Homelessness and the Persistence of Deprivation: Income, Employment, and Safety Net Participation

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Abstract

Homelessness is arguably the most extreme hardship associated with poverty in the United States, yet people experiencing homelessness are excluded from official poverty statistics and much of the extreme poverty literature. This paper provides the most detailed and accurate portrait to date of the level and persistence of material disadvantage faced by the U.S. homeless population, including the first national estimates of income, employment, and safety net participation based on administrative data. We link restricted-use microdata identifying those recorded as homeless during the 2010 Census to longitudinal tax records and administrative data on the Supplemental Nutrition Assistance Program (SNAP), Medicare, Medicaid, Disability Insurance (DI), Supplemental Security Income (SSI), veterans' benefits, housing assistance, and mortality. We find that nearly half of these adults had formal employment in the year they were observed as homeless, one-quarter received disability assistance, and more than 85 percent were reached by at least one safety net program, primarily SNAP. Incomes are persistently low for the decade surrounding an observed period of homelessness, suggesting that homelessness tends to arise in the context of long-term, severe deprivation rather than large and sudden losses of income. As our findings illustrate, most people appear to experience homelessness because they are very poor despite being connected to the labor market and safety net, with persistently low incomes leaving them vulnerable to loss of housing when met with even modest disruptions to life circumstances.

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1. Introduction

Homelessness is an inordinately severe hardship. A long history of qualitative research and abundant anecdotal evidence suggests that people go to great lengths to avoid becoming homeless when confronted with an unfortunate turn of events like a job loss, health crisis, eviction, or relationship dispute, leaving only those with the fewest resources – those without savings or credit to afford temporary lodging, those without the possibility of emergency assistance from friends and family, those with mental health or substance abuse conditions that impair decision-making – to end up on the streets or in a homeless shelter. As Peter Rossi (1989) wrote in his seminal work *Down and Out in America: The Origins of Homelessness*, homelessness is "the most aggravated state of a more prevalent problem, extreme poverty."

Yet while the association between homelessness and severe economic disadvantage is apparent in a general sense, obtaining a detailed and accurate picture of the material circumstances of people who have experienced this hardship in the U.S. has proved challenging. Without a fixed address, such individuals are largely excluded from the household surveys that typically inform our understanding of poverty and well-being in the United States, and they have consequently been understudied in the extreme poverty literature. The most recent national survey to examine this population's income and program receipt, the National Survey of Homeless Assistance Providers and Clients (NSHAPC), dates back nearly three decades to 1996 (Burt 2001). Recent studies linking administrative homeless shelter and employment records have offered important insights but are limited to a handful of cities and a single income source, earnings (Metraux et al. 2018; Wachter, Schnorr, and Riesch 2020). Numerous ethnographic studies and geographically narrow surveys offer nuanced and detailed information on the material well-being of the individuals they represent, but their results may not generalize beyond those settings and they lack longitudinal information. These surveys also rely on self-reports that even when obtained from rigorously tested surveys of the housed have been shown to be substantially biased (Meyer, Mok, and Sullivan 2015).

Understanding the income and safety net participation of people who have experienced homelessness is crucial for the design and targeting of policy interventions. Such knowledge can, for example, indicate the degree of income-related deprivation that puts someone at risk of homelessness, which can in turn improve the targeting of prevention efforts, shed light on the size of the at-risk population, and inform the scale of interventions needed to significantly reduce aggregate homelessness. Understanding the persistence or transience of deprivation can also direct policymakers towards the most appropriate prevention strategies, which might consist of measures aimed at raising permanent incomes, reducing housing costs, or mitigating income volatility.

This paper advances our understanding of the conditions in which homelessness arises by providing the most detailed and accurate portrait to date of income and safety net participation for the U.S. homeless population. Our sample consists of 140,000 adults recorded as sheltered and unsheltered homeless in the 2010 Census, by far the largest, most representative sample ever used to study these questions. We link these individuals to administrative tax and program records to provide the first national calculation of formal employment, income, and safety net participation for this population. We compare these outcomes to a demographically comparable sample of the housed poor and examine how pathways to homelessness appear to differ by sheltered status, race, gender, Hispanic ethnicity, and geography. We demonstrate the robustness of our findings to different linkage methods and alternative samples, including samples of the sheltered homeless population from the American Community Survey (ACS) and several cities' Homeless Management Information System (HMIS) shelter-use databases.

Our approach benefits not only from large samples that are designed to represent national homelessness patterns, but also from a wealth of accurate income and safety net information from administrative records. Using confidential personal identification keys, we link individuals experiencing homelessness to Internal Revenue Service (IRS) microdata on taxable income and employment from Forms 1040, W-2s, and 1099-Rs, as well as data on numerous state and federal safety net programs, including the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), Medicaid, Medicare, Temporary Assistance for Needy Families (TANF) and General Assistance (GA), Supplemental Security Income (SSI), Social Security Disability Insurance (DI), rental assistance from the Department of Housing and Urban Development (HUD), and service-connected disability payments from the Department of Veterans Affairs (VA). We account for mortality in our analyses using Social Security Administration (SSA) records of death dates.

We learn that the modern-day U.S. homeless population is surprisingly well-connected to formal employment and the safety net, in contrast to earlier years' depictions of individuals "unconnected to the world of work" with "no safety net of entitlements" (Rossi 1989). Nearly all sheltered homeless adults in our sample (97 percent) and the vast majority of unsheltered homeless adults (93 percent) were formally employed or enrolled in at least one safety net program in 2010,

the year they were observed as homeless. We also find that a substantial share of the homeless population is drawn from the ranks of the working poor: about half of those in shelters and 40 percent of those at unsheltered locations had formal employment in 2010. Their median annual earnings were about \$8,300, however, suggesting low-wage, sporadic work. We find SNAP receipt to be especially high, reaching about 77 percent of all adults in our sample in 2010. Connections to work and the safety net coexist with deep poverty for this population, however. The median value of our most comprehensive resource measure, which adds to cash income the value of in-kind transfers from SNAP and HUD, was \$7,500 for those in shelters and \$5,500 for those experiencing unsheltered homelessness in 2010. In other words, people experience homelessness not because they are estranged from formal income and programs, but because they are very poor *despite* being highly connected to work and the safety net.

Turning to longitudinal patterns, our calculations reveal persistent, severe deprivation, with incomes remaining low for the decade surrounding an observed period of homelessness. Median annual income, including in-kind transfers, never exceeded \$10,000 for the sheltered homeless and \$8,000 for the unsheltered homeless in the decade surrounding 2010. We observe only a small dip in employment and earnings relative to the long-term trend preceding an observed period of homelessness, suggesting that employment and earnings shocks are not the predominant precipitating event for most spells of homelessness. Reliance on the safety net was also persistently high over the ten years of our study, although receipt of SNAP and TANF/GA – benefits typically understood to be temporary - peaked in the year observed as homeless, perhaps due in part to service providers' and homeless shelters' efforts to facilitate enrollment in these programs. We see a long-term pattern of declining employment that is accompanied by increasing enrollment in disability programs, with receipt of SSI or DI increasing from 19 to 34 percent for the sheltered homeless and 29 to 40 percent for the unsheltered homeless between 2010 and 2016. These longitudinal patterns suggest that homelessness tends to arise in the context of severe long-term deprivation, alongside steadily declining employment and increasing disability assistance receipt, rather than large shocks to income. Put differently, people experiencing homelessness are not just enduring an exceptionally difficult year - they are enduring an exceptionally difficult decade, and perhaps in many cases, an exceptionally difficult life.

Our analyses reveal a high degree of similarity between the material circumstances of people recorded in homeless shelters during the Census and poor housed individuals who share their demographic profile. This poor housed comparison group consists of unmarried individuals who are predominantly male (70 percent), between the ages of 40 and 59 (69 percent), and disproportionately Black (39 percent) relative to the overall population. These individuals had a median income, including the value of in-kind transfers, of about \$9,900 in 2010, only about \$2,000 higher than the median of \$7,500 among those who were in homeless shelters during the Census. By some measures, the housed poor appear to be somewhat more deprived than the sheltered homeless sample: they were slightly less likely to be employed in 2005 through 2010 and slightly *more* likely to receive SSI in 2010. These results underscore the dire economic circumstances faced by this segment of the housed poor population, a group that tends to be neglected in policy discussions on poverty relative to single mothers and children. In this way, our paper complements Meyer et al. (2021)'s work on extreme poverty in the U.S., which finds that after accounting for misreporting of income and program receipt in surveys, the only households who cannot be ruled out as being extremely poor are those consisting of a single, childless adults. Our findings suggest that this overlooked segment of the population, which appears to be exceptionally vulnerable to homelessness and likely other severe hardships as well, may merit more attention in national discussions of poverty alleviation.

Our findings help explain several patterns that have emerged in the recent literature on homelessness prevention. Prior work has emphasized the exceptional difficulty of identifying people who are most likely to become homeless and targeting prevention programs towards them, a finding that is consistent with our observation of substantial overlap between the economic circumstances of people in homeless shelters and the housed poor who share their demographic profile (O'Flaherty 2011; Shinn et al. 2013; Von Wachter et al. 2021). Even detailed and accurate information about someone's long-term trajectory of income and safety net participation are unlikely to yield useful predictors of homelessness.

At the same time, several experimental and quasi-experimental studies have found that providing small emergency payments to people at risk of losing housing, often on the order of one month's rent or less, can significantly reduce their probability of entering a shelter (Rolston et al. 2013; Evans, Sullivan, and Wallskog 2016; Phillips and Sullivan 2023). The effectiveness of such emergency assistance programs accords with our finding that homelessness tends to arise in the context of persistent, severe deprivation rather than major disruptions to income: just as a small loss of resources may be enough to trigger a spell of homelessness for those with the most

precarious circumstances, a small boost to income may be enough to prevent it. Yet our results also underscore the likely continued vulnerability to homelessness of those who receive small, onetime payments through emergency assistance programs. Indeed, these prior studies have found that the effect of emergency financial assistance on shelter entry attenuates over time, suggesting that some of the people for whom a spell of homelessness was initially averted eventually end up homeless – an outcome that is consistent with the persistent deprivation documented in this paper. A small-scale payment may be enough to prevent a singular instance of homelessness, but it is unlikely to make a dent in the long-term deprivation that leaves people vulnerable to the loss of housing.

These analyses shine new light on a highly disadvantaged segment of the U.S. population, those for whom extreme poverty can mean extreme vulnerability to homelessness when met with even modest disruptions to their life circumstances. The rest of the paper proceeds as follows. Section 2 discusses prior work on the income and safety net participation of homeless individuals. Section 3 describes our data, Section 4 describes our methodology, and Section 5 presents our main results, as well as analyses of heterogeneity by demographic characteristics and geography. Section 6 analyzes the robustness of our findings to alternative data sources, sample definitions, and linkage methods and presents extensions, including an analysis of demographic and income misreporting in household surveys. Section 7 compares our findings to prior work and Section 8 concludes.

2. Connections to Prior Work

Concerted efforts to learn about the income, employment, and safety net participation of people experiencing homelessness in the U.S. began in the 1980s, when an alarming and highly visible rise in homelessness drew renewed attention from researchers and the broader public. Rossi (1989) reviewed this early literature in his seminal ethnographic work, with an emphasis on his own surveys of Chicago's homeless population, which were innovative in their efforts to obtain representative samples. These early studies depicted an extremely deprived and disconnected population, heavily reliant on donations of meals and clothing and informal income from activities like panhandling and peddling. Rossi's surveys found that just one in four homeless Chicagoans received food stamps and that one in three had been employed in the previous month. Interviewees reported mean monthly income equivalent to about \$375 in 2018 dollars, or \$4,500 in a year.

The 1996 National Survey of Homeless Assistance Providers and Clients (NSHAPC) built on this early work to provide the first - and, until the present study, the only - estimates of the income, employment, and safety net participation using a sample designed to be representative of the entire U.S. homeless population (Burt, Martha R 1989; Burt et al. 1999). The NSHAPC, which was carried out by the Census Bureau on behalf of numerous federal agencies, collected detailed information from 4,200 users of homeless services around the country to learn about their characteristics, material well-being, health, and many other aspects of their life circumstances. This survey painted a picture of deprivation in the U.S. homeless population that was somewhat less grim than Rossi's but nevertheless dire. Survey respondents reported average monthly income of \$590 in 2018 dollars, corresponding to annual income of \$7,080, slightly less than half of the corresponding federal poverty threshold for a single individual from that year. Forty-four percent reported having worked in the previous month, and 37 percent said they received food stamps. NSHAPC also estimated the receipt of SSI (11 percent), Medicaid (30 percent), and General Assistance (GA) plus Aid to Dependent Families with Children (AFDC, the precursor to TANF) (19 percent). Taken together, about 40 percent of those experiencing homelessness received at least one benefit according to this survey.

While NSHAPC remains the most recent national survey of the U.S. homeless population, two studies have since revisited the question of employment among people experiencing homelessness using administrative data by linking individuals from Homeless Management Information System (HMIS) databases to data on employment and earnings (Metraux et al. 2018, Von Wachter et al. 2020). Linked administrative data permit longitudinal analyses and provide more accurate information on employment and earnings, which are frequently misreported in surveys and perhaps especially so for those experiencing homelessness, as we show in Section 5.

These two studies suggest somewhat lower employment than NSHAPC, although their estimates are at the annual and quarterly level and therefore not directly comparable to NSHAPC's monthly estimate. They also offer some evidence of disruptions to employment and earnings preceding homelessness. Metraux et al. (2018) find that about 42 percent of adults in New York City homeless shelters received wage income in the year they first enrolled in a shelter, a drop of about 6 percentage points relative to average employment over rates the preceding decade. They also observe an average \$3,000 drop in mean earnings conditional on working relative to the preceding decade. Von Wachter et al. (2020) estimate that just 29 percent of Los Angeles shelter

users were employed in the year before shelter enrollment, although this share may be biased towards zero because it is based only on California state earnings records. They observe very little drop in employment in the year preceding the first shelter enrollment in the full sample, although mean earnings do fall among those who work. While these studies produced new insights into the level and longitudinal patterns of employment in this population, their findings are limited to homeless shelter users New York and Los Angeles and may not generalize nationally or to those experiencing unsheltered homelessness. Moreover, these studies examine just one income source (earnings) and therefore provide a limited view of individuals' financial resources.

In this paper, we advance this literature by providing the most comprehensive, accurate, and detailed calculation of the income, employment, and safety net participation for the U.S. homeless population to date. We build upon prior work by using national samples of the homeless population, including those residing outside of homeless shelters, and linking these individuals to administrative records that encompass a more comprehensive set of income sources. Administrative data allow us to obtain more detailed and accurate information on income and safety net receipt than in the NSHAPC and other surveys, including longitudinal patterns. In Section 7, we compare our results in detail to the studies described in this section and how these findings advance and revise our understanding of the level and persistence of deprivation faced by the U.S. homeless population relative to prior work.

3. Data

3.1 2010 Census Data on the U.S. Homeless Population

Our main sample of analysis consists of people who were recorded as experiencing sheltered and unsheltered homelessness during the 2010 Census. The Census collected information on this population through its Service-Based Enumeration (SBE) operation on March 29-31, 2010. SBE enumerators interviewed individuals in homeless shelters, users of soup kitchens and mobile food vans, and people spending the night at pre-identified outdoor locations known as targeted non-sheltered outdoor locations (TNSOLs), such as vehicle and tent encampments.¹ Because people using soup kitchens and food vans were only included in the homeless count if they did not indicate a valid residential or shelter address, we classify people enumerated at those locations as

¹ The SBE did not include people residing in domestic violence shelters. These individuals were included in the Census through a different counting operation and are not identified even in restricted-use data due to privacy concerns, so we do not include them in our study.

"unsheltered homeless" in our study. Our Census homeless sample therefore consists of a crosssection people who were experiencing literal homelessness in early 2010 - i.e., people residing in homeless shelters and those with a primary nighttime residence not meant for human habitation. In Section 4, we discuss the merits of this definition of homelessness relative to other definitions, for example those that include people who are "doubling up" or involuntarily sharing housing.

The Census built its list of service providers and outdoor locations for the SBE through a series of research and validation operations, including internet research, queries to local government officials, advocacy organization, and other local partners, and numerous advance visit and validation operations (Russell and Barrett 2013). Enumerators across the country received several days of uniform training that included a sensitivity component to teach them how to approach people experiencing homelessness and how to work with people suffering from psychological health concerns. At many locations, the Census engaged local "culture facilitators" to aid in interviewing people experiencing unsheltered homelessness. In principle, enumerators aimed to collect names and dates of birth from all interviewees. In practice, given the bustling nature of service locations and the fact that many individuals were sleeping during the outdoor counting operation, many individuals were enumerated by sight without providing this personal information. We discuss the implications of such nonresponse and our methods of accounting for the resulting non-linkage in Section 4.

Meyer, Wyse, and Corinth (2023)establish the broad coverage and reliability of the 2010 Census as a source of data on the U.S. homeless population, estimating that more than 90 percent of people residing in homeless shelters (as these facilities are defined by HUD) were included in its count. However, these individuals were at times classified as residing in housing or other types of congregate facilities due largely to ambiguities in the definition of a homeless shelter.² The completeness of the Census's unsheltered count is less certain, but the similarity of unsheltered estimates between the Census and HUD's point-in-time (PIT) count – despite substantial differences in the sources' methodologies – suggests that the Census covered this population reasonably well.

 $^{^2}$ We test the robustness of our findings to differences between the Census and PIT definitions of a homeless shelter in Section 6 by comparing results based on Census sheltered homeless in Los Angeles and Houston to those based on HMIS sheltered homeless samples in these cities, with the definition of a homeless shelter in these latter sources aligning closely with HUD's definition.

3.2 American Community Survey (ACS) Data on the Sheltered Homeless

We use additional data on the sheltered homeless population from the ACS to test the robustness of our findings to different samples, linkage methods, and years. The ACS interviews about 2,500 to 3,500 people in homeless shelters each year but excludes people experiencing unsheltered homelessness. Its shelter list is based on the most recent Census, with limited updates during the intercensal period. Unlike the Census, which collects only basic demographic characteristics, the ACS collects a wealth of information about shelter users' characteristics, geographic mobility, physical and cognitive difficulties, and self-reported income and program receipt. (B. D. Meyer, Wyse, et al. 2021)provide a detailed description of these outcomes for sheltered homeless individuals interviewed in the 2006-2018 ACS. Despite offering large, nationally representative samples of the sheltered homeless population, the ACS has been underused to study this population in the past because shelter users are not identified in public-use versions of the data.

3.3 Homeless Management Information System (HMIS) Data

In addition to the Census and ACS, we obtain administrative data on people experiencing sheltered homelessness from Homeless Management Information System (HMIS) databases from Los Angeles (2004-2014), Houston (2004-2015), and Chicago (2014-2019). These databases contain individual records of homeless shelter entries and exits covering a large share of these cities' sheltered homeless populations. All federally funded shelters are required to track clients' program use in HMIS and many others elect to do so.

Although HMIS data are limited geographically, they confer several advantages for examining heterogeneity and checking the robustness of results based on homeless samples from the Census and ACS. Unlike the Census and ACS, the HMIS data classify individuals into families and can thus be used to examine heterogeneity by family type that is often emphasized in the literature. Moreover, HMIS-recorded shelter entry and exit dates permit analyses of income and program receipt relative to individuals' first observed shelter enrollment. This allows us to compare results based on different temporal conceptions of the homeless population (e.g., those who were homeless at a point in time versus those with a first shelter enrollment during a period). Finally, because shelter administrators record the Social Security Numbers (SSNs) of clients in the HMIS, these data can be assigned linkage keys at higher rates than the Census and ACS, which rely only on name, date of birth, gender, and geographic location to assign linkage keys. We leverage these

high linkage rates to examine whether or not incomplete linkage leads to bias in the results based on Census and ACS samples (Section 6).

3.4 Administrative Records on Incomes and Program Receipt

We link homeless individuals from the Census, ACS, and HMIS to an extensive collection of administrative records on formal income, employment, and safety net participation from federal and state agencies. We obtain information on taxable sources of money income from Internal Revenue Service (IRS) Forms 1040s, W-2s, and 1099-Rs.³ These records track the universe of formal employment (specifically wages) in the entire United States, with Form 1040 providing information for people who file taxes and Form W-2 adding wage amounts for those who do not. We have further information on retirement distributions from Form 1099-R. We obtain information on food assistance from five states' Supplemental Nutrition Assistance Program (SNAP) enrollment records and on cash assistance from New York State's Temporary Assistance for Needy Families (TANF)/General Assistance (GA) enrollment records.⁴ We obtain national administrative data on housing assistance from the Department of Housing and Urban Development (HUD)'s Public and Indian Housing Information Center (PIC) and Tenant Rental Assistance Certification System (TRACS) files, which cover nearly all public and subsidized housing assistance programs under this agency's jurisdiction. We utilize Medicare and Medicaid enrollment records from the Centers for Medicare and Medicaid Services (CMS). We also obtain data on three sources of disability benefits: the Veterans Benefit Administration's USVETS data on service-connected disability compensation, a universe file on receipt of Supplemental Security Income (SSI), and an indicator for Disability Insurance (DI) receipt in Medicare records. Finally, we obtain birth and death dates from the Social Security Administration (SSA)'s Numident file to account for mortality when calculating income and program receipt.

These datasets cover most formal sources of income and the most important means-tested safety net programs in the United States. Formal income sources not covered by these data include DI amounts, Unemployment Insurance (UI) among people who do not file 1040s, and workers' compensation. We also emphasize that our data are limited to formal income and do not include income from informal employment or private transfers. Transfers from family, friends, and private

³ IRS 1040 records are available for 2003-2015, W2s for 2005-2016, and 1099-Rs for 2003-2015.

⁴ The states and years for which we have SNAP data are the following: Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016).

charity – which could consist of cash assistance or in-kind transfers via housing, food, clothing, or other goods – are undoubtedly important for many people experiencing homelessness but are outside the scope of the present analysis.

4. Methods

4.1 Defining Homelessness

The Census homeless population consists of people experiencing what HUD defines as "literal homelessness." People are literally homeless if they have "a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings" or if they are living in "a supervised publicly or privately operated shelter designated to provide temporary living arrangements" (HUD 2012).⁵ As documented in Meyer, Wyse, and Corinth (2023), the Census definition of a homeless shelter differs in several straightforward ways from HUD's definition, with the latter including people in domestic violence shelters, those in hotel and motel beds funded by homeless service providers, and people sleeping in non-shelter facilities with temporary homeless accommodations. The Census also appears to have classified some HUD-designated shelters, particularly those where individuals can reside for extended periods of time, as housing units or other types of congregate facilities rather than homeless shelters. In Section 6, we test the robustness of our findings to HUD's broader definition of a homeless shelter by comparing results based on the Census's homeless population to those residing in HMIS shelters, which follow the HUD definition.

Literal homelessness does not include people residing in low-quality or shared housing or with tenuous attachment to their current residence. While such living arrangements reflect housing-related hardship in many cases and may indicate heightened risk of homelessness, we limit our attention in this paper to those experiencing literal homelessness for several reasons. First, literal homelessness typically indicates a degree of housing-related hardship that exceeds that associated with precarious or shared housing, as evidenced by individuals' revealed preference for such accommodations over literal homelessness. Moreover, it is not clear that shared housing reflects hardship in most cases, as is well-documented in the household formation literature (e.g.,

⁵ For programmatic purposes, HUD also classifies among the "literally homeless" people exiting certain institutions, such as prisons and hospitals, where they have resided for 90 days if they were residing in a homeless shelter or at unsheltered locations immediately before entering the institution. Our definition does not include such individuals.

Browning, Chiappori, and Weiss 2014). The data requirements needed to identify those individuals for whom shared or low-quality housing represents hardship as extreme as literal homelessness also far exceed the information available in household surveys and administrative data. Meyer et al. (2023) provides further discussion of the merits and data limitations associated with different definitions of homelessness.

4.2 Constructing Homeless and Housed Comparison Samples

We limit our samples to people who were between the ages of 25 and 59 in 2010 and keep only those assigned an anonymized unique identifier by the Census Bureau's linkage software. Our primary homeless samples consist of 89,500 linked individuals who were residing in homeless shelters during the Census (the sheltered homeless) and 49,500 linked individuals who were counted at soup kitchens, food vans, or overnight at outdoor locations and indicated no valid usual address elsewhere (the unsheltered homeless). We also calculate key outcomes for two comparison groups of housed adults drawn from the first six months of the 2010 ACS. Our main comparison sample consists of 55,000 housed, unmarried individuals with self-reported incomes below the federal poverty threshold. To permit more direct comparisons, we reweight these individuals' demographic characteristics to align with those of the pooled sheltered and unsheltered homeless sample. We also calculate key outcomes for the 994,000-person ACS sample of housed individuals surveyed during the first six months of the 2010.

While most of our results are calculated for the entire U.S. population (excluding U.S. territories), our SNAP and TANF/General Assistance administrative records cover only a subset of the U.S. As a result, we impose geographic restrictions for analyses of these outcomes or measures that incorporate their values, such as the share of people receiving at least one benefit and the value of income including in-kind transfers. For such outcome measures, we restrict the sample in year t to people who in 2010 lived in a state for which we have data in year t. In Section 6, we estimate the magnitude of bias in longitudinal SNAP receipt patterns that arises due to migration between states for which we do and do not have administrative data.

4.3 Linking Across Datasets

We link datasets at the individual level using Protected Identification Keys (PIKs), unique anonymized identifiers assigned by the Census Bureau's Personal Identification Verification System (PVS). This software assigns linkage keys by matching the personal information provided to Census enumerators – including name, date of birth, and gender – against a reference file based

on Social Security Administration (SSA) records. In the restricted 2010 Census microdata, this software assigns a linkage key to 69 percent of people in homeless shelters, 42 percent of those counted at food vans and soup kitchens, and 17 percent of those counted at outdoor locations, or TNSOLs. According to the Census's evaluation report on the homeless counting operation, the main proximate reason for this non-linkage is that enumerators did not collect sufficient personal information from these individuals, either because the subjects were sleeping, deemed not "approachable," or because the bustling nature of many service locations prevented them from collecting complete information (Russell and Barrett 2013).

Incomplete linkage could create bias in our income and safety net calculations if the outcomes of unlinked individuals differ systematically from linked individuals. We address this concern by applying inverse probability weights to linked individuals, where these weights are obtained by estimating a probit model of linkage status on age, race, gender, Hispanic origin, state, and homeless location type. The key assumption is that non-linkage no longer biases analyses of outcomes conditional on these observed characteristics. Given low linkage rates and the limited characteristics available in the Census for our probability model, however, we test the robustness of our findings to alternate linkage methods using sheltered homeless samples from ACS and HMIS data. The ACS's rich set of covariates, which include self-reported measures of income and program receipt, allow us to estimate a more detailed inverse probability weighting model on these data and compare our findings to those based on the Census's more limited model. We also compare findings based on the Census homeless samples to those based on HMIS data, where linkage rates are about 90 percent across cities and years because most records contain SSNs.

Despite these robustness checks, we remain concerned that linkage may be non-random with respect to outcomes of interest in the population counted at TNSOLs, even conditional on the covariates in our probability model. The Census's SBE evaluation report indicates that nonresponse appeared to be "most serious" at these locations, where most residents were "asleep and/or covered up" during their overnight counting operation (Russell and Barrett 2013). We therefore exclude people counted at TNSOLs from our main analyses but include them in robustness checks in Section 6.

5. Results

This section contains our main results. We start by providing summary statistics of our homeless samples and comparison groups, before showing how employment, income, and program participation evolve in the years preceding and following an observed period of homelessness during the 2010 Census.⁶ We next discuss comparisons in key outcomes between those who are homeless and the demographically comparable sample of the single housed poor population. The last set of results describe differences by gender and family status, race and ethnicity, and geography and discuss potential reasons for these differences.

5.1 Characteristics of the Homeless and Housed Comparisons Samples

Table 1 presents descriptive statistics for the Census homeless samples and ACS housed comparison groups used in our main analyses. Relative to housed adults (Column 4), sheltered (Column 1) and unsheltered (Column 2) homeless individuals are much more likely to be male (67 and 74 percent, respectively, compared to 49 percent of the overall housed) and much more likely to be Black (40 and 38 percent, compared to 13 percent). They are similarly likely to be Hispanic (14 and 15 percent, compared to 15 percent) and are slightly older (43.5 and 44.4 years old, on average, compared to 42.4), conditional on being between the ages of 25-59 in 2010.

As noted in Section 4, we reweight the single housed poor sample to match the distribution of demographic characteristics in the pooled sheltered and unsheltered homeless samples. The characteristics of the single housed poor indicated in Column 3 are therefore equal to a weighted average of the characteristics in Columns 1 and 2 by construction. This reweighting ensures that any subsequent comparisons are not confounded by demographic differences between those experiencing homelessness and single poor housed individuals. Such comparisons should be interpreted as between those experiencing homelessness and a demographically comparable segment of the single housed poor population, i.e., a segment that is more likely to be male, Black, and in their 40s and 50s than the typical single housed person living in poverty in the United States.

⁶ We inflation-adjust all amounts to 2018 dollars using the Chained Consumer Price Index for All Urban Consumers (C-CPI-U) and report individual income and program receipt at the annual level. The notes on Appendix Tables A1-A7 contain detailed information about the definitions and methodology underlying income and program receipt measures.

5.2 Employment, Income, and Safety Net Participation in the Year Observed as Homeless

We begin by summarizing levels of employment, safety net participation, and material deprivation in the year individuals were observed as homeless, before turning to a discussion of longitudinal patterns of income, employment and earnings, disability program receipt, and receipt of other benefits in the years preceding and following an observed period of homelessness. Key results are indicated in Tables 2a and 2b.⁷

Connections to Formal Employment and the Safety Net

Figure 1a displays the share of the Census homeless population and single housed poor comparison group receiving various benefits and earnings in 2010. We find that homeless individuals are highly connected to formal employment and the safety net, with 97 percent of those in shelters and 93 percent of those at unsheltered locations receiving at least one government benefit and/or having been formally employed in 2010. The vast majority received at least one safety net benefit (89 percent of the sheltered and 80 percent of the unsheltered), and about 53 percent of sheltered homeless individuals and 40 percent of unsheltered homeless individuals had formal employment, albeit with low earnings (a median of \$8,300 among workers) that suggest sporadic and/or part-time work at very low wages.⁸

Receipt of all non-disability benefits was higher among people experiencing sheltered rather than unsheltered homelessness, but this latter group was more likely to receive disability benefits from SSI or DI. About 83 percent of those in homeless shelters and 70 percent of those at unsheltered locations received SNAP in the year they were observed as homeless. Nearly half of this population was enrolled in Medicaid, and receipt of TANF and General Assistance was high (58 percent) among homeless shelter users in New York, where we have access to these data. A moderate share received disability benefits in 2010, with a respective 14 and 21 percent of the sheltered and unsheltered homeless receiving SSI, 9 and 14 percent receiving DI, and 3 and 2 percent receiving service-connected disability payments from the VA. A small share (10 percent of the sheltered and 9 percent of the unsheltered) received HUD housing assistance for at least some portion of 2010, although the mean months of receipt drop in 2010 relative to surrounding

⁷ Detailed additional results are available in Appendix Tables A1-A7.

⁸ For comparison, a full year of work at the federal minimum wage of \$7.25 corresponds to about \$15,000 of annual earnings.

years, suggesting disruptions in housing benefit receipt that are consistent with having been homeless for some portion of that year.

Income and the Value of In-Kind Transfers

We also calculate the median and 75th percentile of our most comprehensive resource measure, money income plus in-kind transfers, for our homeless and housed comparison samples in 2010 (Figure 1b). This income measure includes most sources of taxable income reported on 1040s or in W-2s and 1099-Rs, as well as (non-taxable) cash transfers from SSI and VA payments and the value of in-kind transfers from SNAP and HUD. Despite the high degree of connection to employment and the safety net indicated in Figure 1a, we find that people experiencing homelessness have extremely low incomes, indicating severe material deprivation. The median value of income including in-kind transfers was about \$5,500 for the unsheltered homeless and \$7,500 for the sheltered homeless in 2010. These annual incomes fall well below the official poverty threshold of about \$12,000 for a single-person household, despite including the value of in-kind transfers that are not included when calculating official poverty status.⁹

At the same time, we note that material deprivation would be even more extreme in this population without certain safety net programs. For example, median income falls to about \$750 for those in shelters and to \$0 for the unsheltered homeless population when we deduct the value of transfers from SSI, SNAP, and housing assistance (Appendix Tables A3-A4). The safety net appears to provide crucial assistance to many people experiencing homelessness.

Comparisons to the Single Housed Poor

Figures 1a and 1b also allow us to compare the material circumstances of those experiencing homelessness and single housed poor individuals who share their demographic profile. We find that single housed poor individuals are *less* connected to formal employment and the safety net, with just 89 percent being employed and/or receiving at least one benefit in 2010, compared to 93 and 97 percent in the homeless samples. Among the single housed poor, the share with formal earnings (48 percent) falls between that of the sheltered homeless (52 percent) and unsheltered homeless samples (40 percent), with the median value of earnings conditional on

⁹ We reference the 2018 federal poverty threshold because we measure incomes in 2018 dollars. Although we compare income to the poverty threshold for a single individual, we note that some people in our samples, particularly those recorded in homeless shelters in the Census, were likely accompanied by children and would hence be subject to even higher poverty thresholds.

working being about \$12,200, compared to \$8,300 among homeless individuals with formal employment. W-2 records offer suggestive evidence of slightly elevated employment instability in the homeless population, with sheltered and unsheltered homeless workers both having an average of 1.6 distinct jobs (as proxied for by the number of W-2 forms) in 2009, compared to 1.4 among the single housed poor (Appendix Tables A3-A5). The single housed poor are less likely to receive SNAP, TANF/GA, Medicaid, and VA disability benefits than those experiencing homelessness, but are more likely to receive housing assistance. They receive DI at similar rates to unsheltered homeless individuals, and their receipt of SSI falls (16 percent) falls between receipt rates for the sheltered homeless (14 percent) and unsheltered homeless samples (21 percent).

Turning to comparisons of the median and 75th percentiles of income including the value of in-kind transfers in Figure 1b, we observe a striking degree of similarity between those experiencing homelessness and single housed poor individuals who share their demographic profile. The median single housed poor individual had about \$9,900 in income after in-kind transfers in 2010, only \$2,400 higher than the median sheltered homeless individual. There is also a substantial amount of overlap between these samples' income distributions. At least one-quarter of those experiencing homelessness had *higher* incomes than most single housed poor adults: the 75th percentiles of income for the unsheltered and sheltered homeless were about \$14,300 and \$15,100, respectively, compared to the median value of \$9,900 for the single housed poor. In other words, those experiencing homelessness, particularly sheltered homelessness, look very much like single housed poor adults who share their demographic profile in terms of their incomes, employment, and safety net participation.

5.3 Longitudinal Patterns of Employment, Income, and Safety Net Participation

Persistence of Deprivation

Moving beyond static levels of deprivation, Figure 2 examines longitudinal patterns in median income including the value of in-kind transfers from SNAP and HUD between 2005 and 2016. The solid lines indicate the value of income from all sources except SSI, which we only incorporate starting in 2010 (as reflected in the dashed lines) when administrative SSI records become available to us. This figure illustrates the stark persistence of material deprivation for this population, with incomes remaining very low over the four years prior to and six years after an observed period of homelessness. We find little evidence of major disruptions to income in the years leading up to 2010, a finding that contrasts with anecdotal narratives emphasizing major and

abrupt deteriorations in material circumstances preceding homelessness. This figure illustrates our key finding that people experiencing homelessness appear to be enduring not just a difficult year or two, but rather a decade or more of exceptional material hardship.

Longitudinal Patterns of Earnings and Employment

We next turn to longitudinal patterns of employment (Figure 3a) and median earnings among those who are employed (Figure 3b) to examine the magnitude of disruptions to these outcomes relative to their long-term trend in the years preceding and following an observed period of homelessness.¹⁰ All homeless and housed comparison groups see a pattern of declining employment between 2005 and 2016, consistent with aging, but the proportional decline in employment is greatest for the unsheltered homeless (39 percent), followed by the sheltered homeless (30 percent), single housed poor (20 percent), and the overall housed population (7 percent).

Because we condition on being observed as homeless or poor in early 2010, we might expect any loss of earnings that led to homelessness or poverty to appear in 2009 tax records. Indeed, we observe a drop in employment and earnings in 2009 for the homeless and single housed poor groups relative to their long-term trends, but the magnitude of this drop is small. Conditional on working, the earnings of sheltered homeless workers are about \$1,500 to \$1,700 lower in 2009 relative to the two surrounding years, and for unsheltered homeless workers it is \$500 to \$1,000 lower. These disruptions are modest relative to the overall trend of declining employment between 2005 and 2016 and are similar in magnitude to the drop in earnings and employment observed among the single housed poor.

Longitudinal Patterns of Safety Net Participation

Looking longitudinally at enrollment in disability programs, we find that receipt of SSI (Figure 4a) and DI (Figure 4b) tends to be increasing for our homeless and housed poor samples in the years surrounding an observed period of homelessness or poverty, but the rate of increase differs across groups, increasing most quickly for the sheltered homeless, followed by the unsheltered, and then the single housed poor. SSI receipt in the sheltered homeless population surpasses that of the single housed poor in 2011 and continues to grow, while SSI receipt in the

¹⁰ In addition to the single housed poor comparison group, this figure also includes a series for the overall housed population to help distinguish longitudinal patterns among the homeless and single housed poor from secular trends in employment for this age cohort during this period, which includes the Great Recession.

single housed poor population remains nearly level at around 16-17 percent. Accelerating disability program receipt for those experiencing homelessness could either indicate that the onset of disability is associated with the onset of homelessness or that the experience of homelessness causes new disabilities to arise. Alternatively, it could mean that people become connected to disability programs for which they already qualified while they are experiencing homelessness, perhaps due to concerted efforts by the Social Security Administration (SSA) to increase access to SSI and DI among eligible people experiencing homelessness.

Figures 5a and 5b display longitudinal patterns in the receipt of other safety net programs among sheltered and unsheltered homeless individuals, respectively, between 2003 and 2016. Patterns differ across benefits, with receipt of SNAP and TANF/GA – benefits typically understood to be temporary – peaking in the year observed as homeless relative to surrounding years. These peaks occur for both the sheltered and unsheltered homeless but are more pronounced in the sheltered homeless population.¹¹ Medicaid receipt increases steadily through 2013 for both groups, before increasing sharply in 2014 after many states expanded eligibility under the Affordable Care Act (ACA). Receipt of HUD housing benefits appears to dip slightly in 2009 for the sheltered homeless population before increasing through 2016, but the overall level of housing assistance receipt remains low (below 20 percent) for both groups over this entire period.

We find that people who were residing in homeless shelters during the 2010 Census have persistently higher rates of enrollment in non-disability safety net programs than those who were experiencing unsheltered homelessness, despite facing somewhat lower material deprivation overall, as indicated by their higher incomes.¹² This pattern appears to reflect, at least in part, differences in family structure between these groups, because adults with accompanying children are more likely to reside in shelters than at unsheltered locations and also to qualify for safety net programs. Different rates of program receipt could also reflect selection into sheltered or unsheltered status related to one's underlying propensity to use services, as we might expect that people who elect to use shelters – essentially a safety net service – will be more likely to take up other safety net programs, as well.

¹¹ Some of this peak could be due to migration between states for which we do and do not have SNAP data. We examine the potential for such bias in Section 6, with those analyses suggesting that migration is likely only a minimal source of bias.

¹² The unsheltered homeless are more likely than the sheltered homeless to be enrolled in Medicare, but this is largely because eligibility for DI entails Medicare eligibility (in most cases after a two-year qualifying period).

In addition to demographic heterogeneity and selection, sheltered homeless individuals may have higher program receipt because shelters facilitate the enrollment in and continued receipt of safety net benefits. We investigate this potential explanation for shelter users' higher program receipt using HMIS data, which unlike the Census indicate precise dates of shelter entry and exit. Figure 6 displays monthly SNAP enrollment among Chicago HMIS users relative to their first observed shelter entry.¹³ SNAP enrollment remains steady at about 46 percent over the two years prior to shelter entry, before abruptly increasing to nearly 60 percent in the month of first observed shelter entry. Receipt peaks at 63 percent in the third month after shelter entry, before declining to about 51 percent after a year has passed. While not necessarily indicating a causal relationship, these results are highly suggestive that homeless shelters play a role in connecting their clients to the safety net. They also suggest that connections to the safety net deteriorate in the months following initial shelter entry, perhaps as people leave shelters and maintaining enrollment becomes more difficult.

5.4 Differences Across Demographic Groups and by Geography

Having discussed static and longitudinal patterns in economic conditions for the overall homeless population, we now turn to heterogeneity across policy-relevant sub-groups defined by gender and family status (i.e., the absence or presence of accompanying children), race and ethnicity, and geography (i.e., California, New York, and the rest of the U.S.).¹⁴

Family Status and Gender

We first examine heterogeneity in in longitudinal patterns of income and safety net participation by gender. In the year they were observed as homeless, women were more likely to be employed (Figure 7a) and had higher earnings conditional on working (Figure 7b) than men with the same sheltered status. Longitudinal patterns also differed by gender, with men experiencing larger and apparently more persistent disruptions to employment and earnings surrounding an observed period of homelessness. Sheltered homeless women also about 6 percentage points more likely to receive any benefit than sheltered homeless men in 2010, while unsheltered homeless women were 3 percentage points more likely to receive benefits than their unsheltered male counterparts.

¹³ See Appendix Table A8.

¹⁴ See Appendix Tables A9-A12.

Differences by gender are likely closely associated with differences in family status, a dimension of heterogeneity emphasized in much of the homelessness literature, including HUD's annual national reports on homelessness. Data from HUD's 2023 report that about 40 percent of sheltered homeless adult women had accompanying children, compared to just 10 percent of sheltered homeless adult men (HUD 2023).¹⁵ Differences in income by gender could reflect higher cost of maintaining housing when children are present, leading women to be unable to afford housing even at higher levels of income. Similarly, higher benefit receipt among homeless women could reflect the greater ease of qualifying in households where children are present.

While Census and ACS data do not report household structure for those experiencing homelessness, we investigate heterogeneity by family status using cross-sections of individuals indicated as being enrolled in HMIS shelters in Los Angeles and Houston on March 30 of 2012 and 2013.¹⁶ Adults in both types of households experience a drop in employment similar in magnitude to the drop among the Census homeless, but employment rates for those without children continue to decline after an observed period of homelessness, while employment among adults with accompanying children recovers almost to its initial level, consistent with gender-based differences described above (Figure 8).

In summary, our findings suggest that homeless women are more connected to employment and the safety net than men who share their sheltered status, and that homelessness appears to be associated with smaller disruptions to employment for women than for men. These patterns are mirrored in analyses of heterogeneity by family status, with women more likely to be in families with accompanying children.

Race and Hispanic Ethnicity

We next turn to analyzing differences across race (Figure 9a) and Hispanic ethnicity (Figure 9b). Compared to white individuals of the same sheltered status, Black individuals experiencing homelessness had higher rates of employment and benefit receipt, including disability benefits.

¹⁵ The HUD reports do not contain separate cross-tabulation of gender and family status for adults and children, which are needed to estimate the share of women and men with accompanying children. The reports do, however, include cross-tabulations of gender and family status and age and family status. We assume that children are equally likely to be male and female and subtract these estimated counts from the overall cross-tabulations by gender and family status to obtain the necessary cross-tabulation of gender and family status among homeless adults.

¹⁶ We use 2012 and 2013 reference years, rather than 2010, because we are more confident in the quality of HMIS shelter entry and exit date reporting in these years, for reasons explained in Meyer et al. (2023). We condition our sample on shelter enrollment on March 30 because this date aligns with the mid-point of the Census's homeless counting operation and hence ensures that our results are robust to any seasonal heterogeneity in shelter enrollment.

Hispanic homeless individuals had higher employment and lower disability program receipt than non-Hispanics with the same sheltered status. Overall benefit receipt was higher for sheltered homeless Hispanics than for sheltered homeless non-Hispanics, but the reverse was true among the unsheltered homeless, with Hispanics having lower overall benefit receipt than non-Hispanics.

Heterogeneity by race is of particular policy interest because people who are Black tend to be overrepresented among those who experience homelessness relative to their share in the broader population in poverty, raising concerns about equity. Meyer et al. (2021) find using the ACS that 47 percent of people in homeless shelters are Black, compared to 30 percent of single housed poor adults. Differences in income and program receipt by race may suggest differences in the predominant pathway to homelessness across groups. As suggested by gender-based differences, it is possible that homeless individuals who are Black appear to be somewhat less deprived than those who are white due to differences in the cost of maintaining housing. This cost could be higher, on average, for Black individuals due to housing market discrimination, racial disparities in the criminal justice system, or due to differences in the availability of resources in one's family and social network to help insure against homelessness.

California, New York, and Other States

Policy discussions on homelessness in the U.S. often center on two states: California, which is home to the largest unsheltered homeless population, and New York, which is home to the largest sheltered homeless population. We therefore examine income and safety net participation in these states separately and compare them to those experiencing homelessness in the rest of the country. As shown in Figure 10a, employment rates are lowest in California (47 percent among the sheltered, 35 percent among the unsheltered), followed by New York (50 percent among the sheltered, 37 percent among the unsheltered) and all other states (53 percent among the sheltered, 42 percent among the unsheltered). At the same time, Figure 10b demonstrates that median earnings among homeless workers in California and New York (about \$10,000 to \$11,000) are somewhat higher than those in other states (about \$7,500), a difference that could once again reflect differential housing costs by state. We also observe slightly higher rates of disability program receipt in California and New York relative to other states (Figure 11c). In summary, although we find somewhat lower employment and higher disability program receipt in New York and California, these differences are relatively small and suggest a high degree of

similarity in the material circumstances of people experiencing homelessness across the United States as a whole.

6. Extensions and Robustness Checks

This section contains extensions of our main analyses and robustness checks. We begin by examining the accuracy of self-reported income and benefit measures and demographic characteristics among those surveyed in homeless shelters in the ACS and housed comparison groups. Our next sets of analyses check the robustness of key findings to alternative temporal conceptions of homelessness (i.e., we compare results based on samples of those with a first shelter enrollment in a year to samples of those enrolled in homeless shelters at a point in time) and to different data sources and years (i.e., we compare results based on those recorded as homeless in the Census to results based on those enrolled in HMIS shelters and those surveyed in homeless shelters in the ACS). Our final set of analyses test the robustness of our findings to alternative Census samples designed to address potential bias from non-linkage, misclassification, and the incomplete geographic coverage of our SNAP datasets.

6.1 Misreporting of Income, Benefit Receipt, and Characteristics in the ACS

Household surveys suffer from widespread underreporting of income and safety net benefit receipt, and self-reported measures may be especially inaccurate among those with very low and very high incomes (B. D. Meyer, Mok, and Sullivan 2015; Bollinger et al. 2019). Misreporting of income and program receipt among those experiencing homelessness is of particular interest because nearly all existing work on these outcomes relies on self-reported measures. This section examines the extent to which income, benefit receipt, and demographic characteristics are misreported in the ACS's sheltered homeless samples, as well as housed comparison groups. In doing so, we illustrate the importance of administrative data and provide estimates that may help researchers and service providers to interpret findings in surveys of this population.

We start by assessing the misreporting of date of birth, place of birth, gender, and citizenship status in the 2011-2018 ACS (Table 3a). We take characteristics indicated in Social Security Administration (SSA)'s Numident file to represent the truth and calculate the share of individuals reporting a different response in the survey. People experiencing homelessness are slightly more likely to misreport the exact day, month, or year of their birth, but only a small share (3.5 percent) report a date of birth that is three or more years away from the true date. These shares

are similar to the misreporting rate for this characteristic among the single housed poor (4 percent) and overall housed populations (3.7 percent). In addition, homeless individuals are slightly more likely to misreport their state or country of birth (7.4 percent) than the single housed poor (5.1 percent) and overall housed populations (4.9 percent), but they are less likely to misreport their gender. Citizenship misreporting rates are similar (3 to 3.7 percent) for all three groups. In summary, the demographic information provided by people experiencing homelessness appears to be generally quite reliable and only slightly less accurate than the information provided by housed individuals.

We next summarize the misreporting of wage and salary income, SNAP, Medicaid, and Medicare in the 2011-2016 ACS, where we take values from administrative datasets to be the truth (Table 3b).¹⁷ Among those experiencing homelessness, 43.2 percent of wage earners fail to report any wages in the survey, which is higher than the corresponding false negative rates for the single housed poor (28 percent) and overall housed population (7.7 percent).¹⁸ Among true SNAP recipients, individuals experiencing homelessness are slightly more likely to falsely report no receipt (20.5 percent) than the single housed poor (15.8 percent), but less likely to do so than the overall housed population (29 percent). On the other hand, false positive rates for SNAP receipt are substantially higher in the homeless sample than in the single housed poor and overall housed populations (30.7 percent, compared to 6.3 percent and 1.2 percent). The three groups have similar (and low) rates of false positives and false negatives for Medicare receipt. Finally, for Medicaid receipt, those experiencing homelessness have slightly lower false negative rates (16.5 percent, compared to 18.6 and 27.6 percent of the single housed poor and overall housed) but substantially higher false positive rates (20.4 percent, compared to 13.2 and 3.7 percent).

In summary, we find that people experiencing homelessness are slightly more likely than the housed population to underreport certain sources of income and benefits (e.g., wage and salary income, SNAP) but may be less likely to underreport receipt of other benefits (e.g., Medicaid). At the same time, the overreporting of program receipt (e.g., SNAP and Medicaid) appears to be a

¹⁷ We limit the sample to ACS data through 2016 for income and safety net misreporting analyses because these are the years for which we have access to administrative data.

¹⁸ We note that our administrative earnings data indicate only formal wage and salary income, so false negative rates should be interpreted as false negatives for formal wage and salary income. Because people may report informal income in the survey that would not be recorded in the tax data, false positive rates should be interpreted with more caution.

greater concern for this population, perhaps reflecting misunderstanding about these programs visa-vis other types of food and medical assistance that they may receive.

6.2 Income and Program Receipt Relative to First Shelter Enrollment

One limitation of the Census and ACS homeless data is that they do not indicate the start and end dates for spells of homelessness. Assuming these dates are uniformly distributed throughout the year, cross-sectional samples of the homeless population like those in the Census and ACS should, on average, include individuals midway through their spells, but we cannot identify the date of homelessness onset, nor can we examine heterogeneity in income and program receipt by the length of time spent homeless. Knowing the exact date of homelessness onset could help differentiate disruptions to income, employment, and safety net receipt that precede homelessness and those that occur after one becomes homeless. Prior work has also emphasized differences in the life circumstances of people displaying patterns of chronic homelessness (remaining homeless for extended periods of time, typically while struggling with behavioral health or substance abuse conditions), episodic homelessness (frequently cycling in and out of homelessness), and transitional homelessness (having just one or a few short spells) (Kuhn and Culhane 1998). We therefore wish to learn whether income and program receipt in a cross-sectional sample of the homeless population differs from that of samples of people who were ever homeless during a period of time. The former sample will contain a larger share of people who are homeless for extended periods of time than the latter.

Specifically, we leverage shelter entry and exit dates in HMIS data to compare income and program receipt in a cross-section of the homeless population and a sample of people with first shelter enrollments in a year. The first sample, which aligns with the Census's temporal conception of homelessness, consists of people who were enrolled in Los Angeles and Houston shelters on March 30 of 2012 or 2013.¹⁹ The second consists of people with a first observed shelter enrollment in 2012 or 2013 and aligns with HMIS-based samples used in key prior studies, thereby facilitating comparisons with prior work (e.g., Metraux et al. 2018, Von Wachter et al. 2020).

In Los Angeles, both the level and longitudinal patterns of employment (Figure 11a) and disability program receipt (Figure 11b) were similar across the two temporal conceptions of the

¹⁹ We use 2012 and 2013 for these analyses, rather than the Census year of 2010, to ensure that we have several years of preceding high-quality HMIS data, which in turn increases our likelihood of having identified an individual's first shelter enrollment. See Meyer et al. (2023) for a discussion of HMIS data quality improvements over time.

homeless population, differing by only about 0 to 4 percentage points across years. In Houston, people in the cross-sectional sample had higher employment rates (by about 3 to 9 percentage points) and lower disability program receipt (by about 5 to 8 percentage points) than those with a first enrollment in the same year. These patterns may be related to gender and family status, which differ substantially across samples: the latter sample has a larger share of women (50 versus 39 percent) and adults with accompanying children (19 versus 14 percent). As in Los Angeles, however, longitudinal patterns in employment and disability program receipt appear similar for the two samples in Houston.

Our findings suggest that using a sample of people with first shelter enrollments in a year rather than a cross-section of those experiencing homelessness at a point in time makes little difference for interpreting longitudinal patterns of income and program receipt, although levels of these outcomes may vary, particularly when characteristics differ substantially between the two temporal conceptions of the homeless population.

6.3 Comparing Census, HMIS, and ACS Sheltered Homeless Samples

We next compare income and program receipt for the Census sheltered homeless samples in Los Angeles and Houston to samples drawn from HMIS records in those cities. Meyer et al. (2023) highlight ambiguities in the definition of a homeless shelter that lead the Census to classify some HMIS facilities as conventional housing or other types of group quarters rather than homeless shelters. For example, the Census appears to have classified many transitional shelters, where people experiencing homelessness can reside for up to two years under a formal tenancy agreement, as conventional housing rather than homelessness shelters. Given these definitional differences, and because HMIS data form the basis for HUD's widely cited point-in-time estimates and are often used in the literature, we compare results based on otherwise comparable samples of the sheltered homeless population drawn from Census and HMIS datasets. These analyses also serve as a check on our methods to account for non-linkage because the majority of HMIS records contain Social Security numbers, leading to much higher linkage rates (about 90 percent in most years in Los Angeles and 96 percent in most years in Houston) than in the Census.²⁰

²⁰ Following Meyer et al. (2023), we exclude from the Los Angeles sample people whose HMIS-recorded exit dates appear to be erroneous, i.e., those with exit dates of March 31, 2010 (the date of an apparent administrative closure of numerous spells with missing exit dates), as well as those who still had open spells on March 30 despite being enrolled in Los Angeles's Winter Shelter Program, which ended on March 15.

Figures 12a and 12b illustrate employment and disability benefit receipt for the Census sheltered homeless from Los Angeles and Houston and for HMIS shelter users with entry and exit dates indicating enrollment during the Census's homeless counting operation in those cities. In Los Angeles, both the levels and longitudinal patterns of employment and disability program receipt were similar for the two samples, with employment differing by at most 4 percentage points and disability program receipt differing by at most 3 percentage points across years. In Houston, the HMIS sample had notably higher employment (by about 7 to 10 percentage points) and lower disability program receipt (by about 9 to 13 percentage points) than the Census sample, although the longitudinal patterns were similar in the two samples.

The prevalence of transitional housing offers one proxy for the degree of misalignment between the Census and HMIS shelter definitions and may help explain the similarity of Censusand HMIS-based results in Los Angeles and their differences in Houston. In Los Angeles, only one-quarter of the HMIS sample was enrolled in transitional housing, compared to about twothirds of the Houston sample. In other words, the levels of income and program receipt appear to be sensitive to ambiguities in the definition of a homeless shelter, but longitudinal patterns appear robust to these differences. Nationally, the share of all homeless shelter beds that are in transitional housing falls between the shares in Los Angeles and Houston, at about 50 percent in 2010 (U.S. Department of Housing and Urban Development 2010). We might therefore expect our national estimates based on the Census sheltered homeless samples to indicate levels of income and program receipt that are slightly lower than one might obtain if using national HMIS data. Our findings suggest, however, that the Census definition of a homeless shelter identifies a somewhat more deprived segment of the population than the HMIS definition.

6.4 Robustness to Alternative ACS and Census Samples

We describe further checks on our findings' robustness to alternative samples, linkage methods, and years in detail in Appendix A. Our main findings are robust to the use of sheltered homeless samples from the 2010-2014 ACS, suggesting that the patterns we observe generalize beyond those who were homeless in 2010. Comparisons between Census and ACS samples also support the validity of our use of inverse probability weights to adjust for non-linkage in the Census because the ACS has higher linkage rates due to more complete personal information and because the ACS's inverse probability weighting model includes a wealth of additional predictors relative to the Census, including self-reported income and benefit receipt. We also find that key results are

robust to the inclusion of those counted during the Census's overnight enumeration at unsheltered locations (a group we excluded from main analyses due to their exceptionally low linkage rate of 17 percent) and to the exclusion of people who were counted at both homeless locations and in housing during the Census (a group which might be thought to include individuals who were misclassified as homeless when they were in fact housed). Finally, we address concerns over potential bias in longitudinal SNAP receipt arising from migration by calculating longitudinal SNAP receipt using a subset of the Census homeless population that we consider less likely to have moved states in the years surrounding 2010. The peak in SNAP receipt in 2010 from our main analyses is somewhat attenuated in this migration-adjusted sample, but remains notable, suggesting that only a small share of this peak reflects bias due to migration between states for which we do and do not have SNAP enrollment data.

7. Comparisons to Past Work

We compare our findings to three key prior studies on the income, employment, and safety net participation of the U.S. homeless population: the NSHAPC survey, Metraux et al. (2018), and Von Wachter et al. (2020). The NSHAPC survey interviewed a random sample of 4,200 users of homeless services in 1996, including people who were homeless at the time of the interview and some who had recently been homeless (Burt et al. 2001). Its advantages lie in its nationally representative nature and detailed measures of self-reported income and program receipt, but three decades have passed since this survey was conducted. More recently, Metraux et al. (2018) base their analyses on a sample of 161,000 New York shelter users with first observed HMIS enrollments in 1990-2002 and Von Wachter et al. (2020)'s sample consists of 137,000 Los Angeles shelter users with first observed HMIS enrollments in 2010-2018. Metraux et al. (2018) link their sample to Social Security Administration (SSA) earnings data and Von Wachter et al. (2020) link their sample to California Unemployment Insurance (UI) wage records. These studies benefit from large samples and accurate earnings data but are limited to a single income source (earnings – and only in-state wages in the latter study), do not include people who are unsheltered homeless, and may not generalize outside of the cities in which they were conducted.

Table 4 summarizes the main findings from these studies alongside the most comparable estimates available in our study. They include estimates for the pooled Census sheltered and unsheltered in Column (1) to facilitate comparisons with NSHAPC and estimates for the sheltered homeless only in Column (3) to facilitate comparisons with Metraux et al. (2018) and Von Wachter et al. (2020). We also indicate employment rates and Medicaid receipt for single adults and those in families (from our pooled Los Angeles and Houston HMIS samples) to compare differences by family status to the results in prior work. We report all dollar amounts in 2018 dollars. While we have so far emphasized percentiles of income in this study, in this section we report mean income amounts to align estimates based on the Census homeless with prior studies' results.

Our estimates of formal income and earnings in the year observed as homeless exceed the estimates in prior studies. Mean pre-tax cash income for the pooled Census sheltered and unsheltered homeless, including the value of SSI payments, is about \$10,900, nearly \$4,000 greater than the \$7,100 average income reported in NSHAPC.²¹ We also calculate mean annual earnings among workers to be nearly \$6,000 higher than in Metraux et al. (2018) and \$3,500 higher than in Von Wachter et al. (2020), differences that could reflect the studies' different timeframes, geographic coverage, or sample selection. We also find higher rates of employment in the sheltered homeless population than those suggested by Metraux et al. (2018) and Von Wachter et al. (2020). Fifty-two percent of the Census sheltered homeless were employed in the year observed as homeless, compared to just 42 percent of shelter users in Metraux et al. (2018) and 29 percent of those in Von Wachter et al. (2020). Low employment rates in this latter study may in part reflect the incomplete coverage of their earnings data, which consist of Unemployment Insurance (UI) wage records exclusively from California.

Comparisons with prior work also suggest a reversal in employment rates between single homeless adults and homeless adults with partners or children over the past three decades. Both NSHAPC and Metraux et al. (2018), studies that relied primarily on homeless samples from the 1990s, found substantially higher employment among unaccompanied adults than those with partners or children, with the first group being predominantly male and the latter group consisting primarily of single mothers. In contrast, our estimates based on 2012-2013 HMIS data from Los Angeles and Houston and Von Wachter et al. (2020)'s estimates based on Los Angeles HMIS data from 2010-2018 indicate substantially higher employment for adults in families than for unaccompanied adults. The reversal in employment rates by family status between the 1990s and

²¹ In New York, where we have access to TANF/GA data, we estimate mean pre-tax cash income including these cash benefits to be about \$12,700. We note, however, that New York's cash assistance programs tend to be more generous than in other states.

2010s may reflect well-established patterns of increasing labor supply among single mothers since the 1990s. Prior studies have shown that this trend in the broader low-income population appears to be driven primarily by the Earned Income Tax Credit (EITC) and other tax changes, but also in part by cuts to welfare benefits and similar programs (Meyer and Rosenbaum 2001, Grogger 2003).

Finally, we compare safety net participation in our study to that reported in the NSHAPC.²² Pooling the sheltered and unsheltered Census samples, we estimate that about 86 percent of those experiencing homelessness in 2010 received at least one benefit that year, including about 77 percent of people who received SNAP. In NSHAPC, just 40 percent of those experiencing homelessness reported receiving at least one benefit, including 37 percent receiving SNAP. We find higher receipt rates for all benefits: 24 percent were enrolled in SSI (compared to 11 percent in NSHAPC), 46 percent were enrolled in Medicaid (compared to 30 percent in NSHAPC), and 48 percent were enrolled in in TANF or GA in New York (compared to 19 percent of the U.S. homeless population enrolled in in AFDC in NSHAPC). Some of these differences may be driven by the underreporting of benefit receipt in the survey, but our findings in Section 5 suggest that such misreporting – while undoubtedly present – is unlikely to be of sufficient magnitude to explain such large differences. Furthermore, our annual measures of benefit receipt are higher by construction than NSHAPC's contemporaneous receipt measures, but such timeframe misalignment is unlikely to explain all of the differences we observe. Higher program receipt in the 2010 Census homeless population appears to reflect, at least in part, a true increase in connections to the safety net for this population since the 1990s.

In summary, our analyses are qualitatively consistent with past studies in demonstrating the dire economic circumstances of people experiencing homelessness. At the same time, we show that these individuals have somewhat greater incomes, employment, and connections to the safety net than previously understood. Differences between our estimates and those in prior work likely reflect some combination of true changes over time – including an apparent rise in employment among homeless mothers and increasing program receipt in recent decades – as well as the improvements to accuracy that come from using administrative data rather than self-reported outcomes, as has been well-established in the broader literature on poverty measurement (e.g.,

²² A caveat is that the NSHAPC reports contemporaneous program receipt at the time of interview, while our estimates indicate program receipt at any point in the calendar year.

Meyer, Mok, and Sullivan 2015). At the same time, we caution that these findings do not necessarily mean that this population is less deprived than previously thought. Homelessness itself is an unambiguous indicator of severe deprivation, so there can be no doubt that people experiencing homelessness are severely deprived. Rather, these comparisons further underscore that people experience homelessness because they are very poor despite being connected to formal work and the safety net, not because they are disconnected from these sources of income.

8. Conclusions

This paper provides the most detailed and accurate description to date of the level and persistence of material deprivation among people experiencing homelessness in the United States, including the first-ever national estimates of income, employment, and safety net participation based on administrative data. We find that this population is highly connected to work and the safety net, with nearly all sheltered homeless adults (97 percent) and the vast majority of unsheltered homeless adults (93 percent) having received at least one benefit or been formally employed in the year they were observed as homeless. Pooling together the sheltered and unsheltered samples, we find that half of these individuals (46 percent) had formal employment in the year they were observed as homeless, more than three-quarters received food assistance from SNAP (77 percent), and many were enrolled in Medicaid (43 percent) or received disability assistance through SSI or DI (24 percent). At the same time, formal incomes were very low: the median annual value of our most comprehensive resource measure - cash income plus the value of in-kind transfers from SNAP and HUD – was just \$7,500 for the sheltered homeless and \$5,500 for the unsheltered homeless in 2010. As these findings illustrate, people with very low incomes remain vulnerable to homelessness even when they are connected to formal labor markets and the social safety net. Conversely, connecting people to formal employment and these social safety net programs are unlikely to be sufficient policies for preventing or reducing homelessness.

Our longitudinal analyses suggest that deprivation is highly persistent in this population, with little change in median incomes over the four years prior to and six years after an individual is observed as homeless in 2010. Employment declines steadily between 2005 and 2016, with only a small and transitory drop relative to this long-term trend in the years preceding an observed period of homelessness in 2010. Long-term declines in employment are accompanied by increasing disability program receipt, with enrollment in SSI or DI increasing from 24 to 37 percent

between 2010 and 2016. Taken together, these results suggest that homelessness tends to arise in the context of long-term, severe deprivation, including declining employment and increasing disability program receipt, rather than large and sudden losses of employment or benefit income. Put differently, our results suggest that extremely low permanent incomes translate into heightened vulnerability to homelessness, leaving individuals with few resources to buffer against the loss of housing when met with even a relatively modest disruption to their income or life circumstances.

Perhaps surprisingly, we observe a high degree of similarity in the material circumstances of people experiencing sheltered homelessness and unmarried poor individuals who are housed but share their demographic profile (i.e., disproportionately male, Black, and in their 40s and 50s). Both groups have persistently very low incomes and high benefit receipt. Although median annual incomes are higher among the housed poor, there is substantial overlap between these groups' income distributions, with at least a quarter of sheltered homeless adults having incomes that exceed the median income in the housed poor comparison group. Adults in our sheltered homeless sample even had slightly *higher* rates of employment than the single housed poor in the years leading up to 2010. These analyses highlight the severe income-related deprivation faced by this segment of the housed population, a group that tends to receive less attention in academic and policy discussions about poverty alleviation than single mothers and children.

At the same time, substantial overlap in the economic circumstances of sheltered homeless and housed poor individuals raises the question of what factors, unobserved in our data, cause some individuals to become homeless while others remain housed. With only about 600,000 people experiencing literal homelessness in the U.S. at a point in time (Meyer et al. 2023), homelessness remains a rare event even among those who are very poor. Differences in permanent incomes and connections to formal work and the safety net do not appear to be the predominant factors distinguishing those who experience homelessness from the single housed poor. Alternative explanations may center on the role of behavioral health conditions and substance abuse disorders, the strength of social ties and affluence of one's social network, and the bad luck of experiencing non-income shocks to life circumstances. Understanding what non-income factors raise or lower an individual's probability of becoming homeless can shed light on the most effective prevention measures and inform the targeting of such interventions. Extreme poverty appears to be just one part of the broader puzzle of what put someone at risk of homelessness. An important caveat on our longitudinal analyses is that we describe patterns in the central tendencies of income, employment, and safety net participation in the U.S. homeless population over time, but we do not examine individual dynamics in these outcomes. This approach yields useful summary measures of the level of deprivation in this population and how this level changes on average across years, but it does not allow us to describe individual-level variability in these outcomes. In future work, we plan to examine individual income dynamics surrounding an observed period of homelessness to characterize the extent of income volatility associated with homelessness and to understand heterogeneity in dynamic patterns. These analyses will shed light on whether policies aimed at increasing permanent incomes (or, equivalently, lowering housing costs) or policies aimed at reducing the volatility of income (or, equivalently, reducing the volatility of housing costs) will be more effective prevention measures.

Another limitation of our study is that we do not observe the duration of spells of homelessness for those in our Census samples. HUD's best estimates, which are based on surveys of likely uneven quality conducted by local service providers, suggest that only about one-quarter of people who are literally homeless at a point in time face extended or repeated long-term spells of homelessness (U.S. Department of Housing and Urban Development 2022). In other words, we expect most people in our Census sample to have been housed for much of the decade surrounding 2010. Yet our findings do not suggest that 2010 was major aberration in these individuals' long-term economic trajectories; they face similar levels of material deprivation even in years where we expect most of them to have been housed. Moreover, our analyses using HMIS data demonstrate the remarkable robustness of key findings to the use of samples designed to include a smaller share of those with longer or more frequent spells of homelessness. Literal homelessness is a severe hardship that rightly draws widespread concern, but the context of persistent, extreme poverty within which homelessness arises – poverty that is less visible than literal homelessness, and hence less likely to capture the attention of policymakers – may be just as alarming and deserving of humanitarian concern.

This paper adds to an emerging portrait of the life circumstances of people who experience homelessness in the United States based on large, national samples linked to administrative data. Recent work has documented the substantially elevated mortality risk associated with homelessness (Meyer, Wyse, and Logani 2023), and ongoing analyses seek to understand homeless individuals' patterns of housing status transitions, migration histories, and the effects of safety net

programs on health and wellbeing. These pathbreaking analyses are informing efforts to understand the causes and consequences of homelessness and to identify the most effective strategies for improving the lives of this exceptionally deprived and ill-understood segment of the U.S. population.

9. Citations

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10. Tables

(Ages 25-59 in 2010)											
	Sheltered	Unsheltered	Single	Overall							
	Homeless	Homeless	Housed Poor	Housed							
	(1)	(2)	(3)	(4)							
Age (mean)	43.48	44.43	43.85	42.35							
Age 25-29	0.11	0.09	0.10	0.14							
Age 30-39	0.22	0.20	0.21	0.27							
Age 40-49	0.34	0.36	0.35	0.30							
Age 50-59	0.33	0.35	0.34	0.29							
Male	0.67	0.74	0.70	0.49							
White	0.49	0.52	0.50	0.76							
Black	0.40	0.38	0.39	0.13							
Other race	0.04	0.04	0.10	0.11							
Hispanic	0.14	0.15	0.15	0.15							
Sample Size	89,500	49,500	55,000	994,000							
Population	128,400	118,200	4,846,000	72,270,000							
Share Assigned Linkage Key (PIK)	0.69	0.42	0.86	0.91							

Table 1: Characteristics of Census Homeless and Housed Comparison Groups(Ages 25-59 in 2010)

Sources: 2010 Census, 2010 ACS

Notes: Homeless and housed samples as defined in the text.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
50th Percentile of Income Inclu	ding the Value	of In-Kind Tra	ansfers from S	SNAP and HU	D (No SSI)							
Sheltered Homeless	\$5,634	\$5,029	\$4,564	\$3,177	\$2,835	\$3,948	\$4,414	\$3,906	\$3,947	\$3,527	\$4,041	\$4,347
Unsheltered Homeless	\$2,399	\$2,484	\$3,619	\$2,264	\$2,664	\$2,710	\$2,630	\$2,579	\$2,525	\$2,389	\$2,439	\$2,417
Single Housed Poor	\$7,158	\$6,786	\$9,937	\$7,012	\$6,169	\$7,026	\$7,356	\$7,491	\$7,545	\$7,411	\$7,532	\$8,350
50th Percentile of Income Inclu	ding the Value	of In-Kind Tra	ansfers from S	SNAP and HU	D (Including S	SSI)						
Sheltered Homeless						\$7,461	\$9,149	\$9,289	\$9,441	\$9,325		\$9,518
Unsheltered Homeless						\$5,479	\$5,950	\$6,101	\$6,419	\$6,303		\$7,571
Single Housed Poor						\$9,886	\$10,140	\$10,450	\$10,660	\$10,500		\$11,030
Employment												
Sheltered Homeless	0.622	0.620	0.605	0.579	0.501	0.518	0.496	0.462	0.454	0.438	0.435	0.437
Unsheltered Homeless	0.559	0.546	0.527	0.493	0.418	0.403	0.389	0.359	0.357	0.339	0.339	0.341
Single Housed Poor	0.611	0.596	0.582	0.553	0.484	0.483	0.498	0.493	0.489	0.488	0.489	0.487
Earnings (Conditional on Emplo	yed)											
Sheltered Homeless	\$9,493	\$9,534	\$9,327	\$8,039	\$6,590	\$8,328	\$10,870	\$11,170	\$11,380	\$11,820	\$12,860	\$13,470
Unsheltered Homeless	\$8,377	\$8,483	\$8,514	\$7,847	\$7,373	\$8,298	\$10,120	\$10,310	\$10,620	\$11,020	\$12,020	\$12,320
Single Housed Poor	\$14,510	\$14,920	\$14,230	\$12,790	\$10,690	\$12,240	\$13,890	\$14,930	\$15,830	\$16,460	\$17,650	\$18,560
Sample Size												
Sheltered Homeless	89,500	89,500	89,500	89,500	89,500	89,500	89,000	88,000	86,500	85,500	84,500	83,000
Unsheltered Homeless	49,500	49,500	49,500	49,500	49,500	49,500	49,000	48,500	48,000	47,000	46,500	45,500
Single Housed Poor	55,000	55,000	55,000	55,000	55,000	55,000	54,500	54,000	54,000	53,500	53,000	52,500
Population												
Sheltered Homeless	128,400	128,400	128,400	128,400	128,400	128,400	127,500	126,000	124,400	122,800	121,100	119,100
Unsheltered Homeless	118,200	118,200	118,200	118,200	118,200	118,200	117,300	115,900	114,400	112,700	110,900	108,900
Single Housed Poor (1000s)	4,846	4,846	4,846	4,846	4,846	4,846	4,814	4,770	4,718	4,672	4,616	4,560

Table 2a: Income and Earnings (Homeless and Single Housed Poor, Ages 25-59)

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)

Notes: See notes on Tables A1-A6 for full definition of each outcome measure. Samples include PIKed adults with a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. Homeless and housed samples as defined in text. 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 the average of the twelve observations above and the twelve 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.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
SSI Receipt														
Sheltered Homeless								0.137	0.176	0.201	0.210	0.213		0.225
Unshelt. Homeless								0.210	0.234	0.255	0.260	0.260		0.270
Single Housed Poor								0.157	0.166	0.174	0.176	0.173		0.174
DI Receipt														
Sheltered Homeless				0.058	0.063	0.069	0.074	0.089	0.112	0.136	0.153	0.164	0.166	0.167
Unshelt. Homeless				0.105	0.114	0.122	0.129	0.145	0.160	0.174	0.187	0.196	0.194	0.191
Single Housed Poor				0.095	0.104	0.114	0.122	0.142	0.157	0.169	0.178	0.183	0.179	0.177
HUD Housing Assistance														
Sheltered Homeless	0.083	0.083	0.082	0.078	0.074	0.071	0.068	0.101	0.126	0.143	0.146	0.154	0.161	0.165
Unshelt. Homeless	0.082	0.084	0.083	0.081	0.081	0.082	0.083	0.094	0.104	0.111	0.116	0.122	0.128	0.132
Single Housed Poor	0.113	0.116	0.119	0.123	0.131	0.140	0.152	0.160	0.158	0.154	0.149	0.148	0.144	0.141
VA Service-Connected Disability	ty Receipt													
Sheltered Homeless					0.015	0.017	0.023	0.026	0.029	0.031	0.033	0.034	0.035	0.036
Unshelt. Homeless					0.014	0.014	0.017	0.018	0.020	0.021	0.022	0.023	0.024	0.025
Single Housed Poor					0.011	0.013	0.014	0.015	0.016	0.017	0.018	0.019	0.020	0.021
SNAP Receipt														
Sheltered Homeless			0.358	0.382	0.538	0.600	0.738	0.826	0.786	0.737	0.707	0.681	0.652	0.628
Unshelt. Homeless			0.413	0.428	0.503	0.560	0.636	0.695	0.683	0.666	0.658	0.647	0.631	0.610
Single Housed Poor			0.374	0.408	0.437	0.473	0.548	0.595	0.594	0.575	0.558	0.549	0.528	0.507
Medicaid Receipt														
Sheltered Homeless					0.315	0.333	0.376	0.445	0.473	0.488	0.492	0.612	0.661	
Unshelt. Homeless					0.328	0.348	0.374	0.414	0.446	0.470	0.476	0.614	0.683	
Single Housed Poor					0.322	0.338	0.371	0.398	0.414	0.420	0.421	0.503	0.540	
TANF and GA Receipt (New Ye	ork Only)													
Sheltered Homeless					0.333	0.361	0.469	0.584	0.486	0.396	0.343	0.303	0.289	0.275
Unshelt. Homeless					0.219	0.264	0.285	0.302	0.267	0.251	0.239	0.228	0.213	0.199
Single Housed Poor					0.183	0.182	0.186	0.191	0.162	0.145	0.122	0.113	0.109	0.103
Sample Size														
Sheltered Homeless	89,500	89,500	89,500	89,500	89,500	89,500	89,500	89,500	89,000	88,000	86,500	85,500	84,500	83,000
Unsheltered Homeless	49,500	49,500	49,500	49,500	49,500	49,500	49,500	49,500	49,000	48,500	48,000	47,000	46,500	45,500
Single Housed Poor	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	54,500	54,000	54,000	53,500	53,000	52,500
Population														
Sheltered Homeless	128,400	128,400	128,400	128,400	128,400	128,400	128,400	128,400	127,500	126,000	124,400	122,800	121,100	119,100
Unsheltered Homeless	118,200	118,200	118,200	118,200	118,200	118,200	118,200	118,200	117,300	115,900	114,400	112,700	110,900	108,900
Single Housed Poor (1000s)	4,846	4,846	4,846	4,846	4,846	4,846	4,846	4,846	4,814	4,770	4,718	4,672	4,616	4,560

Table 2b: Benefit Receipt (Homeless and Single Housed Poor, Ages 25-59)

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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)

Notes: See notes on Tables A1-A6 for full definition of each outcome measure. Samples include PIKed adults with a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. Homeless and housed samples as defined in text. 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 the average of the twelve observations above and the twelve 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.

		Homeless		Singl	e Housed	l Poor		Overall H	oused
	2011-2018			0	2011-201	8		2011-20	18
	Share	(SE)	Obs.	Share	(SE)	Obs.	Share	(SE)	Obs.
Date of Birth									
MM/DD/YYYY is misreported	11.7%	0.004	18,000	10.2%	0.000	2,403,000	9.2%	0.000	34,600,000
MM/YYYY is misreported	10.6%	0.004	18,000	8.0%	0.000	2,403,000	7.1%	0.000	34,600,000
YYYY is misreported	10.0%	0.004	18,000	6.8%	0.000	2,403,000	6.0%	0.000	34,600,000
YYYY is misreported by 3 or more years	3.5%	0.002	18,000	4.0%	0.000	2,403,000	3.7%	0.000	34,600,000
Age									
Age is misreported	10.6%	0.004	18,500	8.1%	0.000	2,484,000	7.3%	0.000	35,660,000
Age is misreported by 3 or more years	3.5%	0.002	18,500	4.4%	0.000	2,484,000	4.1%	0.000	35,660,000
Mean age misreport (in years)	-0.01	0.011	18,500	-0.02	0.003	2,484,000	0.00	0.001	35,660,000
Mean absolute age misreport (in years)	0.25	0.011	18,500	0.58	0.003	2,484,000	0.55	0.001	35,660,000
Place of Birth									
State or country of birth is misreported	7.4%	0.003	17,500	5.1%	0.000	2,398,000	4.9%	0.000	33,990,000
Gender									
Gender is misreported	0.5%	0.001	20,000	3.0%	0.000	2,624,000	2.7%	0.000	37,030,000
Gender is misreported [Sample: Women in Numident]	0.6%	0.001	8,000	2.4%	0.000	1,577,000	2.7%	0.000	19,130,000
Gender is misreported [Sample: Men in Numident]	0.5%	0.001	12,000	3.7%	0.000	1,047,000	2.7%	0.000	17,900,000
Citizenship									
Citizenship is misreported	3.4%	0.002	19,500	3.0%	0.000	2,505,000	3.7%	0.000	35,410,000
False positive [Sample: Non-citizens in Numident]	22.9%	0.016	1,000	25.9%	0.001	118,200	35.5%	0.000	2,021,000
False negative [Sample: Citizens in Numident]	1.6%	0.002	18,500	1.1%	0.000	2,386,000	0.9%	0.000	33,390,000

Sources: 2006-2018 ACS, 2019 Social Security Administration Numident

Notes: Sample consists of PIKed individuals in the 2006-2018 ACS who link to the Social Security Administration's Numident file. Sample is further limited to observations in which the variable in question is non-blank in the Numident (e.g. for analyses of date of birth misreporting, the sample is limited to only observations for which the Numident contains date of birth data). We exclude observations in which the variable in question is hot-deck imputed in the ACS data and observations for which an alternative or edited version of the variable exists in the Numident.

Table 3b: Share	of Individuals	Misreporting	Income and Recei	nt: 2011-2018 ACS

	Table 50. Share of	Wo	go and Salary Inc	and Receipt. 2011-	2010 ACS	SNAP	
		Homeless	Single Housed	Overall Housed	Homeless	Single Housed	Overall Housed
		Homeless	Poor	Overall Houseu	Homeless	Poor	Overall Housed
		2011-2016**	2011-2016	2011-2016	2011-2016**	2011-2016	2011-2016
Outcome Samr	nle	Mean or Rate	Mean or Rate	Mean or Rate	Mean or Rate	Mean or Rate	Mean or Rate
Survey>0 Administrative=0 Full 1	population	0.044	0.050	0.048	0.049	0.024	0.010
Survey o, Hummistuare o Tun	population	(0.006)	(0.001)	(0.000)	(0.006)	(0,000)	(0.000)
Survey=0 Administrative>0 Full 1	population	0.177	0.123	0.055	0.172	0.097	0.054
Survey 0, Hummistuaries 0 1 and	population	(0.013)	(0.001)	(0.000)	(0.009)	(0.001)	(0.000)
Survey>0 Administrative>0 Full 1	population	0 234	0.317	0.664	0.668	0.516	0.131
Survey of Remainstrative of Full	population	(0.013)	(0.001)	(0,000)	(0.012)	(0.002)	(0.000)
Survey=0 Administrative=0 Full t	nonulation	0.545	0.510	0.233	0.111	0.363	0.805
Survey of Remainstrative of Fully	population	(0.016)	(0.002)	(0.000)	(0.008)	(0.001)	(0,000)
False Negative Rate Adm	inistrative>0	0.432	0.280	0.077	0.205	0.158	0.290
Taise Regative Rate Rate		(0.025)	(0.002)	(0,000)	(0.011)	(0.002)	(0.001)
False Positive Rate Adm	inistrative=0	0.075	0.089	(0.000)	0.307	0.063	0.012
Taise I ostuve Rate Auto	mistrative=0	(0.010)	(0.001)	(0.001)	(0.021)	(0.001)	(0.000)
Administrativa Pasaint Pata Full	nonulation	(0.010)	(0.001)	(0.001)	(0.031)	0.613	(0.000)
Administrative Receipt Rate 17th j	population	(0.016)	(0.002)	(0.000)	(0.010)	(0.001)	(0.000)
Comment Descript Deter Exilia		(0.010)	(0.002)	(0.000)	(0.010)	(0.001)	(0.000)
Survey Receipt Rate Full J	population	(0.014)	(0.002)	0.712	0.717	(0.002)	0.141
Manu Dana da (6)		(0.014)	(0.002)	(0.000)	(0.011)	(0.002)	(0.000)
Mean Reported (\$) Surve	ey>0	\$9,233	\$8,414	\$50,250			
		(\$319)	(\$31)	(\$32)			
Mean I rue (\$) Adm	unistrative>0	\$7,980	\$11,120	\$48,250			
		(\$1,059)	(\$105)	(\$108)			
Mean True (\$) Surve	ey>0, Administrative>0	\$7,929	\$11,550	\$50,880			
		(\$524)	(\$87)	(\$113)			
Mean Absolute Misreport (\$) Surve	ey>0, Administrative>0	\$5,598	\$5,316	\$12,190			
		(\$468)	(\$79)	(\$98)			
Observations		1,900	173,000	2,833,000	3,300	181,000	1,933,000
			Medicaid			Medicare	
		Homeless	Single Housed	Overall Housed	Homeless	Single Housed	Overall Housed
			Poor			Poor	
Outcome Samp	ple	2011-2016**	2011-2016	2011-2016	2011-2016**	2011-2016	2011-2016
		Mean or Rate	Mean or Rate	Mean or Rate	Mean or Rate	Mean or Rate	Mean or Rate
Survey>0, Administrative=0 Full	population	0.096	0.072	0.033	0.022	0.018	0.007
		(0.005)	(0.000)	(0.000)	(0.002)	(0.000)	(0.000)
Survey=0, Administrative>0 Full	population	0.087	0.085	0.032	0.033	0.034	0.015
	* *	(0.004)	(0.000)	(0.000)	(0.002)	(0.000)	(0.000)
Survey>0, Administrative>0 Full 1	population	0.440	0.372	0.084	0.045	0.072	0.031
		(0.008)	(0.001)	(0.000)	(0.003)	(0.000)	(0.000)
Survey=0, Administrative=0 Full 1	population	0.377	0.472	0.851	0.901	0.875	0.947
5 . 7	1 1	(0.008)	(0.001)	(0.000)	(0.004)	(0.000)	(0.000)
False Negative Rate Adm	inistrative>0	0.165	0.186	0.276	0.424	0.320	0.330
		(0.008)	(0.001)	(0.001)	(0.022)	(0.002)	(0.001)
False Positive Rate Adm	inistrative=0	0.204	0.132	0.037	0.023	0.021	0.007
	v	(0.009)	(0.001)	(0.000)	(0.002)	(0.000)	(0.000)
Administrative Receipt Rate Full	population	0.527	0.456	0.117	0.078	0.107	0.047
Tuni j	Population	(0.008)	(0.001)	(0.000)	(0.003)	(0.000)	(0,000)
Survey Receipt Rate Full	nonulation	0.536	0 443	0.117	0.066	0.091	0.038
Survey receipt rate I un j	Population	(0.008)	(0.001)	(0,000)	(0.003)	(0,000)	(0,000)
Observations		8.200	708.000	10.660.000	12.500	1.015.000	15.840.000

Sources: 2006-2017 ACS, 2006-2016 IRS 1040 Datasets, 2006-2016 IRS W-2 Datasets, Illinois 2009-2016 SNAP Datasets, Indiana 2005-2016 SNAP Datasets, New Jersey 2007-2016 SNAP Datasets, New York 2007-2016 SNAP Datasets, Tennessee 2005-2016 SNAP Datasets, various states' Medicaid data, CMS Medicare 2008-2016 Datasets

Notes: Sample is PIKed ACS respondents ages 18-64. Sample is limited to those who respondeded to the ACS survey in January or December, and imputed whole person observations are not included. Observations are weighted by the product of IPW weights and ACS person weights, and observations where wage and salary income are allocated are excluded. Wage and salary income is calculated from administrative datasets as the sum of wage and salary income (both taxable and deferred) across W-2s. Those with negative survey values for wage and salary income are assumed to have reported a wage and salary income of \$0. Mean wage and dollar misreport amounts are reported in January 1, 2018 dollars. Standard errors are robust.

* Reference period: 2005-2010

Observations

** Reference period: 2010-2016

I able 4: Compari	sons to Key Prior Studies	: Income, Employment	, and Safety Net Partic	ipation	
	(1) Present study - pooled homeless	(2) NSHAPC (Burt et al. 2001)	(3) Present study - sheltered homeless	(4) Metraux et al. (2018)	(5) Von Wachter et al. (2020)
Sample Definition					
Homeless sample	Census sheltered and unsheltered homeless (pooled)	Service users (current and recent homeless)	Census sheltered homeless	People with first HMIS enrollment in year	People with first HMIS enrollment in year
Geographic coverage	National	National	National	New York	Los Angeles
Age range	25-59	17+	25-59	18+	18+
Year(s) observed as homeless	2010	1996	2010	1990-2002	2010-2018
Resource data source	Various administrative	Self-reported	Various administrative	SSA earnings data	UI records (California)
Characteristics					
Male	0.70	0.68	0.67	0.50	0.61
White ¹	0.50	0.41	0.49	0.08	0.24
Black	0.39	0.40	0.40	0.56	0.46
Other Race	0.11	0.19	0.04	0.36	0.30
Mean Income, Share Employed, and Mean Earnings in Y	ear Observed as Homele	ss (2018 Dollars)			
Pre-tax cash income (sources not specified)	-	\$7,080	-	-	-
Pre-tax cash income (no SSI or TANF/GA)	\$9,196	-	\$8,069	-	-
Pre-tax cash income (with SSI, no TANF/GA) ²	\$10,912	-	\$9,811	-	-
Pre-tax cash income (with SSI and TANF/GA; NY only)	\$12,709	-	\$12,175	-	-
Employment Timeframe	Calendar year	Last month	Calendar year	Year of enrollment	Past year
Employment in month/year (All Adults)	0.46	0.44	0.52	0.42	0.29
Employment (Adults in Families) ³	-	0.29	0.68	0.38	0.44
Employment (Adults not in Families)	-	0.46	0.43	0.45	0.25
Earnings (conditional on working)	\$14,674		\$13,510	\$7,700	\$9,970
Program Receipt in Year Observed as Homeless					
Any benefit	0.86	0.40	0.89	-	-
SSI	0.24	0.11	0.14	-	-
Food stamps	0.77	0.37	0.83	-	-
Medicaid (All Adults)	0.46	0.30	0.45	-	-
Medicaid (Adults in Families)	-	0.60	0.69	-	-
Medicaid (Adults not in Families)	-	0.25	0.26	-	
AFDC/TANF or GA (NY only in Census samples)	0.48	0.19	0.58	-	-
Sample Size	139,000	4,200	89,500	160,525	136,726

T 11 4 G

Sources: Burt et al. (2001), Metraux et al. (2018), Von Wachter et al. (2020), present study

Notes: We inflation-adjust all dollar amounts to 2018 dollars using the Chained CPI for Urban Consumers (C-CPI-U).

¹Metraux et al. (2018) and Von Wachter et al. (2020) indicate non-Hispanic white shares, while the Census and NSHAPC indicate Hispanic and non-Hispanic whites.

²Pre-tax cash income amounts reported in main tables do not include the value of SSI or TANF/GA from New York. We calculate pre-tax cash income with these benefits by adding the share receiving these benefits times the mean benefit amount conditional on receipt.

Employment for adults in families/adults not in families for the present study is calculated by pooling the Los Angeles and Houston HMIS samples.

⁴We omit 2009 from the pre-period because we count people as homeless in the beginning of 2010, meaning that many individuals in our sample may have become homeless in 2009 rather than 2010.

⁵Von Wachter et al. (2020) do not report the share employed in the year after shelter entry. They only report earnings in the year after shelter entry. We report the change in employment as the share employed in the year prior to shelter entry minus the share employed in the year of shelter entry.

11. Figures



Sources: IRS 1040s (2003-2015), W2s (2005-2016), HUD PIC/TRACS (2003-2016), USVETS (2007-2015), Medicare (2006-2014), Medicaid (2007-2015), SNAP for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016), TANF/GA for New York (2007-2015), SSI (2010-2014, 2016), 2010 Census. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.

Figure 1b: Income Including In-Kind Transfers in 2010

Homeless and Single Housed Poor, Ages 25-59



Sources: IRS 1040s (2003-2015), W2s (2005-2016), 1099-Rs (2003-2015), HUD PIC/TRACS (2003-2016), USVETS (2007-2015) SNAP for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016), TANF/GA for New York (2007-2015), SSI (2010-2014, 2016), 2010 Census, 2010 ACS. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015. In-kind transfers from SNAP and HUD.



Figure 2: Median Income Including In-Kind Transfers in 2005-2016

Sources: IRS 1040s (2003-2015), W2s (2005-2016), and 1099-Rs (2003-2015), HUD PIC/TRACS (2003-2016), USVETS (2007-2015), SNAP for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016), SSI (2010-2014, 2016), 2010 Census, 2010 ACS. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.



Figure 3b: Median Earnings (Conditional on Working), 2005-2016

Homeless, Single Housed Poor, and Overall Housed, Ages 25-59



Figure 4a: SSI Receipt, 2010-2016

Homeless and Single Housed Poor, Ages 25-59



Sources: SSI Datasets (2010-2014, 2016), 2010 Census, 2010 ACS. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.



Sources: 2006-2016 Medicare Datasets, 2010 Census, 2010 ACS. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.



Figure 5a: Program Receipt of Sheltered Homeless, 2003-2016

Sources: IRS 1040s (2003-2015), W2s (2005-2016), and 1099-Rs (2003-2015), HUD PIC/TRACS (2003-2016), USVETS (2007-2015), Medicare (2006-2014), Medicaid (2007-2015), SNAP for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016), TANF/GA for New York (2007-2015), SSI (2010-2014, 2016), 2010 Census. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.

Figure 5b: Program Receipt of Sheltered Homeless, 2003-2016 Unsheltered Homeless, Ages 25-59 Year observed as homeless õ Share with Benefit ശ SNAP 🔶



Sources: IRS 1040s (2003-2015), W2s (2005-2016), and 1099-Rs (2003-2015), HUD PIC/TRACS (2003-2016), USVETS (2007-2015), Medicare (2006-2014), Medicaid (2007-2015), SNAP for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016), TANF/GA for New York (2007-2015), SSI (2010-2014, 2016), 2010 Census. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.





Figure 7b: Median Earnings by Gender (Conditional on Working), 2005-2016 Homeless Ages 25-59





Sources: IRS 1040s (2003-2015), W2s (2005-2016), Los Angeles (2004-2014) and Houston (2004-2015) HMIS datasets. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015. Sample contains those enrolled in HMIS shelters on March 30, 2012 or 2013.



Figure 9a: Share with Earnings, Benefits, and Disability by Race, 2010 Homeless, Ages 25-59

Sources: IRS 1040s (2003-2015), W2s (2005-2016), and 1099-Rs (2003-2015), HUD PIC/TRACS (2003-2016), USVETS (2007-2015), Medicare (2006-2014), Medicaid (2007-2015), SNAP for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016), TANF/GA for New York (2007-2015), SSI (2010-2014, 2016), 2010 Census. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.

Figure 9b: Share with Earnings, Benefits, and Disability by Ethnicity, 2010 Homeless, Ages 25-59



Sources: IRS 1040s (2003-2015), W2s (2005-2016), and 1099-Rs (2003-2015), HUD PIC/TRACS (2003-2016), USVETS (2007-2015), Medicare (2006-2014), Medicarid (2007-2015), SNAP for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016), TANF/GA for New York (2007-2015), SSI (2010-2014, 2016), 2010 Census. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.



Figure 10b: Median Earnings (Conditional on Positive) by State, 2010



Homeless, Ages 25-59

Sources: IRS 1040s (2003-2015), W2s (2005-2016), 2010 Census. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.







Los Angeles and Houston HMIS Shelter Users Ages 25-59, 2012 and 2013

Figure 11b: Share with SSI or DI in HMIS Data, Comparison of Sample Time-Frames Los Angeles and Houston HMIS Shelter Users Ages 25-59, 2012 and 2013 4 Year observed as homeless Share with SSI or DI 2 0 -2 2 0 4 Year Relative to Homelessness LA, First Spell -→ Houston, First Spell - - LA, Cross-Section - - Houston, Cross-Section

Sources: Los Angeles (2004-2014) and Houston (2004-2015) HMIS datasets, SSI Datasets (2010-2014, 2016), 2006-2016 Medicare Datasets. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015. "First spe with first observed HMIS enrollment in 2012 or 2013. "Cross section" includes those enrolled on March 30, 2012 or March 30, 2013. "First spell" sample consists of those



Figure 12a: Share with Earnings, Comparison of HMIS and Census Samples

Los Angeles and Houston Census and HMIS Shelter Users Ages 25-59, 2012 and 2013

Sources: Los Angeles (2004-2014) and Houston (2004-2015) HMIS datasets, 2010 Census, 2003-2016 IRS 1040 Datasets, 2005-2016 W2 Datasets. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015. Census sample consists of sheltered homeless counted in Los Angeles or Houston. HMIS sample consists of those enrolled in HMIS shelters in Los Angeles or Houston on March 30, 2010.

Figure 12b: Share with SSI or DI, Comparison of HMIS and Census Samples Los Angeles and Houston Census and HMIS Shelter Users Ages 25-59, 2012 and 2013 Year observed as homeless 4 Share with SSI or DI N 0 2005 2010 2015 LA, HMIS Houston, HMIS LA, Census Houston, Census _

Sources: 2010 Census, Los Angeles (2004-2014) and Houston (2004-2015) HMIS datasets, SSI Datasets (2010-2014, 2016), 2006-2016 Medicare Datasets. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015. Census sample consists of sheltered homeless counted in Los Angeles or Houston. HMIS sample consists of those enrolled in HMIS shelters in Los Angeles or Houston on March 30, 2010.

A. Appendix: Additional Robustness Checks

This section contains additional analyses to test the robustness of our findings to alternative samples, linkage methods, and years through a series of additional analyses using alternative Census and ACS homeless samples.

A.1 Income and Program Receipt using the ACS Sheltered Homeless Sample

We first calculate longitudinal employment and disability program receipt for sheltered homeless samples drawn from the 2010-2014 ACS and compare these results to the 2010 Census homeless. These analyses allow us to see whether homeless samples from years other than 2010 exhibit the same patterns. They also provide an additional check on whether our inverse probably weighting procedure in the Census leads to a representative sample, because the ACS permits us to estimate the probability of linkage using a wealth of additional predictors beyond the limited demographic characteristics available in the Census, including self-reported income and benefit measures that are highly correlated with our administrative outcomes of interest. Figures A1 and A2 (Table A15) show that our findings are robust to the use of ACS sheltered homeless samples. Both the levels and longitudinal patterns of employment and disability program receipt track closely in the two samples, bolstering the generality of our results beyond 2010 and supporting the validity of our approach to adjusting for non-linkage in the Census.

A.2 Robustness to Alternative Samples of the Census Homeless

We also calculate employment and benefit receipt for a version of the Census unsheltered homeless sample that includes those counted at outdoor locations (TNSOLs) and also for a version of the sheltered and unsheltered homeless Census samples that excludes people who were recorded in housing units as well as being counted as homeless in the 2010 Census. The first analysis serves as a check on our decision to omit this group from our main results due to low linkage rates and concerns about non-randomness of linkage conditional on observed characteristics. The second analysis accounts for the finding in Meyer et al. (2023) that about 40 percent of the unsheltered population and 20 percent of those in shelters were also counted as housed in the Census, raising concerns about misclassification of housed people as homeless. Figures A3-A6 (Tables A16 and A17) contain these results.

Our findings are robust to these alternative sample choices. Despite concerns about low linkage rates for people at TNSOLs, the decision to exclude these individuals appears to have little

effect on our results. We also note that people who were double counted during the Census appear slightly more likely to be employed and slightly less likely receive benefits, differences which may reflect a small degree of misclassification but which could alternatively reflect heterogeneity in these outcomes between people with more or fewer connections to housed friends or family.

A.3 Potential Bias in Longitudinal SNAP Receipt from Migration

Our final robustness check examines possible downward bias in SNAP receipt that may arise due to migration between states for which we do and do not have SNAP records. People residing in SNAP states in 2010 who resided in other states for which we do not have these records would necessarily be indicated as non-recipients in those other years in our analyses. To explore this possibility, we link the 2010 Census homeless population to the 2000 Census to identify individuals who lived in the same states in both years, a subset that we consider less likely to have migrated than the typical homeless person. Figure A7 (Table A18) displays the results from this analysis. As expected, the peak in SNAP receipt surrounding 2010 is mitigated somewhat in the migration-adjusted sample, but the qualitative pattern of sharply increasing SNAP receipt preceding 2010 and somewhat decreasing SNAP receipt after 2010 remains intact. Our findings are similar when we examine migration-adjusted SNAP receipt in the unsheltered homeless and single housed poor samples, suggesting that the peak in SNAP receipt in the year observed as homeless is a real phenomenon, not the result of bias due to incomplete coverage of SNAP datasets.

Appendix Tables

Sheltered Homeless 2005 2006 2007 2008 2009 2010 2011 2012 2013 2015 2016 2014 0.622 0.620 0.579 0.501 0.518 0.462 0.454 0.438 0.435 0.437 0.605 0.496 Share employed¹ (0.002)(0.002)(0.002)(0.002)(0.002)(0.002)(0.002)(0.002)(0.002)(0.002)(0.002)(0.002)0.683 0.729 0.823 0.892 0.876 0.851 0.837 0.838 0.837 Share receiving any safety net benefits² (0.002)(0.003)(0.003)(0.003)(0.002)(0.002)(0.003)(0.003)(0.004)Share receiving disability benefits (SSI or DI) 0.191 0.245 0.288 0.312 0.327 0.343 (0.002)(0.002)(0.002)(0.002)(0.002)(0.002)Share with benefits or earnings 0.888 0.899 0.929 0.951 0.945 0.966 0.960 0.947 0.947 (0.002)(0.002)(0.001)(0.001)(0.001)(0.002)(0.002)(0.003)(0.002)0.694 0.709 0.714 Share with disability benefits or earnings 0.657 0.679 (0.002)(0.002)(0.002)(0.002)(0.002)89,500 89,500 89,500 89,500 84,500 83,000 Sample Size 89,500 89,500 89,000 88,000 86,500 85,500 Population 128,400 128,400 128,400 128,400 128,400 128,400 127,500 126,000 124,400 122,800 121,100 119,100 Unsheltered Homeless 2005 2007 2008 2009 2011 2012 2013 2015 2016 2006 2010 2014 0.559 0.546 0.528 0.493 0.418 0.403 0.389 0.359 0.357 0.339 0.339 0.341 Share employed¹ (0.004)(0.004)(0.004)(0.004)(0.003)(0.004)(0.003)(0.003)(0.004)(0.004)(0.004)(0.003)0.647 0.699 0.753 0.800 0.800 0.792 0.797 0.806 0.829 Share receiving any safety net benefits² (0.012)(0.008)(0.006)(0.005)(0.005)(0.006)(0.005)(0.005)(0.007)Share receiving disability benefits (SSI or DI) 0.291 0.327 0.359 0.376 0.385 0.396 (0.005)(0.005)(0.005)(0.005)(0.005)(0.005)0.881 Share with benefits or earnings 0.892 0.899 0.926 0.928 0.921 0.927 0.930 0.936 (0.005)(0.004)(0.004)(0.003)(0.003)(0.003)(0.003)(0.003)(0.004)Share with disability benefits or earnings 0.623 0.642 0.653 0.667 0.667 0.678 0.004 0.004 0.004 0.004 0.004 0.005 49,500 49,500 49,500 49,500 49,500 47,000 Sample Size 49,500 49,000 48,500 48,000 46,500 45,500 Population 118,200 118,200 118,200 118,200 118,200 118,200 117,300 115,900 114,400 112,700 110,900 108,900

Table A1a: Summary of Connections to Formal Work, Safety Net, and Disability Programs, Ages 25-59 in 2010, 2005-2016

Sheltered and Unsheltered Homeless

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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)

Notes: Sample includes PIKed adults from the 2010 Decennial Census and 2009-2010 ACS who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. 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 the average of the twelve observations above and the twelve 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.

¹ Earnings row reports the share of individuals with positive estimated earnings across IRS 1040 and W2 datasets, as defined in Tables 4-6.

² Any benefits includes SNAP, HUD, VA, Medicare, and Medicaid benefits, as well as SSI benefits, when indicated.

			0									
Single Housed Poor												
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share employed ¹	0.611	0.596	0.582	0.553	0.484	0.483	0.498	0.493	0.489	0.488	0.489	0.487
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Share receiving any safety net benefits ²			0.577	0.608	0.662	0.707	0.717	0.707	0.698	0.717	0.716	
			(0.011)	(0.010)	(0.009)	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.012)	
Share receiving disability benefits (SSI or DI)						0.251	0.274	0.292	0.305	0.308		0.307
						(0.005)	(0.004)	(0.005)	(0.004)	(0.005)		(0.005)
Share with benefits or earnings			0.860	0.868	0.861	0.892	0.903	0.909	0.907	0.919	0.928	
			(0.008)	(0.007)	(0.007)	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)	(0.007)	
Share with disability benefits or earnings						0.691	0.726	0.740	0.748	0.753		0.750
						0.004	0.003	0.003	0.003	0.003		0.004
Sample Size	55,000	55,000	55,000	55,000	55,000	55,000	54,500	54,000	54,000	53,500	53,000	52,500
Population (100,000s)	48.46	48.46	48.46	48.46	48.46	48.46	48.14	47.70	47.18	46.72	46.16	45.60
Overall Housed												
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share employed ¹	0.857	0.860	0.864	0.861	0.848	0.843	0.837	0.831	0.825	0.815	0.809	0.801
	(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 any safety net benefits ²			0.185	0.192	0.201	0.217	0.225	0.228	0.229	0.247	0.261	
			(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	
Share receiving disability benefits (SSI or DI)						0.059	0.064	0.068	0.073	0.077		0.078
						(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)
Share with benefits or earnings						0.931	0.928	0.927	0.925	0.924		
						(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		
Share with disability benefits or earnings						0.884	0.882	0.880	0.878	0.873		0.859
						0.000	0.000	0.000	0.000	0.000		0.000
Sample Size	994,000	994,000	994,000	994,000	994,000	994,000	992,000	989,000	986,000	983,000	979,000	975,000
Population (100,000s)	722.70	722.70	722.70	722.70	722.70	722.70	722.70	722.70	721.30	719.10	716.80	714.40

Table A1b: Summary of Connections to Formal Work, Safety Net, and Disability Programs, Ages 25-59 in 2010, 2005-2016

Single Housed Poor and Overall Housed

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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 York (2007-2016), and Tennessee (2004-2016)

Notes: Sample includes PIKed adults from the 2010 Decennial Census and 2009-2010 ACS who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. 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 the average of the twelve observations above and the twelve 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.

¹ Earnings row reports the share of individuals with positive estimated earnings across IRS 1040 and W2 datasets, as defined in Tables A3-A6.

² Any benefits includes SNAP, HUD, VA, Medicare, and Medicaid benefits, as well as SSI benefits, when indicated.

i able A2: income and Benefit Receipt among All Homeless Individuals Ages 25-59 in 2010 Decennial Census, 2005-2016^												
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Employment and Earnings												
Share employed ¹	0.622	0.620	0.605	0.579	0.501	0.518	0.496	0.462	0.454	0.438	0.435	0.437
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
50th percentile (cond. on +)	\$9,493	\$9,534	\$9,327	\$8,039	\$6,590	\$8,328	\$10,870	\$11,170	\$11,380	\$11,820	\$12,860	\$13,470
	(\$69)	(\$71)	(\$68)	(\$68)	(\$68)	(\$63)	(\$63)	(\$71)	(\$77)	(\$89)	(\$102)	(\$103)
75th percentile (cond. on +)	\$20,290	\$19,780	\$18,700	\$16,780	\$14,950	\$16,570	\$20,060	\$20,450	\$20,980	\$21,780	\$23,850	\$24,850
	(\$120)	(\$108)	(\$103)	(\$94)	(\$99)	(\$98)	(\$121)	(\$116)	(\$131)	(\$141)	(\$156)	(\$156)
Pretax Cash Income, Plus In-Kind Transfers	(no SSI) ³											
50th percentile	\$5,634	\$5,029	\$4,564	\$3,177	\$2,835	\$3,948	\$4,414	\$3,906	\$3,947	\$3,527	\$4,041	\$4,347
	(\$247)	(\$218)	(\$135)	(\$87)	(\$33)	(\$100)	(\$139)	(\$126)	(\$131)	(\$127)	(\$151)	(\$158)
75th percentile	\$14,920	\$14,380	\$14,370	\$12,930	\$11,950	\$13,940	\$15,690	\$15,490	\$15,560	\$15,220	\$16,220	\$16,670
	(\$423)	(\$382)	(\$153)	(\$152)	(\$126)	(\$118)	(\$145)	(\$145)	(\$144)	(\$154)	(\$168)	(\$170)
Safety Net Program Receipt												
Share receiving any safety net benefits ²			0.669	0.717	0.795	0.856	0.846	0.827	0.821	0.825	0.834	
			(0.005)	(0.004)	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	
Share receiving SNAP	0.384	0.404	0.524	0.584	0.697	0.774	0.745	0.709	0.687	0.667	0.644	0.621
	(0.007)	(0.007)	(0.005)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)
Share enrolled in Medicaid			0.321	0.340	0.375	0.430	0.460	0.479	0.484	0.613	0.672	
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	
Share receiving disability benefits (SSI or DI)						0.239	0.284	0.322	0.343	0.355		0.368
						(0.003)	(0.003)	(0.003)	(0.003)	(0.003)		(0.003)
Sample Size	139,000	139,000	139,000	139,000	139,000	139,000	138,000	136,500	134,500	132,500	131,000	128,500
Population	246,600	246,600	246,600	246,600	246,600	246,600	244,800	241,900	238,800	235,500	232,000	228,000

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

Notes: Sample includes PIKed adults from the 2010 Decennial Census and 2009-2010 ACS who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. 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 the average of the twelve observations above and the twelve 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.

¹ Earnings row reports the share of individuals with positive estimated earnings across IRS 1040 and W2 datasets, as defined in Tables A3-A6.

² Any benefits includes SNAP, HUD, VA, Medicare, and Medicaid benefits, as well as SSI benefits, when indicated.

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Income and Earnings												
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Employment and Earnings ¹												
Share with earnings	0.622	0.620	0.605	0.579	0.501	0.518	0.496	0.462	0.454	0.438	0.435	0.437
-	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Mean (cond. on +)	\$14,810	\$14,620	\$14,040	\$12,810	\$11,610	\$13,510	\$15,780	\$15,890	\$16,330	\$16,620	\$17,890	\$18,480
	(\$83)	(\$82)	(\$78)	(\$84)	(\$86)	(\$103)	(\$103)	(\$108)	(\$111)	(\$116)	(\$121)	(\$120)
Std Deviation (cond. on +)	\$19,020	\$19,080	\$17,940	\$18,740	\$17,570	\$21,610	\$21,090	\$21,690	\$21,730	\$21,820	\$22,580	\$22,620
25th percentile (cond. on +)	\$2,943	\$2,958	\$3,014	\$2,435	\$1,738	\$2,452	\$3,659	\$3,662	\$3,941	\$4,061	\$4,413	\$4,656
	(\$38)	(\$38)	(\$40)	(\$34)	(\$26)	(\$38)	(\$58)	(\$58)	(\$68)	(\$70)	(\$78)	(\$79)
50th percentile (cond. on +)	\$9,493	\$9,534	\$9,327	\$8,039	\$6,590	\$8,328	\$10,870	\$11,170	\$11,380	\$11,820	\$12,860	\$13,470
	(\$69)	(\$71)	(\$68)	(\$68)	(\$68)	(\$63)	(\$63)	(\$71)	(\$77)	(\$89)	(\$102)	(\$103)
75th percentile (cond. on +)	\$20,290	\$19,780	\$18,700	\$16,780	\$14,950	\$16,570	\$20,060	\$20,450	\$20,980	\$21,780	\$23,850	\$24,850
	(\$120)	(\$108)	(\$103)	(\$94)	(\$99)	(\$98)	(\$121)	(\$116)	(\$131)	(\$141)	(\$156)	(\$156)
Pretax Cash Income ²												
Mean	\$9,519	\$9,475	\$9,432	\$8,055	\$6,520	\$8,069	\$9,050	\$8,393	\$8,337	\$8,245	\$8,835	\$9,192
	(\$65)	(\$63)	(\$60)	(\$62)	(\$52)	(\$61)	(\$62)	(\$63)	(\$64)	(\$66)	(\$70)	(\$71)
Std Deviation	\$18,760	\$18,560	\$17,600	\$18,380	\$15,200	\$17,870	\$18,110	\$18,460	\$18,760	\$19,170	\$20,200	\$20,210
25th percentile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)
50th percentile	\$2,230	\$2,250	\$3,520	\$1,450	\$238	\$758	\$681	\$12	\$0	\$0	\$0	\$0
	(\$50)	(\$50)	(\$60)	(\$39)	(\$17)	(\$35)	(\$43)	(\$13)	(\$6)	(\$0)	(\$0)	(\$0)
75th percentile	\$13,430	\$13,600	\$13,360	\$11,230	\$8,346	\$10,980	\$13,070	\$12,220	\$12,020	\$11,850	\$12,950	\$13,360
	(\$96)	(\$97)	(\$76)	(\$79)	(\$84)	(\$69)	(\$77)	(\$98)	(\$103)	(\$107)	(\$94)	(\$98)
Pretax Cash Income, Plus In-k	Kind Transfers (n	io SSI) ³										
Mean	\$10,270	\$9,666	\$10,120	\$9,121	\$8,543	\$10,040	\$10,970	\$10,680	\$10,710	\$10,430	\$11,120	\$11,540
	(\$235)	(\$222)	(\$112)	(\$106)	(\$96)	(\$99)	(\$107)	(\$107)	(\$111)	(\$111)	(\$117)	(\$128)
Std Deviation	\$13,700	\$12,970	\$15,400	\$14,590	\$14,270	\$14,870	\$15,870	\$15,800	\$16,290	\$16,210	\$16,960	\$18,440
25th percentile	\$754	\$754	\$902	\$833	\$1,277	\$1,994	\$1,790	\$1,565	\$1,469	\$1,210	\$1,159	\$1,041
	(\$91)	(\$85)	(\$33)	(\$29)	(\$23)	(\$22)	(\$27)	(\$28)	(\$29)	(\$30)	(\$34)	(\$39)
50th percentile	\$5,634	\$5,029	\$4,564	\$3,177	\$2,835	\$3,948	\$4,414	\$3,906	\$3,947	\$3,527	\$4,041	\$4,347
	(\$247)	(\$218)	(\$135)	(\$87)	(\$33)	(\$100)	(\$139)	(\$126)	(\$131)	(\$127)	(\$151)	(\$158)
75th percentile	\$14,920	\$14,380	\$14,370	\$12,930	\$11,950	\$13,940	\$15,690	\$15,490	\$15,560	\$15,220	\$16,220	\$16,670
	(\$423)	(\$382)	(\$153)	(\$152)	(\$126)	(\$118)	(\$145)	(\$145)	(\$144)	(\$154)	(\$168)	(\$170)
Pretax Cash Income, Plus In-H	Kind Transfers (v	vith SSI)										
Mean						\$11,280	\$12,550	\$12,460	\$12,600	\$12,280		\$13,150
						(\$100)	(\$111)	(\$110)	(\$113)	(\$112)		(\$126)
Std Deviation						\$14,980	\$16,450	\$16,240	\$16,640	\$16,340		\$18,140
25th percentile						\$2,413	\$2,411	\$2,330	\$2,285	\$2,083		\$2,132
						(\$16)	(\$25)	(\$29)	(\$33)	(\$33)		(\$44)
50th percentile						\$7,461	\$9,149	\$9,289	\$9,441	\$9,325		\$9,518
						(\$142)	(\$115)	(\$106)	(\$102)	(\$96)		(\$73)
75th percentile						\$15,130	\$17,090	\$17,190	\$17,310	\$17,040		\$18,260
						(\$132)	(\$133)	(\$130)	(\$125)	(\$136)		(\$156)
Sample Size	89,500	89,500	89,500	89,500	89,500	89,500	89,000	88,000	86,500	85,500	84,500	83,000
Population	128,400	128,400	128,400	128,400	128,400	128,400	127,500	126,000	124,400	122,800	121,100	119,100

Table A3a: Income and Benefit Receipt among Sheltered Homeless Individuals Ages 25-59 in 2010 Decennial Census, 2005-2016*

Connections to Employment and Formal Income														
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1040 Filing Status														
Share filing 1040	0.390	0.381	0.374	0.376	0.447	0.372	0.330	0.381	0.399	0.341	0.332	0.308	0.306	0.299
	(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)	(0.002)
1040 cofiling rate (cond. on filing)	0.204	0.200	0.193	0.180	0.153	0.158	0.149	0.131	0.131	0.171	0.177	0.187	0.194	0.204
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
Share with dependents (cond. on filing)	0.415	0.419	0.421	0.417	0.354	0.375	0.365	0.367	0.358	0.412	0.425	0.447	0.441	0.437
	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Mean dependents (cond. on +)	1.753	1.756	1.742	1.736	1.726	1.756	1.770	1.790	1.805	1.821	1.846	1.857	1.875	1.890
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)
Income Sources on 1040s														
Share filing 1040 with positive total money income	0.388	0.378	0.359	0.360	0.430	0.356	0.315	0.367	0.376	0.330	0.321	0.298	0.296	0.290
	(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)	(0.002)
Median total money income (cond. on +)	\$16,760	\$16,400	\$14,040	\$14,180	\$12,300	\$12,150	\$11,290	\$12,730	\$14,790	\$15,020	\$15,190	\$15,600	\$16,590	\$17,440
	(\$108)	(\$103)	(\$94)	(\$92)	(\$65)	(\$78)	(\$64)	(\$80)	(\$79)	(\$80)	(\$77)	(\$77)	(\$92)	(\$110)
Share filing 1040 with self-employment income (+ or -)	0.038	0.040	0.040	0.043	0.047	0.047	0.049	0.053	0.056	0.054	0.054	0.051	0.048	0.047
	(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)	(0.001)
Median self-employment income (cond. on +)	\$7,283	\$7,170	\$6,953	\$7,914	\$7,863	\$8,444	\$9,897	\$10,030	\$10,060	\$10,070	\$9,755	\$9,437	\$9,188	\$8,352
	(\$261)	(\$245)	(\$239)	(\$230)	(\$220)	(\$184)	(\$151)	(\$136)	(\$134)	(\$135)	(\$175)	(\$189)	(\$222)	(\$257)
Share filing 1040 with social security income	0.003	0.003	0.004	0.007	0.054	0.013	0.010	0.016	0.020	0.020	0.021	0.021	0.025	0.027
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Median social security income (cond. on +)	\$11,360	\$11,280	\$10,750	\$10,240	\$9,945	\$10,370	\$11,170	\$12,950	\$12,830	\$12,330	\$11,050	\$11,280	\$11,390	\$11,630
	(\$460)	(\$478)	(\$348)	(\$215)	(\$60)	(\$175)	(\$233)	(\$226)	(\$124)	(\$173)	(\$151)	(\$158)	(\$131)	(\$138)
Share filing 1040 with wage and salary income	0.372	0.362	0.354	0.352	0.375	0.336	0.285	0.325	0.329	0.296	0.292	0.274	0.274	0.270
	(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)	(0.002)
Median 1040 wage and salary income (cond. on +)	\$16,000	\$15,880	\$13,240	\$13,160	\$11,820	\$10,800	\$9,466	\$10,810	\$13,140	\$13,560	\$13,930	\$14,530	\$15,730	\$16,600
	(\$123)	(\$116)	(\$104)	(\$108)	(\$88)	(\$88)	(\$88)	(\$76)	(\$108)	(\$107)	(\$120)	(\$122)	(\$132)	(\$139)
IRS Information Returns (W2s and 1099Rs)														
Share receiving W2			0.602	0.597	0.583	0.548	0.454	0.448	0.423	0.406	0.402	0.403	0.406	0.411
			(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 wage and tips (cond. on +)			\$9,073	\$8,973	\$8,690	\$7,231	\$5,021	\$5,759	\$8,176	\$9,456	\$10,260	\$11,210	\$12,580	\$13,230
			(\$72)	(\$74)	(\$69)	(\$65)	(\$54)	(\$57)	(\$87)	(\$95)	(\$102)	(\$104)	(\$114)	(\$113)
Mean W2s received (cond. on +)			2.073	2.101	2.099	1.940	1.647	1.650	1.611	1.623	1.646	1.700	1.764	1.802
			(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)
Share receiving 1099R	0.040	0.041	0.039	0.041	0.042	0.042	0.039	0.030	0.028	0.033	0.034	0.038	0.041	0.044
	(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)	(0.001)
Sample Size	89,500	89,500	89,500	89,500	89,500	89,500	89,500	89,500	89,000	88,000	86,500	85,500	84,500	83,000
Population	128,400	128,400	128,400	128,400	128,400	128,400	128,400	128,400	127,500	126,000	124,400	122,800	121,100	119,100

Table A3b: Income and Benefit Receipt among Sheltered Homeless Individuals Ages 25-59 in 2010 Decennial Census, 2003-2016*

Safety Net Program Receipt														
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Housing Benefits (HUD)														
Share with housing benefits	0.083	0.083	0.082	0.078	0.074	0.071	0.068	0.101	0.126	0.143	0.146	0.154	0.161	0.165
	(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)	(0.001)
Mean housing benefit amount (equivalized) (cond. on $+$) ⁴	\$4,904	\$5,043	\$4,972	\$4,860	\$4,858	\$4,790	\$4,906	\$4,291	\$5,455	\$5,684	\$6,067	\$5,983	\$6,094	\$6,267
	(\$41)	(\$41)	(\$41)	(\$42)	(\$42)	(\$43)	(\$46)	(\$35)	(\$33)	(\$33)	(\$33)	(\$32)	(\$32)	(\$32)
Mean assistance unit size (cond. on +)	2.839	2.791	2.668	2.585	2.454	2.267	2.012	1.829	1.819	1.844	1.841	1.849	1.849	1.836
	(0.022)	(0.022)	(0.022)	(0.023)	(0.023)	(0.023)	(0.022)	(0.016)	(0.015)	(0.014)	(0.013)	(0.013)	(0.013)	(0.013)
Share with child in assistance unit (cond. on +)	0.611	0.585	0.544	0.507	0.456	0.392	0.298	0.256	0.257	0.262	0.263	0.262	0.258	0.254
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Mean months of housing benefit receipt (cond. on +)	10.300	10.360	10.200	9.992	9.892	9.607	9.245	7.829	9.755	10.080	10.630	10.550	10.640	10.730
	(0.046)	(0.044)	(0.045)	(0.045)	(0.046)	(0.047)	(0.049)	(0.042)	(0.034)	(0.032)	(0.028)	(0.028)	(0.026)	(0.025)
Veterans' Benefits (VA)														
Share with VA service-connected disability					0.015	0.017	0.023	0.027	0.029	0.031	0.033	0.034	0.035	0.036
					(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Supplemental Nutrition Assistance Program (SNAP) ⁵														
Share with SNAP receipt			0.358	0.382	0.538	0.601	0.738	0.826	0.786	0.737	0.707	0.681	0.652	0.628
			(0.008)	(0.008)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Mean SNAP benefit amount (equivalized) (cond. on +)			\$1,224	\$1,203	\$1,278	\$1,364	\$1,736	\$1,886	\$1,812	\$1,795	\$1,748	\$1,581	\$1,589	\$1,564
			(\$24)	(\$22)	(\$8)	(\$8)	(\$8)	(\$6)	(\$7)	(\$8)	(\$8)	(\$8)	(\$8)	(\$9)
Mean months of SNAP receipt (cond. on +)			7.327	7.401	8.905	9.108	9.189	10.200	10.100	10.160	10.360	10.300	10.410	10.380
			(0.110)	(0.104)	(0.036)	(0.034)	(0.028)	(0.020)	(0.023)	(0.024)	(0.024)	(0.025)	(0.025)	(0.026)
Mean assistance unit size (cond. on +)			1.965	1.918	2.029	2.000	1.938	1.941	1.947	1.939	1.941	1.930	1.926	1.922
			(0.043)	(0.041)	(0.017)	(0.016)	(0.012)	(0.011)	(0.012)	(0.012)	(0.013)	(0.013)	(0.014)	(0.014)
Share with child in assistance unit (cond. on +)			0.332	0.308	0.338	0.319	0.298	0.291	0.287	0.279	0.273	0.264	0.256	0.249
			(0.013)	(0.013)	(0.005)	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.000)
Medicaid and Medicare														
Share enrolled in Medicaid					0.315	0.333	0.376	0.445	0.473	0.488	0.492	0.612	0.662	
					(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	
Share enrolled in Medicare Part A or B				0.059	0.064	0.069	0.074	0.090	0.113	0.137	0.154	0.166	0.181	0.198
				(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Disability programs (DI and SSI)														
Share receiving DI as indicated by Medicare records				0.058	0.063	0.069	0.074	0.089	0.112	0.136	0.153	0.164	0.166	0.167
				(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share receiving SSI								0.137	0.176	0.201	0.210	0.214		0.225
								(0.001)	(0.001)	(0.002)	(0.002)	(0.002)		(0.002)
Mean SSI amount (cond. on +)								\$8,885	\$9,898	\$9,797	\$9,183	\$8,691		\$8,000
								(\$87)	(\$116)	(\$117)	(\$89)	(\$72)		(\$53)
Share receiving SSI or DI according to Medicare								0.191	0.245	0.288	0.312	0.327		0.343
								(0.002)	(0.002)	(0.002)	(0.002)	(0.002)		(0.002)
Share living in SNAP state in 2010			0.038	0.038	0.206	0.206	0.242	0.242	0.242	0.243	0.243	0.244	0.244	0.245
Share living in Medicaid state in 2010					0.946	0.946	0.946	0.946	0.946	0.947	0.946	0.806	0.368	
Sample Size	89,500	89,500	89,500	89,500	89,500	89,500	89,500	89,500	89,000	88,000	86,500	85,500	84,500	83,000
Population	128,400	128,400	128,400	128,400	128,400	128,400	128,400	128,400	127,500	126,000	124,400	122,800	121,100	119,100

Table A3c: Income and Benefit Receipt among Sheltered Homeless Individuals Ages 25-59 in 2010 Decennial Census, 2003-2016*

	Employment and Income													
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Employment and Earnings ¹														
Share with earnings	0.559	0.546	0.528	0.493	0.418	0.403	0.389	0.359	0.357	0.339	0.339	0.341		
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)		
Mean (cond. on +)	\$15,210	\$15,410	\$15,450	\$14,800	\$14,700	\$16,300	\$17,890	\$18,310	\$18,660	\$19,100	\$20,300	\$21,010		
	(\$173)	(\$179)	(\$215)	(\$169)	(\$186)	(\$203)	(\$231)	(\$257)	(\$263)	(\$255)	(\$268)	(\$296)		
Std Deviation (cond. on +)	\$23,320	\$25,140	\$24,140	\$24,590	\$24,740	\$26,280	\$27,870	\$30,860	\$30,610	\$30,440	\$31,300	\$34,140		
25th percentile (cond. on +)	\$2,100	\$2,245	\$2,359	\$2,014	\$1,607	\$2,066	\$2,902	\$2,642	\$2,920	\$3,048	\$3,403	\$3,479		
	(\$62)	(\$70)	(\$83)	(\$56)	(\$59)	(\$66)	(\$125)	(\$102)	(\$121)	(\$99)	(\$116)	(\$120)		
50th percentile (cond. on +)	\$8,377	\$8,483	\$8,514	\$7,847	\$7,373	\$8,298	\$10,120	\$10,310	\$10,620	\$11,020	\$12,020	\$12,320		
	(\$155)	(\$147)	(\$187)	(\$126)	(\$166)	(\$143)	(\$188)	(\$172)	(\$172)	(\$175)	(\$185)	(\$197)		
75th percentile (cond. on +)	\$19,820	\$19,860	\$19,740	\$18,510	\$17,730	\$19,750	\$21,920	\$21,810	\$22,520	\$23,440	\$25,410	\$26,370		
	(\$281)	(\$257)	(\$333)	(\$224)	(\$302)	(\$307)	(\$385)	(\$303)	(\$343)	(\$324)	(\$359)	(\$337)		
Pretax Cash Income ²														
Mean	\$8,931	\$9,002	\$9,692	\$8,104	\$7,070	\$7,926	\$8,361	\$7,753	\$7,788	\$7,659	\$8,205	\$8,453		
	(\$109)	(\$117)	(\$136)	(\$109)	(\$102)	(\$107)	(\$111)	(\$118)	(\$125)	(\$125)	(\$133)	(\$136)		
Std Deviation	\$20,910	\$23,010	\$21,560	\$21,420	\$20,040	\$21,070	\$21,860	\$23,560	\$24,580	\$24,750	\$26,110	\$25,950		
25th percentile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)		
50th percentile	\$610	\$475	\$2,205	\$114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
	(\$62)	(\$58)	(\$122)	(\$29)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)		
75th percentile	\$10,900	\$10,800	\$12,340	\$9,595	\$7,261	\$8,174	\$9,080	\$7,238	\$7,212	\$6,489	\$7,402	\$7,844		
	(\$228)	(\$218)	(\$171)	(\$207)	(\$234)	(\$223)	(\$242)	(\$289)	(\$304)	(\$326)	(\$359)	(\$352)		
Pretax Cash Income, Plus In-Kind Trans	fers (no SSI) ³	*• • • • •	¢11.020	¢10.070	*************	¢10.400	\$10.020	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u></u>		
Mean	\$9,252	\$9,270	\$11,030	\$10,070	\$9,514	\$10,420	\$10,830	\$10,400	\$10,740	\$10,070	\$11,120	\$11,110		
	(\$364)	(\$385)	(\$296)	(\$282)	(\$248)	(\$259)	(\$276)	(\$261)	(\$307)	(\$267)	(\$302)	(\$319)		
Std Deviation	\$15,960	\$16,870	\$19,530	\$19,580	\$20,120	\$20,720	\$21,580	\$20,620	\$23,440	\$21,010	\$23,570	\$24,200		
25th percentile	\$170	\$162	\$420	\$453	\$817	\$1,350	\$1,161	\$992	\$880	\$703	\$616	\$507		
50.1 ···	(\$54)	(\$51)	(\$72)	(\$72)	(\$79)	(\$68)	(\$67)	(\$//)	(\$80)	(\$/6)	(\$93)	(\$86)		
50th percentile	\$2,399	\$2,484	\$3,619	\$2,264	\$2,664	\$2,710	\$2,630	\$2,579	\$2,525	\$2,389	\$2,439	\$2,417		
754	(\$184)	(\$175)	(\$353)	(\$112)	(\$22)	(\$32)	(\$37)	(\$20)	(\$42)	(\$1)	(\$17)	(\$30)		
/5th percentile	\$11,940	\$11,500	\$14,300	\$12,790	\$11,350	\$12,530	\$13,070	\$12,650	\$12,580	\$11,970	\$13,130	\$15,280		
Protox Cosh Incomo Plus In Kind Trans	(\$704) for (with SSD	(\$309)	(\$492)	(\$343)	(\$439)	(\$482)	(\$302)	(\$301)	(\$470)	(\$499)	(\$319)	(\$321)		
Meen	iers (with 551)					\$11.020	\$12.480	\$12.210	\$12.640	\$11.960		\$12,900		
Mean						(\$268)	(\$288)	(\$273)	(\$316)	\$11,900		(\$320)		
Std Deviation						\$20.610	\$21.600	(\$273) \$20.570	\$22.260	\$20,820		\$22.040		
						\$20,010	\$21,000	\$20,370	\$25,500	\$20,830		\$23,940		
25th percentile						\$1,870	\$1,554 (\$71)	(\$102)	\$1,055	(\$114)		\$1,407 (\$100)		
50th percentile						\$5 479	\$5.950	\$6 101	\$6.419	\$6 303		\$7 571		
Jour percentile						(\$384)	(\$418)	(\$434)	(\$431)	(\$436)		(\$402)		
75th percentile						\$14 280	\$15 220	\$15 030	\$12 990	\$14 640		\$15 520		
/ sur percentile						(\$373)	(\$506)	(\$458)	(\$471)	(\$458)		(\$511)		
Sample Size	49 500	49 500	49,500	49 500	49 500	49 500	49.000	48.500	48.000	47.000	46 500	45 500		
Population	118 200	118 200	118 200	118 200	118 200	118 200	117 300	115 900	114 400	112 700	110,500	108 900		
1 oputition	110,200	110,200	110,200	110,200	110,200	110,200	117,500	115,700	114,400	112,700	110,700	100,700		

Table A4a: Income and Benefit Receipt among Unsheltered Homeless Individuals Ages 25-59 in 2010 Decennial Census, 2005-2016*

	Connections to Employment and Formal Income													
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1040 Filing Status														
Share filing 1040	0.348	0.338	0.327	0.327	0.432	0.326	0.291	0.311	0.325	0.270	0.262	0.244	0.241	0.239
	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
1040 cofiling rate (cond. on filing)	0.257	0.267	0.255	0.243	0.202	0.229	0.236	0.218	0.208	0.276	0.278	0.293	0.303	0.308
	(0.004)	(0.007)	(0.004)	(0.004)	(0.006)	(0.004)	(0.004)	(0.004)	(0.004)	(0.006)	(0.004)	(0.004)	(0.004)	(0.004)
Share with dependents (cond. on filing)	0.407	0.405	0.407	0.394	0.306	0.362	0.362	0.345	0.327	0.382	0.392	0.405	0.398	0.383
	(0.004)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Mean dependents (cond. on +)	1.801	1.793	1.779	1.779	1.756	1.775	1.832	1.822	1.804	1.811	1.811	1.830	1.834	1.844
	(0.012)	(0.012)	(0.010)	(0.011)	(0.011)	(0.015)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.014)	(0.014)	(0.015)
Income Sources on 1040s														
Share filing 1040 with positive total money income	0.346	0.335	0.313	0.311	0.415	0.309	0.275	0.297	0.303	0.259	0.252	0.234	0.231	0.231
	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)
Median total money income (cond. on +)	\$17,100	\$17,450	\$14,520	\$14,750	\$12,150	\$13,640	\$13,890	\$14,810	\$15,510	\$15,790	\$15,920	\$16,810	\$18,110	\$18,570
	(\$204)	(\$273)	(\$181)	(\$170)	(\$137)	(\$172)	(\$228)	(\$160)	(\$211)	(\$187)	(\$171)	(\$181)	(\$180)	(\$202)
Share filing 1040 with self-employment income (+ or -)	0.033	0.034	0.035	0.035	0.039	0.040	0.045	0.044	0.044	0.042	0.042	0.040	0.038	0.036
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Median self-employment income (cond. on +)	\$5,637	\$5,854	\$6,071	\$6,373	\$6,153	\$6,701	\$8,296	\$8,188	\$7,285	\$6,651	\$6,830	\$6,783	\$6,063	\$5,792
	(\$340)	(\$315)	(\$351)	(\$356)	(\$314)	(\$319)	(\$1046)	(\$317)	(\$344)	(\$353)	(\$395)	(\$373)	(\$389)	(\$426)
Share filing 1040 with social security income	0.006	0.006	0.007	0.013	0.098	0.024	0.020	0.023	0.027	0.026	0.027	0.027	0.029	0.032
	(0.000)	(0.000)	(0.000)	(0.001)	(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 +)	\$10,850	\$11,300	\$10,610	\$10,790	\$9,808	\$10,580	\$11,540	\$13,090	\$12,840	\$12,520	\$11,740	\$12,200	\$12,330	\$12,370
	(\$448)	(\$423)	(\$331)	(\$220)	(\$66)	(\$157)	(\$195)	(\$212)	(\$154)	(\$216)	(\$220)	(\$208)	(\$254)	(\$205)
Share filing 1040 with wage and salary income	0.332	0.322	0.311	0.305	0.327	0.291	0.248	0.260	0.264	0.233	0.229	0.216	0.213	0.212
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Median 1040 wage and salary income (cond. on +)	\$16,320	\$16,700	\$13,600	\$13,710	\$12,550	\$11,830	\$11,500	\$12,200	\$13,490	\$14,000	\$14,320	\$15,210	\$16,570	\$17,110
	(\$223)	(\$287)	(\$197)	(\$206)	(\$249)	(\$198)	(\$187)	(\$206)	(\$295)	(\$243)	(\$237)	(\$222)	(\$223)	(\$237)
IRS Information Returns (W2s and 1099Rs)			0.520	0.524	0.507	0.464	0.051	0.001	0.010	0.010	0.010	0.000	0.015	0.010
Share receiving W2			0.538	0.526	0.507	0.464	0.371	0.331	0.312	0.310	0.310	0.309	0.315	0.319
			(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Median W2 wage and tips (cond. on $+$)			\$8,371	\$8,419	\$7,939	\$7,170	\$5,533	\$5,290	\$7,407	\$8,625	\$9,808	\$10,720	\$11,760	\$12,330
			(\$155)	(\$169)	(\$163)	(\$130)	(\$130)	(\$135)	(\$173)	(\$203)	(\$240)	(\$218)	(\$209)	(\$218)
Mean W2s received (cond. on +)			1.993	2.019	1.989	1.841	1.575	1.536	1.532	1.539	1.5/2	1.619	1.668	1.685
Share and the 1000B	0.024	0.025	(0.012)	(0.015)	(0.015)	(0.012)	(0.024)	(0.009)	(0.011)	(0.009)	(0.010)	(0.012)	(0.012)	(0.011)
Snare receiving 1099K	0.034	0.035	0.031	0.032	0.034	0.035	0.036	0.031	0.030	0.032	0.032	0.036	0.039	0.041
C1. C'	(0.001)	(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)
Sample Size	49,500	49,500	49,500	49,500	49,500	49,500	49,500	49,500	49,000	48,500	48,000	47,000	46,500	45,500
Population	118,200	118,200	118,200	118,200	118,200	118,200	118,200	118,200	117,300	115,900	114,400	112,700	110,900	108,900

Table A4b: Income and Benefit Receipt among Unsheltered Homeless Individuals Ages 25-59 in 2010 Decennial Census, 2003-20	016
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Safety Net Program Receipt														
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Housing Benefits (HUD)														
Share with housing benefits	0.082	0.084	0.083	0.081	0.081	0.082	0.083	0.094	0.104	0.111	0.116	0.122	0.128	0.132
	(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)	(0.002)
Mean housing benefit amount (equivalized) (cond. on +) ⁴	\$4,875	\$4,926	\$4,905	\$4,835	\$4,927	\$4,957	\$5,161	\$5,138	\$5,463	\$5,510	\$5,628	\$5,676	\$5,850	\$6,002
	(\$60)	(\$64)	(\$63)	(\$84)	(\$56)	(\$55)	(\$76)	(\$60)	(\$52)	(\$63)	(\$57)	(\$63)	(\$56)	(\$62)
Mean assistance unit size (cond. on +)	2.404	2.405	2.361	2.282	2.182	2.113	2.052	1.913	1.821	1.755	1.710	1.651	1.623	1.616
	(0.027)	(0.055)	(0.056)	(0.058)	(0.060)	(0.060)	(0.079)	(0.072)	(0.053)	(0.050)	(0.049)	(0.048)	(0.047)	(0.046)
Share with child in assistance unit (cond. on +)	0.445	0.425	0.405	0.385	0.349	0.321	0.283	0.243	0.219	0.201	0.186	0.168	0.160	0.155
	(0.010)	(0.014)	(0.014)	(0.015)	(0.015)	(0.015)	(0.016)	(0.014)	(0.013)	(0.013)	(0.012)	(0.012)	(0.012)	(0.012)
Mean months of housing benefit receipt (cond. on +)	10.450	10.550	10.580	10.370	10.380	10.430	10.360	9.969	10.410	10.490	10.570	10.550	10.660	10.780
	(0.064)	(0.068)	(0.066)	(0.115)	(0.066)	(0.063)	(0.091)	(0.068)	(0.056)	(0.049)	(0.050)	(0.075)	(0.045)	(0.041)
Veterans' Benefits (VA)														
Share with VA service-connected disability					0.014	0.014	0.017	0.018	0.020	0.021	0.022	0.023	0.024	0.025
					(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Supplemental Nutrition Assistance Program (SNAP) ⁵														
Share with SNAP receipt			0.413	0.428	0.503	0.560	0.636	0.695	0.683	0.666	0.658	0.647	0.631	0.610
			(0.011)	(0.011)	(0.010)	(0.009)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)
Mean SNAP benefit amount (equivalized) (cond. on +)			\$1,136	\$1,101	\$1,141	\$1,197	\$1,644	\$1,790	\$1,713	\$1,687	\$1,681	\$1,515	\$1,513	\$1,445
			(\$28)	(\$27)	(\$14)	(\$15)	(\$16)	(\$14)	(\$14)	(\$18)	(\$40)	(\$23)	(\$25)	(\$16)
Mean months of SNAP receipt (cond. on +)			8.127	8.081	9.222	9.301	9.712	10.190	10.260	10.450	10.650	10.700	10.750	10.620
			(0.141)	(0.135)	(0.063)	(0.138)	(0.049)	(0.045)	(0.077)	(0.041)	(0.051)	(0.048)	(0.048)	(0.057)
Mean assistance unit size (cond. on +)			1.910	1.816	1.809	1.793	1.707	1.658	1.662	1.653	1.659	1.662	1.657	1.647
			(0.052)	(0.048)	(0.037)	(0.040)	(0.030)	(0.027)	(0.025)	(0.025)	(0.029)	(0.030)	(0.031)	(0.032)
Share with child in assistance unit (cond. on +)			0.278	0.238	0.195	0.170	0.149	0.134	0.134	0.132	0.127	0.124	0.118	0.111
			(0.016)	(0.015)	(0.007)	(0.008)	(0.006)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.000)
Medicaid and Medicare														
Share enrolled in Medicaid					0.328	0.348	0.374	0.414	0.446	0.470	0.476	0.614	0.683	
					(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	
Share enrolled in Medicare Part A or B				0.106	0.114	0.123	0.130	0.146	0.161	0.175	0.188	0.197	0.209	0.227
				(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
Disability programs (D1 and SSI)														
Share receiving DI as indicated by Medicare records				0.106	0.114	0.122	0.129	0.145	0.160	0.174	0.187	0.196	0.194	0.191
				(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Share receiving SSI								0.210	0.234	0.255	0.260	0.260		0.270
								(0.004)	(0.004)	(0.004)	(0.004)	(0.003)		(0.004)
Mean SSI amount (cond. on +)								\$8,018	\$8,525	\$8,511	\$8,513	\$8,388		\$7,834
								(\$79)	(\$100)	(\$104)	(\$101)	(\$193)		(\$79)
Share receiving SSI or DI according to Medicare								0.291	0.327	0.359	0.376	0.385		0.396
			0.000	0.024	0.1.10	0.1.10	0.1	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	0.171	(0.005)
Share living in SNAP state in 2010			0.036	0.036	0.148	0.148	0.175	0.175	0.175	0.175	0.175	0.176	0.176	0.176
Share living in Medicaid state in 2010	10.500	10.500	10.500	10.500	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.839	0.415	15 500
Sample Size	49,500	49,500	49,500	49,500	49,500	49,500	49,500	49,500	49,000	48,500	48,000	47,000	46,500	45,500
Population	118,200	118,200	118,200	118,200	118,200	118,200	118,200	118,200	117,300	115,900	114,400	112,700	110,900	108,900

Table A4c: Income and Benefit Receipt among Unsheltered Homeless Individuals Ages 25-59 in 2010 Decennial Census, 2003-2016

A: Employment and Income														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Employment and Earnings ¹														
Share with earnings	0.611	0.596	0.582	0.553	0.484	0.483	0.498	0.493	0.489	0.488	0.489	0.487		
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)		
50th percentile (cond. on +)	\$14,510	\$14,920	\$14,230	\$12,790	\$10,690	\$12,240	\$13,890	\$14,930	\$15,830	\$16,460	\$17,650	\$18,560		
	(\$180)	(\$168)	(\$155)	(\$153)	(\$122)	(\$147)	(\$157)	(\$158)	(\$156)	(\$171)	(\$213)	(\$235)		
75th percentile (cond. on +)	\$28,010	\$28,090	\$26,420	\$23,500	\$18,510	\$21,160	\$23,930	\$26,120	\$27,810	\$29,910	\$31,830	\$33,460		
	(\$288)	(\$308)	(\$301)	(\$263)	(\$206)	(\$243)	(\$260)	(\$290)	(\$315)	(\$332)	(\$360)	(\$365)		
Pretax Cash Income, Plus In-Kind	Transfers (no	SSI) ³												
50th percentile	\$7,158	\$6,786	\$9,937	\$7,012	\$6,169	\$7,026	\$7,356	\$7,491	\$7,545	\$7,411	\$7,532	\$8,350		
	(\$642)	(\$588)	(\$344)	(\$375)	(\$334)	(\$314)	(\$328)	(\$358)	(\$357)	(\$380)	(\$426)	(\$434)		
75th percentile	\$20,890	\$19,640	\$20,480	\$18,630	\$16,160	\$17,560	\$18,930	\$19,200	\$19,710	\$20,160	\$21,890	\$23,200		
	(\$899)	(\$1018)	(\$554)	(\$560)	(\$400)	(\$406)	(\$465)	(\$496)	(\$537)	(\$577)	(\$574)	(\$627)		
Pretax Cash Income, Plus In-Kind	Transfers (wi	th SSI)												
50th percentile						\$9,886	\$10,140	\$10,450	\$10,660	\$10,500		\$11,030		
						(\$249)	(\$253)	(\$245)	(\$240)	(\$259)		(\$254)		
75th percentile						\$19,090	\$20,070	\$20,460	\$21,100	\$21,600		\$23,890		
						(\$396)	(\$411)	(\$428)	(\$436)	(\$527)		(\$551)		
Sample Size	55,000	55,000	55,000	55,000	55,000	55,000	54,500	54,000	54,000	53,500	53,000	52,500		
Population (100,000s)	48.46	48.46	48.46	48.46	48.46	48.46	48.14	47.70	47.18	46.72	46.16	45.60		

Table A5a: Income and Benefit Rece	ipt among Single Housed Poor A	Adults, Ages 25-59 in 2010	Decennial Census, 2005-2016*
The second and benefit field	pe among single riousear our	144105, 11ges =e e> 111 = 010	

B: Connections to Employment and Formal Income														
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share filing 1040	0.518	0.515	0.509	0.512	0.612	0.499	0.466	0.468	0.480	0.457	0.451	0.446	0.442	0.433
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)
1040 cofiling rate (cond. on filing)	0.225	0.215	0.201	0.185	0.147	0.152	0.138	0.138	0.147	0.179	0.193	0.204	0.218	0.233
	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Share filing 1040 with dependents (cond. on filing)	0.510	0.514	0.517	0.512	0.436	0.501	0.497	0.511	0.497	0.518	0.522	0.524	0.514	0.505
	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)	(0.006)
Mean number of dependents (cond. on filing with dependents)	1.816	1.802	1.801	1.793	1.780	1.798	1.835	1.846	1.844	1.874	1.870	1.865	1.852	1.852
	(0.012)	(0.013)	(0.013)	(0.012)	(0.012)	(0.013)	(0.013)	(0.011)	(0.012)	(0.011)	(0.012)	(0.011)	(0.011)	(0.013)
Share filing 1040 with positive total money income	0.511	0.508	0.488	0.485	0.587	0.475	0.439	0.447	0.456	0.437	0.431	0.426	0.424	0.416
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)
Share filing 1040 with self-employment income, positive or negative	0.085	0.089	0.090	0.095	0.101	0.101	0.104	0.105	0.105	0.101	0.101	0.101	0.101	0.097
	(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)	(0.002)
Share filing 1040 with positive social security income	0.007	0.007	0.006	0.014	0.106	0.027	0.025	0.025	0.030	0.030	0.032	0.037	0.041	0.044
	(0.001)	(0.000)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Share filing 1040 with positive wage and salary income	0.471	0.464	0.455	0.448	0.456	0.416	0.359	0.359	0.375	0.372	0.372	0.368	0.366	0.361
	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)
Share receiving W2			0.557	0.539	0.521	0.485	0.407	0.394	0.411	0.415	0.415	0.421	0.425	0.427
			(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Mean number of W2s received (cond. on +)			1.679	1.690	1.684	1.588	1.442	1.485	1.483	1.480	1.502	1.541	1.562	1.565
			(0.011)	(0.010)	(0.011)	(0.009)	(0.010)	(0.009)	(0.011)	(0.010)	(0.010)	(0.011)	(0.011)	(0.011)
Share receiving 1099R	0.050	0.049	0.047	0.053	0.063	0.067	0.073	0.064	0.058	0.059	0.061	0.068	0.070	0.074
	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Sample Size	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	54,500	54,000	54,000	53,500	53,000	52,500
Population (100,000s)	48.46	48.46	48.46	48.46	48.46	48.46	48.46	48.46	48.14	47.70	47.18	46.72	46.16	45.60

Table A5b: Income and Benefit Receipt among Single Housed Poor Adults, Ages 25-59 in 2010 Decennial Census, 2005-2016*

C: Safety Net Program Receipt														
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Housing Benefits (HUD)														
Share with housing benefits	0.113	0.117	0.120	0.123	0.131	0.140	0.152	0.160	0.158	0.155	0.149	0.148	0.144	0.141
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)
Mean housing benefit amount (equivalized) (cond. on $+$) ⁴	\$5,045	\$5,211	\$5,237	\$5,228	\$5,186	\$5,281	\$5,680	\$5,833	\$5,719	\$5,672	\$5,773	\$5,704	\$5,867	\$5,975
	(\$73)	(\$79)	(\$73)	(\$72)	(\$67)	(\$73)	(\$69)	(\$66)	(\$65)	(\$68)	(\$74)	(\$76)	(\$81)	(\$85)
Mean assistance unit size (cond. on +)	2.736	2.707	2.672	2.589	2.553	2.445	2.359	2.346	2.355	2.298	2.236	2.193	2.155	2.109
	(0.033)	(0.035)	(0.035)	(0.036)	(0.034)	(0.030)	(0.027)	(0.029)	(0.029)	(0.030)	(0.030)	(0.029)	(0.028)	(0.030)
Share with child in assistance unit (cond. on +)	0.570	0.545	0.535	0.514	0.498	0.469	0.438	0.421	0.413	0.397	0.381	0.359	0.339	0.320
	(0.011)	(0.010)	(0.010)	(0.010)	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Mean months of housing benefit receipt (cond. on +)	11.140	11.190	11.210	11.170	11.100	11.070	11.240	11.390	11.320	11.240	11.340	11.230	11.280	11.250
	(0.071)	(0.066)	(0.063)	(0.066)	(0.061)	(0.056)	(0.051)	(0.053)	(0.040)	(0.048)	(0.048)	(0.063)	(0.060)	(0.043)
Veterans' Benefits (VA)														
Share with VA service-connected disability					0.011	0.013	0.014	0.015	0.016	0.017	0.018	0.019	0.020	0.021
					(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Supplemental Nutrition Assistance Program (SNAP) ³														
Share with SNAP receipt			0.374	0.408	0.437	0.473	0.548	0.595	0.594	0.575	0.558	0.549	0.528	0.507
			(0.016)	(0.018)	(0.011)	(0.010)	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.008)
Mean SNAP benefit amount (equivalized) (cond. on +)			\$1,377	\$1,403	\$1,385	\$1,479	\$1,911	\$1,992	\$1,890	\$1,810	\$1,759	\$1,582	\$1,570	\$1,505
			(\$43)	(\$46)	(\$25)	(\$25)	(\$29)	(\$26)	(\$23)	(\$23)	(\$24)	(\$21)	(\$23)	(\$22)
Mean months of SNAP receipt (cond. on +)			8.604	8.884	9.611	9.938	9.999	10.380	10.360	10.450	10.700	10.510	10.550	10.450
			(0.175)	(0.196)	(0.103)	(0.089)	(0.093)	(0.085)	(0.069)	(0.074)	(0.065)	(0.070)	(0.073)	(0.074)
Mean assistance unit size (cond. on +)			2.516	2.396	2.333	2.302	2.192	2.194	2.166	2.145	2.091	2.039	2.029	2.003
			(0.075)	(0.078)	(0.053)	(0.049)	(0.039)	(0.035)	(0.035)	(0.035)	(0.037)	(0.035)	(0.037)	(0.031)
Share with child in assistance unit (cond. on $+$)			0.510	0.484	0.426	0.408	0.373	0.367	0.346	0.331	0.308	0.289	0.279	0.269
			(0.023)	(0.026)	(0.016)	(0.014)	(0.012)	(0.011)	(0.010)	(0.010)	(0.010)	(0.008)	(0.009)	(0.000)
Medicaid and Medicare					0.222	0.000	0.271	0.000	0.414	0.420	0.421	0.502	0.540	
Share enrolled in Medicaid					0.322	0.338	0.371	0.398	0.414	0.420	0.421	0.503	0.540	
				0.007	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)	(0.004)	(0.006)	0.016
Share enrolled in Medicare Part A or B				0.097	0.105	0.115	0.123	0.143	0.158	0.170	0.179	0.185	0.197	0.216
D: 199 (DI 100D)				(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Share receiving DL as indicated by Medicare records				0.005	0.104	0.114	0.122	0.142	0.157	0.160	0.179	0.182	0.170	0.177
Share receiving DI as indicated by Medicare records				(0.093)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Shana nagaziring SSI				(0.002)	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)	(0.003)	(0.003)	(0.003)	(0.003)	(0.005)
Share receiving SSI								(0.002)	(0.002)	(0.002)	(0.002)	(0.002)		(0.002)
Maan SSI amount (aand an 1)								(0.003) \$7.540	(0.005) © 050	(0.003) ¢7 795	(0.003)	(0.005)		(0.005) \$7.410
Wear SSI amount (cond. on +)								\$7,340	(\$171)	\$7,785	\$7,800	\$7,008		\$7,410
Shara raaajiying SSL or DL according to Madicara								(\$101)	(\$171)	(\$155)	(\$95)	(\$94)		(\$147)
Share receiving 351 of D1 according to Wedkare								(0.005)	(0.004)	(0.005)	(0.004)	(0.005)		(0.005)
Share living in SNAP state in 2010			0.048	0.048	0.131	0.131	0.174	0.174	0.174	0.174	0.174	0.173	0.174	0.173
Share living in Medicaid state in 2010			0.040	0.040	0.131	0.131	0.1/4	0.1/4	0.1/4	0.1/4	0.1/4	0.175	0.391	0.175
Sample Size	55.000	55 000	55.000	55.000	55 000	55 000	55 000	55 000	54 500	54 000	54 000	53 500	53 000	52,500
Population (100 000s)	48 46	48 46	48 46	48 46	48 46	48 46	48 46	48 46	48 14	47 70	47.18	46.72	46.16	45.60
1 opumuon (100,0005)	10.10	10.10	10.40	10.40	10.10	10.40	10.40	10.40	10.14	17.70	17.10	10.72	10.10	13.00

Table A5c: Income and Benefit Receipt among Single Housed Poor Adults, Ages 25-59 in 2010 Decennial Census, 2005-2016*

Employment and Income														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Earnings														
Share with earnings	0.857	0.860	0.864	0.861	0.848	0.843	0.837	0.831	0.825	0.815	0.809	0.801		
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		
50th percentile (cond. on +)	\$34,400	\$35,750	\$36,930	\$37,090	\$36,930	\$37,730	\$37,950	\$38,790	\$39,540	\$39,930	\$41,550	\$42,130		
	(\$53)	(\$53)	(\$53)	(\$54)	(\$56)	(\$58)	(\$58)	(\$59)	(\$61)	(\$61)	(\$64)	(\$64)		
75th percentile (cond. on +)	\$60,360	\$62,080	\$63,830	\$64,140	\$64,610	\$66,480	\$67,160	\$68,560	\$70,080	\$70,390	\$73,510	\$74,490		
	(\$84)	(\$87)	(\$90)	(\$89)	(\$91)	(\$96)	(\$99)	(\$103)	(\$109)	(\$109)	(\$114)	(\$117)		
Pretax Cash Income, Plus In-Kind Tran	sfers (no SSI)													
50th percentile	\$28,490	\$29,510	\$34,650	\$34,920	\$35,280	\$36,210	\$35,960	\$36,560	\$37,200	\$37,510	\$39,000	\$39,740		
	(\$217)	(\$228)	(\$162)	(\$159)	(\$140)	(\$143)	(\$149)	(\$152)	(\$153)	(\$153)	(\$159)	(\$160)		
75th percentile	\$52,370	\$53,680	\$66,390	\$66,660	\$67,240	\$69,620	\$70,290	\$71,760	\$73,320	\$74,080	\$77,380	\$78,790		
	(\$346)	(\$350)	(\$274)	(\$275)	(\$235)	(\$248)	(\$254)	(\$263)	(\$275)	(\$272)	(\$287)	(\$299)		
Pretax Cash Income, Plus In-Kind Tran	sfers (with SSI)													
50th percentile						\$36,230	\$36,000	\$36,590	\$37,220	\$37,550		\$39,770		
						(\$142)	(\$149)	(\$151)	(\$152)	(\$152)		(\$161)		
75th percentile						\$69,650	\$70,320	\$71,800	\$73,350	\$74,100		\$78,840		
						(\$249)	(\$254)	(\$264)	(\$274)	(\$271)		(\$300)		
Sample Size	994,000	994,000	994,000	994,000	994,000	994,000	992,000	989,000	986,000	983,000	979,000	975,000		
Population (100,000s)	722.70	722.70	722.70	722.70	722.70	722.70	722.70	722.70	721.30	719.10	716.80	714.40		

Table A6a: Income and Benefit Receipt among All Housed Adults, Ages 25-59 in 2010 Decennial Census, 2005-2016

*Sources and notes after Table A6.

Table A6b: Income and Benefit Receipt among All Housed Adults, Ages 25-59 in 2010 Decennial Census, 2005-2016

Connections to Employment and Formal Income														
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share filing 1040	0.827	0.835	0.840	0.848	0.886	0.866	0.863	0.860	0.857	0.847	0.841	0.835	0.831	0.821
	(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)	(0.001)
1040 cofiling rate (cond. on filing)	0.545	0.554	0.565	0.572	0.569	0.588	0.598	0.603	0.606	0.616	0.622	0.626	0.632	0.637
	(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)	(0.001)
Share filing 1040 with dependents (cond. on +)	0.538	0.542	0.545	0.545	0.531	0.543	0.546	0.533	0.525	0.521	0.513	0.524	0.513	0.501
	(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)	(0.001)
Mean number of dependents (cond. on +)	1.876	1.869	1.864	1.859	1.855	1.868	1.882	1.875	1.876	1.876	1.873	1.871	1.868	1.864
	(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)	(0.002)
Share receiving W2			0.781	0.783	0.783	0.778	0.758	0.747	0.741	0.736	0.729	0.723	0.717	0.709
			(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 number of W2s received (cond. on +)			1.478	1.469	1.445	1.397	1.322	1.322	1.322	1.325	1.327	1.339	1.346	1.339
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Sample Size	994,000	994,000	994,000	994,000	994,000	994,000	994,000	994,000	992,000	989,000	986,000	983,000	979,000	975,000
Population (100,000s)	722.70	722.70	722.70	722.70	722.70	722.70	722.70	722.70	721.30	719.10	716.80	714.40	711.70	708.80

Safety Net Program Receipt														
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Housing Benefits (HUD)														
Share with housing benefits	0.027	0.027	0.026	0.025	0.025	0.025	0.026	0.026	0.026	0.026	0.025	0.025	0.024	0.024
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Mean housing benefit amount (equiv'd) (cond. on +)	10.890	10.940	10.900	10.910	10.920	11.020	11.150	11.220	11.230	11.190	11.190	11.130	11.110	11.120
	(0.029)	(0.030)	(0.030)	(0.030)	(0.026)	(0.028)	(0.027)	(0.026)	(0.024)	(0.024)	(0.025)	(0.024)	(0.025)	(0.023)
Veterans' Benefits (VA)														
Share with VA service-connected disability					0.009	0.010	0.011	0.012	0.012	0.013	0.014	0.015	0.016	0.017
					(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Food Assistance (SNAP)														
Share with SNAP receipt			0.124	0.122	0.098	0.108	0.123	0.137	0.144	0.144	0.144	0.142	0.138	0.132
			(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Mean SNAP benefit amount (equiv'd) (cond. on +)			8.017	8.280	9.176	9.175	9.220	9.467	9.468	9.810	10.090	10.030	10.130	10.060
			(0.085)	(0.074)	(0.051)	(0.047)	(0.035)	(0.035)	(0.030)	(0.035)	(0.030)	(0.028)	(0.031)	(0.032)
Medicaid and Medicare														
Share enrolled in Medicaid					0.095	0.095	0.103	0.109	0.114	0.115	0.116	0.153	0.174	
					(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	
Share enrolled in Medicare Part A or B				0.027	0.030	0.033	0.036	0.042	0.046	0.050	0.055	0.060	0.076	0.100
				(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Disability programs (DI and SSI)														
Share receiving DI as indicated by Medicare records				0.027	0.030	0.033	0.036	0.042	0.046	0.050	0.055	0.059	0.059	0.060
				(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Share receiving SSI								0.026	0.027	0.028	0.028	0.027		0.027
								(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)
Share receiving SSI or DI according to Medicare								0.059	0.064	0.068	0.073	0.077		0.078
								(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)
Share living in SNAP state in 2010			0.042	0.042	0.134	0.134	0.177	0.177	0.177	0.177	0.177	0.177	0.177	0.177
Share living in Medicaid state in 2010					0.949	0.949	0.949	0.949	0.949	0.949	0.949	0.786	0.402	
Sample Size	994,000	994,000	994,000	994,000	994,000	994,000	994,000	994,000	992,000	989,000	986,000	983,000	979,000	975,000
Population (100,000s)	722.70	722.70	722.70	722.70	722.70	722.70	722.70	722.70	721.30	719.10	716.80	714.40	711.70	708.80

Table A6c: Income and Benefit Receipt among All Housed Adults, Ages 25-59 in 2010 Decennial Census, 2005-2016
Table A7: TANF and General Assistance Receipt among Homeless and Comparison Groups, Ages 25-59 in 2010 Decennial Census, New York, 2003-2016											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Share receiving TANF - Sheltered	0.333	0.361	0.469	0.584	0.486	0.396	0.343	0.303	0.290	0.275	
	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	
Mean TANF amount (cond on +)	\$4,330	\$4,602	\$3,725	\$4,047	\$5,411	\$4,871	\$5,382	\$5,476	\$5,625	\$5,771	
	(\$92)	(\$98)	(\$77)	(\$71)	(\$87)	(\$82)	(\$98)	(\$103)	(\$102)	(\$104)	
Share receiving TANF - Unsheltered	0.219	0.264	0.286	0.302	0.267	0.251	0.239	0.228	0.214	0.199	
	(0.010)	(0.023)	(0.022)	(0.022)	(0.023)	(0.024)	(0.024)	(0.025)	(0.025)	(0.026)	
Mean TANF amount (cond on +)	\$3,550	\$3,582	\$3,696	\$3,912	\$4,077	\$4,022	\$4,601	\$4,278	\$4,504	\$4,540	
	(\$188)	(\$387)	(\$284)	(\$215)	(\$436)	(\$376)	(\$226)	(\$416)	(\$401)	(\$403)	
Share receiving TANF - Single Housed Poor	0.183	0.182	0.186	0.191	0.162	0.145	0.122	0.113	0.109	0.103	
	(0.011)	(0.011)	(0.011)	(0.012)	(0.011)	(0.011)	(0.009)	(0.009)	(0.009)	(0.009)	
Mean TANF amount (cond on +)	\$4,226	\$4,569	\$4,872	\$4,742	\$5,162	\$5,014	\$5,605	\$5,471	\$5,311	\$5,287	
	(\$497)	(\$447)	(\$488)	(\$506)	(\$491)	(\$510)	(\$575)	(\$477)	(\$481)	(\$532)	
Share receiving TANF - Overall Housed	0.028	0.027	0.028	0.028	0.027	0.025	0.023	0.022	0.020	0.019	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Mean TANF amount (cond on +)	\$3,913	\$4,140	\$4,397	\$4,453	\$4,646	\$4,531	\$4,809	\$4,623	\$4,906	\$4,883	
	(\$235)	(\$212)	(\$225)	(\$222)	(\$210)	(\$185)	(\$192)	(\$176)	(\$191)	(\$196)	
Sample Size - Sheltered	13,000	13,000	13,000	13,000	13,000	12,500	12,500	12,500	12,500	12,000	
Population - Sheltered	17,820	17,820	17,820	17,820	17,690	17,550	17,370	17,200	17,030	16,810	
Sample Size - Unsheltered	3,500	3,500	3,500	3,500	3,400	3,400	3,400	3,300	3,300	3,200	
Population - Unsheltered	9,694	9,694	9,694	9,694	9,635	9,544	9,437	9,341	9,195	9,037	
Sample - Single Housed Poor	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,100	3,100	
Population - Single Housed Poor	304,600	304,600	304,600	304,600	303,300	299,100	295,300	291,000	288,800	285,200	
Sample Size - Overall Housed	60,500	60,500	60,500	60,500	60,500	60,500	60,000	60,000	60,000	59,500	
Population - Overall Housed	4,563,000	4,563,000	4,563,000	4,563,000	4,556,000	4,545,000	4,533,000	4,519,000	4,507,000	4,494,000	

Sources: 2010 Decennial Census, 2019 Numident, 2007-2016 New York TANF dataset

Notes: Sample includes PIKed homeless adults from the 2010 Decennial Census, PIKed single adults in poverty, and PIKed housed adults who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010 and lived in New York stat in that year. Table displays the weighted means and shares. Sample sizes are rounded to comply with Census Bureau requirements. Dollars are expressed as Chained CPI-U-adjusted 2018 dollars.

					0 0			0				
Month relative to shelter enrollment:	1	2	3	4	5	6	7	8	9	10	11	12
24-13 months prior	0.459	0.462	0.460	0.460	0.463	0.463	0.460	0.463	0.465	0.463	0.466	0.464
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Sample Size	5737	5737	5737	5737	5737	5737	5737	5737	5737	5737	5737	5737
12-0 months prior	0.465	0.460	0.456	0.455	0.453	0.454	0.458	0.459	0.458	0.464	0.469	0.489
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Sample Size	5737	5737	5737	5737	5737	5737	5737	5737	5737	5737	5737	5737
1-12 months after	0.580	0.613	0.627	0.618	0.606	0.577	0.567	0.569	0.561	0.526	0.512	
	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.009)	(0.010)	(0.011)	(0.013)	(0.016)	(0.022)	
Sample Size	5300	4900	4400	3900	3400	3000	2500	2100	1500	1000	550	

Table A8: Monthly SNAP receipt among Chicago HMIS Shelter Users Ages 25-59

Source: Chicago (2014-2019) HMIS dataset, various states' SNAP datasets

Notes: Sample consists of people with first observed homeless spell in 2016.

a Die Aya: Share of Sheltered Homeless with Income and Benefit Receipt by Gender, Ages 25-59 in 2010 Census													
Panel A: Income and Benefit Rec	eipt among S	Sheltered I	Iomeless V	Vomen Ag	es 25-59 in	1 2010 Dec	ennial Cer	1sus, 2003-	-2016				
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Share with earnings	0.613	0.618	0.612	0.593	0.523	0.552	0.532	0.503	0.497	0.483	0.487	0.490	
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	
50th percentile earnings (cond. on +)	\$8,975	\$9,262	\$9,388	\$8,536	\$7,777	\$9,715	\$11,450	\$11,680	\$11,970	\$12,250	\$13,100	\$13,620	
	(\$108)	(\$115)	(\$108)	(\$110)	(\$119)	(\$106)	(\$92)	(\$103)	(\$117)	(\$130)	(\$135)	(\$135)	
75th percentile earnings (cond. on +)	\$18,140	\$18,280	\$17,620	\$16,160	\$15,380	\$16,390	\$18,770	\$18,970	\$19,450	\$19,840	\$21,650	\$22,910	
	(\$172)	(\$149)	(\$159)	(\$131)	(\$129)	(\$119)	(\$138)	(\$147)	(\$163)	(\$186)	(\$215)	(\$214)	
50th percentile pre-tax income + in-kind transfers	\$5,983	\$5,454	\$6,666	\$5,376	\$4,252	\$6,906	\$8,072	\$7,569	\$7,769	\$7,250	\$8,012	\$8,284	
	(\$366)	(\$360)	(\$209)	(\$196)	(\$152)	(\$237)	(\$271)	(\$275)	(\$267)	(\$273)	(\$271)	(\$260)	
75th percentile pre-tax income + in-kind transfers	\$13,680	\$13,760	\$15,360	\$14,700	\$13,900	\$15,920	\$17,170	\$17,040	\$17,250	\$16,910	\$18,070	\$18,420	
	(\$652)	(\$587)	(\$224)	(\$212)	(\$173)	(\$175)	(\$177)	(\$192)	(\$192)	(\$202)	(\$194)	(\$216)	
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)			0.791	0.821	0.890	0.930	0.919	0.903	0.891	0.893	0.874		
			(0.005)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.007)		
Share receiving SNAP	0.491	0.506	0.628	0.683	0.806	0.869	0.840	0.797	0.767	0.741	0.709	0.681	
	(0.015)	(0.015)	(0.006)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	
Share with child in assistance unit (cond on +)	0.584	0.559	0.562	0.545	0.538	0.532	0.521	0.504	0.492	0.473	0.457	0.445	
	(0.019)	(0.018)	(0.007)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	
Share enrolled in Medicaid			0.502	0.514	0.561	0.619	0.636	0.640	0.637	0.732	0.757		
			(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)		
Share receiving SSI or DI (according to Medicare records)						0.200	0.253	0.293	0.315	0.331		0.344	
						(0.003)	(0.004)	(0.004)	(0.004)	(0.004)		(0.004)	
Panel B: Income and Benefit Receipt among Sheltered Homeless Men Ages 25-59 in 2010 Decennial Census, 2003-2016													
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Share with earnings	0.627	0.621	0.602	0.572	0.490	0.502	0.479	0.441	0.432	0.415	0.410	0.410	
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
50th percentile earnings (cond. on +)	\$9,741	\$9,672	\$9,300	\$7,786	\$5,977	\$7,674	\$10,370	\$10,820	\$11,000	\$11,470	\$12,640	\$13,340	
	(\$90)	(\$92)	(\$86)	(\$84)	(\$77)	(\$70)	(\$99)	(\$106)	(\$111)	(\$130)	(\$150)	(\$148)	
75th percentile earnings (cond. on +)	\$21,260	\$20,610	\$19,280	\$17,110	\$14,660	\$16,720	\$20,900	\$21,450	\$22,040	\$22,990	\$25,180	\$26,120	
	(\$148)	(\$145)	(\$135)	(\$128)	(\$139)	(\$150)	(\$161)	(\$163)	(\$173)	(\$188)	(\$211)	(\$205)	
50th percentile pre-tax income + in-kind transfers	\$5,446	\$4,816	\$3,268	\$2,264	\$2,666	\$2,896	\$3,103	\$2,794	\$2,618	\$2,389	\$2,452	\$2,635	
	(\$318)	(\$264)	(\$139)	(\$46)	(\$11)	(\$56)	(\$89)	(\$65)	(\$63)	(\$53)	(\$72)	(\$89)	
75th percentile pre-tax income + in-kind transfers	\$15,700	\$14,700	\$13,530	\$11,400	\$10,140	\$12,370	\$14,220	\$14,070	\$14,150	\$13,770	\$14,460	\$14,990	
1 1	(\$555)	(\$537)	(\$211)	(\$193)	(\$191)	(\$153)	(\$189)	(\$190)	(\$199)	(\$201)	(\$222)	(\$229)	
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)			0.611	0.667	0.780	0.869	0.848	0.817	0.803	0.802	0.821	(.)	
			(0.005)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.005)		
Share receiving SNAP	0.300	0.329	0.478	0.545	0.695	0.799	0.751	0.698	0.668	0.642	0.615	0.594	
	(0.010)	(0.010)	(0.005)	(0.005)	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	
Share with child in assistance unit (cond on $+$)	0.158	0.140	0.141	0.125	0.120	0.119	0.117	0.109	0.106	0.099	0.095	0.091	
	(0.014)	(0.010)	(0.005)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	
Share enrolled in Medicaid	(0.014)	(0.010)	(0.005) 0.223	(0.004) 0.242	(0.003) 0.284	(0.003) 0.359	(0.004) 0.392	(0.004) 0.411	(0.004) 0.419	(0.003) 0.551	(0.003) 0.616	(0.003)	
Share enrolled in Medicaid	(0.014)	(0.010)	(0.005) 0.223 (0.002)	(0.004) 0.242 (0.002)	(0.003) 0.284 (0.002)	(0.003) 0.359 (0.002)	(0.004) 0.392 (0.002)	(0.004) 0.411 (0.002)	(0.004) 0.419 (0.002)	(0.003) 0.551 (0.002)	(0.003) 0.616 (0.003)	(0.003)	
Share enrolled in Medicaid Share receiving SSI or DI (according to Medicare records)	(0.014)	(0.010)	(0.005) 0.223 (0.002)	(0.004) 0.242 (0.002)	(0.003) 0.284 (0.002)	(0.003) 0.359 (0.002) 0.186	(0.004) 0.392 (0.002) 0.241	(0.004) 0.411 (0.002) 0.286	$(0.004) \\ 0.419 \\ (0.002) \\ 0.310$	(0.003) 0.551 (0.002) 0.325	(0.003) 0.616 (0.003)	(0.003)	

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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 PIKed adults enumerated in emergency and transitional shelters in the 2010 Decennial Census who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. 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 the average of the twelve observations above and the twelve 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.

able A9b: Share of Unsheltered Homeless with Income and Benefit Receipt by Gender, Ages 25-59 in 2010 Census												
Panel A: Income and Benefit Receipt among Unsheltered Homeless Women Ages 25-59 in 2010 Decennial Census, 2003-2016												
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share with earnings	0.529	0.522	0.510	0.484	0.425	0.422	0.411	0.388	0.388	0.373	0.374	0.377
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
50th percentile earnings (cond. on +)	\$8,210	\$8,371	\$8,646	\$8,897	\$8,715	\$10,200	\$10,990	\$11,360	\$11,600	\$12,160	\$12,680	\$12,750
	(\$206)	(\$204)	(\$208)	(\$217)	(\$226)	(\$216)	(\$223)	(\$211)	(\$216)	(\$235)	(\$257)	(\$276)
75th percentile earnings (cond. on +)	\$18,770	\$19,330	\$19,420	\$19,250	\$18,850	\$20,020	\$21,020	\$21,070	\$21,490	\$22,560	\$24,140	\$24,920
	(\$322)	(\$355)	(\$325)	(\$327)	(\$359)	(\$404)	(\$401)	(\$396)	(\$421)	(\$461)	(\$494)	(\$497)
50th percentile pre-tax income + in-kind transfers	\$2,474	\$2,380	\$5,719	\$3,789	\$3,233	\$3,933	\$3,992	\$3,738	\$3,863	\$3,275	\$3,579	\$4,560
а а А	(\$294)	(\$310)	(\$408)	(\$313)	(\$206)	(\$305)	(\$327)	(\$305)	(\$342)	(\$307)	(\$334)	(\$408)
75th percentile pre-tax income + in-kind transfers	\$10,000	\$10,030	\$16,090	\$15,150	\$13,940	\$15,470	\$16,170	\$15,870	\$16,130	\$15,810	\$17,030	\$17,110
1 1	(\$1132)	(\$1050)	(\$577)	(\$675)	(\$609)	(\$547)	(\$571)	(\$543)	(\$510)	(\$545)	(\$622)	(\$689)
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)	(* -)	(*****)	0.728	0.745	0.783	0.820	0.831	0.823	0.823	0.832	0.850	(()
			(0.010)	(0.010)	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.012)	
Share receiving SNAP	0.547	0.555	0.578	0.605	0.662	0.715	0.718	0.702	0.691	0.687	0.670	0.652
	(0.021)	(0.021)	(0.011)	(0.011)	(0.010)	(0.009)	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Share with child in assistance unit (cond on +)	0.485	0.430	0.419	0.401	0.362	0.335	0.322	0.315	0.299	0.290	0.276	0.258
	(0.026)	(0.026)	(0.015)	(0.014)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Share enrolled in Medicaid	(0:020)	(0.020)	0.490	0.498	0.516	0.548	0.571	0.588	0.595	0.708	0.759	(0.012)
			(0,004)	(0,004)	(0.004)	(0,004)	(0.004)	(0.004)	(0,004)	(0.004)	(0.006)	
Share receiving SSI or DI (according to Medicare records)			(0.001)	(0.001)	(0.001)	0.335	0.362	0.395	0.414	0.422	(0.000)	0.432
Share receiving Sor of Dr (according to receive records)						(0.006)	(0.006)	(0.006)	(0.006)	(0.006)		(0.007)
Panel B: Income and Benefit Rec	eint among I	Insheltered	l Homeless	Men Age	s 25-59 in	2010 Dece	nnial Cens	us. 2003-2	016	(0.000)		(0.007)
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share with earnings	0.570	0.555	0.534	0.497	0.416	0.397	0.381	0.349	0.346	0.326	0.327	0.328
8	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
50th percentile earnings (cond. on $+$)	\$8.434	\$8.535	\$8.477	\$7.599	\$6.899	\$7.769	\$9.560	\$9.713	\$10.120	\$10.540	\$11.660	\$12.050
······································	(\$193)	(\$183)	(\$237)	(\$151)	(\$215)	(\$152)	(\$247)	(\$228)	(\$239)	(\$230)	(\$240)	(\$260)
75th percentile earnings (cond. on \pm)	\$20,180	\$20.010	\$19.790	\$18.210	\$17.270	\$19.620	\$22.250	\$22,110	\$22.760	\$24.010	\$25.950	\$27.020
(en preening cannigs (condition a)	(\$360)	(\$324)	(\$437)	(\$288)	(\$401)	(\$408)	(\$510)	(\$409)	(\$459)	(\$426)	(\$449)	(\$424)
50th percentile pre-tax income + in-kind transfers	\$2.349	\$2.569	\$2.952	\$2.222	\$2.538	\$2.710	\$2,630	\$2.579	\$2.525	\$2.389	\$2.439	\$2.417
	(\$254)	(\$223)	(\$356)	(\$103)	(\$53)	(\$24)	(\$22)	(\$28)	(\$15)	(\$22)	(\$16)	(\$41)
75th percentile pre-tax income \pm in-kind transfers	\$12,500	\$11.960	\$13.670	\$11.880	\$10,190	\$11.050	\$11.710	\$11,290	\$10.960	\$10.260	\$11.520	\$11.760
	(\$833)	(\$659)	(\$621)	(\$704)	(\$631)	(\$631)	(\$635)	(\$637)	(\$651)	(\$693)	(\$689)	(\$687)
Share with benefits (SNAP_HUD_Medicaid_Medicare_or_VA_benefits)	0 380	0 457	0.617	0.682	0 742	0 793	0 789	0 781	0 787	0 796	0.822	(\$007)
Share with benefits (SIVIII, HOD, Hedreuki, Hedreuke, SI VII benefits)	(0.013)	(0.014)	(0.015)	(0.010)	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	
Share receiving SNAP	0.363	0 381	0.475	0.544	0.626	0.688	0.670	0.653	0.645	0.631	0.616	0 594
Share receiving SIVAI	(0.013)	(0.013)	(0, 013)	(0.013)	(0.020)	(0.000)	(0,000)	(0,000)	(0.0+3)	(0.051)	(0.010)	(0.011)
Share with child in assistance unit (cond on \pm)	0.159	0.125	0.005	0.078	0.065	0.059	0.064	0.061	0.058	0.057	0.054	0.050
Share with child in assistance unit (cond on +)	(0.015)	(0.012)	(0.095	(0,006)	(0.003)	(0.003)	(0.004)	(0.001)	(0.004)	(0.001)	(0.004)	(0.004)
Shara appallad in Madiaaid	(0.013)	(0.013)	(0.000)	(0.000)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	0.652	(0.004)
Share enrolled in Medicald			(0.270)	(0.006)	0.525	(0.006)	(0.006)	0.428	(0.005)	(0.006)	(0.000)	
Shara maaiying SSI on DI (according to Madisons macord)			(0.005)	(0.000)	(0.000)	0.000)	(0.000)	0.246	(0.003)	(0.000)	(0.007)	0.282
share receiving 551 of D1 (according to wiedloare records)						(0.270)	(0.014)	(0.040	0.303	(0.012)		0.383
						(0.007)	(0.007)	(0.007)	(0.000)	(0.000)		(0.007)

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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), New York (2007-2016), New York (2007-2016) 2016)

Note: Sample includes PIKed adults enumerated in unsheltered locations in the 2010 Decennial Census who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. 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 the average of the twelve observations above and the twelve 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.

Table A10: Income and Benefit Rece	ipt among I	IMIS Shel	ter Users A	Ages 25-59	by Family	Status (P	oint-in-Tin	ie Samples	s, 2012-201	(3)		
	Pai	nel A1: Los	s Angeles -	Adults in	Families							
	t-7	t-6	t-5	t-4	t-3	t-2	t-1	t	t+1	t+2	t+3	t+4
Share with earnings	0.695	0.718	0.704	0.649	0.612	0.656	0.650	0.657	0.649	0.655	0.660	0.636
	(0.015)	(0.015)	(0.015)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.022)
50th percentile earnings (cond. on +)	\$10,490	\$11,230	\$11,700	\$11,790	\$12,290	\$12,270	\$11,270	\$11,760	\$14,290	\$15,150	\$15,630	\$15,560
	(\$651)	(\$650)	(\$592)	(\$595)	(\$588)	(\$482)	(\$482)	(\$456)	(\$436)	(\$408)	(\$491)	(\$779)
Share enrolled in Medicaid		· · ·	0.560	0.587	0.639	0.698	0.779	0.853	0.853	0.838	. ,	. ,
			(0.016)	(0.016)	(0.016)	(0.015)	(0.014)	(0.012)	(0.012)	(0.012)		
Share receiving SSI or DI (according to Medicare records)			(0.010)	(******)	(******)	0.051	0.056	0.069	0.081	0.098	0.083	0.103
						(0.006)	(0.006)	(0.006)	(0.008)	(0.012)	(0.008)	(0.008)
Sample Size	950	950	950	950	950	950	950	950	950	950	900	500
	Panel	A2: Los A	ngeles - A	dults Not i	in Familie	3	,00	,,,,,	,,,,,	,,,,,	,,,,,	200
	t-7	t-6	t-5	t-4	t-3	t-2	t-1	t	t+1	t+2	t+3	t+4
Share with earnings	0.555	0.559	0.530	0.473	0.438	0.463	0.410	0.355	0.328	0.296	0.302	0.301
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.008)
50th percentile earnings (cond. on \pm)	\$10.120	\$10.170	\$9.461	\$9.309	\$9.280	\$10.740	\$8.242	\$6.737	\$7.590	\$8.921	\$10.180	\$10.740
	(\$303)	(\$306)	(\$320)	(\$315)	(\$293)	(\$370)	(\$298)	(\$247)	(\$286)	(\$394)	(\$406)	(\$654)
Share enrolled in Medicaid	(\$505)	(\$500)	0 223	0 228	0 239	0 250	0 268	0 309	0.580	0.821	(\$100)	(\$051)
Share enioned in Medicald			(0.223)	(0.005)	(0.23)	(0.005)	(0.006)	(0.00)	(0.006)	(0.021)		
Shara reaciving SSI or DI (according to Medicare records)			(0.003)	(0.003)	(0.003)	(0.003)	(0.000)	(0.000)	0.270	(0.003)	0.224	0 256
Share receiving SSI of DI (according to Medicare records)					(0.00()	(0.004)	(0.004)	0.220	(0.279)	(0.000)	(0.024)	0.550
Comula Cina	(200	(200	(200	(200	(0.006)	(0.004)	(0.004)	(0.004)	(0.005)	(0.008)	(0.005)	(0.006)
Sample Size	6,200 D	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,100	6,100	3,100
	P	anel BI: H	louston - A	auits in Fa	amines	4.0	. 1		41.1	41.2		
<u>qt</u> ::t :	t-/	t-0	t-5	t-4	t-3	t-2	t-1	t	t+1	t+2	<u>t+3</u>	t+4
Share with earnings	0.717	0.737	0.749	0.731	0.756	0.744	0.744	0.794	0.806	0.791	0.761	0.732
	(0.022)	(0.022)	(0.022)	(0.022)	(0.021)	(0.022)	(0.022)	(0.020)	(0.020)	(0.020)	(0.021)	(0.033)
50th percentile earnings (cond. on $+$)	\$8,611	\$10,250	\$10,690	\$11,130	\$10,760	\$11,320	\$10,410	\$10,550	\$14,120	\$15,040	\$15,560	\$14,270
	(\$658)	(\$810)	(\$816)	(\$872)	(\$711)	(\$523)	(\$546)	(\$767)	(\$601)	(\$590)	(\$685)	(\$1196)
Share enrolled in Medicaid			0.450	0.428	0.477	0.512	0.561	0.638	0.529	0.434		
			(0.025)	(0.025)	(0.025)	(0.025)	(0.025)	(0.024)	(0.025)	(0.036)		
Share receiving SSI or DI (according to Medicare records)												
Sample Size	400	400	400	400	400	400	400	400	400	400	400	200
	Par	iel B2: Hou	iston - Adu	ults Not in	Families							
	t-7	t-6	t-5	t-4	t-3	t-2	t-1	t	t+1	t+2	<u>t+3</u>	t+4
Share with earnings	0.692	0.704	0.690	0.657	0.628	0.593	0.594	0.651	0.629	0.590	0.561	0.532
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.012)	(0.012)	(0.011)	(0.012)	(0.012)	(0.012)	(0.017)
50th percentile earnings (cond. on +)	\$10,350	\$11,180	\$10,520	\$9,421	\$9,107	\$8,401	\$5,826	\$7,186	\$10,040	\$11,370	\$11,450	\$11,990
	(\$520)	(\$453)	(\$419)	(\$432)	(\$320)	(\$395)	(\$285)	(\$334)	(\$431)	(\$582)	(\$582)	(\$1024)
Share enrolled in Medicaid			0.114	0.116	0.109	0.126	0.141	0.179	0.185	0.202		
			(0.008)	(0.008)	(0.007)	(0.008)	(0.008)	(0.009)	(0.009)	(0.014)		
Share receiving SSI or DI (according to Medicare records)					0.049	0.060	0.075	0.110	0.145	0.175	0.190	0.201
					(0.006)	(0.005)	(0.005)	(0.006)	(0.007)	(0.010)	(0.006)	(0.007)
Sample Size	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,700	1,700	850

Source: Los Angeles (2004-2014) and Houston (2004-2015) HMIS datasets, various administrative datasets

Notes: Point-in-time samples consists of those who were in an HMIS shelter on March 30 of 2012 and 2013.

Table 1111, 2010 Income and Benefit Receipt among Shenered and	Chisheltered Hom		Sheltered	o census, by rac	e and Etimetry
	White	Black	Other Race	Hispanic	Non-Hispanic
Share with earnings	0.496	0.547	0.514	0.535	0.516
6	(0.002)	(0.003)	(0.005)	(0.005)	(0.002)
50th percentile earnings (cond. on +)	\$7,126	\$9,567	\$9,961	\$10,510	\$7,965
	(\$82)	(\$103)	(\$228)	(\$183)	(\$62)
75th percentile earnings (cond. on +)	\$15,210	\$17,100	\$19,580	\$19,190	\$16,080
	(\$138)	(\$155)	(\$378)	(\$321)	(\$99)
50th percentile pre-tax income + in-kind transfers	\$2,982	\$4,996	\$4,634	\$4,617	\$3,795
	(\$74)	(\$178)	(\$353)	(\$310)	(\$102)
75th percentile pre-tax income + in-kind transfers	\$11,910	\$14,710	\$15,920	\$15,420	\$13,520
	(\$208)	(\$168)	(\$380)	(\$289)	(\$134)
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)	0.852	0.923	0.883	0.910	0.888
	(0.004)	(0.003)	(0.006)	(0.004)	(0.002)
Share receiving SNAP	0.776	0.867	0.802	0.850	0.820
	(0.005)	(0.003)	(0.007)	(0.005)	(0.003)
Share enrolled in Medicaid	0.395	0.486	0.506	0.541	0.429
	(0.002)	(0.003)	(0.005)	(0.005)	(0.002)
Share receiving SSI or DI (according to Medicare records)	0.180	0.207	0.181	0.172	0.194
	(0.003)	(0.003)	(0.006)	(0.005)	(0.002)
Share living in SNAP state in 2010	0.178	0.315	0.260	0.365	0.222
			Unsheltered		
	White	Black	Other Race	Hispanic	Non-Hispanic
Share with earnings	0.383	0.427	0.368	0.465	0.326
	(0.004)	(0.006)	(0.011)	(0.013)	(0.003)
50th percentile earnings (cond. on +)	\$7,474	\$8,946	\$10,030	\$12,300	\$7,744
	(\$143)	(\$270)	(\$514)	(\$364)	(\$131)
75th percentile earnings (cond. on +)	\$19,000	\$19,160	\$25,150	\$27,630	\$18,050
	(\$337)	(\$525)	(\$1261)	(\$717)	(\$328)
50th percentile pre-tax income + in-kind transfers	\$2,694	\$2,710	\$3,495	\$3,017	\$2,710
	(\$70)	(\$58)	(\$520)	(\$980)	(\$17)
75th percentile pre-tax income + in-kind transfers	\$10,690	\$12,520	\$17,520	\$17,410	\$11,310
	(\$1228)	(\$375)	(\$1262)	(\$2129)	(\$331)
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)	0.777	0.832	0.736	0.739	0.816
	(0.011)	(0.006)	(0.016)	(0.021)	(0.005)
Share receiving SNAP	0.671	0.733	0.608	0.661	0.704
	(0.015)	(0.007)	(0.019)	(0.026)	(0.006)
Share enrolled in Medicaid	0.404	0.428	0.416	0.397	0.417
	(0.006)	(0.006)	(0.015)	(0.017)	(0.004)
Share receiving SSI or DI (according to Medicare records)	0.284	0.306	0.277	0.209	0.306
	(0.006)	(0.008)	(0.025)	(0.010)	(0.006)
Share living in SNAP state in 2010	0.130	0.240	0.162	0.231	0.165

Table A11: 2010 Income and Benefit Receipt among Sheltered and Unsheltered Homeless Individuals Ages 25-59 in the 2010 Census, by Race and Ethnicity

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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)

Notes: Sample includes PIKed adults in the 2010 Decennial Census who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. 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 the average of the twelve observations above and the twelve 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.

Table A12, 2010 Income and Denem Receipt among Shere	icu anu Onsneiu	itu nomeness	Inuividuais Ages A	25-57 III the 20	to census, by	State
		Sheltered			Unsheltere	d
	California	New York	Other States	California	New York	Other States
Share with earnings	0.471	0.497	0.531	0.347	0.368	0.422
	(0.005)	(0.004)	(0.002)	(0.008)	(0.014)	(0.004)
50th percentile earnings (cond. on +)	\$10,330	\$9,989	\$7,534	\$9,957	\$11,310	\$7,770
	(\$260)	(\$116)	(\$64)	(\$338)	(\$637)	(\$148)
75th percentile earnings (cond. on +)	\$22,280	\$16,000	\$15,540	\$24,840	\$24,830	\$18,030
	(\$485)	(\$248)	(\$106)	(\$825)	(\$1008)	(\$325)
50th percentile pre-tax income + in-kind transfers		\$4,049	\$3,426		\$2,400	\$2,699
		(\$180)	(\$103)		(\$103)	(\$54)
75th percentile pre-tax income + in-kind transfers		\$40,000	\$12,400		\$36,780	\$11,470
		(\$171)	(\$169)		(\$955)	(\$376)
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)		0.932	0.839		0.814	0.788
		(0.002)	(0.004)		(0.009)	(0.006)
Share receiving SNAP		0.862	0.779		0.694	0.697
		(0.003)	(0.004)		(0.012)	(0.007)
Share enrolled in Medicaid	0.375	0.896	0.367	0.379	0.722	0.387
	(0.005)	(0.003)	(0.002)	(0.013)	(0.011)	(0.004)
Share receiving SSI or DI (according to Medicare records)	0.218	0.230	0.178	0.290	0.310	0.289
	(0.006)	(0.006)	(0.002)	(0.016)	(0.018)	(0.005)
Share living in SNAP state in 2010			0.143			0.128

Table A12: 2010 Income and Benefit Receipt among Sheltered and Unsheltered Homeless Individuals Ages 25-59 in the 2010 Census, by State

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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)

Notes: Sample includes PIKed adults in the 2010 Decennial Census who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. 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 the average of the twelve observations above and the twelve 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.

Table A15: Income and Benefit Receipt among Hivits Sneiter Users Ages 25-59 - Point-in-Time and Interval-Based Results												
	Panel A1:	Los Angel	es Sample	of First S	pells in Ye	ar (2012-20)13)					
	t-7	t-6	t-5	t-4	t-3	t-2	t-1	t-0	t+1	t+2	t+3	t+4
Share with earnings	0.589	0.591	0.573	0.525	0.483	0.486	0.455	0.421	0.395	0.380	0.381	0.375
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.006)
50th percentile earnings (cond. on +)	\$9,975	\$10,590	\$10,750	\$10,870	\$10,780	\$10,720	\$9,704	\$6,831	\$9,013	\$10,380	\$11,350	\$11,760
	(\$190)	(\$190)	(\$192)	(\$201)	(\$185)	(\$170)	(\$194)	(\$162)	(\$205)	(\$187)	(\$223)	(\$331)
Share enrolled in Medicaid		0.139	0.301	0.310	0.325	0.338	0.357	0.393	0.599	0.798	0.781	
		(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.005)	
Share receiving SSI or DI (according to Medicare records)					0.151	0.163	0.179	0.198	0.227	0.255	0.277	0.293
					(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.005)	(0.005)
Sample Size	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,000	7,600
Panel A2: Los Angeles Point-in-Time Sample (2012-2013)												
<u>t-7 t-6 t-5 t-4 t-3 t-2 t-1 t-0 t+1 t+2 t+3 t+4</u>												
Share with earnings	0.574	0.580	0.553	0.496	0.461	0.489	0.441	0.395	0.370	0.344	0.350	0.346
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.008)
50th percentile earnings (cond. on +)	\$10,170	\$10,360	\$10,010	\$9,948	\$10,140	\$11,110	\$9,124	\$7,865	\$9,726	\$10,940	\$11,780	\$12,080
	(\$274)	(\$278)	(\$286)	(\$280)	(\$285)	(\$314)	(\$255)	(\$263)	(\$288)	(\$356)	(\$353)	(\$502)
Share enrolled in Medicaid		0.124	0.267	0.275	0.291	0.309	0.335	0.380	0.616	0.823	0.821	
		(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.005)		
Share receiving SSI or DI (according to Medicare records)		. ,	. ,	, ,	0.134	0.152	0.172	0.207	0.253	0.295	0.292	0.322
					(0.005)	(0.004)	(0.004)	(0.003)	(0.005)	(0.007)	(0.005)	(0.005)
Sample Size	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,100	7,100	7,000	3,600
•	Panel B	1: Houston	Sample o	f First Spe	lls in Year	(2012-201	3)		· · ·			
	t-7	t-6	t-5	t-4	t-3	t-2	t-1	t-0	t+1	t+2	t+3	t+4
Share with earnings	0.659	0.663	0.666	0.632	0.587	0.588	0.578	0.598	0.572	0.545	0.519	0.507
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.008)
50th percentile earnings (cond. on $+$)	\$8,610	\$9,330	\$10,020	\$10,020	\$10,660	\$10,300	\$8,911	\$6,023	\$8,436	\$9,945	\$10,330	\$10,630
	(\$197)	(\$182)	(\$209)	(\$202)	(\$189)	(\$188)	(\$187)	(\$157)	(\$211)	(\$220)	(\$242)	(\$346)
Share enrolled in Medicaid	(.)	0.110	0.221	0.226	0.234	0.255	0.278	0.301	0.311	0.310	(.)	
		(0.003)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.007)		
Share receiving SSI or DI (according to Medicare records)		()	()	()	0.126	0.137	0.151	0.169	0.193	0.216	0.218	0.236
6 (6)					(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.005)	(0.005)	(0.005)
Sample Size	9.000	9,000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	8.900	8.800	4.500
	Pan	el B2: Hou	ston Point	-in-Time S	Sample (20	12-2013)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,	,,		0,000	.,
	t-7	t-6	t-5	t-4	t-3	t-2	t-1	t-0	t+1	t+2	t+3	t+4
Share with earnings	0.697	0.710	0.701	0.671	0.652	0.621	0.622	0.678	0.662	0.628	0.599	0.567
8	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.011)	(0.015)
50th percentile earnings (cond. on \pm)	\$9.891	\$10.890	\$10.600	\$9.783	\$9.495	\$9.234	\$6.796	\$7.970	\$10.790	\$12.300	\$12.470	\$12.670
••••••••••••••••••••••••••••••••••••••	(\$421)	(\$399)	(\$367)	(\$395)	(\$297)	(\$327)	(\$291)	(\$320)	(\$403)	(\$426)	(\$466)	(\$754)
Share enrolled in Medicaid	(0.21)	0.089	0 177	0 174	(0.178)	0 198	0 219	0.265	0 249	0 243	(\$100)	(\$,51)
		(0.000)	(0,008)	(0,008)	(0, 008)	(0,009)	(0, 0.09)	(0, 009)	(0, 009)	(0.013)		
Share receiving SSI or DI (according to Medicare records)		(0.000)	(0.000)	(0.000)	0.045	0.056	0.068	0.096	0 129	0 159	0 167	0 183
since receiving bor or br (according to medicate records)					(0, 005)	(0, 004)	(0.004)	(0.004)	(0.005)	(0,004)	(0, 004)	(0.003)
Sample Size	2 200	2 200	2 200	2 200	2 200	2 200	2 200	2 200	2 200	2 100	2 100	1 000
Sumple Size	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,100	2,100	1,000

Table A13: Income and Benefit Receipt among HMIS Shelter Users Ages 25-59 - Point-in-Time and Interval-Based Results

Source: Los Angeles (2004-2014) and Houston (2004-2015) HMIS datasets, various administrative datasets

Notes: Interval-based sample consists of people who had a first homeless spell in 2012 or 2013. Point-in-time sample consists of those who were in an HMIS shelter on March 30 of 2012 and 20

Table A14: Income and Benefit Receipt among HMIS Shelter Users Ages 25-59 and Census Homeless in Los Angeles and Houston												
		Panel	A1: Los A	ngeles HN	IIS Sample	e						
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share with earnings	0.515	0.514	0.491	0.462	0.401	0.499	0.484	0.341	0.355	0.314	0.298	0.317
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.008)	(0.009)	(0.008)	(0.008)	(0.009)
50th percentile earnings (cond. on $+$)	\$10,250	\$10,650	\$9,751	\$9,119	\$8,320	\$12,750	\$15,700	\$12,890	\$12,310	\$13,770	\$15,580	\$16,140
	(\$419)	(\$405)	(\$439)	(\$430)	(\$433)	(\$501)	(\$572)	(\$503)	(\$527)	(\$568)	(\$612)	(\$683)
Share enrolled in Medicaid	(.)	(.)	0.308	0.318	0.347	0.391	0.426	0.449	0.465	0.752	0.768	
			(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)	(0.008)	(0.008)	
Share receiving SSI or DI (according to Medicare records)			(0.000)	(0.000)	(0.000)	0.208	0 270	0.307	0 332	0 358	(0.000)	0 391
						(0.007)	(0.007)	(0.008)	(0.008)	(0.008)		(0.008)
Sample Size	3.200	3.200	3.200	3.200	3.200	3.200	3.200	3.200	3.200	3.100	3.100	3.000
-		Panel	A2: Los Ai	igeles Cen	sus Sampl	e		-)	-)	-)	-)	-)
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share with earnings	0.529	0.531	0.509	0.471	0.411	0.506	0.503	0.378	0.382	0.349	0.336	0.351
6	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
50th percentile earnings (cond. on $+$)	\$10.400	\$10.950	\$9.514	\$9.173	\$8.208	\$12.850	\$15.740	\$12.970	\$12.370	\$13.500	\$15,440	\$16.240
••••••F•••••••••••••••••••••••••••••	(\$419)	(\$405)	(\$439)	(\$430)	(\$433)	(\$501)	(\$572)	(\$503)	(\$527)	(\$568)	(\$612)	(\$683)
Share enrolled in Medicaid	(\$117)	(\$100)	0 271	0 283	0 306	0 358	0 389	0 423	(0.444)	0 720	0 764	(\$000)
Share enterior in Wedreard			(0.008)	(0.008)	(0.008)	(0.008)	(0,009)	(0,009)	(0,009)	(0, 0.09)	(0,008)	
Share receiving SSI or DI (according to Medicare records)			(0.008)	(0.008)	(0.008)	0.228	0.208	0.334	0.355	0.367	(0.008)	0 304
Share receiving SSI of DI (according to Medicare records)						(0.007)	(0.298)	(0.008)	(0.008)	(0.007)		(0.008)
Samula Siza	2 500	2 500	2 500	2 500	2 500	2 500	2 500	2 500	2 400	2 400	2 200	2 200
Sample Size	3,300	3,300 Ban	3,300	stan IIMI	5,500	5,500	3,300	5,500	5,400	5,400	5,500	3,300
	2005	2006	2007	2008	2000	2010	2011	2012	2012	2014	2015	2016
	2005	2000	2007	2008	2009	2010	2011	2012	2013	2014	2015	2010
Share with earnings	0.714	0.754	(0.010)	0.707	0.005	0./10	0.0/2	0.041	0.04/	0.003	0.590	0.584
	(0.016)	(0.015)	(0.016)	(0.016)	(0.017)	(0.016)	(0.017)	(0.017)	(0.017)	(0.018)	(0.018)	(0.018)
50th percentile earnings (cond. on +)	\$8,716	\$9,333	\$9,097	\$7,505	\$6,855	\$8,147	\$11,850	\$11,800	\$10,840	\$11,820	\$12,590	\$12,900
	(\$536)	(\$534)	(\$684)	(\$514)	(\$461)	(\$477)	(\$536)	(\$556)	(\$753)	(\$726)	(\$745)	(\$702)
Share enrolled in Medicaid			0.211	0.208	0.211	0.273	0.286	0.314	0.310	0.305		
			(0.014)	(0.014)	(0.014)	(0.016)	(0.016)	(0.016)	(0.016)	(0.017)		
Share receiving SSI or DI (according to Medicare records)						0.086	0.129	0.162	0.188	0.212		0.222
<u> </u>						(0.008)	(0.010)	(0.010)	(0.011)	(0.011)		(0.011)
Sample Size	800	800	800	800	800	800	800	800	800	800	750	750
	.	Pane	I B2: Hous	ston Censu	is Sample			0010	0010			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share with earnings	0.605	0.633	0.607	0.618	0.596	0.563	0.543	0.515	0.525	0.503	0.475	0.479
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.016)	(0.016)
50th percentile earnings (cond. on +)	\$9,293	\$8,484	\$8,961	\$8,661	\$7,364	\$8,098	\$10,950	\$11,770	\$11,270	\$12,370	\$13,620	\$13,050
	(\$624)	(\$569)	(\$625)	(\$540)	(\$388)	(\$443)	(\$675)	(\$658)	(\$674)	(\$773)	(\$925)	(\$907)
Share enrolled in Medicaid			0.138	0.153	0.175	0.223	0.266	0.300	0.307			
			(0.010)	(0.011)	(0.011)	(0.012)	(0.014)	(0.014)	(0.014)			
Share receiving SSI or DI (according to Medicare records)						0.179	0.231	0.293	0.321	0.330		0.338
						(0.017)	(0.019)	(0.021)	(0.021)	(0.021)		(0.022)
Sample Size	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,100	1,100	1,100	1,100	1,100

Source: Los Angeles (2004-2014) and Houston (2004-2015) HMIS datasets, various administrative datasets

Notes: Interval-based sample consists of people who had a first homeless spell in 2012 or 2013. Point-in-time sample consists of those who were in an HMIS shelter on March 30 of 2012 and 2013.

Ages 23-39					
	<u>t -2</u>	<u>t -1</u>	<u>t</u>	<u>t+1</u>	<u>t+2</u>
Share with earnings	0.5336	0.4908	0.5065	0.4627	0.4613
	(0.0181)	(0.0194)	(0.0221)	(0.0200)	(0.0205)
Mean earnings (cond. on receipt)	\$12,940	\$11,510	\$11,260	\$12,830	\$13,430
	(\$629)	(\$594)	(\$528)	(\$610)	(\$555)
Median earnings (cond. on receipt)	\$9,514	\$7,350	\$7,779	\$10,140	\$11,380
	(\$458)	(\$443)	(\$413)	(\$425)	(\$491)
75th percentile earnings (cond. on receipt)	\$16,880	\$14,400	\$15,010	\$17,730	\$19,200
	(\$622)	(\$493)	(\$466)	(\$563)	(\$685)
Share receiving disability (SSI or DI)	0.1354	0.1397	0.1686	0.2095	0.2391
	0.0123	0.0112	0.0116	0.0145	0.0133
Share receiving any benefits, excl. SSI (SNAP, Medicaid, HUD, VA, or Medicare)	0.7872	0.8777	0.9386	0.9245	0.9077
	(0.0251)	(0.0211)	(0.0141)	(0.0166)	(0.0189)
Share receiving any benefits, incl. SSI (SNAP, Medicaid, HUD, VA, Medicare, or SS]	0.8713	0.9218	0.9575	0.9321	0.9239
	(0.0217)	(0.0188)	(0.0135)	(0.0212)	(0.0269)
Mean cash income (pretax)	\$7,801	\$6,453	\$6,451	\$6,661	\$6,834
	(\$450)	(\$458)	(\$431)	(\$469)	(\$460)
Median cash income	\$1,150	\$553	\$600	\$333	\$136
	(\$243)	(\$141)	(\$151)	(\$86)	(\$92)
75th percentile cash income	\$11,790	\$9,667	\$9,996	\$11,440	\$12,370
	(\$468)	(\$467)	(\$503)	(\$518)	(\$534)
Mean cash income + in-kind transfers, excl. SSI (SNAP, HUD, and VA)	\$9,652	\$9,009	\$9,025	\$9,169	\$9,789
	(\$828)	(\$771)	(\$705)	(\$830)	(\$960)
Median cash income + in-kind transfers, excl. SSI	\$3,911	\$3,580	\$3,661	\$3,722	\$5,012
	(\$697)	(\$642)	(\$665)	(\$664)	(\$800)
75th percentile cash income + in-kind transfers, excl. SSI	\$14,430	\$13,080	\$13,260	\$14,880	\$16,120
	(\$804)	(\$694)	(\$849)	(\$739)	(\$817)
Mean cash income + in-kind transfers, incl. SSI (SNAP, HUD, VA, and SSI)	\$10,280	\$9,832	\$9,941	\$9,956	\$10,710
	(\$641)	(\$765)	(\$650)	(\$706)	(\$958)
Median cash income + in-kind transfers, incl. SSI	\$6,788	\$6,676	\$7,526	\$7,328	\$8,546
	(\$952)	(\$881)	(\$816)	(\$1009)	(\$1009)
75th percentile cash income + in-kind transfers, incl. SSI	\$15,230	\$14,000	\$13,830	\$15,340	\$16,580
	(\$850)	(\$715)	(\$763)	(\$742)	(\$960)
Sample Size	4200	4200	4200	4100	4100

Table A15: Income and Benefit Receipt Two Years Before and After Observed As Homeless, 2010-2014 ACS Sheltered Homeless
Ages 25-59

Sources: 2010-2014 ACS, various administrative datasets

Note: Sample includes sheltered homeless individuals ages 25-59 at the time of survey.

Table A16: Income and Benefit Receipt among Unsheltered Homeless Individuals Ages 25-59 in 2010 Decennial Census, including TNSOLs, 2003-2016													
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Share with earnings	0.549	0.535	0.522	0.485	0.412	0.397	0.399	0.361	0.358	0.342	0.342	0.341	
	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)	(0.005)	(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	
50th percentile earnings (cond. on +)	\$8,799	\$8,926	\$8,719	\$8,096	\$7,509	\$8,589	\$10,480	\$10,650	\$11,000	\$11,250	\$12,310	\$12,670	
	(\$146)	(\$143)	(\$228)	(\$123)	(\$162)	(\$150)	(\$473)	(\$258)	(\$268)	(\$301)	(\$319)	(\$206)	
75th percentile earnings (cond. on +)	\$20,610	\$20,540	\$20,070	\$18,930	\$18,370	\$20,310	\$22,580	\$22,430	\$23,250	\$24,280	\$26,190	\$27,000	
	(\$267)	(\$242)	(\$411)	(\$232)	(\$324)	(\$307)	(\$958)	(\$385)	(\$430)	(\$555)	(\$584)	(\$344)	
50th percentile pre-tax income + in-kind transfers	\$2,409	\$2,472	\$4,030	\$2,264	\$2,666	\$2,710	\$2,630	\$2,579	\$2,525	\$2,389	\$2,439	\$2,417	
	(\$176)	(\$163)	(\$324)	(\$98)	(\$22)	(\$25)	(\$29)	(\$17)	(\$31)	(\$4)	(\$9)	(\$26)	
75th percentile pre-tax income + in-kind transfers	\$12,330	\$11,550	\$14,580	\$12,980	\$11,490	\$12,750	\$13,120	\$12,800	\$12,640	\$12,110	\$13,230	\$13,360	
	(\$699)	(\$615)	(\$461)	(\$513)	(\$448)	(\$486)	(\$476)	(\$485)	(\$453)	(\$487)	(\$503)	(\$503)	
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)			0.643	0.691	0.745	0.791	0.790	0.781	0.788	0.796	0.817	0.000	
			(0.011)	(0.007)	(0.006)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.007)		
Share receiving SSI or DI (according to Medicare records)						0.270	0.303	0.334	0.351	0.361		0.373	
						(0.006)	(0.006)	(0.007)	(0.007)	(0.007)		(0.007)	
Sample Size	54,000	54,000	54,000	54,000	54,000	54,000	53,500	52,500	52,000	51,000	50,500	49,500	

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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)

Notes: Sample includes PIKed adults enumerated at unsheltered locations in the 2010 Decennial Census who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. We include individuals who were counted in TNSOLs. 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 the average of the twelve observations above and the twelve 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.

Table A17: Income and Benefit Receipt among Sheltered Homeless Ages Individuals 25-59 in 2010 Decennial Census, excluding individuals counted in multiple housing statuses in the Census, 2003-2016

	Sheltered Homeless											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share with earnings	0.619	0.616	0.600	0.573	0.490	0.509	0.486	0.449	0.441	0.423	0.422	0.423
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
50th percentile earnings (cond. on +)	\$9,135	\$9,146	\$8,896	\$7,541	\$5,938	\$7,775	\$10,440	\$10,690	\$10,880	\$11,150	\$12,190	\$12,700
	(\$73)	(\$77)	(\$72)	(\$70)	(\$67)	(\$60)	(\$72)	(\$78)	(\$80)	(\$88)	(\$105)	(\$110)
75th percentile earnings (cond. on +)	\$19,260	\$18,910	\$17,790	\$15,690	\$13,600	\$15,380	\$18,910	\$19,260	\$19,680	\$20,360	\$22,310	\$23,410
	(\$128)	(\$106)	(\$104)	(\$93)	(\$103)	(\$86)	(\$113)	(\$110)	(\$128)	(\$139)	(\$163)	(\$156)
50th percentile pre-tax income + in-kind transfers	\$5,607	\$4,937	\$3,841	\$2,797	\$2,666	\$3,388	\$3,748	\$3,383	\$3,348	\$3,085	\$3,391	\$3,564
	(\$265)	(\$237)	(\$134)	(\$75)	(\$17)	(\$82)	(\$122)	(\$105)	(\$113)	(\$111)	(\$132)	(\$139)
75th percentile pre-tax income + in-kind transfers	\$14,450	\$14,210	\$13,550	\$12,210	\$10,940	\$13,270	\$14,960	\$14,700	\$14,750	\$14,350	\$15,260	\$15,720
	(\$453)	(\$414)	(\$164)	(\$157)	(\$150)	(\$118)	(\$149)	(\$151)	(\$153)	(\$149)	(\$172)	(\$174)
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)			0.687	0.734	0.834	0.906	0.890	0.862	0.848	0.849	0.851	
			(0.004)	(0.004)	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.005)	
Share receiving SSI or DI (according to Medicare records)						0.181	0.238	0.283	0.309	0.326		0.343
						(0.002)	(0.002)	(0.002)	(0.003)	(0.003)		(0.003)
Sample Size	74,500	74,500	74,500	74,500	74,500	74,500	74,000	73,000	72,000	71,500	70,000	69,000
						Unsheltere	ed Homeless					
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Share with earnings	0.555	0.542	0.519	0.480	0.395	0.377	0.361	0.324	0.322	0.299	0.301	0.303
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
50th percentile earnings (cond. on +)	\$7,088	\$7,108	\$7,136	\$6,324	\$5,507	\$7,128	\$8,230	\$8,177	\$8,476	\$8,844	\$9,912	\$10,100
	(\$181)	(\$183)	(\$210)	(\$141)	(\$217)	(\$138)	(\$217)	(\$209)	(\$220)	(\$193)	(\$198)	(\$198)
75th percentile earnings (cond. on +)	\$16,910	\$16,670	\$16,450	\$14,940	\$14,470	\$15,600	\$18,030	\$17,840	\$18,120	\$18,990	\$20,260	\$21,180
	(\$291)	(\$312)	(\$338)	(\$212)	(\$315)	(\$300)	(\$458)	(\$317)	(\$359)	(\$300)	(\$323)	(\$324)
50th percentile pre-tax income + in-kind transfers	\$2,057	\$2,223	\$2,224	\$1,962	\$2,284	\$2,505	\$2,578	\$2,443	\$2,441	\$2,255	\$2,346	\$2,370
	(\$213)	(\$228)	(\$102)	(\$58)	(\$53)	(\$30)	(\$28)	(\$34)	(\$29)	(\$34)	(\$34)	(\$31)
75th percentile pre-tax income + in-kind transfers	\$10,120	\$10,030	\$10,840	\$8,806	\$6,809	\$8,426	\$9,600	\$8,819	\$8,370	\$8,229	\$9,200	\$9,961
	(\$843)	(\$694)	(\$345)	(\$444)	(\$419)	(\$424)	(\$422)	(\$417)	(\$425)	(\$417)	(\$454)	(\$427)
Share with benefits (SNAP, HUD, Medicaid, Medicare, or VA benefits)			0.653	0.695	0.757	0.819	0.814	0.805	0.811	0.823	0.846	
			(0.008)	(0.008)	(0.007)	(0.006)	(0.006)	(0.007)	(0.006)	(0.006)	(0.009)	
Share receiving SSI or DI (according to Medicare records)						0.236	0.277	0.312	0.332	0.344		0.363
						(0.007)	(0.008)	(0.008)	(0.007)	(0.007)		(0.007)
Sample Size	29,500	29,500	29,500	29,500	29,500	29,500	29,500	29,000	28,500	28,000	27,500	27,000

Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2004-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2015 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)

Notes: Sample includes PIKed adults enumerated as homeless in the 2010 Decennial Census who have a non-missing birthdate in the 2019 Numident who were between the ages of 25 and 59 (inclusive) as of March 30, 2010. We exclude individuals who were counted in a housed or other group quarters status in addition to being counted as homeless in the Census. 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 the average of the twelve observations above and the twelve 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.

				Table A18	8: Migration	-Adjusted SN	NAP Receipt							
				Panel A:	Migration A	djustment A	pproach #1							
	Baseline consists of all those who lived in SNAP state in 2010. Migration-adjusted sample consists of those who lived in the same SNAP state in 2000 and 2010.													
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Sheltered	Baseline													
Homeless	Migration Adjusted	0.4366	0.4498	0.5852	0.6432	0.7668	0.8435	0.8090	0.7604	0.7363	0.7123	0.6846	0.6519	
	SE	0.0138	0.0139	0.0060	0.0059	0.0047	0.0040	0.0044	0.0048	0.0050	0.0051	0.0053	0.0055	
Sample size	Baseline													
	Migration Adjusted	1,300	1,300	6,800	6,800	8,100	8,100	8,100	8,000	7,900	7,800	7,700	7,600	
Unsheltered	Baseline													
Homeless	Migration Adjusted	0.5004	0.4959	0.5364	0.5704	0.6445	0.7024	0.6941	0.6902	0.6739	0.6658	0.6492	0.6275	
	SE	0.0183	0.0183	0.0103	0.0102	0.0089	0.0086	0.0086	0.0087	0.0089	0.0090	0.0092	0.0094	
Sample size	Baseline													
	Migration Adjusted	750	750	2,400	2,400	3,000	3,000	3,000	2,900	2,900	2,800	2,800	2,700	
Single Housed	Baseline													
Poor	Migration Adjusted	0.4082	0.4496	0.4428	0.4689	0.5417	0.5873	0.5951	0.5818	0.5647	0.5500	0.5342	0.5137	
	SE	0.0202	0.0212	0.0131	0.0131	0.0112	0.0110	0.0110	0.0110	0.0111	0.0113	0.0114	0.0114	
Sample size	Baseline													
	Migration Adjusted	1,800	1,800	4,300	4,300	5,800	5,800	5,800	5,800	5,700	5,700	5,600	5,600	
				Panel B:	Migration A	djustment A	pproach #2							
Bas	seline consist of 2010 Medic	caid recipients in	SNAP state	in 2010. Mig	ration-adjust	ed sample co	nsists of Med	dicaid recipie	ents in SNAP	state in pre-	and post-201	0 window.		
		2005	2007	2007	2000	2000	2010	2011	2012	2012	2014	2015	2017	

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sheltered	Baseline			0.6097	0.6810	0.8409	0.9174	0.8689	0.8113	0.7734	0.7429	0.7082	0.6848
Homeless	SE			0.0043	0.0041	0.0031	0.0023	0.0028	0.0033	0.0036	0.0037	0.0039	0.0040
	Migration Adjusted			0.6872	0.7580	0.8786	0.9197	0.8992	0.8574	0.8222	0.7914	0.7537	0.7284
	SE			0.0039	0.0036	0.0025	0.0019	0.0018	0.0025	0.0029	0.0030	0.0030	0.0025
Sample size	Baseline			13,500	13,500	14,500	14,500	14,500	14,500	14,000	14,000	14,000	13,500
	Migration Adjusted			11,500	11,500	12,500	12,500	12,500	12,000	12,000	12,000	12,000	11,500
Unsheltered	Baseline			0.6410	0.7165	0.8046	0.8558	0.8288	0.8008	0.7844	0.7688	0.7509	0.7319
Homeless	SE			0.0207	0.0115	0.0084	0.0069	0.0079	0.0086	0.0090	0.0095	0.0101	0.0108
	Migration Adjusted			0.6869	0.7603	0.8236	0.8527	0.8464	0.8304	0.8197	0.8030	0.7841	0.7696
	SE			0.0266	0.0078	0.0046	0.0044	0.0040	0.0052	0.0049	0.0055	0.0056	0.0050
Sample size	Baseline			3,600	3,600	4,000	4,000	4,000	4,000	3,900	3,800	3,800	3,700
	Migration Adjusted			3,300	3,300	3,700	3,700	3,700	3,700	3,600	3,600	3,500	3,400
Single Housed	Baseline			0.6473	0.6930	0.7959	0.8432	0.8205	0.7911	0.7574	0.7459	0.7151	0.6951
Poor	SE			0.0130	0.0127	0.0097	0.0086	0.0093	0.0097	0.0102	0.0103	0.0107	0.0110
	Migration Adjusted			0.6932	0.7304	0.8081	0.8446	0.8474	0.8304	0.8041	0.7895	0.7573	0.7317
Sample size	SE			0.0111	0.0096	0.0051	0.0049	0.0044	0.0046	0.0063	0.0065	0.0074	0.0078
·	Baseline			3,900	3,900	5,100	5,100	5,100	5,100	5,000	5,000	4,900	4,900
	Migration Adjusted			3,600	3,600	4,800	4,800	4,800	4,700	4,700	4,600	4,600	4,500

Sources: 2000 and 2010 Census, 2010 ACS, various states' SNAP datasets, various states' Medicaid datasets

Notes: Sample for Approach 1 consists of people who lived in a SNAP state in 2010 and in the same state in 2000 according to that year's Census. Sample for Approach 2 consists of people who received Medicaid in a SNAP state in a three-year window before 2010 and a three-year window after 2010; baseline consists of those who received Medicaid in a SNAP state in 2010.

Appendix Figures



Figure A2: Share with SSI or DI, Comparison of Census and ACS Homeless Sheltered Homeless, Ages 25-59

Sources: SSI Datasets (2010-2014, 2016), 2006-2016 Medicare Datasets, 2010 Census, 2010-2014 ACS. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.







Sources: 2010 Census, 2003-2016 HUD PIC & TRACS, 2007-2015 Administrative VA Dataset, 2006-2016 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). Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.

Figure A5: Share with Earnings, Including and Excluding Double-Counted, 2005-2016



Sources: IRS 1040s (2003-2015), W2s (2005-2016), 2010 Census. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.



Sources: 2010 Census, 2003-2016 HUD PIC & TRACS, 2007-2015 Administrative VA Dataset, 2006-2016 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). Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015.



Sources: SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016), TANF/GA for New York (2007-2015), SSI (2010-2014, 2016), 2010 Census, 2000 Census. Notes: Approved for release by the Census Bureau's Disclosure Review Board, authorization number CBDRB-FY2022-CES005-015. Baseline sample consists of homeless residing in SNAP states in 2010. Migration-adjusted sample consists of homeless residing in SNAP states in both 2010 and 2000.