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LEARNING ABOUT HOMELESSNESS USING LINKED SURVEY AND ADMINISTRATIVE DATA

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ABSTRACT

Official poverty statistics and even the extreme poverty literature largely ignore people experiencing homelessness. In this paper, we examine the characteristics, labor market attachment, geographic mobility, earnings, and safety net utilization of this population in order to understand their economic well-being. This paper is the first to examine these outcomes at the national level using administrative data on income and government program receipt. It is part of the Comprehensive Income Dataset project, which combines household survey data with administrative records to improve estimates of income and related statistics. Specifically, we use restricted microdata from the 2010 Decennial Census, which enumerates both sheltered and unsheltered homeless people, the 2006-2016 American Community Survey (ACS), which surveys sheltered homeless people, and longitudinal shelter-use data from several major U.S. cities. We link these data to longitudinal administrative tax records as well as administrative data on the Supplemental Nutrition Assistance Program (SNAP), veterans' benefits, Medicare, Medicaid, housing assistance, and mortality. Our approach benefits from large samples that offer a guide to national homelessness patterns and allow us to compare estimates between data sources, including the Department of Housing and Urban Development (HUD)'s point-in-time (PIT) counts. By shedding light on issues of data linkage and survey coverage among homeless people, this paper contributes to efforts to better incorporate this hard-to-survey population into income and poverty estimates.

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1. Introduction

People experiencing homelessness are among the most deprived individuals in the United States, yet they are neglected in official poverty statistics and the extreme poverty literature and largely omitted from household surveys. The Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP) are not designed to represent homeless individuals, while the American Community Survey (ACS) surveys only those in shelters. Those wishing to learn about the economic circumstances of this population must turn to a handful of studies that are either localized, outdated, self-reported, or some combination of the three.

In this project, we draw on underused data sources and employ novel methods to address these shortcomings. We focus on three areas. First, we seek to understand coverage of homeless people in household surveys and to reconcile population estimates across data sources. Second, we present substantial new information on their characteristics, including demographic attributes, physical and cognitive limitations, and geographic mobility. Finally, we use administrative data to examine the employment, income, and safety net program participation of this population. These results allow us to assess the permanence or transience of low material well-being among those who experience homelessness, the coverage of the safety net, and the implications of the current omission of this population from official statistics.

Our work advances the literature in several ways. We take advantage of large samples that offer a guide to national homeless patterns, including the unsheltered. Specifically, we draw on the restricted-use versions of the 2010 Decennial Census and the 2006-2016 American Community Survey (ACS) one-year data files, two sources of data that have gone largely unused in previous work on homelessness. The 2010 Decennial Census allows us to identify both sheltered and unsheltered individuals, while the ACS surveys only people in homeless shelters but reports a broad set of characteristics. Moreover, we link these sources to administrative data on income and program receipt, thereby adding additional information and allowing us to correct for well-established patterns in misreporting of government program participation and income (Meyer, Mok and Sullivan 2015; Meyer and Mittag 2019). And lastly, our linked tax and program data allow us to paint a detailed and longitudinal picture of the economic circumstances of people experiencing homelessness, thereby gaining insight into homeless individuals' well-being over the course of more than a decade.

More generally, this paper is part of an unprecedented project that assembles and links survey and administrative data on income, program receipt, and closely related information (Medalia, Meyer, O'Hara, and Wu 2019; Meyer, Wu, Mooers, and Medalia 2021). Known as the Comprehensive Income Dataset (CID) project, it aims to improve household surveys and statistical research on tax administration and to better understand poverty, inequality, and the effects of government transfers. This paper stems from earlier work using the CID that examined extreme poverty as well as the realization that homeless people are generally excluded from the CPS and SIPP and therefore official income statistics (Meyer, Wu, Mooers, and Medalia 2021).

The remainder of this paper is structured as follows. Section 2 provides background on the challenges of studying homelessness and the most widely used sources of counts or estimates. Section 3 reviews the literature on the characteristics and economic circumstances of people experiencing homelessness. Section 4 describes our survey and administrative data sources. Section 5 compares population estimates and demographic attributes across sources and explains key differences. Section 6 describes our methodology and results on the survey characteristics of the homeless population, while Section 7 presents our methodology and results on the income and program receipt of people experiencing homelessness. Section 8 discusses the preceding results and concludes.

2. Background

2.1 Sources of Counts or Estimates of Homelessness

The most widely cited source of statistics on homelessness in the United States is the Annual Homeless Assessment Report (AHAR), which HUD has presented to Congress each year since 2007. The AHAR provides nationwide estimates of homelessness, including estimates derived from a point-in-time (PIT) count in January of each year and estimates of the number of unique shelter users in a fiscal year based on extrapolation from shelters' administrative records. The AHAR also provides some information about the demographics, family structure, veteran status, and shelter use patterns of people experiencing homelessness, as well as information on different areas' capacities to house homeless persons.

In addition to the AHAR, the Census Bureau published a Special Report on the Emergency and Transitional Shelter Population, which described the geographic distribution and demographic

characteristics of the sheltered homeless population enumerated in the 2010 Census (Smith, Holmberg, and Jones-Puthoff 2010). This report did not, however, address differences between the 2010 Census and the PIT count.

The most detailed national study of people experiencing homelessness is more than two decades old. The 1996 National Survey of Homeless Assistance Providers and Clients (NSHAPC) provided demographic and economic characteristics for a sample of homeless assistance service users that was intended to be nationally representative (Burt et al. 1999). The study offered findings on homeless individuals' self-reported income, employment, participation in government programs, medical issues and special needs, and history of experiences with homelessness.

Aside from the above sources, most work on the characteristics of people experiencing homelessness focuses on a few major U.S. cities. Some local homeless service administrative units, known as Continuums of Care (CoCs), publish reports on the characteristics of people experiencing homelessness in their area, often using databases maintained for the purpose of inclusion in the AHAR or based on the results of their own surveys (Orange County CoC 2017, LAHSA 2018). A small number of researchers have also linked shelter use databases to administrative data to provide more extensive or accurate health or labor market outcomes. For example, Metraux et al. (2018) matched shelter use records from the New York City Department of Homeless Services (DHS) with earnings records from the Social Security Administration (SSA).

Although these localized studies offer a wealth of information, they are unlikely to reflect national homelessness patterns. PIT counts broken down by CoC demonstrate significant geographic heterogeneity in trends in recent years, with New York City and some cities in California seeing dramatic rises in the size of the homeless population and other areas experiencing declines. The share of homeless people residing in shelters versus unsheltered locations also varies widely across the country. Studies that focus on New York City, where right-to-shelter laws require the city to provide beds and most of the homeless reside in shelters, will likely lead to different conclusions than an examination of Los Angeles, where more than twice as many people experienced unsheltered homelessness (versus sheltered homelessness) in recent years according to the PIT data reported in the AHARs. Factors like housing markets,

state and local public services, and shelter capacity also vary widely between jurisdictions and limit the generalizability of localized studies.

3. Literature

This section reviews previous literature. It starts by describing the challenges of studying homelessness. It also reviews prior work on the characteristics of people experiencing homelessness, before turning to literature on employment, income, and government program participation.

3.1 Challenges of Studying Homelessness

People experiencing homelessness are exceptionally difficult to survey. Reasons for this include the lack of a permanent residence, poor mental health, substance abuse, and not wanting to be found (Glasser, Hirsch, and Chan 2013, 2014). Faced with these challenges, many efforts to study this population have centered on users of homelessness services, although there is some evidence that such surveys and enumerations miss the "hidden homeless" who do not interact with service providers (Metraux et al. 2016). These difficulties raise questions about the representativeness and comprehensiveness of any data source, particularly those that cover the unsheltered.

3.2 Defining Homelessness

Another challenge lies in the wide range of commonly used definitions of homelessness. Most definitions, including the one that HUD calls "literally homeless," include individuals and families who are residing in emergency or transitional shelters and those whose primary nighttime residence is a public or private place not meant for human habitation. Commonly used definitions differ in the extent to which they incorporate individuals who are precariously housed or at imminent risk of losing their residence (Evans, Phillips, and Ruffini 2019). For example, HUD includes in its literally homeless classification those who are exiting an institution and who experienced sheltered or unsheltered homelessness before entering that institution. Definitions also vary in whether or not they include those fleeing domestic violence. Some widely cited statistics (e.g. HUD's annual point-in-time estimate) include this group, while others (e.g. the 2010 Census Special Report on homelessness) exclude them. The U.S. Department of

Education's definition of homelessness includes school-aged children who are "doubled up," i.e. sharing the housing of others due to economic hardship.

For the purpose of this project, we focus on people residing in emergency or transitional shelters (the sheltered homeless) and those whose primary nighttime residence is not meant for human habitation (the unsheltered homeless). These are the groups identified in our data sources. Unless otherwise noted, we exclude individuals or families residing in domestic violence shelters, as they are not identified as homeless in the decennial census data. Moreover, we do not address questions relating to the precariously housed or those who are doubled-up, as these individuals are counted among the domiciled populations in the decennial census and household surveys.

3.2 Previous Literature on Characteristics

3.2.1 Race

Whites constitute a large share of people experiencing homelessness in the United States, but Blacks are consistently found to be over-represented relative to their share among the overall population and the poor (Burt et al. 2001, AHAR 2007-2018, O'Flaherty 2019). This pattern is especially stark among the sheltered homeless. According to the 2017 PIT, Blacks were present in the sheltered homeless population at about three times the rate as in the total U.S. population. American Indians/Alaskan Natives and Native Hawaiians/Pacific Islanders are also frequently found to be over-represented among homeless people, while Asians and Whites are under-represented (AHAR 2007-2018).

The disproportionate share of Blacks among the sheltered homeless is a widely studied question in homelessness research. The puzzle is compounded by the observation that major cities in the South, which are home to large concentrations of Blacks living in poverty, tend to have lower rates of homelessness than relatively more white cities in the North and West (O'Flaherty 2019). This pattern makes for a stark distinction between the racial composition of homeless and domiciled populations in places like Los Angeles, where Blacks make up nine percent of the general population but 40 percent of people experiencing homelessness (LAHSA 2018). There is anecdotal evidence that discrimination in housing and labor markets makes poor Blacks more vulnerable to homelessness than poor Whites (LHASA 2018). Discrimination in the criminal justice system could also play a role, given the link between past and subsequent incarceration

and homelessness (Metraux and Culhane 2004, Harding, Morenoff, and Herbert 2013). Some researchers have also pointed towards segregation in shelters as a reason for Blacks' larger shares among the sheltered relative to the unsheltered. Metraux et al. (2016) observe that Philadelphia's shelters tend to be located in areas that are predominantly Black, which they say leads some White homeless individuals to prefer to remain unsheltered in predominately White areas.

It may also be the case that Whites are typically able to draw on more substantial resource networks to avoid homelessness, meaning that they would on average need to experience larger income shocks to fall into homelessness. Corinth and Rossi-de Vries (2018) find that individuals with closer ties to family members and religious community are less likely to experience homelessness, presumably because these networks can provide money, shared housing, or other support to protect against homelessness. Many of the factors that put Blacks at higher risk for homelessness, such as high rates of poverty and incarceration and less accumulated wealth, also mean that Blacks' social networks may have fewer resources to share. As one concrete example, some public housing assistance programs restrict the number of residents in a unit, thereby precluding doubling-up in these units as a strategy to avoid homelessness.

Resource networks could also explain White homeless individuals' higher mortality rates relative to Black homeless individuals, as demonstrated in some medical literature (Roncarati et al. 2018, Baggett et al. 2013). O'Flaherty (2019) hypothesizes that Whites' relatively stronger resource networks may make them less vulnerable to homelessness than Blacks with similar levels of physical and mental health.

3.2.2 Hispanic Origin

Most sources find that share of homeless people identifying as Hispanic or Latino is similar to their share in the broader population, despite Hispanics' relatively high likelihood of being poor (Conroy and Heer, 2003). Baker (1996) coined the term "Latino paradox" to describe this phenomenon and suggested that Hispanics rely disproportionately on personal network-based strategies such as doubling-up to avoid the streets and shelters.

Conroy and Heer (2003) offer an alternative explanation, arguing that homeless Hispanics' tendency to reside in non-traditional homeless spaces leads to a systematic undercount. While the

undercount of Hispanics in surveys is well-documented, this explanation relies on undercount rates being higher for Hispanics experiencing homelessness than for Hispanics in general. This could be true if, for example, homeless Hispanics are more likely to be unauthorized immigrants and therefore mistrustful of surveys and authorities.

3.2.3 Sex and Family Structure

National data sources consistently find that most people experiencing homelessness are male, with an especially stark sex disparity among the unsheltered. For example, the 2018 PIT finds that about 55 percent of sheltered homeless individuals and 70 percent of unsheltered homeless individuals were male. This pattern persists across point-in-time and interval prevalence analyses of sheltered homelessness. A small share of homeless people (about one percent in the 2018 PIT) are transgender or do not identify as male, female, or transgender.

Family structure is closely related to the sex composition of the homeless population. Research shows that the majority of families experiencing homelessness are female-headed, single-parent households (Burt and Cohen 1989, Burt et al. 1999, Metraux et. al 2018, AHAR 2007-2018). Metraux et al. (2018) find that among New York City shelter users between 1990 and 2002, more than three-quarters of female adults had accompanying children while about ninety-five percent of males did not. This suggests that sex may serve as a rough proxy when data on family structure is not available for shelter users, as in the 2010 Census or ACS.

3.2.4 Age

HMIS and PIT data on shelter users show that 20-30 percent of the sheltered homeless are under age 18, while a small but growing share of shelter users is over age 62 (5.4 percent in the 2017 AHAR's interval prevalence estimates, compared to 18.8 percent in the overall 2017 ACS population). Single homeless adults are older, on average, than adults in homeless families, where the modal household head is a young parent with preschool-aged children (Culhane et al. 2013).

Several researchers have called attention to an apparent aging of the homeless population in the last several decades. Hahn et al. (2006) found evidence that the median age of people experiencing homelessness in San Francisco was increasing by about two-thirds of a year annually, while Culhane et al. (2013) observed an aging pattern using New York City shelter

data. Culhane et al. (2013) also analyzed the 1990, 2000, and 2010 Censuses and observed that the modal age of the sheltered population in each year corresponded to people born during the latter part of the baby boom, a phenomenon they attributed to heightened birth cohort-specific risk factors for homelessness. The aging of the homeless population is a matter of concern for public policy, as it appears to be accompanied by a rise in the prevalence of chronic and costly medical conditions among people experiencing homelessness (Kushel 2014).

3.2.5 Veteran Status

Homelessness among veterans is a topic of particular public interest. Veterans, who are primarily male and unaccompanied by children, appear to be disproportionately represented among the homeless relative to their share in the broader population (Brignone et al. 2018, Burt et al. 1999). In the homelessness literature, a large body of work centers on the health care utilization and physical and mental illness among this group, due in part to widespread interest and in part to the extensive administrative data collected and shared with researchers through the Veterans Affairs (VA) health care system (Brignone et al. 2018). This work has identified high rates of substance abuse and psychiatric disorders as potential reasons for the higher rates of homelessness among veterans (Early 2005).

The share of the homeless who are veterans appears to have declined substantially over time. In the 1996 NSHAPC, Burt et al. (1999) found that twenty-three percent of homeless service users nationally were veterans. Fourteen years later, the 2010 PIT found the veteran share to be just 11.6 percent, and by 2018 the veteran share in the PIT had fallen to 8.6 percent (AHAR 2018). This substantial decrease is often attributed to expanded government efforts to end veteran homelessness, including increased investment in prevention and rapid rehousing for this population (AHAR 2018). Demographic shifts might have also played a role. O'Flaherty (2019) notes that the number of veterans between the ages of 18 and 65, the range most susceptible to homelessness, fell substantially over this same period, a fact that could possibly explain much or all of the decline. In particular, the cohort of Vietnam veterans reached their early- to mid-sixties in the 2010s, meaning that social security and SSI receipt, alongside mortality, may have made these individuals less likely to appear among the homeless population.

3.3 Previous Literature on Employment, Earnings, and Program Receipt

3.3.1 Employment and Income Characteristics

A substantial share of people experiencing homelessness are either currently working or were recently employed. The most widely cited national estimate of employment among this population comes from the NSHAPC, where 44 percent of homelessness service users reported working in the previous thirty days (Burt et al. 1999). Metraux et al. (2018) updated this figure using administrative records of earnings from the SSA for shelter users in New York City between 1990 and 2002, finding employment rates of around 45 percent during the year of shelter use. Von Watcher, Schnorr, and Riesch (2020), found that 29 percent of shelter users tracked by HUD in Los Angeles had earnings in the previous year according to California Unemployment Insurance (UI) records, although their approach excluded out-of-state earnings, as well as earnings from self-employment and independent or informal work.

Metraux et al. (2018), Burt et al. (1989), and Burt et al. (1999) found lower rates of employment for homeless adults in families, the majority of whom are female, than for singles. Possible reasons for this difference include the cost of childcare and greater access to public and private assistance by homeless families. Burt et al. (1989) found that homeless women with children relied substantially more on General Assistance (GA) and Aid to Families with Dependent Children (AFDC, the precursor to Temporary Assistance to Needy Families). Similarly, Burt et al. (1999) found that fewer homeless service users in families performed paid labor, and those in families were more likely to receive money from family or friends.

Unsurprisingly, estimates of income and earnings reveal a highly impoverished population. In 1995, the NSHAPC estimated the mean monthly income for single users of homelessness services nationwide to be $348. For families, the majority of whom consisted of a single parent with an average of two children, mean monthly income was estimated to be $475. These income measures included income from earnings, gifts from friends and family, and governmental cash transfers. For comparison, the overall monthly median household income that year was $2,840 (Burt et al. 1999).

Among the working homeless, frequent job turnover, low-wage labor, and informal employment appear to contribute to low income levels. Ethnographers have reported substantial reliance on

informal income-generating activities like recycling, panhandling, childcare, and illicit activities among this population (Gowan 2010, Snow and Anderson 1993). About one-half of NSHAPC respondents who reported working in the last month had earnings from temporary positions, day labor, or informal jobs (Burt 2001, Burt et al. 1999).

3.3.2 Relationship between Employment and Homelessness

There are many reasons to expect low employment rates among people experiencing homelessness. Some of the factors associated with high risk for homelessness, such as substance abuse, physical disabilities, and mental health challenges, are also likely to impair employability (Fazel, Geddes, and Kushel 2014). Zuvekas and Hill (2000) note that physical disabilities and substance abuse are associated with fewer hours of employment among a random sample of homeless shelter and meal program users in Alameda County in 1991-1993. People experiencing homelessness also have high rates of recent incarceration, a well-established barrier to employment (Metraux and Culhane 2016, Harding, Morenoff, and Herbert 2013, Mueller-Smith 2015). Poor health and incarceration may be both a cause and a consequence of homelessness (Kushel, Hahn, and Evans 2005).

There are also more direct reasons why homelessness could cause unemployment. These include the stigma associated with being homeless, poor hygiene, health conditions associated with homelessness, and incompatibility of shelter hours with nighttime employment. Glomm and John (2002), for example, find evidence that homelessness decreases future employability through adverse effects on health.

An active area of inquiry in this literature concerns the extent to which employment shocks precipitate homelessness. In surveys, job loss is often cited as a cause of homelessness (Burt 1999, Levin, McKean, and Raphael 2004, Metraux et al. 2017). A handful of studies attempt to address this question in the aggregate, examining correlations between the size of the homeless population and unemployment rates, using either geographic or inter-temporal variation (see O'Flaherty 2011 for a review of the literature on determinants of aggregate homelessness, including unemployment rates). These studies have produced mixed results.

A more convincing approach to answering this question lies in longitudinal analyses of individual-level data on employment and earnings over a period including the onset of

homelessness. Metraux et al. (2018) observed a slight dip in employment for singles and an even slighter dip in employment for families around onset of homelessness, although there was a somewhat more pronounced fall in earnings. These findings suggest a potential link between employment shocks and the onset of homelessness, but the effect of job loss appears to be more moderate than one might expect from reviewing surveys on the causes of homelessness.

3.3.3 Participation in Government Programs

Given the low material well-being of people experiencing homelessness, one policy-relevant question concerns the extent to which government safety net programs reach this population (Burt et al. 1999). The literature on participation in government programs is scant and almost entirely self-reported. The NSHAPC gives the most detailed account on this topic, finding that 39 percent of single homeless adults and 79 percent of adults in homeless families received means-tested benefits. Among families, the NSHAPC found high rates of receipt of AFDC (52 percent), food stamps (71 percent), and Medicaid (61 percent). Participation rates in these programs were much lower for single homeless adults. SSI receipt was 11 percent for both single homeless adults and those in families, which falls short of estimated rates of disability among this population.

Some research has examined participation in health services programs, especially among veterans. This literature shows that people experiencing homelessness often fail to take advantage of programs for which they qualify. In their secondary analysis of NSHAPC data, Kushel, Vittinghoff, and Haas (2001) found that only one-fourth of homeless veterans had VA insurance, despite theoretical eligibility for these benefits.

4. Data

4.1 Census Bureau Data

4.1.1 2010 Census

The Census Bureau conducted a three-day operation called the Service-Based Enumeration (SBE) to count people experiencing homelessness during the 2010 Census (Smith, Holmberg,

and Jones-Puthoff 2010).[1] The operation built on previous efforts to enumerate the homeless, including the Census's 2000 SBE and the 1990 street and shelter enumeration effort known as "S-night." Census staff constructed the list of SBE locations using internet research and by soliciting input from local officials and advocacy groups. Sites were subject to validation and advance visits prior to the operation. During the 2010 SBE, enumerators visited emergency and transitional shelters, soup kitchens, regularly scheduled mobile food vans, and targeted non-sheltered outdoor locations (TNSOLs). When unable to conduct an interview, subjects were enumerated by observation.

Table 1 describes each type of site and offers examples. Of the 422,972 homeless counted in the 2010 Census, approximately 50 percent were at shelters, 42 percent were at soup kitchens and regularly scheduled mobile food vans, and eight percent were at TNSOLs (Barrett and Russell 2012).[2]

As a source of data on people experiencing homelessness, the decennial census has some distinct advantages. The decennial census is meant to include every person residing in the United States, a fact that facilitates analyses that involve linking to other data sources like the American Community Survey (ACS). Moreover, all SBE enumerators received the same training and carried out the enumeration according to uniform methodological standards nationwide. Finally, the decennial census provides a rare source of data on people experiencing unsheltered homelessness and is the only source of national data on this population that contains name and date of birth, thereby allowing records to be linked to administrative and survey data.

4.1.2 American Community Survey (ACS)

The ACS has collected micro-level data on individuals in emergency and transitional shelters since 2006. Specifically, the ACS surveys people residing in "facilities where people experiencing homelessness stay overnight," including shelters that operate on a first-come, first-served basis, shelters where people have a bed for a specified period of time, and shelters that provide temporary shelter during extremely cold weather. The ACS excludes domestic violence shelters. The ACS group quarters definition document notes that its universe of emergency and

[1] The Census Special Report on the Emergency and Transitional Shelter Population can be accessed here: https://www.census.gov/prod/cen2010/reports/c2010sr-02.pdf.
[2] The 2010 Census Service-Based Enumeration (SBE) Assessment Report can be accessed here: https://www.census.gov/content/dam/Census/library/publications/2013/dec/2010_cpex_250.pdf

transitional shelters includes "missions; hotels and motels used to shelter people experiencing homelessness; shelters for children who are runaways, neglected, or experiencing homelessness; and similar places known to have people experiencing homelessness."[3]

Because they are included in the Group Quarters (GQ) sample, individuals surveyed at shelters are treated as single-person households and not asked whether they have any dependents or partners, unlike the ACS's Housing Unit (HU) sample. Sampling weights are designed to smooth out seasonality, yielding estimates that can be understood as being drawn from an approximate cross-sectional sample of the population in question. The introduction of an updated sample frame and new population controls for the GQ population in 2011 resulted in a discontinuous increase in the estimated count of sheltered homeless individuals.[4]

The GQ indicator used to identify sheltered homeless individuals is not available in public files, and as a result no researchers to date have published work using the ACS as a source of data on people experiencing homelessness. Nevertheless, the ACS surveys a large number of homeless individuals each year with an extensive series of questions. The ACS sample includes approximately one percent of the U.S. population each year and in 2010 collected data from approximately 2,300 individuals residing in emergency and transitional shelters. Moreover, the ACS asks about a range of topics of particular interest to homelessness researchers, including employment, income, government program participation, education, migration, physical and cognitive limitations, and veteran status.

4.2 HUD Administrative Data

4.2.1 Homeless Management Information System (HMIS) Micro-Data

As a condition of federal funding, local homeless services coordinating bodies called Continuums of Care (CoCs) are required to maintain a Homeless Management Information System (HMIS) database. Micro-level client data include the name, social security number, race, birthday, veteran status, and start and end of service-use dates for all individuals utilizing CoC

[3] The 2010 ACS Group Quarters Definitions can be accessed here: https://www2.census.gov/programs-surveys/acs/tech_docs/group_definitions/2010GQ_Definitions.pdf

[4] ACS data are subject to error arising from a variety of sources. Additional information about sources of error and weighting and estimation methodology can be found in the American Community Survey Design and Methodology report (2014), which can be accessed here: https://www2.census.gov/programs-surveys/acs/methodology/design_and_methodology/acs_design_methodology_report_2014.pdf.

resources.[5] These datasets allow CoCs to track service use and measure homelessness at local, regional, and national levels. The CID project currently has access to HMIS micro-data from Los Angeles (2004-2014) and Houston (2004-2015).

4.2.2 Homeless Management Information System (HMIS) Aggregated Data

Building from HMIS records, HUD produces an annual estimate of the number of unique homeless shelter users nationwide in the preceding fiscal year. This estimate is published in the Annual Homeless Assessment Report (AHAR) to Congress.[6] Because only federally funded shelters are required to report into HMIS (although some others report voluntarily), HUD extrapolates to non-HMIS shelters using the HMIS participation rate, which is calculated as the ratio of HMIS shelter beds to total shelter beds in each CoC. This participation rate is published by HUD in the Housing Inventory Count (HIC), an inventory of available shelter beds in a given area maintained by CoCs.

4.2.3 HUD Point-in-Time (PIT) Count

The AHAR also includes an annual estimate of the number of sheltered and unsheltered homeless individuals on one evening in January of a given year, known as the Point-in-Time (PIT) count. Although commonly referenced as a count, the PIT is actually an estimate, with some CoCs adopting sampling or combined sample and census methods, in accordance with HUD-approved methodologies.[7] The 2018 PIT includes in its sheltered homeless estimates people residing in domestic violence shelters, a population that is excluded from the decennial census and ACS sheltered homeless estimates.

4.2.4 Differences between Census and HUD Data Sources

[5] CoCs use the HMIS database to report on all programs administered using HUD funding. Services covered by these programs typically include permanent housing, transitional housing, and supportive services. Permanent housing includes both permanent supporting housing (PSH), which is designed to help homeless persons with a disability live independently, and rapid re-housing (RRH), which provides housing relocation and stabilization services, including short- and medium-term rental assistance. Transitional housing programs provide housing and accompanying supportive services to homeless individuals and families for up to twenty-four months. Supportive services include outreach and efforts to link sheltered or unsheltered homeless individuals with housing or other necessary services and provide ongoing support. The precise services provided vary widely by CoC. More information about the guidelines for HMIS data management can be found in HUD's CoC Program HMIS Manual, which is accessible at: https://files.hudexchange.info/resources/documents/CoC-Program-HMIS-Manual.pdf.

[6] AHAR reports can be accessed here: https://www.hudexchange.info/homelessness-assistance/ahar/

[7] The PIT Count Methodology Guide can be accessed here: https://files.hudexchange.info/resources/documents/PIT-Count-Methodology-Guide.pdf

Table 2 summarizes differences across Census and HUD data sources. Several key distinctions are worth noting.

First, all sources are national in scope, although currently we only have access to linked HMIS micro-data from Los Angeles and Houston. Only the 2010 Census and the PIT cover the unsheltered, and only the 2010 Census allows us to link the unsheltered to administrative data sources.

The time frame of analysis also differs across data sources. While the 2010 Census, PIT, and ACS are all cross-sectional analyses, HMIS data are used to estimate of the total number of unique shelter users over the course of a fiscal year, a type of estimate known as period or interval prevalence. This choice results in HMIS shelter use estimates that are much higher than point prevalence estimates. On average, point-in-time estimates give greater weight to individuals with longer spells of homelessness, and there is some work suggesting that the characteristics of individuals who experience chronic homelessness differ from those who experience shorter spells (Lee, Tyler, and Wright 2010).

The timing of cross-sectional analyses also differs across source. As a result, seasonal patterns may explain some differences in the sheltered/unsheltered composition of people experiencing homelessness in the PIT versus 2010 Census. Shelters in cold climates typically experience higher occupancy in the winter months. By design, the PIT is conducted in January of each year because it is easier to count homeless individuals at sheltered rather than unsheltered locations and because fewer non-homeless individuals are likely to be found on the streets late at night. In contrast, the 2010 Census' SBE was carried out during the comparatively warmer period of late March, while the ACS is conducted year-round and is weighted to smooth out any unevenness of interviewing over the course of the year.

4.2.5 Caveats on Census Bureau Data

The Census Bureau made efforts to ensure that housed individuals were not misclassified as homeless. At soup kitchens and food vans, respondents were asked whether they had a usual home elsewhere, and if so, were prompted to provide that address. If that address was found to be valid during post-processing, the person was removed from the SBE universe and enumerated at his or her usual home instead. It is nevertheless possible that some individuals were

misclassified as homeless. This is a key caveat on our analysis, as misclassification would affect our population estimates and could bias other results depending on the ways in which misclassified non-homeless individuals differ from the actual homeless.

Another potential concern is the completeness and representativeness of the 2010 Census SBE data. The 2010 Census Special Report on the Emergency and Transitional Shelter Population acknowledged that the SBE likely missed some people experiencing homelessness, particularly unsheltered homelessness:

> "Although we made a determined effort to enumerate people at service locations (emergency and transitional shelters, soup kitchens, and regularly scheduled mobile food vans) and targeted non-sheltered outdoor locations, because this is a dynamic and complex group, all people normally at these locations may not have been included in the count." (Smith, Holmberg, and Jones-Puthoff 2010)

The report also observed that some individuals who would be considered homeless under a broader set of criteria, such as doubled-up individuals or those residing in pay-for-use motels or campgrounds without a permanent residence, could have been included in the Census outside of the SBE, a view reiterated in the Glasser, Hirsch, and Chan (2013) ethnographic assessment of the operation. Given these caveats, the report cautions that the decennial census does not "produce or publish a total count of 'the homeless' population." To the extent that enumerated individuals are not representative of the entire population, incompleteness of the enumeration could result in bias.

4.2.6 Caveats on HUD Data

The HUD data sources are also imperfect. Cronley (2011) reviewed HMIS usage patterns among 24 homeless service providers and found that staff members in some organizations rarely used the database, suggesting that their records may not be well or uniformly maintained. In our HMIS micro-data from Los Angeles and Houston, records entered prior to 2010 suggest limited or sporadic database management, due to improbably low counts of shelter users and high rates of missing information. Moreover, a non-negligible share of all records from these cities across

all years of data availability have no recorded shelter exit date. This fact likely reflects poor record maintenance rather than indefinite shelter spells.[8]

Because they incorporate sampling methods, both the HMIS aggregate and PIT estimates are potentially subject to sampling error. Moreover, the PIT methodology varies by CoC, and the quality of the estimate could depend on the resources or expertise available in a given CoC to conduct its annual count. HMIS aggregated estimates of shelter use rely on extrapolation from shelters that participate in the program to those that do not, which could result in bias if HMIS-covered shelters are not a representative subset or all shelters. Nation-wide, the HMIS participation rate (defined as the share of beds in a given CoC that track shelter use through HMIS) ranged from 69-80 percent over the 2007-2018 period, according to the HUD's Housing Inventory Chart (HIC). The quality of PIT estimates in CoCs with low HMIS participation rates may suffer as a result of extrapolation, particularly where HMIS shelters differ substantially from non-HMIS shelters.

4.2.7 Administrative Income/Resource Data

We draw data on income and employment from Internal Revenue Service (IRS) forms 1040s, W-2s (which are available for those who did not file a form 1040 as well as those who did), and 1099-Rs. In addition to wage and salary earnings from employment, 1040 data contain various forms of asset income, including taxable dividends, taxable and tax-exempt interest, gross rents and royalties, and social security income. W-2 records give us wages and tips as well as deferred compensation amounts for individuals who did not file a 1040 but did receive formal labor market earnings. Data on retirement distributions come from IRS 1099-R Forms, which cover gross distributions from employer-sponsored plans (defined benefit and defined contribution plans) and IRA withdrawals. The tax data contain universe records covering the entire United States. IRS 1040 records are available for 2003-2015, W2s for 2005-2016, and 1099-Rs for 2003-2015.

In addition to income from tax records, we examine participation in various safety net programs. We include Supplemental Nutrition Assistance Program (SNAP) records provided by the state

[8] This view was expressed by HUD senior program specialist William Snow, whose responsibilities include analyzing and improving HUD data sources like the HMIS. Snow stated that incompleteness of exit date reporting was an important concern regarding HMIS data quality.

agencies of Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). For housing assistance, our administrative data come from the Public and Indian Housing Information Center (PIC) and Tenant Rental Assistance Certification System (TRACS) files. These data cover almost all public and subsidized housing assistance programs under the jurisdiction of HUD. We also use Medicare and Medicaid data from the Centers for Medicare and Medicaid Services (CMS) to investigate health insurance coverage, and we have Veterans Benefit Administration data on VA disability compensation and pension receipt for fiscal years 2007-2015.

Finally, we draw on the SSA's Numident files for birth and death dates.

5. Comparison of Counts and Coverage Across Data Sources

5.1 Overall Estimates of Sheltered and Unsheltered Homelessness

The size of the homeless population is widely debated in the academic literature and media, with estimates varying considerably depending on the data source, time frame, and definition of homelessness used. Table 3 reports estimated counts of the overall population of the sheltered and unsheltered homeless across our data sources.

In Figure 1, we see that the aggregate HMIS estimate of sheltered homelessness is about 3.5-4 times the PIT estimate across all years. The HMIS estimate is higher in large part because it measures the number of individuals who experienced at least one shelter spell in a given fiscal year, whereas the PIT estimates the sheltered population at a point in time. The ACS estimate was about 50 percent of the PIT estimate for 2007-2010, before jumping to approximately 70 percent after changes to the sample frame and weighting methodology in 2011. The 2010 Census estimate of sheltered homelessness is close to the 2010 ACS estimate. The HMIS estimate has declined steadily since 2010 and the PIT estimate has declined slightly since 2015. The ACS weighted estimate has remained fairly stable, aside from the discontinuous increase in 2010.

Figure 2 displays estimates of the size of the unsheltered homeless population according to the 2010 Census and the PIT. The PIT estimate fell between 2012 and 2015, before rising slightly. The 2010 Census estimate of the unsheltered population size is close to the PIT estimate for 2010.

5.2 Recent Rises in California and New York

These overall estimates mask significant geographic heterogeneity in the HUD PIT estimates. As Figure 3 shows, New York and California have seen substantial rises in their homeless populations in recent years, with most of New York's increase attributable to New York City and California's to Los Angeles and to a lesser extent San Francisco (Figure 4).

Figures 5 and 6 decompose the growth in these states and cities into that attributable to sheltered and unsheltered populations. In Los Angeles, we see a stark rise in the unsheltered homeless population alongside a fairly flat trend in the sheltered homeless population. The San Francisco Bay area has also seen an increase in unsheltered homelessness and a flat trend in sheltered homelessness, although at a lower level. In New York City, in contrast, we see that all of the growth in homelessness has taken place among the sheltered, who constitute the vast majority of that city's homeless population (Figure 6).

5.3 Comparison of Demographic Attributes across Data Sources

Table 4 reports race and Hispanic ethnicity for the sheltered homeless by data source, and Table 5 reports age and sex. Overall, we see that the racial makeup of the sheltered homeless is fairly consistent across data sources, with a larger share of Blacks in the ACS and 2010 Census data than in the HMIS data and a larger share of Whites in the HMIS than the other sources for most years.[9] The ACS reports a smaller share of sheltered homeless under the age of 18 than the other sources (15.3 percent in the 2010 ACS, as opposed to 20.2 and 21.8 percent in the 2010 Census and the 2010 HMIS, respectively). Conversely, the 2010 ACS and 2010 Census report a higher share of individuals over the age of 62 than the HMIS data (5.5 and 4.5 percent in 2010, compared to 2.8 percent, respectively). The share of the homeless population that is male, by contrast, is similar across data sources at approximately 62 percent in 2010.

Table 6 reports demographic characteristics and counts for the unsheltered homeless in the 2010 Census, broken down by the type of enumeration site. (We do not report demographic characteristics of the unsheltered from the PIT, because CoCs did not begin collecting detailed

[9] The share of Blacks in the ACS is statistically significantly larger than the share of Blacks in HMIS for 2007, 2012, and 2014-2016 at the $p<0.05$ level. The share of Whites in HMIS is statistically significantly larger than the share of Whites in the ACS for 2007, 2009, and 2012-2016. The 2010 Census reports a higher share of Blacks and a lower share of Whites than 2010 HMIS (significant at the $p<0.001$ level).

demographic characteristics for the unsheltered until 2015.) A larger share of the unsheltered homeless is over the age of 62 (9.5 percent), male (71.0 percent), and White (52.9 percent) relative to the sheltered estimates. A smaller share of the unsheltered (8.8 percent) is under the age of 18 relative to the sheltered estimates.

5.4 Characteristics of Houston and Los Angeles HMIS Shelter Users

Table 7 reports demographic characteristics for HMIS shelter users, pooled over 2004-2014 for Los Angeles and 2004-2015 for Houston, alongside characteristics according to the ACS and 2010 Census for these areas.

HMIS characteristics are presented using two different weighting methods. The first, which we call person-weighted, gives equal weight to each individual who had any shelter spell in the period covered by our data, regardless of the number or length of his or her shelter spells. This approximates characteristics obtained from interval-prevalence estimates, as in the HMIS aggregate data. The second weighting method, which we call day-weighted, weights each individual by the number of days they spent in an HMIS shelter during the observation period. This approximates characteristics obtained from a point-in-time estimate carried out at a random point in the year, where individuals with longer spells have a higher likelihood of being surveyed.

We observe that the two weighting methods produce similar patterns of characteristics in both cities. In Los Angeles, the shares White, Black, under age 18, female, and Hispanic are comparable under day- versus person-weighting. The appears to be true for Houston, with the exception of the share under age 18 and the share female which differ somewhat across weighting method. Under person-weighting, 21 percent of shelter users are under the age of 18, while 26 percent of users are under 18 with day weights. Forty percent of shelter users are female under person-weighting and 49 percent are female under day-weighting. Differences in characteristics between weighting schemes across groups imply differences in the length and frequency of shelter spells.

These results provide some preliminary evidence that the characteristics of people experiencing sheltered homelessness vary somewhat between point-in-time and interval-prevalence estimates.

The extent to which they differ will depend on the degree to which long-term stayers differ from short-term stayers, as well as the distribution of the cumulative time in shelter.

5.5 Seasonality of Shelter Use in Los Angeles and Houston

Figure 7 displays the average number of daily shelter users in a given month, pooled over 2009-2015 for Houston and 2009-2014 for Los Angeles. We exclude earlier years based on concerns expressed by HUD officials about the quality of HMIS database prior to 2009. Houston's average daily shelter use falls in the 2,000 to 2,200 range throughout the year with little seasonal variation. In Los Angeles, average daily shelter use in January (10,780), the month of the PIT, is close to that in March (11,040), the month of the Census. Publicly available data from the New York City Department of Homeless Services also does not display seasonal shelter use patterns.[10] Taken together, these data do not provide evidence that seasonality is a major driver of differences in sheltered homeless counts between the PIT and 2010 Census, although more study is required.

6. Survey Characteristics of People Experiencing Homelessness

6.1 Methodology for Survey Characteristics

This section lays out our methods for describing the characteristics of the sheltered homeless and comparison groups using ACS. We present results from the pooled 2006-2010 ACS and the pooled 2011-2018 ACS. We divide the ACS between 2010 and 2011 due to the introduction of a new sample frame in 2011 following the 2010 Census. In future work, we will present characteristics for sub-groups of the sheltered homeless based on sex, race, Hispanic ethnicity, and geography.

We identify people experiencing sheltered homelessness in the ACS using the group quarters (GQ) code for emergency and transitional shelters. This GQ code is available only in restricted-use data. We also examine two comparison groups: the broader housed (non-GQ population), and people residing in households with an single adult household head who are identified by the

[10] This data can be found in daily reports published by the New York City Department of Homeless Services, including, for example, this report from July 8, 2020: https://www1.nyc.gov/assets/dhs/downloads/pdf/dailyreport.pdf

ACS as being poor, whether or not children are present.[11] This second comparison group allows us to compare the characteristics and economic circumstances of homeless individuals to the broader population of people in poverty. We restrict this analysis to single individual-headed households because most people in homeless shelters are not accompanied by a spouse.

Our results draw on the entire universe of people surveyed at emergency and transitional shelters in the 2006-2010 and 2011-2018 ACS. We also draw a sample from the ACS non-GQ population to form the comparison groups described above. We apply ACS survey weights to all estimates and calculate standard errors using replicate weights. All shares and amounts are calculated across both imputed and non-imputed item responses for a given ACS variable. Starting in 2011, the ACS began imputing whole persons from surveyed GQ facilities to GQ facilities that were not surveyed, in order to improve the quality of sub-state population estimates. From 2011 onwards, we exclude whole person imputed observations and re-scale the survey weights by a constant such that the sum of the re-scaled weights applied only to non-imputed observations equals the sum of the original weights applied to both imputed and non-imputed observations at the national level.

6.2 Results on Survey Characteristics

Tables 10-12 display characteristics of the sheltered homeless in the 2006-2010 and 2011-2018 ACS. For comparison, these tables also report the characteristics of the two domiciled groups described in the previous section. Tables 10a and 10b describe the demographic characteristics. Tables 11a and 11b report school attendance for children ages 5-17 and education, mobility, marital status, veteran status, and functional limitations for adults ages 18-64. Tables 12a and 12b give self-reported employment, income, and benefit receipt for adults ages 18-64.

6.2.1 Age and Sex

In Tables 10a and 10b, we see that relative to both comparison groups, a smaller share of the sheltered homeless are under the age of 5 or between the ages of 5 and 17. In both time periods, we see that the largest share of the sheltered homeless fall into the 45-64 age bracket, which corresponds to the late baby boom cohort identified by Culhane et al. (2013) as having the

[11] The household types selected for this comparison group may still include additional adults, such as an adult biological child, partner, roommate, or parent. They do not however include any households where a spouse is present.

highest risk of homelessness. In 2011-2018, just 4.1 percent of the sheltered homeless are over the age of 64, compared with 10.0 percent of the poor and 14.6 percent of the non-GQ population. We also see that 60.5 percent of the sheltered homeless are male, which is nearly twenty percentage points higher than the poor comparison group.

6.2.2 Race and Hispanic Ethnicity

The racial composition of the sheltered homeless in the ACS is consistent with previous literature. In 2011-2018, we find that Whites make up 39.6 percent of the sheltered homeless, while Blacks appear at much higher rates than in comparison groups. 46.8 percent of the sheltered homeless are Black in this time period, compared to just 29.7 percent of the poor and 12.9 percent of the non-GQ population. American Indian/Alaskan Natives are over-represented relative to the poor group in 2006-2010. Hispanics are over-represented relative to the overall housed population in 2011-2018, but are under-represented relative to the single poor comparison group in both time periods.

6.2.3 Mobility and Citizenship

Table 11b shows that in the 2011-2018 ACS, sheltered homeless adults ages 18-64 were more likely to reside in their state of birth relative to the housed comparison group, with 54.6 percent of sheltered homeless adults ages 18-64 residing in their state of birth at the time of survey. About 9.1 percent of the sheltered homeless had changed states in the last year, compared to just 3.0 percent of the poor and 2.5 percent of the housed population overall.

6.2.4 Education

Table 11b shows that 89.8 percent of sheltered homeless children ages 5-17 attended school in the last three months, a share that is lower than in comparison groups. This could be driven by lower attendance among sheltered homeless youths ages 16-17. Mean years of completed education is about one-tenth of a year lower for sheltered homeless adults than for poor single adults, but approximately 1.5 years lower than that of housed adults overall. Among sheltered homeless adults ages 18-64, 30.4 percent have less than a high school education, 36.4 percent have a high school diploma or GED, and 27.3 percent have some college but not college degree. Only 5.8 percent are college graduates.

6.2.5 Functional Limitations

The ACS asks respondents whether or not they have difficulty performing a range of physical or cognitive activities. In Table 11b, we see that 36.1 percent of the sheltered homeless ages 18-64 reported experiencing at least one of several physical limitations (difficulty walking or climbing stairs, hearing, or seeing) and cognitive limitations (difficulty remembering or making decisions). By comparison, just 23.1 percent of the poor and 10.1 percent of the non-GQ population in the 2011-2018 period had reported these limitations. Perhaps most starkly, nearly one-quarter of the sheltered homeless have difficulty remembering or making decisions, a share that is about twice that of the single poor adults and about 5.5 times the share among the broader population of adults. While rates of functional limitations are high relative to comparison groups, about two-thirds of sheltered homeless people indicate that they do not have any of these physical or cognitive limitations. In ongoing work, we examine whether these patterns persist even when controlling for age, sex, and race.

6.2.6 Self-Reported Employment and Program Participation

ACS respondents are also asked to report employment and receipt of government benefits. Previous work by Meyer, Mok, and Sullivan (2015) and Meyer and Mittag (2019) has shown that such self-reports are frequently unreliable, and we will show in subsequent sections that administrative data often conflict with self-reports in this case as well. With this caveat in mind, we nevertheless present self-reported measures of employment and program participation from the ACS in Tables 12a and 12b.

About 39.4 percent of sheltered homeless adults ages 18-64 reported having worked in the past year in the 2011-2018 ACS, which is slightly lower than single poor adults (45.5 percent) and much lower than the broader population (78.4 percent). The sheltered homeless also reported fewer weeks worked conditional on having worked in the last year, suggesting a more sporadic work history.

Mean earnings of the sheltered homeless in 2018 dollars are reported to be $14,200 conditional on having worked, which is higher than the poor single adult comparison group's mean reported earnings of $8,325.[12]

Approximately 71.2 percent of the sheltered homeless reported receiving any transfer income in the previous year, compared to 57.4 percent of single poor adults and 16.1 percent of the overall population. The sheltered homeless reported higher receipt rates for food stamps (64.8 percent), Medicaid (61.9 percent), and public assistance (20.1 percent) than the domiciled poor. They reported lower rates of SSI receipt (12.0 percent, compared to 11.0 percent for the poor), which contrasts with the finding in the above section that the sheltered homeless are more likely to suffer from physical and cognitive limitations.

7. Income and Program Receipt Using Administrative Data

7.1 Methodology for Income and Program Receipt

This section describes our methods for estimating income and program receipt. We first describe our three groups of interest (sheltered homeless, unsheltered homeless, and a poor adult comparison group). Next, we explain our methods for linking the 2010 Census to administrative datasets and adjusting for non-linkage. Finally, we describe our treatment of each administrative data source and our methods for constructing various outcomes.

7.1.1 Description of the Sheltered, Unsheltered, and ACS Adult Poor Groups

We create three groups of adults to link across datasets: sheltered homeless adults, unsheltered homeless adults (excluding those enumerated at TNSOLs, for reasons explained below), and the subset of 2010 ACS non-group quarters (housed) adults in poor households with an unmarried household head. We define an adult as an individual who was born between 1945 and 1992, inclusive. These individuals were ages 18-64 at some point during 2010.[13]

[12] The administrative data, when linked to the 2010 Census, paints a different picture, as we will see in the next section. In that data, the sheltered homeless had lower mean pretax income than the ACS poor in 2010. In ongoing work, we examine income and benefit misreporting for specific individuals in the ACS.

[13] We drop individuals who were enumerated in the 2010 Decennial Census or 2010 ACS but died prior to 2010 according to their date of death in the 2019 Numident.

Our sheltered and unsheltered homeless groups are drawn from the 2010 Census. The sheltered group consists of individuals enumerated at emergency and transitional homeless shelters during the Service-Based Enumeration (SBE) on March 29-31, 2010. The unsheltered group consists of individuals enumerated at soup kitchens and regularly-scheduled mobile food vans (RSMFVs) during this same window. We keep only individuals for whom a protected identification key (PIK) could be assigned by the Census Bureau, and we adjust for non-PIKing using inverse probability weights, a method described in detail in a subsequent subsection. Our resulting sample size, rounded to comply with Census Bureau disclosure requirements, is 111,000 sheltered homeless individuals and 60,000 unsheltered homeless individuals.

To construct our ACS poor comparison group, we draw a ten percent sample from the 2010 ACS and keep individuals who are identified as poor based on survey income and household structure in the ACS. We also restrict the sample to households with an unmarried household head, whether or not children are present. We use households with an unmarried household head because people experiencing homelessness are less likely to be married than the general population.[14] We do not exclude households with children because a substantial share of people experiencing homelessness have accompanying children.[15] The resulting sample size, rounded to comply with Census Bureau disclosure requirements, is 153,000 individuals.

7.1.2 Using Protected Identification Keys (PIKs) to Link across Datasets

We link our administrative tax and program receipt data to the 2010 Census using Protected Identification Keys (PIKs). The U.S. Census Bureau's Person Identification Validation System (PVS) assigns PIKs to individuals who appear in survey and administrative data by searching for a matching record by Social Security Number (if available), name, date of birth, sex, and address in a reference file derived from SSA records and augmented with Individual Taxpayer Identification Numbers (ITINs) and other information by the Census Bureau (Wagner and Layne 2014).

[14] Our results from the 2011-2018 ACS indicate that about 10.0 percent of the sheltered homeless ages 18-64 are married, compared to 50.5 percent of the domiciled population in the same age range.
[15] In the 2010 PIT count, for example, nearly 40 percent of people experiencing homelessness had accompanying family members. About 15 percent of the sheltered homeless in the 2010 ACS are below the age of 18.

Table 8 presents the share of records in our HMIS, 2010 Census, and ACS datasets that are assigned a PIK by PVS.[16] Linkage rates are fairly high for HMIS data, where shelters are instructed to collect SSNs but do so imperfectly in practice. ACS and 2010 Census data, in contrast, do not contain SSNs, so linkage rates depend on the completeness and accuracy of personally identifiable information (PII) provided to enumerators and surveyors, the uniqueness of this information, and the coverage of the reference file. Linkage rates for these survey sources vary substantially by SBE site type. For the ACS sheltered homeless, linkage rates range from 70 percent in 2008 to 83 percent in 2010. The linkage rate for the sheltered homeless in the 2010 Census is 68.6 percent. Soup kitchens and food vans in the 2010 Census have linkage rates of 41.8 and 42.4 percent, respectively, while the PVS was able to assign a PIK to only 17.2 percent of people enumerated at TNSOLs.

7.1.3 Adjusting for Non-Linkage Using Inverse Probability Weights

We use inverse probability weights (IPWs) to adjust for non-linkage at the individual level. These weights are the inverse of the predicted probability of an individual receiving a PIK in a probit model of PIK status with a range of covariates.[17] Inverse probability weights will lead to consistent estimates if the ability to assign a link and the outcomes of interest – in this case, income and program participation – are independent conditional on the observables included in the probit estimation. For the 2010 Census, we find that most of the homeless who did not receive a PIK had failed to provide enumerators with sufficient PII. Potential reasons for subjects' failure to provide PII include mistrust of enumerators, cognitive challenges, and being asleep.[18] Our assessment of the conditional independence assumption's validity therefore rests on our beliefs about whether income and program receipt are correlated with subjects' probability of providing sufficient PII to enumerators in a way that is not captured by our probit estimation.

In the case of TNSOLs, we are not confident that the assumption of conditional independence holds. Finding, counting, and capturing demographic data for people experiencing homelessness

[16] Because the vast majority of our administrative data contain a valid social security number, more than 99 percent of these records are successfully assigned a PIK by PVS and we do not include these in the table.
[17] The Appendix more fully describes our IPW methodology.
[18] Tables 9a, 9b, and 9c shows differences in characteristics between linked and unlinked individuals in the 2010 ACS, among 2010 Census sheltered homeless individuals, and among unsheltered homeless individuals, respectively.

at TNSOLs presented a substantial challenge to the SBE effort, according to the 2010 Service-Based Enumeration (SBE) Assessment report..[19] TNSOLs were visited in the middle of the night, and enumerators were instructed not to wake sleeping people and to prioritize safety over gathering information from uncooperative individuals. In some cases, Census officials hired local facilitators, typically themselves homeless, to act as guides and introduce enumerators to people residing at TNSOLs. Given these procedures, it is plausible that a conditionally non-random relationship exists between the Census Bureau's ability to assign a PIK and outcomes of interest.

In contrast to TNSOLs, other service-based locations achieved higher PIK rates. In the three New England cities where they conducted their ethnography, Glasser, Hirsch, and Chan (2013) concluded that "enumeration at soup kitchens is a potentially effective method of including the out-of-doors homeless" in the decennial census, and that "there was a high level of cooperation between the homeless service providers such as shelter and day center administrators and the U.S. Census." They observed that administrators at shelters often provided information about sleeping individuals, which helps explain the higher PIK rates for shelters relative to the other SBE locations.

In light of these assessments, we assume that the probability of being assigned a PIK is not correlated with outcomes of interest after conditioning on observables for those at shelters, soup kitchens, and food vans but not TNSOLs, although we admit that this assumption cannot be verified. We therefore exclude TNSOLs from analyses of the unsheltered that rely on data linkage.

7.1.4 Treatment of Administrative Datasets

This section describes our treatment of the various administrative datasets used to generate income and program receipt estimates. Using PIKs, we linked our two groups of homeless people and our poor, housed comparison group to the following administrative datasets:

IRS 1040 extracts (2003-2016)

[19] The report states: "The greatest challenge that the Census Bureau experienced while implementing the 2010 Census Service-Based Enumeration Operation was finding people at the targeted non-sheltered outdoor locations where people experiencing homelessness lived or stayed and capturing their demographic data, such as age, Hispanic Origin, and race." (p.viii)

We use Census Bureau extracts of IRS Form 1040 to obtain calendar year income information for tax filers, including total money income,[20] interest income, social security income, rental income, wage and salary income, and indicators for whether a schedule C, F, or SE (each pertaining to some source of self-employment) was filed. We attribute a given 1040 to an individual if his or her PIK appears as either a primary or secondary filer on a tax return. In a revision of our approach (not yet disclosed) we subtract from the income appearing on the 1040 any W-2 earnings and 1099-R income of a spouse and any dependents, if present.

IRS W-2s (2006-2016)

These employer-filed information returns provide wage and salary income for all individuals covered by Social Security, allowing us to add income information for individuals who did not file 1040s.[21] Additionally, we count the number of unique employer taxpayer identification numbers (TINs) associated with a particular PIK, giving us an estimate of the number of employers worked for during a given calendar year.

IRS 1099-Rs (2006-2016)

These information returns filed by employers and pension funds provide records of gross retirement distributions paid out to individuals. They exclude rollovers of retirement accounts.

VA Benefits (Fiscal Year 2007-Fiscal Year 2014)

This file contains fiscal year data on Veterans' Administration service-based compensation and pension receipt. To obtain calendar year estimates, we assume individuals received compensation or pensions for all months of the fiscal year in which they were indicated to be a recipient and translate this into calendar years accordingly.[22]

Medicare (2006-2014)

This dataset gives us start and end dates for enrollment in Part A (hospital care) and Part B (out-patient care) of the Medicare health insurance program for the elderly and disabled. We indicate

[20] Total money income includes wages/salaries, total interest income (taxable and tax-exempt), taxable dividends, alimony received, business income, total pensions/annuities, net rents/royalties, farm income, unemployment compensation, and total social security benefits.
[21] Although employers are only supposed to issue W-2s to individuals with valid social security numbers (SSNs), in practice W-2s may also bear invalid SSNs or individual taxpayer identification numbers (ITINs).
[22] For example, if an individual received VA benefits in fiscal year 2010 (October 2009-September 2010), we would indicate that they had received VA benefits in both 2009 and 2010 calendar years.

that an individual received these benefits if they were enrolled for at least one day of a given year. We also obtain from these records whether an individual was receiving Medicare due to Old-Age and Survivors Insurance (OASI, for the elderly or surviving family members) or Disability Insurance (DI, for the disabled) in a given year.

HUD Public and Subsidized Housing (2004-2016)

We use data from the HUD Public and Indian Housing Information Center (PIC) and Tenant Rental Assistance Certification System (TRACS) datasets to obtain information on public and subsidized housing receipt. Note, however, that these data miss payments associated with housing programs administered by the Department of Agriculture, states, and localities. Because some individuals appear in both datasets, we de-duplicate records by keeping the month/year record with the greatest benefit amount. We estimate the value of these in-kind transfers by subtracting total tenant payment from the gross rent amount.[23]

Medicaid (Fiscal Year 2007-Fiscal Year 2015)

These files provide fiscal year-level information about enrollment in Medicaid, a health insurance program for low-income individuals and families. The range of fiscal years for which Medicaid data are available vary by state. As with VA benefits, we obtain calendar year estimates by assuming individuals were enrolled in Medicaid for all months of a given fiscal year and translating this into calendar year receipt indicators.

SNAP (years vary by state)

These files contain monthly dollar amounts of food stamp vouchers from the Supplemental Nutrition Assistance Program (SNAP) data for Illinois (2009-2016), Indiana (2006-2016), Tennessee (2006-2016), New Jersey (2007-2016), and New York (2007-2016).

Numident (2019)

This dataset provides us with birth dates for all individuals with a Social Security Number (SSN), allowing us to calculate age. It also includes death dates. Because mortality is high for

[23] For public housing units, which have missing gross rent amounts and make up less than a quarter of all units in the administrative data, we impute the market rent based on the average rent by 5-digit zip code, household size, and year (and, if rent is still missing, by 3-digit zip code/household size/year, 5-digit zip code/year, and 3-digit zip code/year in that order). We consider a household as receiving payments in a given month if that month is within twelve months of the most recent certification date and is prior to any termination date.

homeless people, we also use the Numident to mortality-adjust our estimates, calculating income and program receipt rates only for those who are still living at the end of a given calendar year.

Table A1 in the data appendix describes in detail how we constructed each measure of income and benefit receipt. All shares and amounts reported in income and program receipt tables are mortality-adjusted and use the annual average Chained Consumer Price Index for All Urban Consumers (C-CPI-U) to express dollar amounts in 2018 dollars. Results are also rounded to comply with Census Bureau disclosure rules.

7.1.5 Coverage of Administrative Datasets

All of the administrative datasets, except for SNAP and Medicaid for 2014-2015, cover the entire United States for all years available.[24] When reporting the share of the population receiving SNAP or Medicaid, or any outcomes using SNAP or Medicaid receipt as an input, we limit the sample to individuals who in 2010 resided in states for which those datasets are available.[25, 26] For example, the share of individuals receiving SNAP in 2007 is the share of individuals who resided in New York, New Jersey, Tennessee, or Indiana in 2010 who link to those states' SNAP datasets in 2007. Approximately 25.3 percent of all sheltered and 17.2 percent of all unsheltered homeless individuals resided in one of these states in 2010. Implications of incomplete geographic coverage are discussed in more detail in the results section.

7.2 Results on Income and Program Receipt

Tables 13, 14, and 15 respectively present our findings on income and program receipt using administrative data sources for the sheltered and unsheltered homeless enumerated in the 2010 Decennial Census, as well as a comparison group of poor single-adult households from the 2010 ACS. Figures 8-20 illustrate key patterns that emerge from the data. Because we link a cross-section of individuals from 2010 to administrative datasets, we are able present those individuals' longitudinal income and program receipt over the course of more than a decade.

[24] We exclude Puerto Rico and other U.S. territories.
[25] Our only information about state of residences comes from the 2010 Census, which means we do not know in which state an individual resided in years other than 2010.
[26] Outcomes that use SNAP receipt as a component include the share receiving any benefits, the share receiving any benefits or earnings, and pre-tax income plus in-kind transfers. Outcomes that use Medicaid receipt as an input include the share receiving any benefits and the share receiving any benefits or earnings.

7.2.1 Share with Any Earnings

Figure 8 displays the share of individuals in each group who had any earnings in the tax data for a given year.[27] In 2010, the year these individuals are observed to be homeless, we see that 52.8 percent of the sheltered homeless and 40.4 percent of the unsheltered appear in the 1040 and/or W2 data as having earned income. For the sheltered homeless, that share is substantially higher than the 39.4 percent of sheltered homeless ACS respondents in the 2011-2018 ACS who self-report having worked in the past year.

Overall, we notice a downward trend in the share of individuals in all three groups that have formal labor market earnings during the Great Recession.[28] After 2010, however, we see the share of single poor adults with earnings rising slightly and then remaining level, while the share of the sheltered and unsheltered homeless with earnings continues to decline. These two groups diverge from the poor comparison group most substantially after the year they are observed to be homeless.

7.2.2 Share with Any Benefit Receipt

Figure 9 displays the share of individuals in each group who are recorded in administrative sources as receiving any government benefit in a given year. Benefits include SNAP, VA, HUD, Medicare, and Medicaid, with SNAP and Medicaid contributing the largest shares. In 2010, the year individuals are observed to be homeless, 88.8 percent of the sheltered and 78.1 percent of the unsheltered homeless received at least one of these benefits.

The rate of benefit receipt increases during the Great Recession, peaking in 2010 followed by a decline for all three groups. The sheltered homeless generally have higher rates of benefit receipt than the unsheltered or the poor, with the notable exception of Medicare, for which the unsheltered have higher rates than the sheltered from 2006-2016.

[27] We define earnings as the sum of wage and salary income and positive estimated self-employment income on a 1040, plus deferred compensation from any linked W2s minus any PIKed cofiler's W2 wages and tips. When an individual does not file a 1040, we define earnings as W2 wages and tips plus deferred compensation. For individuals who do not file a 1040 or receive a W2, earnings are zero.

[28] The spike in earnings for all three groups in 2007 reflects an increase in 1040 filing by taxpayers seeking to receive "recovery rebates" included in the Economic Stimulus Act of 2008.

7.2.3 Earnings, Pre-Tax Income and In-Kind Transfers

Figure 10 shows the median of earnings for the three groups.[29] We see that earnings falls for all groups from 2007 to 2010, which is consistent with the declining share of individuals reporting earnings during the recession. Income for the poor comparison group, however, rises consistently after 2010, while the sheltered and unsheltered homeless' median earnings falls to zero, reflecting the fact that fewer than half had any earned income in those years.

Figure 11 gives the 75th percentile of earnings. We see a similar pattern as with the median, and observe that even among sheltered and unsheltered individuals who are higher up in the income distribution, earnings remain fairly flat, whereas that of the poor comparison group begins to rise after the year observed as homeless or poor. This pattern is also consistent in Figures 12 and 13, which give the median and 75th percentile of pre-tax income plus in-kind transfers from HUD and SNAP.[30]

7.2.4 SNAP Receipt

Figure 14 reports SNAP receipt rates. SNAP receipt is increasing for all three groups in the first four years of observation, but the growth is particularly stark for the sheltered homeless, rising from 36.1 percent in 2006 to 80.9 percent in 2010. SNAP receipt for the unsheltered homeless also begins at a lower level than the ACS poor, but after 2006 surpasses them and peaks at 64.7 percent in 2010. As with most other benefits, SNAP receipt is higher for people experiencing sheltered as opposed to unsheltered homelessness.

There is an important caveat to our findings on SNAP receipt. We have access to SNAP records for just five states, with different periods of coverage for each state. To address this limitation, we restrict our analysis of SNAP receipt to individuals who resided in one of these states in 2010. This restriction means that if an individual receiving SNAP benefits moved from a state that is covered by our records in 2010 to one that is not in a subsequent year, Tables 13 and 14

[29] For individuals with a 1040, pre-tax income is equal to the sum of total money income and VA Service-Connected Disability (SCD) compensation, measured as ¾ of the annual SCD amount for the fiscal year corresponding to the calendar year and ¼ of the annual SCD amount of the fiscal year corresponding to the year after the calendar year specified. For individuals without a 1040, pre-tax income is equal to the sum of wages and tips and deferred compensation in W2s, VA SCD compensation, and IRA and employer sponsored retirement distributions across 1099-Rs. We drop a few observations making over $8 million a year in pre-tax income.

[30] SNAP benefits are calculated by multiplying the months of SNAP receipt in a year by the average monthly SNAP benefit received in that year. We drop a few observations who make over $8 million per year in pre-tax and in kind transfer income.

would incorrectly consider them to have dis-enrolled from SNAP. Similarly, if an individual was enrolled in SNAP in a state that is not covered prior to 2010 and moved to a state that is covered before 2010, our tables would incorrectly consider them to be a new SNAP enrollee.

Taken together, incomplete coverage means that the observed peak in enrollment in 2010 is likely to be overstated, and different trends between the groups could reflect differences in inter-state mobility. From the previous section, we know that 12.6 percent of the sheltered homeless in the 2006-2010 ACS reported living in a different state one year prior, compared to just 2.2 percent of the poor comparison group. We do not have an estimate of interstate mobility for the unsheltered.

7.2.5 Medicaid and Medicare Receipt

Figure 15 displays the share enrolled in Medicaid. Medicaid enrollment is lower for the unsheltered than for the sheltered homeless and the poor prior to 2012, which could reflect the relatively larger share of women and families in these groups. 48.9 and 48.4 percent of the sheltered homeless and poor, respectively, were enrolled in Medicaid in 2010, as compared to 43.5 percent of the unsheltered.

Figure 16 displays the share enrolled in Medicare Part A or B. Medicare Part A (hospital insurance) and Part B (medical insurance) are available individuals who are age 65 and older, disabled, or experiencing end-stage renal disease (ESRD).[31] Because our sample is limited to ages 18-64 in 2010, it is likely that the majority of those enrolled in Medicare before 2010 are disabled, while the upward trend in 2010 and after reflects ageing of this population. In 2010, 8.8 percent of the sheltered homeless and 9.5 percent of the poor were enrolled in Medicare, compared to 14.8 percent of the unsheltered homeless. The unsheltered homeless have higher enrollment rates all years of observation, perhaps reflecting higher rates of disability among this group.

7.2.6 VA Benefit Receipt

As Figure 17 shows, 2010, about 0.7 percent of the poor, 2.2 percent of the unsheltered, and 2.8 percent of the sheltered homeless received VA benefits. This difference in levels is consistent

[31] Source: https://www.cms.gov/Medicare/Eligibility-and-Enrollment/OrigMedicarePartABEligEnrol/index

with the fact the sheltered homeless were more likely to self-report as veterans in the 2006-2010 ACS compared to the poor comparison group (14.8 percent of the sheltered homeless, versus 3.6 percent of the poor). There is a slight increasing trend for all groups over time, likely reflecting the aging of this population, and no discernable deviation from trend in the year they are observed as homeless.

7.2.7 HUD Housing Assistance Receipt

Figure 18 displays the share of individuals receiving housing benefits. 11.1 percent of the sheltered and 10.4 percent of the unsheltered homeless received housing benefits at some point in 2010, compared to 19.0 percent of the poor comparison group. Prior to 2010, housing benefit receipt for both homeless groups was consistently about 5-9 percentage points lower than the poor. There is a steady decrease in the rate of receipt among the sheltered in the years before they are observed as homeless, falling to its lowest level in 2009. Both the unsheltered and especially the sheltered exhibit an increasing pattern after 2010, with housing benefit receipt for the sheltered surpassing the poor in 2015.

7.2.8 Cross-Sectional Analysis of Income by Sub-Group

Tables 14 and 15 provide a cross section of income and program receipt for different sub-groups of the sheltered and unsheltered homeless, respectively, in 2010. Figures 19a and 19b display our results on the 75th percentile of earnings for the following groups, divided into male and female: overall; White, Black, other race; and Hispanic and non-Hispanic. Figures 20 incorporate the full amount of pre-tax income and the value of in-kind transfers from HUD and SNAP.

Among the sheltered, we see that and both male and female Blacks have higher earnings than Whites of the same sex. Figure 21a shows that women experiencing sheltered homelessness are about seven percentage points more likely than males to have any earnings. Blacks experiencing sheltered homelessness are more likely to have earnings than Whites experiencing sheltered homelessness, disaggregated by sex.

These findings are consistent with a model of homelessness where women and Blacks find it more difficult to maintain housing than men and Whites, respectively, given a certain level of income. For women, the need to provide for accompanying children could explain this difference. For Blacks, the various factors discussed in the literature review above, including

discrimination and a comparative lack of resources in friend and family networks, could explain the observed differences in earnings and income.

7.2.9 Cross-Sectional Analysis of Program Receipt by Sub-Group

Figure 22 gives the share of individuals who appear in our administrative records as receiving any benefits. Again, we see that benefit receipt rates are higher for women than for men and for Blacks than for Whites, regardless of sex. Figures 23-27 show differences in receipt rates for SNAP, Medicaid, Medicare, VA benefits, and housing benefits. This pattern persists when we look at SNAP, Medicaid, and housing benefit receipt.

The pattern is reversed for the share enrolled in Medicare. Not only are the unsheltered more likely to be enrolled than the sheltered for all groups, but it is also the case that men have higher receipt rates than women and Whites have higher enrollment than Blacks, regardless of sex. Disability benefit receipt accounts for most of the Medicare enrollment in 2010 because we restrict our data to individuals who were between the ages of 18 and 64 in 2010.

Unsurprisingly, sheltered homeless males are about eight times as likely to receive VA benefits as sheltered homeless females. Sheltered homeless Black men are more likely to receive VA benefits than sheltered homeless White men.

8. Discussion

8.1 Observations on Survey Characteristics

Our ACS data provide the first national estimates of mobility among the sheltered homeless. Mobility is a topic of particular concern for cities with large homeless populations, where officials are apt to make claims about the extent to which homeless people are outsiders drawn by generous public services rather than local residents unable to obtain or afford housing. Nationally, we observe moderate rates of mobility, with only a small share of sheltered homeless adults in 2011-2018 – about 9.1 percent – having changed states in the year before their interview. While this is higher than one-year interstate mobility for the housed (non-GQ) population, it is still lower than one might expect in light of the rhetoric. Furthermore, the longer term measures of mobility since birth indicate only small differences between the homeless and

comparison groups. Our analysis suggests that the link between mobility and homelessness is not as strong as is suggested in public discourse.

We are also able to provide the first national estimates of rates of various functional limitations among adults experiencing sheltered homelessness. We find much higher rates of physical limitations relative to the housed population and moderately higher or similar rates of physical limitations relative to the poor comparison group. There is a stark disparity in the share reporting a cognitive limitation. Nearly one-quarter of the sheltered homeless ages 18-64 reports difficulty remembering or making decisions, a rate that is approximately twice that of the poor comparison group and 5.5 times that of the housed population in this age range. Cognitive limitations appear to be a significant factor distinguishing the sheltered homeless from the rest of the poor.

8.2 Observations on Income and Program Receipt

Unsurprisingly, the administrative data reveal substantial material deprivation among people experiencing homelessness. Earnings for both the sheltered and unsheltered homeless fall far short of the poor comparison group. This pattern is persistent across the ten years of observation, even though many of these individuals were likely housed for large segments of this period. There is no distinguishable drop in earnings relative to the poor comparison group around the year that they were observed as homeless. Homelessness appears to be a symptom of long-term low material well-being. In other words, people experiencing homelessness appear to be having not just a year of deprivation and challenge, but a decade (at least).

We also find high rates of formal employment among this population. 52.8 percent of the sheltered homeless had formal labor market earnings in the year they were observed as homeless. We are the first to use administrative data to estimate the employment and income of the unsheltered, and we find that 40.4 percent of this population had at least some formal employment in the year they were observed as homeless. It is striking that so many individuals experience homelessness despite being employed. This finding contrasts with stereotypes of people experiencing homelessness as too lazy to work or incapable of doing so.

We find that the majority of people experiencing homelessness are reached by some form of social safety net program, primarily SNAP and Medicaid. 88.8 percent of the sheltered and about 78.1 percent of the unsheltered received at least one benefit according to administrative records

in the year they were observed to be homeless. These individuals had consistently high rates of benefit receipt across the decade of observation, indicating long-term reliance on the social safety net. We see a slight rise in SNAP receipt and a rise and subsequent increase in housing benefit receipt around the year observed as homeless, but other benefits have steady receipt rates that do not differ substantially around the year observed as homeless. Persistent reliance on safety net programs reinforces our observation that these individuals are subject to low material well-being over an extended period of time, whether domiciled or not.

An additional noteworthy finding is the higher rate of receipt for nearly all benefits among the sheltered relative to the unsheltered homeless. Anecdotally, we have been told that this might be partially attributable to the fact that homeless shelters work to connect clients to social services. However, this does not explain receipt rates in the years before individuals were observed as homeless. Family structure provides an alternative explanation, as many safety net programs are more readily available to families than single adults. Indeed, we see higher rates of SNAP, HUD, and Medicaid benefit receipt among females than males, even among the sheltered. Selection into shelter use more broadly could also explain higher rates of benefit receipt. Individuals who elect to use shelter services may also be more likely to use other social service programs.

Our analysis of earnings and program receipt by sub-group also sheds light on the racial and sex composition of the homeless population. Conditional on gender, a larger share of homeless Blacks had earnings relative to Whites, and conditional on race, a larger share of homeless females had earnings than males.. Conditional on having earnings, mean earnings for these groups also demonstrated the same pattern. This pattern is consistent with a model where homelessness occurs when an individual's income falls short of a minimum housing cost. If the minimum housing cost is higher for Blacks and females due to factors like limited housing possibilities and larger family size, then Whites and males should be able to maintain housing with fewer resources. Such a model would predict higher average incomes for homeless Blacks and females than Whites and males, which is exactly what we observe.

8.3 Implications for Poverty Statistics

Because the population experiencing homelessness is small relative to the broader population in poverty, incorporating this group into national poverty estimates would have a small effect on

the poverty rate. Including the ACS sheltered homeless in official statistics would increase the poverty rate by between 0.05 and 0.10 percentage points on a base of about 15 percent (15.1 in the 2010 CPS). If we assume all those counted in the PIT were poor (sheltered and unsheltered), we would increase the poverty rate between 0.15 and 0.20 percentage points. The effect on poverty statistics in certain geographic areas or for certain sub-groups, such as veterans or people with disabilities, might be more pronounced, and this is a topic we will explore in future work. Nevertheless, it is important to understand the deprivation faced by this sub-population in its own right.

8.4 Directions for Future Research

In addition to the findings on characteristics and income and program receipt described in this paper, we are using our novel data sources to explore several other topics related to homelessness: transitions in and out of homelessness, migration and geographic dispersion, and mortality. Our work on transitions examines the length of homeless spells and the dynamics of housing status for this population, as well as demographic and economic factors associated with entry to and exit from homelessness. For this work, we link individuals enumerated in the 2010 Census to prior and subsequent ACS surveys and examine their housing statuses in both sources. Our work on migration and geographic dispersion further examines the determinants of the geographic distribution of the homeless population and their degree of mobility. Finally, to explore mortality patterns, we use the SSA's Numident as an administrative source of data on death and use hazard models to estimate mortality differences between the sheltered, unsheltered, and domiciled, controlling for demographic factors.

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10. Appendix

10.1 Inverse Probability Weighting (IPW) Methodology

10.1.1 American Community Survey (ACS)

This section describes the IPW specifications used to generate adjusted weights for PIKed individuals in group quarters and in emergency and transitional shelters in the 2006-2016 American Community Survey (ACS). These adjusted weights allow us to approximate the mean work and program income as well as the share of shelter homeless individuals filing 1040s using only PIKed individuals in our 2006-2016 ACS shelter homeless sample.

We run probit models over three groups in the ACS to predict the probability an individual in each of the 2006-2016 ACS surveys would be PIKed based on household, income, and demographic information available in the ACS. These four groups are: homeless, GQ non-homeless, and non-GQ individuals.

The model controls for the following factors:

> Age, education, race (White, Black, Asian, all other races), Hispanic origin, citizenship, sex, employment status (employed, unemployed, not in labor force), household income categories, an interaction term for whether an individual is Hispanic and in a household making less than $20,000 per year, indicator variables for SNAP, OASDI, SSI, and TANF receipt, indicator for whether an individual worked in construction, indicator for whether English is spoken at home, indicator variables for military participation, marital status, health insurance (public, private, both, or no insurance), migration (moved from a different state or country in the last year, GQ category, household type, number of children, number of adults, and number of years in the United States.

10.1.2 2010 Census

This section describes the IPW specifications used to generate adjusted weights for PIKed individuals in the 2010 Census. These adjusted weights allow us to approximate the mean work and program income as well as the share of shelter homeless individuals filing 1040s using only PIKed individuals in the 2010 Census.

We run a probit to predict the probability an individual in the 2010 Census is PIKed based on demographic and housing information available in the dataset. We run the model over five different groups in the Census: street homeless, shelter homeless, non-homeless GQ institutionalized, non-homeless GQ non-institutionalized, and non-GQ individuals.

Relative to the ACS, the 2010 Census provides fewer potential covariates. The model controls for the following factors:

> Age, race (White, Black, Asian, Native American, Pacific Islander, other), Hispanic origin, interactions between Hispanic status and age, sex, interactions between sex and GQ type, interactions between sex and Hispanic origin, state dummy variables, an indicator for urban, indicators for GQ enumeration site type, building structure type (one-

family house, multi-unit building, trailer/mobile home, other), tenure type (vacant, owned with mortgage, owned without mortgage, rented, occupied without rent), household/family type.

10.2 Definitions of Measures of Income and Program Receipt

Table A1: Definitions of Measures of Income and Program Receipt	
Share filing 1040 with positive total money income	We link adults ages 18-64 in the corresponding ACS survey year to primary and secondary filers on IRS 1040 forms from 2003-2015. In 2016, we only have data from IRS 1040 forms filed during the first 39 weeks of the year. We report the share of individuals who are primary or secondary filers on a 1040 with positive total money income. Among those filing a 1040 with positive total money income, we report the median total money income and median wage and salary income for the tax unit.
Share filing 1040 with self-employment income	This row reports the share of individuals in a given tax year who are a primary or secondary filer on a 1040 with a flag indicating they filed a schedule C, F, or SE. For all samples (sheltered homeless, unsheltered homeless, and non-group quarters adults), this share roughly doubles between 2003 and 2015, from a little under five percent to a little under 10 percent.
Median self-employment income	We estimate the amount of self-employment income received by subtracting interest income, rental income, wage and salary income, and social security income from total money income. The median of this value is reported for those filing a self-employment schedule.[32]
Share filing 1040 with social security	We report the share of adults in our samples who are a primary or secondary filer on a 1040 with positive social security income. We also report the median social security income among those filing a 1040 with positive social security income.
Share receiving a W-2	We report the share of adults in our samples who receive at least one W-2 with positive wages and tips, and/or deferred compensation.
Median W-2 wages and tips	We report the median of wages and tips earned across all W-2s received by adults in our samples who receive at least one W-2 with positive wages and tips, deferred compensation, and/or FICA wages.
Mean number of W-2s	As an estimate of the total of number of jobs an individual held, we count the number of unique employer TINs across W2s they received. We report the mean of this value for all adults receiving at least one W-2 in a given year.
Share receiving 1099-R	We report the share of individuals receiving a 1099-R, which includes information on employer-sponsored IRA as well as pensions and annuities in a given tax year.
Share receiving housing benefits	We report the share of individuals linking to our HUD PIC and TRACS dataset as receiving HUD program benefits in a given year. We report the mean value of these benefits among recipients as gross rents (imputed for public housing) minus total tenant payments for each year from 2005-2015.
Share receiving VA benefits	We have VA data for fiscal years 2007-2015. This contains information for calendar years 2007-2014. We report the share of individuals receiving VA pensions or compensation for at least one month in each of these years.
Share receiving SNAP	We have SNAP data for Indiana (2006-2016), Tennessee (2006-2016), New Jersey (2007-2016), New York (2007-2016), Illinois (2009-2016). Among individuals residing in a state for which we have SNAP data in a given calendar

[32] This value will overestimate self-employment income, because unemployment compensation, taxable retirement income/pensions, and alimony estimates were not subtracted from total money income.

	year in 2010, we report the share who received benefits according to the admin SNAP data. We also estimate the mean value of SNAP benefits and mean months of SNAP receipt among recipients for each year from 2006-2016.
Share receiving Medicare Part A or B	We report the share of individuals receiving Medicare Part A or B according to our administrative datasets from 2006-2016. We also report the share of adults receiving Medicare due to DI and the share receiving Medicare due to OASI.
Share enrolled in Medicaid	We report the share of individuals enrolled in Medicaid from 2007-2015. In 2014-2015, our Medicaid data no longer cover all states, so we report Medicaid receipt only among individuals who were living in states for which we have Medicaid data in 2014-2015 in their corresponding survey year. Depending on migration patterns into and out of Medicaid states, this could result in an over- or under-estimate of the true share receiving Medicaid in these years.
Share receiving any benefits	Among individuals who lived in a state for which we have SNAP data in a given year in their survey year, we report the share linking to SNAP, HUD PIC and TRACS, VA, Medicare, or Medicaid datasets from 2007-2015.
Share receiving any earnings	We define earnings as the sum of wage and salary income and positive estimated self-employment income on a 1040, plus deferred compensation from any linked W2s minus any PIKed cofiler's W2 wages and tips. When an individual does not file a 1040, we define earnings as W2 wages and tips plus deferred compensation. For individuals who do not file a 1040 or receive a W2, earnings are zero.
Earnings	We define earnings as the sum of wage and salary income and positive estimated self-employment income on a 1040, plus deferred compensation from any linked W2s minus any PIKed cofiler's W2 wages and tips. When an individual does not file a 1040, we define earnings as W2 wages and tips plus deferred compensation. For individuals who do not file a 1040 or receive a W2, earnings are zero.
Pre-tax income	Pre-tax income is reported for 2005-2015 as total money income, when an individual files as 1040. If an individual does not file a 1040, it is the sum of W2 wages and tips, deferred compensation, 1099-R IRA and employer sponsored retirement distributions. For those without a 1040, W-2, and 1099-R, pretax income is set to zero.
Pre-tax income and in-kind transfers	This is the sum of pretax income, defined above, plus the annualized value of SNAP for individuals who reside in a state for which we have SNAP data in a given year, in their year of survey. We report the mean, 25th, 50th, and 75th percentile for each year from 2006-2015.

11. Tables and Figures

Table 1: Description of 2010 Census Service-Based Enumeration (SBE) Locations

Category	*Sheltered Locations*		*Unsheltered Locations*		
Group Quarters (GQ) Type	**Emergency Shelters**	**Transitional Shelters**	**Soup Kitchens**	**Regularly Scheduled Mobile Food Vans**	**Targeted Non-Sheltered Outdoor Locations (TNSOLs)**
Description	First-come, first-served shelters typically requiring people to leave in the morning without a guaranteed bed the following night.	Shelters providing transitional housing programs for up to two years and including support services.	Soup kitchens, food lines, and programs for distributing prepared breakfasts, lunches, or dinners.	Mobile food vans that that regularly visit designated locations to provide food to people experiencing homelessness.	Geographically identifiable outdoor locations, open to the elements, where people might be living without paying to stay there.
Examples	Missions; hotels and motels on contract to provide housing to people experiencing homelessness	Missions; hotels and motels on contract to provide housing to people experiencing homelessness	Food service lines; bag or box lunch services. May or may not have a place to sit and eat a meal.	Each stop of a van meeting the above description.	Includes car, RV, and tent encampments; does not include pay-for-use campgrounds or commercial sites (e.g. diners)

Sources: Russell and Barrett (2012); Smith, Homberg, and Jones-Puthoff (2012)

Table 2: Comparison of Data Sources					
	2010 Decennial	**ACS**	**HMIS Aggregated Data**	**HMIS Micro-Data**	**HUD Point-in-Time**
Coverage	National	National – based on Decennial shelter list.	National – Shelters receiving federal funding.	Shelters w/ federal funding; currently L.A. and Houston	National. Includes domestic violence.
Inclusion of Unsheltered	Yes	No	No	No	Yes
Years	2010	2006-2016	2007-2018	2004-2014 (L.A.) 2004-2015 (Houston)	2007-2018
Public Availability	Aggregate data is available in Census Special Report.	Publicly available data do not identify the homeless.	Aggregate data is in HUD's AHAR report to Congress.	Some CoCs publish local reports. Micro-data restricted.	Aggregate data is in HUD's AHAR report to Congress.
Ability to Link	Yes	Yes	No	Yes	No (no PII)
Seasonality	Conducted March 29-31, 2010	Throughout the year	October-September	All shelter users in the given time frame	One night typically in January; varies by year
Time Frame	Cross-section of individuals experiencing homelessness	Called "period estimates" by the Census; approximately point-in-time estimates	Anyone who experienced homelessness in a given time period	Anyone who experienced homelessness in a given time period	Cross-section of individuals experiencing homelessness
Methodology Notes	Subjects asked whether they had usual home elsewhere; de-duplication attempted.	Post-2010, whole person records imputed into not-in-sample GQs.	Extrapolates to non-HMIS shelters to form national estimates.	Data quality issues include incomplete reporting of shelter spell start/end dates.	Methodology varies by CoC using a variety of HUD-approved methods.
Representative-ness	Unsheltered counts may not be complete (see 2010 Census Special Report). Doesn't include all HMIS shelters.	Uses MAF as basis for sampling. Frame expanded after 2010 Decennial. Doesn't include all HMIS shelters.	Only federally funded shelters required to report; some shelters report voluntarily.	Ratio of HMIS-covered beds to total beds varies by year and CoC; median coverage rate 80-85% in most years.	PIT counts are run by local CoCs. Quality of count may vary by CoC.

Table 3: Homeless Counts in Restricted Census Bureau and Public HUD Datasets, 2006-2018

ACS Sheltered Homeless	162,700	208,200	200,600	200,200	165,400	290,000	263,700	283,900	267,900	262,300	272,900		
SE	*(2,189)*	*(2,050)*	*(14,370)*	*(13,460)*	*(8,951)*	*(5,187)*	*(4,971)*	*(4,920)*	*(4,167)*	*(4,613)*	*(4,337)*		
Decennial Sheltered Homeless					209,000								
Decennial Soup Kitchen					162,000								
Decennial Food Van					11,500								
Decennial TNSOL					36,500								
Decennial Unsheltered Homeless					210,000								
Total Decennial Homeless					420,000								
HUD PIT Sheltered Homeless*		391,401	386,361	403,308	403,543	392,316	390,155	394,698	401,051	391,440	373,571	360,867	358,363
HUD PIT Unsheltered Homeless*		255,857	253,423	226,919	233,534	231,472	231,398	195,666	175,399	173,268	176,357	190,129	194,467
Total HUD PIT Homeless*		647,258	639,784	630,227	637,077	623,788	621,553	590,364	576,450	564,708	549,928	550,996	552,830
HMIS One-Year Estimate of Sheltered Homeless*		1,588,595	1,593,794	1,558,917	1,593,150	1,502,196	1,488,371	1,422,360	1,488,465	1,484,576	1,421,196	1,416,908	

Sources: 2007-2018 Annual Homelessness Assessment Reports, U.S. Census Bureau 2006-2016 American Community Survey 1-year data, 2010 Decennial Census

Note: Table reports the count of sheltered and unsheltered homeless individuals according to the HUD PIT, HMIS One-Year estimates, and 2010 Decennial Census. The total weighted count of ACS sheltered homeless individuals in the 2006-2016 ACS is also reported. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-004, CBDRB-FY20-ERD002-004, and CBDRB-FY21-ERD002-19.

*Indicates data obtained from public sources.

Table 4: Race and Ethnicity of Sheltered Homeless in Restricted Census Bureau and Public HUD Datasets

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
White											
ACS	0.446	0.487	0.461	0.437	0.470	0.417	0.382	0.377	0.385	0.397	0.430
ACS SE	*(0.010)*	*(0.011)*	*(0.025)*	*(0.027)*	*(0.025)*	*(0.036)*	*(0.028)*	*(0.027)*	*(0.024)*	*(0.022)*	*(0.024)*
Decennial					0.448						
HMIS*[1]		0.567	0.495	0.496	0.513	0.485	0.484	0.476	0.502	0.549	0.539
Black											
ACS	0.438	0.360	0.417	0.421	0.406	0.437	0.468	0.458	0.465	0.489	0.454
ACS SE	*(0.011)*	*(0.012)*	*(0.026)*	*(0.025)*	*(0.020)*	*(0.031)*	*(0.026)*	*(0.025)*	*(0.021)*	*(0.023)*	*(0.027)*
Decennial					0.408						
HMIS*		0.332	0.417	0.387	0.370	0.381	0.394	0.418	0.406	0.372	0.380
Asian											
ACS	0.013	0.015	0.020	0.012	0.018	0.007	0.012	0.019	0.018	0.014	0.018
ACS SE	*(0.003)*	*(0.004)*	*(0.004)*	*(0.004)*	*(0.005)*	*(0.003)*	*(0.003)*	*(0.006)*	*(0.006)*	*(0.004)*	*(0.006)*
Decennial					0.019						
HMIS*		0.006	0.008	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.009
Am. Indian/Pac. Islander											
ACS	0.046	0.046	0.033	0.040	0.032	0.031	0.045	0.040	0.050	0.030	0.038
ACS SE	*(0.004)*	*(0.004)*	*(0.006)*	*(0.006)*	*(0.005)*	*(0.007)*	*(0.006)*	*(0.005)*	*(0.005)*	*(0.004)*	*(0.008)*
Decennial					0.030						
HMIS*		0.023	0.026	0.039	0.038	0.048	0.042	0.033	0.036	0.036	0.034
Other Race											
ACS	0.067	0.093	0.068	0.090	0.074	0.108	0.093	0.106	0.083	0.070	0.060
ACS SE	*(0.005)*	*(0.008)*	*(0.009)*	*(0.012)*	*(0.011)*	*(0.022)*	*(0.020)*	*(0.016)*	*(0.015)*	*(0.012)*	*(0.013)*
Decennial					0.051						
HMIS*		---	---	---	---	---	---	---	---	---	---
Multiple Races											
ACS	---	---	---	---	---	---	---	---	---	---	---
ACS SE	---	---	---	---	---	---	---	---	---	---	---
Decennial					0.042						
HMIS*		0.073	0.054	0.071	0.072	0.079	0.072	0.065	0.048	0.035	0.038
Hispanic											
ACS	0.157	0.176	0.181	0.155	0.170	0.204	0.190	0.199	0.203	0.195	0.224
ACS SE	*(0.007)*	*(0.009)*	*(0.014)*	*(0.014)*	*(0.014)*	*(0.020)*	*(0.016)*	*(0.021)*	*(0.017)*	*(0.019)*	*(0.024)*
Decennial					0.179						
HMIS*		0.216	0.195	0.195	0.164	0.156	0.163	0.164	0.158	0.128	0.125
Total											
ACS	162,700	208,200	200,600	200,200	165,400	290,000	263,700	283,900	267,900	262,300	272,900
ACS SE	*(2,189)*	*(2,050)*	*(14,370)*	*(13,460)*	*(8,951)*	*(5,187)*	*(4,971)*	*(4,920)*	*(4,167)*	*(4,613)*	*(4,337)*
Decennial					209,000						
HMIS*		1,588,595	1,593,794	1,558,917	1,593,150	1,502,196	1,488,371	1,422,360	1,488,465	1,484,576	1,421,196

Sources: U.S. Census Bureau 2006-2016 American Community Survey 1-year data, 2010 Decennial Census, 2007-2016 Annual Homelessness Assessment Reports to Congress One-Year Estimates of Sheltered Homelessness

Note: Table reports, by survey and survey year, the share of sheltered homeless individuals identifying as a given race, regardless of whether they identify as Hispanic. The total counts of sheltered homeless individuals in each survey and survey year are reported in the bottom rows of the table. The ACS counts are weighted using survey weights prior to 2011. From 2011 onwards, the Census implemented a new group quarters (GQ) estimation methodology, whereby whole person records taken from the interviewed sample were imputed into not-in-sample GQs. For 2011-2016 ACS characteristics, we include only non-imputed ACS records, which are scaled up by a constant such that the new weighted count of non-imputed observations is equal to the old weighted sum of imputed and non-imputed records. Standard errors are computed using replicate weights. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-004, CBDRB-FY21-ERD002-19, and CBDRB-FY21-045.

[1]From 2010-2016 HMIS, one year estimates of the share of sheltered homeless who are white are computed by subtracting the share of sheltered homeless individuals who are black, Asian, Native American/Alaska Native, Native Hawaiian/Pacific Islander, or multiple races from one. The share of sheltered homeless individuals who were white was not directly reported in the AHAR for these years, but should include those who identify as white, Hispanic and white, Non-

*Indicates data obtained from publicly available sources.

Table 5: Age and Gender of Sheltered Homeless in Restricted Census Bureau and Public HUD Datasets

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Under Age 18											
ACS	0.178	0.189	0.159	0.131	0.153	0.135	0.104	0.133	0.158	0.128	0.122
ACS SE	*(0.007)*	*(0.009)*	*(0.022)*	*(0.018)*	*(0.018)*	*(0.026)*	*(0.023)*	*(0.024)*	*(0.026)*	*(0.027)*	*(0.020)*
Decennial					0.202						
HMIS*		0.214	0.204	0.222	0.218	0.221	0.226	0.222	0.223	0.223	0.223
18-30											
ACS	0.155	0.198	0.199	0.183	0.209	0.198	0.206	0.188	0.170	0.185	0.194
ACS SE	*(0.008)*	*(0.009)*	*(0.018)*	*(0.014)*	*(0.013)*	*(0.018)*	*(0.018)*	*(0.015)*	*(0.017)*	*(0.016)*	*(0.017)*
Decennial					0.184						
HMIS*		0.202	0.225	0.223	0.235	0.238	0.235	0.229	0.228	0.224	0.220
31-50											
ACS	0.453	0.367	0.398	0.435	0.352	0.397	0.386	0.369	0.355	0.367	0.332
ACS SE	*(0.011)*	*(0.011)*	*(0.020)*	*(0.019)*	*(0.015)*	*(0.022)*	*(0.018)*	*(0.022)*	*(0.015)*	*(0.021)*	*(0.019)*
Decennial					0.368						
HMIS*		0.405	0.403	0.383	0.370	0.358	0.350	0.346	0.342	0.338	0.333
51-61											
ACS	0.171	0.199	0.199	0.201	0.230	0.221	0.249	0.246	0.257	0.247	0.266
ACS SE	*(0.008)*	*(0.009)*	*(0.011)*	*(0.016)*	*(0.018)*	*(0.020)*	*(0.018)*	*(0.018)*	*(0.021)*	*(0.017)*	*(0.020)*
Decennial					0.201						
HMIS*		0.134	0.140	0.144	0.149	0.155	0.156	0.168	0.170	0.172	0.177
62 and Older											
ACS	0.044	0.047	0.043	0.050	0.055	0.049	0.055	0.065	0.061	0.073	0.085
ACS SE	*(0.004)*	*(0.005)*	*(0.010)*	*(0.005)*	*(0.008)*	*(0.010)*	*(0.008)*	*(0.009)*	*(0.008)*	*(0.009)*	*(0.010)*
Decennial					0.045						
HMIS*		0.029	0.028	0.028	0.028	0.029	0.032	0.035	0.038	0.042	0.047
Male											
ACS	0.616	0.574	0.636	0.631	0.621	0.612	0.636	0.597	0.603	0.626	0.606
ACS SE	*(0.010)*	*(0.010)*	*(0.028)*	*(0.028)*	*(0.026)*	*(0.034)*	*(0.025)*	*(0.032)*	*(0.027)*	*(0.028)*	*(0.025)*
Decennial					0.621						
HMIS*[1]		0.653	0.640	0.637	0.623	0.628	0.632	0.634	0.623	0.621	0.629
Female											
ACS	0.384	0.426	0.364	0.369	0.379	0.388	0.364	0.403	0.397	0.374	0.394
ACS SE	*(0.010)*	*(0.010)*	*(0.028)*	*(0.028)*	*(0.026)*	*(0.034)*	*(0.025)*	*(0.032)*	*(0.027)*	*(0.028)*	*(0.025)*
Decennial					0.379						
HMIS*		0.347	0.360	0.363	0.377	0.372	0.368	0.366	0.377	0.379	0.371
Total											
ACS	162,700	208,200	200,600	200,200	165,400	290,000	263,700	283,900	267,900	262,300	272,900
ACS SE	*(2,189)*	*(2,050)*	*(14,370)*	*(13,460)*	*(8,951)*	*(5,187)*	*(4,971)*	*(4,920)*	*(4,167)*	*(4,613)*	*(4,337)*
Decennial					209,000						
HMIS		1,588,595	1,593,794	1,558,917	1,593,150	1,502,196	1,488,371	1,422,360	1,488,465	1,484,576	1,421,196

Sources: U.S. Census Bureau 2006-2016 ACS 1-year data, 2010 Decennial Census, 2007-2016 Annual Homelessness Assessment Report HMIS One-Year Estimates of Homelessness

Note: Table displays the share of sheltered homeless individuals in the 2006-2016 ACS and 2010 Decennial Census who fall into a given age or gender category. Age categories in the ACS and Decennial are selected to correspond with publicly available HMIS age distributions. The HMIS estimates report the share of individuals at first shelter entry in a given year from October 1st to September 30th of the designated year in a given age category. The HMIS only reports the distribution of genders for sheltered homeless adults over a one year period. The HMIS only reports gender distributions for homeless adults; these shares exclude children. The HMIS reports one year estimates by age and gender for the preceding one year period beginning October 1st of the preceeding year and ending September 30th of the designated year. Total counts of sheltered homeless individuals are reported in final rows. The ACS counts are weighted using survey weights prior to 2011. From 2011 onwards, a new group quarters (GQ) estimation methodology was implemented, whereby whole person records taken from the interviewed sample were imputed into not-in-sample GQs. For 2011-2016 ACS characteristics, we include only non-imputed ACS records, which are scaled up by a constant such that the new weighted count of non-imputed observations is equal to the old weighted sum of imputed and non-imputed records. Standard errors are computed using replicate weights. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-004, CBDRB-FY21-ERD002-19, and CBDRB-FY21-045.

*Indicates data obtained from publicly available sources.

Table 6: Demographic Characteristics of Unsheltered Homeless, 2010 Decennial Census

	Soup Kitchens		Regularly Scheduled Mobile Food Vans		Targeted Non-Sheltered Outdoor Locations (TNSOLs)		Total	
Total	162,000		11,500		36,500		210,000	
Age								
Under 18	13,500	8.4%	1,000	8.7%	3,800	10.3%	18,500	8.8%
18 to 30	25,000	15.5%	2,000	17.4%	6,400	17.4%	33,500	16.0%
31 to 50	68,000	41.9%	4,900	42.3%	16,000	43.5%	88,500	42.1%
51 to 61	39,500	24.3%	2,500	21.1%	8,100	22.1%	50,000	23.8%
62 or Older	16,000	10.0%	1,200	10.5%	2,400	6.7%	20,000	9.5%
Sex								
Female	48,000	29.6%	3,600	31.3%	9,500	26.0%	61,000	29.0%
Male	114,000	70.4%	8,000	69.6%	27,000	74.0%	149,000	71.0%
Ethnicity								
Hispanic	28,500	17.6%	2,600	22.6%	6,500	17.8%	37,500	17.9%
Non-Hispanic	133,000	82.1%	9,100	79.1%	30,500	83.6%	173,000	82.4%
Race								
White	85,000	52.5%	6,600	57.4%	19,500	53.4%	111,000	52.9%
Black	57,000	35.2%	2,900	25.2%	11,500	31.5%	71,000	33.8%
Native Am/Pac Islander	5,600	3.5%	400	3.6%	1,200	3.3%	7,200	3.4%
Asian	3,000	1.9%	450	3.9%	1,100	3.0%	4,700	2.2%
Some other race	7,000	4.3%	800	7.0%	2,200	6.0%	10,000	4.8%
Multiple races	4,600	2.8%	450	3.9%	1,200	3.3%	6,300	3.0%
PIK Status								
PIKed	67,500	41.7%	4,900	42.6%	6,500	17.8%	79,000	37.6%
unPIKed	94,000	58.0%	6,700	58.3%	30,500	83.6%	131,000	62.4%

Source: 2010 Decennial Census

Note: Table displays the count and share of individuals enumerated in soup kitchens, regularly scheduled mobile food vans, and targeted non-sheltered outdoor locations (TNSOLs) in the 2010 Decennial Census by demographic characteristic. The total number of individuals enumerated in each group quarter category in the 2010 Decennial is provided in the first row. Shares in some categories will not sum to one due to Census Bureau rounding requirements. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Table 7: Sheltered Homeless Characteristics Across Census Bureau Datasets

	ACS (Pooled 2006-2016)	Decennial (2010)	HMIS Person-Weighted (Pooled 2004-2014 for LA, 2004-2015 for Houston)	HMIS Day-Weighted (Pooled 2004-2014 for LA, 2004-2015 for Houston)
Los Angeles				
White	0.365	0.359	0.432	0.422
Black	0.483	0.454	0.468	0.480
Under Age 18	0.045	0.124	0.129	0.135
Female	0.318	0.359	0.343	0.357
Hispanic	0.232	0.256	0.294	0.299
Total	148,000	9,500	202,000	202,000
Houston				
White	0.427	0.381	0.351	0.340
Black	0.539	0.549	0.604	0.630
Under Age 18	0.084	0.176	0.207	0.255
Female	0.317	0.350	0.402	0.489
Hispanic	0.085	0.123	0.122	0.111
Total	28,000	3,700	89,000	89,000

Sources: U.S. Census Bureau 2006-2016 American Community Survey 1-year data, 2010 Decennial Census, 2004-2015 Houston CoC HMIS Data

Note: ACS data is subject to error. The Los Angeles CoC covers LA county excluding Pasadena, Long Beach, and Glendale. The Houston CoC includes Houston, Harris, Fort Bend, and Montgomery counties. The total counts of sheltered homeless individuals in each CoC are reported in the bottom rows of the table. We restrict the HMIS data to emergency and transitional shelters, and we drop HMIS observations with no entry date, no exit date, or neither. HMIS day-weighted characteristics are computed by weighting each person appearing in an HMIS shelter in a given year by the number of days the individual spent in the shelter that year. When the entry date equals the exit date we count these as one-day spells. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Table 8: Unweighted Homeless PIK Rates Across Census Bureau Datasets (2004-2016)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ACS Sheltered Homeless			0.760	0.736	0.699	0.726	0.827	0.772	0.763	0.774	0.790	0.779	0.750
Decennial Sheltered Homeless							0.686						
Decennial Soup Kitchen							0.418						
Decennial Food Van							0.424						
Decennial TNSOL							0.172						
Houston HMIS Sheltered Homeless[1]	0.800	0.949	0.979	0.967	0.955	0.956	0.955	0.961	0.962	0.965	0.965		
Los Angeles HMIS Sheltered Homeless[2]	1.000	0.895	0.939	0.945	0.870	0.861	0.879	0.906	0.922	0.923	0.925		

Sources: U.S. Census Bureau 2006-2016 ACS 1-year data, 2010 Decennial Census, 2004-2014 Los Angeles CoC HMIS Data, 2004-2014 Houston CoC HMIS Data

Note: Table reports the unweighted shares of sheltered and unsheltered homeless individuals who are PIKed in the 2006-2016 ACS and Decennial Census by GQ type. The shares of non-imputed sheltered homeless individuals who are PIKed are reported from 2011-2016. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

[1]Houston Housing Management Information System (HMIS) data contains demographic and shelter use information for individuals who visited an emergency or transitional shelter (but not those in permanent supportive housing or service-only programs) in the Houston CoC in years 2004-2015. The Houston CoC encompasses shelters in Houston, Harris, Fort Bend, and Montgomery Counties.

[2]Los Angeles Housing Management Information System (HMIS) data contains demographic and shelter use information for individuals who visited an emergency or transitional shelter (but not those in permanent supportive housing or service-only programs) in the Los Angeles CoC in years 2004-2015. The Los Angeles CoC encompasses shelters in Los Angeles excluding Glendale, Long Beach, and Pasadena.

Table 9a: Survey Summary Statistics for Sheltered Homeless Adults by Whether PIKed in ACS

	PIKed Homeless Adults			unPIKed Homeless Adults			Difference in Means
	Mean for All Responses	Mean for Non-Imputed Responses	Share of Responses Not Imputed	Mean for All Responses	Mean for Non-Imputed Responses	Share of Responses Not Imputed	PIKed – unPIKed (All Responses)
Demographic Characteristics							
Age (Years)	43.76	43.75	0.99	41.39	41.26	0.96	2.38 ***
Male (%)	64.35	64.36	1.00	58.27	58.39	0.99	6.08 ***
Race (%)							
White	45.65	48.53	0.94	41.01	45.45	0.90	4.64 ***
Black	43.11	45.92	0.94	44.50	49.32	0.90	-1.40
Native American	2.77	2.92	0.94	2.09	2.17	0.90	0.68 *
Asian	1.42	1.50	0.94	1.98	2.19	0.90	-0.57 *
Other	7.06	1.13	0.94	10.41	0.87	0.90	-3.36 ***
Hispanic (%)	14.56	13.83	0.98	23.00	22.01	0.97	-8.44 ***
Place of Birth (%)							
Born in Current State	52.86	51.23	0.89	50.18	45.46	0.74	2.69 *
Born in Different US State	37.57	38.79	0.89	27.65	27.78	0.74	9.92 ***
Born Outside US	9.56	9.98	0.89	22.17	26.76	0.74	-12.62 ***
Years of Education[1] (%)							
Primary	5.70	5.54	0.91	8.19	8.73	0.72	-2.49 ***
Less than High School	33.91	33.33	0.91	34.16	33.85	0.72	-0.25
High School	30.08	30.14	0.91	32.96	32.32	0.72	-2.89 **
Some College	25.27	25.95	0.91	19.87	19.84	0.72	5.41 ***
College Graduate	5.04	5.04	0.91	4.82	5.26	0.72	0.22
Marital Status (%)							
Married	9.59	9.43	0.94	9.70	9.59	0.80	-0.10
Divorced	23.30	23.45	0.94	17.46	18.13	0.80	5.84 ***
Separated	8.25	8.29	0.94	7.71	7.52	0.80	0.54
Widowed	3.45	3.41	0.94	3.44	3.60	0.80	0.01
Never Married	55.41	55.42	0.94	61.70	61.16	0.80	-6.29 ***
Mean Number of Times Married	0.52	0.56	0.82	0.40	0.35	0.75	0.11 ***
Veteran (%)	12.28	12.04	0.94	9.27	8.69	0.81	3.01 ***
Has VA Disability Rating (%)	1.55	1.66	0.86	1.39	1.19	0.86	0.17
Difficulty Remembering or Making Decisions (%)	25.90	25.93	0.95	19.61	18.83	0.81	6.28 ***
Difficulty Dressing or Bathing (%)	4.71	4.67	0.95	3.93	4.12	0.82	0.78
Difficulty Walking or Climbing Stairs (%)	21.76	21.66	0.95	16.23	15.83	0.82	5.53 ***
Difficulty Doing Errands Alone (%)	8.92	8.85	0.95	7.76	7.75	0.82	1.16 *
Employment & Program Participation							
Worked in Past Year (%)	42.88	42.63	0.91	35.42	34.11	0.76	7.46 ***
Mean Wks Worked in Past 12 Mos Cond. on Work	28.54	27.75	0.94	29.80	28.43	0.87	-1.26 *
Mean Hrs Worked Per Weekk Conditional on Work	33.23	33.22	0.94	33.46	33.21	0.87	-0.24
Benefit Receipt Rates and Amounts							
Reported Amount of Employment Income[2] (%)	42.84	35.86	0.77	35.42	25.85	0.62	7.41 ***
Mean Amount Conditional on Receipt ($)[2]	$11,200	$9,112	0.77	$12,560	$10,880	0.62	-$1,359
Retirement or Pension Income Receipt Rate (%)	2.42	2.04	0.91	1.91	1.25	0.99	0.52
Mean Amount Conditional on Receipt ($)	$9,170	$8,785	0.91	$10,300	$10,810	0.72	-$1,133
Medicaid Receipt Rate (%)	46.67	50.71	0.77	47.60	49.45	0.64	-0.92
Food Stamp Receipt Rate (?%)	62.54	62.09	0.91	53.43	50.66	0.76	9.11 ***
SSI Receipt Rate (%)	11.42	8.75	0.89	9.44	3.99	0.94	1.99 **
Mean Amount Conditional on Receipt ($)	$7,815	$7,951	0.89	$8,062	$8,235	0.71	-$247.60
Public Assistance Receipt Rate (%)	18.56	16.21	0.88	21.19	11.76	0.89	-2.63 **
Mean Public Assistance Amount ($)	$2,566	$2,570	0.88	$2,964	$3,138	0.89	-$398.10 *
Received Any Transfer Income (%)	28.85	24.38	0.83	57.74	49.98	0.84	-28.89 ***
Received Any Retirement or Employment Income (%)	44.79	38.10	0.76	37.08	27.56	0.62	7.71 ***
Other Income Receipt[3] (%)	9.30	5.82	0.87	7.32	3.56	0.70	1.97 ***
Mean Amount Conditional on Receipt ($)	$5,640	$5,300	0.87	$6,306	$4,881	0.70	-$666
Any Income Receipt (%)	76.43	70.50	0.68	68.84	55.63	0.52	7.59 ***
Mean Amount Conditional on Receipt ($)	$10,170	$8,843	0.68	$10,650	$9,379	0.52	-$478.10
Sample Size (N)		**21,500**			**6,100**		
ACS Weighted Count		**1,759,000**			**489,100**		

Sources: U.S. Census Bureau 2006-2016 American Community Survey 1-year data

Note: Table displays means and weighted shares of ACS variables for PIKed and unPIKed non-imputed adult sheltered homeless individuals in the 2006-2016 ACS. Missing values were recoded as zeros, because all missing values were coded as as non-imputed responses. Conditional shares and means are provided in indented row below overall receipt rates. Far right column displays difference between PIKed and unPIKed variable mean for all responses. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

[1]"Primary school" includes those with up to and including 8 years of schooling. "Less than high school" includes those with more than 8 years of schooling, but no high school diploma or equivalent. "High school" includes those with a high school diploma or equivalent. "Some college" includes those with more than a high school education, but less than a 4 year college degree. Those with associates degrees would fall in this category. "College" includes those with a 4 year college degree or more.

[2]Employment Income includes income from wages and salaries or self employment income.

[3]Other income includes regular sources of income from sources excepting wages, salaries, bonuses, and tips from employment, self-employment income, interest, dividends, net rental income, royalty income, estate income, Social Security or Railroad Retirement income, Supplemental Security income, public assistance or welfare, and retirement, survivor, or disability pensions. This includes VA payments, unemployment compensation, and child support or alimony.

*** p<.05 ** p<.01 *** p<.001**

Table 9b: Descriptive Statistics for Sheltered Homeless in 2010 Decennial Census by PIK Status

	UnPIKed		PIKed		PIKed-UnPIKed	
	Mean	**Percent Imputed**	**Mean**	**Percent Imputed**	**Difference**	**Significance**
Age (%)		33.87		3.29		
0-17	25.42		19.85		-5.57	***
18-24	8.81		10.07		1.27	***
25-39	21.66		21.43		-0.23	
40-49	19.87		21.37		1.50	***
50-64	22.01		24.89		2.88	***
65 or older	2.22		2.38		0.16	*
Sex (%)		7.03		2.69		
Female	36.74		38.37		1.63	***
Male	63.26		61.63		-1.63	***
Race (%)		21.80		13.19		
White	43.86		45.90		2.04	***
Black	45.14		40.83		-4.31	***
Asian	1.79		1.78		-0.01	
Native American	1.96		2.55		0.60	***
Pacific Islander	0.62		0.84		0.22	***
Other	3.68		3.37		-0.31	**
Multiple Races	2.96		4.74		1.78	***
Hispanic	21.45	29.03	16.95	16.23	-4.50	***
Total Count	65,500		144,000			

Source: 2010 Decennial Census

Note: Table displays the share of sheltered homeless individuals who have a non-imputed given demographic characteristic, by PIK status. The total count of PIKed and unPIKed homeless individuals in the 2010 Decennial Census is reported at the bottom of the table. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

*** p<.05 **p<.01 ***p<.001**

Table 9c: Descriptive Statistics for Unsheltered Homeless in 2010 Decennial Census by PIK Status

	UnPIKed		PIKed		PIKed-UnPIKed	
	Mean	**Percent Imputed**	**Mean**	**Percent Imputed**	**Difference**	**Significance**
Age (%)		55.62		3.28		
0-17	7.30		7.83		0.53	***
18-24	6.67		7.61		0.94	***
25-39	25.24		19.75		-5.49	***
40-49	24.97		25.26		0.29	
50-64	29.29		32.07		2.78	***
65 or older	6.52		7.47		0.95	***
Sex (%)		9.48		2.62		
Female	26.53		31.51		4.98	***
Male	73.47		68.49		-4.98	***
Race (%)		23.29		6.34		
White	51.97		52.66		0.69	**
Black	38.30		32.85		-5.45	***
Asian	2.07		2.21		0.14	*
Native American	2.39		4.17		1.78	***
Pacific Islander	0.48		0.46		-0.03	
Other	2.99		3.50		0.51	***
Multiple Races	1.80		4.15		2.35	***
Hispanic	21.60	32.48	16.88	8.04	-4.73	***
Total Count	131,000		79,000			

Source: 2010 Decennial Census

Note: Table displays the share of shelter homeless individuals who have a non-imputed given demographic characteristic, by PIK status. The total count of PIKed and unPIKed homeless individuals in the 2010 Decennial Census is reported at the bottom of the table. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

*** p<.05 **p<.01 ***p<.001**

Table 10a: Demographic Characteristics of Sheltered Homeless & Comparison Groups, 2006-2010 ACS

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Mean	**SE**	**Mean**	**SE**	**Mean**	**SE**
Demographic Characteristics—All Ages						
Age (Years)						
Mean Age	36.89	(0.36)	29.82	(0.15)	36.85	(0.03)
<5	6.08	(0.32)	13.00	(0.27)	7.03	(0.04)
5-17	10.11	(0.57)	25.29	(0.26)	17.83	(0.07)
18-24	9.80	(0.43)	12.20	(0.21)	9.22	(0.05)
25-44	34.46	(0.65)	22.66	(0.26)	27.38	(0.07)
45-64	36.48	(0.73)	16.93	(0.23)	26.02	(0.06)
>64	3.08	(0.29)	9.93	(0.18)	12.52	(0.05)
Male (%)	61.42	(1.07)	39.59	(0.29)	48.94	(0.07)
Race (%)						
White	46.07	(0.97)	55.48	(0.28)	75.61	(0.07)
Black	40.73	(0.84)	30.62	(0.27)	12.48	(0.06)
American Indian/Alaskan Native	3.34	(0.23)	2.17	(0.08)	1.14	(0.02)
Asian	1.55	(0.16)	2.43	(0.09)	4.81	(0.03)
Other	8.31	(0.48)	9.30	(0.18)	5.96	(0.05)
Hispanic (%)	16.64	(0.58)	23.78	(0.26)	16.11	(0.06)
Place of Birth (%)						
Born in Current State	54.69	(0.84)	66.82	(0.34)	58.96	(0.09)
Born in Different US State	37.56	(0.89)	21.28	(0.28)	27.40	(0.07)
Born Abroad	7.75	(0.34)	11.90	(0.19)	13.64	(0.06)
Mobility (%)						
Lived in Different State One Year Ago	12.64	(0.45)	2.50	(0.10)	2.17	(0.03)
Lived in Different Region One Year Ago	6.66	(0.25)	1.14	(0.07)	1.12	(0.02)
Lived Abroad One Year Ago	0.76	(0.08)	0.62	(0.05)	0.54	(0.01)
Rural (%)	3.72	(0.41)	17.61	(0.22)	23.35	(0.08)
Citizenship (%)						
Non-Citizen	4.88	(0.24)	7.90	(0.18)	7.33	(0.05)
Naturalized	2.24	(0.23)	3.41	(0.11)	5.55	(0.04)
Total Sample Size	12,000		37,000		547,000	
Weighted Count	935,100		3,006,000		36,970,000	

Source: U.S. Census Bureau 2006-2010 American Community Survey 1-year data

Notes: Table displays weighted means and shares of responses (including imputed responses) to questions among sheltered homeless individuals and members of comparison groups residing in one of the 50 states or Washington, DC. Standard errors are computed using replicate weights. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Table 10b: Demographic Characteristics of Sheltered Homeless & Comparison Groups, 2011-2018 ACS

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Mean	**SE**	**Mean**	**SE**	**Mean**	**SE**
Demographic Characteristics—All Ages						
Age (Years)						
Mean Age	39.16	(0.40)	30.75	(0.13)	38.18	(0.03)
<5	4.46	(0.32)	11.74	(0.18)	6.35	(0.04)
5-17	8.11	(0.62)	25.88	(0.28)	17.16	(0.07)
18-24	8.39	(0.44)	10.96	(0.21)	8.97	(0.06)
25-44	34.77	(0.83)	22.48	(0.28)	26.55	(0.08)
45-64	40.20	(0.89)	18.95	(0.25)	26.38	(0.08)
>64	4.07	(0.25)	9.99	(0.19)	14.59	(0.05)
Male (%)	60.45	(0.98)	40.99	(0.35)	48.99	(0.09)
Race (%)						
White	39.55	(0.89)	56.99	(0.37)	74.93	(0.08)
Black	46.82	(0.89)	29.65	(0.34)	12.89	(0.06)
American Indian/Alaskan Native	2.40	(0.19)	2.07	(0.08)	1.13	(0.02)
Asian	1.75	(0.28)	2.75	(0.11)	5.70	(0.04)
Other	9.48	(0.60)	8.53	(0.21)	5.34	(0.05)
Hispanic (%)	21.46	(0.71)	26.42	(0.35)	18.16	(0.08)
Place of Birth (%)						
Born in Current State	56.29	(0.90)	67.16	(0.30)	58.40	(0.08)
Born in Different US State	30.94	(0.85)	20.67	(0.26)	27.06	(0.08)
Born Abroad	12.77	(1.01)	12.17	(0.22)	14.53	(0.06)
Mobility (%)						
Lived in Different State One Year Ago	8.90	(0.39)	2.46	(0.10)	2.17	(0.03)
Lived in Different Region One Year Ago	4.42	(0.27)	1.28	(0.08)	1.15	(0.02)
Lived Abroad One Year Ago	1.78	(0.43)	0.63	(0.06)	0.56	(0.01)
Rural (%)	0.85	(0.33)	16.28	(0.24)	19.76	(0.09)
Citizenship (%)						
Non-Citizen	9.54	(1.02)	7.58	(0.19)	7.12	(0.05)
Naturalized	2.58	(0.20)	4.09	(0.15)	6.50	(0.05)
Total Sample Size	26,000		36,500		500,000	
Weighted Count	2,172,000		2,693,000		31,140,000	

Source: U.S. Census Bureau 2011-2018 American Community Survey 1-year data

Notes: Table displays weighted means and shares of responses (including imputed responses) to questions among non-imputed sheltered homeless individuals and members of comparison groups residing in one of the 50 states or Washington, DC. Standard errors are computed using replicate weights. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Table 11a: Education, Mobility, Disability, and Veteran Status of Sheltered Homeless & Comparison Groups, 2006-2010 ACS

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Mean	**SE**	**Mean**	**SE**	**Mean**	**SE**
Survey Characteristics—Ages 5-17						
Attended School in Past Three Months (%)						
Among Ages 5-17	93.24	(0.85)	95.15	(0.28)	96.73	(0.06)
Among Ages 5-15	95.12	(0.78)	96.43	(0.43)	97.01	(0.10)
Among Ages 16-17	85.18	(2.92)	90.37	(1.50)	95.49	(0.31)
Survey Characteristics—Ages 18-64						
Place of Birth (%)						
Born in Current State	51.29	(0.97)	57.46	(0.47)	52.24	(0.11)
Born in Different US State	40.72	(1.00)	25.80	(0.41)	30.31	(0.10)
Born Abroad	7.99	(0.38)	16.74	(0.30)	17.46	(0.08)
Mobility (%)						
Lived in Different State One Year Ago	13.09	(0.49)	3.02	(0.15)	2.49	(0.03)
Lived in Different Region One Year Ago	6.73	(0.30)	1.32	(0.10)	1.29	(0.02)
Lived Abroad One Year Ago	0.67	(0.09)	0.87	(0.08)	0.64	(0.02)
Years of Education[1] (%)						
Mean Years of Post-Kindergarten Education	11.56	(0.04)	11.61	(0.02)	13.09	(0.01)
Primary	14.46	(0.58)	13.34	(0.30)	6.52	(0.06)
Less than High School	42.18	(0.87)	42.80	(0.41)	40.50	(0.10)
High School	23.09	(0.74)	20.67	(0.34)	16.98	(0.09)
Some College	17.16	(0.64)	18.05	(0.30)	19.49	(0.09)
College Graduate	3.12	(0.27)	5.14	(0.19)	16.51	(0.09)
Marital Status (%)						
Married	9.26	(0.46)	5.97	(0.18)	53.35	(0.11)
Divorced	24.38	(0.62)	22.58	(0.31)	11.49	(0.06)
Separated	8.62	(0.32)	8.99	(0.27)	2.56	(0.04)
Widowed	2.87	(0.20)	4.33	(0.17)	1.73	(0.03)
Never Married	54.86	(0.75)	58.13	(0.36)	30.87	(0.10)
Mean Number of Times Married	1.35	(0.02)	1.35	(0.01)	1.29	(0.00)
Veteran (%)	14.84	(0.63)	3.62	(0.16)	7.38	(0.05)
Has VA Disability Rating (%)	1.73	(0.22)	0.54	(0.09)	1.09	(0.03)
Functional Limitations (%)						
Difficulty Remembering or Making Decisions	24.70	(0.74)	12.26	(0.29)	4.24	(0.04)
Difficulty Dressing or Bathing	4.56	(0.30)	5.31	(0.20)	1.93	(0.03)
Difficulty Walking or Climbing Stairs	20.60	(0.64)	15.56	(0.30)	6.16	(0.05)
Difficulty Doing Errands Alone	7.89	(0.42)	9.14	(0.24)	3.28	(0.04)
Difficulty Hearing	5.32	(0.46)	2.80	(0.17)	2.11	(0.04)
Difficulty Seeing	7.09	(0.58)	4.38	(0.22)	1.72	(0.04)
Any of the Above Difficulties	36.68	(1.26)	23.00	(0.44)	10.00	(0.09)
Total Sample Size	12,000		37,000		547,000	
Weighted Count	935,100		3,006,000		36,970,000	
Ages 18-64	9,800		18,500		327,000	
Ages 5-17	1,200		9,100		96,500	

Source: U.S. Census Bureau 2006-2010 American Community Survey 1-year data

Note: Table displays weighted means and shares of responses (including imputed responses) to questions among non-imputed sheltered homeless individuals and members of comparison groups residing in one of the 50 states or Washington, DC. Standard errors are computed using replicate weights. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

[1]"Primary school" includes those with up to and including 8 years of schooling. "Less than high school" includes those with more than 8 years of schooling, but no high school diploma or equivalent. "High school" includes those with a high school diploma or equivalent. "Some college" includes those with more than a high school education, but less than a 4 year college degree. Those with associates degrees would fall in this category. "College" includes those with a 4 year college degree or more.

Table 11b: Education, Mobility, Disability and Veteran Status of Sheltered Homeless & Comparison Groups, 2011-2018 ACS

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Mean	**SE**	**Mean**	**SE**	**Mean**	**SE**
Survey Characteristics—Ages 5-17						
Attended School in Past Three Months (%)						
Among Ages 5-17	89.75	(3.53)	95.77	(0.25)	96.85	(0.08)
Among Ages 5-15	93.63	(1.89)	96.10	(0.27)	96.96	(0.09)
Among Ages 16-17	68.90	(10.75)	93.67	(0.95)	96.26	(0.22)
Survey Characteristics—Ages 18-64						
Place of Birth (%)						
Born in Current State	54.61	(0.96)	58.54	(0.39)	52.26	(0.11)
Born in Different US State	32.73	(0.94)	24.50	(0.37)	29.12	(0.11)
Born Abroad	12.66	(1.10)	16.96	(0.36)	18.63	(0.09)
Mobility (%)						
Lived in Different State One Year Ago	9.08	(0.41)	2.97	(0.16)	2.49	(0.04)
Lived in Different Region One Year Ago	4.45	(0.29)	1.57	(0.13)	1.32	(0.03)
Lived Abroad One Year Ago	1.05	(0.30)	0.81	(0.09)	0.64	(0.02)
Years of Education[1] (%)						
Mean Years of Post-Kindergarten Education	11.76	(0.04)	11.85	(0.02)	13.33	(0.01)
Primary	1.77	(0.25)	3.31	(0.17)	1.84	(0.03)
Less than High School	28.67	(0.67)	22.52	(0.34)	9.86	(0.07)
High School	36.44	(0.65)	34.04	(0.41)	26.66	(0.12)
Some College	27.29	(0.59)	30.71	(0.38)	32.13	(0.12)
College Graduate	5.84	(0.36)	9.43	(0.24)	29.52	(0.11)
Marital Status (%)						
Married	10.01	(0.45)	6.08	(0.22)	50.51	(0.13)
Divorced	18.91	(0.66)	21.94	(0.33)	11.17	(0.08)
Separated	7.21	(0.37)	7.49	(0.24)	2.35	(0.04)
Widowed	2.69	(0.22)	4.14	(0.16)	1.66	(0.02)
Never Married	61.18	(0.80)	60.35	(0.43)	34.31	(0.12)
Mean Number of Times Married	1.33	(0.01)	1.34	(0.01)	1.27	(0.00)
Veteran (%)	8.08	(0.48)	3.15	(0.15)	5.47	(0.05)
Has VA Disability Rating (%)	1.22	(0.19)	0.58	(0.07)	1.15	(0.03)
Functional Limitations (%)						
Difficulty Remembering or Making Decisions	23.64	(0.78)	11.53	(0.30)	4.24	(0.04)
Difficulty Dressing or Bathing	3.90	(0.32)	4.58	(0.20)	1.80	(0.03)
Difficulty Walking or Climbing Stairs	18.39	(0.56)	12.84	(0.32)	5.04	(0.04)
Difficulty Doing Errands Alone	8.30	(0.50)	9.27	(0.24)	3.59	(0.04)
Difficulty Hearing	5.18	(0.34)	3.39	(0.19)	2.02	(0.04)
Difficulty Seeing	6.84	(0.35)	4.62	(0.18)	1.84	(0.03)
Any of the Above Difficulties	36.13	(0.98)	23.05	(0.40)	10.14	(0.06)
Total Sample Size	26,000		36,500		500,000	
Weighted Count	2,172,000		2,693,000		31,140,000	
Ages 18-64	22,000		18,500		290,000	
Ages 5-17	2,100		9,000		81,000	

Source: U.S. Census Bureau 2011-2018 American Community Survey 1-year data

Note: Table displays weighted means and shares of responses (including imputed responses) to questions among non-imputed sheltered homeless individuals and members of comparison groups residing in one of the 50 states or Washington, DC. Standard errors are computed using replicate weights. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

[1]"Primary school" includes those with up to and including 8 years of schooling. "Less than high school" includes those with more than 8 years of schooling, but no high school diploma or equivalent. "High school" includes those with a high school diploma or equivalent. "Some college" includes those with more than a high school education, but less than a 4 year college degree. Those with associates degrees would fall in this category. "College" includes those with a 4 year college degree or more.

Table 12a: Survey-Reported Economic Characteristics of Sheltered Homeless & Comparison Groups, 2006-2010 ACS

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Mean	**SE**	**Mean**	**SE**	**Mean**	**SE**
Employment & Program Participation Among Adults Ages 18-64						
Worked in Past Year (%)	49.40	(1.01)	49.70	(0.44)	80.19	(0.10)
Mean Weeks Worked in Past 12 Months (Cond. On +)	29.71	(0.38)	34.05	(0.21)	45.51	(0.03)
Mean Hours Worked Per Week (Cond. On +)	34.59	(0.28)	31.45	(0.17)	39.44	(0.02)
Benefit Receipt Rates and Amounts Among Adults Ages 18-64						
Earnings in Last 12 Months[2] (%)	49.34	(1.01)	49.37	(0.44)	79.85	(0.10)
75th Percentile of Earnings	6,520.00	(270.70)	7,085.00	(147.60)	51,550.00	(133.50)
Mean Earnings Amount ($)[2] (Cond. On +)	10,970.00	(312.50)	7,939.00	(66.94)	47,940.00	(131.40)
Retirement or Pension Income Receipt Rate (%)	2.27	(0.21)	2.68	(0.12)	4.52	(0.04)
Mean Retirement or Pension Inc. Amt. ($) (Cond. On +)	12,200.00	(1543.00)	5,814.00	(201.50)	22,780.00	(205.50)
Medicaid Receipt Rate (%)	43.89	(1.58)	38.44	(0.56)	9.74	(0.08)
Food Stamp Receipt Rate (%)	52.77	(0.94)	47.70	(0.45)	10.22	(0.09)
SSI Receipt Rate (%)	8.84	(0.38)	9.07	(0.23)	2.13	(0.03)
Mean SSI Amount ($) (Cond. On +)	8,388.00	(152.50)	7,481.00	(89.75)	8,663.00	(60.77)
Public Assistance Receipt Rate (%)	17.81	(0.71)	8.51	(0.27)	1.51	(0.03)
Mean Public Assistance Amount ($) (Cond. On +)	2,730.00	(114.30)	3,122.00	(77.27)	3,615.00	(67.66)
Received Any Transfer Income (%)	60.23	(0.84)	51.10	(0.46)	11.72	(0.09)
Received Any Retirement or Employment Income (%)	51.07	(0.96)	51.66	(0.43)	82.20	(0.09)
Other Income Receipt[3] (%)	11.32	(0.49)	13.97	(0.26)	7.59	(0.06)
Mean Other Income Amount ($) (Cond. On +)	6,347.00	(356.50)	5,040.00	(93.40)	9,601.00	(84.08)
Any Income Receipt (%)	78.25	(0.74)	76.71	(0.42)	89.71	(0.07)
75th Percentile of Total Income	12,330.00	(201.20)	10,320.00	(76.56)	56,430.00	(153.40)
Mean Total Income Amount ($) (Cond. On +)	10,580.00	(216.20)	8,395.00	(48.16)	47,170.00	(134.30)
Total Sample Size	12,000		37,000		547,000	
Weighted Count	935,100		3,006,000		36,970,000	
Ages 18-64	9,800		18,500		327,000	

Source: U.S. Census Bureau 2006-2010 American Community Survey 1-year data

Note: Table displays weighted means and shares of responses (including imputed responses) to questions among non-imputed sheltered homeless individuals and members of comparison groups residing in one of the 50 states or Washington, DC. Conditional shares and means are provided in indented row below overall receipt rates. Standard errors are computed using replicate weights. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

[1]Earnings includes wages and salaries and/or self employment income.

[2]Other income includes regular sources of income from sources excepting wages, salaries, bonuses, and tips from employment, self-employment income, interest, dividends, net rental income, royalty income, estate income, Social Security or Railroad Retirement income, Supplemental Security income, public assistance or welfare, and retirement, survivor, or disability pensions. This includes VA payments, unemployment compensation, and child support or alimony.

Table 12b: Survey-Reported Economic Characteristics of Sheltered Homeless & Comparison Groups, 2011-2018 ACS

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Mean	**SE**	**Mean**	**SE**	**Mean**	**SE**
Employment & Program Participation Among Adults Ages 18-64						
Worked in Past Year (%)	39.40	(0.93)	45.54	(0.51)	78.44	(0.09)
Mean Weeks Worked in Past 12 Months (Cond. On +)	29.56	(0.47)	35.29	(0.25)	45.77	(0.04)
Mean Hours Worked Per Week (Cond. On +)	32.97	(0.32)	30.68	(0.18)	39.13	(0.03)
Benefit Receipt Rates and Amounts Among Adults Ages 18-64						
Earnings in Last 12 Months[2] (%)	39.36	(0.92)	45.33	(0.51)	78.18	(0.10)
75th Percentile of Earnings	4,193.00	(180.00)	6,854.00	(175.10)	51,920.00	(120.10)
Mean Earnings Amount ($)[2] (Cond. On +)	14,200.00	(1501.00)	8,325.00	(73.77)	48,850.00	(166.40)
Retirement or Pension Income Receipt Rate (%)	1.89	(0.21)	2.49	(0.13)	4.12	(0.04)
Mean Retirement or Pension Inc. Amt. ($) (Cond. On +)	8,706.00	(638.40)	6,308.00	(272.80)	23,130.00	(253.50)
Medicaid Receipt Rate (%)	61.94	(0.99)	46.09	(0.40)	13.22	(0.08)
Food Stamp Receipt Rate (%)	64.80	(0.84)	53.94	(0.43)	14.44	(0.09)
SSI Receipt Rate (%)	12.03	(0.55)	10.97	(0.30)	2.79	(0.04)
Mean SSI Amount ($) (Cond. On +)	8,759.00	(119.10)	7,982.00	(70.02)	9,076.00	(64.53)
Public Assistance Receipt Rate (%)	20.11	(0.89)	7.36	(0.21)	1.57	(0.03)
Mean Public Assistance Amount ($) (Cond. On +)	3,543.00	(230.20)	2,910.00	(88.26)	3,057.00	(65.18)
Received Any Transfer Income (%)	71.15	(0.76)	57.40	(0.44)	16.11	(0.10)
Received Any Retirement or Employment Income (%)	40.94	(0.93)	47.50	(0.51)	80.41	(0.09)
Other Income Receipt[3] (%)	6.97	(0.38)	9.51	(0.25)	5.98	(0.06)
Mean Other Income Amount ($) (Cond. On +)	6,684.00	(735.70)	4,447.00	(131.40)	9,810.00	(138.40)
Any Income Receipt (%)	72.64	(0.73)	72.95	(0.41)	88.33	(0.08)
75th Percentile of Total Income	10,330.00	(109.50)	10,430.00	(58.54)	54,510.00	(136.10)
Mean Total Income Amount ($) (Cond. On +)	12,010.00	(875.30)	8,539.00	(53.67)	47,400.00	(156.60)
Total Sample Size	26,000		36,500		500,000	
Weighted Count	2,172,000		2,693,000		31,140,000	
Ages 18-64	22,000		18,500		290,000	

Source: U.S. Census Bureau 2011-2018 American Community Survey 1-year data

Note: Table displays weighted means and shares of responses (including imputed responses) to questions among non-imputed sheltered homeless individuals and members of comparison groups residing in one of the 50 states or Washington, DC. Conditional shares and means are provided in indented row below overall receipt rates. Standard errors are computed using replicate weights. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

[1]Earnings includes wages and salaries and/or self employment income.

[2]Other income includes regular sources of income from sources excepting wages, salaries, bonuses, and tips from employment, self-employment income, interest, dividends, net rental income, royalty income, estate income, Social Security or Railroad Retirement income, Supplemental Security income, public assistance or welfare, and retirement, survivor, or disability pensions. This includes VA payments, unemployment compensation, and child support or alimony.

Table 13: Income & Benefit Receipt among Sheltered Homeless Ages 18-64 in 2010 Decennial Census, 2003-2016														
	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Share Filing 1040 with Positive Total Money Income[1]	0.396	0.392	0.359	0.366	0.438	0.372	0.335	0.375	0.389	0.349	0.344	0.327	0.327	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Median Total Money Income (Cond. On +)	$18,257	$17,708	$12,370	$12,415	$11,217	$10,991	$10,651	$12,015	$14,025	$14,241	$14,546	$15,165	$16,001	
	($108)	($103)	($85)	($84)	($56)	($62)	($54)	($62)	($71)	($69)	($69)	($61)	($65)	
Median Wage & Salary Income (Cond. On +)	$16,414	$16,180	$10,022	$9,842	$7,338	$7,767	$6,180	$8,068	$9,745	$10,365	$10,766	$11,544	$12,690	
	($114)	($109)	($92)	($91)	($71)	($74)	($70)	($61)	($82)	($82)	($87)	($93)	($99)	
Share Filing 1040 with Self-Employment Income	0.040	0.042	0.042	0.046	0.051	0.052	0.055	0.057	0.062	0.061	0.061	0.060	0.057	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Median Self Employment Income (Cond. On +)	$9,951	$10,026	$9,615	$10,145	$9,883	$10,031	$10,796	$10,813	$10,875	$10,855	$10,894	$10,885	$10,940	
	($134)	($136)	($132)	($99)	($113)	($106)	($69)	($67)	($53)	($48)	($51)	($57)	($72)	
Share Filing 1040 with Social Security Income	0.005	0.005	0.006	0.010	0.056	0.017	0.015	0.018	0.022	0.023	0.023	0.025	0.028	
	(Z)	(Z)	(Z)	(Z)	(0.001)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(0.001)	
Median Social Security Income (Cond. On +)	$13,202	$13,432	$12,414	$11,224	$10,117	$10,839	$11,728	$12,523	$12,776	$12,446	$11,637	$11,890	$11,925	
	($416)	($412)	($380)	($259)	($62)	($174)	($237)	($215)	($128)	($149)	($151)	($149)	($128)	
Share Receiving W2			0.567	0.577	0.576	0.548	0.462	0.457	0.432	0.423	0.421	0.426	0.431	0.435
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
Median W2 Wages & Tips (Cond. On +)			$8,250	$8,015	$7,724	$6,472	$4,542	$5,248	$7,344	$8,559	$9,517	$10,602	$12,071	$12,790
			($65)	($63)	($59)	($53)	($43)	($47)	($68)	($76)	($84)	($87)	($95)	($97)
Mean Number of W2s Received (Cond. On +)			2.054	2.089	2.091	1.939	1.650	1.651	1.623	1.644	1.688	1.752	1.860	1.896
			(0.006)	(0.006)	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.007)
Share Receiving 1099R	0.036	0.037	0.035	0.038	0.040	0.040	0.038	0.030	0.030	0.034	0.036	0.040	0.043	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Share Receiving Housing Benefits		0.101	0.102	0.099	0.097	0.093	0.089	0.111	0.129	0.146	0.161	0.168	0.184	0.190
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Mean Housing Benefits Cond. On Receipt		$4,054	$5,680	$5,333	$5,101	$4,687	$4,273	$3,484	$4,291	$4,849	$5,318	$4,837	$4,168	$2,665
		($39)	($48)	($51)	($73)	($48)	($48)	($36)	($37)	($35)	($35)	($35)	($34)	($25)
Share Receiving VA Benefits					0.017	0.019	0.025	0.028	0.030	0.032	0.034	0.035		
					(Z)	(Z)	(Z)	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Receiving SNAP[2]				0.361	0.482	0.552	0.707	0.809	0.753	0.692	0.656	0.622	0.588	0.559
				(0.008)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Mean SNAP Amount (Cond. On +)				$1,873	$2,190	$2,229	$2,686	$2,838	$2,800	$2,820	$2,755	$2,500	$2,553	$2,538
				($49)	($17)	($16)	($15)	($13)	($14)	($15)	($15)	($14)	($15)	($16)
Mean Months of SNAP (Cond. On +)				7.158	8.201	8.367	8.589	9.720	9.572	9.628	9.800	9.722	9.822	9.625
				(0.097)	(0.033)	(0.032)	(0.025)	(0.019)	(0.022)	(0.023)	(0.023)	(0.025)	(0.025)	(0.027)
Share Receiving Medicare Part A or B				0.055	0.059	0.065	0.070	0.088	0.115	0.141	0.165	0.186	0.200	0.213
				(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Receiving OASI in Medicare								0.003	0.008	0.015	0.026	0.038	0.055	0.068
								(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Receiving DI in Medicare				0.054	0.059	0.064	0.069	0.084	0.105	0.125	0.139	0.147	0.143	0.144
				(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Enrolled in Medicaid					0.363	0.379	0.424	0.489	0.508	0.509	0.506	0.561	0.484	
					(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
Share Receiving Any Benefits[23]					0.674	0.721	0.814	0.888	0.864	0.839	0.822	0.816	0.791	
					(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
Share Receiving Any Earnings[4]			0.596	0.604	0.602	0.583	0.514	0.528	0.507	0.477	0.474	0.464	0.464	
			(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
Share Receiving Any Benefits or Earnings[2]					0.883	0.894	0.924	0.963	0.955	0.946	0.943	0.941	0.933	
					(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	

Table 13: Income & Benefit Receipt among Sheltered Homeless Ages 18-64 in 2010 Decennial Census, 2003-2016 (continued)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Mean Earnings			$8,340	$8,369	$7,894	$7,094	$5,673	$6,877	$7,648	$7,184	$7,356	$7,419	$8,169	
			($54)	($91)	($52)	($62)	($49)	($84)	($79)	($60)	($59)	($63)	($118)	
SD Earnings			$18,140	$30,250	$17,228	$20,621	$16,423	$28,173	$26,439	$19,883	$19,356	$20,660	$38,394	
50th Percentile Earnings			$898	$1,123	$1,176	$749	$1	$170	$1	$0	$0	$0	$0	
			($31)	($33)	($32)	($25)	($4)	($15)	($10)	(Z)	(Z)	(Z)	(Z)	
75th Percentile Earnings			$11,040	$11,224	$10,757	$9,269	$6,301	$8,424	$10,533	$10,115	$10,417	$10,560	$11,348	
			($82)	($79)	($70)	($70)	($71)	($70)	($64)	($75)	($74)	($75)	($85)	
Mean Pre-Tax Income			$8,786	$8,891	$8,991	$7,759	$6,410	$7,791	$8,723	$8,060	$8,103	$8,186	$8,885	
			($63)	($95)	($66)	($68)	($57)	($81)	($83)	($65)	($69)	($78)	($101)	
SD Pre-Tax Income			$20,922	$31,571	$21,911	$22,844	$18,908	$26,999	$27,491	$21,624	$22,828	$25,370	$32,914	
50th Percentile Pre-Tax Income			$1,249	$1,490	$2,763	$1,178	$182	$559	$432	$1	$0	$0	$0	
			($34)	($38)	($49)	($31)	($14)	($26)	($31)	($8)	($5)	(Z)	($1)	
75th Percentile Pre-Tax Income			$11,863	$12,106	$12,451	$10,407	$7,871	$10,190	$12,064	$11,339	$11,393	$11,544	$12,763	
			($87)	($84)	($67)	($66)	($73)	($61)	($80)	($71)	($75)	($84)	($99)	
Mean Pre-Tax Income + In-Kind				$9,276	$9,301	$8,736	$8,762	$10,412	$11,012	$10,638	$10,587	$10,477	$11,086	
				($225)	($137)	($135)	($135)	($179)	($170)	($160)	($173)	($214)	($215)	
SD Pre-Tax Income + In-Kind				$14,343	$21,603	$21,293	$22,986	$30,454	$28,839	$27,030	$29,209	$35,794	$35,816	
50th Percentile Pre-Tax Income + In-Kind				$4,397	$3,810	$3,207	$3,300	$4,616	$4,694	$4,122	$3,915	$3,349	$3,500	
				($185)	($76)	($66)	($56)	($67)	($88)	($83)	($85)	($86)	($93)	
75th Percentile Pre-Tax Income + In-Kind				$13,640	$12,735	$11,992	$11,716	$14,262	$15,669	$15,477	$15,544	$15,354	$16,472	
				($387)	($120)	($137)	($126)	($109)	($119)	($119)	($119)	($128)	($147)	
Share in SNAP State				0.036	0.217	0.217	0.253	0.253	0.253	0.254	0.254	0.254	0.255	0.256
Share in Medicaid State			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.968	0.801	
Sample Size	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	109,000	108,000	107,000	105,000	103,000
Weighted Count	159,500	159,500	159,500	159,500	159,500	159,500	159,500	159,500	158,400	156,700	154,800	152,800	150,700	148,300

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016)

Note: Sample includes the approximately 111,000 PIKed adults enumerated in emergency and transitional shelters in the 2010 Decennial Census who have a non-missing year of birth between 1945 and 1992 (inclusive) in the 2019 Numident. (Z) indicates a standard error that rounds to zero (but is not equal to zero). Table displays the weighted means, percentiles, and shares for individuals who link to income and benefits datasets from 2003-2016. For disclosure purposes, percentiles are calculated as a weighted mean of the six observations above and the six observations below the weighted percentile. Sample sizes are rounded to comply with Census Bureau requirements. Dollars are expressed as Chained CPI-U-adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.

[1] Total money income includes wage and salary, total interest (taxable and tax-exempt), taxable dividends, alimony received, business income (+/-), total pensions and annuities, net rents royalties, estates and trusts (+/-), farm income (+/-), unemployment compensation, and total social security benefits.

[2] Because our SNAP data cover only certain states and years, the sample underlying year *Y* of SNAP receipt (or the two outcomes that use SNAP receipt as an input, namely "share receiving any benefits" and "share receiving any earnings") is composed only of individuals who in 2010 resided in a state for which we have SNAP data in year *Y*. For example, because we lack 2007 SNAP data from Illinois, 2007 SNAP receipt is calculated as a share of individuals who lived in Indiana, New York, New Jersey, or Tennessee - but not Illinois - at the time of the 2010 Census.

[3] Any benefits includes SNAP, HUD, VA, Medicare, and Medicaid benefits.

[4] This row reports the share of individuals with positive estimated earnings across IRS 1040 and W2 datasets. Earnings is the sum of 1040 wage and salary income, estimated non-negative 1040 self-employment income (when a self employment schedule was filed), and W2 deferred compensation less any W2 wages and tips associated with a cofiler for individuals filing a 1040. Self-employment income is equal to total money income less wage and salary income, dividend income, rental income, social security, and interest income. For individuals without a 1040, earnings is equal to wages and tips across W2s.

[5] For individuals with a 1040, pre-tax income is equal to the sum of total money income and VA SCD compensation, measured as ¾ of the annual SCD amount for the fiscal year corresponding to the calendar year and ¼ of the annual SCD amount of the fiscal year corresponding to the year after the calendar year specified. For individuals without a 1040, pre-tax income is equal to the sum of wages and tips and deferred compensation in W2s, VA SCD compensation, and IRA and employer sponsored retirement distributions across 1099-Rs. We drop a few observations with implausibly high pre-tax income.

[6] Pre-tax income is measured as above. In-kind transfers include benefits from HUD and SNAP benefits. SNAP benefit amounts are estimated by multiplying the months of SNAP receipt in a year by the average monthly SNAP benefit received in that year.

Table 14: Income & Benefit Receipt among Unsheltered Homeless Ages 18-64 in 2010 Decennial Census, 2003-2016 (Food Vans and Soup Kitchens)														
	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Share Filing 1040 with Positive Total Money Income[1]	0.361	0.354	0.322	0.324	0.433	0.327	0.295	0.301	0.311	0.272	0.266	0.251	0.250	
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
Median Total Money Income (Cond. On +)	$18,797	$18,710	$13,237	$13,361	$11,331	$12,448	$12,632	$14,341	$15,066	$15,315	$15,512	$16,202	$17,562	
	($197)	($255)	($179)	($177)	($117)	($164)	($202)	($143)	($186)	($158)	($146)	($149)	($157)	
Median Wage & Salary Income (Cond. On +)	$16,849	$16,668	$10,431	$10,175	$5,232	$8,185	$7,151	$8,385	$9,205	$10,267	$10,713	$11,324	$12,522	
	($215)	($260)	($187)	($172)	($161)	($152)	($199)	($132)	($191)	($176)	($158)	($184)	($194)	
Share Filing 1040 with Self-Employment Income	0.035	0.036	0.038	0.038	0.042	0.043	0.047	0.043	0.044	0.042	0.043	0.041	0.039	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Median Self Employment Income (Cond. On +)	$8,965	$8,925	$9,172	$9,383	$9,347	$9,582	$10,115	$10,553	$10,185	$9,975	$10,122	$9,849	$10,004	
	($263)	($278)	($232)	($251)	($242)	($228)	($536)	($197)	($205)	($219)	($231)	($227)	($247)	
Share Filing 1040 with Social Security Income	0.008	0.009	0.010	0.018	0.104	0.030	0.029	0.029	0.034	0.034	0.035	0.034	0.036	
	(Z)	(Z)	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Median Social Security Income (Cond. On +)	$12,401	$12,854	$11,969	$11,669	$10,116	$11,138	$12,289	$13,584	$13,028	$13,091	$12,656	$13,177	$13,518	
	($471)	($481)	($424)	($311)	($77)	($234)	($295)	($206)	($174)	($226)	($256)	($255)	($286)	
Share Receiving W2			0.515	0.513	0.501	0.465	0.376	0.333	0.318	0.321	0.323	0.323	0.330	0.332
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Median W2 Wages & Tips (Cond. On +)			$7,929	$7,792	$7,386	$6,580	$5,208	$4,913	$6,904	$8,176	$9,356	$10,354	$11,568	$12,105
			($144)	($151)	($141)	($115)	($112)	($107)	($134)	($161)	($189)	($180)	($177)	($186)
Mean Number of W2s Received (Cond. On +)			1.978	2.008	1.989	1.850	1.586	1.544	1.543	1.560	1.609	1.667	1.759	1.780
			(0.008)	(0.009)	(0.009)	(0.008)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.009)	(0.010)
Share Receiving 1099R	0.035	0.036	0.033	0.036	0.037	0.041	0.041	0.037	0.036	0.039	0.040	0.044	0.046	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Share Receiving Housing Benefits		0.090	0.093	0.092	0.094	0.097	0.097	0.104	0.110	0.119	0.128	0.134	0.146	0.149
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Mean Housing Benefits Cond. On Receipt		$3,490	$5,068	$4,956	$4,927	$4,851	$5,060	$4,967	$4,747	$4,901	$5,159	$4,642	$4,060	$2,508
		($49)	($57)	($56)	($56)	($55)	($57)	($54)	($51)	($49)	($47)	($48)	($48)	($35)
Share Receiving VA Benefits					0.017	0.018	0.021	0.022	0.024	0.025	0.026	0.027		
					(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		
Share Receiving SNAP[2]				0.408	0.439	0.496	0.581	0.647	0.624	0.598	0.584	0.567	0.548	0.521
				(0.010)	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Mean SNAP Amount (Cond. On +)				$1,717	$1,665	$1,714	$2,240	$2,340	$2,274	$2,231	$2,227	$2,019	$2,021	$1,908
				($56)	($24)	($23)	($24)	($21)	($21)	($20)	($21)	($20)	($21)	($21)
Mean Months of SNAP (Cond. On +)				8.014	8.351	8.443	9.047	9.553	9.664	9.852	10.050	10.080	10.090	9.700
				(0.124)	(0.062)	(0.060)	(0.048)	(0.040)	(0.042)	(0.043)	(0.042)	(0.043)	(0.044)	(0.048)
Share Receiving Medicare Part A or B				0.104	0.112	0.120	0.127	0.148	0.170	0.192	0.213	0.233	0.246	0.261
				(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Share Receiving OASI in Medicare								0.005	0.013	0.023	0.036	0.051	0.075	0.092
								(Z)	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Receiving DI in Medicare				0.103	0.111	0.120	0.126	0.142	0.157	0.168	0.177	0.181	0.170	0.169
				(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Share Enrolled in Medicaid					0.358	0.373	0.397	0.435	0.460	0.473	0.474	0.546	0.462	
					(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
Share Receiving Any Benefits[23]					0.624	0.672	0.728	0.781	0.778	0.773	0.776	0.784	0.767	
					(0.005)	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	
Share Receiving Any Earnings[4]			0.545	0.539	0.529	0.501	0.430	0.404	0.393	0.366	0.368	0.353	0.354	
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
Share Receiving Any Benefits or Earnings[2]					0.871	0.881	0.890	0.916	0.917	0.913	0.919	0.921	0.914	
					(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	

Table 14: Income & Benefit Receipt among Unsheltered Homeless Ages 18-64 in 2010 Decennial Census, 2003-2016 (Food Vans and Soup Kitchens) (continued)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Mean Earnings			$8,186	$8,049	$7,849	$7,085	$5,953	$6,332	$6,700	$6,406	$6,494	$6,467	$6,934	
			($129)	($111)	($118)	($100)	($81)	($104)	($93)	($109)	($89)	($89)	($96)	
SD Earnings			$31,627	$27,158	$28,816	$24,508	$19,779	$25,441	$22,769	$26,428	$21,458	$21,351	$22,697	
50th Percentile Earnings			$139	$112	$33	$1	$0	$0	$0	$0	$0	$0	$0	
			($28)	($25)	($19)	($2)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	
75th Percentile Earnings			$9,235	$9,085	$8,505	$7,206	$4,360	$4,537	$5,690	$4,165	$4,630	$4,100	$4,682	
			($188)	($182)	($191)	($176)	($172)	($199)	($214)	($218)	($233)	($235)	($263)	
Mean Pre-Tax Income			$8,887	$8,925	$9,765	$8,147	$7,118	$7,885	$8,188	$7,637	$7,705	$7,711	$8,221	
			($154)	($136)	($142)	($126)	($101)	($155)	($102)	($125)	($115)	($116)	($116)	
SD Pre-Tax Income			$37,740	$33,353	$34,764	$30,903	$24,658	$38,054	$24,829	$30,254	$27,659	$27,662	$27,402	
50th Percentile Pre-Tax Income			$372	$377	$2,092	$123	$0	$0	$0	$0	$0	$0	$0	
			($42)	($43)	($101)	($22)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	
75th Percentile Pre-Tax Income			$10,306	$10,369	$11,943	$9,224	$7,093	$7,625	$8,605	$7,022	$7,239	$6,794	$7,690	
			($198)	($191)	($155)	($182)	($202)	($180)	($208)	($248)	($257)	($272)	($306)	
Mean Pre-Tax Income + In-Kind				$10,099	$11,053	$10,004	$9,479	$10,381	$10,553	$10,386	$10,512	$9,850	$10,594	
				($661)	($384)	($310)	($238)	($389)	($287)	($446)	($408)	($293)	($305)	
SD Pre-Tax Income + In-Kind				$31,644	$34,480	$27,893	$23,295	$38,076	$27,973	$43,205	$39,264	$28,007	$28,953	
50th Percentile Pre-Tax Income + In-Kind				$2,222	$3,251	$2,264	$2,650	$2,710	$2,630	$2,579	$2,525	$2,386	$2,439	
				($146)	($203)	($46)	($21)	($10)	($7)	($13)	($10)	($17)	($18)	
75th Percentile Pre-Tax Income + In-Kind				$11,094	$13,220	$11,775	$10,656	$11,473	$11,987	$11,145	$11,202	$10,498	$11,474	
				($510)	($393)	($530)	($463)	($458)	($469)	($488)	($499)	($584)	($594)	
Share in SNAP State				0.035	0.147	0.147	0.172	0.172	0.173	0.173	0.173	0.173	0.173	0.173
Share in Medicaid State			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.973	0.831	
Sample Size	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	59,500	59,000	58,000	57,000	56,000	55,000
Weighted Count	143,200	143,200	143,200	143,200	143,200	143,200	143,200	143,200	142,100	140,500	138,600	136,400	134,200	131,900

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016).

Note: Sample includes the approximately 60,000 PIKed adults enumerated at soup kitchens and regularly scheduled mobile food vans in the 2010 Decennial Census who have a non-missing year of birth between 1945 and 1992 (inclusive) in the 2019 Numident. (Z) indicates a standard error that rounds to zero (but is not equal to zero). Table displays the weighted means, percentiles, and shares for individuals who link to income and benefits datasets from 2003-2016. For disclosure purposes, percentiles are calculated as a weighted mean of the six observations above and the six observations below the weighted percentile. Sample sizes are rounded to comply with Census Bureau requirements. Dollars are expressed as Chained CPI-U-adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.

[1] Total money income includes wage and salary, total interest (taxable and tax-exempt), taxable dividends, alimony received, business income (+/-), total pensions and annuities, net rents royalties, estates and trusts (+/-), farm income (+/-), unemployment compensation, and total social security benefits.

[2] Because our SNAP data cover only certain states and years, the sample underlying year *Y* of SNAP receipt (or the two outcomes that use SNAP receipt as an input, namely "share receiving any benefits" and "share receiving any earnings") is composed only of individuals who in 2010 resided in a state for which we have SNAP data in year *Y*. For example, because we lack 2007 SNAP data from Illinois, 2007 SNAP receipt is calculated as a share of individuals who lived in Indiana, New York, New Jersey, or Tennessee - but not Illinois - at the time of the 2010 Census.

[3] Any benefits includes SNAP, HUD, VA, Medicare, and Medicaid benefits.

[4] This row reports the share of individuals with positive estimated earnings across IRS 1040 and W2 datasets. Earnings is the sum of 1040 wage and salary income, estimated non-negative 1040 self-employment income (when a self employment schedule was filed), and W2 deferred compensation less any W2 wages and tips associated with a cofiler for individuals filing a 1040. Self-employment income is equal to total money income less wage and salary income, dividend income, rental income, social security, and interest income. For individuals without a 1040, earnings is equal to wages and tips across W2s.

[5] For individuals with a 1040, pre-tax income is equal to the sum of total money income and VA SCD compensation, measured as ¾ of the annual SCD amount for the fiscal year corresponding to the calendar year and ¼ of the annual SCD amount of the fiscal year corresponding to the year after the calendar year specified. For individuals without a 1040, pre-tax income is equal to the sum of wages and tips and deferred compensation in W2s, VA SCD compensation, and IRA and employer sponsored retirement distributions across 1099-Rs. We drop a few observations with implausibly high pre-tax income.

[6] Pre-tax income is measured as above. In-kind transfers include benefits from HUD and SNAP benefits. SNAP benefit amounts are estimated by multiplying the months of SNAP receipt in a year by the average monthly SNAP benefit received in that year.

Table 15: Income & Benefit Receipt Among ACS Adults Ages 18-64 in Single-Adult Households in Poverty, 2003-2016

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share Filing 1040 with Positive Total Money Income[1]	0.537	0.547	0.508	0.530	0.620	0.554	0.531	0.520	0.546	0.545	0.549	0.553	0.557	
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	
Median Total Money Income (Cond. On +)	$20,008	$19,403	$13,162	$13,288	$12,002	$12,539	$11,819	$13,381	$14,573	$15,799	$16,659	$17,604	$19,092	
	($91)	($92)	($75)	($73)	($54)	($60)	($50)	($55)	($49)	($54)	($56)	($62)	($76)	
Median Wage & Salary Income (Cond. On +)	$17,441	$17,002	$9,418	$9,171	$6,688	$7,929	$6,251	$7,808	$9,821	$11,500	$12,635	$13,784	$15,299	
	($101)	($101)	($85)	($82)	($72)	($68)	($66)	($64)	($69)	($73)	($82)	($84)	($87)	
Share Filing 1040 with Self-Employment Income			0.090	0.097	0.103	0.108	0.114	0.110	0.115	0.114	0.115	0.118	0.119	
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Median Self Employment Income (Cond. On +)			$9,715	$9,468	$9,333	$9,177	$9,853	$10,168	$10,247	$10,254	$10,195	$10,108	$10,327	
			($98)	($101)	($112)	($104)	($82)	($70)	($64)	($71)	($76)	($80)	($82)	
Share Filing 1040 with Social Security Income	0.008	0.009	0.009	0.018	0.082	0.030	0.030	0.029	0.033	0.035	0.036	0.039	0.042	
	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(0.001)	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Median Social Security Income (Cond. On +)	$12,831	$12,995	$13,037	$11,580	$9,904	$10,755	$11,682	$11,676	$11,998	$12,349	$12,433	$12,622	$13,015	
	($342)	($329)	($318)	($190)	($50)	($119)	($137)	($130)	($134)	($133)	($129)	($121)	($127)	
Share Receiving W2			0.525	0.545	0.558	0.542	0.484	0.480	0.501	0.516	0.527	0.536	0.546	0.547
			(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Median W2 Wages & Tips (Cond. On +)			$10,887	$10,620	$10,349	$9,604	$8,144	$8,682	$10,918	$12,790	$14,397	$15,888	$17,877	$19,445
			($81)	($76)	($75)	($70)	($60)	($61)	($71)	($76)	($84)	($89)	($95)	($99)
Mean Number of W2s Received (Cond. On +)			1.722	1.751	1.748	1.659	1.498	1.531	1.556	1.566	1.604	1.645	1.702	1.705
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)	(0.005)	(0.005)
Share Receiving 1099R	0.036	0.038	0.038	0.044	0.050	0.056	0.062	0.058	0.055	0.059	0.060	0.066	0.071	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Share Receiving Housing Benefits		0.146	0.151	0.155	0.164	0.172	0.182	0.190	0.190	0.182	0.179	0.174	0.176	0.176
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Mean Housing Benefits Cond. On Receipt		$4,249	$6,212	$6,126	$6,295	$6,527	$6,930	$7,036	$6,424	$6,395	$6,546	$5,868	$5,054	$2,847
		($37)	($51)	($46)	($43)	($43)	($44)	($41)	($38)	($45)	($39)	($38)	($45)	($31)
Share Receiving VA Benefits					0.005	0.006	0.007	0.007	0.008	0.008	0.009	0.009	0.010	0.010
					(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Share Receiving SNAP[2]				0.439	0.437	0.474	0.536	0.590	0.587	0.556	0.531	0.510	0.480	0.453
				(0.009)	(0.006)	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Mean SNAP Amount (Cond. On +)				$3,010	$2,997	$3,066	$3,956	$4,039	$3,777	$3,593	$3,440	$3,093	$3,050	$2,825
				($53)	($36)	($34)	($36)	($37)	($31)	($30)	($28)	($24)	($27)	($29)
Mean Months of SNAP (Cond. On +)				9.031	9.312	9.409	9.714	10.020	9.976	10.010	10.170	10.030	9.999	9.565
				(0.100)	(0.057)	(0.050)	(0.036)	(0.034)	(0.032)	(0.034)	(0.030)	(0.033)	(0.035)	(0.041)
Share Receiving Medicare Part A or B				0.062	0.069	0.076	0.082	0.095	0.112	0.129	0.145	0.158	0.167	0.178
				(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Receiving OASI in Medicare								0.000	0.000	0.000	0.000	0.001	0.001	0.071
								(Z)	(Z)	(Z)	(Z)	(0.001)	(0.001)	(0.001)
Share Receiving DI in Medicare				0.062	0.068	0.075	0.081	0.094	0.105	0.112	0.117	0.118	0.107	0.106
				(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Enrolled in Medicaid					0.428	0.437	0.466	0.484	0.483	0.462	0.448	0.458	0.344	
					(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
Share Receiving Any Benefits[2][3]					0.627	0.653	0.686	0.725	0.733	0.720	0.707	0.708	0.683	
					(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.003)	
Share Receiving Any Earnings[4]			0.595	0.613	0.626	0.615	0.573	0.567	0.590	0.597	0.603	0.606	0.612	
			(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	
Share Receiving Any Benefits or Earnings[2]					0.886	0.893	0.891	0.912	0.924	0.929	0.933	0.938	0.935	
					(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	

Table 15: Income & Benefit Receipt Among ACS Adults Ages 18-64 in Single-Adult Households in Poverty, 2003-2016 (continued)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Mean Earnings			$10,087	$10,310	$10,222	$9,299	$7,626	$7,918	$9,501	$10,739	$11,849	$12,905	$14,429	
			($102)	($88)	($83)	($86)	($65)	($52)	($54)	($73)	($69)	($90)	($115)	
SD Earnings			$33,560	$31,268	$31,394	$27,073	$24,337	$19,783	$19,021	$23,064	$24,601	$30,279	$34,863	
50th Percentile Earnings			$1,250	$1,731	$2,139	$1,718	$461	$846	$1,775	$2,403	$3,093	$3,605	$4,518	
			($46)	($51)	($57)	($55)	($40)	($50)	($73)	($86)	($98)	($112)	($123)	
75th Percentile Earnings			$13,911	$14,149	$14,047	$12,904	$10,703	$11,473	$13,970	$15,530	$16,744	$17,981	$19,983	
			($90)	($82)	($82)	($73)	($53)	($64)	($60)	($66)	($74)	($84)	($101)	
Mean Pre-Tax Income			$11,134	$11,308	$12,262	$11,032	$9,477	$9,684	$11,198	$12,327	$13,506	$14,590	$16,179	
			($128)	($350)	($205)	($144)	($188)	($176)	($97)	($152)	($110)	($119)	($137)	
SD Pre-Tax Income			$50,079	$91,743	$61,806	$49,802	$66,059	$47,629	$36,728	$40,637	$37,554	$42,325	$45,519	
50th Percentile Pre-Tax Income			$2,302	$3,078	$6,354	$3,741	$2,643	$3,201	$4,534	$5,243	$6,122	$6,887	$8,161	
			($53)	($60)	($67)	($64)	($63)	($73)	($86)	($96)	($100)	($108)	($110)	
75th Percentile Pre-Tax Income			$15,171	$15,664	$16,117	$14,876	$13,113	$14,307	$15,997	$17,497	$18,740	$20,085	$22,246	
			($81)	($77)	($72)	($63)	($62)	($59)	($60)	($65)	($75)	($90)	($103)	
Mean Pre-Tax Income + In-Kind				$12,209	$13,622	$12,927	$12,231	$12,624	$13,773	$14,606	$16,128	$16,694	$17,981	
				($354)	($313)	($544)	($349)	($272)	($291)	($278)	($427)	($408)	($373)	
SD Pre-Tax Income + In-Kind				$26,018	$36,679	$77,650	$48,193	$40,346	$41,954	$38,111	$57,006	$55,251	$54,248	
50th Percentile Pre-Tax Income + In-Kind				$5,701	$7,790	$5,956	$6,610	$7,127	$7,778	$8,428	$8,617	$8,892	$10,160	
				($201)	($148)	($123)	($102)	($109)	($139)	($178)	($178)	($205)	($225)	
75th Percentile Pre-Tax Income + In-Kind				$16,343	$17,134	$16,232	$15,954	$17,186	$18,671	$19,926	$21,182	$21,874	$23,902	
				($381)	($204)	($181)	($163)	($149)	($158)	($171)	($169)	($190)	($206)	
Share in SNAP State				0.046	0.129	0.129	0.169	0.169	0.169	0.168	0.168	0.168	0.168	0.168
Share in Medicaid State			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.972	0.765	
Sample Size	153,000	153,000	153,000	153,000	153,000	153,000	153,000	153,000	153,000	151,000	150,000	149,000	148,000	147,000
Weighted Count	14,140,000	14,140,000	14,140,000	14,140,000	14,140,000	14,140,000	14,140,000	14,140,000	14,090,000	14,000,000	13,920,000	13,830,000	13,720,000	13,620,000

Sources: U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2006-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2004-2015 Medicaid dataset, 2007-2016 SNAP datasets for Illinois (2009-2016), Indiana, New York, New Jersey, and Tennessee.

Note: Sample includes the approximately 153,000 individuals in single-adult households were identified as living in poverty in the 2010 ACS who have a non-missing year of birth between 1945 and 1992 (inclusive) in the 2019 Numident. (Z) indicates a standard error that rounds to zero (but is not equal to zero). Table displays the weighted means, percentiles, and shares for individuals who link to income and benefits datasets from 2003-2016. Poverty status is attributed using survey-reported characteristics in the ACS. For disclosure purposes, percentiles are calculated as a weighted mean of the six observations above and the six observations below the weighted percentile. Sample sizes are rounded to comply with Census Bureau requirements. Dollars are expressed as Chained CPI-U-adjusted 2018 dollars. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.

[1] Total money income includes wage and salary, total interest (taxable and tax-exempt), taxable dividends, alimony received, business income (+/-), total pensions and annuities, net rents royalties, estates and trusts (+/-), farm income (+/-), unemployment compensation, and total social security benefits.

[2] Because our SNAP data cover only certain states and years, the sample underlying year Y of SNAP receipt (or the two outcomes that use SNAP receipt as an input, namely "share receiving any benefits" and "share receiving any earnings") is composed only of individuals who in 2010 resided in a state for which we have SNAP data in year Y. For example, because we lack 2007 SNAP data from Illinois, 2007 SNAP receipt is calculated as a share of individuals who lived in Indiana, New York, New Jersey, or Tennessee - but not Illinois - at the time of the 2010 Census.

[3] Any benefits includes SNAP, HUD, VA, Medicare, and Medicaid benefits.

[4] This row reports the share of individuals with positive estimated earnings across IRS 1040 and W2 datasets. Earnings is the sum of 1040 wage and salary income, estimated non-negative 1040 self-employment income (when a self employment schedule was filed), and W2 deferred compensation less any W2 wages and tips associated with a cofiler for individuals filing a 1040. Self-employment income is equal to total money income less wage and salary income, dividend income, rental income, social security, and interest income. For individuals without a 1040, earnings is equal to wages and tips across W2s.

[5] For individuals with a 1040, pre-tax income is equal to the sum of total money income and VA SCD compensation, measured as ¾ of the annual SCD amount for the fiscal year corresponding to the calendar year and ¼ of the annual SCD amount of the fiscal year corresponding to the year after the calendar year specified. For individuals without a 1040, pre-tax income is equal to the sum of wages and tips and deferred compensation in W2s, VA SCD compensation, and IRA and employer sponsored retirement distributions across 1099-Rs. We drop a few observations with implausibly high pre-tax income.

[6] Pre-tax income is measured as above. In-kind transfers include benefits from HUD and SNAP benefits. SNAP benefit amounts are estimated by multiplying the months of SNAP receipt in a year by the average monthly SNAP benefit received in that year.

Table 16a: Income & Benefit Receipt Among Sheltered Homeless Adults Ages 18-64 in 2010 Decennial Census by Sub-Group

	Male						Female					
	All	White	Black	Other	Hispanic	Non-Hispanic	All	White	Black	Other	Hispanic	Non-Hispanic
Share Filing 1040 with Positive Total Money Income[1]	0.326	0.301	0.347	0.366	0.351	0.321	0.467	0.423	0.513	0.465	0.502	0.459
	(0.002)	(0.002)	(0.003)	(0.006)	(0.005)	(0.002)	(0.002)	(0.004)	(0.004)	(0.007)	(0.006)	(0.003)
Median Total Money Income (Cond. On +)	$12,421	$11,789	$12,692	$14,228	$13,731	$12,229	$11,676	$10,856	$12,184	$12,376	$12,477	$11,495
	($99)	($132)	($156)	($356)	($281)	($104)	($70)	($113)	($110)	($244)	($167)	($74)
Median Wage & Salary Income (Cond. On +)	$9,124	$8,366	$10,022	$10,108	$9,658	$9,049	$6,949	$6,646	$7,118	$7,381	$6,533	$7,022
	($94)	($118)	($138)	($385)	($301)	($100)	($87)	($125)	($133)	($273)	($241)	($90)
Share Filing 1040 with Self-Employment Income	0.033	0.025	0.037	0.053	0.049	0.030	0.102	0.065	0.139	0.109	0.156	0.091
	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	(0.004)	(0.005)	(0.002)
Median Self Employment Income (Cond. On +)	$9,761	$7,858	$10,157	$10,877	$10,854	$9,152	$11,051	$10,405	$11,096	$11,382	$11,292	$10,947
	($229)	($483)	($267)	($520)	($397)	($283)	($63)	($232)	($73)	($256)	($174)	($71)
Share Filing 1040 with Social Security Income	0.017	0.018	0.016	0.013	0.013	0.017	0.021	0.028	0.015	0.016	0.014	0.022
	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)
Median Social Security Income (Cond. On +)	$12,963	$13,528	$12,545	$10,809	$11,274	$13,110	$12,071	$13,437	$11,138	$10,767	$10,474	$12,274
	($229)	($292)	($327)	($661)	($666)	($230)	($328)	($500)	($465)	($881)	($819)	($333)
Share Receiving W2	0.445	0.446	0.442	0.448	0.457	0.443	0.478	0.474	0.486	0.467	0.480	0.478
	(0.002)	(0.003)	(0.003)	(0.006)	(0.005)	(0.002)	(0.003)	(0.004)	(0.004)	(0.007)	(0.006)	(0.003)
Median W2 Wages & Tips (Cond. On +)	$5,224	$5,117	$5,024	$6,786	$6,491	$5,076	$5,299	$5,031	$5,225	$6,790	$6,000	$5,167
	($62)	($85)	($94)	($263)	($206)	($64)	($72)	($103)	($110)	($248)	($213)	($77)
Mean Number of W2s Received (Cond. On +)	1.670	1.671	1.668	1.671	1.782	1.651	1.618	1.627	1.616	1.592	1.589	1.624
	(0.006)	(0.009)	(0.009)	(0.020)	(0.021)	(0.006)	(0.008)	(0.011)	(0.011)	(0.033)	(0.019)	(0.009)
Share Receiving 1099R	0.031	0.034	0.029	0.027	0.025	0.032	0.029	0.035	0.026	0.017	0.019	0.031
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)
Share Receiving Housing Benefits	0.087	0.071	0.109	0.080	0.075	0.089	0.154	0.128	0.193	0.118	0.133	0.159
	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)	(0.005)	(0.004)	(0.002)
Mean Housing Benefits Cond. On Receipt	$2,876	$2,647	$2,892	$3,813	$3,619	$2,771	$4,111	$3,480	$4,381	$5,102	$5,152	$3,935
	($44)	($60)	($65)	($179)	($170)	($44)	($56)	($76)	($81)	($220)	($190)	($57)
Share Receiving VA Benefits	0.041	0.041	0.046	0.022	0.021	0.044	0.005	0.005	0.005	0.004	0.002	0.005
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(Z)
Share Receiving SNAP[2]	0.770	0.709	0.816	0.770	0.804	0.761	0.864	0.820	0.899	0.811	0.883	0.857
	(0.003)	(0.006)	(0.004)	(0.010)	(0.007)	(0.004)	(0.003)	(0.006)	(0.004)	(0.010)	(0.006)	(0.004)
Mean SNAP Amount (Cond. On +)	$2,283	$2,096	$2,332	$2,666	$2,650	$2,180	$3,515	$3,309	$3,591	$3,631	$3,857	$3,393
	($14)	($21)	($18)	($49)	($34)	($14)	($21)	($39)	($27)	($57)	($41)	($24)
Mean Months of SNAP (Cond. On +)	9.266	8.825	9.472	9.686	9.711	9.141	10.280	9.873	10.440	10.420	10.590	10.160
	(0.027)	(0.048)	(0.036)	(0.080)	(0.056)	(0.031)	(0.024)	(0.052)	(0.030)	(0.068)	(0.043)	(0.029)
Share Receiving Medicare Part A or B	0.095	0.100	0.094	0.079	0.070	0.100	0.074	0.088	0.064	0.055	0.047	0.079
	(0.001)	(0.002)	(0.002)	(0.003)	(0.003)	(0.001)	(0.001)	(0.002)	(0.002)	(0.003)	(0.003)	(0.001)
Share Receiving OASI in Medicare	0.004	0.004	0.003	0.003	0.004	0.004	0.002	0.003	0.001	0.002	0.002	0.002
	(Z)	(Z)	(Z)	(0.001)	(0.001)	(Z)	(Z)	(Z)	(Z)	(0.001)	(0.001)	(Z)
Share Receiving DI in Medicare	0.091	0.095	0.089	0.075	0.065	0.095	0.071	0.085	0.062	0.052	0.045	0.076
	(0.001)	(0.002)	(0.002)	(0.003)	(0.003)	(0.001)	(0.001)	(0.002)	(0.002)	(0.003)	(0.003)	(0.001)

Table 16a: Income & Benefit Receipt Among Sheltered Homeless Adults Ages 18-64 in 2010 Decennial Census by Sub-Group (continued)

	Male						Female					
	All	White	Black	Other	Hispanic	Non-Hispanic	All	White	Black	Other	Hispanic	Non-Hispanic
Share Enrolled in Medicaid	0.392	0.357	0.418	0.470	0.478	0.378	0.667	0.611	0.730	0.654	0.761	0.648
	(0.002)	(0.003)	(0.003)	(0.006)	(0.005)	(0.002)	(0.002)	(0.004)	(0.003)	(0.007)	(0.005)	(0.003)
Share Receiving Any Benefits[2,3]	0.856	0.808	0.893	0.856	0.872	0.852	0.932	0.902	0.953	0.905	0.950	0.925
	(0.003)	(0.005)	(0.003)	(0.008)	(0.006)	(0.003)	(0.002)	(0.005)	(0.003)	(0.007)	(0.004)	(0.003)
Share Receiving Any Earnings[4]	0.503	0.483	0.525	0.513	0.518	0.501	0.573	0.539	0.612	0.560	0.597	0.568
	(0.002)	(0.003)	(0.003)	(0.006)	(0.005)	(0.002)	(0.002)	(0.004)	(0.004)	(0.007)	(0.006)	(0.003)
Share Receiving Any Benefits or Earnings[2]	0.951	0.932	0.965	0.955	0.953	0.951	0.980	0.973	0.986	0.970	0.983	0.979
	(0.002)	(0.003)	(0.002)	(0.005)	(0.004)	(0.002)	(0.001)	(0.003)	(0.001)	(0.004)	(0.002)	(0.001)
Mean Earnings	$6,856	$6,029	$7,332	$9,129	$8,207	$6,631	$6,913	$5,932	$7,838	$7,317	$7,519	$6,791
	($126)	($136)	($183)	($770)	($361)	($134)	($67)	($104)	($96)	($190)	($151)	($74)
SD Earnings	$33,605	$25,892	$30,477	$65,041	$34,734	$33,413	$13,336	$14,024	$12,466	$13,381	$11,947	$13,595
50th Percentile Earnings	$0	$0	$140	$21	$120	$0	$898	$217	$2,404	$686	$1,867	$755
	($7)	($2)	($28)	($47)	($47)	($6)	($51)	($39)	($127)	($151)	($212)	($51)
75th Percentile Earnings	$7,314	$5,850	$8,545	$9,027	$9,421	$7,002	$10,436	$7,607	$11,845	$10,851	$11,856	$10,073
	($77)	($114)	($149)	($343)	($294)	($83)	($77)	($150)	($120)	($278)	($194)	($101)
Mean Pre-Tax Income	$7,701	$6,991	$8,015	$10,027	$8,713	$7,532	$7,957	$7,155	$8,721	$8,262	$8,228	$7,903
	($115)	($123)	($146)	($776)	($183)	($130)	($91)	($124)	($149)	($274)	($161)	($104)
SD Pre-Tax Income	$30,748	$23,600	$24,345	$65,560	$17,660	$32,419	$18,225	$16,723	$19,366	$19,309	$12,760	$19,151
50th Percentile Pre-Tax Income	$203	$68	$492	$265	$442	$179	$1,625	$742	$3,433	$1,330	$2,851	$1,472
	($21)	($16)	($51)	($92)	($91)	($21)	($70)	($64)	($161)	($216)	($257)	($71)
75th Percentile Pre-Tax Income	$8,881	$7,624	$10,167	$10,919	$11,087	$8,585	$11,461	$9,638	$12,918	$11,924	$12,884	$11,214
	($97)	($109)	($134)	($375)	($303)	($98)	($80)	($155)	($143)	($285)	($220)	($81)
Mean Pre-Tax Income + In-Kind	$9,569	$8,950	$9,686	$11,253	$10,137	$9,417	$11,574	$10,041	$12,297	$11,924	$11,755	$11,506
	($273)	($504)	($364)	($465)	($265)	($336)	($198)	($282)	($304)	($361)	($218)	($254)
SD Pre-Tax Income + In-Kind	$35,310	$40,639	$33,469	$19,512	$15,120	$38,946	$22,053	$17,197	$25,497	$14,566	$11,947	$24,605
50th Percentile Pre-Tax Income + In-Kind	$2,858	$2,710	$3,280	$3,731	$3,630	$2,726	$7,509	$5,292	$9,063	$8,179	$8,665	$7,220
	($48)	($23)	($93)	($230)	($163)	($40)	($159)	($186)	($237)	($457)	($356)	($173)
75th Percentile Pre-Tax Income + In-Kind	$11,642	$9,907	$12,331	$14,499	$13,268	$11,250	$16,317	$13,923	$17,152	$17,468	$16,983	$16,023
	($168)	($263)	($211)	($643)	($435)	($180)	($139)	($292)	($179)	($381)	($276)	($162)
Share in SNAP State	0.226	0.173	0.290	0.239	0.332	0.208	0.302	0.201	0.401	0.327	0.460	0.270
Share in Medicaid State	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Sample Size	71,500	36,500	28,000	7,100	9,300	62,500	40,000	18,000	17,000	5,000	6,300	33,500
Weighted Count	103,200	51,890	41,010	10,300	14,770	88,430	56,330	25,430	23,990	6,915	9,485	46,850

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2008-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2006-2016), and Tennessee (2004-2016)

Table 16a: Income & Benefit Receipt Among Sheltered Homeless Adults Ages 18-64 in 2010 Decennial Census by Sub-Group (notes)

Note: Table displays the IPW weighted share adults enumerated as homeless in the 2010 Decennial Census and 2019 Numident dataset with a non-missing year of birth born between 1945 and 1992 (inclusive) linking to income and benefits datasets in 2010. Z indicates a standard error that rounds to zero (but is not equal to zero). For disclosure purposes, percentiles are calculated as a weighted mean of the six observations above and the six observations below the weighted percentile. Dollars are expressed as C-CPI-U adjusted 2018 dollars. Sample sizes are rounded to comply with Census Bureau requirements. Dollars are expressed as Chained CPI-U-adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.

[1] Total money income includes wage and salary, total interest (taxable and tax-exempt), taxable dividends, alimony received, business income (+/-), total pensions and annuities, net rents royalties, estates and trusts (+/-), farm income (+/-), unemployment compensation, and total social security benefits.

[2] We report the share of individuals receiving SNAP benefits, any benefits, or any benefits or earnings, who were enumerated in New York, New Jersey, Tennessee, Indiana, or Illinois in the 2010 Decennial Census.

[3] Any benefits includes SNAP, HUD, VA, Medicare, and Medicaid benefits.

[4]This row reports the share of individuals with positive estimated earnings across IRS 1040 and W2 datasets. Earnings is the sum of 1040 wage and salary income, estimated non-negative 1040 self-employment income (when a self employment schedule was filed), and W2 deferred compensation less any W2 wages and tips associated with a cofiler for individuals filing a 1040. Self-employment income is equal to total money income less wage and salary income, dividend income, rental income, social security, and interest income. For individuals without a 1040, earnings is equal to wages and tips across W2s.

[5] For individuals with a 1040, pre-tax income is equal to the sum of total money income and VA SCD compensation, measured as ¾ of the annual SCD amount for the fiscal year corresponding to the calendar year and ¼ of the annual SCD amount of the fiscal year corresponding to the year after the calendar year specified. For individuals without a 1040, pre-tax income is equal to the sum of wages and tips and deferred compensation in W2s, VA SCD compensation, and IRA and employer sponsored retirement distributions across 1099-Rs. We drop a few observations with implausibly high pre-tax income.

[6] Pre-tax income is measured as above. In-kind transfers include benefits from HUD and SNAP benefits. SNAP benefits are calculated by multiplying the months of SNAP receipt in a year by the average monthly SNAP benefit received in that year.

Table 16b: Income & Benefit Receipt Among Unsheltered Homeless Adults Ages 18-64 in 2010 Decennial Census by Sub-Group

	Male						Female					
	All	White	Black	Other	Hispanic	Non-Hispanic	All	White	Black	Other	Hispanic	Non-Hispanic
Share Filing 1040 with Positive Total Money Income[1]	0.276	0.256	0.296	0.304	0.321	0.268	0.367	0.346	0.396	0.383	0.432	0.355
	(0.002)	(0.003)	(0.004)	(0.007)	(0.006)	(0.002)	(0.004)	(0.005)	(0.007)	(0.010)	(0.010)	(0.004)
Median Total Money Income (Cond. On +)	$14,533	$14,307	$14,183	$17,051	$18,022	$13,979	$13,991	$13,912	$13,991	$14,273	$14,883	$13,720
	($199)	($275)	($284)	($984)	($535)	($225)	($195)	($289)	($277)	($628)	($419)	($223)
Median Wage & Salary Income (Cond. On +)	$8,989	$8,028	$9,800	$10,294	$11,856	$8,617	$7,405	$6,765	$8,076	$7,509	$9,035	$7,240
	($182)	($192)	($300)	($918)	($649)	($178)	($180)	($254)	($342)	($744)	($534)	($193)
Share Filing 1040 with Self-Employment Income	0.033	0.029	0.035	0.046	0.048	0.030	0.070	0.056	0.091	0.075	0.101	0.064
	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)	(0.001)	(0.002)	(0.002)	(0.004)	(0.005)	(0.006)	(0.002)
Median Self Employment Income (Cond. On +)	$9,872	$8,496	$10,207	$10,398	$11,473	$9,336	$10,884	$10,349	$11,144	$10,163	$11,157	$10,845
	($321)	($576)	($372)	($910)	($872)	($361)	($217)	($508)	($247)	($836)	($644)	($275)
Share Filing 1040 with Social Security Income	0.026	0.028	0.024	0.025	0.020	0.027	0.039	0.046	0.032	0.031	0.030	0.041
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.004)	(0.004)	(0.002)
Median Social Security Income (Cond. On +)	$13,821	$14,036	$13,799	$12,545	$12,003	$14,013	$12,929	$13,787	$11,823	$10,343	$10,522	$13,245
	($253)	($411)	($353)	($1,112)	($886)	($278)	($379)	($441)	($719)	($1,957)	($804)	($404)
Share Receiving W2	0.331	0.335	0.322	0.349	0.392	0.320	0.337	0.339	0.323	0.369	0.408	0.325
	(0.002)	(0.003)	(0.004)	(0.007)	(0.006)	(0.002)	(0.004)	(0.005)	(0.006)	(0.010)	(0.010)	(0.004)
Median W2 Wages & Tips (Cond. On +)	$4,574	$4,685	$3,821	$7,391	$8,502	$4,075	$5,809	$5,728	$5,378	$7,229	$8,757	$5,261
	($126)	($135)	($203)	($462)	($422)	($121)	($174)	($230)	($305)	($632)	($532)	($175)
Mean Number of W2s Received (Cond. On +)	1.555	1.587	1.511	1.556	1.702	1.522	1.515	1.523	1.482	1.555	1.593	1.497
	(0.009)	(0.013)	(0.013)	(0.027)	(0.027)	(0.009)	(0.012)	(0.016)	(0.021)	(0.035)	(0.032)	(0.013)
Share Receiving 1099R	0.036	0.038	0.034	0.036	0.030	0.038	0.040	0.042	0.037	0.033	0.030	0.041
	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.001)	(0.002)	(0.003)	(0.004)	(0.003)	(0.002)
Share Receiving Housing Benefits	0.082	0.069	0.104	0.065	0.054	0.087	0.162	0.133	0.226	0.120	0.142	0.165
	(0.001)	(0.002)	(0.002)	(0.004)	(0.003)	(0.001)	(0.003)	(0.003)	(0.006)	(0.007)	(0.007)	(0.003)
Mean Housing Benefits Cond. On Receipt	$4,374	$3,776	$4,758	$5,257	$5,307	$4,268	$5,766	$4,993	$6,235	$7,362	$8,084	$5,418
	($65)	($85)	($102)	($241)	($250)	($66)	($89)	($111)	($143)	($338)	($324)	($88)
Share Receiving VA Benefits	0.029	0.027	0.035	0.021	0.013	0.033	0.003	0.003	0.004	0.004	0.004	0.003
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(Z)
Share Receiving SNAP[2]	0.638	0.615	0.668	0.568	0.603	0.648	0.670	0.669	0.698	0.551	0.679	0.668
	(0.006)	(0.010)	(0.008)	(0.019)	(0.014)	(0.006)	(0.009)	(0.013)	(0.013)	(0.027)	(0.021)	(0.010)
Mean SNAP Amount (Cond. On +)	$2,083	$2,008	$2,091	$2,372	$2,259	$2,040	$2,958	$2,914	$2,954	$3,175	$3,289	$2,879
	($20)	($34)	($27)	($79)	($53)	($22)	($49)	($75)	($71)	($152)	($123)	($53)
Mean Months of SNAP (Cond. On +)	9.397	8.969	9.627	9.790	9.628	9.342	9.930	9.799	10.040	9.899	10.090	9.891
	(0.049)	(0.085)	(0.065)	(0.159)	(0.111)	(0.055)	(0.066)	(0.104)	(0.093)	(0.197)	(0.149)	(0.073)
Share Receiving Medicare Part A or B	0.150	0.158	0.147	0.121	0.097	0.160	0.143	0.157	0.133	0.102	0.091	0.152
	(0.002)	(0.002)	(0.003)	(0.005)	(0.004)	(0.002)	(0.003)	(0.004)	(0.005)	(0.006)	(0.006)	(0.003)
Share Receiving OASI in Medicare	0.005	0.006	0.005	0.004	0.004	0.005	0.005	0.006	0.005	0.004	0.004	0.006
	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(Z)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share Receiving DI in Medicare	0.144	0.152	0.141	0.116	0.092	0.154	0.137	0.151	0.126	0.097	0.086	0.145
	(0.002)	(0.002)	(0.003)	(0.005)	(0.004)	(0.002)	(0.003)	(0.004)	(0.005)	(0.006)	(0.006)	(0.003)

Table 16b: Income & Benefit Receipt Among Unsheltered Homeless Adults Ages 18-64 in 2010 Decennial Census by Sub-Group (continued)

	Male						Female					
	All	White	Black	Other	Hispanic	Non-Hispanic	All	White	Black	Other	Hispanic	Non-Hispanic
Share Enrolled in Medicaid	0.384	0.373	0.396	0.395	0.383	0.384	0.569	0.561	0.607	0.501	0.547	0.573
	(0.002)	(0.003)	(0.004)	(0.007)	(0.006)	(0.003)	(0.004)	(0.005)	(0.007)	(0.010)	(0.010)	(0.004)
Share Receiving Any Benefits[2,3]	0.772	0.749	0.802	0.700	0.696	0.792	0.802	0.796	0.823	0.732	0.798	0.803
	(0.005)	(0.008)	(0.007)	(0.018)	(0.013)	(0.005)	(0.007)	(0.011)	(0.011)	(0.024)	(0.018)	(0.008)
Share Receiving Any Earnings[4]	0.395	0.377	0.414	0.413	0.447	0.385	0.428	0.405	0.457	0.455	0.504	0.414
	(0.002)	(0.003)	(0.004)	(0.007)	(0.006)	(0.003)	(0.004)	(0.005)	(0.007)	(0.010)	(0.010)	(0.004)
Share Receiving Any Benefits or Earnings[2]	0.908	0.903	0.913	0.907	0.901	0.910	0.935	0.930	0.944	0.912	0.945	0.932
	(0.004)	(0.006)	(0.005)	(0.011)	(0.009)	(0.004)	(0.005)	(0.007)	(0.006)	(0.015)	(0.010)	(0.005)
Mean Earnings	$6,354	$5,813	$6,749	$7,585	$8,863	$5,889	$6,275	$5,510	$7,176	$7,383	$7,833	$6,003
	($135)	($183)	($241)	($284)	($264)	($151)	($134)	($191)	($211)	($374)	($300)	($148)
SD Earnings	$27,778	$27,225	$30,206	$19,614	$20,529	$28,907	$17,762	$18,903	$15,436	$18,067	$14,634	$18,236
25th Percentile Earnings[5]	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
50th Percentile Earnings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	($4)	($5)	($97)	(Z)
75th Percentile Earnings	$3,902	$2,866	$5,434	$5,716	$8,784	$3,261	$6,347	$4,066	$9,405	$7,308	$11,360	$5,361
	($225)	($233)	($443)	($1,166)	($1,080)	($194)	($215)	($280)	($327)	($694)	($531)	($247)
Mean Pre-Tax Income	$7,694	$7,267	$8,016	$8,626	$9,891	$7,287	$8,391	$8,330	$8,320	$8,873	$8,792	$8,321
	($146)	($190)	($274)	($297)	($276)	($165)	($406)	($707)	($245)	($434)	($320)	($470)
SD Pre-Tax Income	$30,149	$28,241	$34,395	$20,495	$21,443	$31,482	$53,693	$70,066	$17,909	$20,958	$15,605	$57,826
25th Percentile Pre-Tax Income[5]	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
50th Percentile Pre-Tax Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$234	$0
	(Z)	(Z)	(Z)	($7)	($52)	(Z)	(Z)	(Z)	($46)	($63)	($231)	(Z)
75th Percentile Pre-Tax Income	$7,024	$5,553	$7,981	$8,567	$12,184	$6,252	$9,798	$8,135	$11,288	$9,966	$13,290	$9,012
	($242)	($351)	($373)	($1,134)	($1,163)	($261)	($222)	($324)	($303)	($737)	($502)	($243)
Mean Pre-Tax Income + In-Kind	$10,133	$9,789	$9,998	$12,376	$11,597	$9,757	$11,010	$9,714	$11,563	$13,336	$11,585	$10,874
	($527)	($500)	($929)	($1,034)	($654)	($634)	($380)	($484)	($637)	($1,080)	($595)	($447)
SD Pre-Tax Income + In-Kind	$43,090	$25,610	$54,156	$26,604	$22,776	$46,918	$20,416	$17,006	$22,877	$20,280	$13,516	$21,714
25th Percentile Pre-Tax Income + In-Kind[6]	$838	$555	$1,027	$1,410	$1,386	$766	$1,645	$1,264	$1,912	$2,162	$2,433	$1,463
	($104)	($203)	($85)	($255)	($414)	($63)	($84)	($130)	($108)	($289)	($103)	($97)
50th Percentile Pre-Tax Income + In-Kind	$2,698	$2,588	$2,692	$2,710	$2,710	$2,607	$3,312	$2,748	$3,647	$4,605	$5,033	$3,007
	($22)	($103)	($15)	($326)	($248)	($17)	($169)	($184)	($313)	($1,031)	($831)	($159)
75th Percentile Pre-Tax Income + In-Kind	$10,025	$9,231	$9,863	$14,386	$15,650	$8,895	$14,058	$12,308	$15,029	$17,401	$17,593	$12,816
	($627)	($1,402)	($532)	($2,124)	($3,065)	($414)	($550)	($801)	($835)	($2,344)	($1,073)	($632)
Share in SNAP State	0.170	0.128	0.231	0.153	0.223	0.160	0.178	0.131	0.261	0.172	0.228	0.170
Share in Medicaid State	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Sample Size	42,500	22,000	15,500	4,800	6,100	36,500	17,500	9,900	5,400	2,300	2,400	15,000
Weighted Count	104,100	53,270	40,300	10,490	16,290	87,780	39,130	21,730	12,800	4,603	5,819	33,310

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2008-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2006-2016), and Tennessee (2004-2016)

Table 16b: Income & Benefit Receipt Among Unsheltered Homeless Adults Ages 18-64 in 2010 Decennial Census by Sub-Group (notes)

Note: Table displays the IPW weighted share adults enumerated as homeless in the 2010 Decennial Census and 2019 Numident dataset with a non-missing year of birth born between 1945 and 1992 (inclusive) linking to income and benefits datasets in 2010. (Z) indicates a standard error that rounds to zero (but is not equal to zero). Sample sizes are rounded to comply with Census Bureau requirements. Dollars are expressed as Chained CPI-U-adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.

[1] Total money income includes wage and salary, total interest (taxable and tax-exempt), taxable dividends, alimony received, business income (+/-), total pensions and annuities, net rents royalties, estates and trusts (+/-), farm income (+/-), unemployment compensation, and total social security benefits.

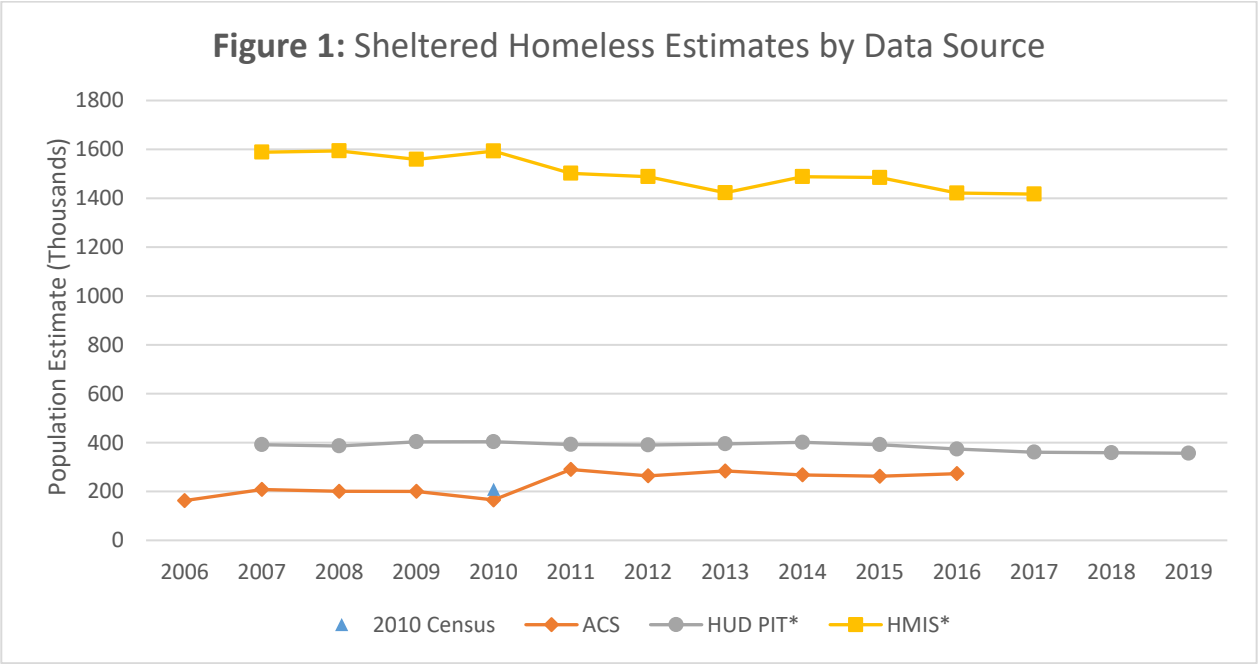
[2] We report the share of individuals receiving SNAP benefits, any benefits, or any benefits or earnings, who were enumerated in New York, New Jersey, Tennessee, Indiana, or Illinois in the 2010 Decennial Census.

[3] Any benefits includes SNAP, HUD, VA, Medicare, and Medicaid benefits.

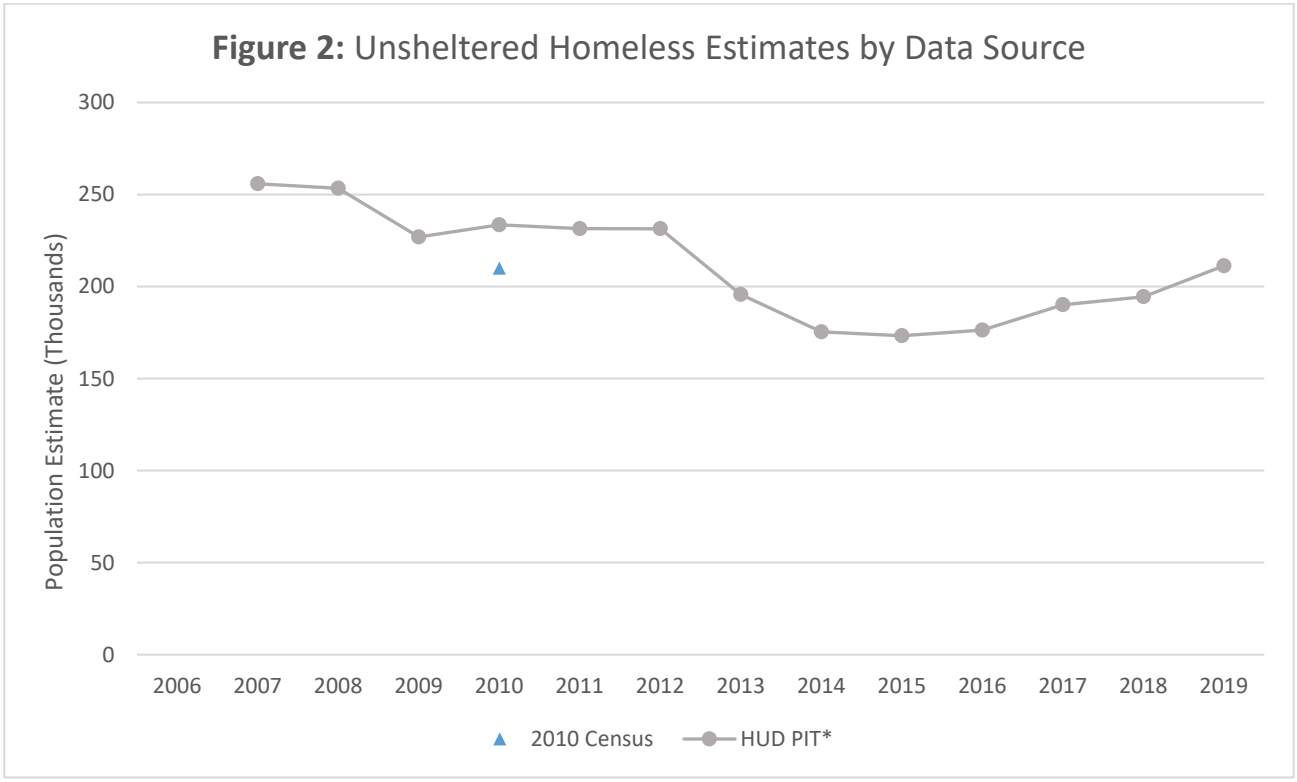
[4]This row reports the share of individuals with positive estimated earnings across IRS 1040 and W2 datasets. Earnings is the sum of 1040 wage and salary income, estimated non-negative 1040 self-employment income (when a self employment schedule was filed), and W2 deferred compensation less any W2 wages and tips associated with a cofiler for individuals filing a 1040. Self-employment income is equal to total money income less wage and salary income, dividend income, rental income, social security, and interest income. For individuals without a 1040, earnings is equal to wages and tips across W2s.

[5] For individuals with a 1040, pre-tax income is equal to the sum of total money income and VA SCD compensation, measured as ¾ of the annual SCD amount for the fiscal year corresponding to the calendar year and ¼ of the annual SCD amount of the fiscal year corresponding to the year after the calendar year specified. For individuals without a 1040, pre-tax income is equal to the sum of wages and tips and deferred compensation in W2s, VA SCD compensation, and IRA and employer sponsored retirement distributions across 1099-Rs. We drop a few observations with implausibly high pre-tax income.

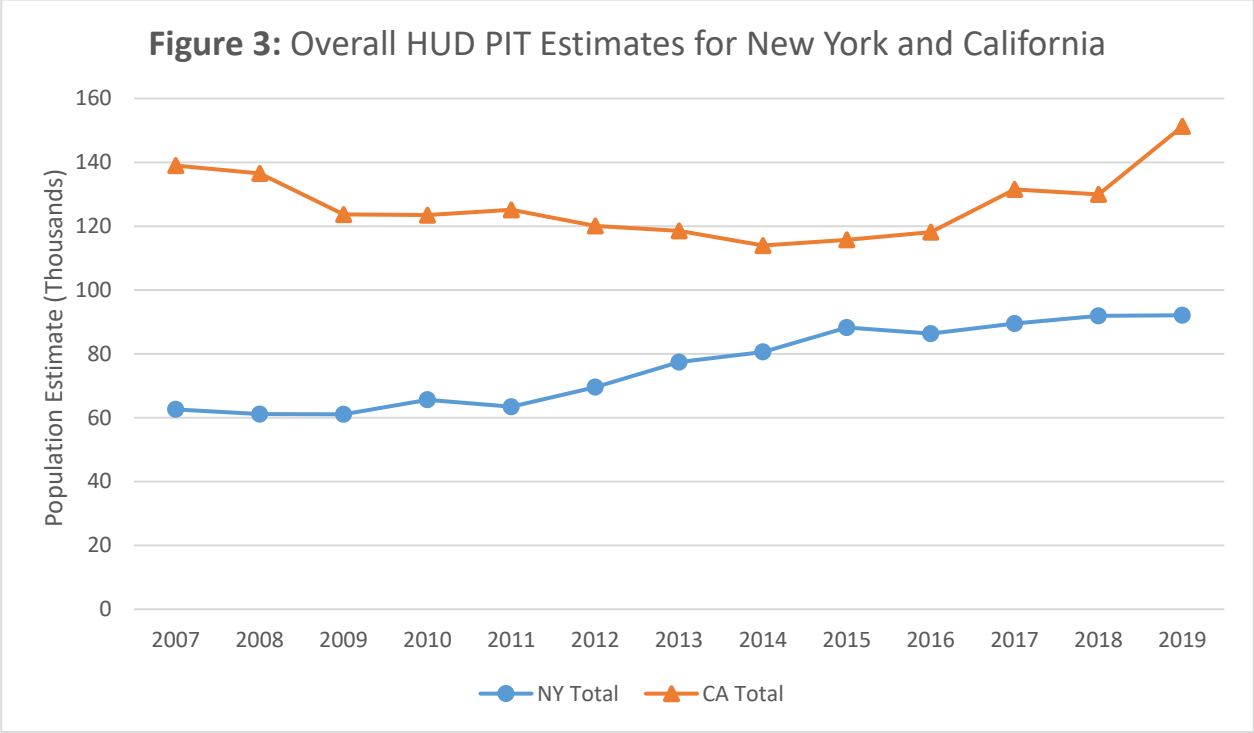
[6] Pre-tax income is measured as above. In-kind transfers include benefits from HUD and SNAP benefits. SNAP benefits are calculated by multiplying the months of SNAP receipt in a year by the average monthly SNAP benefit received in that year.



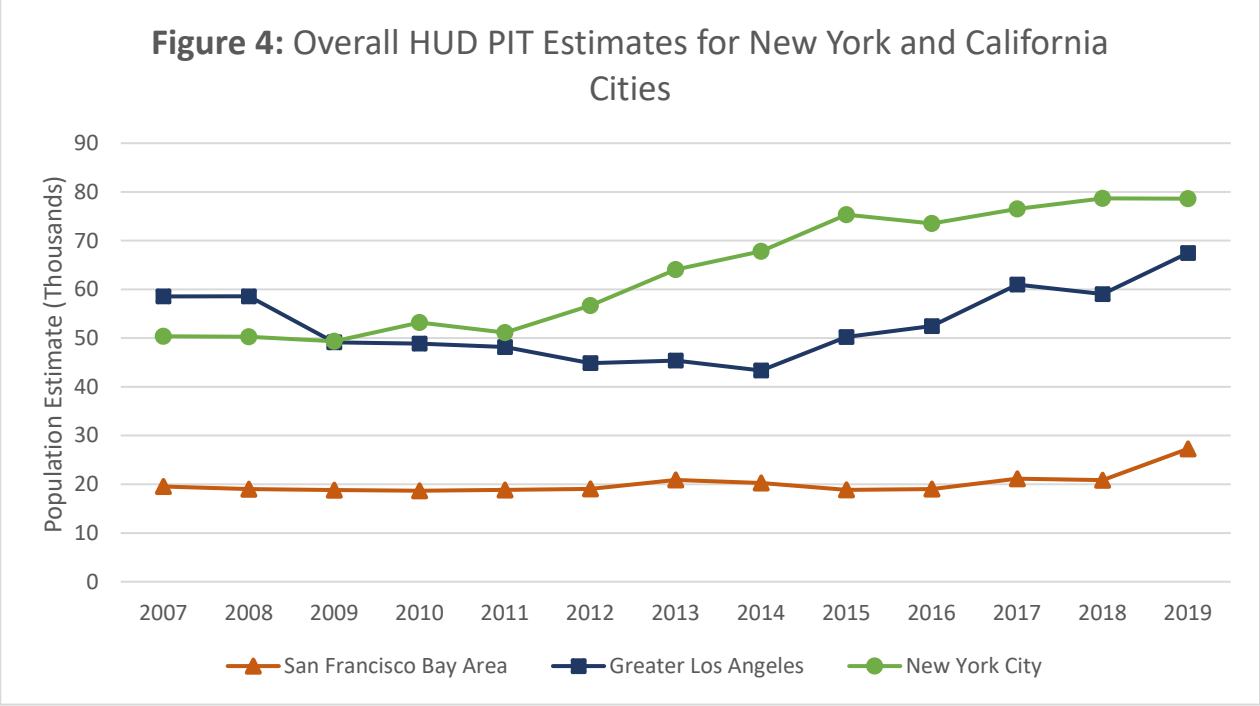
Sources: *2007-2018 Annual Homelessness Assessment Reports, U.S. Census Bureau 2006-2016 American Community Survey 1-year data, 2010 Decennial Census. *Indicates data obtained from publicly available sources. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.*



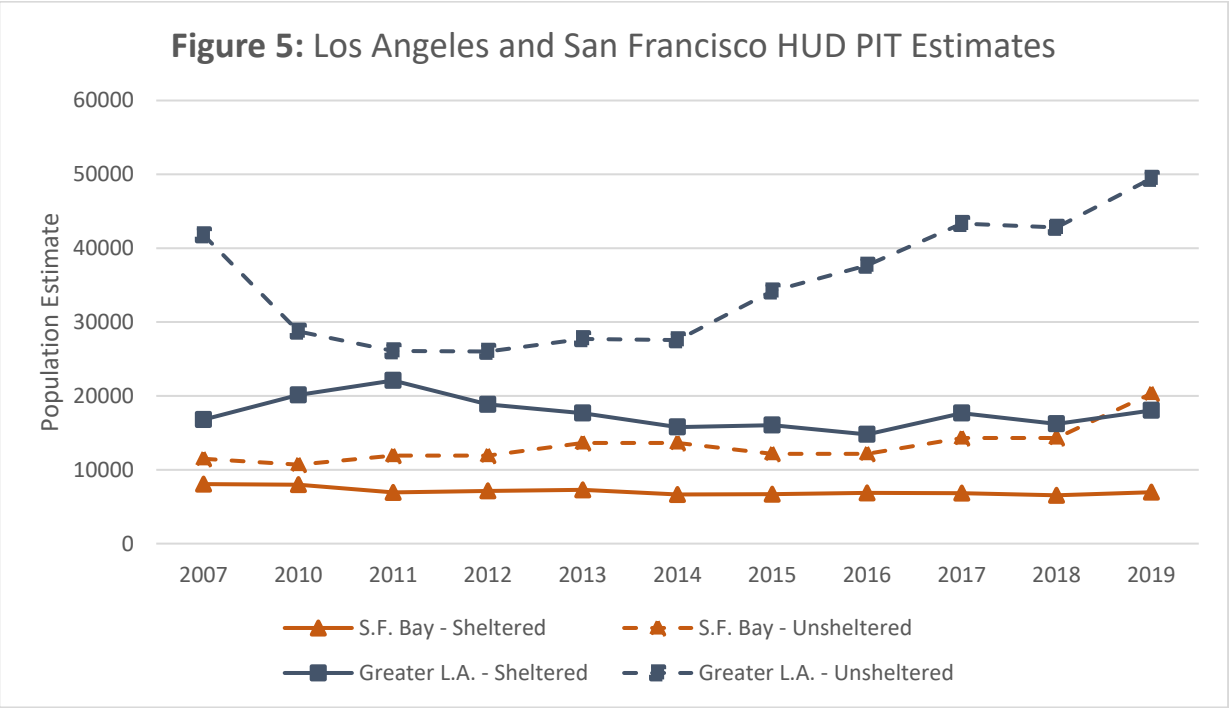
Sources: *2007-2018 Annual Homelessness Assessment Reports, U.S. Census Bureau 2006-2016 American Community Survey 1-year data, 2010 Decennial Census. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. *Indicates data obtained from publicly available sources. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004*



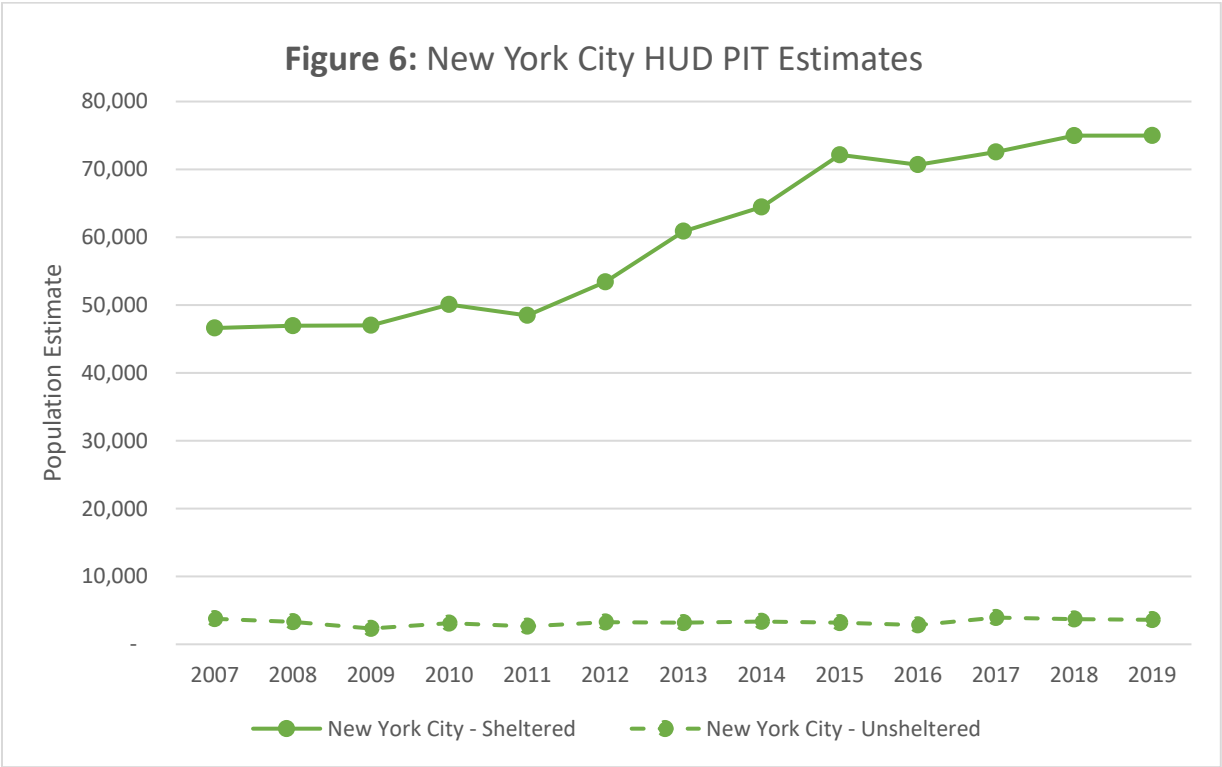
Source: *2007-2019 HUD PIT estimates by state and CoC, which are publicly available at https://www.hudexchange.info/.*



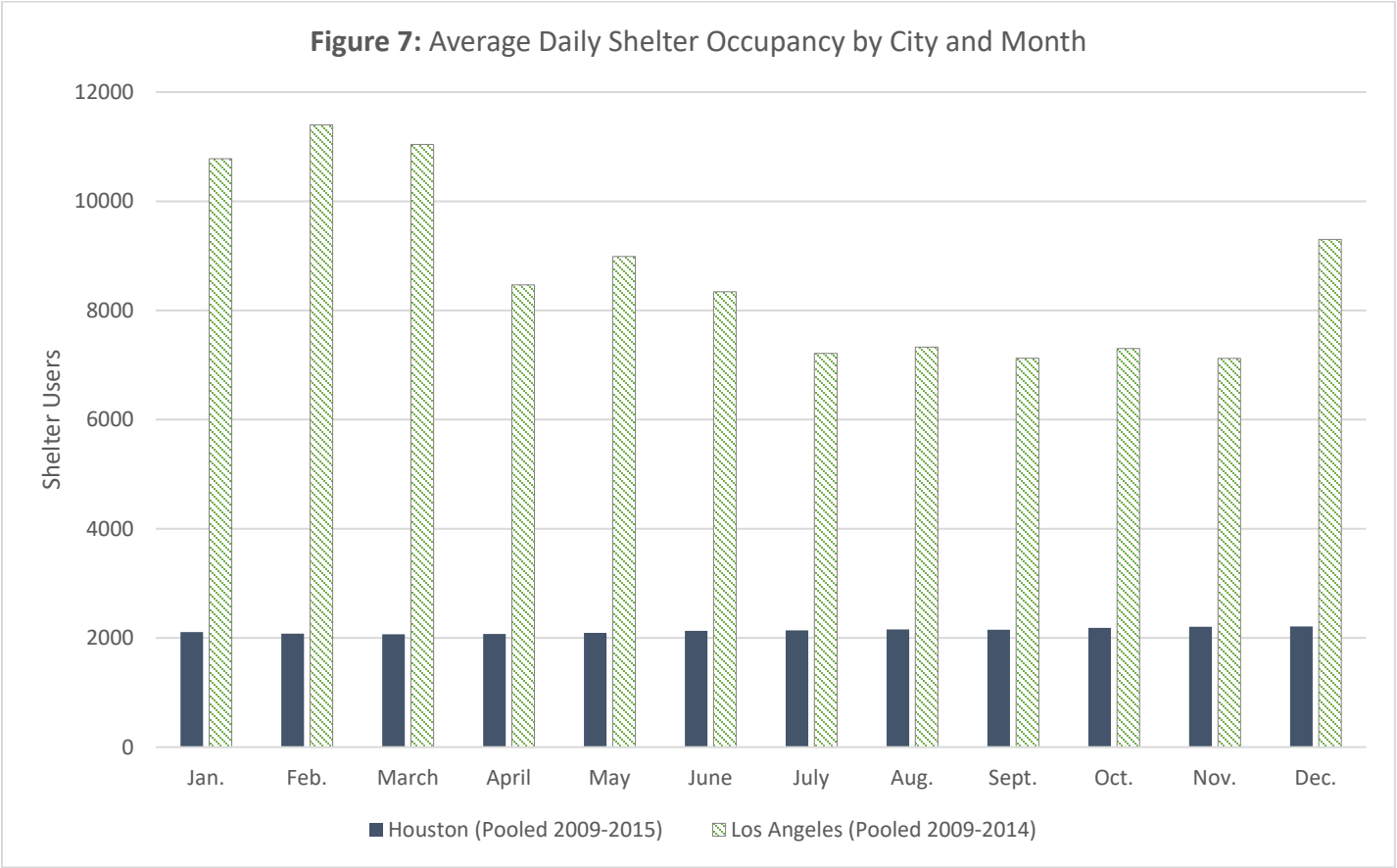
Source: *2007-2019 HUD PIT estimates by state and CoC, which are publicly available at https://www.hudexchange.info/. The San Francisco Bay Area includes the following CoCs: San Francisco CoC, Oakland, Berkeley/Alameda County CoC, San Jose/Santa Clara City & County CoC, and Daly/San Mateo County CoC. Los Angeles City & County CoC. The Greater Los Angeles area includes the following CoCs: Los Angeles City & County CoC, Santa Ana, Anaheim/Orange County CoC, Long Beach CoC, Pasadena CoC, Oxnard, San Buenaventura/Ventura County CoC, and Glendale CoC. New York City includes only the New York City CoC.*



Source: *2007-2019 HUD PIT estimates by state and CoC, which are publicly available at https://www.hudexchange.info/. The San Francisco Bay Area includes the following CoCs: San Francisco CoC, Oakland, Berkeley/Alameda County CoC, San Jose/Santa Clara City & County CoC, and Daly/San Mateo County CoC. Los Angeles City & County CoC. The Greater Los Angeles area includes the following CoCs: Los Angeles City & County CoC, Santa Ana, Anaheim/Orange County CoC, Long Beach CoC, Pasadena CoC, Oxnard, San Buenaventura/Ventura County CoC, and Glendale CoC.*

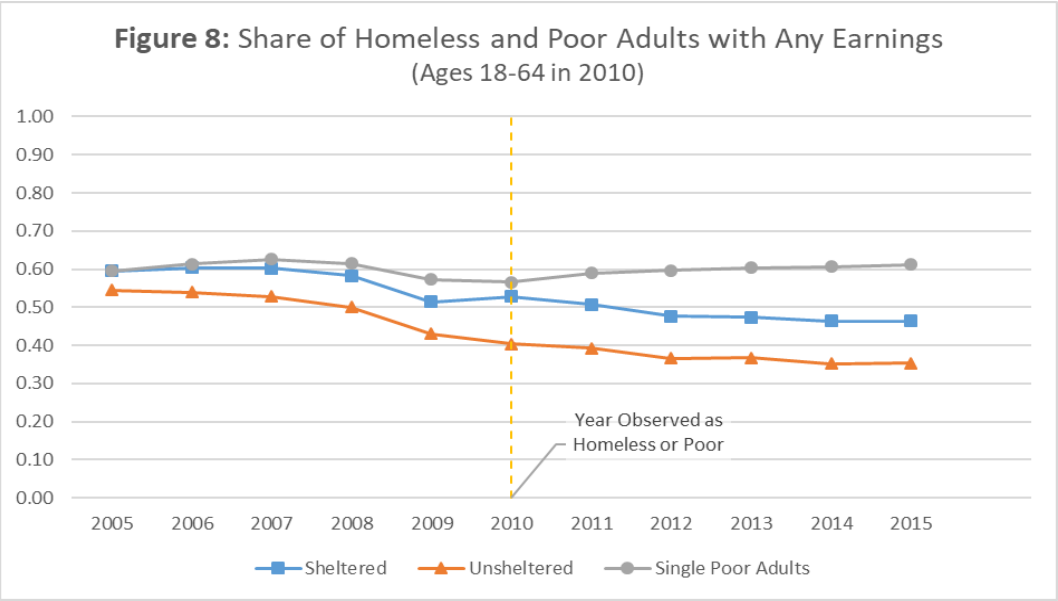


Source: *2007-2019 HUD PIT estimates by state and CoC, which are publicly available at https://www.hudexchange.info/. This chart displays the HUD PIT Estimate for the New York City CoC.*



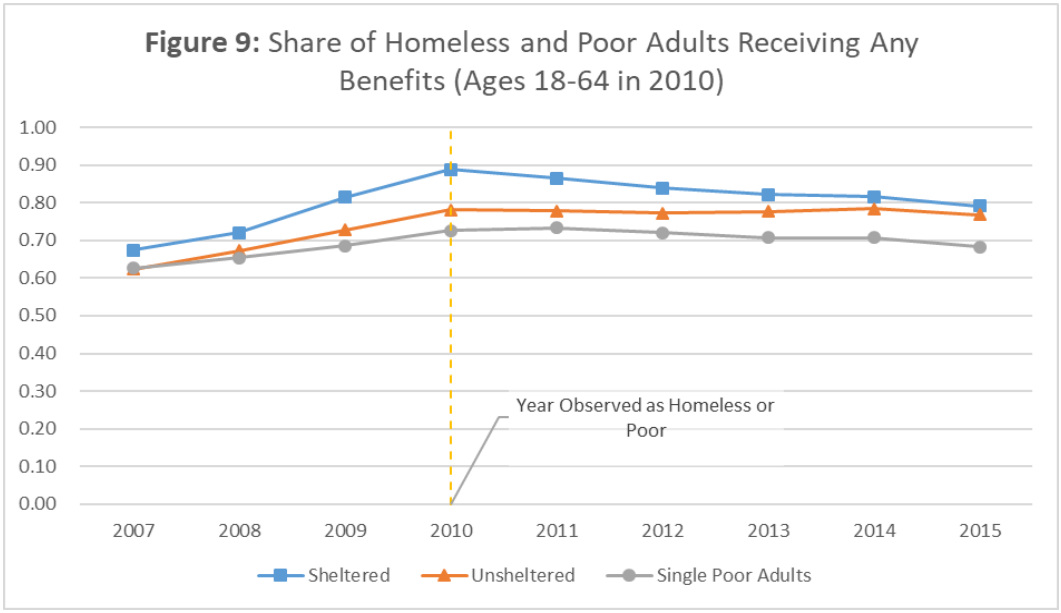
Sources: *2009-2015 Houston CoC HMIS data, 2009-2014 Houston CoC HMIS data.*

Note: *The Los Angeles CoC covers LA county excluding Pasadena, Long Beach, and Glendale. The Houston CoC includes Houston, Harris, Fort Bend, and Montgomery counties. Seasonality is computed using the set of all individuals appearing at any point in the HMIS dataset over the 2004 to 2015 (for Houston) or 2014 (for LA) time frame. We only compute occupancy for emergency and transitional shelters. We drop observations with no entry date, no exit date, or neither. When the entry date equals the exit date, we count these as one-day spells. To calculate average daily shelter users, we first sum up the number of person-days of shelter occupancy in a given month and year, and then divide this by the number of days in that month and year to find average daily shelter occupancy. We then take the average of the monthly average shelter occupancies over 2009-2014 or 2009-2015. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.*



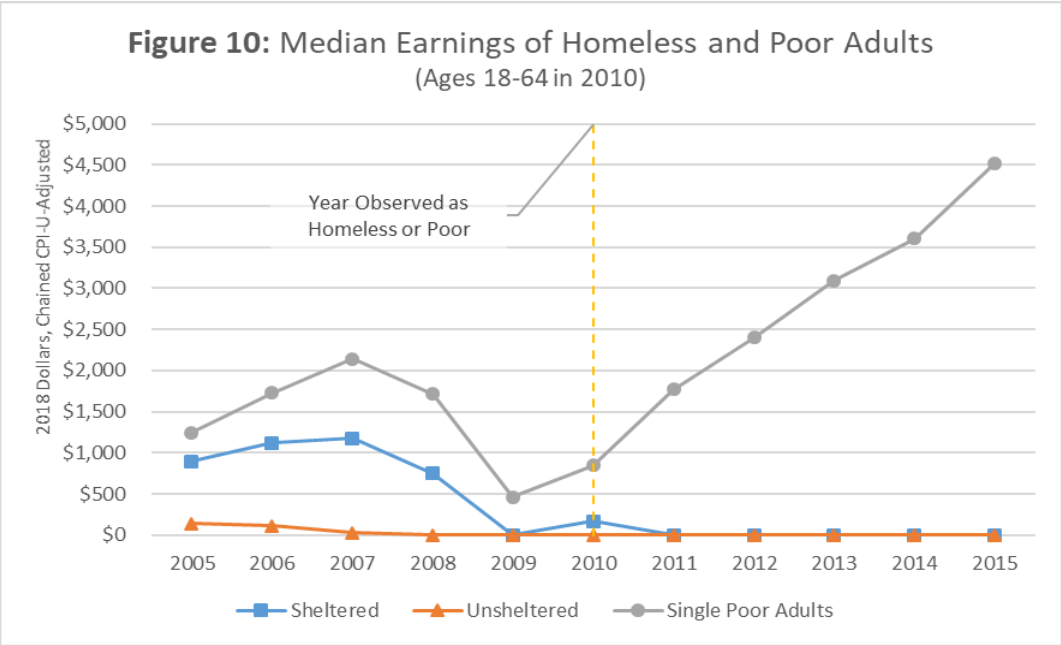
Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets.*

Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Figure depicts the mortality-adjusted, IPW-weighted share of individuals in a given group who have positive earnings in administrative datasets. Earnings are defined as in Tables 11-13. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



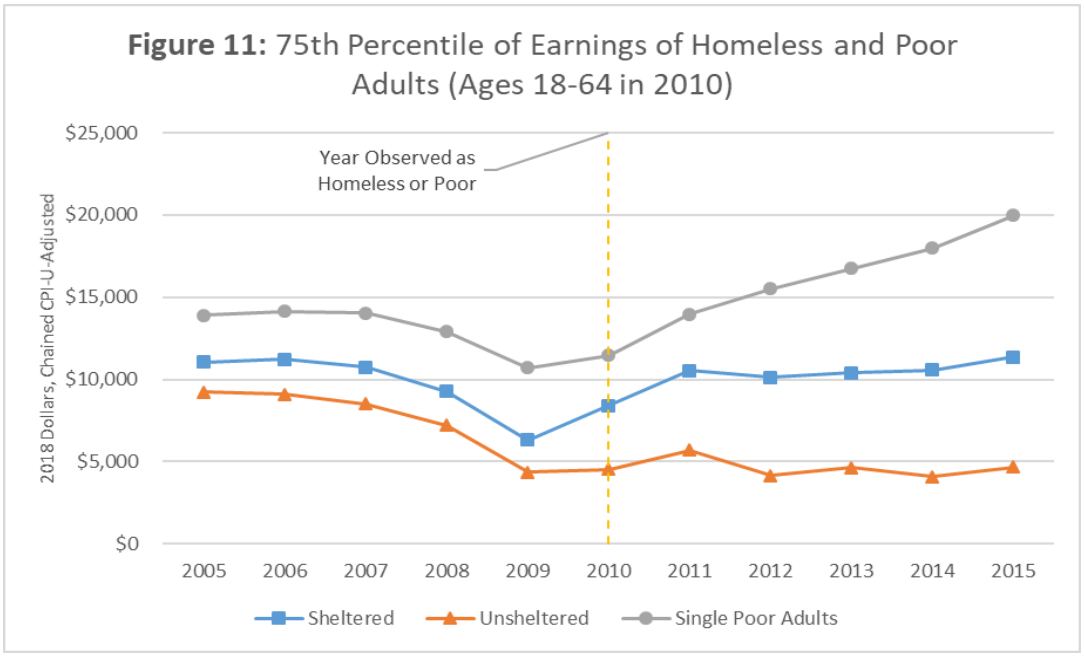
Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016).*

Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Among individuals who lived in a state for which we have SNAP data in a given year in their survey year, table reports the IPW-weighted share linking to SNAP, HUD PIC and TRACS, VA, Medicare, or Medicaid datasets from 2006-2015. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



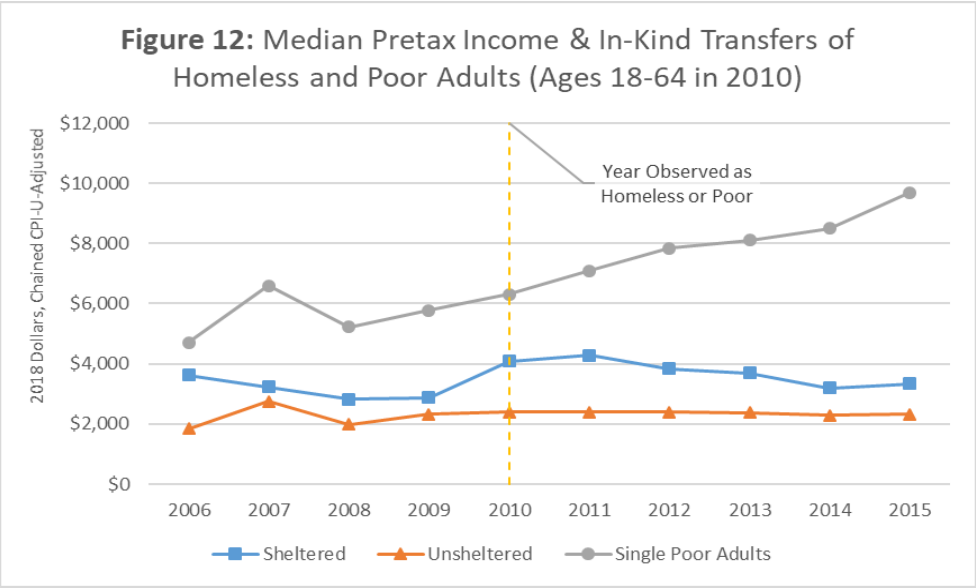
Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets.*

Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Earnings are calculated as in Tables 11-13. Dollars are expressed as C-CPI-U adjusted 2018 dollars. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



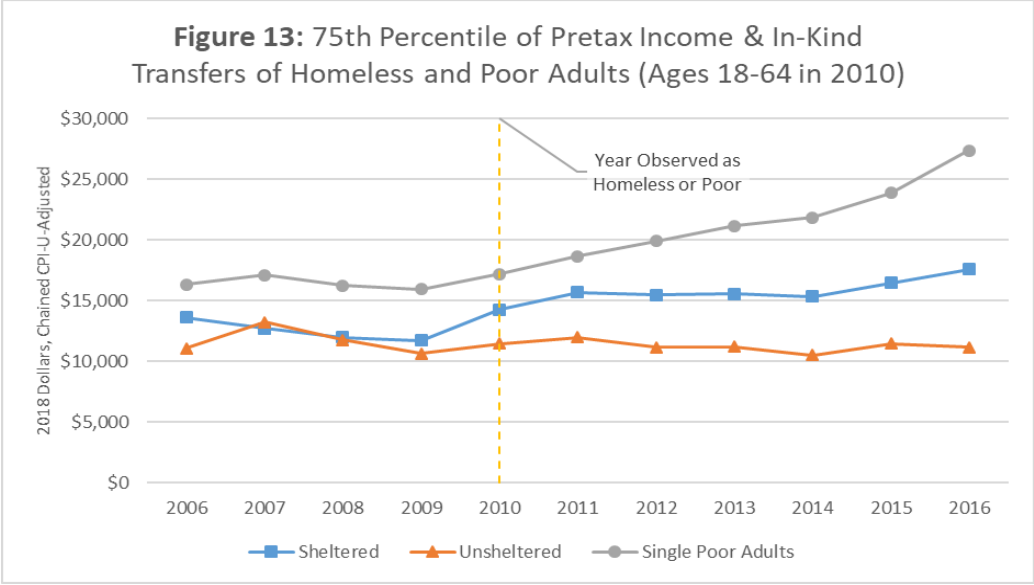
Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets.*

Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Earnings are calculated as in Tables 11-13. Dollars are expressed as C-CPI-U adjusted 2018 dollars. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016).*

Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Pretax income and in-kind transfers are calculated as in Tables 11-13. Dollars are expressed as C-CPI-U adjusted 2018 dollars. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016).*

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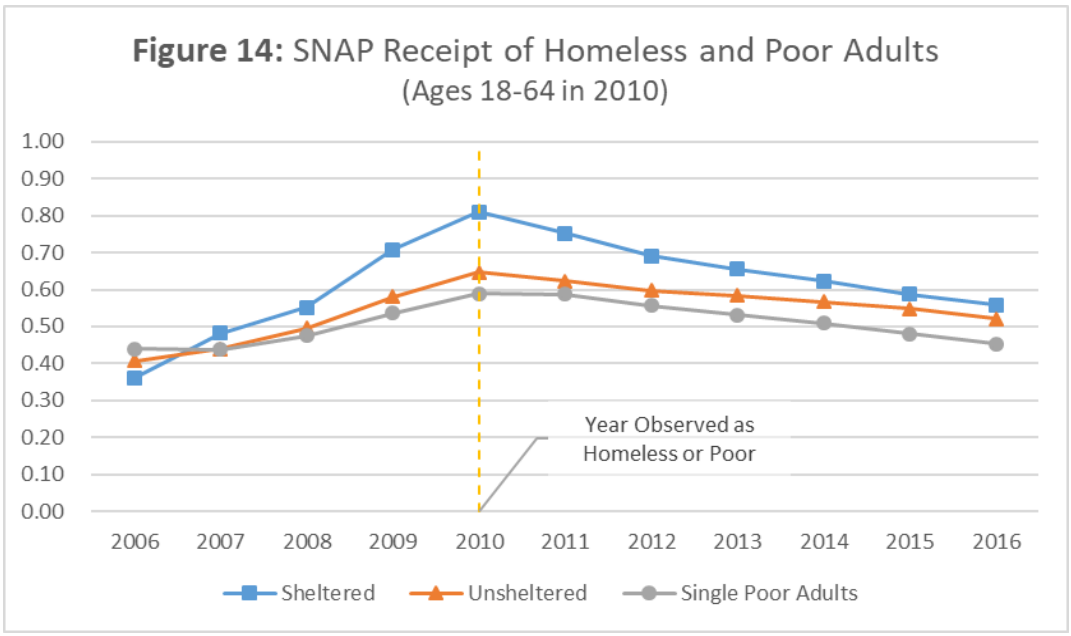
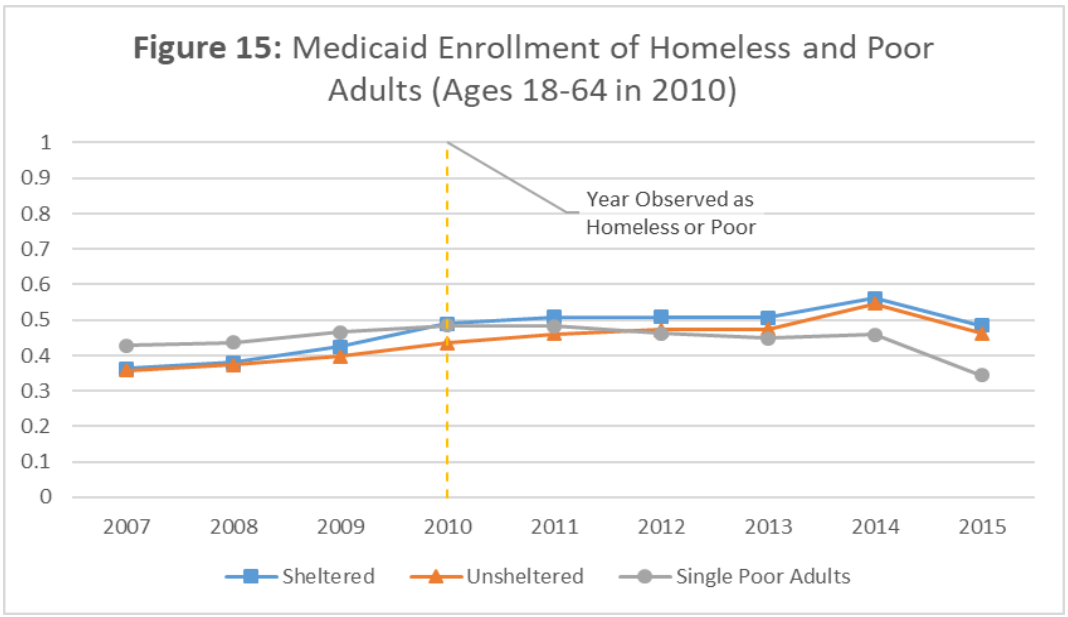


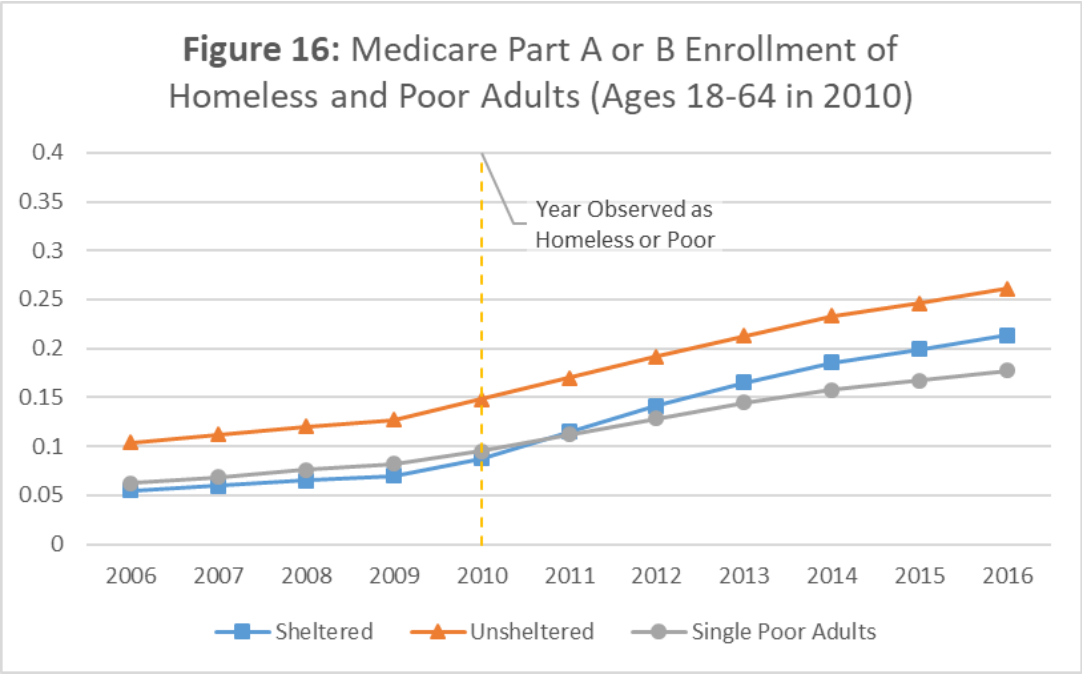
Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016).*

Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Figure reports the IPW-weighted share of individuals receiving SNAP benefits who were enumerated in New York, New Jersey, Tennessee, Indiana, or Illinois in the 2010 Decennial Census, conditional on our having administrative data for that state in a given year. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



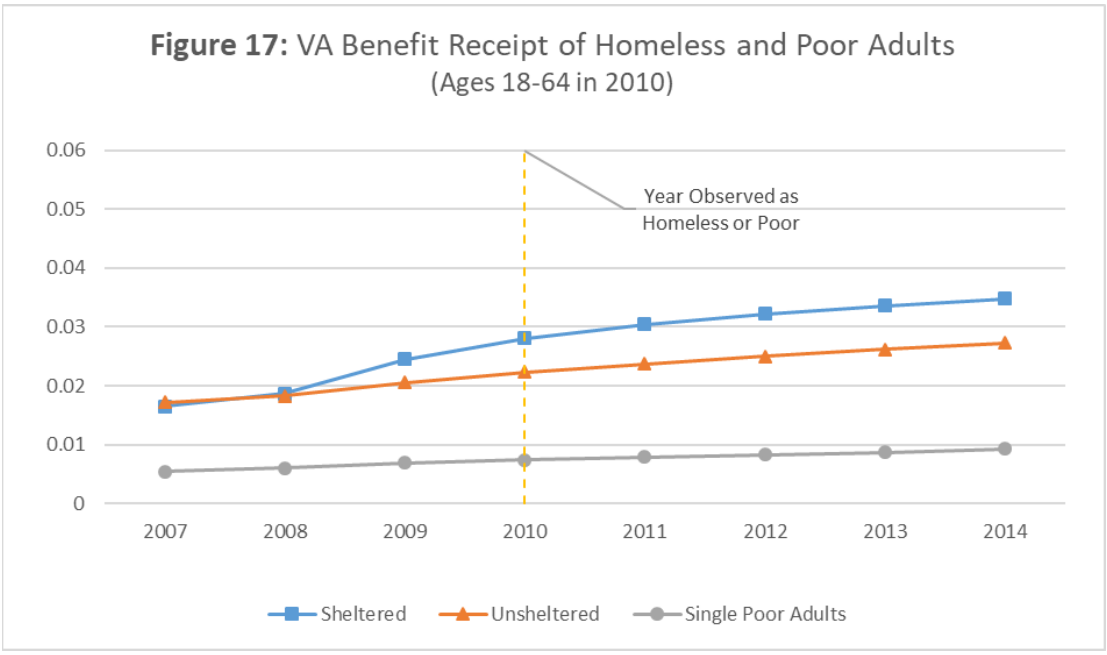
Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2007-2015 Medicaid dataset*

Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Figure reports the IPW-weighted share of individuals receiving Medicaid benefits. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



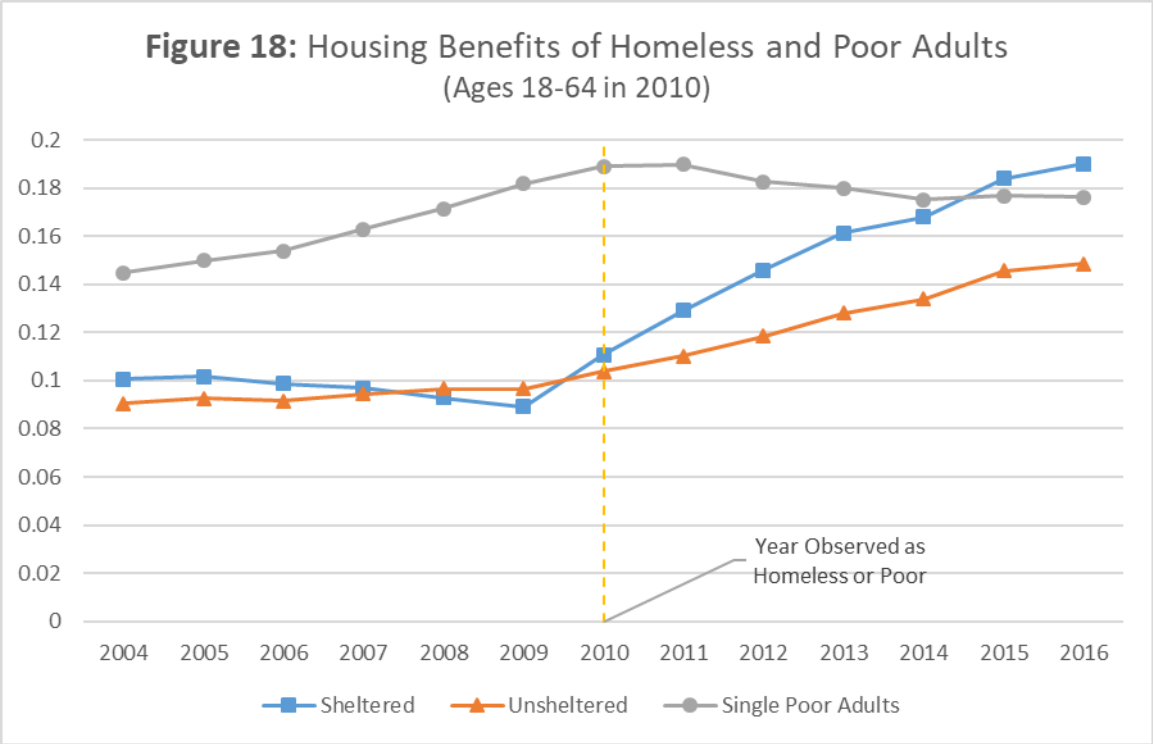
Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2006-2016 Medicare dataset*

Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Figure reports the IPW-weighted share of individuals enrolled in Medicare Part A or B. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



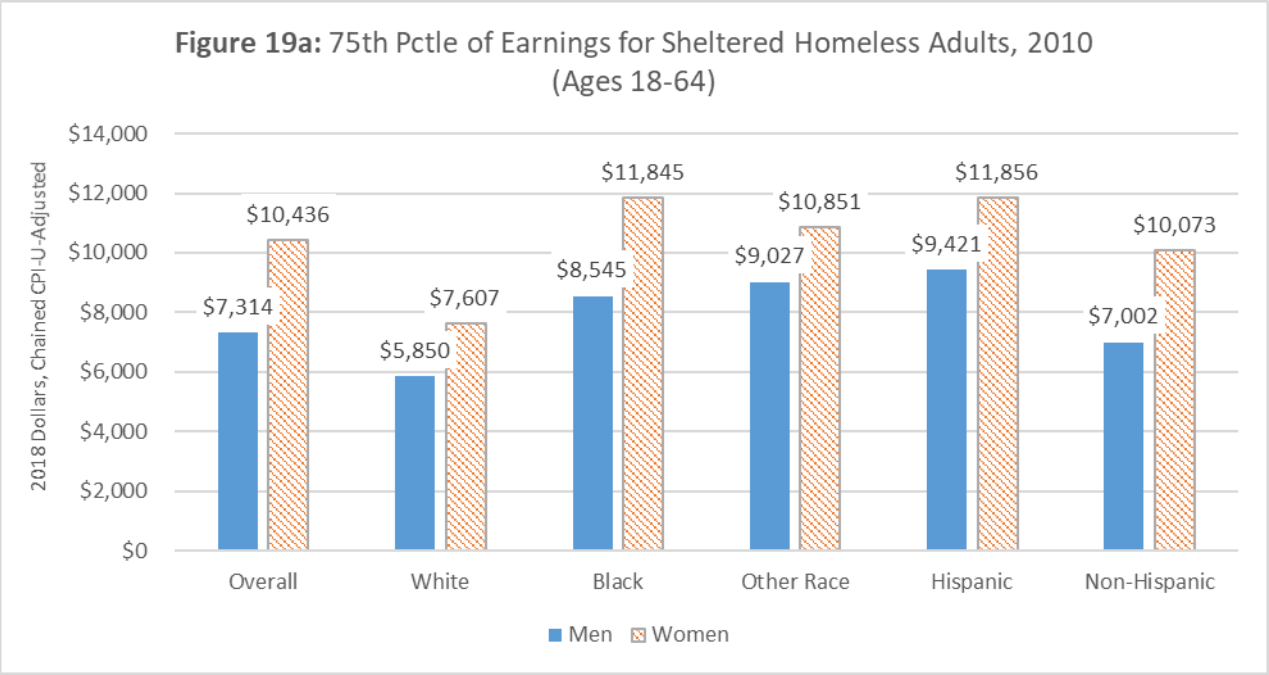
Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2007-2014 Administrative VA dataset*

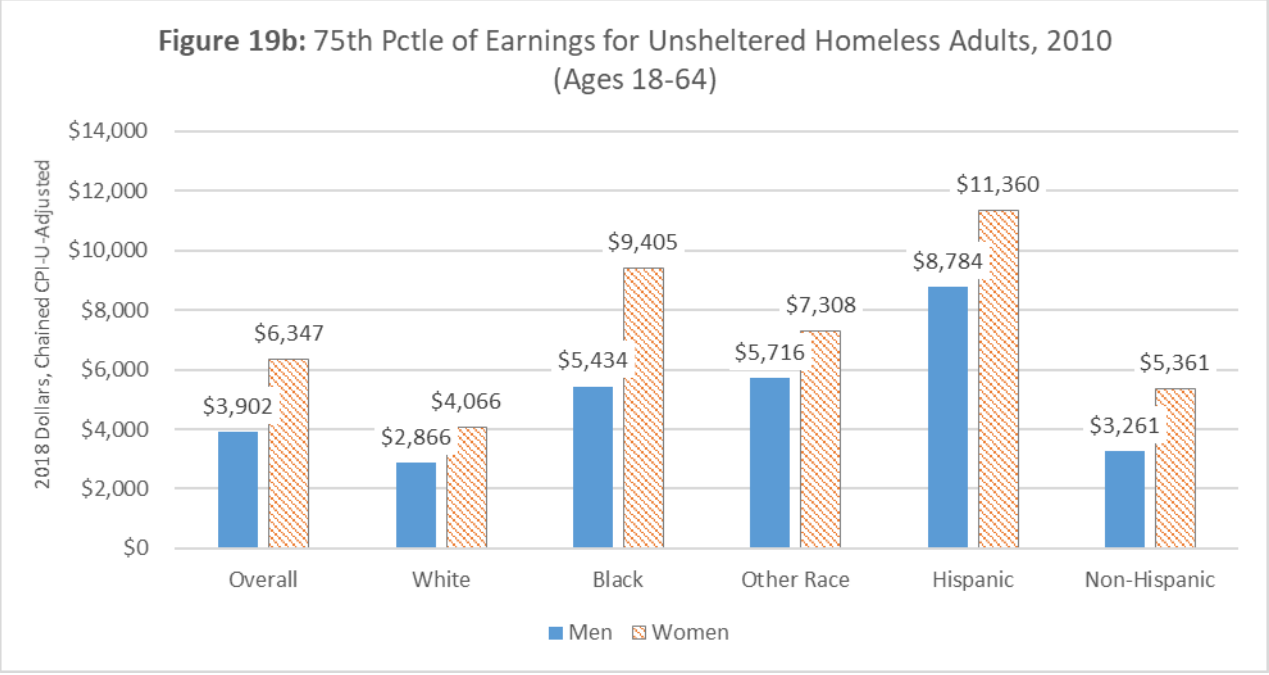
Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Figure reports the IPW-weighted share of individuals receiving VA benefits. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*



Sources: *2010 Decennial Census, U.S. Census Bureau 2010 American Community Survey 1-year data, 2019 Numident, 2006-2016 HUD PIC & TRACS*

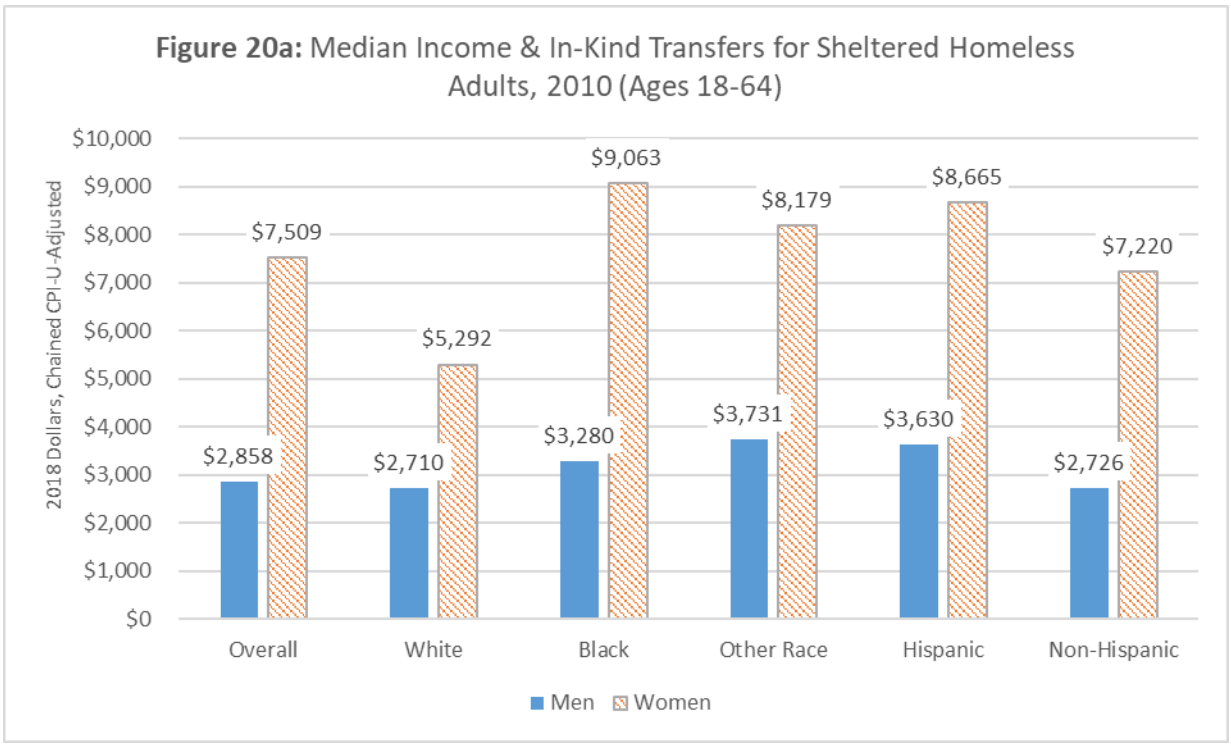
Note: *Sheltered and unsheltered homeless groups are identified in the 2010 Decennial Census, and the single poor adult group is drawn from the 2010 ACS. Unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Figure reports the IPW-weighted share of individuals receiving HUD benefits. For more information on confidentiality protection, sampling error, non-sampling error, and definitions in the ACS, visit www.census.gov/acs. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*

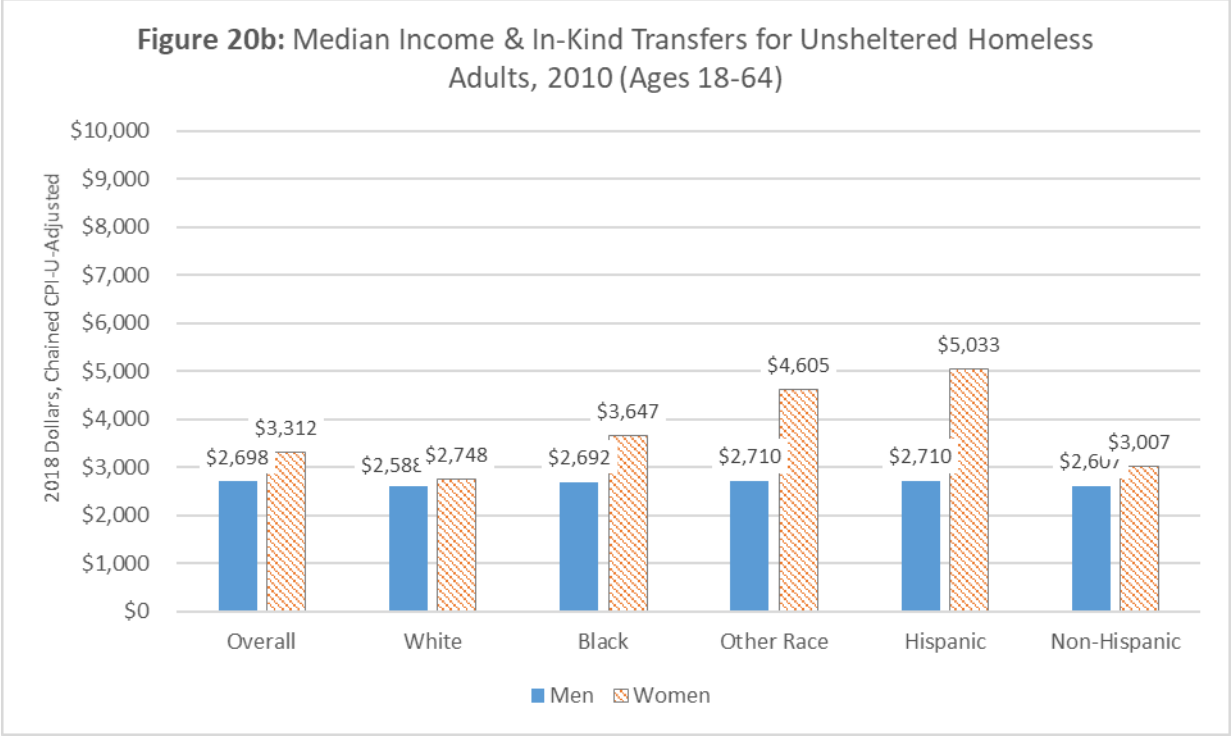




Sources: *2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets.*

Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Earnings are calculated as in Tables 11-13 using IPW weights. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*





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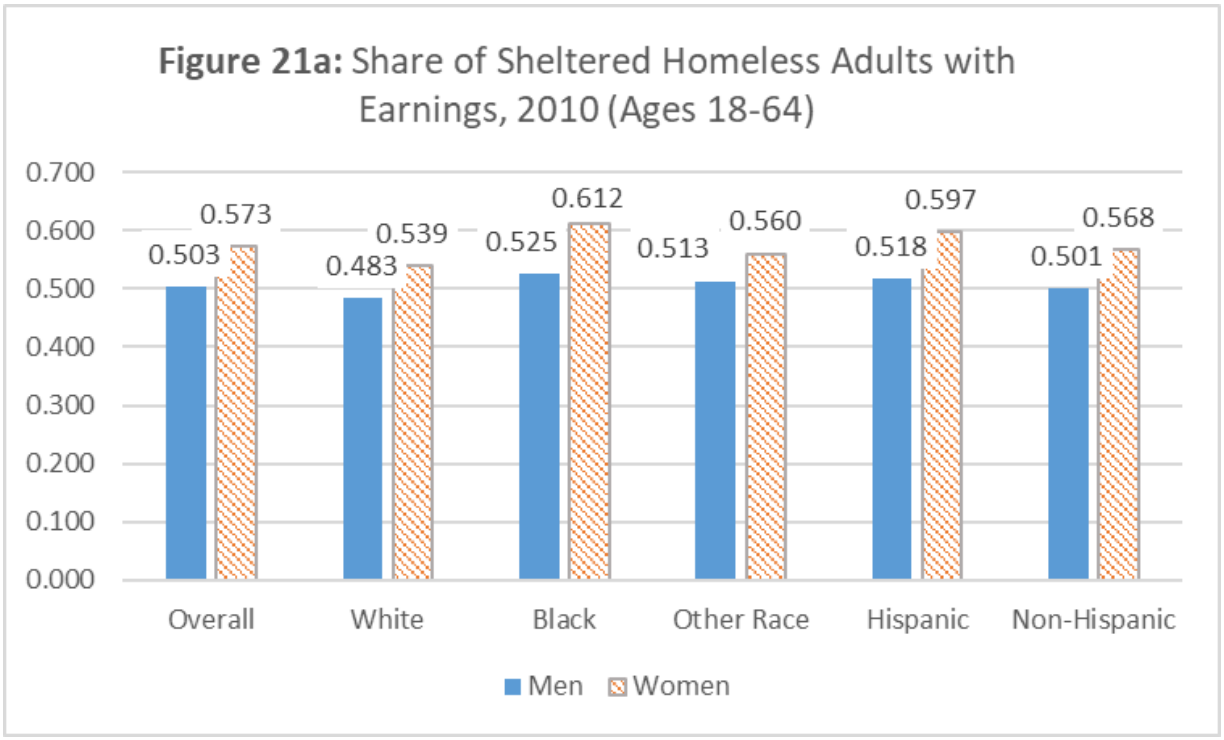
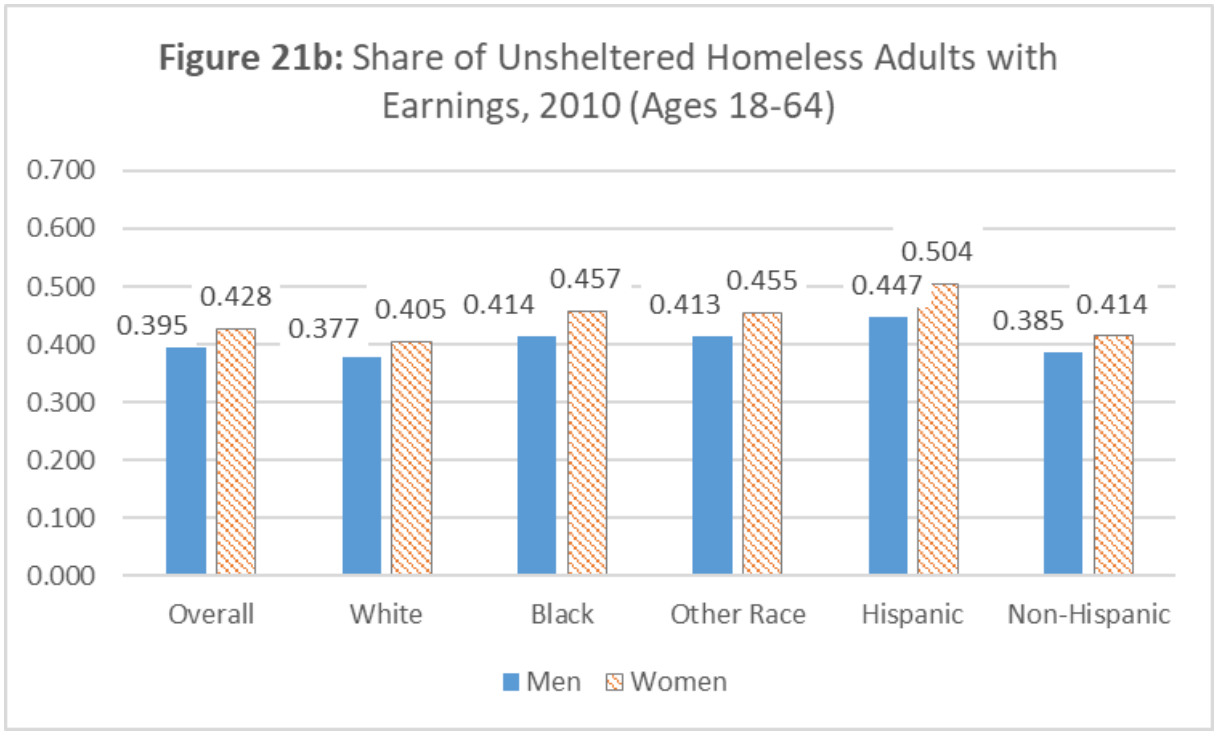
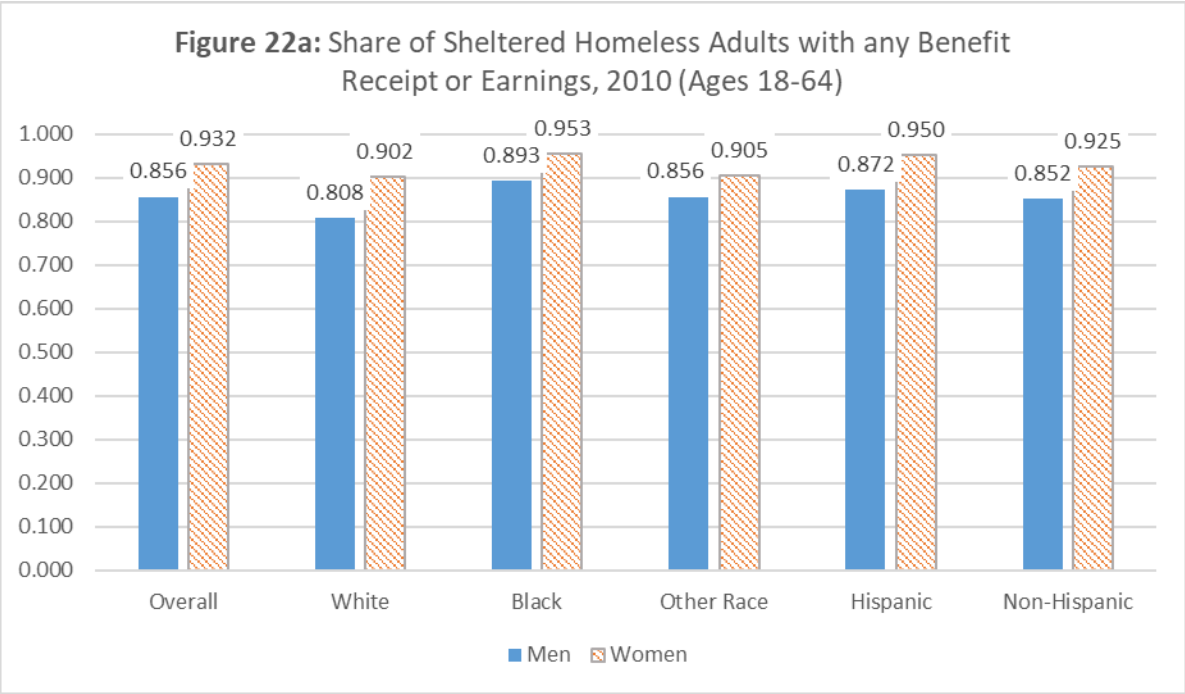
Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Pre-tax income and in-kind transfers are calculated as in Tables 11-13 using IPW weights. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*

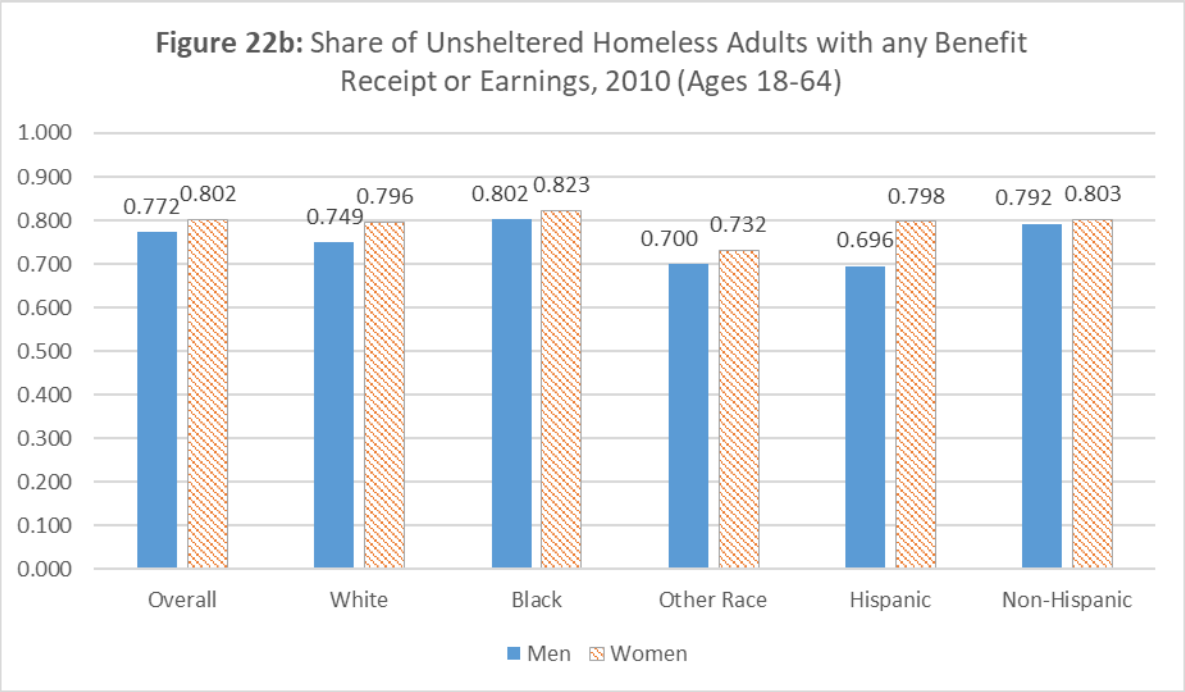




Sources: *2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets.*

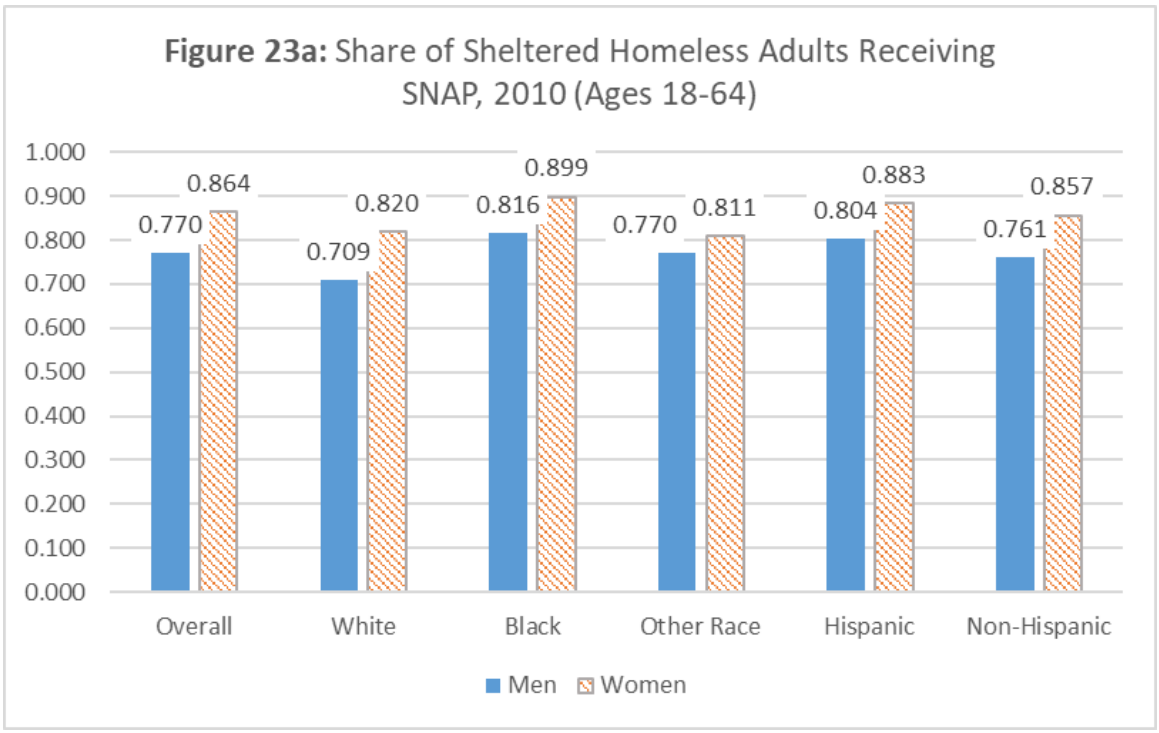
Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Earnings are calculated as in Tables 11-13 using IPW weights. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*

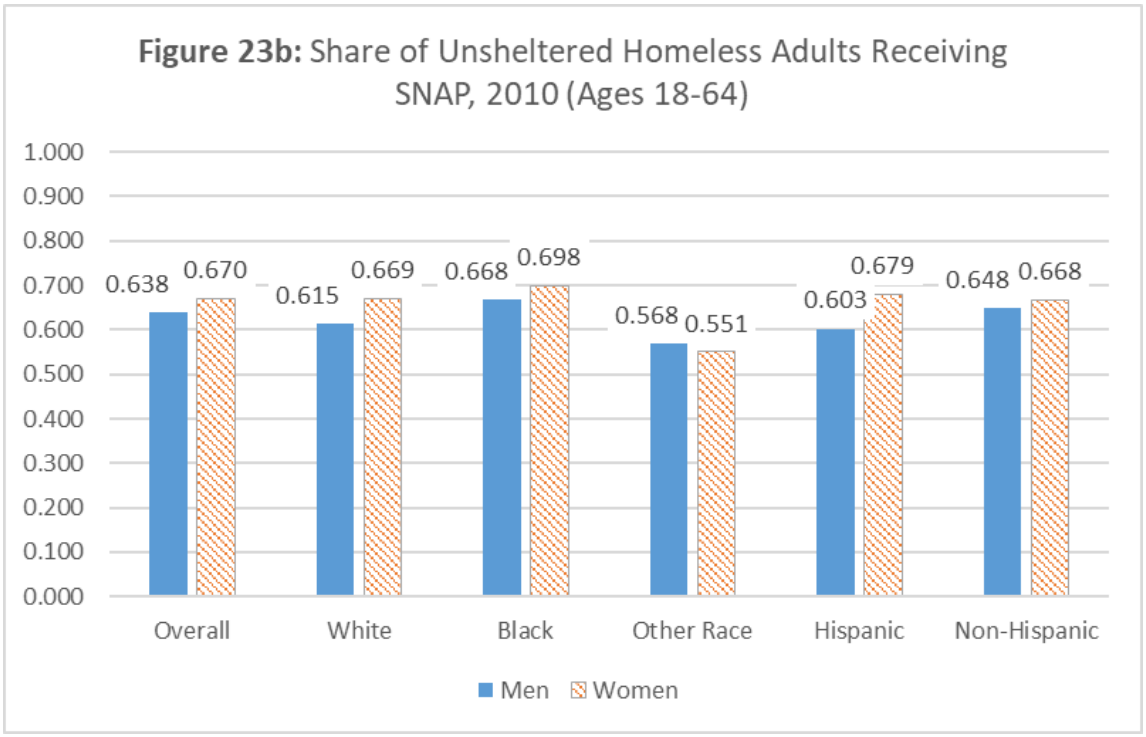




Sources: *2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets.*

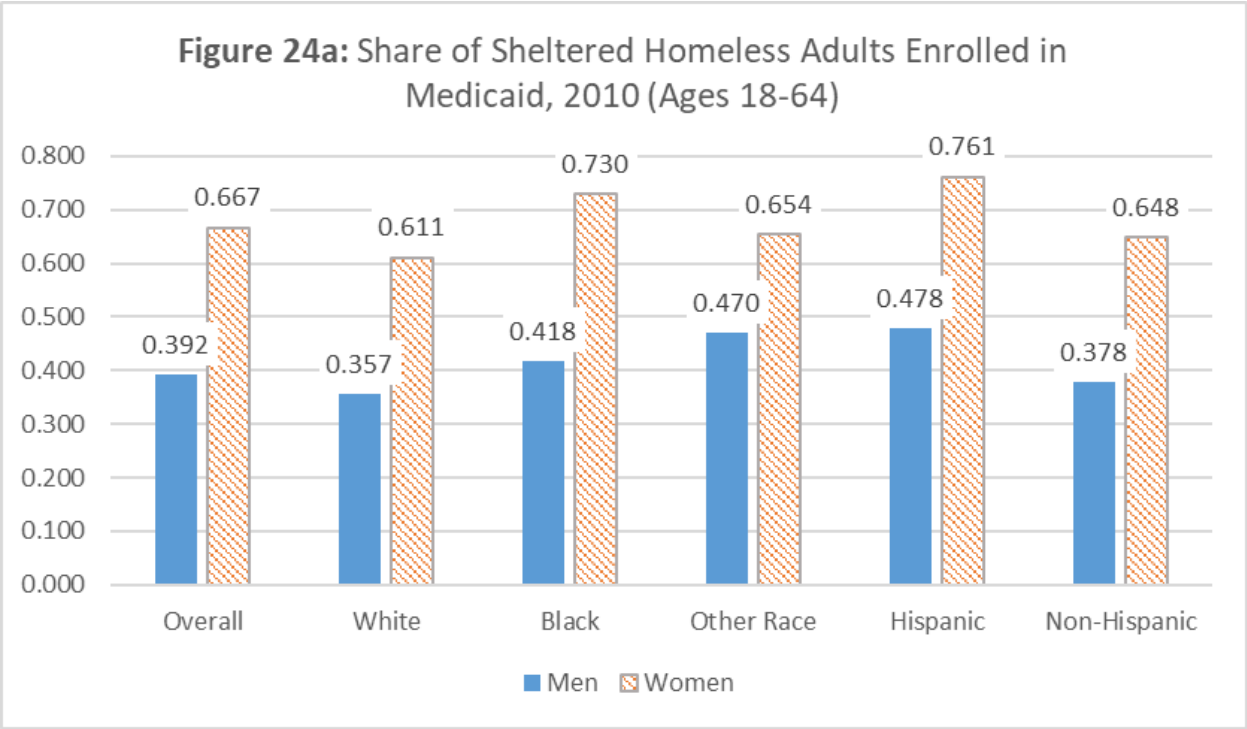
Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Benefit receipt is defined as in Tables 11-13 using IPW weights. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*

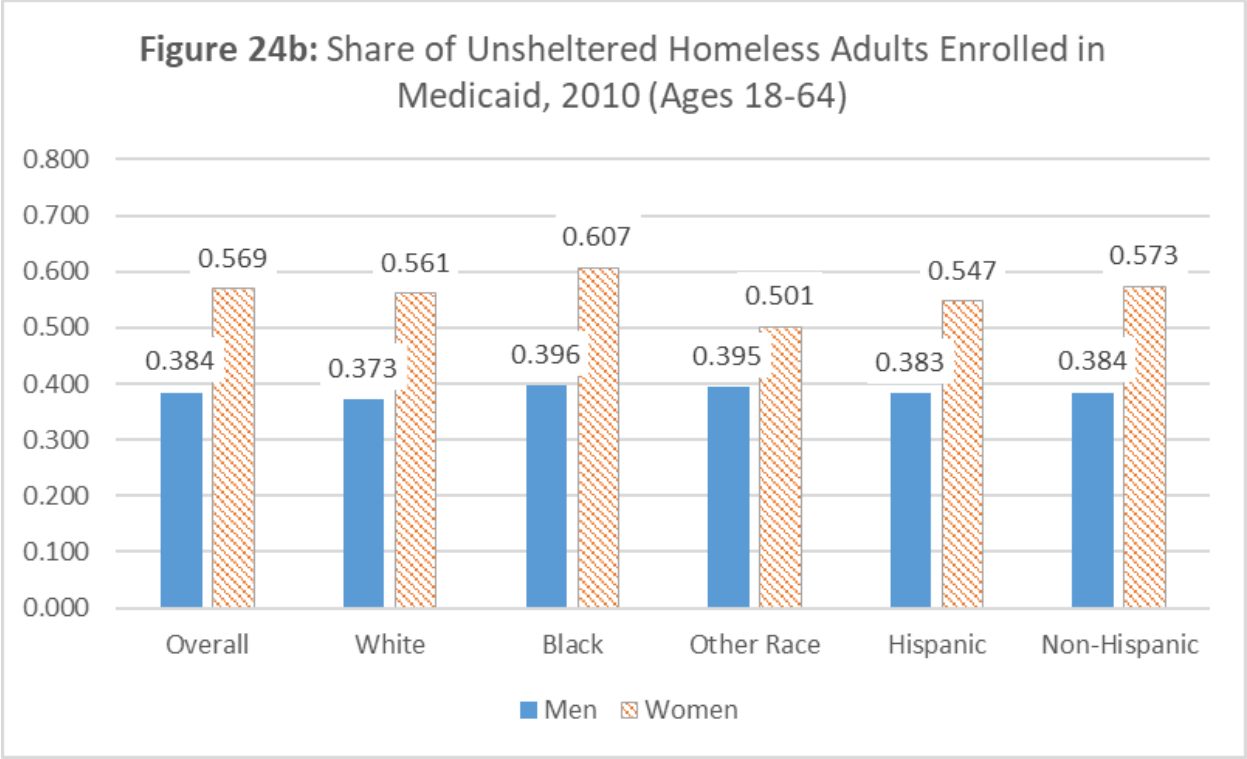




Sources: *2010 Decennial Census, 2019 Numident, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016).*

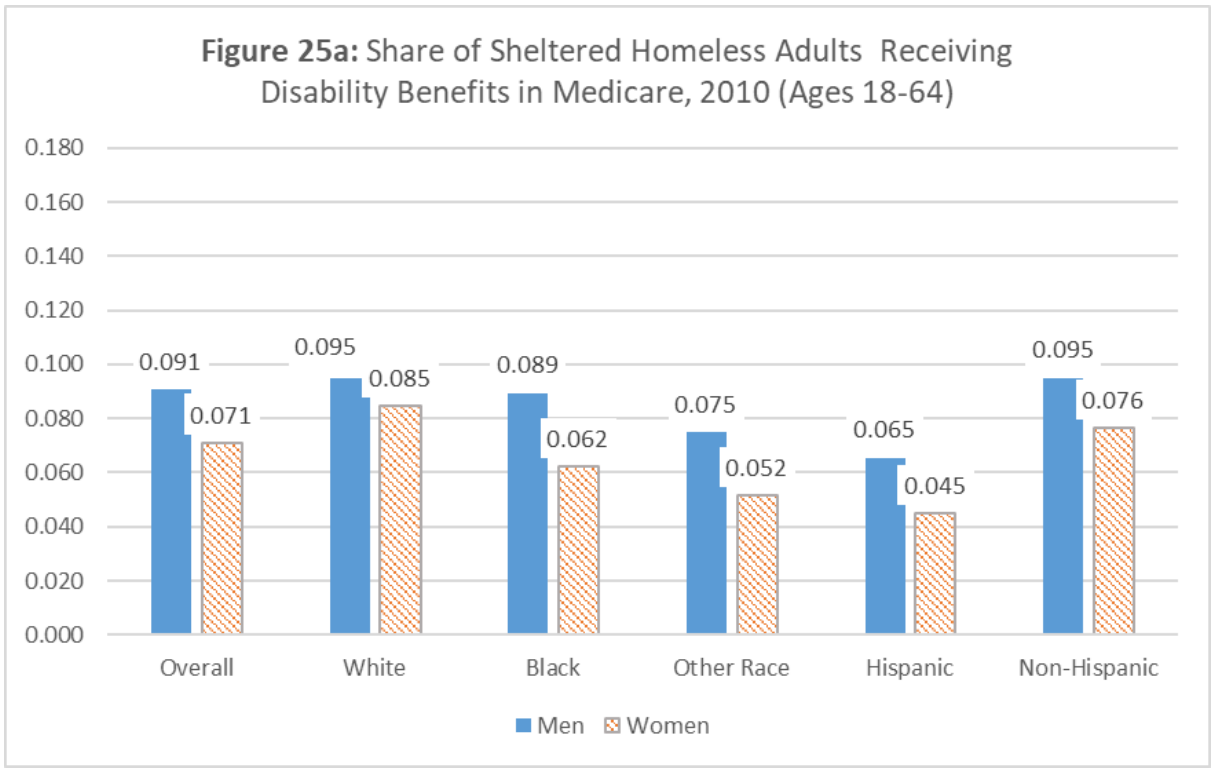
Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. SNAP receipt is limited to people enumerated in New York, New Jersey, Tennessee, Indiana, or Illinois in the 2010 Decennial Census. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*

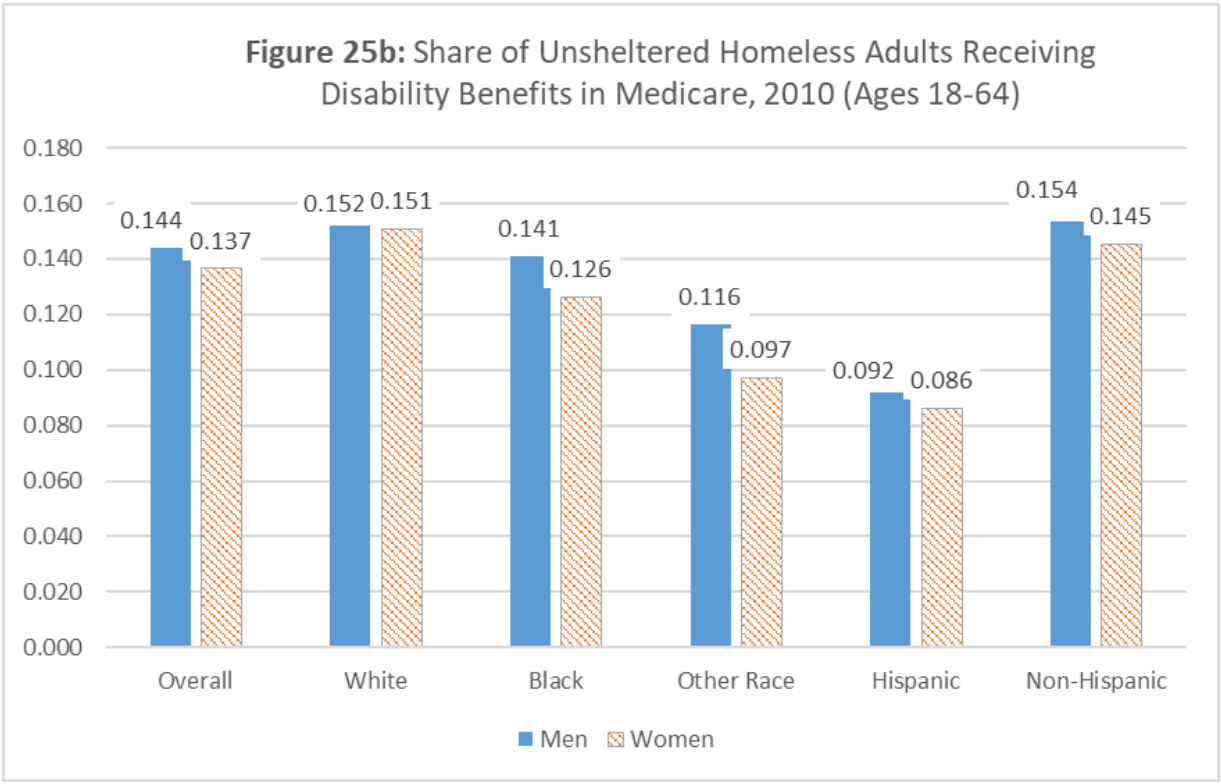




Sources: *2010 Decennial Census, 2019 Numident, 2007-2015 Medicaid dataset*

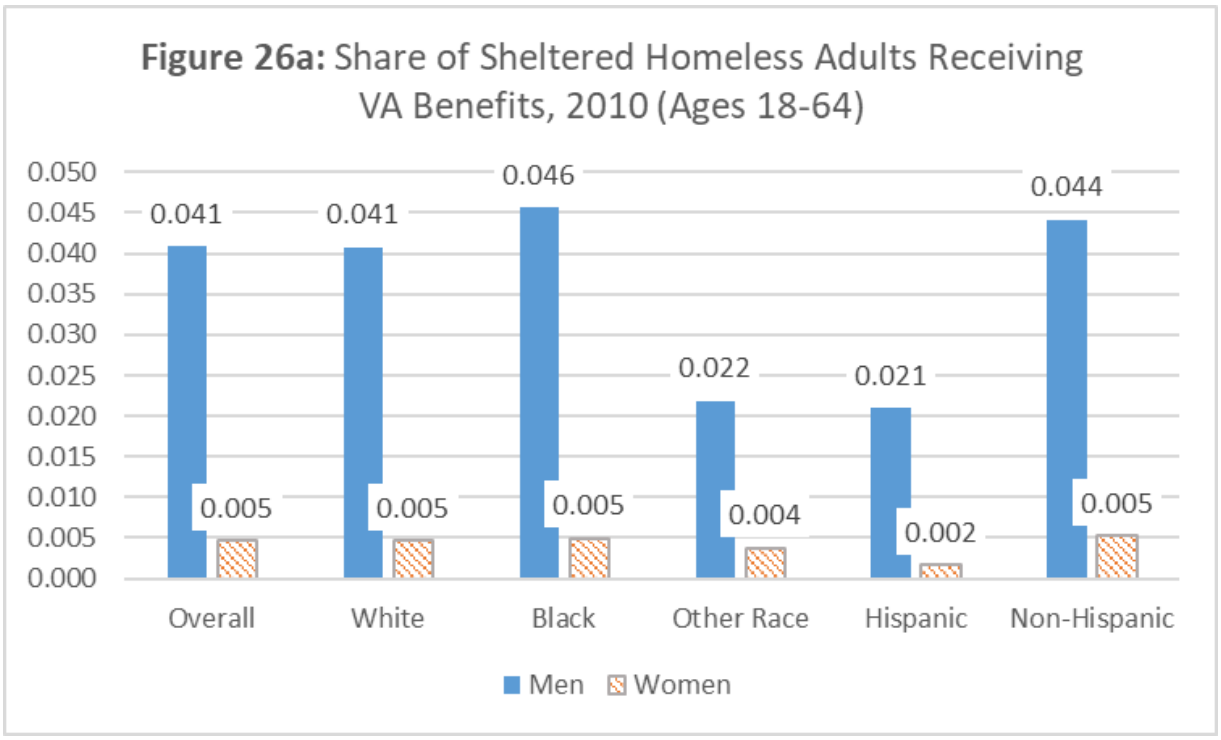
Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Medicaid receipt is as defined in Tables 11-13. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*

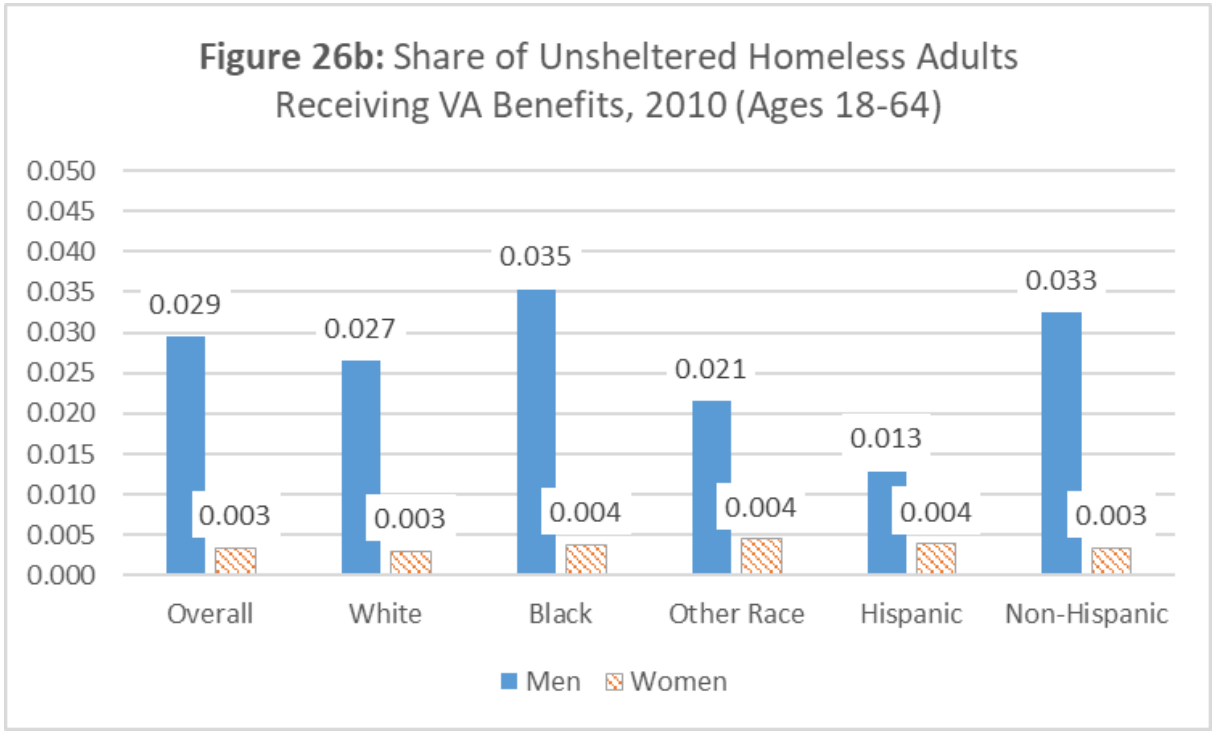




Sources: *2010 Decennial Census, 2019 Numident, 2006-2016 Medicare dataset*

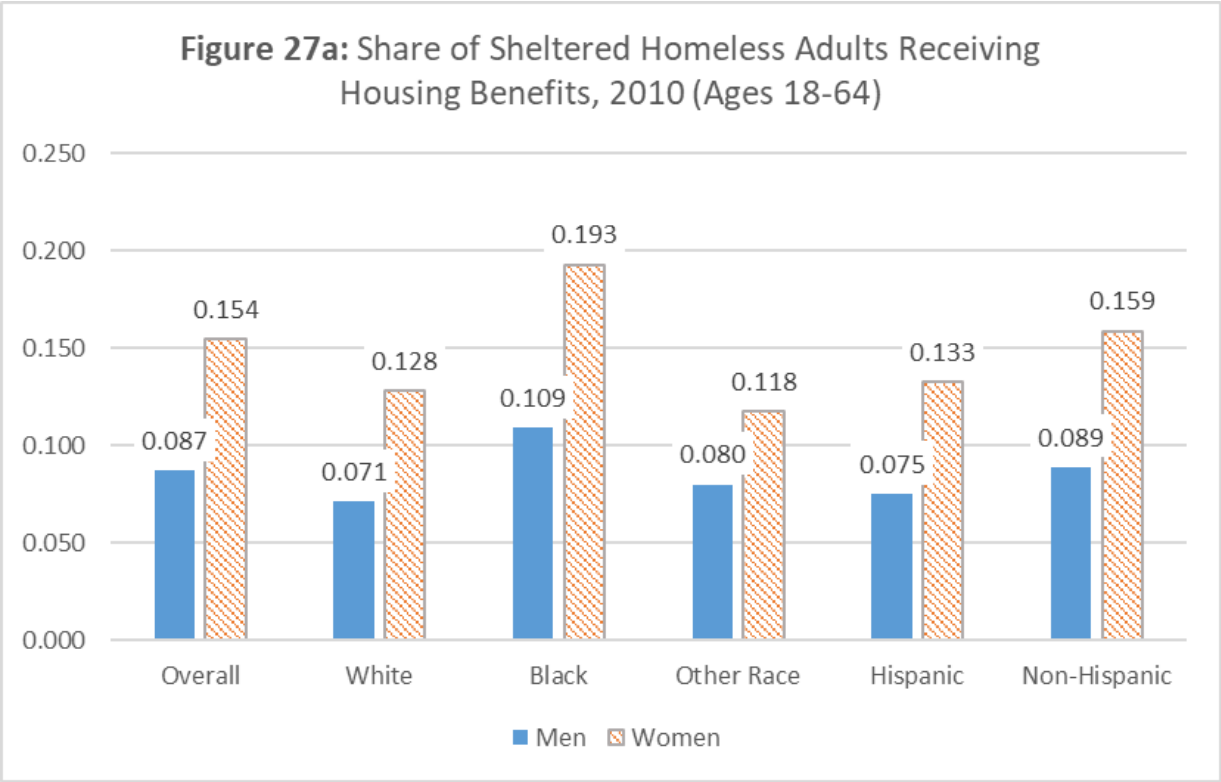
Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Disability benefit receipt is as defined in Tables 11-13. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*

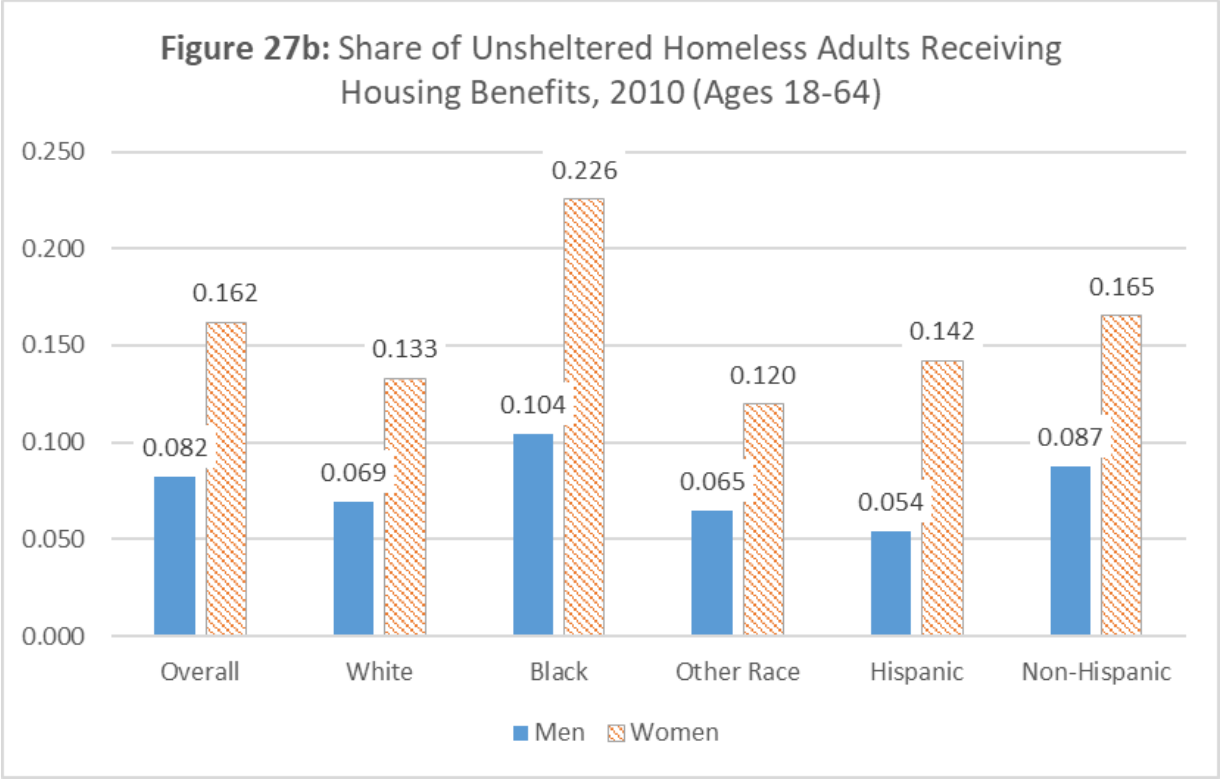




Sources: *2010 Decennial Census, 2019 Numident, 2007-2014 Administrative VA dataset*

Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. VA benefit receipt is as defined in Tables 11-13. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*





Sources: *2010 Decennial Census, 2019 Numident, 2006-2016 HUD PIC & TRACS*

Note: *Homeless individuals' race, Hispanic ethnicity, and sex are identified in the 2010 Decennial Census. The unsheltered group includes individuals enumerated at soup kitchens and regularly scheduled mobile food vans. Housing benefit receipt is as defined in Tables 11-13. Dollars are expressed as C-CPI-U adjusted 2018 dollars. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-007 and CBDRB-FY21-045.*