# Reducing Worst Case Housing Needs With Assisted Housing

Kirk McClure University of Kansas

#### Abstract

This research note seeks to answer this question: When units of assisted housing are added to a metropolitan market, is there a commensurate reduction in the number of households with worst case housing needs (WCN)? WCN are defined as unassisted renter households with very low incomes (VLIs) that pay more than 50 percent of income on housing or live in severely inadequate housing conditions or experience both.

Previous work estimated the relationship among extremely low-income renter families with children, finding a reduction in WCN of 76 households for each 100 additional assisted units in the market. This work was replicated with more recent data drawn from the larger population of VLI renter households. It found a reduction in WCN of 68 households per 100 units of assistance. There appears to be a threshold in the relationship. In markets in which less than 45 percent of the VLI renter households per 100 assisted units added. If the percentage of assisted households is greater than 45 percent, no reduction in WCN is found with the introduction of additional assisted units.

### Introduction

This research note addresses this question: If assisted housing units are added to a housing market, is there a commensurate reduction in the count of renter households with worst case housing needs (WCN)? WCN form a benchmark that is used to assess the need for housing assistance across the nation. The benchmark is estimated by the U.S. Department of Housing and Urban Development (HUD) as the count of poor renter households that suffer from severe housing affordability conditions. This count is limited to renters with incomes that are less than 50 percent of the Area Median Income (AMI). This income level is referred to as very low-income (VLI). These VLI renters are

deemed to have WCN if they do not receive federal housing assistance and (1) pay more than one-half of their monthly income for rent and utilities or (2) live in severely inadequate housing conditions or (3) experience both (Steffen et al., 2011).

To properly budget scarce resources and quantify the expected results of investments in assisted housing, HUD and Congress want and need to know the responsiveness of housing markets to interventions through the provision of assisted housing. The assisted housing can take the form of project-based assisted housing or tenant-based vouchers. Can the government expect a one-for-one reduction in WCN with the introduction of an assisted unit or a voucher, or does some lesser level of response indicate that not all assisted housing goes to households with WCN?

## **Previous Work**

Khadduri, Shroder, and Steffen (2003) examined this topic in the context of welfare reform. Because of their interest in welfare reform, the population they studied was composed of families with children. The families they studied had incomes placing them at less than 30 percent of the AMI for families. Income at this level is referred to as extremely low-income (ELI). The authors, who based their paper on data from 44 metropolitan areas (exhibit 1), illustrated the relationship graphically and found a strong negative relationship.

Khadduri, Shroder, and Steffen (2003) did not model the relationship between WCN and assisted housing. Using their data, however, an estimate can be generated (model 1 in exhibit 2). The model finds a regression coefficient of -0.76 between the percentage of ELI families with children and assisted housing as a percentage of the same group. The coefficiant is, as expected, negative and significant. Their work suggests that adding 100 assisted housing units to a metropolitan market results in 76 fewer poor renter households with WCN.

#### Exhibit 1



Percent of ELI Families With Children With WCN and Percent of ELI Families With Children Receiving Housing Assistance for Metropolitan Areas, 1989 Through 1996

*ELI* = extremely low-income. WCN = worst case housing needs. Source: Khadduri, Shroder, and Steffen (2003)

#### Exhibit 2

Models Explaining Percent of Households With WCN as a Function of Percent of Households Assisted

	Model 1	Model 2	Model 3	Model 4
Dependent variable	Percent of ELI families with children with WCN	Percent of VLI renter households with WCN	Percent of VLI renter households with WCN	Percent of VLI renter households with WCN
Number of cases	44	30	24	6
Cases	All	All	Percent with WCN < 45	Percent with WCN > 45
Coefficient for percent assisted	- 0.756	- 0.678	- 0.918	- 0.346
t score	10.539	5.565	3.526	1.214
Significance	0.001	0.001	0.002	0.292
Adjusted R squared	0.719	0.508	0.332	0.087

*ELI* = extremely low-income. *VLI* = very low-income. *WCN* = worst case needs.

The model generated from the Khadduri, Shroder, and Steffen (2003) data suggests a less than onefor-one reduction in the number of WCN households with the addition of assisted housing units. Perhaps the less than one-for-one reduction in WCN households should be expected. Hardiman et al. (2010) found that about 85 percent of the households benefiting from HUD-funded housing assistance have VLIs. This 85-percent figure provides an expected value for the estimated coefficient between assisted housing and WCN. The admission requirements for the various HUD-funded housing assistance programs vary. Each program serves people with low incomes, but those served are not exclusively VLI or ELI renters. In addition, although most households that receive housing assistance will be from the VLI population, not all will come from housing with severely inadequate conditions or housing that costs more than 50 percent of their household income, conditions that define WCN households. Steffen et al. (2011) found that only 51 percent of all unassisted VLI renters have WCN.

Many VLI renters do not suffer from WCN, and the households that are admitted to housing assistance programs may or may not be drawn from those with WCN. Public housing authorities (PHAs) have some discretion as they administer the public housing program and the Housing Choice Voucher Program (HCVP), two of the largest forms of housing assistance for VLI renters. These scarce housing resources are allocated to eligible households that enter their names onto the PHA's waiting lists for housing assistance. Households can move up the list as a function of both federal and local preferences. The highest priority tends to be given to households displaced by natural disaster or government action. Although some priority is given to households whose members are employed, it appears that most households receiving housing assistance have few, if any, resources (Leopold, 2012). Given this process, it seems likely that as housing assistance becomes available, the recipient households would probably be drawn from the population of unassisted VLI renters who are likely to have high housing cost burdens. This probability makes it reasonable to expect the reduction in WCN to be closer to 85 per 100 new units of housing assistance. This process also means, however, that not every incremental assisted unit will become occupied by a household drawn from the population of WCN.

## **Recent Data From the American Housing Survey**

To establish an estimate of the relationship between WCN and assisted housing, data are taken from both HUD and from the American Housing Survey (AHS). Data on WCN are available from the AHS but not from the decennial census or the American Community Survey (ACS). The census and the ACS examine housing cost hardship, but they do not provide data on the incidence of severely deficient housing, a component of WCN. Thus, analysis in this research note is restricted to the 30 metropolitan areas for which recent AHS data are available.

The counts of assisted housing are derived from HUD data. The counts include public housing, Section 8 new construction/substantial rehabilitation units, Section 236 units, HCVP households, and a few older HUD multifamily programs with units that are still under contract. The data do not include the units that are subsidized under the Low-Income Housing Tax Credit Program, because the program tends to assist households that are less poor, such as households with 30 to 60 percent of AMI.

Using AHS and HUD data illustrated in exhibit 3, a simple bivariate model is estimated (model 2 in exhibit 2). The dependent variable is the percentage of VLI renter households with WCN, a larger population than was used in the previous study. This population reflects the universe from which WCN households are drawn. The independent variable is assisted housing as a percentage of VLI renter households.

#### Exhibit 3





VLI = very low-income. WCN = worst case housing needs.

Sources: U.S. Department of Housing and Urban Development, Office of Policy Development and Research, Assisted Housing Data, 2008; American Housing Survey Metropolitan Data, 2002, 2004, and 2007

The coefficient estimated from these more recent data is lower than found with the previous study. This model suggests that 100 units of additional assisted housing will result in a reduction of WCN of only 68 households. There appears to be a threshold in the relationship between WCN and assisted housing, however. If assisted housing is introduced into a market in which less than 45 percent of the VLI renter households are assisted, the percentage of VLI renters with WCN appears to be very responsive. The count of WCN households is reduced by an estimated 92 households per 100 assisted units added. If the percentage of VLI renters who are assisted is greater than 45 percent, however, no reduction can be found with the introduction of additional assisted units (models 3 and 4 in exhibit 2).

# Conclusion

The relationship between the incidence of WCN and the incidence of assisted housing is negative. We would expect this relationship to be close to 85 households per 100 additional assisted housing units. This expectation is reasonable because 85 percent of the households that benefit from HUD-funded housing assistance have VLIs and those households selected for entry into housing assistance programs tend to be those VLI households with a high housing cost burden. The small amount of available data does not permit construction of models with controls that could help improve our understanding of the relationship. Inspection of the relationship indicates that a threshold exists, however. In the metropolitan areas studied, those with lower levels of assisted housing seem to be very responsive to additional assisted housing. These markets experience higher levels of VLI households with WCN. Alternatively, markets with higher levels of assisted housing do not show any significant relationship, but these markets are few in number.

This finding suggests that markets are most responsive to the introduction of additional assisted housing if they suffer from lower levels of housing assistance for their renter populations. Where a reduction of WCN is sought, additional assisted housing will generate the greatest effect if it is introduced into markets with these low levels of assisted housing.

### Author

Kirk McClure is a professor in the Department of Urban Planning at The University of Kansas.

#### References

Hardiman, David L., Carolyn Lynch, Marge Martin, Barry L. Steffen, David A. Vandenbroucke, and Yung Gann David Yao. 2010. *Worst Case Housing Needs 2007: A Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Khadduri, Jill, Mark Shroder, and Barry Steffen. 2003. "Can Housing Assistance Support Welfare Reform?" In *A Place To Live, a Means To Work: How Housing Assistance Can Strengthen Welfare Policy,* edited by Barbara Sard and Amy Bogdon. Washington, DC: Fannie Mae Foundation: 23–62.

Leopold, Josh. 2012. "The Housing Needs of Rental Assistance Applicants," *Cityscape* 14 (2): 275–298.

Steffen, Barry L., Keith Fudge, Marge Martin, Maria Teresa Souza, David A. Vandenbroucke, and Yung Gann David Yao. 2011. *Worst Case Housing Needs 2009: A Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.