

## Proposed Method for Estimating Local Population of Precariously Housed

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### Abstract

In the United States there are no local estimates of “couch-homeless” also sometimes called precariously housed, doubled up, couch surfers. They are the homeless who stay with friends and family. Although the US Census may have enumerated the couch homeless as household residents, it did not discern whether a person was homeless or a permanent household resident. There are nation-wide estimates of the couch-homeless at 1-2% of the population, but no way to estimate local populations. Using Census data, and surveys of homeless persons, rough estimates are a procedure was created to estimate the number of couch-homeless in local areas. This number varies widely from city to suburbs and from urban to rural areas. For the US overall, the estimate is 1.65% of the population is couch-homeless.

### Introduction:

Over the course of a lifetime, approximately 9 to 15% of the US population becomes homeless. (Ringwalt et.al., 1998; Robertson & Toro, 1999) This total may only include those who are considered literal homeless, those who have no home whatsoever to live in, although the homeless are very transient, and are in and out of shelters and homes. (HUD 1999) Therefore, this number may include couch homeless, the homeless who double up at other’s houses. This rate of homelessness is appears to be lower in other developed nations. ([Toro, 2004](#)).

Lack of housing has an impact on people’s lives. It is a problem that can be greatly alleviated. Rent vouchers for low-income people, supported housing, and intensive case management services have all been shown to work ([Toro et al., 1997](#); [Toro & Warren, 1999](#); [Tsemberis, 1999](#)).

The number of couch-homeless have been previously estimated by conducting nation-wide surveys. (Tompsett et. al., 2006) However, there has been no way to determine local populations. It is difficult to plan to solve the problem if the magnitude of the problem is not even known.

Identifying the couch-homeless is important because people are often couch-homeless before they become street-homeless. This is because people in difficult situations can often find someone to stay with, but only for a limited time. Locating the couch-homeless and providing them with services may prevent many people from becoming homeless.

### Background and Definitions

There is a spectrum of housing conditions in the US. From least secure to most secure the conditions are: street homelessness, staying in a shelter, couch homelessness, semi-permanently staying with family or friends because they are dependant upon them, being a roommate, renting, and owning a home. The street homeless are often viewed as the only truly homeless since all others have a roof over their heads. However, this paper focuses on estimating the number of couch homeless.

Are the couch homeless truly homeless? If they are living with friends or family should they be counted as homeless? It is true that they are not literally homeless, since they have a privately owned roof over their head.

However, the Stewart B. McKinney Homeless Assistance Act of 1987, defined the homeless as an individual who lacks a fixed, regular, and adequate nighttime residence, or an individual who has a primary nighttime residence that is: (a) a supervised publicly or privately operated shelter designed to provide temporary living accommodations (including welfare hotels, congregate shelters, and transitional housing for the mentally ill); (b) a public or private place that provides a temporary residence for individuals intended to be institutionalized; or (c) a public or private place not designed for, or ordinarily used as, regular sleeping accommodations for human beings. (HUD 1999)

Whether a residence is adequate, regular and fixed is often a measure of degree of adequacy, etc. Conditions while being couch homeless were found in a survey. (LEAHC 2003) One check that needed to be made was that people doubling up with family were not just college-aged children returning home before working. However, the survey covered all people in need of housing. Among the three people in the survey who had completed a four year degree, none of them were staying with family or friends, but each was in an unsuitable apartment.

*Home is the place where, when you have to go there, They have to take you in.*  
~Robert Frost, *The Death of the Hired Man*

Another check that needed to be done was that the people doubling up with friends and family were not there intentionally. However, some families were split between multiple residences with families, friends, tents and shelters. Some said the housing was too small for their families and there were no other affordable places to live. Some people were truly sleeping on couches. One responded that their need of housing was because "It is not working out with in-laws." In fact, the Housing Needs Survey was only for those who were in need of housing. The survey was not for those who were just shopping around. The pattern of families split between family and shelters follows closely the HUD summary that the homeless are very transient, sleeping in one place one night then another the next night. (HUD 1999)

The above quote also supports the premise that street-homeless are often couch-homeless first. After all their options are exhausted, the homeless end up on the street.

A separate survey asked the couch homeless the reasons that they became homeless. (LEAHC 2005) The responses were commonly that they had been victims of domestic violence, being runaways, or being recently released from jail with no other place to go. Being the victim of domestic violence is reflected in that women and children were homeless as a much higher rate than the men.

From these surveys, it can be stated with confidence that none of the couch homeless felt that they had an adequate, fixed, regular home over their head.

### Runaways

Runaway children often get more media attention than other homeless even though runaways account for only about 5% of the homeless population. (US Conference of Mayors, 2004) Therefore, there is much more known about where runaways stay. It is known that many runaways stay with family or friends when running away. (Hammer 2002)

In 1999, an estimated 1,682,900 youth had a runaway or throwaway episode. (Hammer 2002) However, the actual number could be much higher than this because this estimate is a count of only cases known to police. More than 70% of the time the parents did not contact the police, but the police found out through other means. Therefore, there is a possibility that a large number of additional runaways were never counted.

The number of children away from home on a given night are found. We assume first that a child gone less than 7 hours has left and returned on the same day so we do not count them at all here. We also do not make any attempt to account for children whose duration away from home is unknown.

Based on the remaining categories, representing children whose runaway episodes lasted from 7 hours to 6 months, we model the data using an exponential distribution. This is an open-ended distribution widely used in industrial applications to model failure times (e.g. will my engine fail after 300 million cycles or after 500 million?). In this application, we use the term “failure” in the statistical sense to represent the child’s determination that running away has “failed” and the child returns home.

The model best fits the data when we use a mean episode duration of 3.5 days. The distribution then tells us what percent of episodes last less than 1 day, 1 up to less than 2 days, 2 up to less than 3 and so on. We multiply these percentages by the total population (1,660,300 here) to get the number of children whose episode lasted each number of days, then we multiply by the number of days and add these together giving the number of child-episode-days (the total number of children times the number of days each child was gone). This total is approximately 6,845,000.

There were 365 days in 1999, so we divide the total by 365, and the result is that on any given night, on average, approximately 18,750 children were experiencing a runaway episode.

The mean time for runaways to be away from home was 3.5 days. Versus for other homeless the mean duration was 39 months in 1996. (HUD 1999) Runaways are sought after either by parents or police and 99% of the time and are returned to the parents whether the parents or children agree, but the other homeless are not sought after.

In a given year the number of runaways is significant, 1,682,900, compared to the other homeless that year, approximately 3.5 million. (Urban Institute, 2000) However, because they stay away from home for only 3.5 days on average, the daily count of runaways 18,750 is only 2 to 5% of the total on a given day. Likewise, they will be only one small segment of the couch-homeless on a given day.

### Census Data

Although the US Census enumerated the couch homeless among all household residents, it did not discern whether a person was homeless or a permanent household resident. The US Census counts all household residents on the date of the count.

The number of couch homeless with friends can be rationalized from the data. The Census asks about the family or monetary relationship between the household members. (US Census Bureau, 2001)

The census form had check boxes for most common family relationships. It also had a check box for other family relatives. Then in the "Not Related" section it listed the options: Roomer, boarder; Housemate, roommate; Unmarried partner; Foster child; Other nonrelative.

The category of "Other Nonrelatives" is where the couch homeless residing with friends would have been enumerated. If a resident had been paying for a part of the rent then they would have been counted as a Roommate or Boarder. Therefore, the people in "Other" are not paying rent but are staying there out of charity from their friend. The other nonrelatives must be the couch homeless because all other options have been filtered out. All relatives, roommates, partners, and foster children have been counted separately. This fits the definition of couch homeless because when staying with friends, but not being a partner or paying roommate, the agreement to stay is not fixed in a contract, but only granted out of charity. Being not fixed qualifies them to be counted as couch-homeless according to the Stewart B. McKinney Homeless Assistance Act of 1987.

This category of relationship was available only for households. Group quarters such as college dorms, correction institutions, nursing homes, and military quarters only listed total occupants. It is highly unlikely that any of these institutions would have semi-permanent guests because they each have very strict rules related to their occupants.

The number of other nonrelatives in the US Census was mapped.

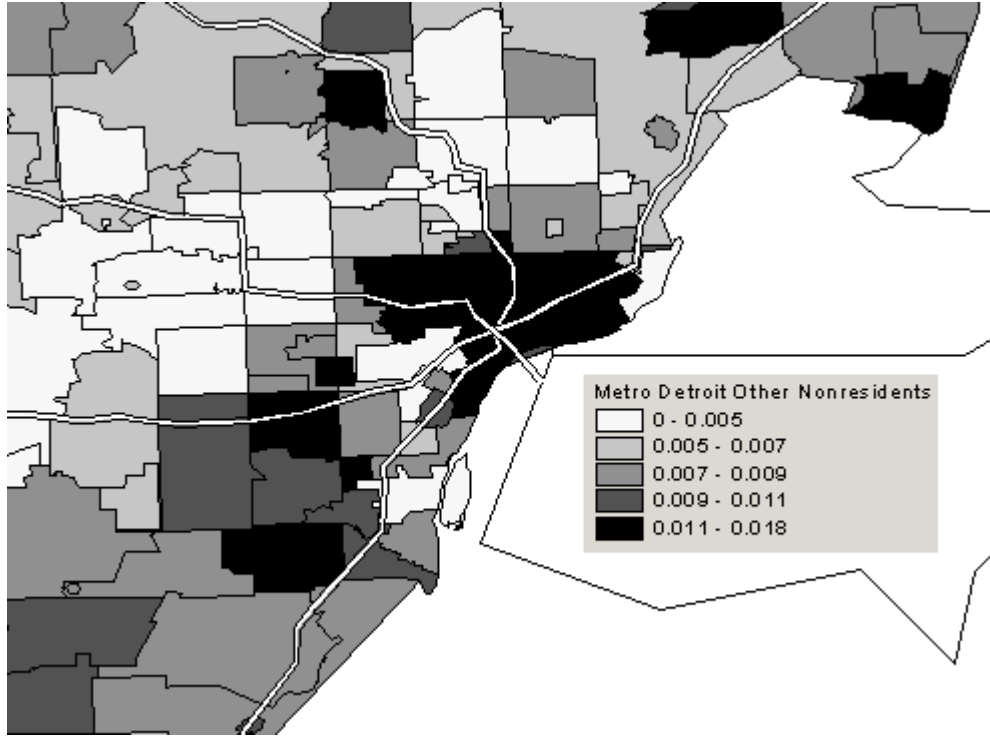


Figure 1, Metro Detroit Other Nonrelatives.

From the Metro Detroit map in Figure 1 we see that there is a direct correlation of the number of other nonrelatives with low income areas. The wealthier northwestern suburbs have much lower “Other nonrelatives” than the City of Detroit. This agrees with observed trends in homelessness. Lower income people are much more likely to become homeless. This map also disproves the possibility that the other nonrelative census category incorrectly counted children on sleepovers. There is no reason to believe that sleepover parties would be higher in the city. Additionally, Detroit has 1.3% of its population as “Other nonrelatives”, which would be much more than experience says would be on sleepovers on any night.

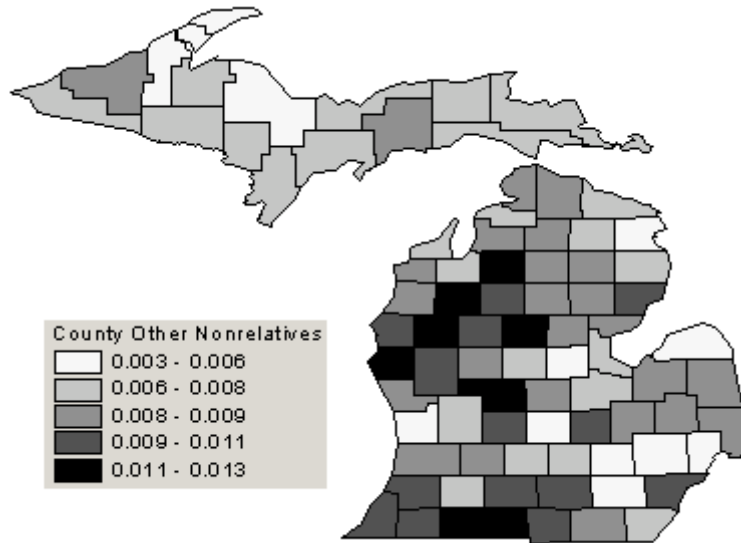


Figure 2, Michigan Other Nonrelatives

From the Michigan map in Figure 2 we see that there is a region in Southern and Western Michigan that has a high count of other nonrelatives. Some counties have a rate of couch homeless that equals the rate in the City of Detroit. This is counterintuitive since urban areas, especially the City of Detroit, are known to draw homeless. When the Census count is performed on April 1<sup>st</sup>, farm work has begun with pruning trees and preparing for planting. A list of agricultural tasks statewide by date shows the activity in April. (DLEG, 2006) Comparing the map above to counties with grower profiles, Labor Housing Sites, and counties with an Agricultural Employment Specialist we see a pattern. The regions of the state with high migrant workers are higher in couch homeless. However, the other rural regions have lower rates of couch homeless. There is definitely a correlation between rural couch homelessness to migrant agriculture, and these other nonresidents found in the census are likely migrant farm workers. State of Michigan has created shelters in these regions specifically for migrant workers. They house 22,401 people. However, not all of the migrants stay in the shelters. Migrant workers often stay in tents or other temporary structures next to farm houses.

Therefore, the US Census data category for “Not Related, Other nonrelatives” may be used as a measure of the couch homeless staying with friends. However, this is a snapshot that changes over the seasons. The traditional homeless are more desperate for housing in the colder months, and are more aggressively seek housing with friends and family when it is cold. Migrant workers move throughout the state and country over the seasons.

### Couch-Homeless with Family

From above, the number of couch-homeless staying with friends was found. However, there was no similar way to prove from the census that any of the family members in a household were couch-homeless.

For the survey responses listed above there is no doubt that some people staying with family members are couch homeless. (LEAHC 2003) Some families in the Housing Needs Study were split between family, friends, shelters, tents, and the street.

The Housing Needs Study can be used to find the approximate ratios of couch-homeless staying with friends versus family. The survey found where each member of a respondent's immediate family resided. Some people in the same immediate family stayed with friends, family, etc. Parents and children were often split. The people who participated in the survey recognized that they needed adequate housing. It was obvious that they had no intention of making it their permanent home. Therefore, the self identified couch-homeless in this survey should count as couch-homeless.

The results showed that an essentially equal number of the couch-homeless stayed with family, 64, versus friends, 66. The count being different by 2 people is not statistically significant in this survey. Therefore, the couch homeless stay with families as frequently as they do with friends.

#### Total Couch-Homeless

Therefore, in the City of Detroit, 1.3% of the population is "Other nonresidents" that should be counted as couch-homeless, staying with friends. An equal 1.3% of the population should be estimated as couch-homeless, staying with family. Therefore, approximately 24,700 people are couch-homeless in Detroit.

Nationally, 0.825% of the population is other nonresidents, and so the same should be estimated for those staying with family. The total national couch-homeless count is estimated at 1.65% or 4,700,000 people on a given night in 2000.

This methodology can also be replicated in rural areas with adjustment. There is no reason to believe that in areas with migrant workers that there would be an equal number of couch-homeless staying with family as with friends. Therefore, in rural areas it is recommended to cap estimate of couch-homeless staying with family at 1.3%, as found in Detroit. The couch-homeless staying with friends in rural areas is equally suspect if migrant works are in the area in April. However, the US Census recommends no adjustments for the location of migrants throughout the growing season. The adjustment for rural areas in the national rate should have very little effect since the areas have very low population.

The number of couch homeless, 4.70 million people, is in the same approximate range of estimates for the number of street and shelter homeless, 2.5 to 3.5 million. The lifetime prevalence of precariously housed and homeless were found to be 12.9 and 6.2%, respectively. (Tompsett, 2006) This confirms the believability of the couch homeless numbers found here because it shows twice the number of precariously housing or any type of homelessness to the number of literal homeless.

The couch-homeless are generally considered by homeless shelter workers to be the group at risk for becoming homeless. This is because there is a perception that a majority of the homeless stay with family and friends before becoming homeless. Not all of the couch-less become street or shelter-homeless, therefore the numbers of couch-homeless are likely to be higher than other homeless persons.

Of this 4.7 million couch-homeless people, half or 2.35 million, are with families. Some families intentionally stay together in extended families. The numbers of grandchildren, brothers and sisters, parents, and other relatives staying with the house holder are: 5,428,325; 3,032,894; 2,327,136; and 4,895,963 in the 2000 Census. The total is 15.7 million people. This is the total number of people staying in non-traditional situations with extended family members. However, only 2.35 million of these are couch homeless, those who have families split between family, friends, shelters, and streets. The remainder, 13.33 million, are intentionally staying with family. It seems reasonable as an estimate that 15% of the extended family homes are such out of temporary need, and 85% by choice.

### Conclusions

The total couch-homeless in the United States is estimated at 1.65% or 4,700,000 people on a given night in 2000. These are people who stay temporarily at another person's home because they have no home of their own. This rate of couch-homelessness varies greatly with cities having more than suburbs and some rural areas being high with migrant workers.

The US Census category of Other Nonrelative was used to find the number of couch-homeless staying with friends. This Census category is a good match with couch-homeless because these are the people who are not paying rent, and have no where else to go. To find the number of couch-homeless staying with family was taken as the same number because a survey found that people were equally likely to double up with family as with friends. Often families are split up to stay with extended families and friends.

The couch homeless rates for every region in the United States are listed on the website: <http://www.udmercy.edu/ibsc/research/homeless-count/> The count of couch homeless is found for counties and designated places. For example, in Detroit Michigan 2.72% or 25890 people are couch homeless. Detroit is contained in Wayne County, Michigan which has a total count of couch homeless of 2.02% or 41770 people.

Identifying the couch-homeless is important because they are more prone to becoming street-homeless. Organizations wishing to prevent this can direct their resources to areas with the most couch-homeless. An organization wishing more geographically precise number than given above should conduct a similar study using one of the smaller census data levels such as blocks.

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