Learning about Homelessness in the U.S. Using Linked Administrative and Survey Data

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Disclaimer: Any opinions and conclusions expressed herein are those of the author(s) and do not represent the views of the U.S. Census Bureau. All results were approved for release by the Census Bureau, authorization numbers CBDRB-FY20-ERD002-004, CBDRB-FY20-ERD002-007, and CBDRB-FY21-045.

Background

- Part of Comprehensive Income Dataset (CID) project which combines survey and admin data to improve income estimates and related statistics
- Official poverty statistics and extreme poverty studies are not intended to represent people experiencing homelessness
- People experiencing homelessness not covered or sharply under-represented in most surveys
  - Not generally surveyed in CPS and SIPP; ACS includes only those in shelters
- We use restricted survey and administrative data to provide first rigorous examination of the homeless nationally
  - Initially examine, counts and coverage of homeless in available sources
  - Demographics, income and program receipt
  - Set stage for later work on housing transition, migration and mortality

What we learn about the homeless population

- Population Estimates and Survey Coverage
  - Population estimates and their differences across data sources
  - Coverage in available data sources
- Population Characteristics
  - Characteristics including, age, gender, race, education, disabilities, veteran status, and migration
- Income and Program Receipt
  - Employment and earnings in formal labor market
  - Safety net program receipt
  - Permanence or transience of low material well-being among homeless people
  - Implications for official statistics of the omission of homeless people

Challenges to studying homelessness

- People experiencing homelessness are difficult to survey
  - Reasons include mobility, lack of a permanent residence, tenuous attachment to living quarters, not wanting to be found, pretending to be housed (Glasser, Hirsch, and Chan 2014) or cognitive challenges
  - Raises questions about the representativeness and comprehensiveness of any data source
- There are many different definitions of homelessness
  - We focus on individuals residing in emergency or transitional shelters ("sheltered homeless") and those whose primary nighttime residence is a public or private place not meant for human habitation ("unsheltered homeless")
  - Literature is also concerned with precariously housed and "doubled up"; more complicated to do with current data, for future work (Lee, Tyler, and Wright 2010)

Bringing new data and methods to bear

- Our approach takes advantage of large samples that offer a guide to national homeless patterns, including the unsheltered
  - To date, there are only very limited studies of homelessness using the Decennial Census and ACS
- We rely on accurate administrative data as well as self-reports
- By linking tax and program data, we get a more detailed picture of the situation of those experiencing homelessness including longitudinal information

Population Estimates and Survey Coverage

Public sources of counts or estimates

- HUD issues an Annual Homeless Assessment Report (AHAR) to Congress
  - Provides nationwide estimates of homelessness, including service-use patterns, the capacity to house homeless persons, and some information about the characteristics of people experiencing homelessness (although limited relative to the ACS)
- 2010 Census Special Report on the Emergency and Transitional Shelter Population described the geographic distribution of the sheltered population and provided demographic characteristics (Smith, Holmberg, and Jones-Puthoff 2010)
- Culhane et al. (2013) used special tabulations from the 1990, 2000, and 2010 Censuses to examine the age distribution of homeless individuals over time
  - Suggests a cohort effect, with individuals born during the latter part of the baby boom era facing the highest risk for homelessness

Other sources of counts or estimates

- Besides AHARs and Census report, the best detailed national study on homelessness is more than two decades old
  - The 1996 National Survey of Homeless Assistance Providers and Clients (NSHAPC) provided detailed demographic and economic characteristics (Burt et al. 1999)
- Localized studies offer a wealth of information but may not be generalizable; first order differences across cities
  - Some local homeless services administrative units (Continuums of Care, or CoCs) publish their own reports analyzing shelter use databases
  - Some research using administrative databases in a handful of major cities (Culhane 1994, Culhane et al. 2007, Metraux et al. 2018, Cassidy 2019, von Wachter et al. 2020)

Census Bureau Data

- 2010 Decennial Census
  - Enumerated individuals at emergency and transitional shelters, as well as unsheltered individuals in soup kitchens, regularly-scheduled mobile food vans, and targeted non-sheltered outdoor locations (TNSOLs)
  - Enumeration frame developed by internet research and querying local officials, followed by validation and advance visits
- American Community Survey
  - Collects micro-level data on individuals in emergency and transitional shelters since 2006, but they are not identified in public use data
  - Draws on the shelter list from the Decennial, which was expanded starting in 2011

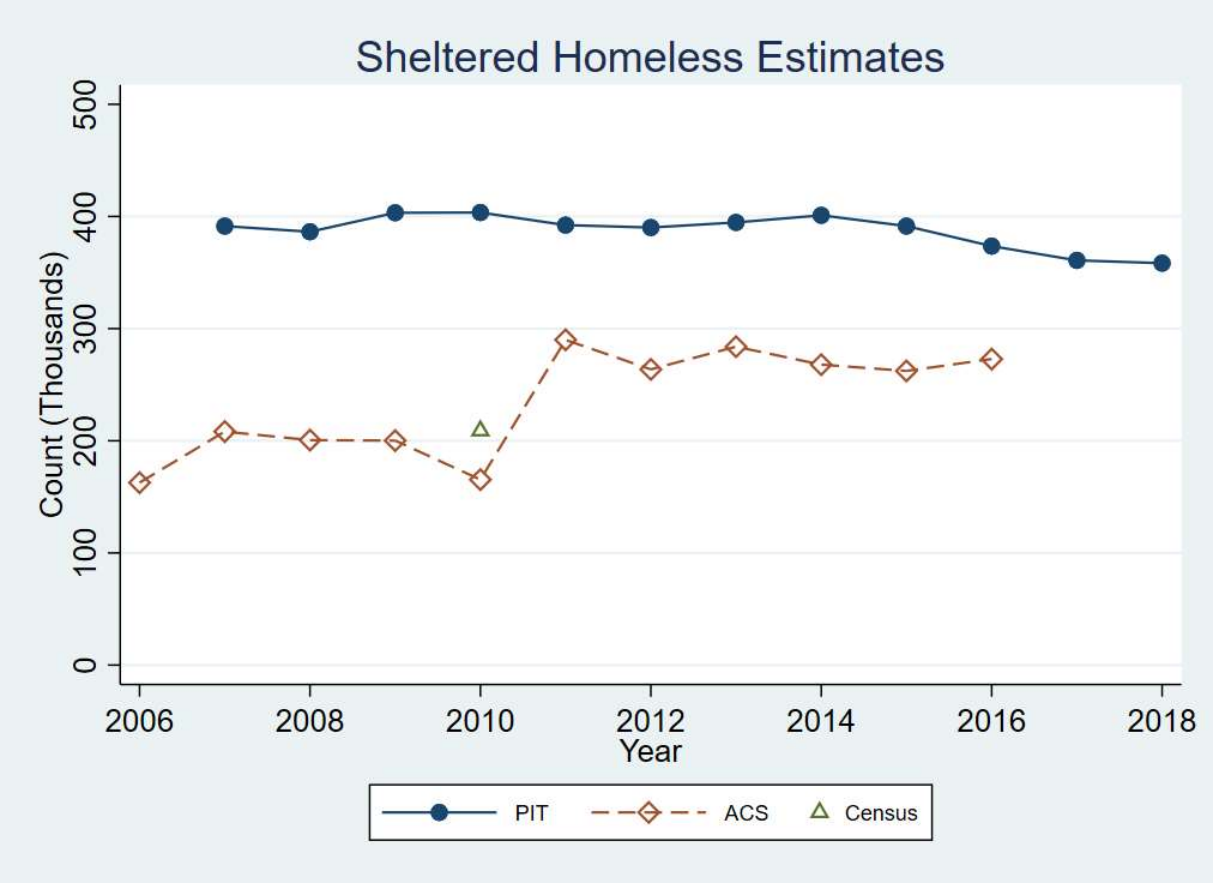
HUD Local/Administrative Data

- Homeless Management Information System (HMIS) Aggregated Data
  - HMIS data, maintained by CoCs, provides unduplicated data for a subset of the individuals experiencing homelessness over a period of time and is extrapolated to form national estimates
- HMIS Micro-Data
  - The CID project has access to linked HMIS data from Los Angeles, Houston, (and recently Chicago) including dates of shelter entry and exit
- HUD Point-in-Time Count (PIT)
  - CoCs conduct annual counts of sheltered and unsheltered homeless on one evening in January
  - PIT counts of the shelter homeless include domestic violence shelters

Administrative Income/Resource Data

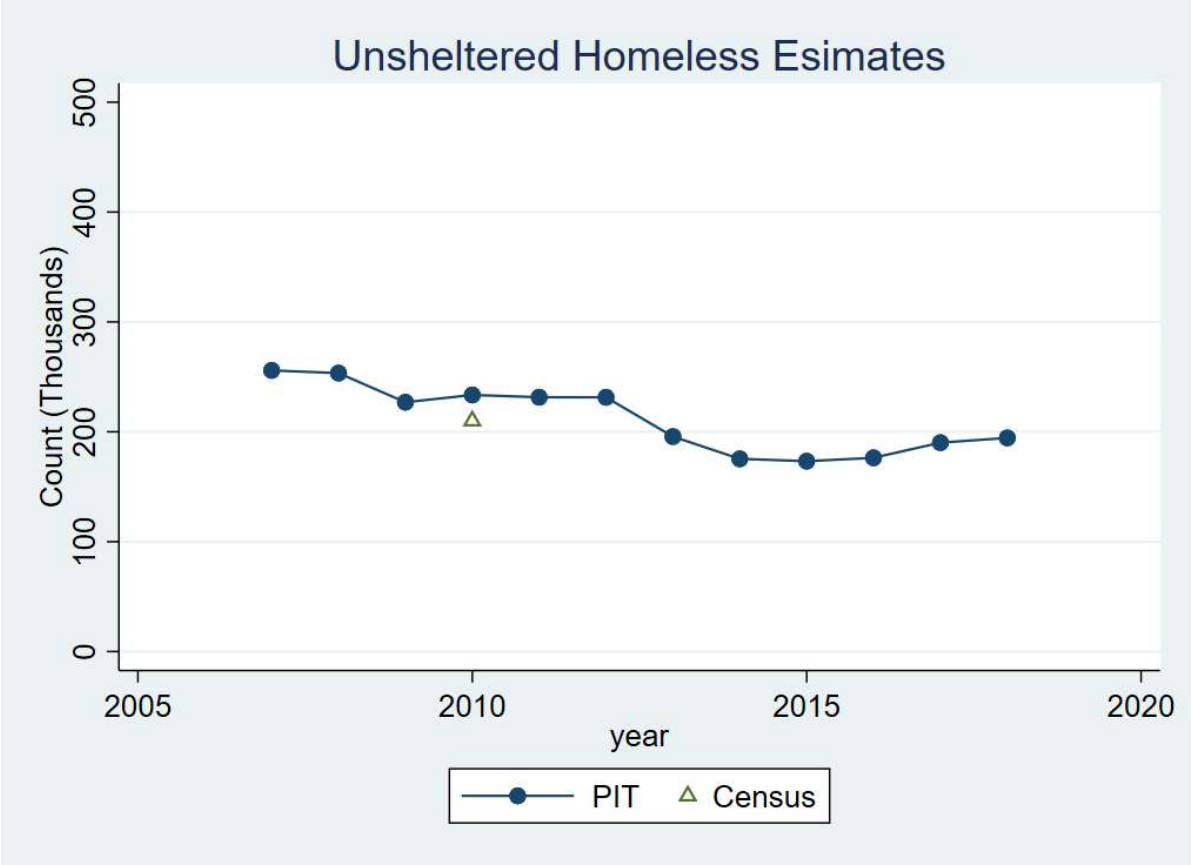
- We link the Census data to the following longitudinal administrative data:
  - Taxable Income (IRS 1040s, W2s, 1099-Rs)
  - Supplemental Nutrition Assistance Program (SNAP) for five states
    - Illinois, Indiana, New York, New Jersey and Tennessee (2006-2016 for all except IL and NJ)
  - Medicare and Medicaid enrollment, VA benefits
  - Housing assistance (HUD PIC and TRACS)
  - Birth and death dates (Numident)
  - In the process of adding OASDI, SSI
- Will discuss linking methods and implications shortly

Overall Population Estimates: Sheltered



Sources: 2007-2019 Annual Homelessness Assessment Reports, 2006-2016 ACS, 2010 Decennial Census. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Overall Population Estimates: Unsheltered



Sources: 2007-2018 Annual Homelessness Assessment Reports, 2006-2016 ACS, 2010 Decennial Census. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Possible reasons for differences

- Coverage
  - PIT includes several categories of homeless people not included in the ACS and Census sheltered homeless estimates, e.g those in domestic violence shelters
    - Larger share of females and children in PIT than Census
- Completeness
  - HMIS shelter list maintained by local organizations (CoCs) – perhaps more complete than the shelter list used by Decennial and ACS
  - Completeness of PIT unsheltered count likely varies by CoC; Census report on homeless enumeration acknowledges it may be incomplete
- Weighting
  - The ACS weighting and estimation methodology over-weights homeless population estimates to represent certain group quarters types that are out of the ACS's scope, such as unsheltered homeless individuals

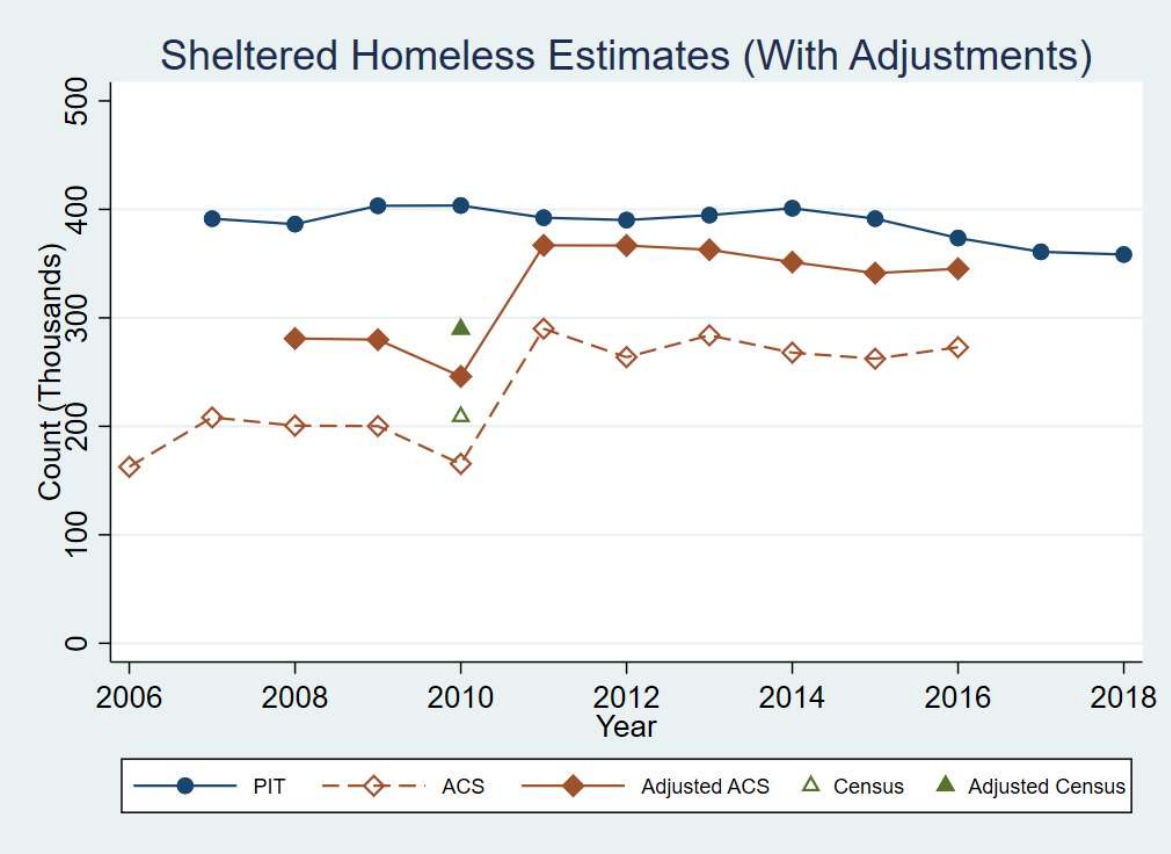
More possible reasons for differences

- Time Frame
  - Many people experiencing homelessness cycle into and out of shelters fairly rapidly (Metraux et al. 2018, O'Flaherty 2019)
  - PIT, Decennial, and ACS (approximately) give point prevalence estimates of homelessness
  - HMIS data used to develop a period-prevalence estimate of homelessness (i.e. number of shelter users in a year)
  - Point-in-time samples give greater weight to individuals with longer or more frequent spells
- Seasonality
  - ACS reflects annual average, but doesn't show pronounced seasonality
  - HUD PIT at night in the last ten days of January
  - Decennial count conducted March 29-31, 2010

Why sources differ: Coverage

- The PIT includes several categories of homeless people not included in the ACS and Census sheltered homeless estimates
  - Safe havens, domestic violence shelters, voucher-based beds, beds in non-shelter facilities
- We estimate the number of people belonging to these categories each year and add them to the Census, in order to obtain an Census estimate that is more comparable to the PIT
  - We do this using the share of each CoC's PIT count that is associated with these bed types in a given year's Housing Inventory Count (HIC)
  - For voucher-based and non-shelter beds we cast back this share from 2011, as it is not reported in the 2010 HIC

Sheltered homeless estimates with definitional adjustments



Sources: 2007-2018 Annual Homelessness Assessment Reports, 2007-208 HIC, 2006-2018 ACS, 2010 Decennial Census. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Why sources differ: Time frame

- Person-weighted characteristics weight equally anyone who experienced a shelter stay in a given year
  - Approximated by characteristics from period-prevalent data source, like HMIS
- Day-weighted characteristics are weighted by the number of days an individual spent in a shelter in a given year
  - Approximated by characteristics from a point in time data source, like Decennial, ACS, or PIT
- Some differences – e.g. share under 18, share female in Houston – but fairly similar

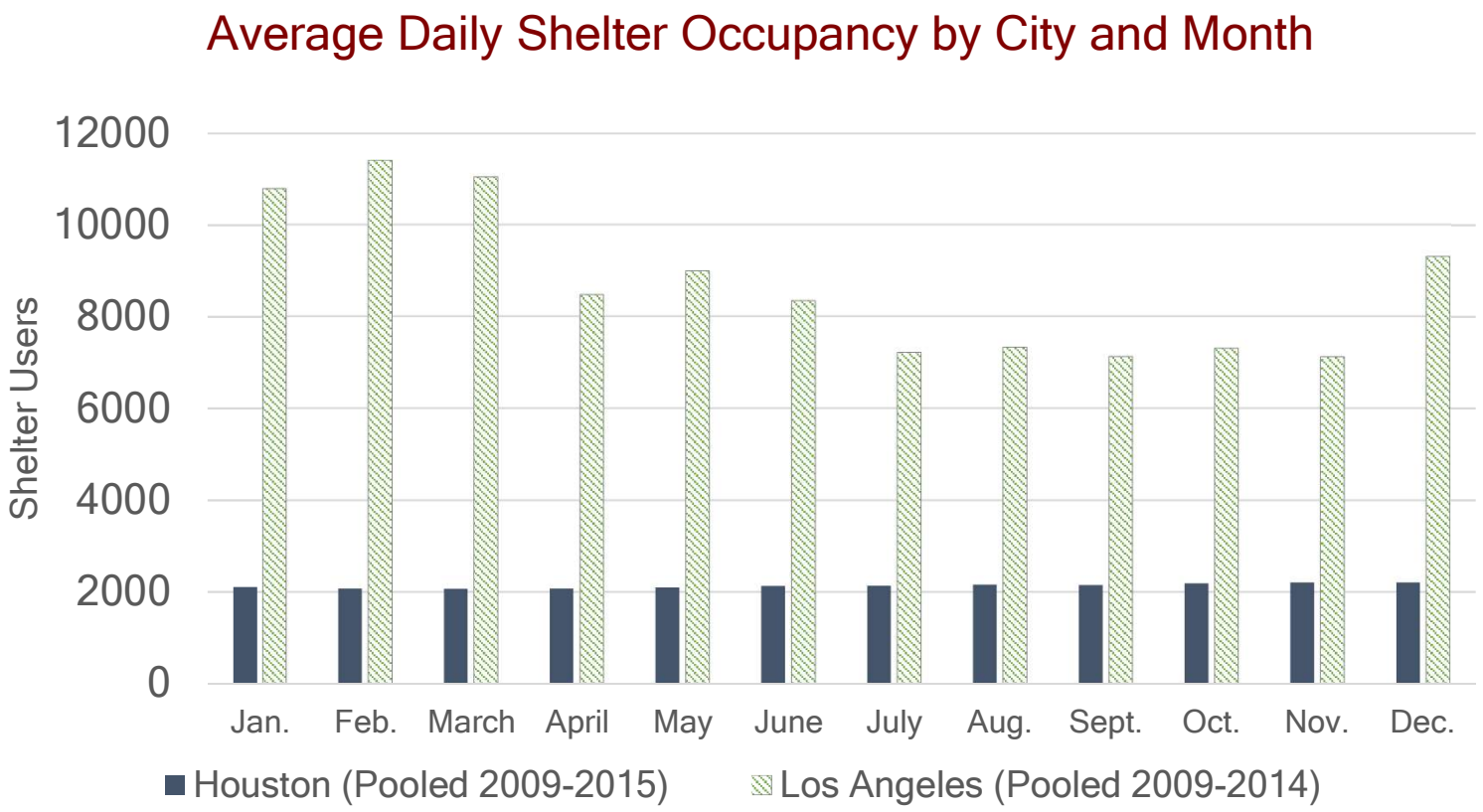
HMIS Sheltered Homeless Characteristics Under Different Weighting Schemes

	Los Angeles (2004-2014)		Houston (2004-2015)	
	Person-Weighted Share	Day-Weighted Share	Person-Weighted Share	Day-Weighted Share
White	43%	42%	35%	34%
Black	47%	48%	60%	63%
Under 18	13%	13%	21%	26%
Female	34%	36%	40%	49%
Hispanic	29%	30%	12%	11%

Sources: 2004-2014 LA CoC HMIS Data, 2004-2015 Houston CoC HMIS Data

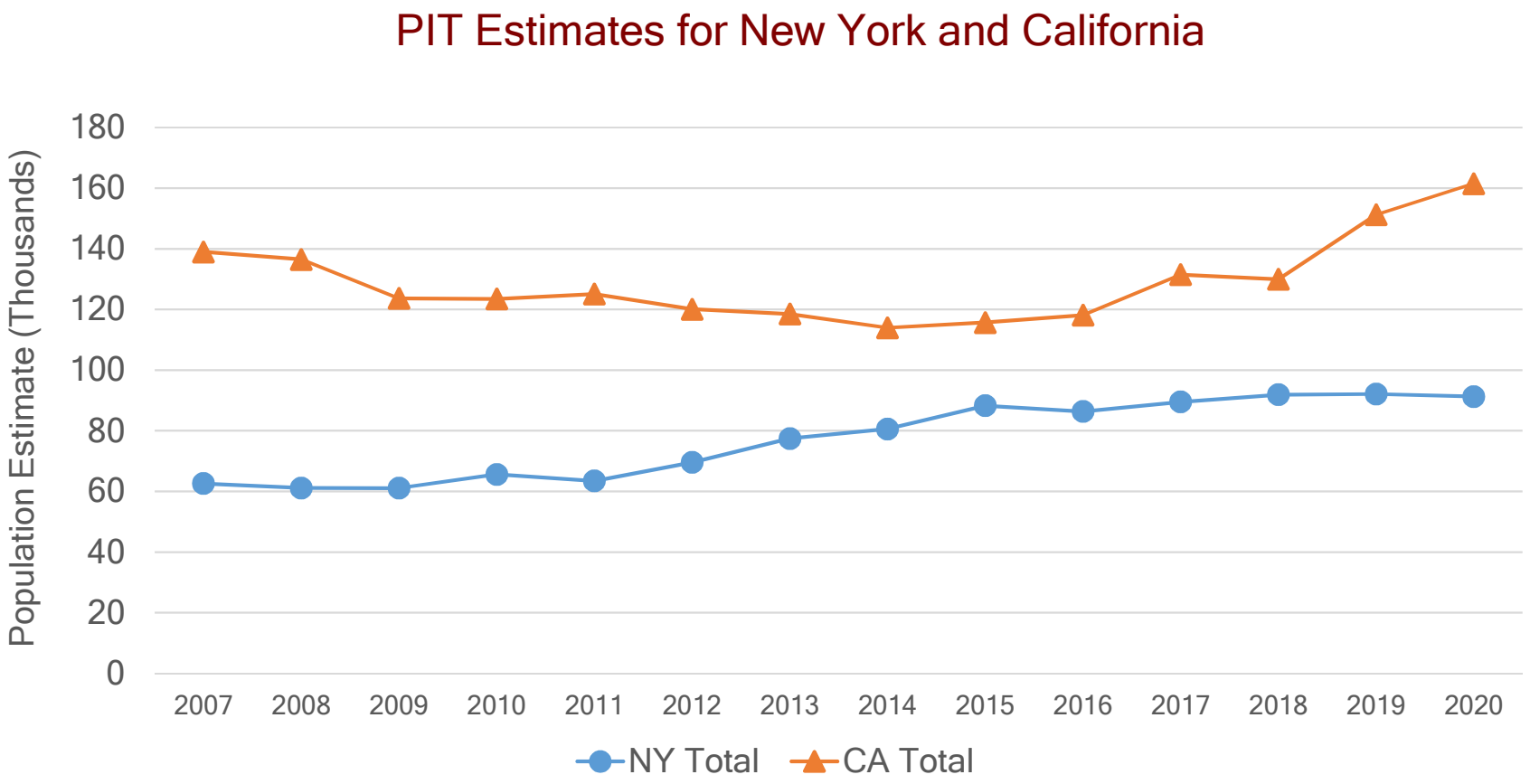
Note: The Los Angeles CoC includes Los Angeles county excluding Pasadena, Long Beach, and Glendale. The Houston CoC encompasses Houston, Harris, Fort Bend, and Montgomery counties. We restrict the HMIS data to emergency and transitional shelters, and we drop HMIS observations with no entry date, no exit date, or neither. When the entry date equals the exit date we count these as one-day spells. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Why sources differ: Seasonality



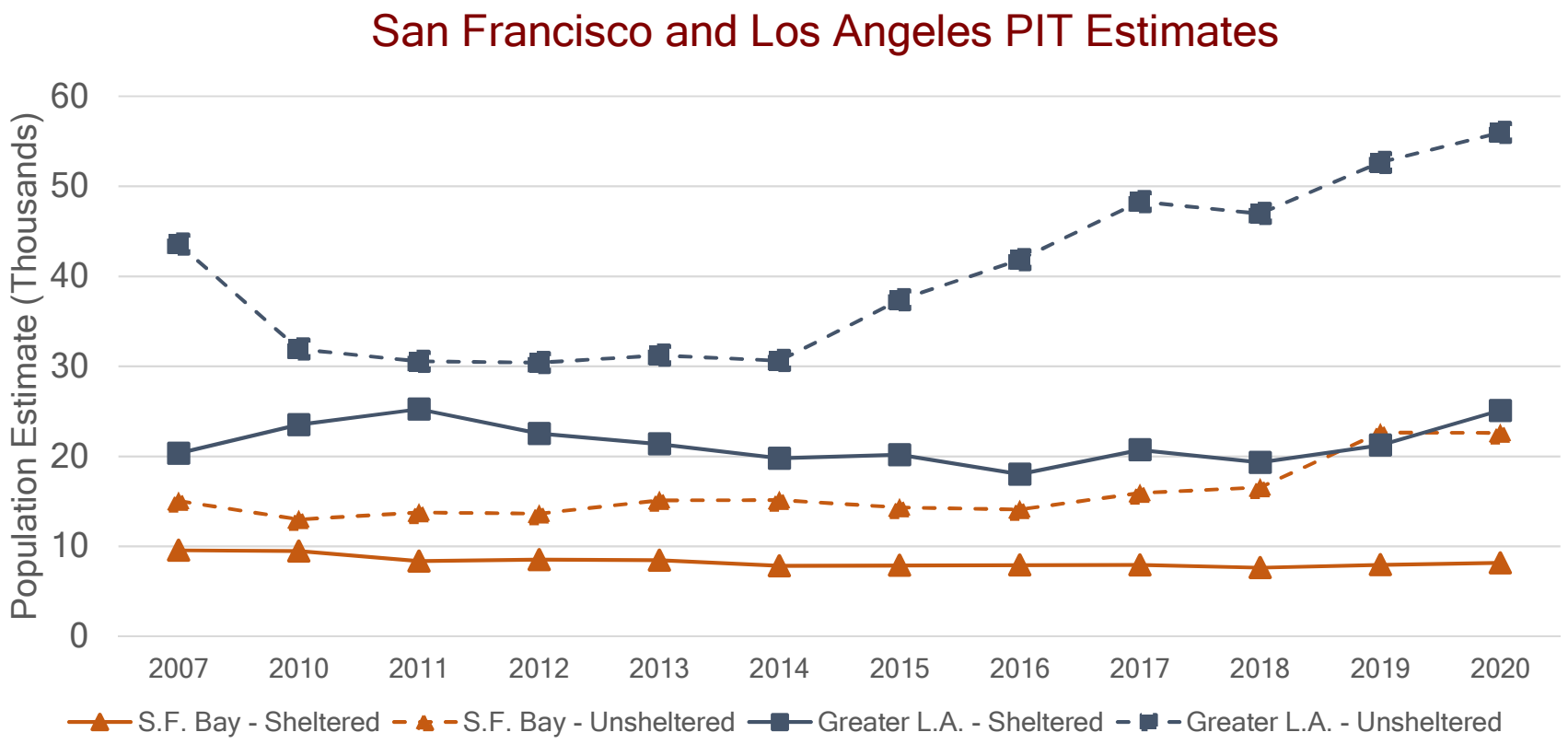
Sources: 2009-2015 Houston CoC HMIS Data, 2009-2014 LA CoC HMIS Data. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Recent trends in California and New York



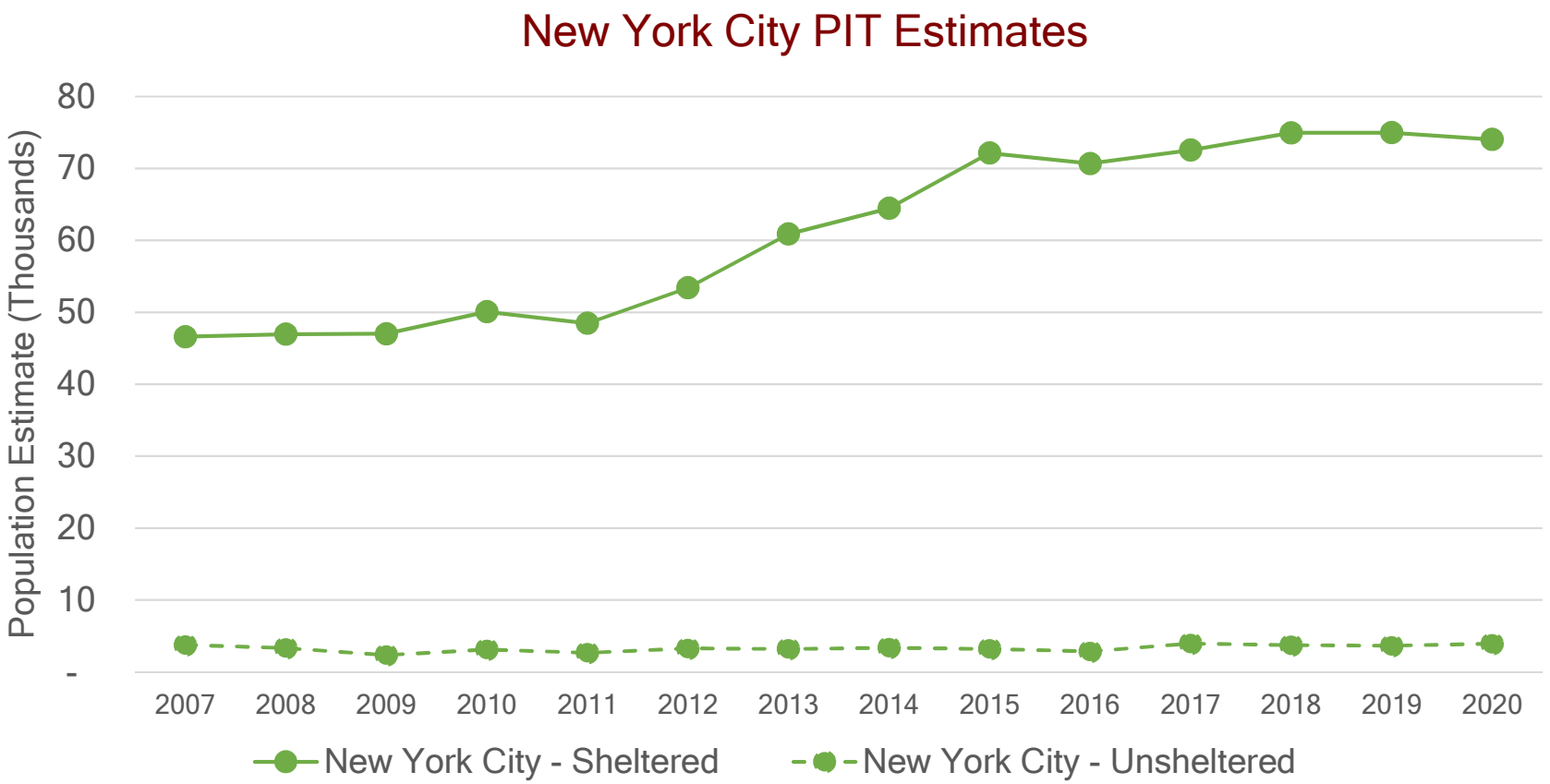
Source: HUD 2007-2020 PIT files. All data obtained from publicly available sources.

Recent trends in San Francisco and Los Angeles



Source: HUD 2007-2020 PIT files. All data obtained from publicly available sources. San Francisco Bay includes the following CoCs: San Francisco, Contra Costa County, Marin County, Alameda County, San Mateo County, and Santa Clara County. LA, OC, and SD includes: Los Angeles, Pasadena, Glendale, Long Beach, Orange County, and San Diego.

Recent trends in New York City



Source: HUD 2007-2020 PIT files. All data obtained from publicly available sources.

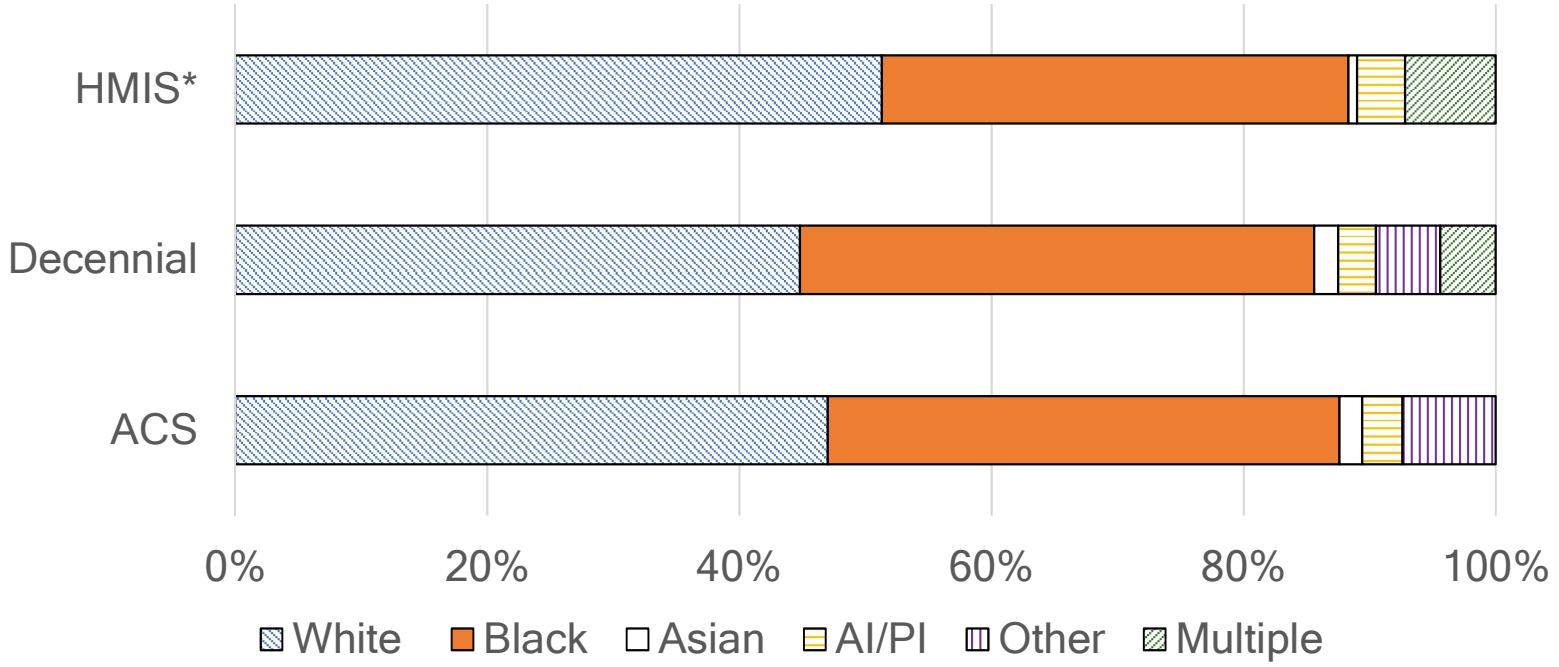
Population Characteristics

Literature on demographics

- Despite difficulties of studying people experiencing homelessness, several demographic patterns have emerged in the literature:
  - Blacks are overrepresented among those experiencing homelessness, especially shelter homeless and people in families (Burt et al. 2001, AHAR 2007-2018, O'Flaherty 2019)
  - Most single homeless adults are male; most homeless adults in families are female (Metraux et al. 2018, AHAR 2007-2018)
  - Veterans are disproportionately represented, but their share has declined substantially since 2010 (O'Flaherty 2018, AHAR 2018)
    - 8.6% of homeless individuals in the 2018 PIT were veterans, compared to 11.7% in 2010
  - Mixed evidence regarding the "paradox" of infrequent homelessness among Latinos (Conroy and Heer 2003)
  - Homelessness is more common in urban settings than in rural, but has been becoming more suburban in recent years (Lee, Tyler, and Wright 2010)

Sheltered Homeless Characteristics

Racial Composition of Sheltered Homeless Across Data Sources, 2010



Sources: 2010 American Community Survey, 2010 Decennial Census, 2010 Annual Homelessness Assessment Reports to Congress One-Year Estimates of Shelter Homelessness . * Indicates data from publicly available sources. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Sheltered Homeless Characteristics

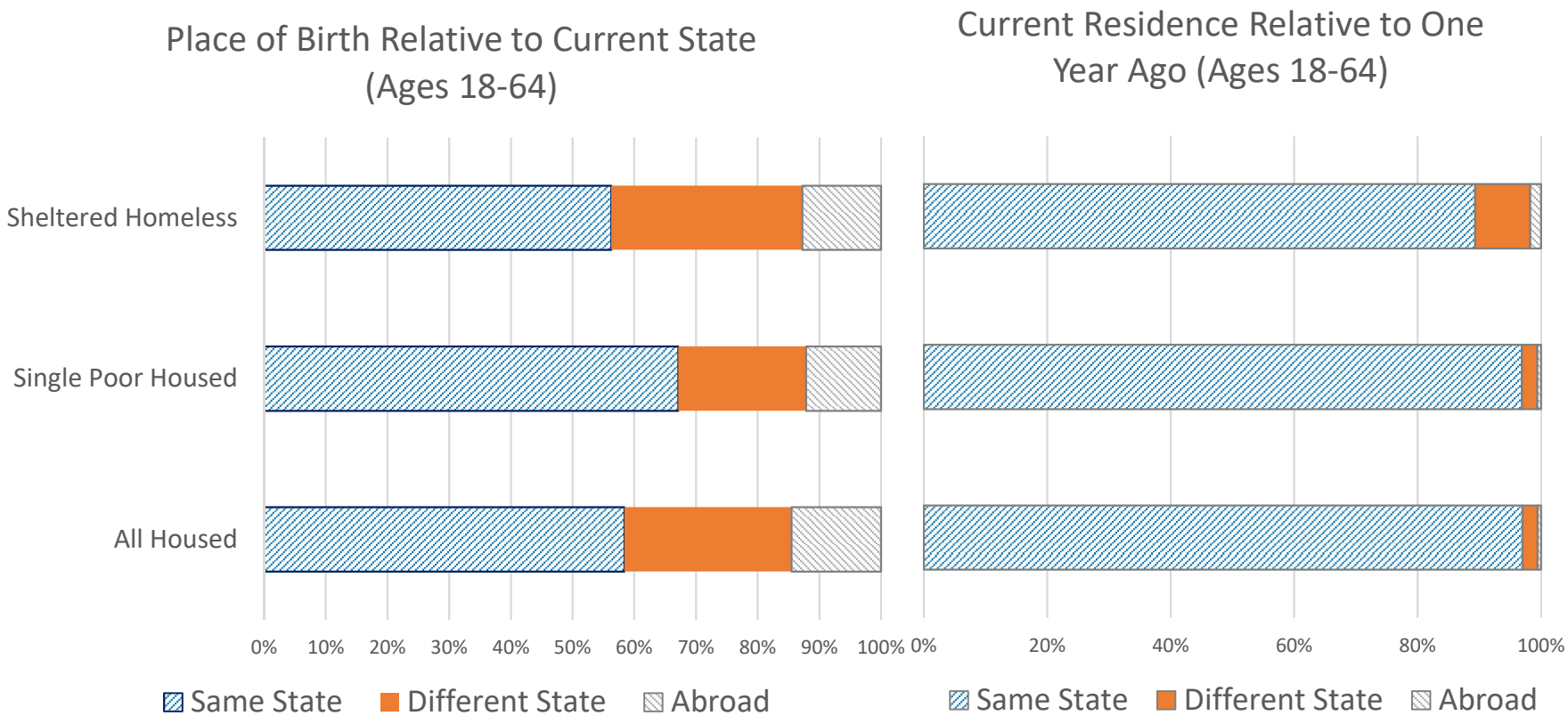
- Share Hispanic and male across data sources
  - About 17% Hispanic
  - About 62% male
- Sheltered homeless by age in HMIS data
  - Share under 18 is 22% in HMIS, 20% in Decennial, 15% in ACS
  - Modal age category in all sources is 31-50 years (about 36% of sheltered homeless)

Demographics Relative to Comparison Groups

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Share (%)	SE	Share (%)	SE	Share (%)	SE
Demographic Characteristics–All Ages						
Age (Years)						
Mean Age	39.2	(0.40)	30.8	(0.13)	38.2	(0.03)
<5	4.5	(0.32)	11.7	(0.18)	6.4	(0.04)
5-17	8.1	(0.62)	25.9	(0.28)	17.2	(0.07)
18-24	8.4	(0.44)	11.0	(0.21)	9.0	(0.06)
25-44	34.8	(0.83)	22.5	(0.28)	26.2	(0.08)
45-64	40.2	(0.89)	19.0	(0.25)	26.4	(0.08)
>64	4.1	(0.25)	10.0	(0.19)	14.6	(0.05)
Male (%)	60.5	(0.98)	41.0	(0.35)	49.0	(0.09)
Race (%)						
White	39.6	(0.89)	57.0	(0.37)	74.9	(0.08)
Black	46.8	(0.89)	29.7	(0.34)	12.9	(0.06)
American Indian/Alaskan Native	2.4	(0.19)	2.1	(0.08)	1.1	(0.02)
Asian	1.8	(0.28)	2.8	(0.11)	5.7	(0.04)
Other	9.5	(0.60)	8.5	(0.21)	5.3	(0.05)
Hispanic (%)	21.5	(0.71)	26.4	(0.35)	18.2	(0.08)
Sample Size	26,000		36,500		500,000	
Weighted Count	2,172,000		2,693,000		31,140,000	

Sources: 2011-2018 (pooled) American Community Survey. All results were approved for release by the Census Bureau, authorization number CBDRB-FY20-ERD002-004.

Mobility Since Birth and in Last Year



Source: 2011-2018 (pooled) American Community Survey. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Share Urban, Citizenship, and Education

- More than 99% of the sheltered homeless are located in urban areas
  - Compared to 82% of single poor housed adults and 76% of the overall adult housed population
- 90.5% of the sheltered homeless are citizens
  - Compared to 92.4% of single poor housed adults and 92.8% of the overall adult housed population
- Educational attainment for the sheltered homeless is similar to single poor housed adults
- Just 69% of sheltered homeless children ages 16-17 attended school in the past three months
  - Compared to 93.7% of poor housed children and 96.3% over all housed children in this age range

Source: 2011-2018 (pooled) American Community Survey. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Veteran Status and Functional Limitations

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Share (%)	SE	Share (%)	SE	Share (%)	SE
Survey Characteristics Among Adults Ages 18-64 in the 2011-2018 ACS						
Veteran (%)	8.08	(0.48)	3.15	(0.15)	5.47	(0.05)
Has VA Disability Rating (%)	1.22	(0.19)	0.58	(0.07)	1.15	(0.03)
Functional Limitations (%)						
Diff. Remembering or Making Decisions	23.64	(0.78)	11.53	(0.30)	4.24	(0.04)
Difficulty Dressing or Bathing	3.90	(0.32)	4.58	(0.20)	1.80	(0.03)
Difficulty Walking or Climbing Stairs	18.39	(0.56)	12.84	(0.32)	5.04	(0.04)
Difficulty Doing Errands Alone	8.30	(0.50)	9.27	(0.24)	3.59	(0.04)
Difficulty Hearing	5.18	(0.34)	3.39	(0.19)	2.02	(0.04)
Difficulty Seeing	6.84	(0.35)	4.62	(0.18)	1.84	(0.03)
Any of the Above Difficulties	36.13	(0.98)	23.05	(0.40)	10.14	(0.06)
Sample Size - Ages 18-64	22,000		18,500		290,000	

Source: 2011-2018 (pooled) American Community Survey. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Income and Program Receipt

Literature: Employment and Earnings

- Metraux et al. (2018) examine New York homeless shelter users longitudinally using SSA data (presumably the DER)
  - Examines those ever shelter homeless between 1990 and 2002
  - Rates of employment around 45 percent during year of shelter use; higher for single adults (80% male) than adults in families (93% female)
  - Slight dip in employment for singles, some for families around onset of homelessness
  - More of a dip in earnings around onset of homelessness
  - Emphasizes heterogeneity by single or family, gender, pattern (persistence) of homelessness
- Rossi (1989); Burt and Cohen (1989); Burt et al. (1999) reported similar (or slightly lower) employment rates in the past month
  - Rossi reported employment estimates of about 30-40% in the last month, using studies that focused on both sheltered and unsheltered in Chicago
  - The NSHAPC found 44% of homelessness service users interviewed had worked in the last 30 days

Literature: Program Receipt

- 1996 National Survey of Homeless Assistance Providers and Clients (NSHAPC) collected self-reported program receipt data from a nationally representative sample of homelessness service users (Burt et al. 1999)
  - NSHAPC found that 8 percent of homeless people surveyed were receiving SSDI, and 11 percent were receiving SSI (despite much higher estimated disability rates)
  - NSHAPC indicated that 52 percent of homeless families were receiving AFDC (precursor to TANF)
  - NSHAPC indicated that 31 percent of homeless single adults were receiving food stamps, compared to 71 percent of people in homeless families

Self-Reported Earnings and Benefit Receipt

	Sheltered Homeless		Single Poor Housed (Non-Group Quarters)		Housed (Non-Group Quarters)	
	Share (%)	SE	Share (%)	SE	Share (%)	SE
Employment & Program Participation Among Adults Ages 18-64						
Worked in Past Year (%)	39.40	(0.93)	45.54	(0.51)	78.44	(0.09)
Mean Weeks Worked in Past 12 Months (Cond. On +)	29.56	(0.47)	35.29	(0.25)	45.77	(0.04)
Mean Hours Worked Per Week (Cond. On +)	32.97	(0.32)	30.68	(0.18)	39.13	(0.03)
Benefit Receipt Rates and Amounts Among Adults Ages 18-64						
Retirement or Pension Income Receipt Rate (%)	1.89	(0.21)	2.49	(0.13)	4.12	(0.04)
Medicaid Receipt Rate (%)	61.94	(0.99)	46.09	(0.40)	13.22	(0.08)
Food Stamp Receipt Rate (%)	64.80	(0.84)	53.94	(0.43)	14.44	(0.09)
SSI Receipt Rate (%)	12.03	(0.55)	10.97	(0.30)	2.79	(0.04)
Public Assistance Receipt Rate (%)	20.11	(0.89)	7.36	(0.21)	1.57	(0.03)
Received Any Transfer Income (%)	71.15	(0.76)	57.40	(0.44)	16.11	(0.10)
Received Retirement or Employment Income (%)	40.94	(0.93)	47.50	(0.51)	80.41	(0.09)
Other Income Receipt[3] (%)	6.97	(0.38)	9.51	(0.25)	5.98	(0.06)
Any Income Receipt (%)	72.64	(0.73)	72.95	(0.41)	88.33	(0.08)
75th Percentile of Total Income	10,330.00	(109.50)	10,430.00	(58.54)	54,510.00	(136.10)
Mean Total Income Amount ($) (Cond. On +)	12,010.00	(875.30)	8,539.00	(53.67)	47,400.00	(156.60)
Sample Size: Ages 18-64	22,000		18,500		290,000	

Source: 2011-2018 (pooled) American Community Survey. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Linkage (PIK) Rates

Unweighted Homeless PIK Rates Across Census Bureau Datasets

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

Sources: 2006-2016 ACS, 2010 Decennial Census, 2004-2014 Los Angeles CoC HMIS Data, 2004-2014 Houston CoC HMIS Data. All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Adjusting for Missing PIKs

- We adjust for individuals missing PIKs using inverse probability weighting (IPW)
- In the Decennial, our model adjusts individual-level weights for the homeless based on:
  - Age
  - Race
  - Gender
  - Hispanic origin
  - State
  - Enumeration type (shelter, soup kitchen, food van, TNSOL)
- Covariates are limited in Decennial relative to ACS; may still be some conditional non-randomness in PIKing (especially when PIK rates low)
  - We exclude TNSOLs from income and program receipt results due to this concern

PIKed vs unPIKed characteristics in the ACS

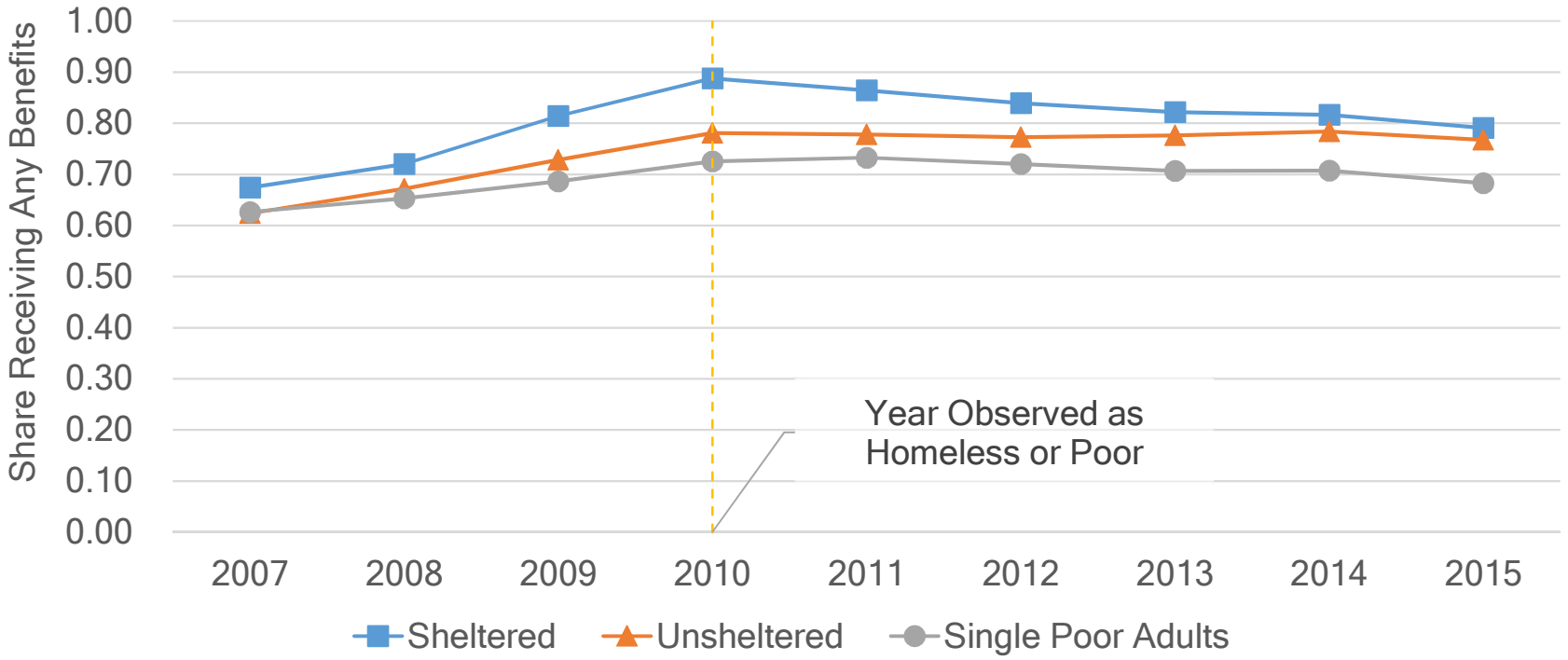
- In the 2006-2016 ACS, there are many statistically significant predictors of being unPIKed
  - UnPIKed are 2.4 years younger on average, 6.1 ppts more likely to be female, 4.6 ppts less likely to be white
  - UnPIKed are 8.4 ppts more likely to be Hispanic and 12.6 ppts more likely to have been born outside the U.S.
  - UnPIKed are 6.3 ppts more likely to report having difficulty remembering or making decisions
  - UnPIKed are 7.4 ppts less likely to report having worked in the last year and 7.6 ppts less likely to report having any income receipt

PIKed vs unPIKed characteristics in the Census

- Many unPIKed individuals are missing sufficient information (name or date of birth) to be PIKed
  - Among sheltered homeless individuals, 33.9 percent of the unPIKed were missing date of birth, compared to 3.3 percent of those who are PIKed
  - Among unsheltered homeless individuals, 55.6 percent of the unPIKed were missing date of birth, compared to 3.3 percent of those who are PIKed
- Among both the sheltered and unsheltered homeless, unPIKed individuals are more likely to be male, black, and Hispanic
- UnPIKed sheltered homeless individuals are more likely to be under the age of 18 than the PIKed

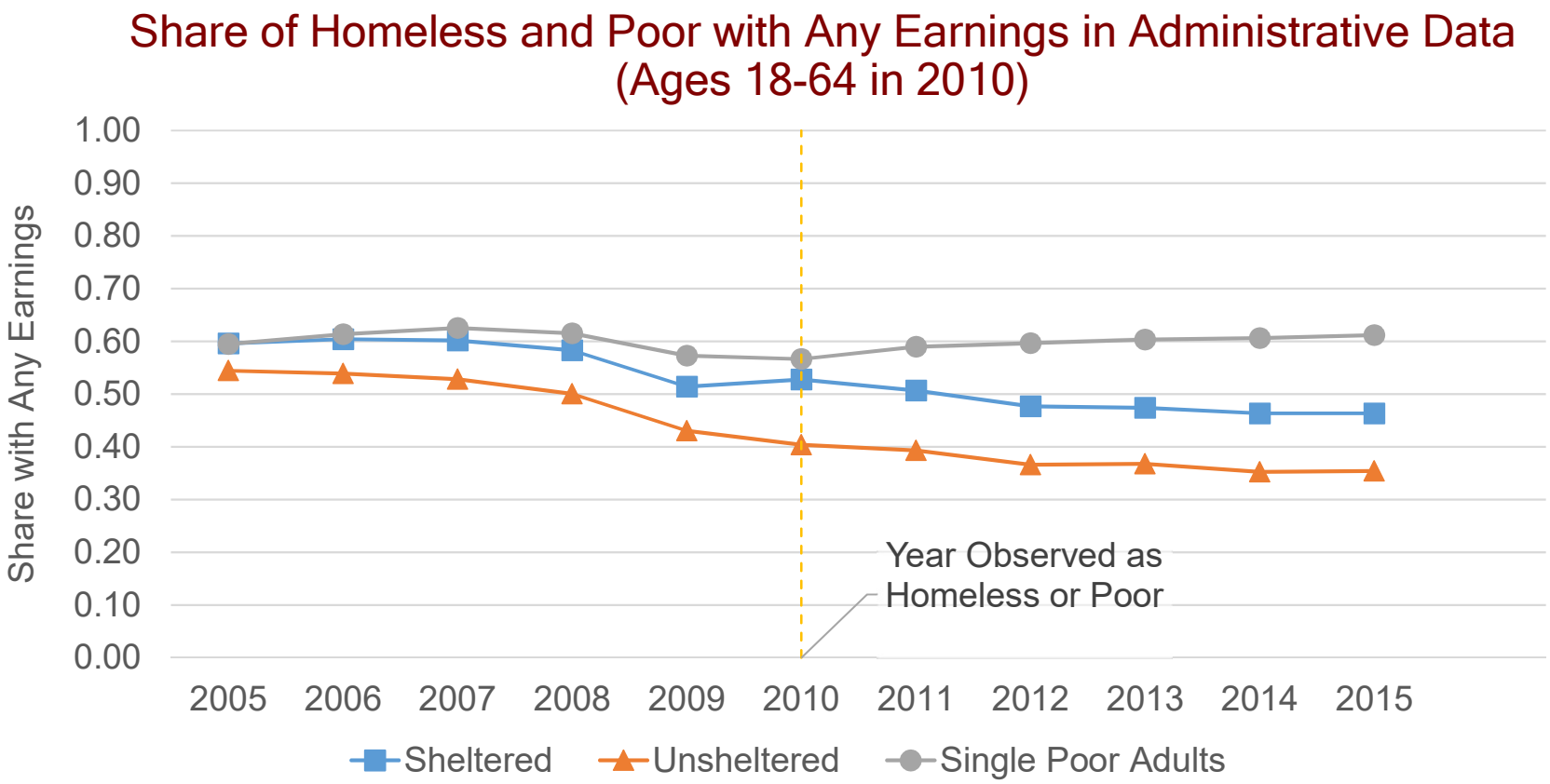
Benefit Receipt

Share of Homeless and Poor Receiving Any Benefits in Administrative Data (Ages 18-64 in 2010)



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

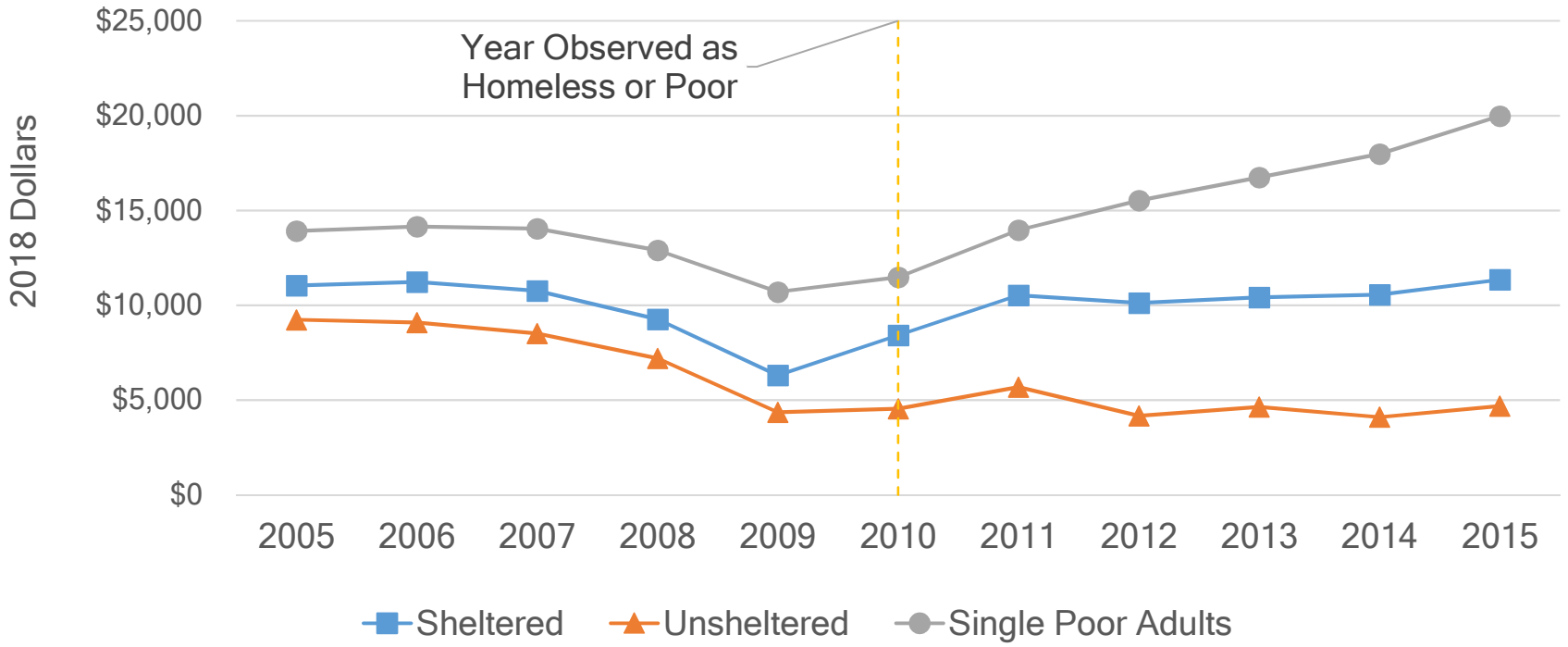
Share with Any Earnings



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

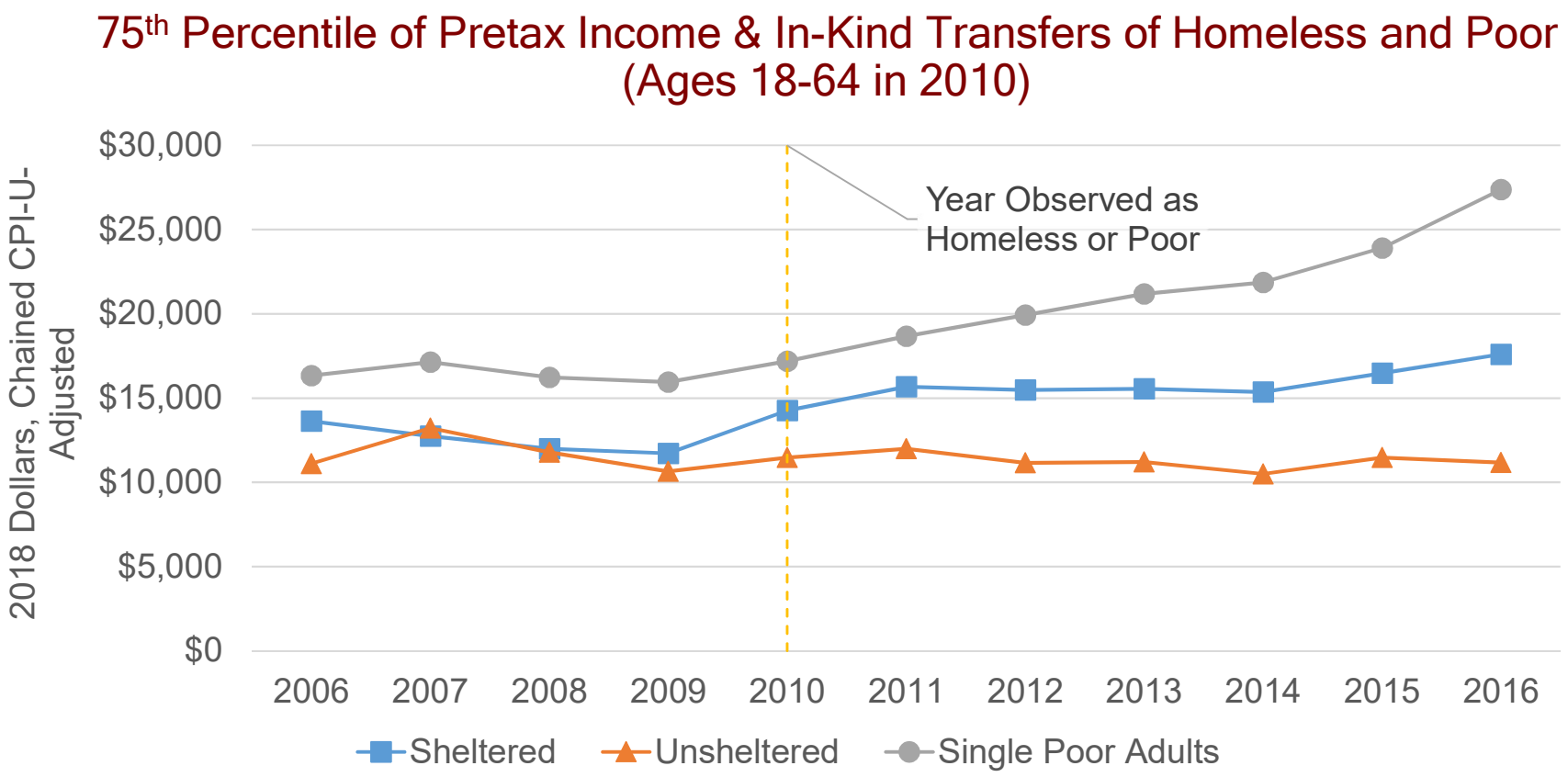
Pre-Tax Earnings (75th Percentile)

75th Percentile of Earnings of Homeless and Poor in Administrative Data (Ages 18-64 in 2010)



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

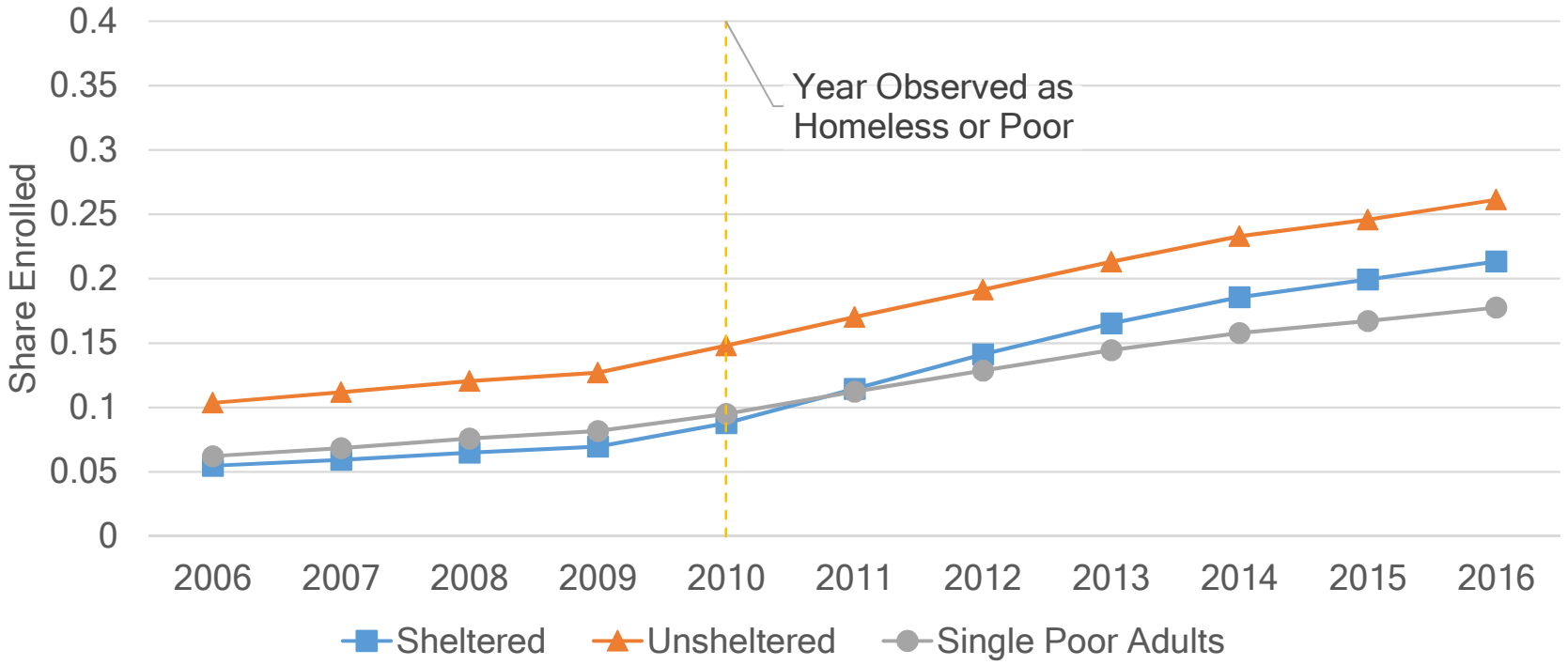
75th Percentile of Pretax Income + In-Kind Transfers



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Medicare Receipt

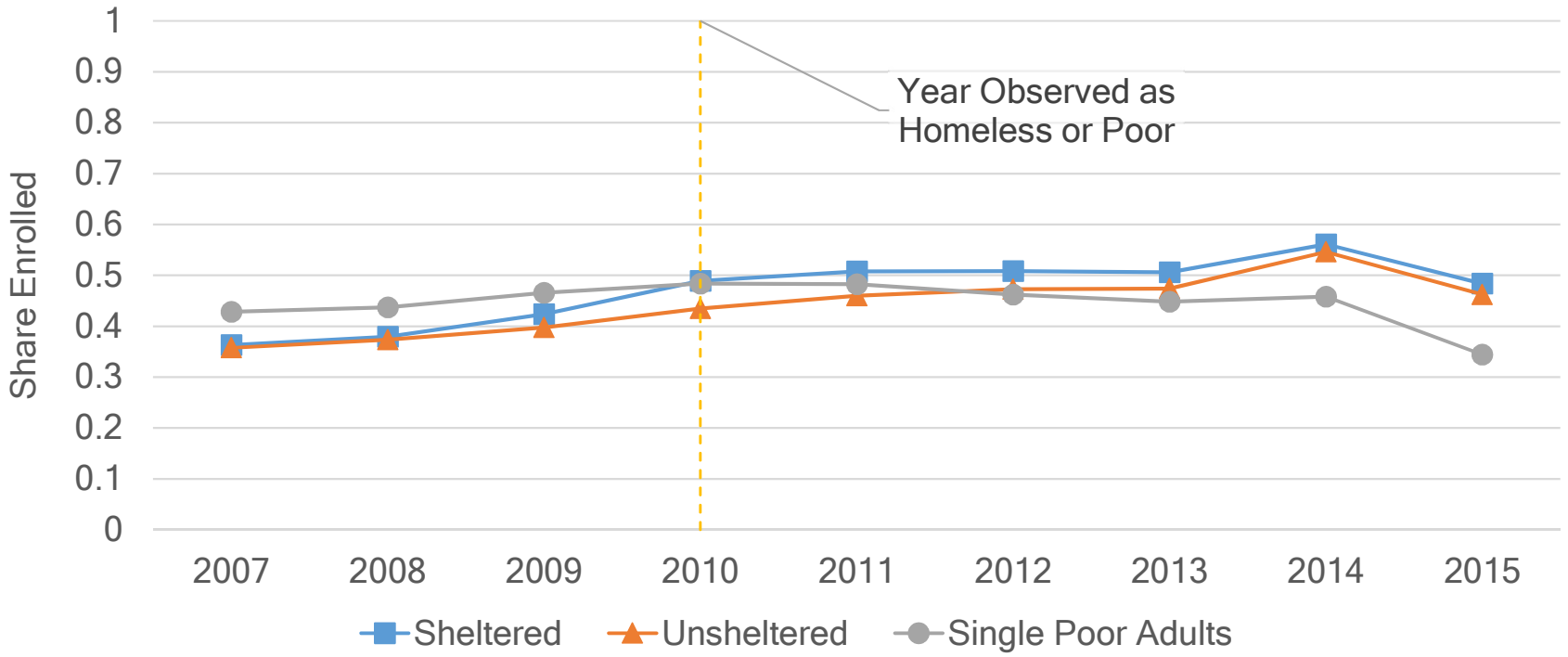
Medicare Part A or B Enrollment of Homeless and Poor in Administrative Data (Ages 18-64 in 2010)



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

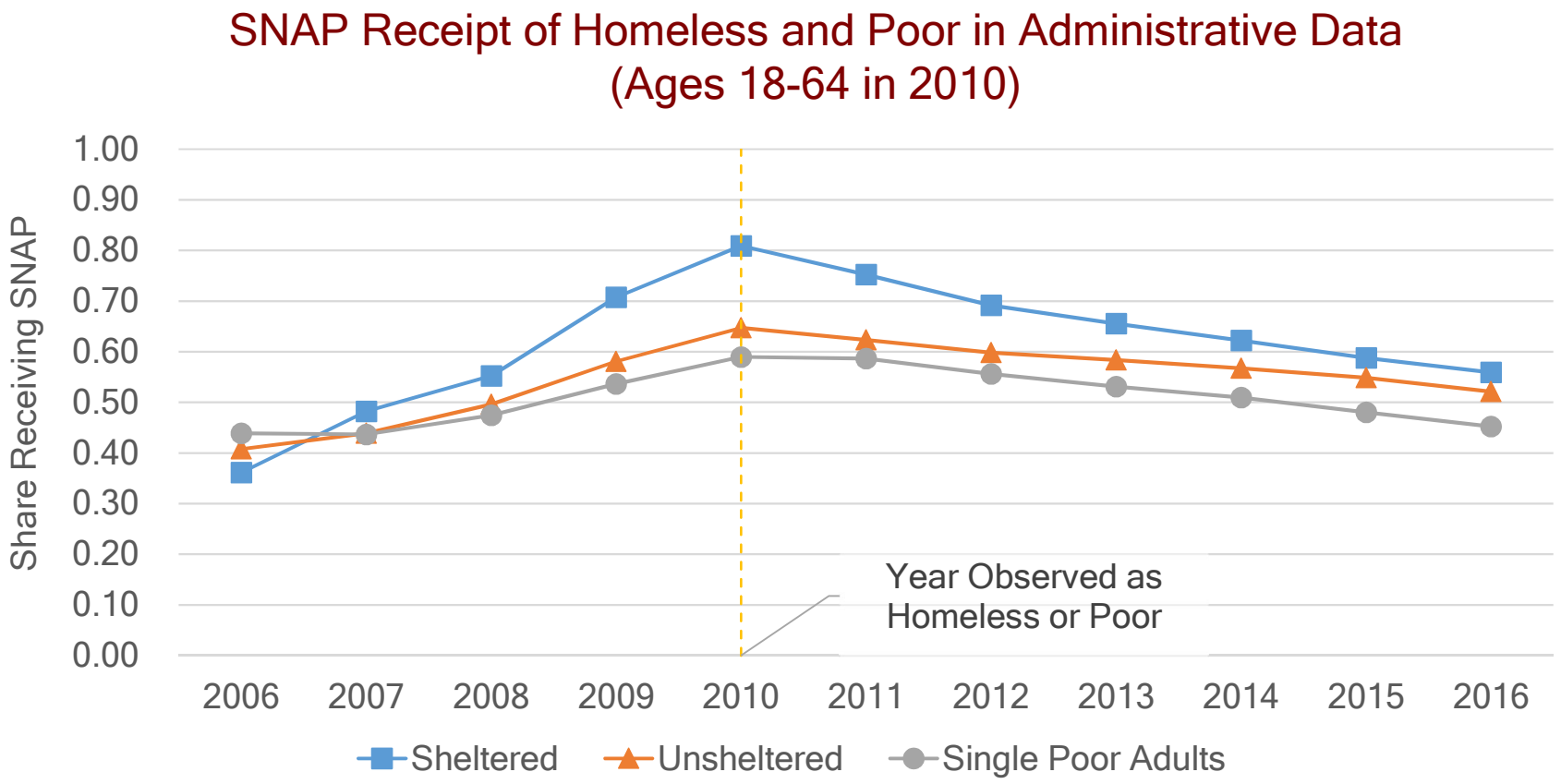
Medicaid Receipt

Medicaid Enrollment of Homeless and Poor in Administrative Data (Ages 18-64 in 2010)



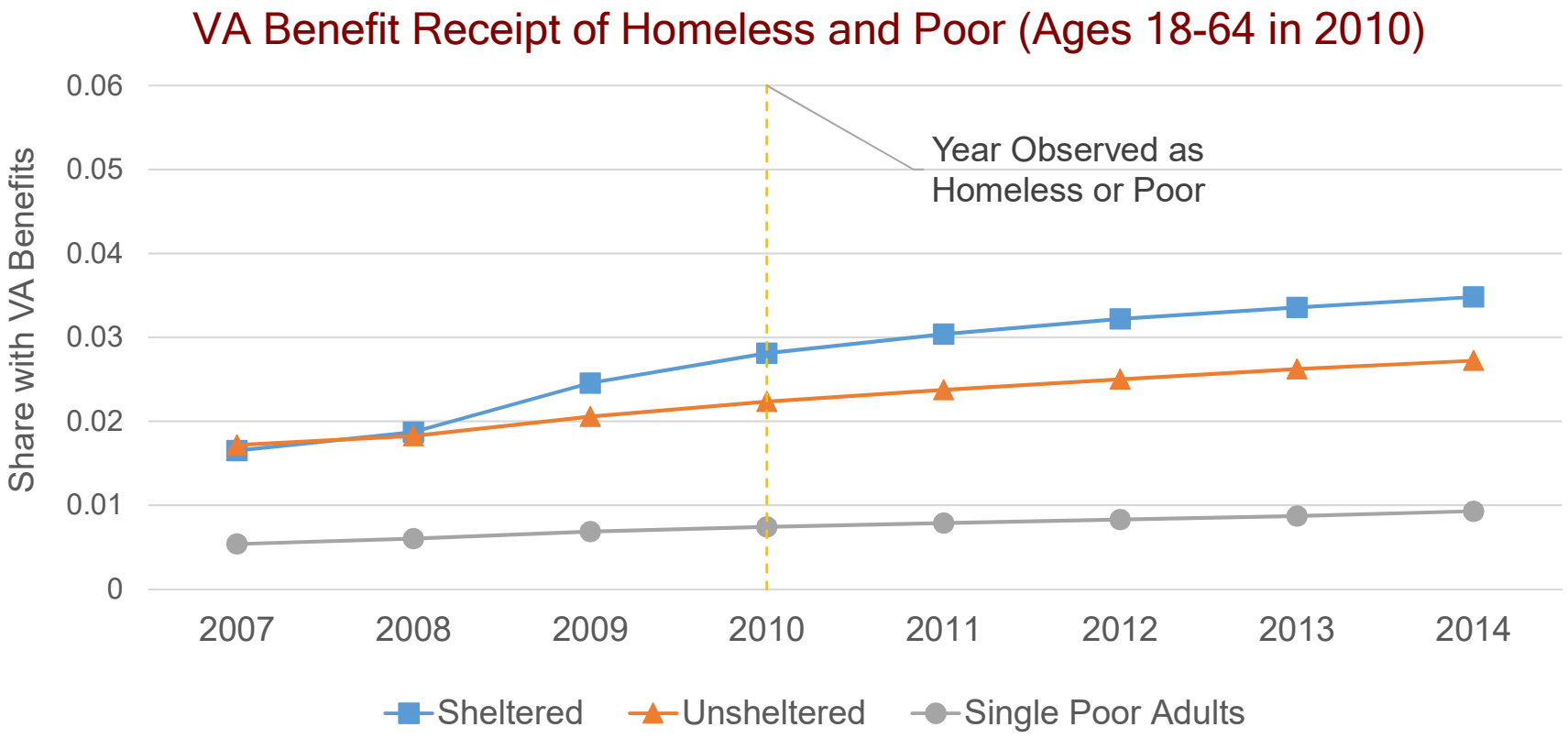
Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

SNAP Receipt



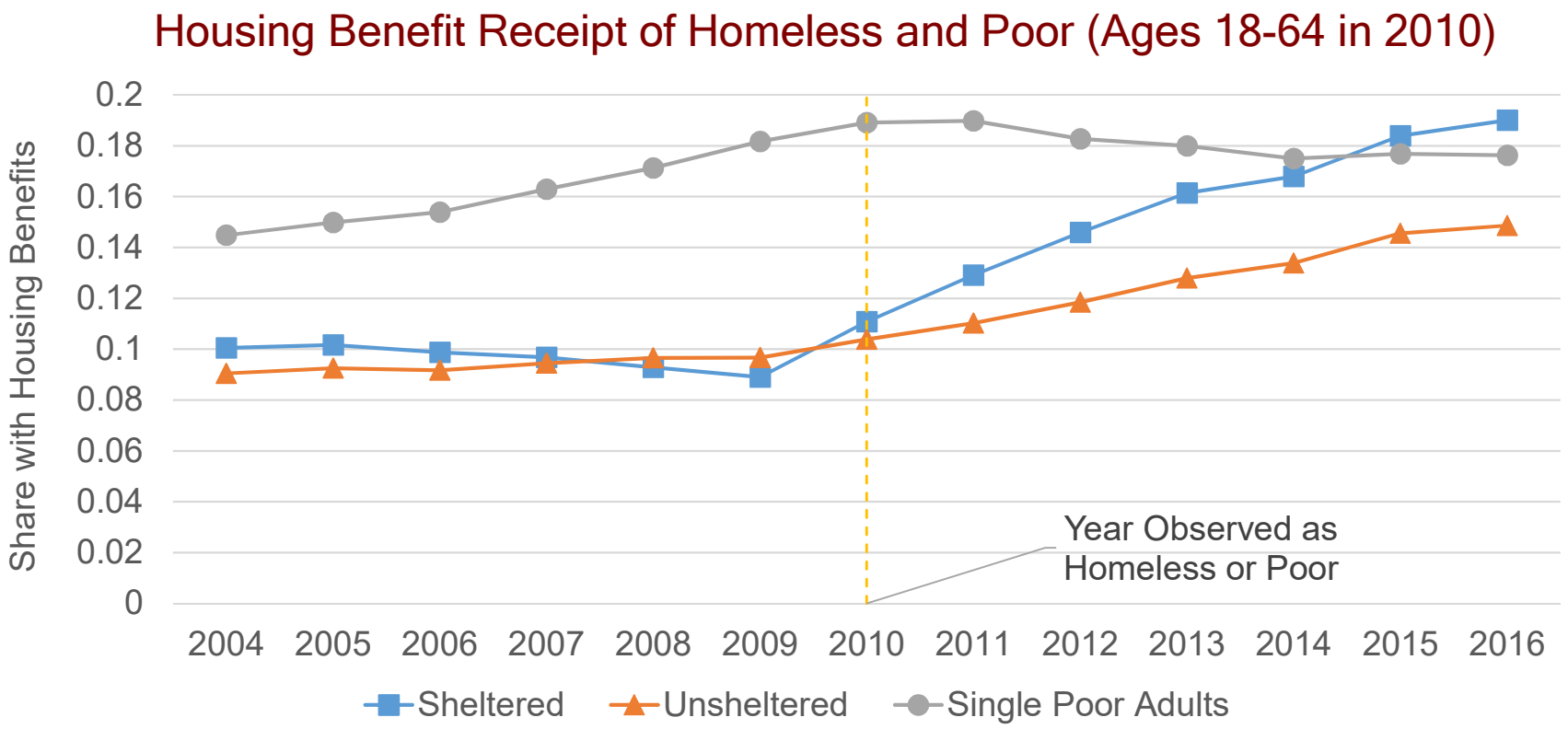
Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

VA Benefit Receipt



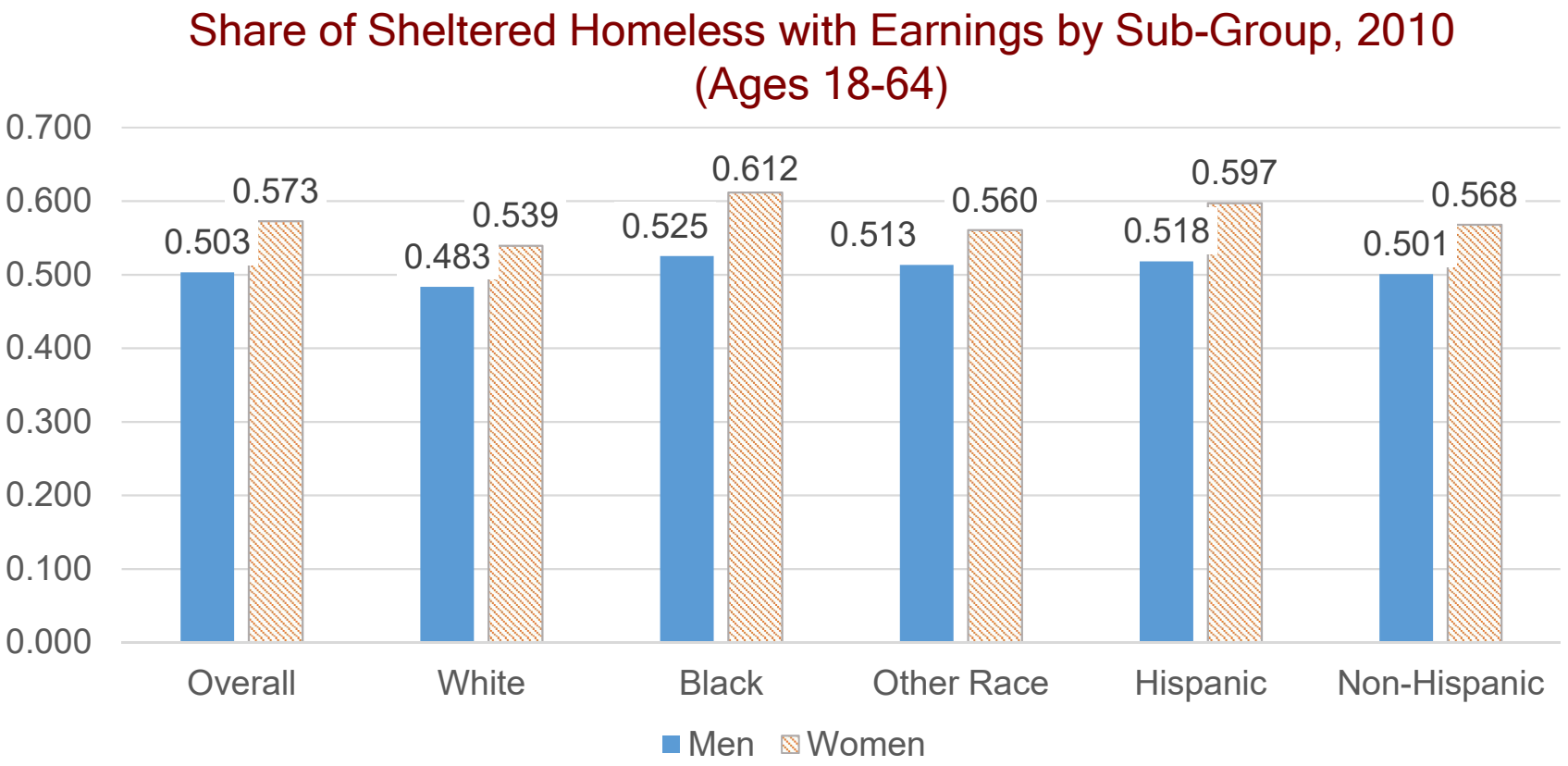
Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Housing Benefit Receipt



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

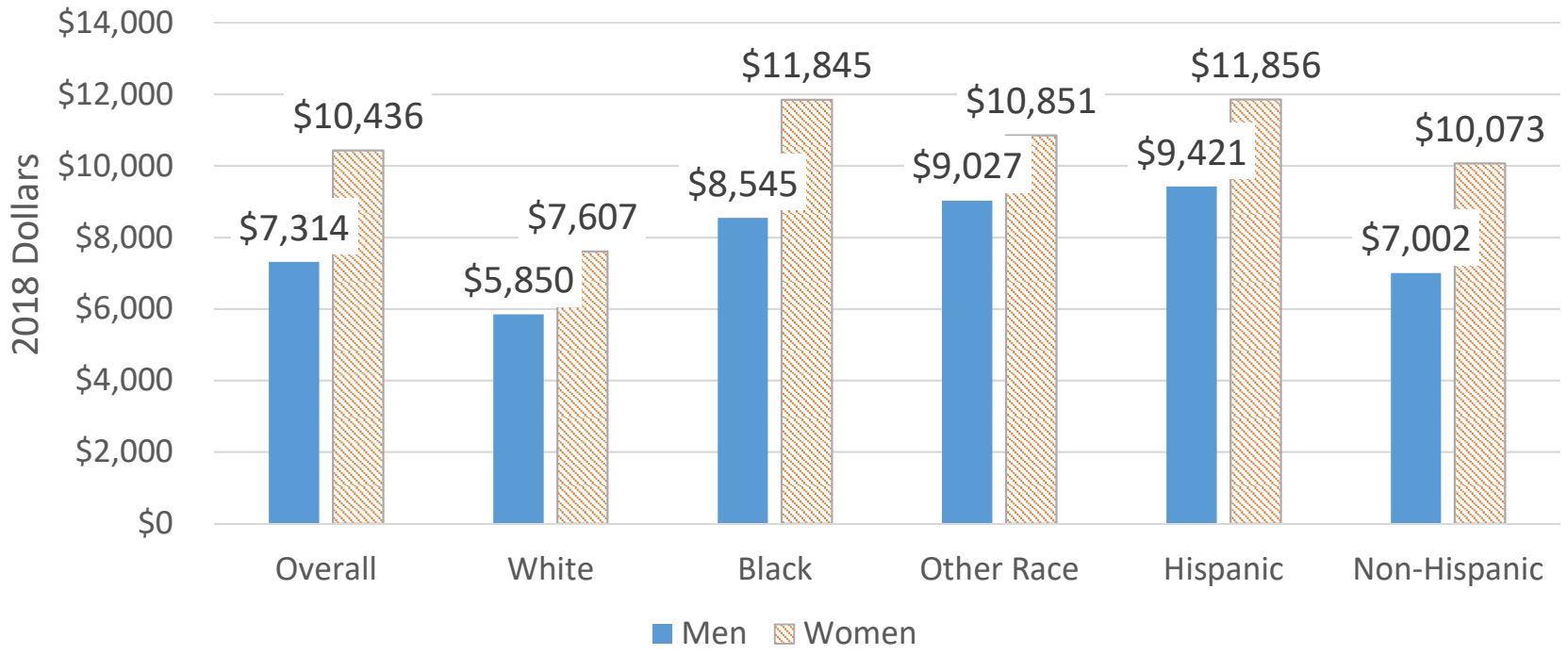
Sheltered Homeless with Any Earnings by Sub-Group



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Sheltered Homeless Earnings by Sub-Group

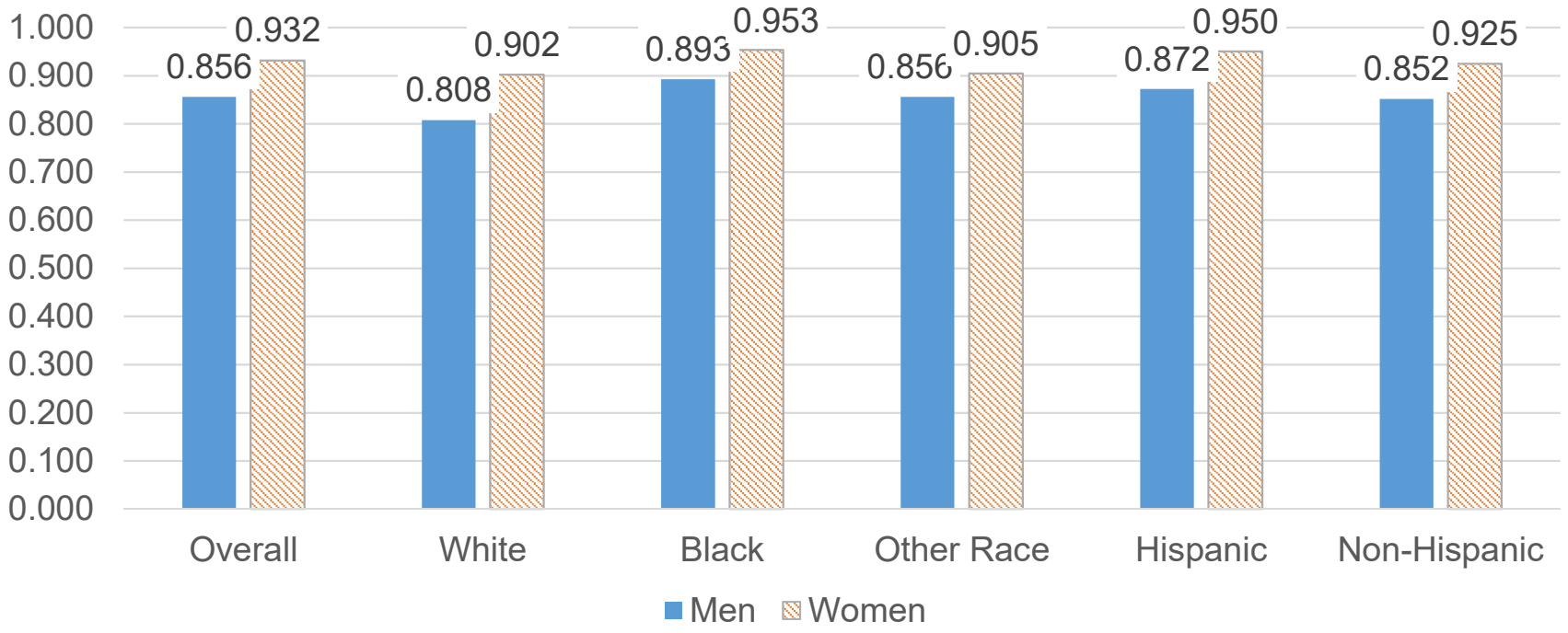
75th Pctle of Earnings for Sheltered Homeless in Administrative Data, 2010 (Ages 18-64)



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Sheltered Homeless with Any Benefit Receipt by Sub-Group

Share of Sheltered Homeless with any Benefit Receipt in Administrative Data, 2010 (Ages 18-64)



Sources: 2010 Decennial Census, 2019 Numident, 2003-2016 IRS 1040 Datasets, 2006-2016 W2 Datasets, 2006-2016 IRS 1099R Datasets, 2004-2016 HUD PIC & TRACS, 2007-2014 Administrative VA Dataset, 2006-2014 Medicare Datasets, 2007-2015 Medicaid dataset, SNAP datasets for Illinois (2009-2016), Indiana (2004-2016), New York (2007-2016), New Jersey (2007-2016), and Tennessee (2004-2016). All results were approved for release by the Census Bureau, authorization number CBDRB-FY21-045.

Rates of benefit receipt by sub-group

- In 2010, sheltered homeless have higher rates of benefit receipt than unsheltered homeless for all benefits except for HUD benefits and Medicare
  - Higher Medicare receipt for unsheltered reflects larger share receiving DI in Medicare (14.2 percent of unsheltered in 2010, compared to 8.4 percent of sheltered)
  - Higher HUD receipt for unsheltered may reflect priority status
- Consistently see greater earnings and higher rates of benefit receipt for women than men, conditional on race, Hispanic ethnicity, and sheltered/unsheltered status
  - VA benefits and DI benefits in Medicare are the only exceptions, with men having higher receipt rates than women

Overall Impressions of Results

- Moderate rates of geographic mobility
- High rates of cognitive and moderate rates of physical limitations
- Administrative data indicates that the homeless are among the most materially deprived Americans
- Lack of employment and reliance on safety net persistent
- Homeless almost all reached by some safety net program

Comparison to Previous Literature

- We find that blacks are over-represented among the sheltered homeless relative to their share among the poor and the overall population
  - Aligns with PIT estimates, the NSHAPC, and various localized studies (Burt et al. 1999, 2017-2020 AHAR, LAHSA 2020)
- We find that sheltered homeless individuals are more likely to be male, and that a similar (or somewhat smaller) share of the sheltered homeless are Hispanic relative to the overall population and the poor
  - Also consistent with prior work (Baker 1996, Burt et al. 1999, Conroy and Heer 2003, 2017-2020 AHAR)
- We also observe a decline in the share of the sheltered homeless who are veterans between our two ACS time periods (14.8% in 2006-2010, compared to 8.1% in 2011-2018)
  - This is consistent with the PIT's declining veteran share over time, a phenomenon that some have attributed to expanded government efforts to end veteran homelessness (AHAR 2018) or demographic shifts (O'Flaherty 2019)

Comparison to Previous Literature

- Where we disagree
  - Administrative data v. SNAP receipt self-reported in survey
    - 81% of sheltered homeless received SNAP in 2010 in the Decennial, as opposed to 64.8% in the 2011-2018 ACS
  - Employment among sheltered homeless compared to what previously thought
    - Administrative data indicates 53% employment in the previous year for sheltered homeless, as opposed to 40-45% in previous literature
- Where we bring new evidence
  - Sheltered homeless v. unsheltered in enrollment in safety net programs and income
  - Female and African-American incomes
- Longitudinal measures of income and program receipt indicate persistent disadvantage, some similarities to Metraux et al., recent CPL report

Implications for Poverty Statistics

- The homeless population is very small relative to the broader population in poverty
  - Including the ACS sheltered homeless in official statistics would increase the poverty rate by between 0.05 and 0.10 percentage points on a base of about 15 percent (15.1 in the 2010 CPS)
  - If we assume all those in the PIT count were poor (sheltered and unsheltered), we would add to poverty between 0.15 and 0.20 percentage points
- Effect on poverty statistics in certain geographic areas or for certain sub-groups (e.g. veterans, people with disabilities) may be more pronounced - a topic we will explore in future work
- Important to look at homeless population separately to understand the deprivation they face

Future Research

- Filling in some of Missing Information in Counts and Coverage, Demographics, Income and Program Receipt
- Transitions in and out of Homelessness
  - Length of homelessness and dynamics of housing status for the population
  - Demographic and economic factors associated with entry to and exit from homelessness
- Migration and Geographic Dispersion
  - Determinants of the geographic distribution of homelessness
  - Degree of mobility of people experiencing homelessness
- Mortality
  - Mortality differences between the sheltered homeless, unsheltered homeless, and non-homeless

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