

Enhancing the Homeless Point-In-Time Count through Mapping Technology

Program Abstract (200 words)

Every year, community volunteers participate in the annual federally mandated Homeless Point-In-Time (PIT) Count and Survey which reflects a *snapshot* of Riverside County's homeless population at one particular point-in-time. Accuracy of the data collection is critical as the County of Riverside Continuum of Care (CoC) receives over \$10 million dollars annually from the United States Department of Housing and Urban Development (HUD) for the administration of homeless programs and services.

In 2018, the *Survey 123* app was piloted in four cities during the PIT Count and Survey. In 2019, in its role as the designated collaborative applicant for the County of Riverside CoC, the Department of Public Social Services (DPSS) opted to implement use of the *Survey 123* app countywide. By using this technology to collect PIT Count data, coordinators were able to create an accurate and up-to-date geographical view of individuals experiencing homelessness in Riverside County. In addition, the app generated the exact locations of veterans requesting services and identified the cities and unincorporated areas not covered on the day of the count to allow for efficient follow-up during the post-PIT count.

THE PROBLEM OR NEED FOR THE PROGRAM (1/4 PAGE)

The data collected during the annual PIT Count and Survey provides critical insights about homelessness in the community and tracks progress towards the County's goal of ending homelessness. On the day of the count community volunteers, city leaders, and law enforcement complete the time-intensive task of canvassing neighborhoods to gather valuable homeless population data. The data collected from the PIT Count and Survey is entered into a database and is used to generate a report to HUD. While the data provides a *snapshot* of homelessness in the County and is used to determine HUD funding, not much more is usually done with the data collected. If the goal is to reduce the number of people experiencing homelessness, PIT count data can be used to further inform service and outreach agencies about geographical patterns and trends of individuals experiencing homelessness in Riverside County. The data can also identify the location of difficult to reach subpopulations like veterans, youth and, victims of domestic violence. This level of detail in the data is crucial in developing a county-wide coordinated response to homelessness that can enhance collaboration between law enforcement, service agencies and the community at large to better serve individuals and families experiencing a housing crisis.

DESCRIPTION OF THE PROGRAM (2 ½ PAGES)

The annual homeless PIT Count and Survey is a county-wide effort that requires the support and participation of key stakeholders. County and agency staff, law enforcement, and community volunteers prepare months in advance to interview and survey individuals living on the street to determine the amount of resources needed for programs and services. City leaders are committed to help determine the extent of homelessness in their city by identifying volunteer

deployment sites, promoting the homeless PIT Count and Survey within their communities and coordinating volunteers on the day of the count.

During the planning phase of the PIT Count and Survey volunteers are solicited, registered, and attend a volunteer training to prepare them for the count. A significant portion of the 2019 volunteer training focused on how to accurately use the *Survey 123* app. Volunteers received step-by-step direction on how to download the *Survey 123* application as well as the Riverside County web-based survey onto their smart phone or tablet. Trainers also facilitated a survey demonstration to highlight important features of the *Survey 123* app. Finally, the volunteer training reinforced the importance of following the homeless PIT Count and Survey methodology.

PIT coordinators in Riverside County have begun to identify additional ways to improve the quality and utility of the data collected. Through utilization the *Survey 123* app, Riverside County further sought to improve the integrity and application of the data collected through the 2019 PIT Count and Survey with the following objectives in mind:

Objective #1: Improve the Collection and Accuracy of PIT Data

Every year, the survey tool used to collect the PIT Count data is modified to ensure compliance with HUD requirements and in response to volunteer feedback from the previous year. The revised survey is pilot tested to assess whether prospective volunteers can navigate the survey tool comfortably and accurately. Coordinators involved in this testing have increasingly realized the number of challenges presented by the use of a paper-based survey. Such challenges include confusing skip logic, the propensity to submit incomplete surveys, and a likelihood for volunteers to misidentify respondents as homeless when they may not meet the HUD definition. Upon completion of the 2018 PIT Count, 237 surveys were rejected prior to being entered into the database due to one of the reasons listed above. In addition, the paper-based surveys do not allow for a reliable deduplication method to be implemented to account for any individuals who may have been interviewed more than once. Use of the mobile survey in 2019 was expected to improve the accuracy of the PIT data collected by eliminating these challenges related to the paper survey.

Objective #2: Simplify Data Entry

The use of paper-based surveys necessitates the arduous task of re-entering the data collected into an electronic database. In previous counts, once the survey was completed the focus of staff shifted to collecting the completed surveys from each deployment site and attempting to re-enter the data in electronic format. Even with good coordination, the task of collecting large numbers of completed surveys from 28 deployment sites throughout the county took several days to complete. In 2018, over 2,500 surveys were collected after the count. Once the surveys were collected, additional time was required to enter each survey one by one into a database. Further, separate electronic databases were used for the street-based interview surveys and street-based observational surveys to accommodate for differences in the questions. Five lead staff members from the PIT team manually entered this data into the appropriate databases for two months

following the 2018 count. By using the *Survey 123* app in 2019 coordinators anticipated that the entire data entry process would be eliminated since every survey completed and submitted is automatically entered into the database.

Objective # 3: Improve Area Maps and Service Provision

Every year as part of the PIT count planning process, law enforcement officers conduct *soft counts* in their patrol areas to map where homeless individuals are likely to be found in each city. The data obtained from the *soft counts* is used to create city maps utilized on the day of the PIT Count and Survey to direct volunteers to specific locations where homeless individuals can be engaged and interviewed. The maps include specific streets, parks, parking lots, abandoned buildings, and other locations where homeless individuals have been previously observed. Law enforcement officials have first-hand knowledge about where homeless individuals can be found in their given jurisdictions and as such are asked to conduct the *soft counts* each year. Many jurisdictions do not have the technological resources necessary to produce their own area maps. Thus, in addition to conducting the *soft counts*, law enforcement agencies also provide assistance with generating the subsequent area maps. Using the *Survey 123* app is expected to simplify the *soft count* process for law enforcement officers as once the locations of the homeless population are recorded in the app, up-to-date maps can be quickly generated and used on the day of the count. Furthermore, the use of geo-mapping can assist with service provision since subpopulations like veterans, youth, and individuals fleeing from domestic violence who request immediate assistance can be easily found by outreach staff.

THE COST OF THE PROGRAM (3/4 TO 1 PAGE)

The cost to the Riverside County associated with collecting the PIT data using the *Survey123* app includes the cost of obtaining an ESRI Geographic Information System (GIS) enterprise account. Every enterprise account comes with features negotiated as part of the contract. Riverside County's contract provides for utilization of the *Survey 123* app and an unlimited number of user accounts. Additional costs associated with using the *Survey 123* app are related to staff time required to develop a *Survey 123* app volunteer training video and volunteer training materials.

THE RESULTS/SUCCESS OF THE PROGRAM (3/4 TO 1 PAGE)

The 2019 PIT Count was the first in Riverside County to collect all data using the *Survey123* app. The use of the app ultimately resulted in a more efficient, accurate, and useful Count.

Objective #1: Improve the Collection and Accuracy of PIT Data

The use of the mobile survey in 2019 eliminated all the issues related to the use of the paper survey. The skip logic was automatically applied allowing the interviewer to focus solely on asking the questions as they appeared on the screen of their mobile device, rather than having to navigate the various paths of questioning on paper surveys. The mobile survey required users to populate all of the necessary fields required to ensure survey completion and included questions to aid in determining if an individual met HUD's "homeless" criteria. If an individual was determined to meet the HUD criteria for "homelessness" the survey continued, whereas if the person did not meet the criteria the survey ended. The web-based survey eliminated the need to

have multiple versions of the paper-based survey on hand because all versions were included in the app and the appropriate survey was automatically detected. The mobile survey also allowed for a more accurate deduplication process to be implemented. Using the digitally mapped geographic coordinates of where surveys were conducted, coordinators were able to more accurately assess for duplicative data.

Objective #2: Simplify Data Entry

One of the most significant impacts the use of *Survey 123* had on the 2019 PIT count was that it eliminated the need for data entry entirely. As volunteers hit the “submit” button on the mobile survey from their device, the survey was immediately uploaded and entered into the database providing coordinators with live updates of the number and location of surveys being collected. Thus, by the end of the Count all surveys conducted were completely uploaded and entered into a database.

Objective # 3: Improve Area Maps and Service Provision

The data collected for the 2019 PIT Count was digitally mapped as part of the automated data collection process. Each dot on the map produced indicates where a homeless individual was surveyed. Agencies interested in finding difficult to reach subpopulations like veterans and youth can now request a map identifying the locations as to where these individuals were located on the day of the Count. This information can be used to focus their outreach efforts. On the day of the Count, a total of 65 veterans requested assistance. Since their location was mapped in real-time, coordinators were able to partner with service providers to deploy resources immediately. In addition, after the count a veteran outreach agency was provided the exact locations of the homeless veterans not reached on the day of the count for follow-up. Thus, knowledge of where the homeless population is located allows service agencies to provide assistance more efficiently.

HUD allows a 7-day post count to ensure all areas of the county are included in the PIT Count. Some areas such as harder to access encampments and unincorporated areas, are not always able to be thoroughly searched on the morning of the count. During the 2019 PIT Count, coordinators accessed the live map to easily identify areas to focus on during the post count. Thus, by mapping locations where homeless individuals tend to congregate, we are able to not only create soft count maps to be used on the day of the PIT Count and Survey, but also to map the trends and patterns of the homeless population residing in Riverside County.

WORTHINESS OF AWARD (1/4 TO ½ PAGE)

In 2018 Riverside County piloted, and in 2019 fully implemented, an innovative solution to address the issue of accurately counting homeless individuals and using the data obtained from the count in meaningful ways. New technology has provided an opportunity to benefit more from the data collected than in prior years. The mobile PIT Count and Survey improved efficiencies in the data collection process and eliminated the substantial amount of time required to prepare the data for analysis. As a result of using the *Survey 123* app, special populations like

veterans experiencing homelessness can be served rapidly and more effectively. Community agencies will also have access to data that will help them better provide services to individuals and families experiencing homelessness. Riverside County is now able to share more meaningful data collected in the field to enhance collaboration between service agencies and provide them with the information necessary to more efficiently impact the issue of homelessness. Finally, because soft counts are being conducted year-round in the County via mobile devices, as the yearly PIT Count date approaches, city planners and law enforcement will have a better idea of what neighborhoods to canvass on the day of the count. As the years go by and the County continues to produce maps based on annual PIT count data this will allow for a multi-year geographic analysis of the patterns and trends of the homeless population in Riverside County.