

The Annual Homeless Point-in-Time Count: Limitations and Two Different Solutions

Jack Tsai, PhD, and Jemma Alarcón, MD, MPH

 See also Raymond, p. 544.

The point-in-time (PIT) homeless count conducted annually in communities across the United States is a major metric reported to the federal government that has a number of limitations.

With the PIT count in 2021 being optional because of the COVID-19 pandemic and potential increases in homeless-related needs in the aftermath of the pandemic, there are opportunities for renewed efforts to improve how the United States enumerates homelessness, determines needs of communities, and tracks progress in ending homelessness throughout the nation. This article describes 2 divergent solutions: (1) improve the PIT by standardizing methodologies across jurisdictions and supplementing counts with other data sources or (2) replace the PIT with a new system.

There are strengths and limitations of both solutions. Advocates for either solution agree that there are important funding considerations to take into account and advancing technologies to utilize. As the nation continues to ramp up public health efforts, homelessness is a public health crisis that could benefit from improved epidemiological and data science methods. (*Am J Public Health*. 2022;112(4): 633–637. <https://doi.org/10.2105/AJPH.2021.306640>)

On a single night in January every year, communities across the United States attempt to count the number of unsheltered and sheltered homeless individuals. Since 2007, these community counts have been combined to produce the annual point-in-time (PIT) homeless count reported in the US Department of Housing and Urban Development (HUD) Annual Homeless Assessment Report to Congress.¹ The PIT count is used to inform government leaders about the state of homelessness and is a main performance measure for communities. PIT counts are used in decisions regarding federal policies, allocation of resources and services, and research.

Because of the COVID-19 pandemic, HUD made the unsheltered PIT count

in 2021 optional for communities, and many did not participate. This hiatus provides an opportunity for a reset to consider how the nation approaches assessing homelessness in the United States.

The PIT count is a cross-sectional survey conducted by Continuums of Care (CoCs) and reflects the number of homeless people at 1 point in time within CoCs. The count informs stakeholders about the number of people who need help in each CoC, and can be used to estimate costs of providing that help and tracking whether the size (and associated price tag) of homelessness is growing or decreasing. To improve data-driven processes for enumerating homelessness, however, policymakers and stakeholders need to be educated

about the limitations associated with the PIT count.^{2,3} Two divergent solutions have been proposed, with some advocating for improving and supplementing the PIT count and others advocating for replacing the PIT count with other methods.

SOLUTION 1: IMPROVEMENT AND SUPPLEMENTATION

The first proposed solution is to improve and supplement the PIT count.

Standardize Methodologies Across Jurisdictions

There is wide variability in how PIT counts are conducted between and

within CoCs over time. Community sizes and conditions vary significantly. Conducting a count in New York City presents different challenges and opportunities than doing this work in Helena, Montana. Thus, HUD allows for variations in the ways PIT is conducted (i.e., through census counts, sampling, or a combination of the two). There are also different sampling and extrapolation methods used. For example, some communities employ stratified geographic sampling (e.g., the Rossi method)⁴ for unsheltered PIT counts, whereas other communities do not use any special sampling method.

A recent report from the Government Accountability Office urged HUD to improve guidance related to PIT and include data quality checks.³ Not all CoCs have a shared understanding of how to implement PIT methodologies, and HUD is working toward implementing practices more uniformly across CoCs. However, this work will require steady improvements over time and may require the support of research and data collection experts engaged conceptually and logistically in this federal-level work. Transparency and public sharing of PIT methodologies by CoCs would be helpful toward this end.

Another important issue is that state and CoC leaders involved in PIT counts change over time. Technical assistance and guidance need to be provided regularly, with particular vigilance given to orienting and training new leadership involved in the PIT count.

Expand and Supplement the Count

Maintaining and improving on PIT would allow for historical analysis of PIT counts over the past 2 decades and build on existing infrastructure. Instead

of treating the PIT count as a sole source of information, the count can be supplemented with several other approaches.

Per capita data. Presenting counts within the context of general population data sheds further light on the severity of the problem. Suppose 2 communities each have 1000 people experiencing homelessness. If this number represents 33% of people in Community A but 0.01% of people in Community B, the severity of the homeless challenge varies greatly between the 2 communities. Per capita data can be useful in understanding homelessness in both communities and understanding trends as well as successful and unsuccessful strategies over time. Currently, within the Annual Homeless Assessment Report, HUD calculates current-year per capita data at the national and state level, but this could be expanded to calculations at the CoC level. Not only do the population sizes of communities change, but the size of subpopulations of interest (e.g., women, racial/ethnic minorities, veterans) change as well, and per capita data can be reported alongside PIT counts of these subpopulations.

Homeless Management Information System data. Data on encounters and service use of homeless individuals are captured by CoCs in the Homeless Management Information System (HMIS). The Longitudinal Systems Analysis,⁵ introduced in 2018, uses data from the HMIS to provide longitudinal data on incidence, frequency of service use, and other characteristics of homeless individuals in CoCs.

Service-based and postenumeration surveys. After PIT counts of the unsheltered population are conducted, service-based surveys can be

conducted at various social service locations (e.g., soup kitchens, day shelters, libraries) to identify unsheltered homeless individuals who were not included so they can be added to the PIT count to produce a more comprehensive total count. Postenumeration surveys, which have been performed by the US Census since 1980,⁶ can also be conducted for PIT counts, selecting a sample of regions to assess the accuracy of PIT counts and making corrections accordingly.

Other sampling methods. Biobehavioral surveys, which have been developed to study hard-to-reach populations, may provide tools to improve on how to enumerate homeless counts.⁷ Among the different methods included, time-location sampling would be helpful. This strategy utilizes venues known to be frequented by the target population at specific times (e.g., homeless shelters in the evenings, soup kitchens during lunch time). Another sampling method of interest is “respondent-driven sampling,” a peer-driven, chain-referral sampling method; the challenge with this method is that it can only be used if the target population is socially networked, and if its members can recognize and recruit one another.

Epidemiological surveys. National epidemiological surveys of the general population can estimate the number and prevalence of people who have ever experienced homelessness. Such surveys have been conducted using telephone interviews,⁸ in-person structured interviews,⁹ online representative surveys,¹⁰ and longitudinal surveys.¹¹ These surveys are unlikely to capture current homelessness, but could capture past homelessness (e.g., homelessness in the past year or lifetime).

These surveys are expensive to conduct but could be worth conducting every 5 to 10 years as benchmark reports on the prevalence of homelessness to supplement the PIT count.

Administrative public service records.

There are also various administrative public service records at state and local levels—such as through housing authorities, public schools, Medicaid, Temporary Assistance for Needy Families programs—that could presumably be merged with HMIS data to provide a rich, combined data source for homeless estimates. However, there are not only major logistical data-sharing challenges between institutions, but there are also privacy concerns that need to be considered, particularly because homeless individuals may already have institutional distrust.

SOLUTION 2: REPLACEMENT

Cross-sectional and epidemiological surveys can be useful for understanding the estimates of homelessness in the United States as they present the ability to identify changes over time and relative concentrations of homelessness between different geographies. However, these surveys are limited in scope and scale for individual communities, states, and the nation. With a high margin of error and without utility to develop and execute actions to address the problem, these approaches do not provide communities and local, state, and federal governments real-time and actionable insights into the crisis. Over the past few years, many communities have begun to use “by-name lists” (BNLs) that offer a comprehensive list of every individual experiencing homelessness in CoCs,

using uniform data quality standards that is updated in real time.¹² Using information collected and shared with their consent, each person on the list has a file that includes their name, homeless history, health, and housing needs. BNLs may not only be useful in enumerating homeless individuals, but they can provide data about incidence and actionable information between partnering agencies, such as referrals and placement into permanent housing.

A successful case example of this is the CoC in Rockford, Illinois, which worked with community partners and system experts to change its homeless response system in 2015 by developing real-time, person-specific BNLs to capture every person experiencing homelessness in their community. They built a unified team with a shared aim of population-level outcomes, and used data and quality improvement to target resources and services to dramatically reduce veterans’ homelessness and chronic adult homelessness. Since then, the community has sustained its BNL system and continues working to prevent new episodes of homelessness.

The nation’s response to COVID-19 may help inform a new approach to addressing homelessness. In 2020, over a matter of weeks, every community in the United States began to report on the active number of COVID-19 cases at every level of geography, providing community, state, and federal agencies real-time visibility into prevalence. This approach can be replicated to provide real-time visibility into homelessness; with infrastructure in place in many communities, it would require only a fraction of the cost of COVID-19 reporting. With real-time visibility into homelessness, every level of government and

the community would be able to understand the prevalence of homelessness and develop actions to address this crisis.

STRENGTHS AND LIMITATIONS OF PROPOSED SOLUTIONS

There are important strengths and limitations to consider for both solutions, which are briefly summarized in [Box 1](#). Certainly, there may be many more strengths and limitations for both solutions that have not been described. Because Solution 1 would be building on existing PIT infrastructure, the strengths and limitations are more knowable. For Solution 2, although there are successful case examples, the strengths and limitations are more speculative, and it may be easy to underestimate the challenges that could arise with implementing a new system.

FUNDING, RESEARCH, AND INNOVATIONS

With both solutions, proponents agree that there is a need for funding, research, and incorporation of new technologies. There is lack of specific funding for CoCs to enumerate homelessness and no cost value placed on accuracy of counts. Greater involvement of governmental public health agencies in homelessness and cross-funding of initiatives could help lead to more attention and accountability on this matter. Many CoCs rely on well-intentioned but undertrained volunteers, leading to inconsistent implementation of PIT methodologies. Some communities have good methodologists, but more are needed to help devise complex sampling strategies

BOX 1— Strengths and Limitations of Solutions for the Homeless Point-in-Time (PIT) Count

| | Solution 1: Improve and Supplement the PIT | Solution 2: Replace the PIT |
|--------------------|--|--|
| Strengths | <ul style="list-style-type: none"> • Uses existing community investment and infrastructure • Capitalizes on existing and developing data sources • Provides continuity and comparison for counts over time | <ul style="list-style-type: none"> • Potentially provides a more comprehensive count • Ability to provide just-in-time information • Successful case examples available |
| Limitations | <ul style="list-style-type: none"> • Data-sharing challenges and fragmented environment of agencies and communities • Privacy and legal concerns among vulnerable individuals • Inability to provide just-in-time information | <ul style="list-style-type: none"> • Data-sharing challenges and fragmented environment of agencies and communities • Potentially high up-front costs • Requires reinvestment of communities and new infrastructure |

and utilize multiple data sources. Certainly, more rigorous studies are needed on estimation methods. There have been some successful models of community–university collaborations for the PIT count that have leveraged university resources, involved students in civic work, and enhanced community relations.^{13–15} Universities may provide viable opportunities to further develop, evaluate, and promote new estimation and data-driven approaches on how best to count and serve homeless individuals.¹⁶ Various think tanks and research firms can also be called upon to support innovation in this area, but federal as well as private funding is needed.

Advances in computing power, digital photography and video, and artificial intelligence provide new options to enumerate homelessness. Satellite images and machine learning have been used to predict poverty¹⁷; street cameras may be used to identify homeless encampments and hotspots¹⁸; drones and helicopters equipped with thermal imaging equipment are being used to identify homeless individuals¹⁹;

and there is potential to capture homelessness using mobile phone technologies, particularly among homeless youth.²⁰ With rapid technologies being developed, the current national momentum to support public health, and growing public concern about homelessness, there are unique opportunities for us to strive toward better accounting and tracking of homelessness in a post–COVID-19 era. *AJPH*

ABOUT THE AUTHORS

Jack Tsai is with the School of Public Health, University of Texas Health Science Center, Houston, and the US Department of Veterans Affairs National Center on Homelessness Among Veterans, Tampa, FL. Jemma Alarcón is with Ventura County Medical Center, Ventura, CA.

CORRESPONDENCE

Correspondence should be sent to Jack Tsai, PhD, 1200 Pressler St, Houston, TX 77030 (e-mail: Jack.Tsai@uth.tmc.edu). Reprints can be ordered at <http://www.ajph.org> by clicking the “Reprints” link.

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CONFLICTS OF INTEREST

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HUMAN PARTICIPANT PROTECTION

This work did not involve human participant research, so no institutional review board approval was needed.

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