	925	976	1,001	801	28%	26%	26%	28%	30%	30%	23%
Other Problems	665	641	568	598	549	573	770	24%	21%	19%	18%	17%	17%	23%
Moderate Physical Problems	99	87	83	47	70	98	106	4%	3%	3%	1%	2%	3%	3%
Rent Burden 31–50%	597	561	519	574	508	497	684	22%	18%	17%	18%	15%	15%	20%
Crowded	84	61	57	59	42	72	93	3%	2%	2%	2%	1%	2%	3%
Rent Burden Only		505	430	502	445	410	582	NA	16%	14%	15%	13%	12%	17%
No Problems, Total	644	668	780	765	752	723	794	24%	22%	25%	23%	23%	21%	23%
No Problems, Unassisted	312	291	339	306	270	343	387	11%	9%	11%	9%	8%	10%	11%
Assisted	599	1,103	1,094	1,156	1,257	1,167	1,232	22%	36%	36%	35%	38%	35%	36%
Priority As % Unassisted								54%	53%	54%	57%	60%	58%	47%
Midwest	2,373	3,183	3,342	3,446	3,014	2,967	2,984							
Priority Problems	834	999	961	1,126	976	939	898	35%	31%	29%	33%	32%	32%	30%
Severe Physical Problems	172	73	124	91	80	98	75	7%	2%	4%	3%	3%	3%	3%
Rent Burden >50%	695	953	879	1,065	916	876	858	29%	30%	26%	31%	30%	30%	29%
Rent Burden Only	611	802	738	934	793	742	728	26%	25%	22%	27%	26%	25%	24%
Other Problems	643	733	849	754	637	673	766	27%	23%	25%	22%	21%	23%	26%
Moderate Physical Problems	41	80	74	79	79	125	98	2%	3%	2%	2%	3%	4%	3%
Rent Burden 31–50%	589	662	787	683	570	571	686	25%	21%	24%	20%	19%	19%	23%
Crowded	54	71	66	75	42	63	52	2%	2%	2%	2%	1%	2%	2%
Rent Burden Only		595	714	613	524	490	620	NA	19%	21%	18%	17%	17%	21%
No Problems, Total	695	828	947	985	862	782	783	29%	26%	28%	29%	29%	26%	26%
No Problems, Unassisted	458	452	516	487	404	411	402	19%	14%	15%	14%	13%	14%	13%
Assisted	439	999	1,017	1,079	997	944	917	18%	31%	30%	31%	33%	32%	31%
Priority As % Unassisted								43%	46%	41%	48%	48%	46%	43%
South	3,327	4,266	4,535	4,768	4,534	4,602	4,632							
Priority Problems	1,211	1,371	1,474	1,491	1,446	1,635	1,547	36%	32%	33%	31%	32%	36%	33%
Severe Physical Problems	429	179	174	133	109	150	148	13%	4%	4%	3%	2%	3%	3%
Rent Burden >50%	859	1,241	1,350	1,385	1,370	1,530	1,464	26%	29%	30%	29%	30%	33%	32%
Rent Burden Only	599	932	1,045	1,155	1,110	1,240	1,186	18%	22%	23%	24%	24%	27%	26%
Other Problems	1,057	1,231	1,288	1,326	1,194	1,143	1,269	32%	29%	28%	28%	26%	25%	27%
Moderate Physical Problems	472	469	376	380	311	336	349	14%	11%	8%	8%	7%	7%	8%
Rent Burden 31–50%	705	943	1,002	1,057	991	912	1,024	21%	22%	22%	22%	22%	20%	22%
Crowded	171	137	151	132	161	114	153	5%	3%	3%	3%	4%	2%	3%
Rent Burden Only		674	800	853	765	708	820	NA	16%	18%	18%	17%	15%	18%
No Problems, Total	711	924	1,169	1,258	1,184	992	1,016	21%	22%	26%	26%	26%	22%	22%
No Problems, Unassisted	416	546	590	619	659	617	607	12%	13%	13%	13%	15%	13%	13%
Assisted	642	1,118	1,169	1,332	1,235	1,209	1,209	19%	26%	26%	28%	27%	26%	26%
Priority As % Unassisted								45%	44%	44%	43%	44%	48%	45%

Table A–10 (continued)

	Number of Households (Thousands)							As Percent of Households						
	1978	**1987**	**1991**	**1993**	**1995**	**1997**	**1999**	**1978**	**1987**	**1991**	**1993**	**1995**	**1997**	**1999**
West	2,192	2,756	3,062	3,246	3,696	3,863	3,765							
Priority Problems	747	1,130	1,347	1,362	1,552	1,519	1,373	34%	41%	44%	42%	42%	39%	36%
Severe Physical Problems	75	63	117	94	60	88	148	3%	2%	4%	3%	2%	2%	4%
Rent Burden >50%	692	1,083	1,292	1,313	1,518	1,455	1,298	32%	39%	42%	40%	41%	38%	34%
Rent Burden Only	598	937	1,011	1,044	1,235	1,169	1,024	27%	34%	33%	32%	33%	30%	27%
Other Problems	707	702	766	891	1,016	1,082	1,058	32%	25%	25%	27%	28%	28%	28%
Moderate Physical Problems	83	88	109	92	105	184	156	4%	3%	4%	3%	3%	5%	4%
Rent Burden 31–50%	588	618	672	803	893	930	919	27%	22%	22%	25%	24%	24%	24%
Crowded	162	153	164	197	300	306	312	7%	6%	5%	6%	8%	8%	8%
Rent Burden Only		486	508	630	644	662	631	NA	18%	17%	19%	17%	17%	17%
No Problems, Total	574	508	594	576	682	614	708	26%	18%	19%	18%	18%	16%	19%
No Problems, Unassisted	335	293	305	305	339	327	435	15%	11%	10%	9%	9%	8%	12%
Assisted	401	630	645	689	789	936	898	18%	23%	21%	21%	21%	24%	24%
Priority As % Unassisted								42%	53%	56%	53%	53%	52%	48%

Source: HUD-PD&R tabulations of the 1978 Annual Housing Survey and of the 1987, 1991, 1993, 1995,1997 and 1999 American Housing Surveys.

Table A–11
Housing Problems Among Very-Low-Income Renters by Metropolitan Location, 1987, 1991, 1993, 1995, 1997, and 1999

	Number of households (Thousands)						**As Percent of Households**					
	1987	**1991**	**1993**	**1995**	**1997**	**1999**	**1987**	**1991**	**1993**	**1995**	**1997**	**1999**
Central Cities	6,938	7,157	7,419	7,260	7,479	7,487						
Priority Problems	2,442	2,474	2,759	2,666	2,719	2,504	35%	35%	37%	37%	36%	33%
Severe Physical Problems	202	295	272	199	300	326	3%	4%	4%	3%	4%	4%
Rent Burden >50%	2,319	2,305	2,591	2,550	2,530	2,316	33%	32%	35%	35%	34%	31%
Rent Burden Only	1,825	1,777	2,076	2,066	2,028	1,822	26%	25%	28%	28%	27%	24%
Other Problems	1,679	1,766	1,698	1,650	1,745	1,990	24%	25%	23%	23%	23%	27%
Moderate Physical Problems	357	316	277	263	407	364	5%	4%	4%	4%	5%	5%
Rent Burden 31–50%	1,445	1,528	1,499	1,440	1,453	1,700	21%	21%	20%	20%	19%	23%
Crowded	208	262	239	298	323	341	3%	4%	3%	4%	4%	5%
Rent Burden Only	1,180	1,217	1,234	1,138	1,081	1,348	17%	17%	17%	16%	14%	18%
No Problems, Total	1,352	1,643	1,634	1,549	1,479	1,512	19%	23%	22%	21%	20%	20%
No Problems, Unassisted	638	724	683	642	725	749	9%	10%	9%	9%	10%	10%
Assisted	2,181	2,192	2,281	2,302	2,290	2,246	31%	31%	31%	32%	31%	30%
Priority As % Unassisted							51%	50%	54%	54%	52%	48%
Suburbs	3,854	4,352	4,766	4,855	4,847	4,903						
Priority Problems	1,357	1,660	1,735	1,831	1,881	1,703	35%	38%	36%	38%	39%	35%
Severe Physical Problems	88	165	110	95	100	108	2%	4%	2%	2%	2%	2%
Rent Burden >50%	1,300	1,569	1,663	1,762	1,820	1,648	34%	36%	35%	36%	38%	34%
Rent Burden Only	1,131	1,313	1,444	1,512	1,556	1,451	29%	30%	30%	31%	32%	30%
Other Problems	1,054	1,150	1,303	1,239	1,132	1,272	27%	26%	27%	26%	23%	26%
Moderate Physical Problems	182	133	173	153	190	186	5%	3%	4%	3%	4%	4%
Rent Burden 31–50%	903	1,015	1,170	1,102	976	1,133	23%	23%	25%	23%	20%	23%
Crowded	158	119	183	198	186	207	4%	3%	4%	4%	4%	4%
Rent Burden Only	732	906	980	909	783	905	19%	21%	21%	19%	16%	18%
No Problems, Total	832	1,009	1,116	1,155	994	1,106	22%	23%	23%	24%	21%	23%
No Problems, Unassisted	497	587	616	646	602	696	13%	13%	13%	13%	12%	14%
Assisted	944	955	1,112	1,139	1,232	1,231	25%	22%	23%	23%	25%	25%
Priority As % Unassisted							47%	49%	47%	49%	52%	46%
Nonmetropolitan	2,480	2,493	2,553	2,433	2,475	2,413						
Priority Problems	735	708	704	706	779	648	30%	28%	28%	29%	31%	27%
Severe Physical Problems	130	121	71	75	89	93	5%	5%	3%	3%	4%	4%
Rent Burden >50%	624	633	652	650	706	590	25%	25%	26%	27%	29%	24%
Rent Burden Only	501	490	538	537	568	462	20%	20%	21%	22%	23%	19%
Other Problems	574	555	570	507	594	601	23%	22%	22%	21%	24%	25%
Moderate Physical Problems	186	193	146	149	147	160	7%	8%	6%	6%	6%	7%
Rent Burden 31–50%	437	440	450	419	481	480	18%	18%	18%	17%	19%	20%
Crowded	60	56	41	50	47	59	2%	2%	2%	2%	2%	2%
Rent Burden Only	345	329	385	329	407	400	14%	13%	15%	14%	16%	17%
No Problems, Total	742	838	834	775	639	680	30%	34%	33%	32%	26%	28%
No Problems, Unassisted	449	439	416	384	370	388	18%	18%	16%	16%	15%	16%
Assisted	722	791	834	837	733	774	29%	32%	33%	34%	30%	32%
Priority As % Unassisted							42%	42%	41%	44%	45%	40%

Table A–11 (continued)

	Number of households (Thousands)						As Percent of Households					
	1987	**1991**	**1993**	**1995**	**1997**	**1999**	**1987**	**1991**	**1993**	**1995**	**1997**	**1999**
U.S. Total	13,273	14,002	14,738	14,549	14,801	14,803						
Priority Problems	4,535	4,842	5,198	5,203	5,379	4,856	34%	35%	35%	36%	36%	33%
Severe Physical Problems	420	581	453	369	489	527	3%	4%	3%	3%	3%	4%
Rent Burden >50%	4,242	4,507	4,906	4,962	5,056	4,553	32%	32%	33%	34%	34%	31%
Rent Burden Only	3,457	3,580	4,058	4,114	4,153	3,735	26%	26%	28%	28%	28%	25%
Other Problems	3,307	3,471	3,571	3,396	3,470	3,863	25%	25%	24%	23%	23%	26%
Moderate Physical Problems	724	641	596	565	743	711	5%	5%	4%	4%	5%	5%
Rent Burden 31–50%	2,784	2,983	3,119	2,961	2,910	3,312	21%	21%	21%	20%	20%	22%
Crowded	426	437	464	545	556	607	3%	3%	3%	4%	4%	4%
Rent Burden Only	2,257	2,452	2,599	2,377	2,271	2,653	17%	18%	18%	16%	15%	18%
No Problems, Total	2,926	3,490	3,584	3,479	3,112	3,298	22%	25%	24%	24%	21%	22%
No Problems, Unassisted	1,584	1,750	1,714	1,672	1,697	1,833	12%	12%	12%	11%	11%	12%
Assisted	3,847	3,938	4,227	4,278	4,254	4,251	29%	28%	29%	29%	29%	29%
Priority As % Unassisted							48%	48%	49%	51%	51%	46%

Source: HUD-PD&R tabulations from the 1987, 1991, 1993, 1995, 1997, and 1999 American Housing Surveys.

Table A–12
Assistance and Worst Case Needs Among Very-Low-Income Renters by Region and Location, 1987 and 1999

	Very-Low-Income Renters	Assisted		Worst Case		% of Worst Case	
		Thousands	Percent	Thousands	Percent	With Rent Burden Only	As % of UVLIRs*
1999							
Northeast	3,422	1,230	36%	1,035	30%	78%	47%
Central Cities	1,983	749	38%	607	31%	70%	49%
Suburbs	1,114	337	30%	371	33%	90%	48%
Nonmetro	324	144	44%	56	17%	80%	31%
Midwest	2,984	917	31%	899	30%	82%	44%
Central Cities	1,547	447	29%	497	32%	76%	45%
Suburbs	778	216	28%	237	30%	89%	42%
Nonmetro	659	254	39%	165	25%	87%	41%
South	4,632	1,208	26%	1,548	33%	76%	45%
Central Cities	2,142	600	28%	739	35%	76%	48%
Suburbs	1,445	348	24%	500	35%	87%	46%
Nonmetro	1,046	261	25%	310	30%	61%	39%
West	3,765	898	24%	1,373	36%	75%	48%
Central Cities	1,815	452	25%	661	36%	70%	48%
Suburbs	1,567	330	21%	596	38%	79%	48%
Nonmetro	383	116	30%	117	30%	80%	44%
United States	14,803	4,253	29%	4,856	33%	77%	46%
Central Cities	7,487	2,248	30%	2,504	33%	73%	48%
Suburbs	4,903	1,230	25%	1,703	35%	85%	46%
Nonmetro	2,413	775	32%	648	27%	72%	40%
1987							
Northeast	3,068	1,102	36%	1,034	34%	76%	53%
Central Cities	1,853	703	38%	608	33%	71%	53%
Suburbs	918	280	31%	339	37%	83%	53%
Nonmetro	297	119	40%	87	29%	81%	49%
Midwest	3,183	999	31%	999	31%	80%	46%
Central Cities	1,662	556	33%	544	33%	78%	49%
Suburbs	726	208	29%	234	32%	84%	45%
Nonmetro	795	235	30%	220	28%	84%	39%
South	4,266	1,117	26%	1,371	32%	68%	44%
Central Cities	2,027	596	29%	648	32%	71%	45%
Suburbs	1,213	249	20%	402	33%	80%	42%
Nonmetro	1,025	273	27%	320	31%	48%	43%
West	2,756	629	23%	1,130	41%	83%	53%
Central Cities	1,396	326	23%	641	46%	80%	60%
Suburbs	997	207	21%	382	38%	87%	48%
Nonmetro	363	96	26%	108	30%	80%	41%
United States	13,273	3,847	29%	4,534	34%	76%	48%
Central Cities	6,938	2,181	31%	2,441	35%	75%	51%
Suburbs	3,854	944	25%	1,357	35%	83%	47%
Nonmetro	2,480	723	29%	735	30%	68%	42%

* Unassisted very-low-income renters

Source: HUD-PD&R tabulations of the 1987 and 1999 American Housing Surveys.

Table A–13
Housing Problems, Characteristics, and Earnings of Nonelderly Renters by Relative Income and Household Type, 1999

	Total	0–20%	21–30%	31–50%	51–60%	61–80%	80–100%	101–120%	121%+
Renters With Children (Thousands)	12,326	2,171	1,462	2,669	1,090	1,658	1,173	731	1,373
Children/Household	1.91	2.17	2.17	2.00	1.76	1.76	1.77	1.66	1.59
Persons/Household	3.70	3.57	3.84	3.79	3.55	3.64	3.72	3.75	3.73
Percent Of Households With:									
Priority Problems	16	43	35	13	4	5	4	3	1
Severe Physical Problems	3	3	4	3	2	3	2	2	1
Rent Burden >50% of Income	14	42	32	10	2	2	1	0	0
Rent Burden Only	11	30	25	9	2	2	1	0	0
Multiple Problems	4	13	9	3	1	1	1	1	0
Other Problems	26	6	28	49	39	25	18	13	12
Moderate Physical Problems	5	2	4	7	7	6	6	5	5
Rent Burden 31–50% Of Income	17	3	26	40	26	13	6	4	2
Rent Burden Only	13	2	15	31	24	12	6	4	2
Crowded	8	3	12	13	9	8	7	5	6
Multiple Problems	5	2	12	10	4	1	1	0	0
No Problems At All	46	20	17	25	50	66	77	82	85
Unassisted, No Problems	37	8	6	17	39	57	68	76	78
In Assisted Housing	21	42	31	21	18	13	11	7	8
One-Person Household	2	4	2	1	1	1	1	0	1
Husband-Wife Family	49	24	39	45	46	55	63	70	75
Female Head	41	67	52	45	43	33	24	17	14
Minority Head	54	70	69	61	50	45	42	37	33
AFDC/SSI Income	15	38	26	13	10	5	4	4	4
Social Security Income	6	7	9	7	6	4	3	3	4
Income Below 50% Of Poverty	13	73	2	0	0	0	0	0	0
Income Below Poverty	30	100	78	15	0	0	0	0	0
Income Below 150% Of Poverty	46	100	99	69	17	4	0	0	0
High School Graduate	72	53	58	69	78	81	81	86	88
Two+ Years Post High School	18	7	8	13	17	21	26	27	41
Earnings At Minimum Wage:									
At Least Half Time	83	25	85	95	98	97	97	98	97
At Least Full Time	76	6	63	91	96	97	97	98	97
Earnings Main Source Income	84	43	82	93	96	95	94	96	92
Head Age <30	37	44	43	39	38	35	36	32	23
Head Age 31–50	56	47	48	54	57	60	59	64	69
Head Age 51+	7	8	9	7	5	6	5	4	8
Children Age 6–12	26	24	25	26	27	30	29	26	27
Children Age <6	52	54	59	55	50	49	49	50	48
Housing Rated Poor	12	15	14	11	12	9	11	9	11
Housing Rated Good+	66	61	64	66	65	69	67	69	73
Neighborhood Rated Poor	10	16	13	11	8	7	6	6	4
Neighborhood Rated Good	66	56	64	66	72	69	69	74	75
In Central Cities	44	54	53	48	41	38	36	33	34
Suburbs	38	32	33	36	40	42	47	46	42

Table A–13 (continued)

	Total	0–20%	21–30%	31–50%	51–60%	61–80%	80–100%	101–120%	121%+
Other Nonelderly Renters	15,304	1,663	690	2,113	1,234	2,377	2,200	1,658	3,369
Persons/Household	1.57	1.40	1.49	1.51	1.51	1.58	1.53	1.64	1.74
Percent of Households With:									
Priority Problems	14	48	57	23	8	5	3	3	2
Severe Physical Problems	3	4	6	4	3	3	2	2	2
Rent Burden >50% of Income	11	46	53	20	6	2	1	1	0
Rent Burden Only	10	40	45	18	5	2	1	1	0
Multiple Problems	2	7	10	3	2	1	0	0	0
Other Problems	21	6	22	46	38	28	17	11	8
Moderate Physical Problems	6	4	4	7	6	8	8	6	5
Rent Burden 31–50% of Income	16	2	21	43	35	21	10	5	2
Rent Burden Only	14	2	18	39	32	20	9	5	2
Crowded	0	0	0	1	0	0	0	1	0
Multiple Problems	1	0	3	4	3	2	1	0	0
No Problems At All	61	36	10	22	48	64	77	85	89
Unassisted, No Problems	55	29	7	19	44	57	71	78	81
In Assisted Housing	10	17	15	12	9	9	8	8	9
One-Person Household	55	70	61	62	58	54	55	50	42
Husband-Wife Family	20	9	16	14	15	19	18	22	34
Female Head	35	46	44	40	42	40	36	30	21
Minority Head	34	44	49	42	36	31	31	29	26
Income Below 50% Poverty	8	73	0	0	0	0	0	0	0
Income Below Poverty	13	100	48	3	0	0	0	0	0
Income Below 150% of Poverty	20	100	97	36	2	0	0	0	0
High School Graduate	89	81	80	81	85	91	94	90	95
Two+ Years Post High School	39	26	23	24	27	35	44	45	59
Earnings at Minimum Wage:									
At Least Half Time	90	21	90	95	99	99	99	99	99
At Least Full Time	85	1	52	91	98	98	99	99	99
Earnings Main Source Income	92	51	90	95	98	98	98	98	96
Head Age <30	42	46	39	44	49	46	40	41	34
Head Age 31–50	44	39	45	39	40	40	47	46	52
Head Age 51+	14	15	17	17	11	13	13	13	15
Housing Rated Poor	9	19	15	11	9	7	7	7	7
Housing Rated Good+	72	62	62	68	71	75	73	75	76
Neighborhood Rated Poor	7	10	11	8	8	7	7	6	5
Neighborhood Rated Good	70	59	62	66	69	70	70	73	77
In Central Cities	48	52	56	52	51	45	46	47	43
Suburbs	38	32	28	32	38	36	43	38	44

Source: HUD-PD&R tabulations of the 1999 American Housing Survey.

Table A–14
Rental Units Categorized by Incomes to Which They Are Affordable, by Region, 1991, 1995, and 1999

(Number of units in thousands)

	Income as percentage of 1999 HAMFI				
	<30%	**31–50%**	**51–60%**	**61–80%**	**81–100%**
1991					
U.S. total	8,262	12,756	6,493	5,981	2,092
Northeast	1,747	2,426	1,316	1,333	589
Midwest	2,187	3,682	1,205	661	186
South	3,088	4,447	2,153	1,766	421
West	1,239	2,202	1,819	2,221	895
1995					
U.S. total	7,454	12,310	7,105	6,959	2,242
Northeast	1,683	2,361	1,447	1,423	606
Midwest	1,833	3,371	1,397	828	179
South	2,708	4,066	2,270	2,411	593
West	1,231	2,512	1,991	2,297	863
1999					
U.S. total	6,681	12,092	6,948	7,274	2,271
Northeast	1,572	2,408	1,425	1,418	422
Midwest	1,506	3,307	1,286	1,048	211
South	2,382	3,853	2,178	2,750	763
West	1,222	2,525	2,059	2,058	875

* Units affordable to an income range have rents equaling 30 percent of the range's incomes.

Source: HUD-PD&R tabulations of the 1991, 1995, and 1999 American Housing Surveys.

Table A–15
Mismatch Ratios by Region: Numbers of Affordable Units per 100 Renters With Incomes Below 30%, 50%, 60%, or 80% of 1999 HAMFI, 1991, 1995, and 1999

	Affordable* units per 100 renters with income (percentage below HAMFI)				Affordable and available** units per 100 renters (percentage below HAMFI)			
	<30%	<50%	<60%	<80%	<30%	<50%	<60%	<80%
1991								
U.S. total	89	136	150	147	52	87	99	108
Northeast	81	123	138	141	52	82	94	104
Midwest	97	160	164	145	57	100	106	109
South	101	151	164	156	61	96	106	113
West	66	100	127	144	33	63	84	103
1995								
U.S. total	79	126	145	145	47	82	96	107
Northeast	71	114	132	136	48	78	91	102
Midwest	89	160	171	149	52	95	107	109
South	97	139	155	155	54	89	101	110
West	54	94	122	138	31	65	87	104
1999								
U.S. total	78	127	147	150	42	78	93	106
Northeast	78	117	137	142	42	74	90	101
Midwest	87	162	172	156	48	94	106	112
South	87	135	152	159	46	81	95	109
West	60	99	128	140	31	64	85	101

* Units affordable to an income range have rents equaling 30 percent of the range's incomes.

** Units available to an income range are vacant or occupied by renters with income below the range's upper cutoff.

Source: HUD-PD&R Tabulations of the 1991, 1995, and 1999 American Housing Surveys.

Table A–16
Mismatch Ratios by Region and Metropolitan Location: Numbers of Affordable Units per 100 Renters with Incomes below 30%, 50%, and 60% of 1999 HAMFI, 1991 and 1999

	Affordable* units per 100 renters with income (percentage below HAMFI)			Affordable and available** units per 100 renters (percentage below HAMFI)		
	<30%	<50%	<60%	<30%	<50%	<60%
1999						
Northeast	78	117	137	42	74	90
Central Cities	70	113	131	45	77	91
Suburbs	74	115	143	31	64	84
Nonmetro	152	152	151	68	93	100
Midwest	87	162	172	48	94	106
Central Cities	68	146	156	46	96	108
Suburbs	89	169	188	46	86	104
Nonmetro	137	190	190	56	99	106
South	87	135	152	46	81	95
Central Cities	62	124	144	42	79	96
Suburbs	93	135	154	43	74	89
Nonmetro	134	157	165	60	95	101
West	60	99	128	31	64	85
Central Cities	48	94	121	29	63	85
Suburbs	51	91	126	27	59	82
Nonmetro	163	158	171	59	86	103
United States	79	127	147	42	78	93
Central Cities	62	118	138	41	78	94
Suburbs	75	122	148	36	69	88
Nonmetro	141	166	171	60	95	103
1991						
Northeast	81	123	138	52	82	94
Central Cities	75	120	134	53	85	96
Suburbs	89	128	146	47	73	88
Nonmetro	103	132	140	56	91	100
Midwest	98	160	164	57	100	106
Central Cities	83	147	153	55	101	108
Suburbs	100	176	185	55	96	106
Nonmetro	126	172	162	63	100	103
South	101	151	164	61	96	106
Central Cities	83	144	160	59	98	109
Suburbs	98	153	172	52	89	102
Nonmetro	141	166	160	77	103	108
West	66	100	128	33	64	84
Central Cities	53	95	124	33	64	85
Suburbs	60	92	124	27	57	79
Nonmetro	140	145	153	54	83	98
United States	89	136	150	52	87	99
Central Cities	75	128	144	52	89	100
Suburbs	86	134	156	45	78	93
Nonmetro	132	161	157	67	97	104

* Units affordable to an income range have rents equaling 30 percent of the range's incomes.

** Units available to an income range are vacant or occupied by renters with income below the range's upper cutoff.

Source: HUD-PD&R Tabulations of the 1991 and 1999 American Housing Surveys.

Table A–17
Households and Affordable Units by Income as Percentages of HAMFI, Affordable Units per Household, and Median Cost/Income Ratio, by Tenure and Relative Income, 1985 and 1999

	1985				1999			
	Affordable Units (Thousands)	Households (Thousands)	Cumulative Affordable Units per Household	Median Cost/ Income Burden	Affordable Units (Thousands)	Households (Thousands)	Cumulative Affordable Units per Household	Median Cost/ Income Burden
Owners								
LTE 30% AMI	3,624	4,509	0.80	47%	5,538	6,410	0.86	50%
30.1–50% AMI	5,954	5,767	0.93	27%	8,344	7,138	1.02	25%
50.1–60% AMI	4,534	2,960	1.07	22%	6,624	3,609	1.20	22%
60.1–80% AMI	10,407	5,641	1.30	19%	13,871	7,071	1.42	20%
80.1–100% AMI	11,119	6,679	1.39	18%	12,041	7,326	1.47	18%
100.1–120% AMI	7,961	6,336	1.37	15%	7,588	6,958	1.40	16%
120%+ AMI	14,214	24,253	1.03	12%	16,243	30,283	1.02	13%
All	57,813	56,145	1.03	17%	70,248	68,796	1.02	17%
Renters								
LTE 30% AMI	6,285	8,147	0.77	57%	6,681	8,513	0.78	58%
30.1–50% AMI	9,392	5,148	1.18	36%	12,092	6,243	1.27	35%
50.1–60% AMI	5,888	2,524	1.36	29%	6,948	2,787	1.47	28%
60.1–80% AMI	8,053	3,928	1.50	25%	7,274	4,483	1.50	24%
80.1–100% AMI	3,832	3,729	1.42	22%	2,271	3,743	1.37	20%
100.1–120% AMI	1,194	2,775	1.32	19%	678	2,938	1.25	16%
120%+ AMI	502	6,029	1.09	14%	1,073	5,300	1.09	12%
All	35,147	32,280	1.09	25%	37,018	34,007	1.09	25%

Source: HUD-PD&R tabulations of 1985 and 1999 American Housing Survey data done for the Millennial Housing Commission.

Table A–18
Renter Households And Affordable Units By Incomes as Percentage Of HAMFI, Affordable Units per Household, and Median Rent/Income Ratio, by Relative Income and Region, 1985 and 1999

	1985				1999			
	Affordable Units (Thousands)	Households (Thousands)	Cumulative Affordable Units per Household	Median Rent/ Income Burden	Affordable Units (Thousands)	Households (Thousands)	Cumulative Affordable Units per Household	Median Rent/ Income Burden
Northeast								
LTE 30% AMI	1,454	2,195	0.66	57%	1,572	2,013	0.78	55%
30.1–50% AMI	2,284	1,147	1.12	35%	2,408	1,380	1.17	35%
50.1–60% AMI	1,250	536	1.29	29%	1,425	555	1.37	28%
60.1–80% AMI	1,510	700	1.42	23%	1,418	864	1.42	24%
80.1–100% AMI	828	827	1.36	22%	422	772	1.30	21%
100.1–120% AMI	247	616	1.26	17%	170	601	1.20	17%
120%+ AMI	165	1,360	1.05	13%	343	1,129	1.06	12%
All	7,739	7,382	1.05	25%	7,757	7,314	1.06	26%
Midwest								
LTE 30% AMI	1,582	2,058	0.77	58%	1,505	1,727	0.87	58%
30.1–50% AMI	2,936	1,158	1.40	34%	3,307	1,251	1.62	33%
50.1–60% AMI	1,536	632	1.57	28%	1,286	562	1.72	26%
60.1–80% AMI	1,530	992	1.57	23%	1,048	1,033	1.56	22%
80.1–100% AMI	397	853	1.40	19%	211	788	1.37	18%
100.1–120% AMI	86	638	1.27	17%	64	575	1.25	14%
120%+ AMI	26	1,140	1.08	12%	108	856	1.11	11%
All	8,092	7,469	1.08	24%	7,529	6,791	1.11	24%
South								
LTE 30% AMI	2,302	2,438	0.94	52%	2,384	2,732	0.87	56%
30.1–50% AMI	2,721	1,655	1.23	34%	3,850	1,885	1.35	35%
50.1–60% AMI	1,808	767	1.41	30%	2,178	918	1.52	28%
60.1–80% AMI	2,868	1,320	1.57	26%	2,750	1,476	1.59	24%
80.1–100% AMI	1,163	1,172	1.48	22%	763	1,207	1.45	20%
100.1–120% AMI	406	844	1.37	19%	210	1,015	1.31	17%
120%+ AMI	177	2,009	1.12	14%	300	1,976	1.11	13%
All	11,446	10,205	1.12	24%	12,436	11,209	1.11	24%
West								
LTE 30% AMI	948	1,455	0.65	61%	1,222	2,041	0.60	61%
30.1–50% AMI	1,451	1,187	0.91	42%	2,525	1,727	0.99	37%
50.1–60% AMI	1,294	590	1.14	31%	2,059	752	1.28	30%
60.1–80% AMI	2,145	916	1.41	27%	2,058	1,110	1.40	26%
80.1–100% AMI	1,444	877	1.45	24%	875	976	1.32	22%
100.1–120% AMI	455	677	1.36	20%	235	747	1.22	17%
120% AMI +	134	1,520	1.09	16%	322	1,339	1.07	14%
All	7,870	7,223	1.09	27%	9,296	8,692	1.07	27%

Source: HUD/PD&R tabulations of 1985 and 1999 American Housing Survey data.

Appendix B

Glossary

Household and family types

Family—The "families" eligible for HUD programs have traditionally included households with relatives, households with children, elderly single persons age 62 or older, and single persons with disabilities. The Cranston-Gonzalez National Affordable Housing Act of 1990 broadened the statutory definition of "family" in a way that makes all households eligible for rental programs, including households comprised only of nonelderly singles living alone or with other singles to whom they are not related. In this report, however, the term "family" refers only to "family households" in which one or more persons in the household are related to the householder by birth, marriage, or adoption.

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

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

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

Nonfamily households—Households with a single nonelderly person living alone or only with nonrelatives.

Households having adult members with disabilities—This category *should* include all nonelderly households with adults with significant physical or mental disabilities. Unfortunately, no available data source counts these households perfectly. The American Housing Survey (AHS) proxy used in previous reports was an underestimate because it counted only nonelderly single persons living alone or with nonrelatives who report receiving Supplemental Security Income (SSI) income. Based on research with the 1995 AHS supplement on physical disabilities, this report uses an expanded proxy, as discussed in Appendix C, but it too undercounts disabled households. HUD program data show appreciably more households (without children) having members with disabilities receiving rental assistance than does the expanded AHS proxy. Social Security Administration data on SSI recipients who are blind or have other disabilities provide a basis for making more complete estimates of very-low-income renters with SSI income who receive HUD assistance or have a severe rent burden. But even the SSA data are incomplete because they exclude very-low-income persons with disabilities who have incomes above SSI cutoffs. The estimate of 1.1 million worst case households with persons with disabilities is made by increasing the new AHS proxy estimates to account for both known sources of undercount.

Types of income

Income—Income in the AHS is based on the respondent's reply to questions about income during the 12 months prior to interview. It includes amounts reported for wage and salary income, net self-employment income, Social Security or railroad retirement income, public assistance or welfare payments, and all other money income, prior to deductions for taxes or any other purpose. Comparison to independent sources of data on total household income in 1983 suggests that AHS respondents underreport income by some 10 to 15 percent, with income from interest and dividends most likely to be underreported. Comparisons between 1990 census data and 1989 AHS data summarized in Chapter 4 of this report suggest that owners are more likely than renters to underreport income. In 1993, the AHS began asking more detailed questions on nonwage income, and the share of households reporting nonwage income rose from 63 percent in 1991 to 77 percent in 1993. Following HUD rules for income eligibility, the first three worst case reports also included imputed income from equity in an owned home as income for owners, but imputed income from equity is not included as income in this report. Following HUD rules, however, the earnings of teenagers 17 and younger are not counted as income when determining income eligibility for HUD programs.

Family income—Reported income from all sources for the householder (the first household member 18 years or older who is listed as an owner or renter of the housing unit) and other household members related to the householder.

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

Housing problems

Overcrowding—The condition of having more than one person per room in a residence.

Rent or cost burden—Ratio between payments for housing (including utilities) and reported household income. The calculation used in this report is based on gross income reported for the previous 12 months, minus the adjustments to income required by housing assistance programs before percentage-of-income rents are determined. To the extent that respondents underreport total income, the AHS estimates may overcount the number of households with cost burden. However, the comparison between 1989 AHS data and 1990 census data reported in Chapter 4 suggests that the AHS may count fewer households with rent burden than did census data.

Moderate rent or cost burden—Housing costs over 30 percent but less than or equal to 50 percent of reported income.

Severe cost burden—Housing costs exceeding 50 percent of reported income. 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. The definitions are presented in Appendix A of the AHS published volumes in detail and in Appendix D of this report. Briefly, a unit is defined as having severe physical problems if it has severe problems in any of five areas: plumbing, heating, electrical system, upkeep, and hallways. It has moderate problems if it has problems in plumbing, heating, upkeep, hallways, or kitchen, but no severe problems. As Appendix D of this report details, some of the specific questions underlying definitions of inadequate housing were changed in the 1997 questionnaire.

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

Income categories

HUD-adjusted area median family income (HAMFI)—In 1974, Congress defined "low income" and "very low income" for HUD rental programs as incomes not exceeding 80 and 50 percent, respectively, of the area median family income, as adjusted by HUD. Statutory adjustments in 1999 included upper caps and lower floors for areas with low or high ratios of housing costs to income and, for each nonmetropolitan county, a lower floor equal to its state's nonmetropolitan average. Estimates of the median family income and the official income cutoffs for each metropolitan area and nonmetropolitan county are made once each decade based on the most recent decennial census results and are then updated each year by HUD. (As discussed in Appendixes C and D, however, in most years HUD's AHS tabulations have not used the official yearly updates of HAMFI.) It should be noted that HUD continues to base these estimates on median *family* income, not median household income. Each base income cutoff is assumed to apply to a household of four, and official cutoffs are further adjusted by household size: one person, 70 percent of base; two persons, 80 percent; three persons, 90 percent; five persons, 108 percent; six persons, 116 percent; and so on.

Low income—Reported income not in excess of 80 percent of HAMFI or, if lower, the national median family income. In 1999, 42 percent of AHS households reported incomes that fell below the low-income cutoffs.

Very low income—Income not in excess of 50 percent of HAMFI. In 1999, 25 percent of AHS households reported income below the very-low-income cutoffs.

Extremely low income—Income not in excess of 30 percent of HAMFI. In 1999, 13 percent of AHS households reported income below 30 percent of HAMFI, a marked drop from the 16 percent reported in 1997.

Poor—Household income below the national poverty cutoffs for the United States for that household size. (As discussed in Appendix A of the Census Bureau's AHS publications, AHS poverty estimates differ from official poverty estimates made from the Current Population Survey in using income of households rather than income of families or individuals, and because AHS income questions are much less detailed and refer to income during the past 12 months rather than a fixed period.) The poverty cutoff for a family of four approximates 33 percent of HAMFI. In 1999, 51 percent of very-low-income households and 83 percent of extremely-low-income households were poor.

Middle income—For this report, incomes between 81 and 120 percent of HAMFI. One-fifth of households (20 percent) were in this category in 1999.

Upper income—For this report, households with income above 120 percent of HAMFI. Almost two-fifths of U.S. households (38 percent) were in this category in 1999.

Rental affordability categories

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, for example, housing units with rents up to (30 percent of) 60 percent of HAMFI qualify as affordable and eligible for the credit. This report generalizes the approach developed to define LIHTC maximum rents for units of different size to categorize units as affordable to incomes at or below 30 percent of HAMFI, above 30 and up to 50 percent of HAMFI, and above 50 percent of HAMFI. Gross rents for each unit, including payments for utilities, are compared to 30 percent of HUD's 30 percent and 50 percent of HAMFI income limits. The income limits are adjusted for number of bedrooms using the formula codified at U.S.C. 42(g)(2)(C): no bedrooms, 70 percent of base; one bedroom, 75 percent; two bedrooms, 90 percent; three bedrooms, 104 percent; four bedrooms, 116 percent, plus 12 percent of base for every additional bedroom. This formula assumes that an efficiency houses 1 person, a one-bedroom unit houses 1.5 persons, and each additional bedroom houses another 1.5 persons. For vacant units, the costs of any utility that would be paid by an occupant were allocated using a hot deck technique with a matrix of structure type, AHS climate code, and eight categories of gross rent.

Housing assistance status

Receiving assistance—As discussed further in Appendix C of this report, to more accurately identify households participating in housing assistance programs, the order and content of the AHS questions about housing assistance were changed in 1997, but HUD's published counts of 1997 assisted units differed from those produced by the Census Bureau. In this report, assisted households are identified as those with affirmative answers to any of the following questions: As part of your rental agreement, do you need to answer questions about your income whenever your lease is up for renewal? (If so,) do you report your income to either "a building manager or landlord" or "a public housing authority or a state or local housing agency"? Do you pay a lower rent because the

government is paying part of the cost of the unit? Is the building owned by a public housing authority?

Because state and local assistance are not separately identified by these post-1997 AHS questions, the revised estimates of assisted households done in this report for the years between 1985 and 1995 added those households responding that "a state or local government pay[s] some of the cost of the unit" to the pre-1997 estimates given in earlier reports that were based only on the questions: "Is the building owned by a public housing authority? Does the federal government pay some of the cost of the unit? Do the people living here have to report the household's income to someone every year so they can set the rent?"

Through 1983, the Annual Housing Survey questions about rental assistance did not distinguish federal from state or local assistance. Therefore, the 1978 and 1983 data on assisted households in this report should be comparable to the expanded estimates of assistance developed here for all years since 1985.

Worst case needs for rental assistance—Unassisted very-low-income renters with the priority housing problems that formerly gave them preference for admission to federal rental assistance programs. Because AHS questions do not distinguish federal from state or local assistance, however, in this report, as in *Rental Housing Assistance—The Worsening Crisis,* assisted renters include those with state or local assistance.

Location

(Standard) Metropolitan Statistical Area—From 1973 to 1983, the definitions of metropolitan location in Annual Housing Survey data corresponded to the 243 Standard Metropolitan Statistical Areas (SMSAs) 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.

Appendix C

Procedures Used To Provide the Most Accurate Estimates of Worst Case Needs in 1999 Possible From 1999 American Housing Survey Data

To estimate worst case needs for federal rental assistance from American Housing Survey data as accurately as is possible from survey data, we should determine whether household incomes fall below HUD's official very-low-income limits [50 percent of HUD-adjusted area median family income (HAMFI)], whether a household already receives federal housing assistance, and whether an unassisted income-eligible household has one or more of the priority problems that formerly conferred preference in tenant selection (rent burdens exceeding 50 percent of income, substandard housing, or being involuntarily displaced). As discussed in this appendix, the best point-in-time estimates of income-eligible households in 1999 include all households with incomes below HUD's *1999* income limits and also make use of the more accurate responses about income and rent elicited by questions on outside financial support with household expenses that were first asked on the 1999 AHS. Based on research with the 1995 AHS supplement on physical modifications of housing and physical disabilities of household members, the AHS estimates in this report also use an improved and more complete proxy to identify households with disabled adults.

The procedures used in estimating 1999 worst case needs for this report thus differ in four respects from the practice in previous reports.

- The 1997 and 1999 definition of rental assistance was slightly revised following review of differences between HUD and Census Bureau counts of assisted households in 1997. This definition does not distinguish federal from state or local assistance programs.
- New 1999 AHS questions on outside help with household expenditures led some households to correct their original responses on income and/or housing expenses.
- The official HUD income limits used to categorize households as having very low incomes in 1999 (or any other income category) were estimated by adjusting the 1995 income limits to reflect real income growth since 1995 as well as inflation.
- The AHS proxy used to identify households with adults with disabilities was improved based on research with the 1995 AHS Housing Modification Supplement.

This appendix discusses each of these changes and their cumulative impact on counts of worst case needs. Because several of these procedural changes also make it more difficult to identify real changes in worst case needs between 1997 and 1999, the appendix closes by discussing the methods used to distinguish between procedural and real changes.

Receiving rental assistance

As discussed in Appendixes B and C of HUD's previous worst case report to Congress, *Rental Housing Assistance—The Worsening Crisis,* in 1997 the AHS questions intended to identify households receiving rental assistance were changed in both content and order from those used earlier. Between 1985 and 1995, the worst case reports classified as "assisted" those households responding "yes" to any of the following AHS questions: "Is the building owned by a public housing authority? Does the federal government pay some of the cost of the unit? Do the people living here have to report the household's income to someone every year so they can set the rent?" Because the worst case concept was developed to measure the number and characteristics of households having priority for *federal* rental assistance, households responding that "a state or local government pay[s] some of the cost of the unit" were not included as receiving (federal) rental assistance.

In 1997, the AHS questions were changed to first ask "As part of your rental agreement do you need to answer questions about your income whenever your lease is up for renewal?" If so, "To whom do you report your income?" Depending on the answers to those two questions, households were next asked "Do you pay a lower rent because the government is paying part of the cost of the unit?" or questions about specific forms of subsidy such as "Is the building owned by a public housing authority?" and "Did a public housing authority, or some similar agency, give you a certificate or voucher to help pay the rent for this unit?" Households responding "no" or "don't know" to these questions were then asked whether their rent was limited by rent control or adjusted by the unit's owner. These new questions no longer attempt to identify state or local rental assistance.

For the published 1997 AHS volume, the Census Bureau tabulated 5.3 million occupied units with affirmative responses to these questions in three categories: owned by a public housing authority, government subsidy, and other income verification. Using part of the coding recommended by the Census Bureau, HUD's worst case report on 1997 data counted 5.6 million households as assisted. Subsequent investigation of the disparity between 5.3 and 5.6 million revealed that it arose from different treatment of households asked questions about rent control or rent reductions by owner.

Although assisted households may live in rent controlled units, prior to 1997 AHS questions about rent control or owner rent reductions were only asked of renters who had answered "No" to both the rental subsidy and income verification questions. With the change in question content and order in 1997, some households reporting income verification were also asked the rent control and owner reduction questions and then tallied in these latter categories in the Census Bureau's published 1997 AHS volume.

After careful review, HUD and the Census Bureau decided that the following procedure would provide counts of assisted units that are more comparable to pre-1997 data than either the counts published by the Census Bureau in 1997 national and 1998 metropolitan area reports or the count of 5.6 million assisted units published by HUD in *Rental Housing Assistance*. This alternative procedure results in an estimate of 5.7 million assisted households for 1997, and 6.2 million assisted households in 1999.

- Units are “owned by a public housing authority” if the respondent answers yes to “Is the building owned by a public housing authority?”
- Otherwise, units receive “government subsidy” if the respondent was assigned to that unit or answers yes that “a public housing authority, or some similar agency, [gave them] a certificate or voucher to help pay the rent for the unit.”
- Finally, “other, income verification” units include all others responding yes to “As part of your rental agreement do you need to answer questions about your income whenever your lease is up for renewal?” and, as a follow-up saying that they report their income to either “a building manager or landlord” or “a public housing authority or a state or local housing agency.” A follow-up answer likely to reflect some type of public subsidy was deemed necessary because the income verification is now the first, rather than last, question about potential assistance asked in the sequence and thus is more subject to misinterpretation.

The effect of new questions on outside assistance with household expenditures

Although the 1999 national AHS was essentially identical to the 1997 survey in both content and procedures in almost all respects, it did ask several new questions of poorer renters with high rent burdens. These supplemental questions asked whether persons outside the household contributed to household expenses such as rent, food, and child care. The new battery of questions was asked of assisted renters who paid more than 35 percent of their reported income for rent, and of unassisted renters with household income below $10,000 who paid more than 50 percent of their income for rent.

When they were asked these additional questions at the end of the interview, a small number of renters corrected their earlier income and/or rent responses. Analysis by the Census Bureau shows that respondents representing at most 250,000 unassisted very-low-income renters changed either their income or rent responses in ways that would tend to reduce their rent burden. Although the revised responses about incomes and rents that resulted from the Census Bureau’s new 1999 questions about whether any persons outside their household provided any financial help with household expenditures should provide more accurate estimates of worst case needs as well, the new procedures mean that these new estimates are not directly comparable to earlier worst case estimates. To estimate the maximum possible impact of the new questions on counts of households with worst case needs, this report assumes that all of the 250,000 renters changing their responses would otherwise have had severe rent burdens.

Estimates of official 1999 income limits that account for both inflation and income growth

As Appendix D discusses in more detail, PD&R has prepared estimates of official income limits to use with the geography available on AHS sample data only for the 3 years—1977, 1986, and 1995—in which official income limits were developed based on data newly available from the most recent decennial census of housing. AHS estimates for

years other than these three have used these limits adjusted for inflation rather than the actual income limits developed by HUD for program eligibility each year. Because real median family income did not grow greatly between 1978 and 1995, this approach provides estimates of the number of households below various income limits that should not greatly differ from the actual numbers, and moreover, has the advantage that changes over time in the number of households in different income categories should reflect real differences in income. Between 1995 and 1999, however, median family incomes grew appreciably. Reflecting this real income growth, HUD income limits increased, on average, by 8.8 percent more than inflation during this 4-year period. Because an accurate estimate of the number of households with worst case needs in 1999 should include all households qualifying under the 1999 income limits, the 1999 estimates of households in different income categories presented in this report are all based on the 1995 income limits adjusted both for inflation between 1995 and 1999 and also by real 1995–99 income growth of 8.8 percent.

Estimating the number of households with nonelderly adults with disabilities

For this report, information on persons with permanent physical limitations from the 1995 AHS Housing Modification supplement was used to develop a more complete and robust proxy for households with nonelderly disabled adults than earlier worst case reports used with AHS data. As done in previous reports, estimates prepared with this new proxy were increased to be consistent with Social Security Administration (SSA) data on persons receiving Social Security Disability Insurance (SSDI) payments and paying more than half of their income for rent. In addition, drawing on information from the modification supplement, they were further adjusted to account for the fact that SSDI maximum benefits fall well below HUD's very-low-income cutoffs. Information from both the new AHS proxy and data on SSDI recipients was then used to estimate changes over time in numbers of disabled households. Only the AHS proxy gives information on the household characteristics and housing problems of nonelderly disabled adults.

Improving the AHS proxy. Based on research with the 1978 AHS Housing Modification Supplement, the AHS proxy for households with nonelderly disabled persons in previous worst case reports was nonelderly singles living alone or with other singles who reported receiving income from welfare or SSI. From its inception, this proxy was known to undercount total households with disabled persons because it excluded households with adults who received SSI because of disabilities but who lived in families with children. (They were excluded because the AHS question on SSI income lumps welfare and SSI income together, and we wished to identify families with children who received welfare income rather than assuming that all families with children who reported either welfare or SSI income received SSI income). As the 1996 worst case report showed (p. 28), comparison between 1993 AHS results using this proxy and the 1994 SSI Stewardship Review sample (SRS) confirmed that the AHS proxy was much too low: it counted 144,000 households as worst case while the SSI SRS showed that over 820,000 renters receiving SSI because of disabilities paid more than half of their income for rent.

In 1995, the AHS included a second Housing Modifications Supplement (AHS-HMS). It identified over 850,000 very-low-income nonelderly renter households as having persons with permanent physical limitations, 280,000 of them with worst case needs.[1] As the first panel of Exhibit C–1 shows, the original AHS proxy for persons with disabilities used in past worst case reports did differentially identify households with persons with physical disabilities in 1995: 20 percent of all proxy households and 25 percent of assisted proxy households had persons with physical disabilities, both higher rates than those observed for other nonelderly household types. Nonetheless, the proxy badly undercounted nonelderly households with physical disabilities, since it included only 110,000 (or 13 percent) of the 850,000 total found on the AHS-HMS. Further investigation showed that families with children reporting "Social Security" income and other nonelderly households reporting either SSI/welfare or "Social Security" income also had much higher rates of persons with physical limitations than households not reporting these income sources, as the second panel of the exhibit illustrates.

Because of this evidence that nonelderly households reporting either SSI/welfare or "Social Security" income had high rates of physical disabilities, this report expands the proxy for disabled households to include positive responses to either of these questions among all nonelderly households without children. As the second panel of the exhibit shows, this expanded proxy includes 276,000 very-low-income renters with physical disabilities, or 64 percent of the total identified among nonelderly households without children, a decided improvement over the earlier AHS proxy for disabled households. And one-fourth of the proxy households had physical disabilities, compared to fewer than 5 percent of the other nonelderly households without children.

Yet this improved proxy clearly still misses many disabled nonelderly individuals. According to the Housing Modification supplement, some 6 percent of worst case families with children, and 3 to 7 percent of the remaining nonfamily households with worst case problems, had persons with physical disabilities. If rates of physical disability among family households and other nonelderly worst case households were the same in 1999 as observed in the supplement in 1995, in 1999 at least 563,000 worst case households had [physically] disabled adults. Moreover, since over half of the SSI disabled recipients have a mental rather than physical disability, simple arithmetic then suggests that over 1.1 million worst case households might have nonelderly adults with either a mental or physical disability.

Estimating worst case needs from SSI data. As done in previous reports, comparisons between AHS data and the SSI Stewardship Review sample allow more complete estimates of worst case needs among the mentally and physically disabled nonelderly adults receiving SSI benefits. This approach also suggests that some 1.1 million worst case households might have nonelderly adults with either a mental or physical disability.

[1] Because the Housing Modification Supplement focuses on persons with physical disabilities and their needs for housing modifications, its counts of persons with physical disabilities probably identify at most half of persons who would qualify as disabled. According to the 2000 Green Book, p. 246, "over one-half of all SSI disabled recipients are eligible on the basis of a mental disability."

Exhibit C–1 The incidence of physical disability among very-low-income renters by household type according to the 1995 AHS Housing Modification Supplement using two different proxies for households with nonelderly disabled adults

Physical disabilities reported by household type with former AHS disability proxy

	All households	Elderly	With children	Other family	Nonfamily, SSI	Other nonfamily
Very-low-income renters						
(Thousands)	14,549	3,336	6,502	985	559	3,166
Percentage with disability	12%	29%	7%	12%	20%	6%
Assisted	4,278	1,331	2,151	179	253	364
Percentage with disability	18%	34%	8%	20%	25%	21%
Very-low-income renters reporting						
SSI or SS income	2,111	448	536	260	559	308
Percentage with disability	27%	35%	25%	33%	20%	26%
Other very-low-income renters	12,438	2,889	5,966	725	—	2,858
Percentage with disability	10%	28%	5%	5%	—	4%

Physical disabilities reported by household type with revised AHS disability proxy

	All households	Elderly	With children	Other family	Nonelderly, no children, SSI or SS income	Other nonfamily
Very-low-income renters						
(Thousands)	14,549	3,336	6,502	725	1,127	2,858
Percentage with disability	12%	29%	7%	5%	24%	4%
Assisted	4,277	1,331	2,151	101	457	238
Percentage with disability	18%	34%	8%	9%	29%	14%

Source: HUD-PD&R tabulations of the 1995 AHS Housing Modification Supplement

As Exhibit C–2 shows, when the AHS relationship between severe rent burden and worst case needs is applied to data on blind or disabled adults from the SSI Stewardship review sample, results for 1999 imply that some 990,000 very-low-income renters with worst case needs were nonelderly adults with disabilities.

A further adjustment is highly desirable because SSI maximum benefits are less than poverty and thus well below HUD's very-low-income cutoffs. SSI is an income supplement with maximum benefit levels that approximate 75 percent of the poverty level for singles, and 90 percent of the poverty level for couples.[2] These extremely low maximum benefits imply that those with SSI income almost always would have total incomes below 30 percent of HAMFI. Therefore, SSI estimates probably exclude some disabled renters with incomes between 30 and 50 percent of AMI.

[2] According to Tables 3–9 and 3–10 of the 2000 Green Book.

Exhibit C–2

	Total	With rental assistance		Rent >50% of income		Worst case needs		Needs as % of unassisted
	(Thousands)	Number	Percent of total	Number	Percent of total	Number	Percent of total	
American Housing Survey[a]								
1987	1,047	471	45%	328	31%	356	34%	62%
1991	1,087	450	41%	428	39%	380	35%	60%
1993	1,065	417	39%	314	29%	364	34%	56%
1995	1,127	457	41%	431	38%	459	41%	69%
1997	1,093	531	49%	353	32%	374	34%	67%
1999	1,127	548	49%	350	31%	378	34%	65%
SSI Stewardship Review Sample[b]								
1994	2,148	700	33%	824	38%	881	41% [c]	61%
1997	2,207	521	24%	874	40%	935	42% [c]	55%
1998	2,151	516	24%	900	42%	962	45% [c]	59%
1999	2,171	511	24%	923	43%	988	45% [c]	59%

[a] Households with adults 18–61 living alone or in families without children reporting welfare or Social Security income

[b] Blind or disabled adults 18–61; 77–74 percent of total shown in SSI review sample to exclude blind or disabled persons 62 or older

[c] Estimates of worst case need for SSI Stewardship Review sample based on relationship between severe rent burden and worst case needs shown by AHS data

Source: HUD-PD&R calculations from the American Housing Survey and the SSI Stewardship Review Sample.

Comparison of all disabled worst case renters to respondents identified by the AHS SSI proxy from the 1995 HMS shows that that number of physically disabled worst case renters with incomes between 30 and 50 percent of HAMFI is underestimated by approximately 10 percent of the total physically disabled worst case renters. Inflating the SSI estimate of 990,000 by 10 percent to offset this underestimate supports the earlier estimate that some 1.1 million disabled nonelderly adults had worst case needs in 1999.

Results. The improved AHS proxy implies that a high share of those with disabilities and SSI or welfare income already receive housing assistance. Tabulations with the new proxy for the years between 1985 and 1999 show that the share of disabled very-low-income renters who reported receiving assistance fluctuated between 39 percent and 49 percent, higher than that observed for any other type of household. Yet several considerations suggest strongly that the AHS proxy counts the *assisted* nonelderly disabled more completely than it does the nonelderly disabled worst case renters who do not receive assistance. In the first place, the estimate from the AHS proxy of 555,000 assisted disabled in households without children is almost identical to the 543,000 recorded by HUD administrative data for 1999.[3] Secondly, the SSI data on 2.1 million disabled show only 511,000 receiving rental assistance, only one-fourth of the total. This

[3] As shown in Table A–13 of the previous worst case report.

is essentially the same as the HUD administrative data, because some 560,000 disabled renters with very low incomes would be assisted if the SSI total is increased by 10 percent to add very-low-income disabled renters with incomes above the SSI maximum benefits.

In sum, these considerations suggest that the "true" total of worst case disabled renter households in 1999 is 1.1 million, with the "true" total of assisted disabled around 550,000 households.

Trends over time. Even though the AHS new proxy for disabled nonelderly renters [that are not in families with children] apparently counts only a third of the number of households with worst case needs in this group in 1999, it should provide a consistent estimate of how needs over time changed among the subgroup of disabled renters it identifies. As Exhibit C–2 shows, the proxy does not show needs dropping between 1997 and 1999, although there was a marked drop, of 18 percent, between 1995 and 1997. Indeed, the 1997 and 1999 estimates of worst case need among proxy households are quite close in both magnitude and incidence to the 1987, 1991, and 1993 estimates. This pattern suggests that the 1993–95 rise in worst case needs among the disabled that was highlighted in the 1998 worst case report[4] may have reversed between 1995 and 1997, and the total number with needs in 1999 may well be similar to that experienced in 1993. Alternatively, worst case needs among the disabled may have increased slightly, because estimates based on the SSI Stewardship Review Sample (Exhibit C–2) rose from 940,000 to 990,000 between 1997 and 1999. In either case, the more detailed analysis of AHS and SSI data done for this report implies that the number of worst case households with nonelderly disabled adults was closer to 1.1 million in both 1999 and 1997 than to the 1.1–1.4 million range estimated for 1995 and 1997 in earlier reports.

Estimating real change between 1997 and 1999 by excluding the effects of procedural changes

Because of improvements in AHS questions and processing and the use of 1999 income limits, HUD judges that the 1999 estimates of worst case needs in this report more accurately count current households with severe cost burdens and households not receiving assistance than did estimates from earlier surveys, and thus provide a more reliable point-in-time measure of the number of households with worst case needs. But the four changes in 1999 procedures discussed above in this appendix mean that the best 1999 estimates cannot be directly compared to previous 1997 results to evaluate real change between 1997 and 1999. For this report, data from 1997 and earlier years were rerun to use the improved proxy to identify households with nonelderly disabled adults, and the revised definition of assisted households was used in 1997 as well as 1999. But even after these changes to make pre-1999 data as comparable as possible to the 1999 results, special procedures were needed to isolate the impacts of the new 1999 AHS questions on outside financial support and of approximating the real 1999 income limits.

[4] See Finding 6, page 30, of *Rental Housing Assistance—The Crisis Continues.*

As the first two lines of Exhibit C–3 summarize, when both 1997 and 1999 AHS data were tabulated using the improved definition of assisted households and 1995 constant-dollar income limits, worst case needs apparently dropped by 660,000 households between these 2 years. But some of this decline possibly reflected lower rent burdens resulting from corrections to income or rent made by respondents answering the new 1999 AHS questions on outside financial support. To identify the effects of these new questions, the third run on Exhibit C–3 estimated what the 1999 count of worst case needs would have been without the new questions. All of 250,000 unassisted households whose corrected income or rent reports reduced their reported rent burden were assumed to have changed rent burden status from a severe rent burden (more than 50 percent of income) to a moderate burden. This reduction is effectively the most conservative assumption possible, because some of those with lower post-revision rent burdens may actually still have had burdens above 50 percent of income. Because the public-use AHS data file does not show *which* households corrected their income or rent, it was necessary to devise another means of estimating the net impact of this change. To do so, tabulations were made of rent burden among the households asked the supplemental questions, and 250,000 unassisted very-low-income renters with rent burdens between 35 and 50 percent of income were found to have answered the supplemental questions. Accordingly, to estimate the impact of these corrected responses, those 250,000 households were instead assigned a severe rent burden. Doing so increased the number of households with worst case needs by 220,000.[5] Therefore, it appears that at most 220,000 of the reduction in worst case needs is procedural, and that worst case needs really fell between 1997 and 1999 by at least 440,000 households. All of the report's discussion of specific changes between 1997 and 1999 is based on a total reduction of 440,000 households, although needs may well have fallen by as much as 660,000.

As discussed above, PD&R has only processed official HUD limits to use with AHS geography in the 3 years—1977, 1986, and 1995—when official income limits were revised based on results of the most recent decennial census data. In other years, these income limits have been used as adjusted only or mainly for inflation. The 1997 worst case estimate of 5.4 million made in the previous report in 2000, therefore, was based on constant-dollar 1995 income limits.

When the 1999 data were first processed using the constant-dollar 1995 income limits (Run B in Exhibit C–3), worst case needs were clearly lower than in 1997. Numerous possibilities were reviewed to determine whether this decline was real. Because the significant decline of at least 440,000 appeared due, in part, to real income growth among all households and among very-low-income renters, we decided that a complete estimate of 1999 worst case needs should include those qualifying under HUD's 1999 income limits, which had risen by 8.8 percent above inflation since 1995. As the final line of Exhibit C–3 shows, using 1999 income limits rather than constant-dollar 1995 limits added 140,000 households to the worst case estimate.

[5] Worst case needs were reduced by only 220,000 because 30,000 of these households had severely inadequate housing.

Exhibit C–3 Results of runs to isolate the effects of procedural changes and thus estimate real 1997–99 change in numbers of households with worst case needs

Major runs and their assumptions	Worst case needs (thousands)	Differences between estimates
A. Worst case needs in 1997, using 1999 definition of assisted renters and 1995 constant-dollar HUD income limits	5,380	
B. Worst case needs in 1999, using 1999 definition of assisted renters and 1995 constant-dollar HUD income limits	4,720	
		B–A = (660) 1997–99 change including effects of new questions
C. Worst case needs in 1999, using 1999 definition of assisted renters, 1995 constant-dollar HUD income limits, and adjustment to remove effect of new questions on outside financial support	4,940	
		C–B = (220) Possible effect of new questions on 1999 worst case estimate
		C–A = (440) Minimum real 1997–99 change within 1995 income limits and excluding effects of new questions
D. Worst case needs in 1999 with 1999 income limits and corrections from new questions on outside financial support	4,860	
		D–B = 140 Worst case needs added by raising 1999 income limits

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

Appendix D

Procedures Used To Estimate Comparable Trend Data on Housing Needs and Rental Affordability by Relative Income Between 1978 and 1999 From Annual and American Housing Survey Data

Ever since counts of households with worst case needs for rental assistance were first estimated in the mid-1980s, there has been interest in measuring changes in these unmet needs over time. The first report to Congress in 1991 showed worst case needs increasing among family and elderly households from 1974 to 1985 before falling between 1985 and 1989; it also crudely projected future worst case needs under different assumptions about household growth and levels of incremental assistance. Several subsequent reports have tracked worst case needs among all households for years since 1978, when income data were first gathered for all households in the AHS.

The 1997 changes in questions about rental assistance, however, mean that most pre-1997 data published in previous reports are not comparable to current data and definitions. Moreover, even the 1991–97 trends discussed in the last report to Congress used a definition of assistance that has since been slightly changed, as Appendix C details. To the degree possible, this report develops consistent data on worst case needs and housing problems under the revised definition of assistance for the two decades between 1978 and 1999. Yet the comparability of these data over time are not perfect because of weighting changes, several differences in AHS questions and definitions, and the approximations of income limits used in estimation procedures. Careful review with staff of the Millennial Housing Commission (MHC) emphasized the importance of clearly describing the procedures and assumptions underlying these estimates.

This appendix discusses the procedures and definitions used with microdata from the 1978 and 1983 Annual Housing Surveys and from the 1985 through 1999 American Housing Surveys (AHS) to make comparable estimates of the topics of main interest: the number of households in different income-eligibility categories that have worst case needs, severe housing problems, or other housing problems, and the number of rental units in affordability categories defined as percentages of HAMFI compared to the number of renters with incomes in the same categories.

- Estimates in this report for the years 1985–99 base income category and rent burdens on reported household income for the past 12 months for all households. Because the 1978 and 1983 Annual Housing Surveys only gathered data about housing costs for "specified" owners and renters, however, the 1978 and 1983 estimates of numbers of households with rent burdens or other housing problems in this report are made by assuming that the incidence of housing problems, including rent burdens, observed for income categories of specified renters holds for all renters in those income categories.

- **Area income limits.** 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, household income was compared with area income limits for all households. Very-low- and low-income cutoffs for a household of four—that is, 50 or 80 percent of HAMFI, respectively—were defined for each unit of geography identified on the AHS national microdata tapes. Official income limits were used directly for each of the 141 MSAs identified on the 1985–99 AHS tapes. For housing units outside these MSAs, the AHS geography identifies only four regions, metropolitan status, and six climate zones. Average income limits were estimated for each of these 48 locations weighting by 1990 population. A similar but less detailed approach was used for 1978 and 1983. The actual income limits for 1978 were used for the lower number of MSAs identified then, and average income limits were calculated for metropolitan areas and nonmetropolitan areas by region otherwise.

  Because developing estimates of HUD's income limits for the geography identified on the AHS microdata is time-consuming, PD&R has prepared income limits to use with AHS geography only for 3 different years: 1978, 1986, and 1995.[6] AHS estimates for years other than these three have used these limits adjusted for inflation rather than the official income limits published by HUD for program eligibility each year.

  Because HUD's official income limits have been based on 1990 census data since 1995, limits based on 1990 census data, adjusted for inflation by the CPI-U, were used for the estimates of income categories for the time series data for the years 1985 to 1999 in this report.[7] The 1978 and 1983 estimates use the constant-dollar 1978 income limits, which were originally developed from 1970 census data. Because median family income rose appreciably faster than inflation between 1995 and 1999, however, the "best" estimates for 1999 are based on 1995 limits updated both by inflation and by the average factor 1.0877, by which income has exceeded inflation.

  Although estimates prepared with these "constant-dollar" income limits do not vary annually as real income rises or falls during business cycles, over most of the past two decades they illustrate long-term trends quite accurately. This occurs because median family income was remarkably constant in real terms over this period. Expressed in 1999 dollars, for example, the U.S. median family income was $44,100 in 1979, $44,800 in 1986, and $44,400 in 1995. The time-series estimates of very-low-income renters and households with worst case needs presented in Chapter 1, therefore, closely approximate the actual number of renter households with worst case problems who also had very low incomes at different years during that period. More important for time-series analysis, because the income limits used for each year (except 1999) are essentially the constant-dollar 1995 income limits for that year, the results show

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

[7] Technically, the income limits that were developed in 1995 from 1990 census data and observed trends in metropolitan area income between 1990 and 1995 account for metropolitan area differences between 1991 and 1995. Consequently, the limits used in this report's estimates for 1985 through 1991 are the constant-dollar 1991 limits, while those used for 1995 and 1997 are the constant-dollar 1995 limits.

the net effects of changes in incomes, rents, and rental assistance on the housing problems of those who would have been income-eligible in 1995; they do not reflect the short-term increases and decreases in income-eligible, very-low-income renters that may have occurred because of changes in real income associated with business cycles during this period.

The income limits used for 1985 in this report are not those used in the tabulations prepared by PD&R for the MHC. Because the MHC wished to adjust income limits for both general price inflation and real income growth, the 1985 limits used for their tabulations were "backcast" from the 1991 income limits by accounting for real income growth between 1985 and 1991. However, subsequent comparison of the 1985 income distributions of renters categorized by three different approximations of the official 1985 income limits suggests that the approach used in this report gives results more similar to actual 1985 limits than the approach used for the MHC tabulations. Exhibit D–1 shows the 1985 income distributions of renters grouped in relation to 1985 income limits developed in three different ways: 1) the constant-dollar 1986 income limits that were developed from 1980 census data in 1986; 2) the constant-dollar 1991 income limits (developed from 1990 census data) that were used in this report; and 3) the limits used for MHC tabulations that were backcast from 1991 constant-dollar income limits based on real growth in median family income between 1985 and 1999. The percent distributions in the second panel show that the second method is better than the approach used for the MHC tabulations: it equals the first method exactly in the shares of all renters categorized as having very low incomes (0–50 percent of HAMFI) or upper incomes (120+ percent of HAMFI), although the correspondence is not exact in the two middle income groups. The MHC approach, by contrast, undercounts both very-low-income and low-income groups. It categorizes only 61.2 percent of renters as having incomes 0–80 percent of HAMFI, 2.4 percentage points below the 63.6 percent identified by the first method.

- **Categorizing households by income.** For all households, income status is determined by comparing household income with the very-low- and low-income cutoffs, with appropriate adjustments for household size. Households reporting negative income were redefined as having incomes just above median income if their monthly housing costs were above the fair market rent (FMR) and they lived in adequate and uncrowded housing, since many households in this situation live in housing with amenities such as dining rooms, balconies, and off-the-street parking and thus may be reporting temporary accounting losses. For the years 1985 on, households with incomes above median income were identified by comparing their income to the actual median family income for the location, rather than to five-fourths of the low-income cutoff, as had previously been done because it was the only approach possible for estimates made through 1983.

Exhibit D–1 Renters by income in 1985, based on alternative estimates of 1985 HUD income limits

	Income as percent of HUD-adjusted area median income				
	0–50%	**51–80%**	**81–120%**	**121%+**	**Total**
1. 1986 constant-dollar income limits	13,894	6,641	6,289	5,456	32,280
2. 1991 constant-dollar income limits	13,871	6,564	6,396	5,449	32,280
3. 1985 income limits backcast from 1991(MHC)	13,294	6,452	6,505	6,029	32,280
1. 1985 income limits backcast from 1986	43.0%	20.6%	19.5%	16.9%	100.0%
2. 1991 constant-dollar income limits	43.0%	20.3%	19.8%	16.9%	100.0%
3. 1985 income limits backcast from 1991	41.2%	20.0%	20.2%	18.7%	100.0%

1. Run October 1995; 2. Run October 2001; 3. Run for the Millennial Housing Commission
Source: HUD-PD&R tabulations from the 1985 American Housing Survey.

- **Categorizing rental units by affordability and households by income.** For the analysis of mismatches between affordability and income in Chapter 3, both household income and housing unit rents were compared to multiples of the 1999 constant-dollar income limits for income and rent categories up to and including 80 percent of HAMFI and to the actual median family incomes above that. As in the analysis of household income, households reporting negative income were redefined as having incomes just above median income if their monthly housing costs were above the FMR and they lived in adequate and uncrowded housing. The tabulations for 1999 are the same as those produced for the MHC.

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

- **Receiving housing assistance.** As discussed in Appendix C, to more accurately identify households participating in housing assistance programs, the order and content of the AHS questions about housing assistance were changed in 1997, but HUD's published counts of 1997 assisted units differed from those produced by the Census Bureau. In this report, assisted households are identified as those with affirmative answers to any of the following questions: As part of your rental agreement, do you need to answer questions about your income whenever your lease is up for renewal? (If so,) do you report your income to either "a building manager or landlord" or "a public housing authority or a state or local housing agency"? Do you pay a lower rent because the government is paying part of the cost of the unit? Is the building owned by a public housing authority?

  Like the assistance questions used in the Annual Housing Survey through 1983, these questions do not distinguish between federal and state or local programs. Accordingly, to increase comparability between earlier data and the new definition resulting from the 1997 questions, with data from 1985 to 1995 in this report, households were counted as receiving housing assistance if they answered "yes" to the question "Does the state or local government pay some of the cost of the unit?" *or* to one of the three questions: "Is the building owned by a public housing authority? Does the federal government pay some of the cost of the unit? Do the people living here have to report the household's income to someone every year so they can set the rent?"

- **Severe or moderate physical problems.** For the years from 1985 on, the definitions are those used since 1984 in the AHS and defined in Appendix A of published AHS volumes. For 1978 and 1983, these definitions were approximated as closely as possible from available Annual Housing Survey data, but are not exactly the same as the post-1985 definitions. In 1985 and 1987, a change in procedures led to an undercount of households with shared plumbing facilities, artificially reducing counts of severely inadequate units in those years. In 1997, some of the questions and procedures underlying the definitions were changed, thus making post-1997 results more accurate but less comparable to earlier results.

  A unit is considered severely inadequate if it has any one of the following five problems:

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

  — **Heating.** Having been uncomfortably cold last winter for 24 hours or more or three times for at least 6 hours each due to broken-down heating equipment.

  — **Upkeep.** Having any five of the following six maintenance problems: leaks from outdoors, leaks from indoors, holes in the floor, holes or open cracks in the walls or ceilings, more than a square foot of peeling paint or plaster, or rats in the last 90 days.

— **Hallways.** Having all of the following four problems in public areas: no working light fixtures, loose or missing steps, loose or missing railings, and no elevator.

— **Electrical.** Having no electricity or having all of the following three electrical problems: exposed wiring, a room with no working wall outlet, and three blown fuses or tripped circuit breakers in the last 90 days.

A unit is defined as moderately inadequate if it has any of the following five problems, but none of the severe problems:

— **Plumbing.** Having all toilets break down simultaneously at least three times in the last 3 months for at least 6 hours each time.

— **Heating.** Having unvented gas, oil, or kerosene heaters as the main source of heat (because these heaters give off unsafe fumes).

— **Upkeep.** Having any three of the six upkeep problems mentioned under severe problems.

— **Hallways.** Having any three of the four hallway problems mentioned under "severely inadequate."

— **Kitchen.** Lacking a sink, range, or refrigerator for the exclusive use of the unit.

- **Weighting of AHS estimates.** Because each housing unit in the AHS sample represents many other units, the sample data are adjusted so that each year's total matches independent estimates of the total housing stock. For 1991 through 1999, these independent estimates were based on the 1990 Census of Housing (1990 weights). Weights for data for 1985 through 1989 were based on the 1980 Census of Housing, and data for 1978 and 1983 were based on weights derived from the 1970 Census of Housing. As Exhibit 1–3 illustrates, comparison of 1991 data tabulated with 1980 and 1990 weights shows that the 1980 weights gave estimates that were slightly high by 1991. No direct comparison between 1970 and 1980 weights was made.

Appendix E

Sensitivity Analysis of Measures of Affordable Units per 100 Renters

As Chapter 3 mentions, the "mismatch" ratios of affordable units per 100 renters defined and used there may overestimate supplies of affordable housing below any income cutoff. These ratios may also be questioned because they include extreme values—households reporting zero or negative incomes or units for which no cash rent is paid—and thus may be biased if respondents really have higher incomes. This appendix explores these questions by examining alternative tabulations to determine the sensitivity of the ratios to different approaches. The results suggest that the ratios in Chapter 3 are quite robust for the cutoffs examined. They reveal, moreover, that shortages of affordable rental housing are worse for households with incomes at 10 and 20 percent of HAMFI than those for households with extremely low incomes.

The ratios could tend to overestimate supplies of affordable housing because units are defined as affordable if their rent is less than or equal to 30 percent of the upper income limit being examined. Therefore, if units have rents clustered near the upper limit of a range—for example just below 30 percent of HAMFI—while renters have income more evenly spread throughout the range, some or many of the extremely-low-income renters living in units defined as "available and affordable to extremely-low-income renters" may in fact pay far more than 30 percent of their income for rent.

A related weakness of mismatch ratios calculated only for incomes below 30 percent, 50 percent, 60 percent, and 80 percent of HAMFI is that they are "lumpy" and give no information about the match or mismatch between affordable units and renters for incomes below these four upper limits.

To examine such concerns, alternative tabulations of mismatch ratios were prepared that vary in three ways. Exhibit E–1 compares their results to the report's basic mismatch ratios of units "affordable" or "affordable and available" to renters below four different income cutoffs, which are given in the first line of the exhibit.

The first alternative, which is graphed as the upper line in Exhibit E–2, calculates cumulative mismatch ratios for each 5-percentage-point interval of HAMFI. As it should, below each income cutoff it gives mismatch ratios that are essentially the same as those from the report's runs. The third line in Exhibit E–2 graphs these mismatch ratios for units that are both affordable and available to renters with incomes under each HAMFI cutoff.

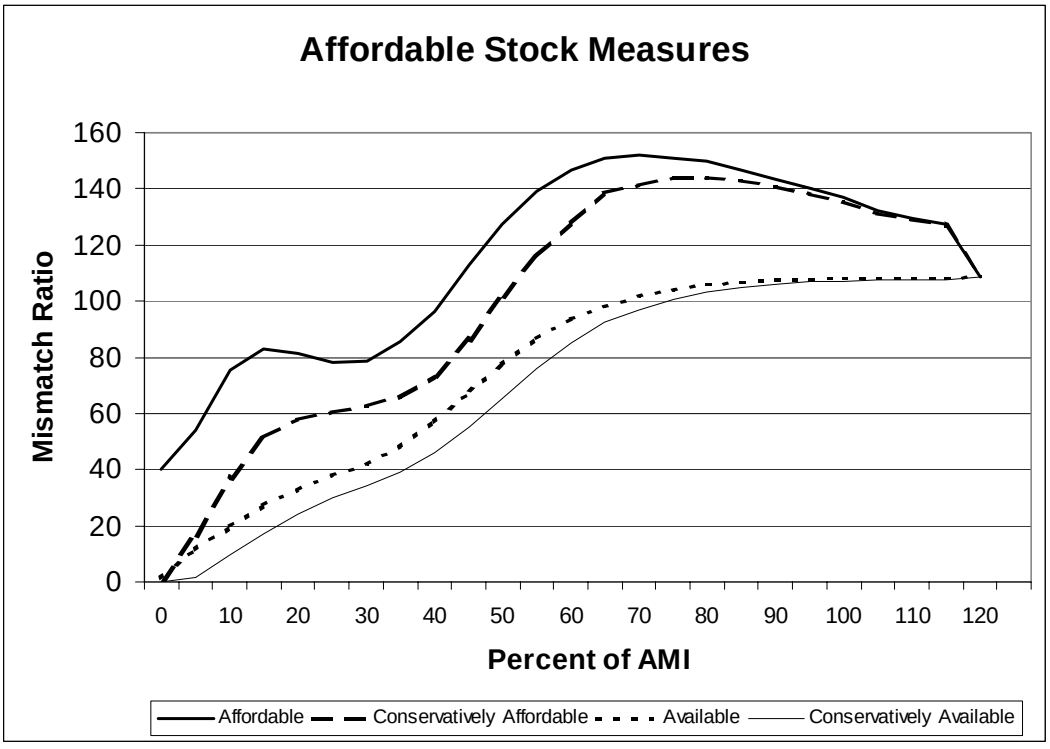
Exhibit E–1 Sensitivity analysis of measures of affordable and available rental housing

	Affordable units per 100 renters with incomes as percentage of HAMFI			Affordable and available units per 100 renters with incomes as percentage of HAMFI			
	0–30%	0–50%	0–60%	0–30%	0–50%	0–60%	0–80%
Report ratios	78	127	147	42	78	93	106
Calculated with 5-percentage-point HAMFI intervals:							
Basic	79	127	127	42	78	93	106
Comprehensive*	63	102	102	35	65	85	103
Without zero-cost units and renters with zero or negative income:							
Basic	82	131	131	45	81	97	109
Comprehensive	68	106	106	37	68	88	106

* Conservative tabulations ensure that renters can afford units by comparing renters below an income cutoff to units affordable to incomes below a cutoff that is 5 percentage points lower. For example, (units <25 percent of HAMFI)/(renters <30percent of HAMFI).

Source: HUD-PD&R tabulations from the 1999 American Housing Survey.

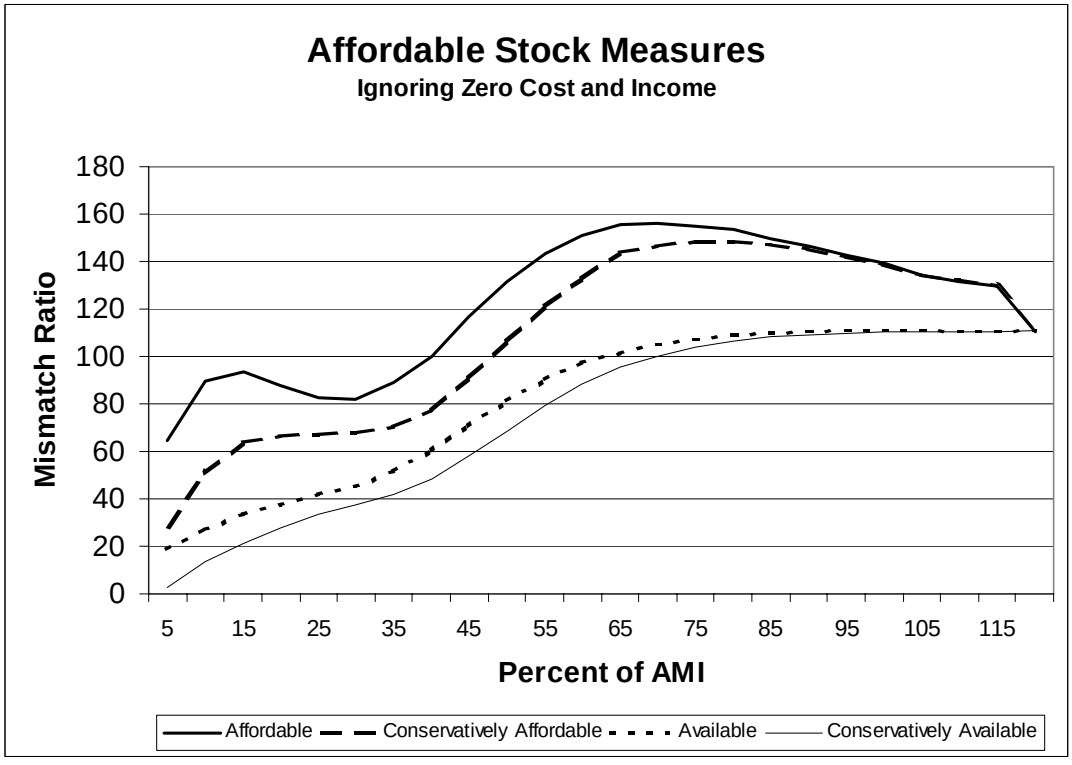
Exhibit E–2



The second "conservative" alternative is essentially a lower bound. It ensures that all units in a range are truly affordable to renters below an income cutoff by comparing units affordable to incomes below (x–5) percent of HAMFI to renters with incomes below x percent of HAMFI. Consequently, even if all units had rents affordable to incomes bunched near the upper limits of each 5-percentage-point income range and all renters had incomes bunched near the lower limits of each narrow income range, no renter would pay more than 30 percent of income for a unit. This conservative alternative, which is graphed as the second and fourth lines of Exhibit E–2, is always less than the corresponding basic mismatch ratio. Where it is decidedly less, as, e.g., 102 compared to 127 for units affordable to incomes below 50 percent of HAMFI, it implies that there are many units with rents affordable to incomes in the 5-percentage-point range that is excluded from the conservative estimate.

The third alternative, which is summarized in the bottom panel of Exhibit E–1 and graphed in Exhibit E–3, repeats the first and second alternatives while also excluding units with no cash rents and renters reporting zero or negative incomes. Because the resulting ratios range only 2 to 6 units higher per 100 renters than the corresponding ratios calculated with all units and renters, they suggest that the omission of extreme values does not greatly bias the original ratios.[8] The fact that all the alternative ratios are so similar at each point of the HAMFI distribution suggests strongly that the ratios originally estimated are quite robust.

Exhibit E–3



[8] These ratios are slightly higher because the number of units with no cash rent is lower than the number of renters with zero or negative incomes.

The third alternative provides very conservative estimates of mismatch ratios because, in addition to excluding zero or negative incomes, it also excludes the homeless, who are not covered by the AHS. For this reason, although its values for the lowest income groups are probably optimistic, the basic and conservative values should quite reliably indicate whether shortages of affordable housing are worse for incomes below 30 percent of HAMFI. As Exhibit E–4 details, shortages of affordable and available housing are indeed much worse than previously calculated for renters with incomes 20 percent of HAMFI and below. Specifically, for the 1.7 million renters with incomes below 10 percent of HAMFI, there are at most some 27 affordable and available units for every 100 renters, roughly one-half the supply affordable and available to renters with incomes at the extremely-low-income cutoff.

Exhibit E–4 Even with zero or negative income renters excluded, shortages at the lowest incomes are very severe.

	Affordable and available units per 100 renters with incomes as percentage of HAMFI that are:								
	0–10%	**0–20%**	**0–30%**	**0–40%**	**0–50%**	**0–60%**	**0–70%**	**0–80%**	**0–90%**
Without zero cost units and renters with zero or negative income:									
Basic	27	38	45	61	81	97	105	109	110
Conservative	13	28	37	49	68	88	100	106	109

Source: HUD-PD&R tabulations from the 1999 American Housing Survey.