## Introduction and Context

Homelessness is a complex issue that adversely impacts individuals and families all across the nation. Multiple factors contribute to homelessness, including lack of affordable housing options, poverty, unemployment, low wages along with underlying aspects such as mental health issues or substance abuse disorders among others. Natural disasters and housing displacement, as well as systemic issues like racism and discrimination, worsen the problem.

To address the challenges faced by the homeless population and create proper intervention strategies, it is important to identify all these critical contributing factors.

## Homelessness in Chattanooga

Following the onset of the pandemic, there has been an alarming rise in unsheltered homelessness in Southeast Tennessee. The number of individuals experiencing homelessness according to the 2019 Point-In-Time survey, which was 191, escalated to 3,172 as of January 2022. In January of 2023, the Point in Time count found that there were 1,735 Homeless Individuals in Southeastern Tennessee. The CRHC, the lead agency of TN-500 CoC has been working actively to reduce the number of unsheltered homelessness and provide support to the people with severe service needs. TN-500 established the Regional Outreach Cooperative (ROC) as a unified strategic outreach effort involving various service providers, including mental health organizations, victim service providers, HIV/AIDS providers, homeless shelters, hospitals, government agencies, and more. Best practices are shared through training opportunities and participation in conferences and events with other outreach workers. The CoC and ROC continuously evaluate performance, providing additional resources or training. TN-500 views the ROC as a successful model and encourages other communities to replicate its efforts. TN-500's Regional Outreach Cooperative (ROC) carries out street outreach within the Continuum of Care's (CoC) geographic area to engage individuals experiencing

unsheltered homelessness. The ROC performs housing assessments during these engagements, enrolling individuals into Coordinated Entry for potential housing connections. All contacts and relevant data are documented in TN-500's local Homeless Management Information System (HMIS). (Source: “TN-500 CoC Plan for Serving Individuals and Families Experiencing Homelessness with Severe Service Needs”)

**Biases and Equity in Homelessness**

From slavery to segregation, people of color have historically faced systemic denial of rights and socioeconomic opportunities, a struggle shared by other minority groups. The disproportionate rates of homelessness among these groups are a consequence of systemic inequity, as the lasting effects of racism continue to perpetuate disparities in crucial areas that impact homelessness rates. (National Alliance to End Homelessness, 2023).

Poverty plays a significant role in predicting homelessness, particularly deep poverty. Black and Latinx groups are overrepresented in poverty relative to their overall population representation and are more likely to live in deep poverty. Redlining, a form of housing discrimination supported by the federal government in the past, has contributed to the existing wealth gap between white households and households of color. Its effects persist today, as people of color continue to disproportionately reside in areas of concentrated poverty or neighborhoods characterized by environmental risks, limited access to quality care, services, nutritious food, and economic opportunities. Individuals who become homeless are often from these types of neighborhoods. (National Alliance to End Homelessness, 2023).

For minority groups, the transition to neighborhoods with lower crime rates, fewer environmental hazards, and proximity to services poses challenges. A study by the U.S Department of Housing and Urban Development (HUD) on racial discrimination revealed that people of color are frequently shown fewer rental units, experience higher lease denials

compared to White individuals, and face disparities in rental terms. (Turner et. al 2013). White individuals, on the other hand, are often offered lower rents, with negotiable move-in costs, making it easier for them to secure housing units. (National Alliance to End Homelessness, 2023).

The racial disparity in incarceration rates has been steadily worsening. These disparities are not coincidental; people of color face a significantly higher risk of being targeted, profiled, and arrested for minor offenses, particularly in areas with high poverty rates. Overcriminalization has far-reaching implications, as a criminal history can hinder individuals from passing background checks necessary for securing housing and employment. People exiting jails and prisons often encounter significant challenges in accessing safe and affordable housing, resulting in high rates of homelessness among this population. (National Alliance to End Homelessness, 2023).

Access to quality healthcare is another critical factor. People of color are more likely to lack health insurance compared to white individuals, particularly in states without Medicaid expansion. In 2021, 40.0 percent of the population were people of color, but they accounted for 62.8 percent of the uninsured population. (Peter G. Peterson Foundation, 2022). The absence of health insurance for individuals with chronic medical conditions or untreated serious mental illness puts them at higher risk of homelessness. Individuals with behavioral health issues are disproportionately represented among the homeless population, with nearly 1 in 5 people experiencing homelessness in 2022 having a behavioral health issue. (HUD 2022) While the rate of serious mental illness may not significantly vary by race, studies indicate that people of color face greater difficulties in accessing mental health treatment. (National Alliance to End Homelessness, 2023).

The article "Recognizing and Responding to Women Experiencing Homelessness with Gendered and Trauma-Informed Care" by Milaney et al. tackles the importance of

providing specialized support to homeless women, considering the impact of sex-based violence and trauma. Trauma-informed care recognizes the prevalence of trauma among the homeless population and incorporates strategies that promote safety, trust, collaboration, and empowerment. While trauma and mental health issues certainly affect the whole unhoused community, Milaney et al. highlights the significance of understanding the unique needs and experiences of homeless women in developing effective interventions that address their trauma and facilitate their journey towards stable housing and self-sufficiency (Milaney et al., 2020). Although the study was conducted in Canada, this research is important to our context as in 2022 women made up 38.3% of the total homeless population in America (USA Facts Org, 2023).

**Demographics (PIT) (~1 page)**

***The following analysis is based on PVA data from 02.13.23-06.26.23 and the PIT count of January 2023.***

**Race:**

- In the Point-in-Time (PIT), the racial breakdown of the homeless population is the following:
    - White: 71.9%, 1248
    - Black or African American: 24.4%, 424
    - Native/Indigenous: 0.6%, 11
    - Asian: 0.4%, 7
    - Multiple Races: 2.6%, 45

- In the Place Value Assessment (PVA), the racial breakdown of the surveyed population is the following:
    - White: 48.8%, 436
    - Black or African American: 47.7%, 426
    - Skip this question: 2.2%, 20
    - American Indian or Alaskan Native: 0.8%, 7
    - Native Hawaiian or Other Pacific Islander: 0.2%, 2
    - Asian: 0.2%, 2

| Race | PIT Count | PIT % | (PIT–PVA) | PVA Count | PVA % |
|---|---|---|---|---|---|
| Black/African American | 424 | 24.4 | +2 | 426 | 47.7 |
| White | 1248 | 71.9 | 812 | 436 | 48.8 |
| Native/Indigenous/American Indian/Alaskan Native | 11 | 0.6 | 4 | 7 | 0.8 |
| Native Hawaiian or other Pacific Islander | N/A | N/A | N/A | 2 | 0.2 |
| Asian | 7 | 0.4 | 5 | 2 | 0.2 |
| Multiple Races | 45 | 2.6% | N/A | N/A | N/A |
| Skip this Question | N/A | N/A | N/A | 20 | 2.2 |

Key insights:

- The PIT count indicates that Native/Indigenous individuals and Asians are underrepresented in the homeless population compared to their representation in the general population.
- The PVA data shows a higher percentage of Black or African American individuals in the homeless population compared to their representation in the overall population.
- While white individuals make up 71.9% of the PIT count, they make up 48.8% of the PVA count.

**Sex:**

- In the PIT count, the breakdown of the homeless population by sex is the following:
    - Female: 32.7%, 568
    - Male: 65.2%, 1131
    - Gender that is not singularly “Female” or “Male”: 0.692%, 13
    - Transgender: 1.01%, 18
    - Questioning: 0.228%, 5
- In the PVA, the breakdown of the surveyed population by sex is the following:
    - Female: 57.8%, 516
    - Male: 41.9%, 374
    - Skip this question: 0.2%, 2
    - Gender Non-conforming: 0.1%, 1

| Sex/Gender | PIT Count | PIT % | (PIT–PVA) | PVA Count | PVA % |
|---|---|---|---|---|---|
| Female | 568 | 32.7 | 52 | 516 | 57.8 |

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|---|---|---|---|---|---|
| Male | 1131 | 65.2 | 757 | 374 | 41.9 |
| Gender that is not singularly “Female” or “Male” | 13 | 0.692 | N/A | N/A | N/A |
| Transgender | 18 | 1.01 | N/A | N/A | N/A |
| Questioning | 5 | 0.228 | N/A | N/A | N/A |
| Gender Non-Conforming | N/A | N/A | N/A | 1 | 0.1 |
| Skip this question | N/A | N/A | N/A | 2 | 0.2 |

Key Insights:

- There are 18 Transgender Individuals represented in the PIT count. The closest related column in the PVA is “Gender Non-Conforming,” in which there is only 1 individual counted. This would indicate there is a larger number of Transgender individuals experiencing homelessness in Chattanooga than have been assessed by the CRHC using the PVA.
- There are 757 Males unaccounted for in the PVA assessment count.

**Age:**

- In the PIT count, the breakdown of the homeless population by age is the following:
    - Under 18: 3.8%, 66
    - 18-24: 11.7%, 203
    - 25-34: 14.4%, 250
    - 35-44: 21.9%, 380
    - 45-54: 20.5%, 356
    - 55-64: 19%, 329
    - 64 and over: 8.7%, 151
- In the PVA, the breakdown of the surveyed population by age is the following:
    - 18-24: 11.7%, 203
    - 25-34: 14.4%, 250
    - 35-44: 21.9%, 380
    - 45-54: 20.5%, 356
    - 55-64: 19%, 329
    - 64 and over: 8.7%, 151
    - Under 18: 3.8%, 66

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Key insights:

- Resource for Age insights

Resource for conclusion on PIT and PVA demographics

**PVA (Information on creation and function) (~1 page)**

The Place Value Assessment (PVA) is an assessment and scoring tool developed by Storm Walker in 2022 to support housing referrals, primarily by homeless coalitions and other similar organizations. The PVA produces an assessment score which serves as an "indicator of risk, vulnerability, and/or need." This score supports the coalition in determining a prioritization list, which must place those with more severe service needs and higher levels of vulnerability at the top of the list.

The PVA is broken down into five categories, each representing one digit in a five digit number. The digit occupying the ten thousand place would hold the most "weight" in determining the place on a prioritization list, and the digit occupying the last would hold the least. At the CRHC, these categories are broken down as:

1. Ten Thousands Place:  Length of Time Homeless
2. Thousands Place:  Health Scale
3. Hundreds Place: Risks and Barriers
4. Tens Place:  Household Type

5. Ones Place: Living Situation

The scales within the subcategories range from 1-9, so the theoretical “highest score” (which would indicate the absolute highest level of vulnerability), is 99,999. Thus, the score decodes into valuable information. The Place Value Assessment score does not support math operations which include averages, as each digit represents categorical data.

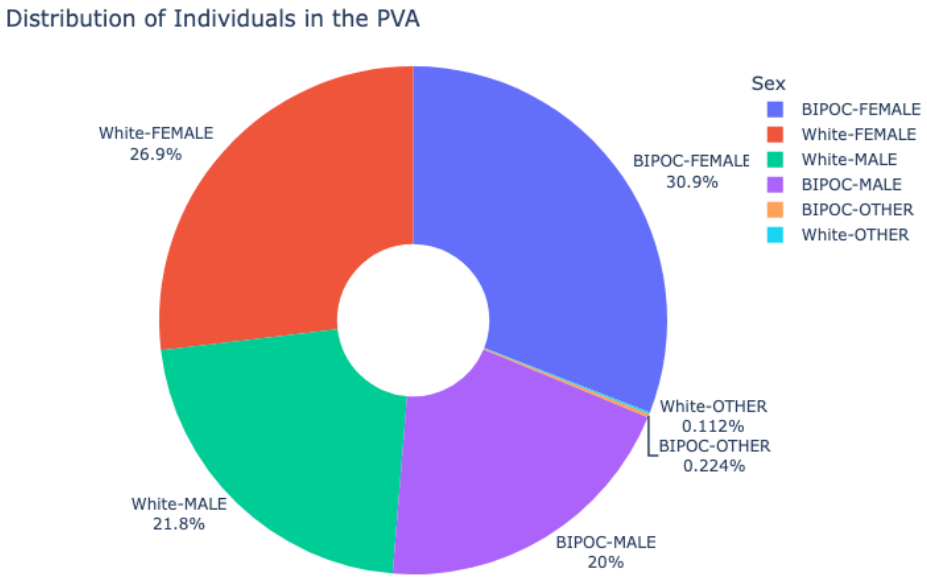
The PVA may be modified by the CoC using it to fit the community’s needs. The above order of categories is the order that has most recently been determined to support the Chattanooga Homeless Populations’ specific risks and needs.

Storm Walker Presentation

**Methods**

In our analysis, we used aggregated data from the 2023 Point-in-Time survey conducted by the Chattanooga Regional Homeless Coalition in January, as well as anonymized, de-identified HMIS data from the Place Value Assessment beginning February 13, 2023, and ending June 26, 2023. While Point-in-Time aggregated data was used for demographic visualizations and insights, Place Value Assessment data was used for our analysis of the Chattanooga Regional Homeless Coalition's intake process. From the Point-in-Time survey, we derived vital information about the homeless population in Chattanooga. These numbers and insights are represented in the Demographics section of this paper.

To properly analyze our data, we first drew conclusions from the demographic groups represented in the Point-in-Time survey and the Place Value Assessment. However, due to limitations surrounding the size of our dataset, we had to combine demographic groups into four categories: "White Female, White Male, BIPOC Female, BIPOC Male." The composition of this dataset broken down into these categories can be seen below.



Data Collection

- Data Analysis
    - cleaning, missing values, preliminary tasks

Courtney Conley's study methods & our own

- **Pearson Correlation Coefficient:** The Pearson Correlation Coefficient measures the linear relationship between two continuous variables. It quantifies the strength and direction of the relationship between the variables, ranging from -1 (perfect negative correlation) to +1 (perfect positive correlation), with 0 indicating no correlation. It is denoted by the symbol "r."

*Example:* Let's say you want to examine the relationship between the hours of study and the exam scores of a group of students. You collect data on both variables for each student and calculate the Pearson correlation coefficient to determine if there is a significant correlation between the two variables.

*Categorical or Continuous Data:* Pearson correlation coefficient is used for continuous data.

- **Chi-Square Independence Test:** The Chi-Square Independence Test determines whether there is a statistically significant association between two categorical variables. It compares the observed frequencies in a contingency table to the expected frequencies assuming independence. If the test yields a significant result, it indicates that the variables are dependent.

*Example:* Suppose you want to investigate whether there is an association between gender and smoking habits among a group of individuals. You collect data on the gender (male or female) and smoking habits (smoker or non-smoker) of each individual and perform a chi-square independence test to determine if there is a significant relationship between the variables.

*Categorical or Continuous Data:* Chi-square independence test is used for categorical data.

- **t-test:** The t-test is used to determine if there is a significant difference between the means of two independent groups. It is commonly used when comparing the means of two samples to test if they are significantly different from each other.

*Example:* Suppose you want to compare the average scores of two different groups of students who underwent different teaching methods. You collect data on the test scores of students from both groups and perform a t-test to assess if there is a significant difference in the mean scores between the two groups.

*Categorical or Continuous Data:* t-test is used for continuous data.

- **ANOVA (Analysis of Variance):** ANOVA is used to compare the means of three or more independent groups to determine if there are significant differences between them. It assesses whether the variances between the groups are greater than the variances within the groups.

*Example:* Imagine you want to analyze the effectiveness of three different diets in terms of weight loss. You assign participants randomly to three groups: Diet A, Diet B, and Diet C. After a specific time period, you measure the weight loss of each participant and conduct an ANOVA to determine if there are significant differences in the mean weight loss between the three diets.

*Categorical or Continuous Data:* ANOVA is used for continuous data.

**In summary, Pearson Correlation Coefficient and t-test are used for continuous data, while Chi-Square Independence Test and ANOVA are used for categorical data.**

**Findings (~3 pages)**

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Research-Based Recommendations (~2-3 pages)

- inclusive language
- trauma-informed professional, (psychologist, psychiatrist, etc.) to administer PVA and to act as an advisor of sorts.
- all administrators of the PVA go through special training, must be certified, etc.
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Trauma-informed Care Recommendations (~1-2 pages)

- trauma-informed professional, (psychologist, psychiatrist, etc.) to administer PVA and to act as an advisor of sorts.

**Resources (lit review)**


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