

## Homelessness among Veterans: Evidence from the Greater Richmond Area<sup>1</sup>

Shannon A. McKay<sup>2</sup>

Federal Reserve Bank of Richmond

Margot Ackermann<sup>3</sup>

Homeward

---

<sup>1</sup> We are grateful to the staff at Homeward for collection of the survey data. We are solely responsible for any errors. The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Richmond or the Federal Reserve System.

<sup>2</sup> Corresponding Author. Federal Reserve Bank of Richmond, P.O. Box 27622, Richmond, VA 23261.

[Shannon.McKay@rich.frb.org](mailto:Shannon.McKay@rich.frb.org). Ph: 804-697-8468

<sup>3</sup> Homeward. [mackermann@homewardva.org](mailto:mackermann@homewardva.org)

## Introduction

In 2010, the Obama administration set a goal to end homelessness among veterans by the end of 2015. According to estimates of the Department of Housing and Urban Development (HUD), the incidence of homelessness among the veterans has been declining. In 2012, there were 62,619 homeless veterans, a 7.2 percent decline from 2011 and 17.2 percent from 2009 (U.S. Department of Housing and Urban Development 2012). At the same time, the U.S. Census Bureau reported 6.7 percent of male veterans and 10.1 percent of female veterans were living in poverty in 2011.<sup>4</sup> With the military combat efforts in Iraq having ended and those in Afghanistan winding down, more veterans will be returning stateside with housing, employment and mental health needs. In fact, the largest segment of the female veteran population is those who have served in the most recent Gulf War conflicts.

To effectively target homelessness reduction efforts, it is important to identify the risk factors contributing to homelessness among veterans. Our study investigates the factors that affect the risk of homelessness among the low-income veteran population in the Greater Richmond, Virginia area. We look at the role of demographic, socioeconomic, mental health and behavioral characteristics on veterans' likelihood of homelessness. Our study is based on data collected from a semi-annual survey of low income and homeless populations between 2008 and 2013. The survey is conducted by Homeward, a planning and coordinating organization for homeless services in the Greater Richmond area.

We model the likelihood of homelessness using a series of logistic models that look at whether veteran status increases the likelihood of homelessness, after controlling for a series of factors identified in earlier research as associated with a higher risk of homelessness. Our analysis begins by looking at the likelihood of homelessness among the full sample of low-income and homeless populations. This step allows us to start with the bigger picture. We complete our analysis by looking only at veterans and whether certain veterans are at greater risk for homelessness compared to other veterans.

We find that veteran status by itself does not affect an individual's risk of becoming homeless. Having a current problem with alcohol, drugs or substance abuse as well as being in recovery for such a problem significantly increases an individual's likelihood of becoming homeless. We find the largest increase in likelihood when someone has had one episode of homelessness in the past three years. There are risk factors such as spending time in foster care as a child which when combined with an individual's veteran status, increase the risk of homelessness.

Among veterans themselves, we find consistent risk factors that are associated with a change in a veteran's likelihood of becoming homeless. However, we can only clearly relate one of these factors directly to military service – Department of Veterans Affairs (VA) Benefits. Receiving VA benefits lowers the likelihood that a veteran will become homeless.

---

<sup>4</sup> U.S. Census Bureau, American Community Survey PUMS, 2011

Our empirical results build on and expand the work in the existing literature. As prior research has shown, we find that the risk factors for post-military homelessness are associated with different phases of a veteran's life (pre-military, military, readjustment period and post-readjustment) (Rosenheck and Fontana 1994). The bulk of the literature examining the connection between veterans and homelessness was based on studies of individuals who served in the military directly after the Vietnam War when the military moved to an all-volunteer force (Winkleby and Fleshin 1993; Rosenheck, Frisman and Chung 1994; Tessler, Rosenheck and Gamache 2002; Perl 2011). Our study includes individuals who indicated that their last year of service took place along a spectrum from World War II to the current conflict in Afghanistan. We also use a unique dataset that provides more information about an individual's background than can be found in the other studies that rely on large administrative databases. Further, more recent studies have relied on administrative databases from the VA which only capture those individuals who apply for or use VA services (Edens, Kaspro, Tsai, Rosenheck 2011; Metraux, Clegg, Daigh, Culhane and Kane 2013).

## **Data and Methods**

The data for this study comes from the Point-in-Time (PIT) counts conducted by Homeward, a planning and coordinating organization for homeless services in the greater Richmond, Virginia region.<sup>5</sup> Since 2007, Homeward has been conducting PIT counts twice a year in January and July (see Table 1). The count is conducted in cooperation with shelter providers, Departments of Social Services, volunteers and police departments. Depending upon where the count is taking place, individuals are asked to complete either a short or long form.<sup>6</sup> During the count, one of the sites offers a service fair that provides access to social services, job placement, medical services and clothing. Attendees at the service fair site are also provided with bus tickets. Outreach teams in the counties offer homeless individuals they encounter a care package of toiletries and warm clothing accessories during the winter counts.

The short form is generally administered by the street outreach workers and teams counting in the counties. The long form usually consists of 6-7 pages of questions covering family information, housing history and information, childhood history, employment/income history and information, domestic violence, physical and mental health history, legal/judicial history and involvement and the economy. The surveys are only completed by adults. Survey respondents may not necessarily be homeless because the survey is conducted at local meals programs which serve vulnerable individuals and families regardless of housing status. As a result, there are adults who are not homeless but are meals program users who complete the survey.

---

<sup>5</sup> The greater Richmond region is defined as the Richmond Continuum of Care (COC) which consists of the city of Richmond and the counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent and Powhatan.

<sup>6</sup> Homeward conducts a Spanish-language version of the survey through a short form.

Since 2007, an average of 72 percent of the adults counted also completed the PIT survey form. Slightly over 96 percent of them complete the long form of questions with an average of 806 adult respondents. This study uses the data only from the long forms. All of the survey responses are self-reported and anonymous. The self-reporting means that some of the responses may be incorrect, but there is no way to independently verify them. When looking at survey results between two or more time periods, there may be duplicate respondents. However, the data cannot be de-duplicated. Further, PIT counts typically show more homeless individuals in the winter than the summer due to the greater availability of seasonal shelter beds in the winter.

Our dataset is built from pooling together 11 survey samples taken from PIT counts conducted from January 2008 to January 2013. We use 6,071 observations (69 percent of the PIT dataset) in our analysis.<sup>7</sup> Table 2 presents descriptive statistics for the variables used in our first set of regression models. The variables are grouped as demographic characteristics, socio-economic characteristics, military service characteristics, health characteristics, adverse childhood experiences, criminal history and homelessness history.

### *Full Sample*

Seventy-nine percent of the full sample was classified as “homeless” at the time of their respective PIT count.<sup>8</sup> The remainder is composed of “housed” adults who were utilizing a meals program on the day of the count and can be characterized as low-income individuals. Veterans make up 18 percent of the full sample. These are individuals who said that at some point in time they had served in the U.S. military.

Demographically, the full sample is predominately African-American (65 percent), male (74 percent) and at least 45 years old or older (55 percent). The sample is also educated with 84 percent having completed at least a high school diploma or GED. Less than a quarter of the sample (23 percent) is employed in some way (day labor/temp work, part-time, full-time). Thirteen percent generates some form of income from panhandling or asking strangers for money. Roughly, 94 percent of the sample does not currently have a spouse due to death, divorce, separation or never having been married.

There is evidence of both past and current alcohol and drug abuse in the sample. At the same time, some individuals are in recovery programs. It should be noted that as a condition for staying in some emergency shelter or transitional housing programs, individuals must either not

---

<sup>7</sup> The full PIT dataset has 8,871 observations. Due to missing values among the variables, our analysis is based on a lower number of observations.

<sup>8</sup> The classification of “homeless” is based upon the U.S. Department of Urban and Housing Department (HUD)’s definition whereby a homeless individual is anyone living in a place not suitable for human habitation as well as those in emergency shelter and transitional housing. HUD also includes people fleeing dangerous situations related to violence (e.g., domestic violence, stalking); those exiting an institution who were homeless prior to entry; those losing their housing in the next 14 days who lack the resources they need to remain stably housed; and families or unaccompanied youth who lack housing stability (HUD 2013).

use alcohol or drugs or be enrolled in a substance abuse treatment program. We also have individuals who were treated for mental health problems in the past (34 percent) as well as currently (24 percent) in the sample. Seventy-two percent of the sample has been to a doctor in the past year. More than half of the sample (58 percent) relied upon the emergency room at a hospital for medical treatment. Finally, 30 percent of surveyed adults were victims of violence at the hands of a spouse or intimate partner.

A minority of adults in the full sample experienced adverse childhood events such as placement into foster care (11 percent) or homelessness (5 percent). 72 percent of the sample has been incarcerated at some point in time in jail, prison or both. Prior episodes of homelessness are prevalent in the sample. Only 7 percent of the sample has never experienced an episode of homelessness in the three years prior to when they responded to the survey. Fifty-four percent had been homeless once in the past three years. Slightly more than half of the survey respondents (53 percent) had their last permanent residence in the city of Richmond. For 10 percent of the sample, their last permanent residence was not located in the Commonwealth of Virginia.

Since our sample consists of homeless and housed populations as well as veterans and non-veterans, Table 3 contains the descriptive statistics for these group comparisons. Looking at Table 3, we see that for several variables the differences between homeless and housed individuals are statistically significant. There are also statically significant differences between veterans and nonveterans.

#### *Homeless v. Housed Individuals*

African-Americans are a larger share of housed individuals (77 percent) compared to the share of homeless individuals (62 percent). Three-quarters of the homeless sample is male while 70 percent of the housed sample is male. The housed sample tends to be older than the homeless sample with a larger share of individuals in the 55 to 64 years old and 65 years old and greater groups. We also see evidence of lower educational attainment among the housed individuals relative to the homeless individuals. For example, a larger share of housed individuals did not complete high school or receive a GED while larger shares of homeless individuals went to at least some college or graduated with a BA degree or higher. There is greater labor force participation among the homeless sample. Housed respondents have a higher share of married individuals as well as lower shares of divorced or separated individuals.

Across almost every measure of health, we see that the homeless respondents have statistically significant higher shares of unhealthy life indicators. Homeless individuals have higher incidences of alcohol problems as well as drugs or substance abuse. A greater proportion of homeless individuals have also sought out medical treatment whether by visiting an emergency room or being seen by a doctor compared to housed individuals. With mental health problems (treatment and medication), we still see statistically significant differences, but the two groups are closer in size.

While there was a history of homelessness among the currently housed individuals, the shares were smaller than those for currently homeless individuals. There are clear geographic permanent residency differences between the two groups. Close to 70 percent of the housed individuals had their last permanent residence in Richmond compared to 48 percent of the homeless individuals. The homeless individuals were more geographically dispersed across the region, state and out-of-state relative to the housed individuals. The high concentration of the housed individuals in Richmond is most likely due to the fact that the feeding programs attended by low-income populations included in the survey are all located in Richmond. Transportation options to these programs by low-income individuals who live outside of the city are limited which hinders their attendance.

#### *Veterans v. Non-Veterans*

In comparing veterans to non-veterans, we see only slight racial differences. There are larger demographic differences for gender and age. Close to 95 percent of the veterans are male; 70 percent of non-veterans are male. Veterans are also older than non-veterans with 76 percent of veterans 45 years of age or older compared to 50 percent for non-veterans. There are higher levels of educational attainment among veterans. Non-veterans appear to be in more stable relationships evidenced by the higher share of marriage as well as lower share of divorce.

In terms of health measures, the differences between veterans and non-veterans are mixed. We see a larger share of mental health issues (treatment and medication) among the veterans. Alcohol usage is greater among the veterans and statistically significant for history and recovery. Veterans and non-veterans are closer on the shares of both groups who are involved with drugs and substance abuse. Non-veterans are also more susceptible to domestic violence than veterans. This difference may reflect the small share of females among the veterans' population.

Non-veterans are more likely to have been in foster care as a child. Approximately, 75 percent of veterans have spent time incarcerated in a jail, prison or both which is slightly higher than the share of non-veterans. The share of homeless among veterans is 81 percent compared to 79 percent of non-veterans. A larger share of veterans had their last permanent address outside of the Richmond region as well as the Commonwealth of Virginia. Fifty-four percent of non-veterans listed Richmond as the location of their last permanent residence which is statistically significant from 48 percent for veterans.

The cross-tabulation results in Table 3 provide evidence to support the contention that homeless individuals are different from housed individuals and veterans are different from non-veterans. The next step is to see whether these differences increase the risk for homelessness across the sample in particular among veterans.

*Model*

To address the questions, we model an individual's likelihood of homelessness by the following series of equations.

Let  $Y_i$  be a binary random variable that assumes a value of 1 if individual  $i$  is homeless and 0 otherwise. Then the probability of being homeless, after controlling for individual characteristics is given by:

$$P[Y_i = 1|X_i = x] = \Phi(\beta_0 + \beta x_i + \gamma V_i)$$

where  $V_i$  assumes a value 1 if an individual is a veteran and 0 otherwise,  $x_i$  is a vector of demographic, socioeconomic, health, childhood, criminal and homelessness history characteristics of the individual. To see whether the effects of individual risk factors are different among individuals who are veterans, we also estimate a model given by:

$$P[Y_i = 1|X_i = x] = \Phi(\beta_0 + \beta x_i + \gamma V_i + \delta V_i * x_i)$$

where  $V_i$  assumes a value 1 if an individual is a veteran and 0 otherwise,  $x_i$  is a vector of demographic, socioeconomic, health, childhood, criminal and homelessness history characteristics of the individual and  $V_i * x_i$  are the interactions of individual characteristics with the veteran variable. Thus, the model enables us to measure the effects of the risk factors on veterans and compare them to non-veterans.

We estimate the models using maximum likelihood techniques with logistic specification for  $\Phi$ . A set of time indicator variables to control for time specific macroeconomic and other unobserved factors are also included in the models. We also collapsed the variables for alcohol usage and drug usage into fewer variables because of how highly correlated they were.

**Results***Full Sample*

As a first step in our analysis, we wanted to see the likelihood of homelessness among the full sample. These results allow us to see how veterans may fit into the bigger picture of homelessness in general. Table 4 presents the results from the logistic specifications of the model which show the odds of being currently homeless after controlling for factors outside of veteran status. A value of less than one indicates a decreased risk of homelessness while odds greater than one indicate an increased risk. We find that being a veteran alone only very slightly increases the odds of someone being currently homeless but the effect is not statistically significant. Other factors outside of veteran status play a much larger role in either increasing or decreasing an individual's odds of being homeless at the moment.

If an individual has had one episode of homelessness over the past three years, they are at greatest risk of being homeless again. This single episode increases their odds of having another episode of homelessness by 3.75. Having a history of homelessness as a child slightly increases one's risk of being homeless in the future. Other factors that increased the odds of being homeless now were being male, having a college degree or higher, employment, marital separation, current problem with alcohol, drugs or substance abuse, in recovery for alcohol, drugs or substance abuse, current mental health issues, receiving treatment in an emergency room in the past year, visiting a doctor, and being a victim of domestic violence. The location of an individual's last permanent residence in a Virginia jurisdiction other than the city of Richmond or even outside the state also increases an individual's odds of being currently homeless.

We do find statistically significant factors that will decrease an individual's odds of being homeless. These factors are being African-American, at least 55 years of age or older, married, widowed, currently taking medication for mental health issues and having been placed in foster home as a child. While all of these factors may decrease the odds of someone becoming homeless, the amounts by which the odds would decline are small compared to some of the factors that increase the odds. For example, being 55 to 64 years old has the highest below one value of 0.71.

Since an individual's status as a veteran alone is not a significant factor in increasing their odds of becoming homeless, we wanted to see whether being a veteran in conjunction with another individual characteristic has a statistically significant effect. The results from this model specification are shown in Table 5. The majority of the variables that were statistically significant in Table 4 retained their status. Being a victim of domestic violence and currently having mental health issues continue to increase the odds of an individual being homeless but they are no longer statistically significant. For the interactions with veteran status, we find several variables to be statistically significant in affecting the odds of someone becoming homeless. The odds of becoming homeless decline for veterans who are a race other than White or Black, have a disability, were incarcerated and had one episode of homelessness in the past three years. The effect of being both a veteran and having been placed in a foster home as a child, however, increases the odds of being at risk for homelessness by a much larger margin – 2.62.

#### *Veterans Only Sample*

So far, our models have looked at veterans and non-veterans together; the cross-tabulations in Table 3 showed that there are significant differences between the two groups. As the final stage in our analysis, we estimate the models only on veterans as well as incorporate additional variables that are tied to military service. The results from these models may provide insight into why certain veterans become homeless and others do not.



In order to run the veterans only models, we had to modify the existing dataset. Over the years, more detailed questions about military service were added to the original PIT survey. As result, the starting point for the veterans-only analysis changed from January 2008 to July 2009 with the end point remaining at January 2013. Restricting the dataset to only veterans and excluding any observations with missing values left us with a final dataset of 634 observations.

We ran three models with the veterans-only dataset as shown in Table 6. With the exception of dropping a few year dummy variables as well as last permanent residence indicator variables because of collinearity issues, Model 1 was run with the variables used in earlier models. Two variables related to additional potential sources of income – family and friends as well as supplemental security income (SSI) and/or social security disability income (SSDI) are added to Model 2. These income sources were not included in the earlier models because the questions about them were not added to the PIT survey until after January 2008. Building off the prior model, Model 3 introduces the variables related to military experience including combat experience, honorable or general discharge, last year of service time period dummy variables and receipt of benefits from the Department of Veterans Affairs (VA).

We find four variables to have a statistically significant effect on the odds of someone becoming homeless across all three models. Marriage and incarceration are two risk factors that decrease the odds of a veteran becoming homeless. In recovery for alcohol or drugs or substance abuse problem as well as a single episode of homelessness within the past three years are factors that increase the odds of a veteran becoming homeless. These negative risk factors more than double the odds among the veteran population.

In terms of additional sources of income, the SSI and/or SSDI variable has a consistent statistically significant negative effect on the odds of a veteran becoming homeless. For the military service-related variables, the receipt of VA benefits is the only statistically significant variable and it decreases the odds of homelessness. While the other military variables are not statistically significant, they do show differentiation in how they affect the odds. For example, a veteran who receives a honorable or general discharge faces lower odds while a veteran whose last year of service was during Gulf War I has higher odds.

## **Discussion**

An individual's veteran status alone does not affect their risk of becoming homeless. This finding supports results found previously in older studies (Balslem, Christensen and Tuepker 2011). We find the greater risk factors to be those connected to an individual's demographic, socioeconomic, health, childhood and homelessness history characteristics. In addition, there are risk factors when combined with an individual's veteran status that do affect an individual's likelihood of homelessness in a statistically significant manner. Further, among veterans themselves, we find consistent risk factors that could change the likelihood of a veteran

becoming homeless. The receipt of VA benefits was the only direct military service-related variable to be a significant risk factor and it lowers the likelihood of homelessness.

Our findings suggest several areas where policymakers and service providers may want to target their efforts in order to meet the federal government's goal of ending homelessness among veterans by the end of 2015. Across the models, risk factors related to an individual's health consistently were shown to have a statistically significant association with increasing the likelihood of homelessness. The first of these risk factors included having current alcohol, drug or substance abuse problems, current mental health issues, as well as being in recovery for alcohol, drug or substance abuse problems. One potential strategy is to have prevention and rapid rehousing resources available in the community. Early intervention by service providers of getting someone enrolled in a treatment program may prevent that individual from becoming homeless.

Usage of a hospital's emergency room for medical treatment may be an indicator of larger issues related to how low-income individuals obtain health care. They may seek out treatment through emergency rooms because they are uninsured. Lack of access to preventative care may mean that their medical problems have become severe enough to require treatment via emergency room. The finding that having seen a doctor within the past year increases your likelihood of being homeless may also indicate that low-income individuals are less likely to visit a doctor. It is unclear whether their lack of doctor visits is because they cannot financially afford them or they just have fewer medical issues.

The importance of having a social support system around an individual to prevent homelessness could be signified by the findings around marital status. The variable indicating that an individual was married was found to be statistically significant across all of the models with a negative likelihood for homelessness. Individuals whose marital status was "separated" were at greater risk for becoming homeless. Potential strategies for reducing the likelihood of homelessness could range from expanding services to include mediation counseling as well as connecting at-risk individuals with social networks that can provide a supportive environment.

There are limitations to our analysis. While homeless and housed veterans are our population of interest, they were not the focus of the PIT survey used to collect our data. Thus their representativeness in the sample cannot be confirmed. This issue also extends to how much of the Greater Richmond region's total homeless population that is actually captured in Homeward's PIT count despite their efforts to try to survey everyone possible. Further, the housed population only consists of those individuals who attend the area's meals programs, so they are not fully representative of the area's low-income population. Despite these limitations, we did find significant differences across the groups for a variety of demographic, socioeconomic, health, childhood and homelessness history characteristics. Caution should be taken, however, in making any broad generalizations about these different groups. Finally, we do not know in our data whether an individual's alcohol, drugs or substance abuse problem(s) as

well as mental health issues stem from their military experience. So we do not know whether these issues were present before military service took place or came about as a result of it.

This study has provided a more recent look at the relationship between veteran status and homelessness. Our data includes veterans from recent military conflicts in Iraq and Afghanistan back to the Vietnam War era and was collected from 2008 through 2013. We hope that this up-to-date evidence will inform policy directed towards homelessness elimination efforts among veterans. Our findings have identified individuals most at risk of homelessness and thus can help policymakers target their resources towards the most effective strategies.

## References

- Balshem, H, Christensen V, Tuepker, A, Kansagara D. A Critical Review of the Literature Regarding Homelessness Among Veterans. VA-ESP Project #05-225: 2011.
- Edens, Ellen L., Wes Kaspro, Jack Tsai and Robert A. Rosenheck. "Association of Substance Use and VA Service-Connected Disability Benefits with Risk of Homelessness Among Veterans." *The American Journal on Addictions*, 2011, 20: 412-419.
- Gamache, Gail, Robert Rosenheck and Richard Tessler. "Overrepresentation of Women Veterans among Homeless Women." *American Journal of Public Health*, 2003, July, Vol 93, No 7.
- Karney, Benjamin R., Rajeev Ramchand, Karen Chan Osilla, Leah B. Caldarone and Rachel M. Burns. Invisible Wounds: Predicting the Immediate and Long-Term Consequences of Mental Health Problems in Veterans of Operation Enduring Freedom and Operation Iraqi Freedom. RAND Center for Military Health Policy Research, Working Paper WR-546-CCF, April 2008.
- Lazaryan, Nika, Margot Ackermann and Urvi Neelakantan. "The Impact of Foreclosure on Homelessness: Evidence from Greater Richmond Area." Federal Reserve Bank of Richmond, 2013, Unpublished manuscript.
- McGuire, James. "Closing a Front Door to Homelessness among Veterans." *Journal of Primary Prevention*, 2007, 28: 389-400.
- Metraux, S., Clegg, L., Daigh, J., Culahne, D., Kane, V. "Risk factors for becoming homeless among a cohort of veterans who served in the era of the Iraq and Afghanistan conflicts." *American Journal of Public Health*, 2013 – In press.
- Perl, Libby. Veterans and Homelessness. Library of Congress Washington DC Congressional Research Service, 2011.
- Rosenheck, Robert and Alan Fontana. "A Model of Homelessness Among Male Veterans of the Vietnam War Generation." *The American Journal of Psychiatry*, 1994, March, 151, No 3: 421-427.
- Rosenheck, Robert, Linda Frisman and An-Me Chung. "The Proportion of Veterans among Homeless Men." *American Journal of Public Health*, 1994, March, Vol 84, No 3.
- Sosin, Michael R. and Maria Bruni. "Homelessness and Vulnerability among Adults with and without Alcohol Problems." *Substance Use & Misuse*, 1997, 32, 7 and 8, 939-968.
- Tessler, Richard, Robert Rosenheck, and Gail Gamache. "Comparison of Homeless Veterans with Other Homeless Men in a Large Clinical Outreach Program." *Psychiatric Quarterly*, 2002, Summer, Vol. 73, No. 2.

Tessler, Richard, Robert Rosenheck, and Gail Gamache. "Homeless Veterans of the All-Volunteer Force: A Social Selection Perspective." *Armed Forces & Society*, 2003, Summer, Vol. 29, No. 4.

U.S. Department of Housing and Urban Development. The 2012 Point-in-Time Estimates of Homelessness. Office of Community Planning and Development Washington DC, December 2012.

Washington, Donna L., Elizabeth M. Yano, James McGuire, Vivian Hines, Martin Lee, Lillian Gelberg. "Risk Factors for Homelessness among Women Veterans." *Journal of Health Care for the Poor and Underserved*, 2010, 21: 81-91.

Winkleby, Marilyn A. and Diane Fleshin. "Physical, Addictive, and Psychiatric Disorders Among Homeless Veterans and Nonveterans." *Public Health Reports*, 1993, January-February, Vol. 106, No. 1.

**Table 1: Homeward Point-in-Time (PIT) Count and Survey Breakdown, January 2008 to January 2013**

	PIT Count of Adults Experiencing Homelessness	PIT Count of Adults Who Completed Long Form (PIT dataset)	PIT Count of Adults Who Completed Short Form
January 2007	1,024	--	n/a
July 2007	802	--	n/a
January 2008	920	757	48
July 2008	823	711	41
January 2009	1,014	860	95
July 2009	906	708	28
January 2010	881	815	27
July 2010	748	666	36
January 2011	943	881	16
July 2011	772	762	7
January 2012	909	959	9
July 2012	772	819	24
January 2013	885	933	20

Note: Homeward did not begin using a short form until January 2008.

Source: Homeward

**Table 2: Descriptive Statistics for Homeward Point-in-Time (PIT) Survey Long Form Respondents, January 2008 to January 2013**

<b>Variable</b>	<b>Full Sample (n=6,071)</b>
<b>Demographic Characteristics</b>	
<i>Race/Ethnicity</i>	
White	29.1
Black	65.0
Other	5.9
Hispanic	3.4
<i>Gender</i>	
Male	73.8
Female	26.0
Transgendered	0.3
<i>Age (years)</i>	
18 to 24	6.3
25 to 34	16.1
35 to 44	22.5
45 to 54	36.7
55 to 64	17.0
65 and greater	1.4
<b>Socio-Economic Characteristics</b>	
<i>Education</i>	
Less than High School	16.1
High School	53.3
Some College	22.2
College Degree or Higher	8.3
<i>Employment Status</i>	
Employed	22.8
<i>Income</i>	
Panhandling	13.1
<i>Marital Status</i>	
Single/Never Married	57.1
Married	6.1
Widowed	3.5
Divorced	22.1
Separated	11.3
<b>Military Service Characteristics</b>	
Veteran	18.2
<b>Health Characteristics</b>	
Presence of an Alcohol or Drug Problem, a Serious Mental Health Problem, a Developmental Disability, or a Chronic Physical Illness or Other Disability	44.9
<i>Alcohol Usage</i>	
History of Problems with Alcohol	44.3
Problem with Alcohol Now	20.8
Currently in Recovery for Alcohol Problems	34.4
<i>Drug Usage</i>	
History of Problems with Drugs or Substance Abuse	48.9
Problem with Drugs or Substance Abuse Now	21.0
Currently in Recovery for Drugs or Substance Abuse	38.1
<i>Mental Health</i>	
History of Treatment for Mental Health Problems	34.3
Currently in Treatment for Mental Health Problems	24.1
Currently Taking Medication for Mental Health Problems	22.9

<i>Medical Treatment</i>	
Treated in Emergency Room in the Past Year	58.4
Been to a Doctor in the Past Year	72.2
<i>Domestic Violence</i>	
Experienced Violence at the Hands of Spouse or Intimate Partner	29.8
<b>Adverse Childhood Experiences</b>	
In Foster Care as a Child	10.5
Homeless as a Child	5.2
<b>Criminal History</b>	
Incarceration in Jail, Prison or Both	72.1
<b>Homelessness History</b>	
Currently Homeless	79.2
<i>Number of Times Homeless in Past 3 Years</i>	
0	7.3
1	54.3
2	20.8
3	8.5
4 or more	9.1
<i>Location of Last Permanent Residence</i>	
City of Richmond	52.8
Chesterfield County	6.6
Henrico County	9.9
Hanover County	2.0
Other City/County in Virginia	16.0
Never had a Permanent Address	2.4
Other State	10.3



**Table 3: Comparison of Homeward Point-in-Time (PIT) Survey Long Form Respondents by Homelessness Status and Veteran Status, January 2008 to January 2013**

Variable	Homeless (N=4,805)	Housed (N=1,266)		Veteran (N=1,106)	Non- Veteran (N=4,965)	
<b>Demographic Characteristics</b>						
<i>Race/Ethnicity</i>						
White	32.2	17.4	***	31.6	28.6	*
Black	61.8	77.3	***	62.8	65.5	+
Other	6.0	5.3		5.7	5.9	
Hispanic	3.5	2.8		3.6	3.3	
<i>Gender</i>						
Male	74.9	69.8	***	94.9	69.1	***
Female	24.9	30.1	***	5.1	30.6	***
Transgendered	0.3	0.2		0.1	0.3	
<i>Age (years)</i>						
18 to 24	6.4	6.0		1.4	7.5	***
25 to 34	16.5	14.8		6.2	18.4	***
35 to 44	23.7	17.9	***	16.6	23.8	***
45 to 54	36.9	35.7		44.3	34.9	***
55 to 64	15.7	21.8	***	28.8	14.3	***
65 and greater	0.8	3.8	***	2.7	1.1	***
<b>Socio-Economic Characteristics</b>						
<i>Education</i>						
Less than High School	15.0	20.1	***	5.7	18.4	***
High School	52.9	54.8		52.1	53.6	
Some College	23.0	19.3	**	30.1	20.5	***
College Degree or Higher	9.0	5.8	***	12.0	7.5	***
<i>Employment Status</i>						
Employed	23.6	19.6	**	24.2	22.5	
<i>Income</i>						
Panhandling	13.1	13.2		14.3	12.8	
<i>Marital Status</i>						
Single/Never Married	56.6	58.9		43.5	60.1	***
Married	5.8	7.4	*	4.6	6.5	*
Widowed	3.0	5.5	***	4.3	3.3	
Divorced	22.7	19.6	*	35.7	19.0	***
Separated	12.0	8.8	***	11.9	11.1	
<b>Military Service Characteristics</b>						
Veteran	18.7	16.6	+	--	--	
<b>Health Characteristics</b>						
Presence of an Alcohol or Drug Problem, a Serious Mental Health Problem, a Developmental Disability, or a Chronic Physical Illness or Other Disability	45.8	41.4	**	46.3	44.6	
<i>Alcohol Usage</i>						
History of Problems with Alcohol	48.5	28.5	***	50.4	43.0	***
Problem with Alcohol Now	23.9	8.8	***	21.0	20.7	
Currently in Recovery for Alcohol Problems	39.6	14.5	***	39.6	33.2	***
<i>Drug Usage</i>						
History of Problems with Drugs or Substance Abuse	52.4	35.7	***	51.7	48.3	*
Problem with Drugs or Substance Abuse Now	23.9	10.0	***	20.1	21.2	
Currently in Recovery for Drugs or Substance Abuse	43.1	19.3	***	39.7	37.8	
<i>Mental Health</i>						
History of Treatment for Mental Health Problems	34.8	32.3	+	39.2	33.2	***

Currently in Treatment for Mental Health Problems	24.1	24.1		28.7	23.1	***
Currently Taking Medication for Mental Health Problems	22.3	25.2	*	27.9	21.8	***
<i>Medical Treatment</i>						
Treated in Emergency Room in the Past Year	60.3	51.3	***	57.5	58.6	
Been to a Doctor in the Past Year	73.8	66.0	***	76.8	71.2	***
<i>Domestic Violence</i>						
Experienced Violence at the Hands of Spouse or Intimate Partner	30.4	27.4	*	21.2	31.7	***
<b>Adverse Childhood Experiences</b>						
In Foster Care as a Child	9.3	14.9	***	7.4	11.2	***
Homeless as a Child	5.3	5.0		4.5	5.4	
<b>Criminal History</b>						
Incarceration in Jail, Prison or Both	73.2	68.2	***	75.3	71.4	**
<b>Homelessness History</b>						
Currently Homeless	--	--		81.0	78.7	+
<i>Number of Times Homeless in Past 3 Years</i>						
0	0.0	35.2	***	6.3	7.6	
1	61.0	29.2	***	55.9	54.0	
2 or more	39.0	35.7	*	37.8	38.5	
<i>Location of Last Permanent Residence</i>						
City of Richmond	48.4	69.4	***	48.3	53.8	***
Chesterfield County	7.1	4.7	**	5.6	6.8	
Henrico County	10.5	7.8	**	9.3	10.1	
Hanover County	2.4	0.6	***	2.4	1.9	
Other City/County in Virginia	18.1	8.0	***	19.4	15.2	***
Never had a Permanent Address	2.5	2.4		2.8	2.4	
Other State	11.1	7.2	***	12.1	9.9	*

Note: +p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

**Table 4: Logit Estimates of Probability of Becoming Homeless**

<b>Variable</b>	<b>Odds Ratio</b>		
<b>Demographic Variables</b>			
Black	0.61	(0.06)	***
Other Race	0.79	(0.14)	
Hispanic	1.19	(0.26)	
Male	1.23	(0.12)	*
25 to 34 years old	0.90	(0.15)	
35 to 44 years old	1.04	(0.18)	
45 to 54 years old	0.96	(0.16)	
55 to 64 years old	0.71	(0.13)	*
65 years and older	0.25	(0.08)	***
<b>Socio Economic Variables</b>			
High School Graduate	1.06	(0.10)	
Some College	1.09	(0.13)	
College Graduate and higher	1.44	(0.24)	*
Employed	1.20	(0.11)	+
Panhandling	0.90	(0.10)	
Married	0.60	(0.09)	***
Widowed	0.62	(0.11)	**
Divorced	0.98	(0.10)	
Separated	1.28	(0.16)	*
<b>Military Service Variables</b>			
Veteran Status	1.01	(0.10)	
<b>Health Status Variables</b>			
Current alcohol or drugs or substance abuse problem	1.35	(0.14)	**
In recovery for alcohol or drugs or substance abuse problem	2.18	(0.20)	***
Medication for mental health issues	0.58	(0.09)	***
Current mental health issues	1.32	(0.20)	+
Disability	1.02	(0.09)	
Received treatment in an emergency room	1.26	(0.10)	**
Been seen by a doctor	1.32	(0.11)	***
Domestic violence victim	1.16	(0.10)	+
<b>Adverse Childhood Experience Variables</b>			
Placement in a foster home	0.66	(0.07)	***
Homeless as a child	1.34	(0.22)	+
<b>Criminal History Variables</b>			
Spent time in jail or prison	0.91	(0.08)	
<b>History of Homelessness Variables</b>			
One prior episode of homelessness	3.75	(0.28)	***
Last residence in Chesterfield County	1.43	(0.23)	*
Last residence in Henrico County	1.49	(0.19)	**
Last residence in Hanover County	3.10	(1.28)	**
Last residence in Other City or County in Virginia	2.21	(0.27)	***
No permanent address	1.35	(0.31)	
Last residence was out of state	1.69	(0.23)	***
Pseudo R <sup>2</sup>	0.19		
N	6,071		

Note: +p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001; The coefficient estimates for time specific effects are not reported and are available upon request.

**Table 5: Logit Estimates of Probability of Becoming Homeless with Veteran Status Interaction**

Variable	Odds Ratio		
<b>Demographic Variables</b>			
Black	0.64	(0.07)	***
Other Race	0.92	(0.19)	
Hispanic	1.09	(0.27)	
Male	1.26	(0.13)	*
25 to 34 years old	0.88	(0.16)	
35 to 44 years old	0.99	(0.18)	
45 to 54 years old	0.89	(0.15)	
55 to 64 years old	0.62	(0.12)	*
65 years and older	0.25	(0.09)	***
<b>Socio Economic Variables</b>			
High School Graduate	1.07	(0.11)	
Some College	1.18	(0.15)	
College Graduate and higher	1.52	(0.29)	*
Employed	1.26	(0.13)	*
Panhandling	0.91	(0.11)	
Married	0.61	(0.10)	**
Widowed	0.65	(0.14)	*
Divorced	0.92	(0.10)	
Separated	1.35	(0.19)	*
<b>Military Service Variables</b>			
Veteran Status	1.77	(1.67)	
<b>Health Status Variables</b>			
Current alcohol or drugs or substance abuse problem	1.27	(0.15)	*
In recovery for alcohol or drugs or substance abuse problem	2.06	(0.21)	***
Medication for mental health issues	0.57	(0.10)	***
Current mental health issues	1.31	(0.22)	
Disability	1.12	(0.11)	
Received treatment in an emergency room	1.30	(0.11)	**
Been seen by a doctor	1.30	(0.12)	**
Domestic violence victim	1.15	(0.14)	
<b>Adverse Childhood Experience Variables</b>			
Placement in a foster home	0.59	(0.07)	**
Homeless as a child	1.35	(0.24)	+
<b>Criminal History Variables</b>			
Spent time in jail or prison	0.99	(0.09)	
<b>History of Homelessness Variables</b>			
One prior episode of homelessness	4.07	(0.34)	***
Last residence in Chesterfield County	1.40	(0.25)	+
Last residence in Henrico County	1.54	(0.22)	**
Last residence in Hanover County	3.06	(1.36)	*
Last residence in Other City or County in Virginia	2.41	(0.34)	***
No permanent address	1.33	(0.34)	
Last residence was out of state	1.59	(0.24)	**
<b>Interacted with Veteran Status</b>			
<b>Demographic Variables</b>			
Black	0.69	(0.18)	
Other Race	0.41	(0.19)	+
Hispanic	1.34	(0.75)	
Male	0.75	(0.31)	
25 to 34 years old	1.27	(1.06)	

35 to 44 years old	1.91	(1.56)	
45 to 54 years old	2.61	(2.10)	
55 to 64 years old	3.05	(2.48)	
65 years and older	1.71	(1.65)	
<b>Socio Economic Variables</b>			
High School Graduate	0.82	(0.32)	
Some College	0.63	(0.26)	
College Graduate and higher	0.73	(0.36)	
Employed	0.68	(0.16)	
Panhandling	0.81	(0.22)	
Married	0.69	(0.29)	
Widowed	0.75	(0.34)	
Divorced	1.30	(0.31)	
Separated	0.85	(0.28)	
<b>Health Status Variables</b>			
Current alcohol or drugs or substance abuse problem	1.36	(0.38)	
In recovery for alcohol or drugs or substance abuse problem	1.45	(0.34)	
Medication for mental health issues	0.99	(0.42)	
Current mental health issues	1.09	(0.47)	
Disability	0.60	(0.13)	*
Received treatment in an emergency room	0.94	(0.20)	
Been seen by a doctor	1.02	(0.26)	
Domestic violence victim	1.10	(0.28)	
<b>Adverse Childhood Experience Variables</b>			
Placement in a foster home	2.62	(0.99)	*
Homeless as a child	1.00	(0.52)	
<b>Criminal History Variables</b>			
Spent time in jail or prison	0.66	(0.16)	+
<b>History of Homelessness Variables</b>			
One prior episode of homelessness	0.61	(0.12)	*
Last residence in Chesterfield County	1.16	(0.56)	
Last residence in Henrico County	0.78	(0.27)	
Last residence in Hanover County	0.88	(1.05)	
Last residence in Other City or County in Virginia	0.69	(0.21)	
No permanent address	1.05	(0.59)	
Last residence was out of state	1.29	(0.46)	
Pseudo R <sup>2</sup>	19%		
N	6,071		

Note: +p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001; The coefficient estimates for time specific effects are not reported and are available upon request.

**Table 6: Logit Estimates of Probability of Becoming Homeless for Veterans Only Sample**

Variable	Model 1 Odds Ratio	Model 2 Odds Ratio	Model 3 Odd Ratio
<b>Demographic Variables</b>			
Black	-0.50 (0.30)	-0.41 (0.30)	-0.46 (0.31)
Other Race	-0.87 (0.57)	-0.60 (0.59)	-0.71 (0.60)
Hispanic	0.86 (0.78)	0.57 (0.80)	0.59 (0.81)
Male	0.9 (0.53) +	0.89 (0.54)	0.86 (0.56)
25 to 34 years old	0.12 (1.15)	0.21 (1.14)	0.31 (1.14)
35 to 44 years old	1.32 (1.12)	1.31 (1.11)	1.32 (1.18)
45 to 54 years old	1.07 (1.09)	1.08 (1.08)	1.06 (1.21)
55 to 64 years old	0.94 (1.11)	0.96 (1.10)	0.99 (1.26)
65 years and older	-0.8 (1.24)	-0.40 (1.25)	-0.38 (1.44)
<b>Socio Economic Variables</b>			
High School Graduate	0.22 (0.52)	0.15 (0.53)	0.18 (0.54)
Some College	0.16 (0.55)	0.09 (0.55)	0.15 (0.56)
College Graduate and higher	0.4 (0.62)	0.33 (0.62)	0.51 (0.65)
Employed	-0.31 (0.30)	-0.40 (0.31)	-0.38 (0.31)
Panhandling	-0.55 (0.37)	-0.45 (0.37)	-0.43 (0.38)
Married	-1.10 (0.49) *	-1.04 (0.49) *	-1.03 (0.50) *
Widowed	-0.77 (0.55)	-0.84 (0.55)	-0.92 (0.57)
Divorced	-0.09 (0.28)	-0.16 (0.28)	-0.15 (0.29)
Separated	0.46 (0.44)	0.43 (0.45)	0.38 (0.46)
<b>Health Status Variables</b>			
Current alcohol or drugs or substance abuse problem	0.65 (0.37) +	0.55 (0.37)	0.60 (0.38)
In recovery for alcohol or drugs or substance abuse	0.87 (0.29) **	0.87 (0.30) **	0.85 (0.30) **
Medication for mental health issues	-1.11 (0.56) *	-0.94 (0.56) +	-0.90 (0.58)
Current mental health issues	0.95 (0.57) +	0.89 (0.57)	0.88 (0.58)
Disability	-0.14 (0.28)	0.10 (0.30)	0.18 (0.31)
Received treatment in an emergency room	0.31 (0.27)	0.27 (0.27)	0.24 (0.28)
Been seen by a doctor	0.24 (0.31)	0.33 (0.31)	0.37 (0.32)
Domestic violence victim	0.45 (0.32)	0.37 (0.33)	0.40 (0.33)
<b>Adverse Childhood Experience Variables</b>			
Placement in a foster home	0.63 (0.55)	0.67 (0.55)	0.67 (0.56)
Homeless as a child	0.66 (0.81)	0.62 (0.82)	0.6 (0.82)
<b>Criminal History Variables</b>			
Spent time in jail or prison	-0.64 (0.30) *	-0.61 (0.31) *	-0.67 (0.31) *
<b>History of Homelessness Variables</b>			
One prior episode of homelessness	0.86 (0.24) ***	0.88 (0.24) ***	0.89 (0.25) ***
<b>Additional Sources of Income</b>			
SSI and/or SSDI		-0.95 (0.35) **	-0.85 (0.36) *
Family and/or Friends		-0.36 (0.28)	-0.39 (0.28)
<b>Veteran Experience Variables</b>			
Experienced Combat			-0.08 (0.30)
Honorable or General Discharge			-0.33 (0.47)
Last year of Service in Vietnam			0.19 (1.60)
Last year of Service in Post-Vietnam War Era			0.07 (1.61)
Last year of Service in Gulf War I			0.22 (1.65)
Last year of Service in Gulf War II			-0.02 (1.72)
Receive VA Benefits			-0.57 (0.31) +
Pseudo R <sup>2</sup>	19%	21%	21%
N	634	634	634

Note: +p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001; The coefficient estimates for time specific effects as well as geographic location of last permanent residence are not reported and are available upon request.