January 16, 2013

The Age Structure of Contemporary Homelessness: Evidence and Implications for Public Policy

Dennis P Culhane, *University of Pennsylvania*
Stephen Metraux, *University of the Sciences in Philadelphia*
Thomas Byrne, *University of Pennsylvania*
Magdi Steno, *University of the Sciences in Philadelphia*
Jay Bainbridge, *Marist College*, et al.

The Age Structure of Contemporary Homelessness: Evidence and Implications For Public Policy

Dennis P. Culhane*
 University of Pennsylvania

Stephen Metraux
 University of the Sciences

Thomas Byrne
 University of Pennsylvania

Magdi Stino
 University of the Sciences

Jay Bainbridge
 Marist College

Amidst concern about the implications of an aging U.S. population, recent evidence suggests that there is a unique aging trend among the homeless population. Building on this, we use data from New York City and from the last three decennial Census enumerations to assess how the age composition of the homeless population—both single adults and adults in families—has changed over time. Findings show diverging trends in aging patterns for single adults and adults in families over the past 20 years. Among single adults, the bulk of the sheltered population is comprised of persons born during the latter part of the baby boom era whose high risk for homelessness has continued as they have aged. Specifically, the age group in this population facing the highest risk for homelessness was 34–36 (born 1954–1956) in 1990; 37–42 (born 1958–1963) in 2000; and 49–51 (born 1959–1961) in 2010. In contrast, among adults in sheltered families, there is no indication of any progressive aging of the family household heads. The

---

 *Correspondence concerning this article should be addressed to Dennis P. Culhane, University of Pennsylvania, School of Social Policy and Practice, 3701 Locust Walk, Philadelphia, PA 19104 [e-mail: culhane@sp2.upenn.edu].

modal age across the study period remains at 21–23 years of age. We consider
implications for the health care and social welfare systems, and policy responses
to homelessness.

Introduction

Homelessness in its contemporary form has been an issue since the early 1980s when, cast against a backdrop of a recession, the U.S. public became aware of a "new" homeless population comprised mainly of young and minority adults. An unprecedented number of these persons were homeless with families, but even those who were homeless individually were distinctly different demographically from their aging, mainly white "skid row" forbears (Baxter & Hopper, 1981; Lee, 1980). Three decades later, despite the volumes of research on homelessness, little of it has assessed how the characteristics of this population have changed over time.

In this study, we hypothesize that contemporary homelessness is a birth cohort phenomenon linked to the coming of age of the baby boom generation—an inquiry that is overdue given the length of time that contemporary homelessness has been an issue. Recent evidence suggests that the single adult homeless population is aging even after accounting for the aging of the overall U.S. population (Hahn, Kushel, Bangsberg, Riley, & Moss, 2006; Israel, Toro, & Ouellette 2010; Shinn et al., 2007). Amidst great concern about the impact of an aging populace on health care systems and social welfare programs (Anderson, Goodman, Holtzman, Posner, & Northridge, 2012), evidence of a separate aging trend in the homeless population merits closer investigation. This is especially true in light of a wealth of evidence showing that poor health and homelessness are closely intertwined (Baggett, O'Connell, Singer, & Rigotti, 2010; Breakey, 1997; Haddad, Wilson, Ijaz, Marks, & Moore, 2005; Hibbs et al., 1994; Hwang, 2001; Kerker et al., 2005; O'Connell, 2005) and that homeless persons, by virtue of their elevated use of health and behavioral health services, place increased demand on health care systems and providers (Kushel, Perry, Bangsberg, Clark, & Moss, 2002; Larimer et al., 2009; Salit, Kuhn, Hartz, Vu, & Mosso, 1998; Schanzer, Dominguez, Shrout, & Caton, 2007).

In looking at possible aging trends among the homeless population, we also investigate the possibility that aging trends are different for adults who are homeless accompanied by families and those who are homeless as individuals. Research has consistently demonstrated differences in the characteristics of people in these subpopulations (Burt & Cohen, 1989; Metraux & Culhane, 1999). Families presenting themselves as homeless are predominantly headed by single women with young children, while the single adult population is predominantly male (Burt et al., 1999; Metraux et al., 2001). Services providers implicitly recognize

the differences in these populations, as well as the different needs they have, with different services streams for each of these subpopulations. Similarly, we will parse the homeless population by household status as we examine aging trends.

Examining Contemporary Homelessness as a Birth Cohort Phenomenon

The 1980s saw a tremendous growth in homelessness, perhaps best illustrated by a substantial expansion in emergency housing capacity. Residential programs for homeless families and single adults almost tripled between 1984 and 1988, and doubled again between 1988 and 1996 (Burt et al., 1999; U.S. Department of Housing and Urban Development, 1984; U.S. Department of Housing and Urban Development, 1989). The most recent estimates from the U.S. Department of Housing and Urban Development indicate that there were about 650,000 Americans enumerated as homeless on a given day in January 2010 including 38% who were "unsheltered" or living on the streets, in parks, encampments, or other places not intended for habitation (U.S Department of Housing and Urban Development, 2011). Over the entire course of 2010, 1.6 million people stayed in a shelter or transitional housing program for the homeless. Approximately 14% of the sheltered homeless households in 2010 were comprised of families with children (accounting for slightly more than one-third of all homeless persons), and 86% of households were single adults (U.S Department of Housing and Urban Development, 2011).

This contemporary version of homelessness is distinctly different from the earlier "skid row" homelessness that was documented by sociologists in the 1950s and 1960s (Hoch & Slayton, 1989; Hopper & Hamburg, 1986). The skid row homeless population was defined primarily by their residence in transient housing, usually confined to a particular area of central cities. In contrast, the new homelessness has had no fixed spatial dimensions, and is defined by an outright lack of private accommodations. Put simply, the contemporary homeless have faced much more dispersed and starker sleeping conditions, relying on public spaces, makeshift arrangements, and open barracks-style shelters.

Accompanying this change in definition and circumstances, the people who experienced homelessness were also found to be quite distinct. Researchers of skid row found that the population consisted almost exclusively of older, single white male households, with three-quarters of the men over the age of 45 (Blumberg et al., 1960). However, a 1989 survey of the homeless population in Philadelphia found a near inversion, with 88% being African American, and more than 75% under the age of 45, including 18% who were children under the age of 18 (Ryan, Bartelt, & Goldstein, 1989). Even the single male households, taken separately, were substantially younger than the skid row population.

Whatever the other dynamics, there was clearly a demographic transition associated with the emergence of contemporary homelessness in the 1980's, with

the "new" homeless drawing largely from those in the "baby boom" generation that included persons born between 1945 and 1964. Some researchers argued that the growth in the young adult population associated with the baby boom led to a corresponding increase in the proportion of people exposed to acute housing problems, including homelessness (Bingham, Green, & White, 1987; Robertson & Greenblatt, 1992; Timmer, Eitzen, & Talley, 1994; Wagner, 1993; Wright, 1989). Others argued that the homelessness problem was a result of both the larger number of exposed persons associated with the baby boom and a new set of challenging social and economic circumstances that coincided with the boomers' coming of age, such as deindustrialization, deinstitutionalization, residential segregation, a growing illicit drug economy, and reduced social welfare protections (Baum, Burnes, & Lamb, 1993; Jencks, 1994; Massey & Denton 1993; O'Flaherty, 1996; Rosenthal, 1989; Rossi, 1989; Wright, Rubin, & Devine, 1998).

A number of factors have made it difficult to assess whether baby boomers as a group faced an increased risk of homelessness. The changing definition of homelessness and the absence of a comparable type of condition in the immediate years and decades preceding the 1980s meant that the rate of homelessness among young adult baby boomers could not be readily compared to preceding cohorts in the same age period. Furthermore, cohort effects could not be ascertained due to the lack of detailed, longitudinal data on any homeless population that would permit examining age-specific effects over a multi-year period.

For this study, we draw on two different data sets that follow homeless populations over a 20-year period to examine changes in their age distributions. We look at this dynamic separately among single adult and family households, and examine two possible frameworks to fit the dynamics of these age structures over time. The first is that homelessness most closely resembles a birth cohort phenomenon, which would show a pattern similar to those found by Hahn et al. (2006), where the average age of homelessness increased over time. Such a pattern would underscore the role and relative importance of the baby boom and its impact on homelessness, as well as the plausibility of related interpretations of these effects. It would also have implications related to providing services to an aging population and shifting more resources to targeting this age cohort as a means of reducing and preventing homelessness (Israel, Toro, & Ouellette, 2010; Shinn et al., 2007).

Alternately, if the age distributions in the homeless population remain relatively static over time, then homelessness would more reflect a period phenomenon. Here progressive birth cohorts are at elevated risk for homelessness as they pass through a specific age period. Homelessness as a period phenomenon would mean that instead of following a specific birth cohort (in this case baby boomers), homeless services would be best off continuing to focus on the demographic groups and issues that were recognized as correlates of homelessness when the problem first emerged over 30 years ago.

Two criteria would need to be present in order to support the existence of a cohort effect. First, the age distribution in the homeless population would need to get progressively older with time, showing evidence of a cohort moving through the system. Second, any aging of the homelessness population would need to be distinct from the more general age distribution of the U.S. population, which has been aging as well. Assessing the extent to which these criteria are present constitutes the main component of this study's analysis.

Data and Methods

Data for this study came from administrative records on shelter use in New York City and from the nationwide shelter and general population enumerations in each of the last three decennial Census enumerations in the United States. Upwards of 85% of New York City shelter beds are funded or operated by the municipal Department of Homeless Services (DHS). One byproduct of the centralized nature of this system is that DHS has been able to maintain comprehensive records on persons and families staying in this shelter system since 1987. This offers a rich database from which to explore trends, dynamics and determinants of public shelter use (Culhane, Dejowski, Ibanez, Needham, & Macchia, 1994; Culhane, Metraux, & Wachter, 1999). Although many cities have more recently followed its lead, no other jurisdiction has amassed such a comprehensive and continuous homeless services database dating back that far. This database allows for the creation of annual incidence and prevalence cohorts, grouped by age and sex, while also allowing for the identification of whether persons entered shelter as a single adult or as part of a family.

As part of their decennial censuses in 1990, 2000, and 2010, the U.S. Census Bureau conducted "S-Night"—an enumeration of homeless persons staying in shelters and in "street" locations on a single evening. The Bureau has repeatedly emphasized that S-Night enumerations are not meant as comprehensive counts of the entire homeless population, as the 1990 count quickly became controversial for the methodology used to count unsheltered homeless persons and for its apparently low counts in numerous jurisdictions (Martin, 1992; Wright & Devine, 1992). Despite problems with its street enumeration, the 1990 S-Night shelter count is considered to have provided an accurate count of the sheltered population (U.S. General Accounting Office, 1991) and when the Bureau implemented another homeless count as part of its 2000 and 2010 enumerations, it employed largely the same methods for enumerating the sheltered population while changing its enumeration strategies for the street population (U.S. Census Bureau, 2001). This study uses the data from the shelter portion of the nationwide 1990, 2000, and 2010 S-Night enumerations (i.e., not the street enumeration) for males only, broken down by age, in special tabulations provided by the U.S. Census Bureau as well

Table 1. Aggregated Population Sizes for Groups that are the Bases for Age Structure Analyses

	1988	1990	1995	2000	2005	2010
DHS – New York City						
Single adults	35,644		19,433	19,333	22,892	20,077
Adults with families	12,495		12,877	12,145	18,852	
Census Bureau – US						
Adult homeless males		104,010		82,420		108,650
Total adult males		88,655,140		100,994,367		113,836,190

Note. As the U.S. Census did not enumerate homeless adults by household status (i.e., single adult or adult with family), adult male homeless persons were used as a proxy for single adults, as men are homeless almost exclusively as individuals and the single adult homeless population is predominantly male.

as comparable age-stratified counts for the overall U.S. population from the three decennial enumerations.

Sheltered males here is a proxy for single adults, as the Census shelter enumeration did not distinguish between the family or single adult household status of the persons counted. Given that the preponderance of homeless families are headed by young single females, the data on total females would be heavily representative of heads of families and would obscure the pattern observed for single females. Correspondingly, because the homeless adult male population is known to be very heavily comprised of single adult households, the male data better reflect the age distribution of the single adults (Burt et al., 1999; Rog & Buckner, 2007).

These data are broken down by age, year in shelter, and (in New York City) shelter type and then compared using a variety of descriptive means to identify trends in age composition for adults who are homeless. Data are presented both for New York City and the United States as a whole, using DHS and Census data, respectively, in order to have two independent means to gauge any trends that are found. For New York City, data were available to present results in an annual time series from 1988 to 2010 for single adults, and 1988 to 2005 for adults in families. Census data comes from the latest three decennial census enumerations, occurring in 1990, 2000, and 2010.

Table 1 reports the aggregate sizes of the Census and DHS sheltered homeless populations in the years for which age distributions are reported here. In addition, the overall population sizes for the U.S. adult male population, derived from the last three decennial enumerations, are also presented as they were used as denominators for relative risk calculations. The size of the sheltered populations, both in NYC and nationwide, is large enough so that even small differences in the age distributions that were examined will be statistically significant. Given this, results from tests of difference are not reported.

Finally, in anticipation of a cohort effect, the roster of unaccompanied DHS shelter users from 1988 were matched with similar rosters from subsequent years to assess the extent to which, if an age cohort were to be identified, whether there
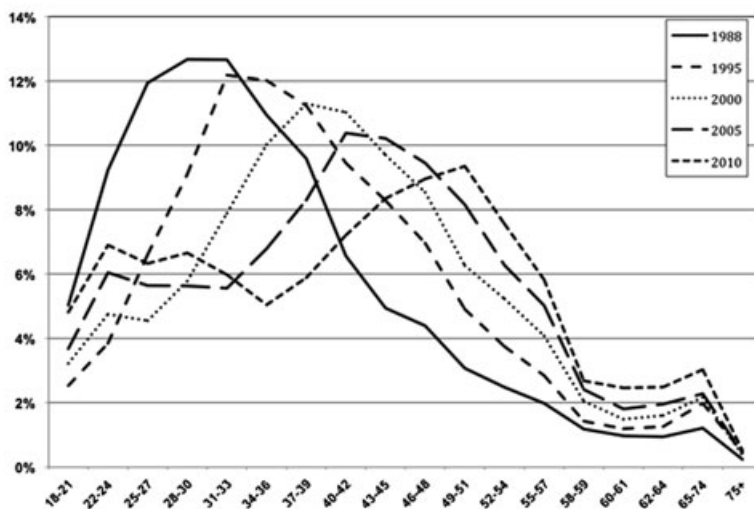
Fig. 1. Age distribution for male prevalence cohorts in NYC single adult shelters.

was turnover in personnel in that cohort over time or, alternately, whether that cohort consisted largely of the same, long-term shelter users.

Results

Looking at descriptive measures of males staying in NYC single adult shelters (i.e., prevalence populations) for 1988, 1995, 2000, 2005, and 2010 suggests that shelter use among this population is largely a cohort-related phenomenon. This is clearly represented in Figure 1, which shows the age distributions in each of these 5 years. With each year examined, the age groups that are most represented in the prevalence populations get older, and encompass individuals born during the latter half of the baby boom, or roughly between 1954 and 1967. In addition, while the age distribution is consistently concentrated among individuals in that age bracket over time, the distribution flattens somewhat in each successive year, suggesting that the age distribution has become more evenly distributed on the whole over time.

Figure 2 shows the comparable distributions from the decennial censuses for all sheltered males in the United States in 1990, 2000, and 2010. Again, the population shifted rightward over time, as the population aged from 1990 to 2000 to 2010. Similarly, the peak age groups were consistently associated with the cohort born between the mid-1950s and the mid-1960s. An increasing proportion of homelessness among persons under 25 is noteworthy in the 2000 Census data.
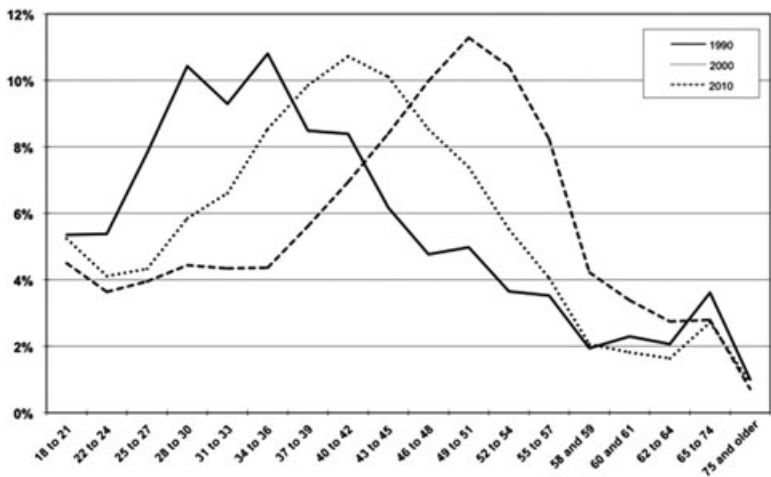
Fig. 2. Age distribution for male shelter users in the U.S., 1990, 2000, and 2010 (U.S. Census).
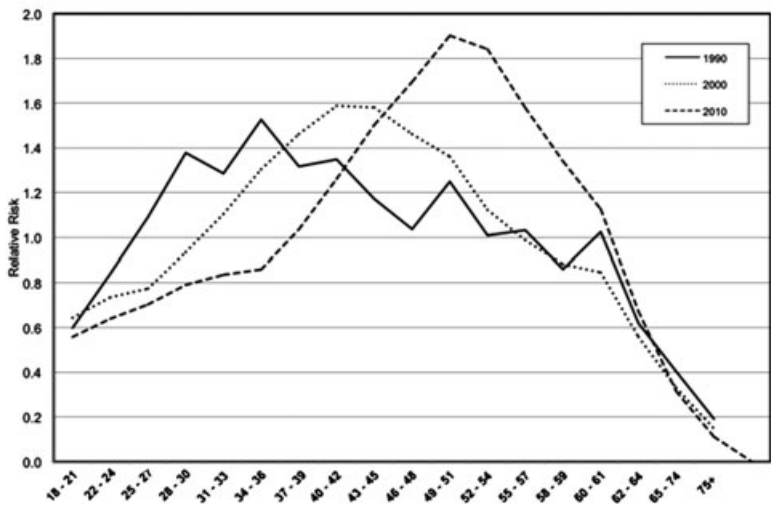

Fig. 3. Relative risk, by age, for shelter use among adult males in U.S.: 1990, 2000, and 2010 (U.S. Census).

While this trend fades somewhat in the 2010 Census data, it was also observed in the latter years of the New York City data.

Figure 3 uses relative risk ratios to compare the sheltered homeless male population to the U.S. male population as a whole in 1990, 2000, and 2010 to
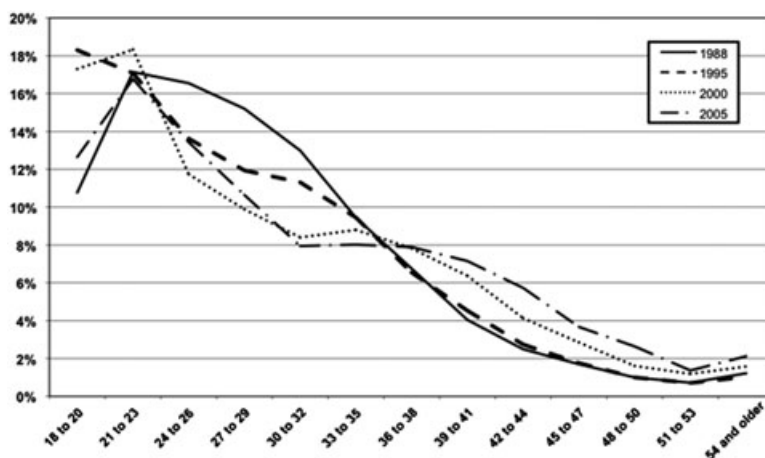
Fig. 4. Age distribution for four prevalence cohorts of heads of household in NYC family shelters.

assess the level of excess risk for homelessness by age group. The data show an elevated risk for homelessness in 1990 that peaks for those in the 34–36 year old age group (born 1954–1956), and which is higher than expected on a sustained basis for the group aged 25–45 (born 1945–1965). By 2000, a higher and sustained risk for shelter use occurs among those aged 31–51 (born 1949–1969), and peaks at 1.6 times the relative risk for persons aged 37–42 (born 1958–1963). Risk for shelter use shifts to the right again in 2010, with a higher than anticipated risk of shelter use among persons in the 37–61 age bracket (born 1949–1973), and a peak relative risk ratio of 1.9 for persons aged 49–51 (born 1959–1961).

Amidst this apparent cohort effect among unaccompanied DHS shelter users, as time progressed declining proportions of the persons in this age cohort had records of shelter use in earlier years. Based on these results (not shown here), it would appear that the aging of the single adult homeless population does not reflect the aging of a specific group of individuals who are persistent shelter users over time. Instead, those in the highest risk age cohort who are homeless at any given point in time appear to be drawn from a much larger group of persons in that cohort.

Finally, Figure 4 focuses on families, showing the age distribution for heads of families who stayed in a NYC family shelter in 1988, 1995, 2000, and 2005. The age distributions offer a striking contrast to what was observed in Figures 1–3: the modal age throughout the various observation periods remains persons 21–23 years of age. In 1988, those households were born between 1965 and 1967, and by 2005, were born between 1982 and 1984. While the age distributions have tended to straighten or become more linear over time, there is no indication of any

progressive aging of the family household heads. In addition, although children are not included in this age distribution, the predominant sheltered family in all years consists of young parents with preschool age children.

Discussion

This study found a cohort effect among the homeless population that centered on the latter half of the baby boom generation as it aged, and that persisted even after taking into account the more general aging of the U.S. population. Such an explanation is different than, but not mutually exclusive from, examinations of the specific dynamics which explain the increased risk among this cohort, be it specific precipitating factors (Shinn et al., 2007), or broader macro-economic trends (Israel et al., 2010). While dynamics and precipitants of homelessness may have changed over three decades of contemporary homelessness, this study shows that (among single adults) there has been one cohort of persons who has consistently remained at highest risk of homelessness.

The results also indicate that poor single parent (mostly female headed) families have consistently faced an increased risk of homelessness when the mothers and children are relatively young. The peak period of risk for the mothers has been between the ages of 21 and 24, a time when they were likely to be parenting infants and toddlers. Taken together, the risks for homelessness in the initial years of contemporary homelessness most affected adults of a similar age (regardless of household status) and might well have initially been driven by similar social and economic factors. However, after this initial and coincident "burst" of public destitution, these household types appear to have diverged, as the cohort from which the young single adults were drawn has had a sustained risk as they have aged, while the problem among parents remained linked to households in the early parenting years.

While descriptive, these findings nonetheless provide a highly compelling portrait of both the course of homelessness over the past 30 years and its likely future trajectory. Looking backwards, the results presented here provide some additional insight about what factors might have contributed to the genesis of contemporary homelessness. Looking forward, the findings have some important implications for the health care and social welfare systems in the coming years.

In considering how the age composition of the single adult homeless population has changed over the past three decades, a number of plausible explanations could be offered as to the economic and social factors that may have been associated with disproportionate housing instability and homelessness among adults from the late baby boom cohort. First, economic recessions in the late 1970s and early 1980s meant that late baby boomers came of age in a period characterized by depressed wages for unskilled workers, higher rates of youth and young adult unemployment, and rising rental housing costs. Indeed, evidence that those who

graduated college during this time period experienced negative labor market outcomes over the long-term (Kahn, 2010) underscores the risk for housing and labor market problems that members of this age cohort encountered. In addition, participation in the illicit drug trade, particularly in the context of the proliferation of crack cocaine, and the attendant risks for addiction and involvement in the criminal justice system may also have increased the problems of this cohort, placing an even greater strain on their attachment to the labor market and their social ties, while also exposing them to violence and heightening the risk for additional health and social problems. These conditions could have created an underlying vulnerability that resulted in a sustained risk for housing instability over the ensuing decades.

Finally, compounding these risks, social welfare expenditures were under pressure throughout the 1980s and 1990s, as anti-welfare sentiments and restrictions on eligibility and benefit growth became politically popular. The safety net was further stretched in the 1980s because baby boomer-related demand for services among poor and dependent young adults increased substantially. For example, the number of people with schizophrenia grew dramatically in the late 1970s and early 1980s due to the latter half of the baby boomer cohort passing through the primary risk period (ages 18–27) (Kramer, 1980; Kramer, 1983). Of course, these explanations are as yet hypothetical, and need to be investigated by future research.

Similarly, although additional research is needed to test specific hypotheses, findings presented here suggest that the circumstances of homeless families were quite different. The young parents (mostly mothers) who became homeless in record numbers during the 1980s went on to be somewhat upwardly mobile, as indicated by reduced rates of homelessness as they aged. One possible explanation for this is that labor market opportunities increase for parents as their children reach school age and as childcare responsibilities are assumed by schools. Expanding low and semi-skilled labor market opportunities may also have favored women over men in this period, an explanation that is consistent with research showing that young women, including African American women, have faced improved job prospects in the new service economy, relative to their male counterparts (Autor, 2010; Blau & Kahn, 2000; O'Neill & Polachek, 1993; Taylor et al., 2010).

That said, it is possible that some mothers who did not achieve upward mobility may have had their children removed from care and joined the ranks of the single adult homeless population. While the data presented here are limited in that they do not provide information about the single adult homeless female population, it is unlikely that transitions to the single adult homeless population are a large factor in explaining reduced rates of homelessness among female heads of households as they age. Thus, in contrast to single homeless adults, the persistence of homelessness among family households is likely primarily a product of the continued disadvantage experienced by young, single parent families who

cannot afford market rents and daycare on minimum wage incomes or public assistance benefits, both of which declined substantially in real terms from 1975 to 1990 (Hoynes & MaCurdy, 1994; Moffitt, Ribar, & Wilhelm, 1998).

Looking to the future, the observed trends in the age composition of the homeless population have a number of important implications for the health care and social welfare systems. First, the aging of the single adult homeless population raises serious questions about the near future of those who are currently homeless and the age cohort from which they come. With this population heavily concentrated in the 46 to 57 age range and evidence showing the average life expectancy of homeless single adults to be 64 years, (Metraux, Eng, Bainbridge, & Culhane, 2011) aging related health needs are likely to become a substantial problem among the single adult homeless population in the very near term. Indeed, a recent study found that, when compared to members of the general population aged 50 and above, homeless adults in the same age bracket had significantly higher rates of a number of geriatric symptoms including difficulty performing activities of daily living (ADLs), mobility and cognitive impairment, frailty, and depression. (Brown, Kiely, Bharel, & Mitchell, 2012). Such findings highlight how the aging of the single adult homeless population is likely to be accompanied by complicated challenges associated with increased morbidity, disability and medical frailty among persons in this population.

These health problems mean that the health care providers who serve homeless populations will increasingly be required to provide care for chronic conditions. New models of care may be needed to manage such chronic conditions so as to prevent homeless individuals from requiring expensive long-term care in nursing homes or other settings. Similarly, facilities providing long-term care may need to adapt practices to serve formerly homeless individuals who may have significant behavioral health needs. In short, the increased demand for new types and longer-term health care among single homeless adults and the accompanying housing needs of this aging population will soon be a potentially unique and major issue for communities, as well as health care providers and payers.

The housing needs of this population undoubtedly merit close consideration as well. As the single adult homeless population ages, an increasing number of individuals will become eligible for mainstream federal, state, and local programs that provide subsidized housing, care in an assisted living facility, or other forms of housing assistance for low-income elderly adults. While a certain proportion of the single adult homeless population will have their housing needs met through such mainstream forms of support, the homeless assistance system will nonetheless also need to be prepared to address the housing needs of an aging homeless population. This may include the targeted provision of permanent supportive housing (PSH)— defined broadly as subsidized housing matched with ongoing supportive health and social services—towards particularly high need individuals who may be likely to stay in hospitals for extended periods or require expensive nursing home care

in the absence of a PSH placement. In addition, our finding that the aging of the single adult homeless population is primarily the result of a large number of persons from the same age cohort cycling through homelessness over time, suggests that the homeless assistance system will face an increased need for less intensive forms of housing assistance that are suited to the needs of older persons experiencing short-term housing crises. Therefore, it is important that the emerging shift in homeless assistance services towards prevention and rapid rehousing be accompanied by the development of best practices for serving older persons in such program frameworks.

At the other end of the developmental spectrum, there is some indication from the findings presented here that a young single adult cohort may be growing among the homeless population. While this trend was less apparent in the 2010 Census data, and although their rates of homelessness remain below the population average, their numbers bear watching in the coming years, as many in this cohort face increased labor market problems associated with the recent, deep recession and resulting high youth unemployment. Without adequate attention to their labor market needs and other social welfare concerns, another cohort of young adults with sustained risk for homelessness may emerge.

Among families, the results suggest a continuing need to address the housing affordability problems that are particularly acute for young families with preschool children. Programs should pay special attention to the developmental stage of these families, in which the mothers may have little labor market experience and need parenting supports, and in which the children are presumably in need of engagement in early care and education programs. High rates of subsequent foster care placement and under-enrollment of homeless children in early care and learning programs suggest the need for such supports (Perlman & Fantuzzo, 2010). While families do not appear to face a risk for homelessness that persists over time, many may use homelessness assistance to transition out of their parental households and/or into independent living. Policymakers should consider more systematic, normalized, and community-based interventions that target this development pathway for poor mothers with young children. The shelter system has in some ways assumed this role, but at significant cost to society and to the families and children.

In closing, this study has several limitations that are important to acknowledge. First, the study is limited in that it is descriptive and did not systematically investigate the causes or consequences of the age structure of contemporary homelessness. While the discussion here offers some suggestions as to both the sources of homelessness and the need for policy responses moving forward, these are suggestive and are not based on an empirical test of these associations. Future research should attempt to identify data that might better illuminate the excess risk for homelessness among the latter half of the baby boom population identified here and among young mothers with children.

Second, limitations to the Census data used in this study made it impossible to distinguish between the sheltered single adult female population and female heads of households in families residing in shelter. As a result, this study was unable to examine the age distribution of single homeless females. Along the same lines, this study did not examine the age distribution of homelessness among children and adolescents and how it has changed over time. Given that our intent was primarily to examine changes in the age distribution of the homeless single adult and family populations and to identify any differences between these two groups, an analysis of age trends among children and adolescents was beyond the scope of this study. However, it bears mentioning that while our study suggests that risk of shelter use among single adults is highest among those in the latter part of the baby boom age cohort, when considering the overall population, children under the age of five have been shown to have the highest risk of homelessness (Culhane & Metraux, 1999).

Third, this study was unable to examine the age distribution of the unsheltered homeless population, as data that would permit such an analysis were unavailable. As members of the single adult homeless population are more likely than homeless families to be in unsheltered locations, the inability to include the unsheltered homeless population presents more of a limitation for this study's analysis of the age distribution of the adult male homeless population. While there is little evidence to suggest that individuals and households in unsheltered locations are characteristically different from their sheltered counterparts, examining the age distribution of the unsheltered homeless population—including how it might differ from the sheltered population—is an important goal for future research. Studies should also explore which potential societal interventions may be necessary to deal with the immediate needs of these households, and which ones might achieve success in preventing homelessness among other cohorts in the future.

References

Anderson, L. A., Goodman, R. A., Holtzman, D., Posner, S. F., & Northridge, M. E. (2012). Aging in the United States: Opportunities and challenges for public health. *American Journal of Public Health*, *102*(3), 393–395.

Autor, D. (2010). The polarization of job opportunities in the US labor market: Implications for employment and earnings. *Community Investments*, *23*(2), 11–41.

Baggett, T. P., O'Connell, J. J., Singer, D. E., & Rigotti, N. A. (2010). The unmet health care needs of homeless adults: A national study. *American Journal of Public Health*, *100*(7), 1326–1333.

Baum, A. S., Burnes, D. W., & Lamb, H. (1993). *A nation in denial: The truth about homelessness*. Boulder, CO: Westview Press.

Baxter, E., & Hopper, K. (1981). *Private lives/public spaces: Homeless adults on the streets of New York City*. New York: Community Service Society of New York.

Bingham, R. D., Green, R. E., & White, S. (1987). *The homeless in contemporary society*. New York: Sage.

Blau, F. D., & Kahn, L. M. (2000). Gender differences in pay. *The Journal of Economic Perspectives*, *14*(4), 75–99.

Blumberg, L. U., Hoffman, F. H., LoCicero, V. J., Niebhur, H., Rooney, J. F., & Shipley, T. E. (1960). *The men on skid row: A study of Philadelphia's homeless man population*. Philadelphia, PA: Temple University Sociology Department.

Breakey, W. R. (1997). It's time for the public health community to declare war on homelessness. *American Journal of Public Health*, *87*(2), 153–155.

Brown, R.T., Kiely, D.K., Bharel, M. & Mithcell, S.L. (2012). Geriatric syndromes in older homeless adults. *Journal of General Internal Medicine*, *27*(1):16–22.

Burt, M. R., Aron, L. Y., Douglas, T., Valente, J., Lee, E., & Iwen, B. (1999). *Homelessness: Programs and the people they serve*. Washington, D.C.: The Urban Institute.

Burt, M. R., & Cohen, B. E. (1989). Differences among homeless single women, women with children, and single men. *Social Problems*, *36*, 508–524.

Culhane, D. P., Dejowski, E. F., Ibanez, J., Needham, E., & Macchia, I. (1994). Public shelter admission rates in Philadelphia and New York City: The implications of turnover for sheltered population counts. *Housing Policy Debate*, *5*(2), 107–140.

Culhane, D. P., Metraux, S., & Wachter, S. M. (1999). Homelessness and public shelter provision in New York City. In M. Schill (Ed.), *Housing and community policy in New York City: Facing the future* (pp. 203–232). Albany, NY: SUNY Press.

Haddad, M. B., Wilson, T. W., Ijaz, K., Marks, S. M., & Moore, M. (2005). Tuberculosis and homelessness in the United States, 1994–2003. *The Journal of the American Medical Association*, *293*(22), 2762–2766.

Hahn, J. A., Kushel, M. B., Bangsberg, D. R., Riley, E., & Moss, A. R. (2006). The aging of the homeless population: Fourteen-Year trends in San Francisco. *Journal of General Internal Medicine*, *21*(7), 775–778.

Hibbs, J. R., Benner, L., Klugman, L., Spencer, R., Macchia, I., Mellinger, A. K., & Fife, D. (1994). Mortality in a cohort of homeless adults in Philadelphia. *New England Journal of Medicine*, *331*(5), 304–309.

Hoch, C., & Slayton, R. A. (1989). *New homeless and old: Community and the skid row hotel*. Philadelphia, PA: Temple University Press.

Hopper, K., & Hamburg, J. (1986). The making of America's homeless: From skid row to the new poor, 1945–1984. In R. G. Bratt, C. Hartman & A. Meyerson (Eds.), *Critical perspectives on housing* (pp. 12–39). Philadelphia, PA: Temple University Press.

Hoynes, H., & MaCurdy, T. (1994). Has the decline in benefits shortened welfare spells? *The American Economic Review*, *84*(2), 43–48.

Hwang, S. W. (2001). Homelessness and health. *Canadian Medical Association Journal*, *164*(2), 229–233.

Israel, N., Toro, P. A., & Ouellette, N. (2010). Changes in the composition of the homeless population: 1992 to 2002. *American Journal of Community Psychology*, *46*, 49–59.

Jencks, C. (1994). *The homeless*. Cambridge, MA: Harvard University Press.

Kahn, L.B. (2010). The long-term labor market consequences of graduating from college in a bad economy. *Labour Economics*, *17*(2), 303–316.

Kerker, B., Bainbridge, J., Li, W., Kennedy, J., Bennani, Y., Agerton, T., Gutkovich, A. (2005). *The health of homeless adults in New York City: A report from the New York City Departments of Health and Mental Hygiene and Homeless Services*. New York, NY: The New York City Departments of Health and Mental Hygiene and Homeless Services.

Kramer, M. (1980). The rising pandemic of mental disorders and associated chronic diseases and disabilities. *Acta Psychiatrica Scandinavica*, *62*(S285), 382–397.

Kramer, M. (1983). The increasing prevalence of mental disorders: A pandemic threat. *Psychiatric Quarterly*, *55*(2), 115–143.

Kushel, M. B., Perry, S., Bangsberg, D., Clark, R., & Moss, A. R. (2002). Emergency department use among the homeless and marginally housed: Results from a community-based study. *American Journal of Public Health*, *92*(5), 778–784.

Larimer, M. E., Malone, D. K., Garner, M. D., Atkins, D. C., Burlingham, B., Lonczak, H. S., Hobson, W. G. (2009). Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. *The Journal of the American Medical Association*, *301*(13), 1349–1357.

Lee, B. (1980). "The Disappearance of Skid Row: Some Ecological Evidence." *Urban Affairs Quarterly* *16*(1): 81–107.

Martin, E. (1992). Assessment of S-night street enumeration in the 1990 census. *Evaluation Review*, *16*(4), 418–438.

Massey, D.S., & Denton, N.A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.

MetLife Mature Market Institute. (2011). *The 2011 MetLife market survey of nursing home, assisted living, adult day services, and home care costs*. Westport, CT: Author.

Metraux, S., & Culhane, D.P. (1999). "Family Dynamics, Housing and Recurring Homelessness Among Women in New York City Homeless Shelters." *Journal of Family Issues 20*(3): 371–398.

Metraux, S., Culhane D.P., Raphael, S., White, M., Pearson, C., Hirsch, E., Ferrell, P., Rice, S., Ritter, B, & Cleghorn, J.S. (2001). "Assessing Homeless Population Size through the Use of Emergency and Transitional Shelter Services in 1998: Results from the Analysis of Administrative Data in Nine US Jurisdictions." *Public Health Reports 116*: 344–352.

Metraux, S., Eng, N., Bainbridge, J., & Culhane, D. P. (2011). The impact of shelter use and housing placement on mortality hazard for unaccompanied adults and adults in family households entering new york city shelters: 1990–2002. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, *88*(6), 1091–1014.

Moffitt, R., Ribar, D., & Wilhelm, M. (1998). The decline of welfare benefits in the US: The role of wage inequality. *Journal of Public Economics*, *68*(3), 421–452.

O'Connell, J. J. (2005). *Premature mortality in homeless populations: A review of the literature*. Nashville, TN: National Health Care for the Homeless Council.

O'Flaherty, B. (1996). *Making room: The economics of homelessness*. Cambridge, MA: Harvard University Press.

O'Neill, J., & Polachek, S. (1993). Why the gender gap in wages narrowed in the 1980s. *Journal of Labor Economics*, *11*(1), 205–228.

Perlman, S., & Fantuzzo, J. (2010). Timing and influence of early experiences of child maltreatment and homelessness on children's educational well-being. *Children and Youth Services Review*, *32*(6), 874–883.

Robertson, M. J., & Greenblatt, M. E. (1992). *Homelessness: A national perspective*. New York, NY: Plenum Press.

Rog, D., & Buckner, J. C. (2007) Homeless families and children. *The 2007 national symposium on homelessness research*. Washington, D.C.: U.S. Department of Housing and Urban Development.

Rosenthal, R. (1989). *Homeless in paradise: A map of the terrain*. Philadelphia, PA: Temple University Press.

Rossi, P. (1989). *Down and out in America: The origins of homelessness*. Chicago, IL: The University of Chicago Press.

Ryan, P., Bartelt, D., & Goldstein, I. (1989). *Homelessness in Pennsylvania: How can this be?* Philadelphia, PA: Coalition on Homelessness in Pennsylvania.

Salit, S. A., Kuhn, E. M., Hartz, A. J., Vu, J. M., & Mosso, A. L. (1998). Hospitalization costs associated with homelessness in New York City. *The New England Journal of Medicine*, *338*(24), 1734–1740.

Schanzer, B., Dominguez, B., Shrout, P. E., & Caton, C. L. M. (2007). Homelessness, health status, and health care use. *American Journal of Public Health*, *97*(3), 464–469.

Shinn, M., Gottlieb, J., Wett, J. L., Bahl, A., Cohen, A., & Ellis, D B. (2007). Predictors of homelessness among older adults in New York City: Disability, economic, human, and social capital, and stressful events. *Journal of Health Psychology*, *12*, 696–708.

Taylor, P., Fry, R., Cohn, D., Wang, W., Velasco, G., & Dockterman, D. (2010). *Women, men and the new economics of marriage*. Washington, D.C.: Pew Research Center.

Timmer, D. A., Eitzen, S., & Talley, K. D. (1994). *Paths to homelessness, extreme poverty and the urban housing crisis*. Boulder, CO: Westview Press.

U.S. Census Bureau. (2001). *Emergency and transitional shelter population: 2000*. Washington, D.C.: Author.

U.S Department of Housing and Urban Development. (1984). *Report to the secretary on homelessness and emergency shelters*. Washington, DC: Author.

U.S Department of Housing and Urban Development. (2011). *The 2010 annual homeless assessment report to congress*. Washington, DC: Author.

U.S. Department of Housing and Urban Development. (1989). *A report on the 1988 national survey of shelters for the homeless*. Washington, D.C.: Author.

U.S. General Accounting Office. (1991). *1990 census: Limitations in methods and procedures to include the homeless*. Washington, DC: Author.

Wagner, D. (1993). *Checkerboard square: Culture and resistance in a homeless community*. Boulder, CO: Westview Pres.

Wright, J., Rubin, B. A., & Devine, J. A. (1998). *Beside the golden door: Policy, politics and the homeless*. New York: Walter de Gruyter.

Wright, J. D. (1989). Address unknown: Homelessness in contemporary America. *Society*, *26*(6), 45–53.

Wright, J. D., & Devine, J. A. (1992). Counting the homeless: The census bureau's "S-night" in five U.S. cities. *Evaluation Review*, *16*(4), 355–364.

DENNIS P. CULHANE, PhD is the Dana and Andrew Stone Professor of Social Policy at the University of Pennsylvania and the Director of Research at the U.S. Department of Veterans Affairs' Nation Center on Homelessness Among Veterans. His primary areas of research are homelessness, assisted housing policy, and policy analysis research methods. His current work includes studies of the dynamics of homelessness among families and adults, and the impact of homelessness on the utilization of health, education, and social services.

STEPHEN METRAUX is Associate Professor in the Department of Health Policy and Public Health at University of the Sciences in Philadelphia and a Policy Analyst at the National Center for Homelessness Among Veterans at the Department of Veterans Affairs.

THOMAS BYRNE is a Research Assistant Professor at the University of Pennsylvania's School of Social Policy and Practice and an Investigator at the National Center for Homelessness Among Veterans at the Department of Veterans Affairs.

MAGDI STINO is a doctoral student in the Department of Health Policy and Public Health at University of the Sciences in Philadelphia and a pre-doctoral research fellow at the National Center for Homelessness Among Veterans at the Department of Veterans Affairs.

JAY BAINBRIDGE Before joining the Marist College School of Management in Fall 2009, Jay Bainbridge was Assistant Commissioner of Policy and Research at the NYC Department of Homeless Services (DHS). Dr. Bainbridge contributed to a variety of major initiatives at DHS, such as the evaluation of the agency's new prevention programs, the writing of two reports on the health of the homeless, and the designing and running of the Homeless Outreach Population Estimate (HOPE) – New York City's annual street count involving thousands of volunteers and city workers.