

# Improving Measures of Housing Insecurity: A Path Forward

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Housing insecurity is a real, persistent, and growing problem with implications for people's education, health, and well-being. Although there is a general awareness among policymakers and the public about the causes and consequences of the affordable housing crisis, there are large gaps in our knowledge of different components of housing insecurity, the duration of housing insecurity and the relationship between housing insecurity and other forms of hardship. Much of the research treats the different dimensions of housing insecurity as discrete problems rather than part of a continuum of bad options for poor renters. As a result, policymakers do not have enough information about how many households experience housing insecurity, how they move in and out of different types of housing situations, and the effect of housing insecurity on other measures of material hardship and personal well-being.

The field needs better measures of housing instability and would benefit from a standard set of measures, and possibly a standardized scale, that could be adapted for use in surveys across different domains. In this paper, we draw from the experience of the creation of the US Department of Agriculture's Core Food Security Module to discuss the possible benefits of a standard scale of housing insecurity and the process for creating one.

## Dimensions of Housing Insecurity

Housing insecurity can take a number of forms: homelessness; housing cost burden; residential instability; evictions and other forced moves; living with family or friends to share housing costs (doubling-up); overcrowding; living in substandard, poor quality housing; or living in neighborhoods that are unsafe and lack access to transportation, jobs, quality schools, and other critical amenities. We reviewed the current literature to document what we know about how each of these forms of housing insecurity are

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This paper originated from a literature review of housing insecurity measures and a meeting of experts on housing and food insecurity funded by Enterprise Community Partners as part of its efforts to end housing insecurity.

measured in the United States. Our review draws from population surveys, longitudinal surveys, and longitudinal administrative data. There is no single survey or administrative dataset that captures all the different components of housing insecurity. Table 1 summarizes the available data for measuring different forms of housing insecurity. For some dimensions, like housing affordability or housing adequacy, the measure is clearly defined and consistently reported. For other measures, like homelessness and overcrowding, there are multiple definitions and measures, and some measures, like doubling-up, residential instability, and neighborhood quality there is no agreed upon definition or measure.

In this section we evaluate the current state of measurement for each of the key measures of housing insecurity with a focus on whether the measure has a clear, agreed-upon definition, whether it is currently measured throughout the country, the frequency of data collection and the ability to track changes to households over time.

### **Housing Cost Burden**

Housing cost burden is defined by the percentage of a household's gross monthly income spent on housing. Households that spend 30 to 50 percent of their income on housing are considered cost burdened and households that spend more than half of their income on housing are severely cost burdened. This is the measure used by the Department of Housing and Urban Development (HUD) in its Worst Case Housing Needs study of very-low income renters not receiving housing assistance. It has also been widely adopted by other efforts to measure housing affordability. The 30 percent cutoff for affordability matches what assisted households are required to pay in HUD's Section 8 rental assistance programs—public housing and the housing choice voucher program. These programs previously required assisted households to pay 25 percent of their income on rent. As a cost-saving measure, Congress increased this to 30 percent in 1981. The 30 percent affordability standard is arbitrary and based on outdated notions of the relative cost of shelter compared to other necessities like food, clothing, and durable goods. It also does not account for other the interrelationship of housing and other costs, for example households could choose to pay more for housing in order to lower their commuting costs (Matthews 2015). Similarly, there is no empirical basis for defining severe housing burden as paying more than half of one's income on rent. For example, there is no data that suggests that is the threshold beyond which households are more likely to make trade-offs between housing and other necessities or to face either formal eviction or be forced to move by their landlord for failure to pay rent. However, there is widespread agreement within the policy and advocacy community that paying more than half of one's income on rent is a serious problem. There are some advocates for an alternative measure of housing affordability that would look at the amount of income households have left each month after paying rent and utilities, or "residual income" (Stone 2006). Under this formulation, a household with \$1,000 in monthly income and \$400 in housing costs would have a greater housing burden than a household with \$2,000 in monthly income and \$1,200 in housing costs.

Housing cost burden is measured by dividing a household's monthly housing costs (rent and utilities) by its monthly income. Thus, any survey that measures households' income and housing costs can be used to

**Table 1. Summary of Available Data for Key Measures of Housing Insecurity**

Dimension	Key Measure(s)	Data Sources	Geography	Frequency	Longitudinal or Cross-sectional
<b>Housing Quality</b>	HUD measure of severely inadequate housing used to define Worst Case Need; Poor Quality Index that has a more comprehensive range of housing deficiencies	American Housing Survey (AHS)	National, with estimates available for 47 selected metropolitan areas	Biennially in odd numbered years	Cross-sectional
<b>Housing Cost Burden</b>	<ul style="list-style-type: none"> <li>Moderate rent burden: households paying 30-50 percent of their income on housing (rent and utilities)</li> <li>Severe rent burden: households paying more than 50 percent of their income on housing (rent and utilities)</li> </ul>	American Housing Survey (AHS)	National, with estimates available for 47 selected metropolitan areas	Biennially in odd numbered years	Cross-sectional
		American Community Survey (ACS)	Census tracts and block groups in multi-year averages, cities, metropolitan areas, counties, states, national	Annually, with multi-year averages	Cross-sectional
		Survey of Income and Program Participation (SIPP)	Household, Metropolitan areas, state, national	Monthly, Annually	Longitudinal
<b>Homelessness</b>	HUD Definition: People living in homeless programs, on the streets, or places not suitable for human habitation	Point-in-Time (PIT) estimates	National, State, Continuum of Care	Annually	Cross-sectional
	HUD definition plus people doubled-up for economic reasons or living in hotels or motels	Consolidated State Performance Report (CSPR) for EdFacts	State, National	Annually	Cross-sectional
<b>Residential Instability</b>	Number of moves, forced moves	Panel Survey of Income Dynamics	National, State, Region, Urban-Rural Code	Biennially	Longitudinal
	Forced moves including evictions, formal and informal, condemned buildings, and landlord foreclosures	Milwaukee Area Renters Survey	Individual, Households, City	Survey data gathered from 2009 to 2011	Longitudinal

	Doubling up, forced moves, and evictions in previous 3 months	American Housing Survey (AHS)	National, with estimates available for 47 selected metropolitan areas	Biennially in odd numbered years	Cross-sectional
	Doubling-up: multi-family households	American Community Survey (ACS)	Census tracts and block groups in multi-year averages, cities, metropolitan areas, counties, states, national	Annually, with multi-year averages	Cross-sectional
	Doubling-up: multi-family households	Survey of Income and Program Participation (SIPP)	Household, Metropolitan areas, state, national	Monthly, Annually	Longitudinal
<b>Neighborhood Quality</b>	ACS measure for “distressed neighborhoods” where at least 40% of households in a census tract are below the poverty line	American Community Survey (ACS)	Census tracts and block groups in multi-year averages, counties, states, national	Annually, with multi-year averages	Cross-sectional
	Households’ perceptions of their neighbors and community	American Housing Survey (AHS)	National, with estimates available for 47 selected metropolitan areas	Biennially in odd numbered years	Cross-sectional
	Households’ preference to stay or leave their neighborhood and their perceptions of the community within the neighborhood	Making Connections Survey	Households	Three waves of surveys between 2002 and 2011	Longitudinal
	Neighborhood quality and household’s perception of safety	HOPE VI	Households in five communities	Biennially	Longitudinal
<b>Overcrowding</b>	Number of occupants per room	American Housing Survey (AHS)	National, with estimates available for 47 selected metropolitan areas	Biennially in odd numbered years	Cross-sectional
	Number of occupants per room	American Community Survey (ACS)	Census tracts and block groups in multi-year averages, counties, states, national	Annually, with multi-year averages	Cross-sectional

measure cost burden—including the Census, the American Community Survey (ACS), the American Housing Survey, the Panel Study on Income Dynamics and the Survey on Income and Program Participation. These data sources all have their own strengths and limitations for measuring housing cost burden. The AHS provides the most detailed set of questions on housing costs, including the receipt of housing assistance, but it cannot be used to track households' cost burden over time and local estimates are only available for large metropolitan areas. The ACS can be used to produce estimates at the city or county level, but does not collect information on households' receipt of rental assistance. The SIPP also can be used to measure housing cost burden and can be used for longitudinal analysis as the same households are surveyed monthly or annually in two and four-year panels. However, the SIPP has its own limitations for measuring cost burden. Utility costs that are not included as part of the rent are not captured; like the ACS, it can be difficult to determine if respondents with a housing subsidy report the total rent for their unit or just the amount that they contribute; and housing costs are tracked at the individual or family level, which makes it difficult to determine total housing costs for households with two or more unrelated adults living together. Additionally, the SIPP's sample is too small to produce estimates at the county or city level for most of the country (Census Bureau 2016).

A number of reports regularly measure housing cost burden in different ways. HUD's biannual Worst Case Needs report uses the AHS to produce national estimates of the number of very-low income unassisted renters with moderate and severe rent burden. The Joint Center on Housing Studies at Harvard, in its annual State of the Nation's Housing report, uses ACS data to estimate the number of all households—renters and homeowners—with moderate and severe rent burden by income-level. The National Low Income Housing Coalition's annual Out of Reach report calculates the hourly wage a worker would need in order to afford a 1-bedroom and 1-bedroom apartment based on the Fair Market Rent (FMR) HUD sets for each locality. The Urban Institute uses ACS data, supplemented with administrative data from HUD and the U.S. Department of Agriculture on rental assistance, to estimate the number of rental units that are adequate, affordable, and available to extremely-low income renters in each county.

## **Housing Quality**

Housing quality receives less attention as a measure of housing insecurity than housing affordability, in part because it is perceived as a less common and less urgent problem. The primary measure of housing quality is the HUD definition of moderate and severely inadequate housing used in its Worst Case Needs study. Housing is considered severely inadequate if it lacks certain basic features like hot and cold water or a flush toilet.<sup>2</sup> The AHS is the only national survey with sufficiently detailed questions to measure incidences of

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<sup>2</sup> HUD defines a housing unit as severely inadequate if any of the following criteria apply.

1. Unit does not have hot and cold running water.
2. Unit does not have a bathtub or shower.
3. Unit does not have a flush toilet.
4. Unit shares plumbing facilities.

substandard housing. The AHS finds a relatively low incidence of severely substandard housing. However, some researchers believe that the HUD measure could be improved upon. An analysis of the AHS quality measures by Newman and Garboden (2013) found low levels of reliability and internal consistency and are not necessarily validated by other proxies for housing quality such as housing cost and residents' self-reported satisfaction with their housing. The authors recommend a new effort to conceptualize and measure housing quality.

## **Homelessness**

No national survey attempts to include a representative sample of people experiencing homelessness. Instead, national homeless counts are derived from compiling counts done at the community level. One complication for measuring homelessness is that Congress has defined homelessness in different ways for different federal agencies. HUD produces an annual national estimate of homelessness by compiling point-in-time counts, which all communities are required to conduct every January. To be included in the count, people must be living in emergency shelters, transitional housing, or places not suitable for human habitation, such as the streets, cars, or abandoned buildings. HUD also uses administrative data from a representative sample of communities to produce an annual national estimate of the number of people that use emergency shelter or transitional housing over the course of the year. The number of people that use a homeless program at some point throughout the year is almost three times higher than the number of people counted as homeless on a single night (HUD 2015).

The Department of Education (ED) uses a more expansive definition of homelessness that includes people living in shelter, transitional housing, or on the streets, but also families that are doubled-up with family or friends for economic reasons or living in hotels or motels. ED publishes an annual report on the number of homeless students in the U.S. that is a compilation of reports by local school districts. ED reported that 1.36 million students were homeless during the 2013-2014 school year (EDFacts 2015) While the number of people reported homeless by HUD has been steadily falling, the number of homeless students, as reported by ED, has consistently increased. This could be because the HUD count is somewhat constrained by the availability of shelter and transitional housing beds (Leopold 2014). Another factor that could explain the increase is more accurate reporting by local school officials.

## **Overcrowding**

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5. Unit was cold for 24 hours or more and more than two breakdowns of the heating equipment have occurred that lasted longer than 6 hours.
  6. Electricity is not used.
  7. Unit has exposed wiring, not every room has working electrical plugs, and the fuses have blown more than twice.
  8. Unit has five or six of the following structural conditions: a. Unit has had outside water leaks in the past 12 months. b. Unit has had inside water leaks in the past 12 months. c. Unit has holes in the floor. d. Unit has open cracks wider than a dime. e. Unit has an area of peeling paint larger than 8 by 11 inches. f. Rats have been seen recently in the unit.

HUD considers overcrowding a “moderate” housing problem and not a worse-case housing need. HUD defines overcrowded housing as any unit with more people than rooms, specifically bedrooms and living rooms. Alternate measures of overcrowding include more than 2 people for every bedroom in a housing unit, more than 1.5 people per room, or less than 165 square feet of housing per person (Blake, Kellerson, and Simic 2007). Both the AHS and the ACS can be used to measure overcrowding. One challenge to measuring overcrowding, aside from selecting the most appropriate definition, is accurately counting the number of people living in the housing unit. Research has shown that this response can be sensitive to how the question is asked (e.g., “how many people live with you” versus “how many people are staying with you”) and can fluctuate throughout the year as friends, family, or boarders come and go (Cunningham and Henry 2007).

### **Residential Instability and Forced Moves**

Another potential consequence of a lack of adequate, affordable housing is frequent, forced moves. These moves can be triggered by an unexpected decrease in income, an increase in other expenses, a dispute with the landlord or safety concerns. A formal eviction is the clearest example of a forced move. Evictions are a legal process and administrative data is available at the local level through housing courts. However, no one has attempted to compile this data to create a national estimate of the frequency of eviction. The American Housing Survey has included eviction as a response option when asking respondents who have moved within the last two years the reason for their move. However, a survey of renters in the Milwaukee area found compelling evidence that this measure may significantly underestimate the extent of forced moves. Thirteen percent of renters in the Milwaukee Area Renters Study (MARS) experienced a forced move during the two year study period, with formal evictions accounting for only 24 percent of such moves (Desmond 2015). Informal evictions, where renters move out prior to an eviction hearing, accounted for 48 percent of forced moves; 23 percent of forced moves resulted from landlords having their buildings foreclosed on and the other five percent were the result of buildings being condemned. HUD and the Census Bureau are adopting the questions on forced moves from this Milwaukee Area Renters Study for the 2017 AHS (Flowers 2016).

Other forms of housing insecurity lack a standard definition or means of measurement. For instance, there is no national measure of residential instability or any research that we are aware of that tracks its prevalence from year to year. Residential instability is thought to have negative effects on children’s education and well-being, and can also be a precursor to homelessness, however there is no standard way to define it. Researchers have used various definitions including six or more moves during childhood (Tucker, Marx, and Long 1998), three or more moves during childhood (Gilman et. al. 2003) or more than one move in a year (Masten et. al. 1997). Residential instability is also difficult to measure because, by definition, households that move often are more difficult to track over time. The PSID is the most useful of the national

surveys for measuring residential instability, although it has several limitations including attrition, as respondents drop off over time, recall problems because data is only collected every other year, and an undersample of recent immigrants (McGonagle and Schoeni 2006).

Similarly, no reliable estimates are available on the number of people who double up with friends or relatives because they cannot afford housing. Using the US Census Bureau definition, Johnson estimated the number of doubled-up households to be almost 70 million people. But the definition is broad: those households that include at least one “additional” adult—in other words, a person 18 years or older who is not enrolled in school and is not the householder, spouse, or cohabiting partner of the householder (Johnson 2011). Past efforts to quantify the doubled-up population who share housing for economic reasons have been difficult, in part because there is no official definition. In 2013, the AHS introduced a special supplement on doubling up. In this supplement, respondents were asked about household members who had moved out of the housing unit within the past year. The results showed that in 27 percent of doubled-up situations, the additional household members were staying in the housing unit because they lacked the money to afford housing on their own. More than 90 percent of doubled-up household members leave voluntarily and most (72 percent) exit the doubled-up situation for housing of their own or some other type of housing, and less than 1 percent exit to a homeless situation (HUD 2015).

### **Neighborhood Quality**

Having to live in unsafe or economically distressed neighborhoods is another potential form of housing insecurity. Living in high crime neighborhoods, for example, is a form of housing insecurity that can have negative consequences for the well-being of children and families. Conversely, moving to “opportunity neighborhoods” that have high-quality schools and access to transportation and employment has been associated with better educational, employment, and health outcomes for families. There is no agreement on how to define the boundaries of neighborhood or the dimensions of quality that researchers should track. Researchers using the ACS often define distressed neighborhoods as census tracts where 40 percent or more of households have incomes below the poverty level. By this measure, 11.2 million people live in distressed neighborhoods (Kneebone 2014).

The loose body of academic literature around “geographies of opportunity” (a term first named in a seminal 1995 paper by George Galster and Sean Killen) explores the idea that spatial variations in social systems, markets, and institutions affect a range of social outcomes. Most research into “geographies of opportunity” focuses on documenting disparities in education, health, and wealth by geography and race. From this research, we know that poor neighborhood conditions have deleterious effects on a wide range of outcomes, including housing outcomes, and can have a cumulative, even inter-generational, impact on families and communities.



There are a number of national “neighborhood indices” that typically focus on some combination of measures including education, income & employment, transportation, environmental quality and health, anchor institutions and neighborhood services, arts, civic engagement, and crime and safety. Yet, these neighborhood indices are generally not integrated into broader measures of housing insecurity.

## Dynamics of Housing Insecurity

In addition to the limitations of our knowledge of the prevalence of different forms of housing insecurity, there is also a lack of longitudinal data about the duration of housing insecurity. In part because the dimensions of housing insecurity are measured across a variety of surveys and administrative datasets, it is very difficult to collect data on how people become housing insecure, how they move between different types of housing insecurity, and how they exit housing insecurity into more stable situations. This type of information is critical to policymakers and practitioners making decisions about where to target resources and how to coordinate across programs.

Important questions about housing insecurity, answered with longitudinal data, could inform housing policy and how to target scarce housing resources. For example, what share of low-income people experience chronic housing insecurity? What are the patterns of different forms of housing insecurity? A couple of examples illustrate how longitudinal data can transform policy. Analysis of administrative data from homeless programs has revealed three main patterns of service use among homeless individuals: transitional, episodic, and chronic. Roughly 80 percent of individuals in the shelter system were transitional users. These individuals had a single, relatively short stay in a shelter and did not return to the homeless system after exit. Ten percent of individuals used homeless shelters episodically—having multiple shelter stays spread over a long period of time. A shelter stay was typically short, and episodic users seldom spent more than 100 total days in a shelter over a multi-year period. Ten percent of individuals were chronic shelter users. These individuals tended to be older and chronically unemployed and used shelters as long-term housing at great expense to local systems. Chronic shelter users accounted for half of all shelter costs (Kuhn and Culhane 1998). Policymakers have used this information to focus resources on helping people experiencing chronic homelessness find and maintain permanent housing with case management and other services. The research has helped spur a major increase in permanent supportive housing targeted to people experiencing chronic homelessness and a national adoption of Housing First principles that have been shown to be effective for serving that population.

More recently, Matthew Desmond and colleagues’ research on low-income renters in Milwaukee has provided a new understanding of how the different dimensions of housing intersect. For example, landlords set rents that they know their tenants cannot afford as a way to gain leverage over them: if a tenant is

always behind on the rent it is easier for the landlord to defer maintenance and repairs. The high cost burden also contributes to residential instability as tenants are generally behind on the rent and under threat of eviction. Evictions and other forced moves then exacerbate housing insecurity as families, under pressure to find new housing quickly, are likely to move into worse quality housing in less desirable neighborhoods or double-up with friends or acquaintances. Forced moves also disrupt people's employment and schooling and create unanticipated expenses including transporting or storing personal belongings (Desmond 2016). Desmond's research has also provided insight into the risk factors for housing insecurity. For example, households with children are more likely to be evicted or experience a forced move as are women that experience domestic violence. Additional research is necessary to understand how the characteristics of housing instability experienced by low-income Milwaukee renters following the Great Recession (2009-2011) compare to renters in other markets in other time periods. The adoption of some of the core questions from the MARS into the AHS is a useful step in this direction.

Researchers and policymakers could also benefit from knowing more about the connections between housing insecurity and other kinds of material hardship, like food insecurity. A national survey of households that received food assistance, conducted by Feeding America, found that 59 percent of these households are renters and 60 percent had faced a housing hardship in the previous year, including having to make trade-offs between paying for food or utilities (51%), moving (26%) or doubling-up (22%). Renters were also more likely to report trade-offs between paying for food and housing than households that were homeless (57 percent versus 44 percent) (Scott unpublished).

## The Case for a Standard Measure of Housing Insecurity

Our review of the available measures shows the lack of a coherent framework for thinking about housing insecurity as a distinct concept rather than a set of discrete problems. The lack of a standard measure for housing insecurity is not necessarily felt as a major limitation within the field. Researchers and advocates have used the available measures to demonstrate that there is a serious and worsening lack of affordable housing and that this shortage has negative effects in a variety of areas. However, a standard measure could help create a "common language" around housing insecurity that could allow for more consistent data collection and better communication of the scale and nature of the problem to policymakers and the public.

One potential way to advance the field is to create a standard set of questions on housing insecurity. This module could be incorporated into national panels could allow for consistent, national data on the prevalence and severity of housing insecurity issues. The module could be used to create a scale to measure households' overall level of housing insecurity. A standard module and scale already exists to measure

hunger and food insecurity. It is called the USDA's Core Food Security Module (CFSM). The original impetus of the CFSM was a 1984 report by the President's Taskforce on Food Assistance lamenting the lack of an official national "hunger count". This sparked both public and private investment in best practices for measuring food insecurity. In 1990 Congress enacted the National Nutrition Monitoring and Related Research Act, which directed the USDA and the Department of Health and Human Services (HHS) to "create a sound national measure of food insecurity and hunger". In turn, this led to the creation of the Food Security Measurement Project, a federal interagency council charged with creating the national measure of food insecurity. This group led the creation of the CFSM, which was introduced into the CPS in 1995 and has been part of the survey ever since (Bickel et al. 2000).

The final scale consisted of 18 items that takes under four minutes to administer via survey.<sup>3</sup> There is also a "Short Scale" that has six items. Researchers can use the scale to group households into one of four categories: high food security, marginal food security, low food security, and very low food security. The Economic Research Services division within USDA uses the data from the CPS to provide annual reports on trends in food insecurity at the national, state, county and congressional-district level; differences in food insecurity by household configuration and demographics; and relationship between food insecurity and income, spending levels, and participation in social programs (Coleman-Jensen et al. 2016). At a convening on housing and food insecurity held at The Urban Institute, food insecurity experts believe that the development of the CFSM helped the field move on from issues of definition and measurement that the housing insecurity field is still trying to work out. In addition, the food insecurity measure has helped assist the advocacy efforts of food banks, soup kitchens and other organizations that address hunger. For example, Feeding America uses CFSM data to "map the gap" of the number of food insecure households in each county and the amount of funding that would be needed to provide enough meals to end food insecurity.

Having a statistic on the number of households that are housing insecure could be a powerful tool for raising public awareness of the affordable housing problem. It could also provide a more holistic measure of progress at the local, state, and national level for addressing housing affordability; rather than focusing narrowly on the number of affordable housing units built or the number of people identified as homeless. The ability to incorporate a scale or subscale into existing surveys, like the CPS or ACS, would also allow for a deeper analysis of the relationship between housing insecurity, food insecurity, and other forms of material hardship and the role of social programs in alleviating housing insecurity.

There are other precedents for a standard scale of housing insecurity. The European Federation of National Organisations Working with the Homeless (FEANTSA) has created the European Typology on Homelessness and Housing Exclusion (ETHOS). Definitions of homelessness vary across European countries.

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<sup>3</sup> The 18 items can be found here: [http://www.ers.usda.gov/media/910773/fanrr11\\_1b\\_002.pdf](http://www.ers.usda.gov/media/910773/fanrr11_1b_002.pdf)

The ETHOS typology allows for a cross-country comparison of homelessness by incorporating the different definitions into a single measure that incorporates rooflessness (unsheltered homelessness), houselessness (temporary stays in institutions or shelters), insecure housing (at-risk of eviction or exposed to domestic violence), and inadequate housing (FEANTSA 2006) The ETHOS typology has been translated into 25 languages and is used by the European Union as part of its transnational homeless analysis. Within the U.S., Dr. Megan Sandel of Boston University has developed a nine-point housing stability continuum, which ranges from stably housed with appropriate services to severe housing instability.

While these projects provide a helpful starting point, a universal measure of housing insecurity would require a great deal of conceptual work to determine what measures to include and how they would fit together. The guiding framework for the CFMS is that hunger and food insecurity are experienced as “a sequence of stages reflecting increasingly severe deprivation of basic food need and characterized by a managed process of decision making and behavior in response to increasingly constrained household resources.” (Carlson, Andrews, and Bickel 1999). It is an open question whether that framework is appropriate for understanding housing insecurity. Housing has many dimensions—affordability, quality, neighborhood, privacy—and households have their own preferences about the relative importance of each. Despite these complications, it may be possible to create a measure that provides useful distinctions between minimal, moderate, and severe housing insecurity.

The conceptual model needs to be supported by survey items that accurately capture what they are intended to measure. It would certainly be possible to construct a housing insecurity module by assembling survey items for each of the forms of housing insecurity discussed in this paper. However, it is unclear whether existing measures do an adequate job of capturing the types of housing insecurity that most interest researchers and policymakers. For example, HUD recently acknowledged that the AHS has underestimated the number of evictions in the U.S. and has adopted the survey items from the Milwaukee Area Renters Study, which derived from intensive qualitative field work and better captured informal evictions and forced moves under threat of eviction. Similar, in-depth field work is probably needed to develop survey items to accurately capture other housing insecurity measures like doubling-up. Even seemingly straightforward measures like housing costs can be difficult to capture. For example, when asked their monthly rent, subsidized renters are more or less equally likely to report the gross rent of their apartment and the portion of the rent that they are responsible for paying (Parker unpublished). It is also challenging to capture the rent contributions of non-heads of household.

The final stage in developing a standard measure would be large scale psychometric testing. The CFMS creators used statistical techniques to whittle the original 58 items in the survey to 18. Through this process they discovered that certain items, like questions about the use of food banks and other emergency

assistance, were not strongly associated with other items and could be dropped. They then used Rasch modeling to determine the relative weight of different survey items and create a 10-point food insecurity severity scale. A similar process would need to occur to create a housing insecurity scale.

## **Conclusion**

The construction of a universal housing measure would be a massive effort that would require years of work and significant funding. However, the investment would be worthwhile if it resulted in a coherent framework for conceptualizing and measuring housing insecurity. In addition to helping raise awareness about the scale and severity of the problem, a universal measure of housing insecurity could also provide a new perspective on familiar policy challenges related to housing insecurity. For example, if a city makes a decision to open new homeless shelters or to loosen eligibility requirements for accessing shelter will likely have the short-term effect of increasing the number of people included in the homeless point-in-time count. This creates the impression that homelessness has gotten worse. A universal housing measure might allow researchers to test the premise that expanding shelter eligibility protects people from other forms of housing insecurity. Similarly, rapid rehousing, short-term rental assistance for people experiencing homelessness, has been shown to be effective at helping people exit homeless shelter more quickly, but has no lasting benefit in improving housing stability (Gubits et. al. 2015). A universal housing measure might help practitioners and policymakers think about the incremental benefit of helping people move from homelessness to a different form of housing insecurity. Lastly, a universal housing measure, if available, could be added to existing surveys that examine other dimensions of interest—for example food insecurity or poverty. Often these surveys omit questions about housing insecurity in part because of the lack of awareness around how housing matters for families and children but also because there are no ready measures that have been tested and validated.

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