

The Hidden Housing Crisis: Worst Case Housing Needs Among Adults With Disabilities

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In HUD's 2007 report to Congress, *Affordable Housing Needs 2005*, the American Housing Survey (AHS) proxy used to estimate the worst case housing needs¹ of disabled non-elderly very-low-income renters without children was incomplete because it did not incorporate a new 2005 AHS question about disability income.² Moreover, the AHS proxy results were not compared to independent sources of better data on numbers of very-low-income renters with disabilities and increased to agree with these control totals, as had repeatedly been done in previous HUD Worst Case reports.³

This study uses data about households with severe rent burdens from the 2005 American Community Survey (ACS) to overcome these two weaknesses and develop more accurate estimates of worst case needs among households containing non-elderly adult renters with disabilities.⁴ The ACS identifies disabilities through direct questions about six disabling conditions, and thus has better data on persons with disabilities than any AHS proxy could provide. Yet the ACS does not have all the data elements needed to measure worst case needs as well as the AHS does, so the estimates developed here are based on AHS relationships between severe rent burdens and worst case needs. Then, because two other national surveys have better questions about disabling conditions than does the ACS,⁵ the estimates of worst case needs made from the ACS were adjusted to be consistent with control totals from those two other surveys.

The resulting estimates imply that some 1.3-1.4 million childless very-low-income renter households with non-elderly adults with disabilities had worst case housing needs in 2005. This range is more than double the estimate of 542,000 disabled households published by HUD in their 2007 report, and also much higher than the estimate of 694,000 that results from using the expanded AHS proxy that includes the new question on disability income (HUD, 2008).

¹ Worst case needs, a concept intended to measure renters with acute needs for housing assistance, are unassisted renters with income below half of their area's median income ("very-low-income" renters) who pay more than half of their income for housing or live in severely substandard housing. Homeless individuals should be included in this measure, but the necessary data are not available.

² In February, 2008, HUD released *Housing Needs of Persons With Disabilities: Supplemental Findings to the Affordable Housing Needs 2005 Report*. This supplement uses the new AHS question on disability income ("Did [this person] receive any disability payments such as SSDI, worker's compensation, veteran's disability or other disability payments?") in the AHS proxies recommended by this study.

³ Reasons and procedures for adjusting AHS estimates to control totals drawn from more complete data on adults with disabilities are described in Appendix C of HUD's 2003 report, *Trends in Worst Case Needs for Housing, 1978-1999*. The desirability of including "all nonelderly households with adults with significant physical or mental disabilities" is also cited in HUD's 2007 report (on p. 84). These issues, and HUD's previous practice in making such adjustments, are further described in the technical appendix to this study.

⁴ "Non-elderly" adults are between 18 and 61 years old, because persons aged 62 and older are eligible for HUD's rental assistance programs for the elderly such as Section 202 housing. All of the adults considered in this paper are "non-elderly", and all estimates made are for households rather than persons. Elderly households are those in which the head or spouse is 62 or older.

⁵ The Survey of Income and Program Participation (SIPP) and the National Health Interview Survey (NHIS) identify 35% to 54 % more non-elderly adults as having disabling conditions than does the ACS. Cornell Guide to Disability Statistics from the ACS (Weathers, 2005) Table 11.

Direct data on disabilities among non-elderly adults living in families with children, and their severe rent burdens, were also produced from the ACS. With procedures and adjustments similar to those used for non-elderly adults *without* children, this study produces the first estimates of worst case needs among families with children and disabled non-elderly adults ever made. The results reveal that close to one million of the very-low-income renter families with children who had worst case needs in 2005 housed non-elderly adults with disabilities.

These improved estimates of worst case needs for housing assistance among non-elderly adults with disabilities do not question or change HUD's published finding that six million renter households had worst case needs in 2005. They do, however, clearly imply that households with non-elderly adults with disabilities constitute a much larger share of total worst case needs than HUD's published estimates for 2005 imply. Rather than making up 9 to 12% of the total, as the unadjusted AHS proxies suggest, non-elderly adults with disabilities live in 35 to 40% of the 6 million households with worst case needs. Moreover, almost half of the 4.7 million non-elderly renter households with worst case needs for housing assistance have adults with disabilities.⁶

Overview of Study Procedures and Organization.

This study improves measurements of worst case needs among non-elderly adult renters with disabilities by building in three ways on ACS estimates of very-low-income renter households and their rent burdens prepared by the National Low Income Housing Coalition (NLIHC).⁷

1. Because the ACS has essentially the same questions on income sources as the 2005 AHS,⁸ sources of income reported by non-elderly adult renters with disabling conditions were examined to recommend better AHS proxies for identifying non-elderly adult renters with disabilities from AHS data and thus tracking their housing conditions. ACS data allowed evaluation of possible AHS proxies for both households without children and families with children. HUD's *Supplemental Findings* are based on estimates that use both of the AHS proxies recommended by this study.
2. Households with and without non-elderly adult renters with disabilities were identified within each of the household types used by HUD in their Worst Case reports to provide a basis for estimating worst case needs of non-elderly adult renters with disabilities. As detailed below, because the ACS lacks data on rental assistance and severely inadequate housing, worst case needs were then estimated from ACS counts of renter households with housing costs above 50% of income based on AHS relationships between severe rent burden and worst case needs. This approach, previously used by HUD in five worst case reports to adjust AHS estimates to control totals from the SSI Stewardship Review sample,⁹ is appropriate because severe rent burden—paying more than half of household income for housing—is the problem underlying 95% of worst case needs.

⁶ The remaining 1.3 million households with worst case needs in 2005 had elderly heads or spouses. Many elderly persons in these households also had disabling conditions, but this study focuses on how to best estimate worst case needs among households with non-elderly adults.

⁷ Danilo Pelletiere and Keith Wardrip, *Housing at the Half: A Mid-Decade Progress Report from the 2005 American Community Survey*, NLIHC 2008.

⁸ As Susin (2007) discusses, the 2005 AHS adopted "a series of income questions similar to the questions used in the ACS". However, the new AHS question about disability income is more specific than that in the ACS. HUD 2008 gives the exact wording of all these questions.

⁹ As shown in the Technical Appendix, however, many disabled adults do not receive SSI payments, so the SSI Stewardship Review control totals themselves undoubtedly undercounted eligible adults with disabilities.

3. Cornell University's Employment and Disability Institute compared ACS disability statistics to those available in five other national data sets in its *Guide to Disability Statistics from the American Community Survey* (Weathers, 2005). This comparison showed that for persons between the ages of 18 and 61, the ACS estimates of numbers of persons with some disability are appreciably below those from the Survey of Income and Program Participation (SIPP) and the National Health Interview Survey (NHIS). SIPP and NHIS "both use a much larger set of survey questions to identify persons with disabilities" (Weathers 2005, p. 28). Following a procedure similar to the one used in five previous HUD worst case reports, this study accordingly adjusts its ACS and AHS based estimates of worst case needs to be consistent with the higher, and presumably more accurate, counts produced by the SIPP and NHIS. Although procedures for accurately counting persons with disabilities continue to be studied, I strongly recommend that HUD similarly adjust future AHS-based estimates to the best available national counts of persons with disabilities.

Recommendations for AHS proxies for non-elderly renters with disabilities.

In HUD's last three reports on worst case needs, the proxy for adults with disabilities used among non-elderly renters without children was income from Social Security, SSI, or public assistance reported by the household head.¹⁰ No attempt was made to proxy the presence of disabled adults among families with children because it was assumed that most of those reporting public assistance income were participating in a program such as TANF rather than being disabled. The new income question added to the AHS in 2005 specifically asks about income from disability payments: "Did [this person] receive any disability payments such as SSDI, worker's compensation, veteran's disability or other disability payments?" Beginning in 2005, all AHS questions about income sources are asked for every adult in each household.

As the first panel of Table 1 shows, ACS tabulations of four income sources reported by very-low-income childless non-elderly adult renter households (hereafter "VLICNEAR" households!) with or without disabilities imply that the corrected AHS disabled proxy definitely should include the new AHS disability income question. Over three-fourths (77%) of those renters reporting such income on the ACS did have disabling conditions. Nonetheless, fewer than 10% of the total 2.2 million VLICNEAR households that contain adults with disabilities report income from retirement, survivor or disability payments. These results imply the corrected AHS proxy should continue to retain income reported from Social Security, SSI, or public assistance as reliable indicators of disabilities among childless adults. Clear majorities of the VLICNEAR households reporting these three income sources on the ACS – from 98% to 69% – did include non-elderly adults with disabilities.

The table also reveals that these four sources of income fail to identify all of the VLICNEAR households that do have adults with disabilities. Because some of these households have income from more than one of these sources, the ACS results imply that only two-thirds (65%) of the childless households with disabled adults may be identified by an AHS proxy based on these four income-source questions. This finding reinforces the importance of comparing, and adjusting, future AHS results from this recommended new proxy to the best available independent data on persons with disabilities.

¹⁰ Appendix C of HUD 2003 discusses the research on which this proxy was based, why it represented an improvement over HUD's earlier proxy, and why it probably still undercounted the total number of adults with disabilities. HUD's new *Supplemental Findings* (HUD 2008) detail the questions underlying this proxy.

The ACS identifies one-fourth of the 6 million very-low-income renter families *with* children as having non-elderly adults with disabilities, including 826,000 households with severe rent burden (Table 1). Among these families, the ACS tabulations confirm that receipt of public assistance income does not reliably indicate the presence of an adult with disabilities, as HUD had assumed in not previously attempting a proxy for disabilities among this household type. Only 37% of the ACS very-low-income family renters reporting public assistance income contained a disabled adult. However, three-fifths or more of those reporting income from Social Security, SSI, or disability benefits do have adults with disabilities. Moreover, those three income sources identify more than half of the very-low-income renter families with children who have non-elderly adults with disabilities in the household. These ACS results imply that an AHS proxy that includes income from Social Security, SSI, or disability benefits, but not from public assistance, could usefully identify those families with children that housed non-elderly adults with disabilities, and thus provide estimates of their worst case needs and other housing problems. I recommend that HUD use this three-income proxy to track housing problems among this important group.

To summarize these recommendations,

- The AHS proxy to identify childless non-elderly adult renters with disabilities should include households that report income from the new AHS disability income question. It should, however, also retain income reported from Social Security, SSI, or public assistance sources because the ACS tabulations show that each of these income sources is a reliable indicator of the presence of non-elderly adults with disabilities in the households. Below, I sometimes refer to this as a “four-income” proxy.
- A new AHS proxy to identify families with children that have non-elderly adult renters with disabilities should include *three* AHS questions on income source: the new AHS disability income question, income reported from Social Security or retirement benefits, and income from SSI payments.

Estimates of worst case needs for renter households with non-elderly adults with disabilities.

Childless adult renters with disabilities. ACS data show that almost three-fifths (57%) of the 2.2 million VLICNEAR households with adults with disabilities had severe rent burdens in 2005 (Table 2, third column). As the first two columns of Table 2 show, this prevalence rate is quite similar to the 54% with severe rent burdens found when recommended four-income source proxy identifies 1.8 million likely childless renters with disabilities from the AHS.¹¹

Because worst case needs were originally defined to identify renters most in need of housing assistance, the concept has from its start excluded renters reporting rental assistance.¹² The 694,000 childless disabled renter households counted by the AHS new proxy as having worst case needs, therefore, include only 664,000 unassisted renters with severe rent burden plus more than 30,000 unassisted renters living in severely substandard housing.¹³ The new four-income

¹¹ The AHS estimates in these tables are drawn from HUD’s new *Supplemental Findings*.

¹² As Shroder has shown, the AHS questions used to measure receipt of rental assistance do not do so accurately in all cases. Mark Shroder, “Does Housing Assistance Perversely Affect Self-Sufficiency?” *Journal of Housing Economics*, Volume 11: 4, December 2002, Pages 381-417.

¹³ Among these disabled renters as among all with worst case needs, severe rent burdens characterize 95% or more of those with worst case needs. The remainder live in severely inadequate housing without a severe rent burden, and a small fraction have both severe rent burdens and severely inadequate housing.

AHS proxy, therefore, shows 39% of childless disabled renter households as having worst case needs.

As the 'NA's in the ACS column of Table 2 suggest, the ACS asks no questions about rental assistance. The ACS does record whether a household lacks complete kitchen or plumbing facilities, but can not measure severely inadequate housing as defined in the AHS. To estimate how many of the ACS's 2.24 million very-low-income childless disabled renters had worst case needs, therefore, this study assumes that the new AHS proxy's relationship between severe rent burden and worst case needs among VLICNEAR households with disabilities holds for the equivalent households identified from the ACS. This is the same assumption used in HUD's previous worst case reports to estimate worst case needs for this group based on data and control totals from the SSI Stewardship Review Sample (HUD 2003, Exhibit C-2). This assumption implies that 932,000 of these renter households, 42% of the VLICNEAR group with disabilities, had worst case needs in 2005.

Family renters with children who have non-elderly adults with disabilities in the household. As Table 1 showed, the ACS identifies one-fourth of the 6 million very-low-income renter families with children as having non-elderly adults with disabilities. As the right side of Table 2 repeats, this represents 1.46 million households, 826,000 of them (57%) with severe rent burden. Using the three income sources recommended above as an AHS proxy for disabled families with children, 49% of the one million such families identified by the AHS have severe rent burdens, and 37% have worst case needs. Assuming that the relationship between severe rent burdens and worst case needs shown by the AHS for such families with children also holds for equivalent ACS families, some 620 thousand of the very-low-income renter families with children who have worst case needs have adults with disabilities in the household.

Should AHS estimates of very-low-income renters with disabilities and their worst case needs be compared to control totals from better data sources and adjusted if appropriate?

For reasons discussed in more detail in the Technical Appendix, not least of which is HUD's history of doing this over more than a decade, I judge that AHS estimates derived from proxies indicating the presence of non-elderly adults with disabilities should continue to be compared to national data sources with better data on persons with disabilities and adjusted to conform to those data. Even the improved AHS proxies that I recommend above can not pretend to accurately identify all households with disabled non-elderly adults.

At the very least, estimates derived from the new AHS proxies should be adjusted to be consistent with the better counts of adults with disabilities that are available from the ACS through its six questions on disabling conditions. Adopting the approach pioneered by HUD in conforming AHS estimates to control totals from the 1994-1999 SSI Stewardship Review samples, Table 2 used 2005 AHS relationships between worst case needs and severe rent burdens to estimate worst case needs among the households with disabled adults identified by the ACS. Compared to AHS estimates made with my recommended proxy, the results raise estimates of worst case needs among non-elderly childless adult renters with disabilities in 2005 by a third, from 694 to 922 thousand. Worst case needs among renter families with children and non-elderly adults with disabilities increase by 70%, from 365 to 622 thousand.¹⁴

¹⁴ In this regard, it is highly pertinent that the ACS evidence that the four income sources only count 65% of VLICNEAR disabled also implies that AHS proxy results should be increased. Multiplying the AHS results by 1/0.65, for example, would imply that 1.07 million non-elderly childless adult households had worst case needs.

More fundamentally, although research on improving counts of disabled persons continues, at present the SIPP and NHIS clearly provide more complete counts of non-elderly adults with disabilities living in housing units than the ACS does.¹⁵ As the middle panel of Table 2 illustrates, Cornell's direct comparisons of SIPP, NHIS and ACS counts of adults aged 18-61 can be used to provide adjustment factors that are recent as well as directly relevant to this study. The bottom panel of Table 2, accordingly, uses these factors to adjust the ACS estimates.¹⁶ I conclude that some 1.3 to 1.4 million VLICNEAR households with adults with disabilities had worst case needs for rental housing assistance in 2005, as did some 840 to 960 thousand families with children and non-elderly adults with disabilities present.

Compared to the AHS estimate of 694,000 for worst case needs among VLICNEAR households with adults with disabilities, a range of 1.3 to 1.4 million may seem implausibly high. But two considerations suggest that it may even be low. 1) The range is only 14-30% above the estimate of 1.1 million derived from 2 different approaches for 1999.¹⁷ 2) Comparison of estimates for years between 1987 and 2005 derived from the three-income AHS proxy that was consistently defined over those years show worst case needs among VLICNEAR households with disabilities rising by 43% between 1999 and 2005.¹⁸ If this growth rate were accurate, the 1.1 million in 1999 would have risen to 1.6 million in 2005, rather than "only" 1.3 to 1.4 million.

Conclusion

Following a procedure like the one used in six worst case reports to Congress between 1994 and 2003, this study adjusts its ACS and AHS based estimates of worst case needs among very-low-income renter households with non-elderly adults with disabilities to be consistent with more accurate counts from the SIPP and NHIS. Although procedures for accurately counting persons with disabilities continue to be studied, I strongly recommend that HUD similarly adjust future AHS-based estimates of housing needs and conditions among households with disabled persons to the best available national counts of persons with disabilities. I also recommend that they continue their past practice of actively studying how such adjustments can be improved.

In addition to estimating that worst case needs affected 1.3-1.4 million childless households with non-elderly adults with disabilities, this study found that 0.9-1.0 million families with children with worst case needs in 2005 had non-elderly adults with disabilities in the household. Thus, overall, the study finds that almost half of the nation's 4.7 million non-elderly households with worst case needs include adults with disabilities. The remaining 1.3 million worst case households have elderly heads or spouses.

These improved estimates of worst case needs for housing assistance among non-elderly adults with disabilities do not question or change HUD's published finding that six million renter households had worst case needs in 2005. They do, however, clearly imply that households with non-elderly adults with disabilities constitute a much larger share of total worst case needs than

¹⁵ One reason for the better coverage of SIPP and NHIS is that their questions better identify persons with physical impairments than does the ACS. Because of HUD's continuing interest in needs for housing with physical modifications, such data should be of particular interest for future research.

¹⁶ Future research might usefully develop adjustment factors separately for childless renters and families with children.

¹⁷ The Technical Appendix summarizes these independent approaches and why the estimate of 1.1 million itself was probably low.

¹⁸ Author's calculation of change between 378,000 in 1999 (Exhibit C-2, HUD 2003) and 542,000 in 2005 (Table A-5, HUD 2007).

had previously been thought. Rather than making up 9 to 12% of the total, as the unadjusted AHS proxies suggest, in 2005 non-elderly adults with disabilities lived in 35 to 40% of the 6 million households with worst case needs.

These estimates offer the hope that the ACS can track needs among persons with disabilities annually in the future. The ACS will also provide much more geographic detail about the location of persons with disabilities and housing problems when multiyear ACS data are released.

Finally, the new AHS proxy to identify families with children that contain a non-elderly adult with disabilities should provide a basis for obtaining hitherto unavailable information about the housing problems and household characteristics of these families. For example, preliminary tabulations of the AHS suggest that in three-fourths of these families the disabled adult is a female head.

Technical Appendix: Adjusting AHS estimates of persons with disabilities and their housing problems to control totals derived from more complete estimates of persons with disabilities

Practice in HUD's past Worst Case reports. In response to a 1990 request from the Senate Appropriations Committee, HUD has been producing reports on worst case needs since 1991, when its first report, *Priority Problems and "Worst Case" Needs in 1989*, was published. The third report, *Worst Case Needs for Housing Assistance in 1990 and 1991*, began the practice of estimating needs for non-elderly adults with disabilities. Based on research with the 1978 AHS Housing Modifications Supplement, receipt of SSI income was identified then as a useful AHS proxy to identify adults with disabilities, although the report acknowledged that this proxy "is likely to seriously undercount the number of households with disabled individuals present" (HUD, 1994, p.44).

The fourth worst case report, *Rental Housing Assistance at a Crossroads*, then reported on HUD's first attempts to estimate more complete counts of worst case needs among adults with disabilities by comparing estimates of worst case needs among persons receiving SSI from the 1993 AHS against better control totals. From counts of non-elderly adults with disabilities who had severe rent burdens from the 1994 SSI Stewardship Review Sample, coupled with AHS proxy data on the relationship between worst case needs and such burdens, the report concluded that "At least 17 percent of worst case households have adults with disabilities present" (HUD 1996, Figure 14, page 29).

Each subsequent report continued and improved this approach, as described in Appendix C of HUD's 2003 report, pp A-46 to A-50 of HUD 2003, *Trends in Worst Case Needs for Housing, 1978-1999*. That appendix also discusses the basis for the report's estimate that 1.1 million renter households with nonelderly adults had worst case needs in 1999. This estimate was derived from two independent procedures. The first used data from the 1995 AHS Physical Modifications Supplement to estimate the number of renters with physical disabilities (and also extend the AHS proxy used to identify households with adults with disabilities). The second approach compared AHS proxy results to data from on non-elderly renters with severe rent burdens from SSI Stewardship Review sample for the years 1994-1999. Then, because payment levels for SSI provide incomes well below 30% of HAMFI, the SSI total was raised by 10% to approximate disabled renters with incomes too high to qualify for SSI but still below the very-low-income cutoff of 50% of HAMFI.

After 1999, the SSI Stewardship Review sample no longer provided all the data elements needed to identify very-low-income renter households with severe rent burdens for this purpose so adjustments to control totals from SSI data could not be made in the reports published in 2005 and 2007. But both reports cite the desirability of such adjustments, however, and note that even such adjusted estimates are likely to be incomplete.¹⁹

Approach of this study. Because the SSI Review sample data previously used as control totals have not been available since 1999, I reviewed alternative sources of national data on adults with disabilities to identify appropriate control totals for estimates in 2005. In doing so, I discovered that SSI program statistics show that many disabled adults receive both SSI and Social Security disability benefits, while still others receive only Social Security payments. Specifically, Table 15 of the 2005 SSI Annual Statistical Report counted 6 million disabled adults as receiving only Social Security benefits, 2.9 million as receiving only SSI benefits, and 1.2 million as receiving both. Some of these 10 million adults were undoubtedly owners, and some receiving only Social Security payments probably had incomes above the very-low-income limit. Nevertheless, this evidence that SSI recipients make up only some 40% of disabled adults receiving Social Security or SSI payments implies strongly that the control totals from SSI Review Sample data used in HUD's previous reports were themselves far from complete.

My search for better data on persons with disabilities led to the *Guide to Disability Statistics from the American Community Survey* (Weathers, 2005), prepared by Cornell University's Employment and Disability Institute. This resource reviews sources of data on disabilities and past research on the strengths and weakness of different questions asked over the past several decades in efforts to improve disability statistics. It also compares ACS disability statistics to those available in five other national data sets, including explicit comparisons of ACS and other disability statistics for persons between the ages of 18 and 61, the exact ages of interest in this study. This comparison showed that for persons between the ages of 18 and 61, the ACS estimates of persons with a disability are appreciably below those from SIPP and the NHIS, "which both use a much larger set of survey questions to identify persons with disabilities" (Weathers 2005, p. 28).

To conclude, this history of past HUD efforts to better count all of the eligible renters with disabilities, combined with evidence that much better data on adults with disabilities than the SSI Stewardship Review sample are now available and should continue to improve, is the basis of my considered judgment:

- AHS estimates derived from proxies indicating the presence of non-elderly adults with disabilities should continue to be compared to national data sources with better data on persons with disabilities and adjusted to conform to those data.

¹⁹ Footnote 43 of HUD 2007, for example, states "Social Security Administration (SSA) data on SSA recipients who are blind or have other disabilities provide a basis for making more complete estimates of the number of very low-income renters with SSI income who receive HUD assistance or who 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."