

Make a difference immediately

Use the right maps and data

Prepared for the US Department of Housing & Urban Development

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According to the [Department of Housing and Urban Development's 2017 Annual Homeless Assessment Report Part I](#), over 553,000 people in the United States were homeless on a single night in 2017. Continuums of Care (CoCs) are responding to homelessness in their communities by coordinating housing and services, but still face many obstacles to getting people the help they need. By using location tools to collect, organize, and share data, organizations can better understand the needs of homeless communities, increase the reach and impact of services, and deliver resources where and when they're needed. HUD provides CoC-level datasets each year, including the geographic boundaries, funding awards, and Point-in-Time count data to enable CoCs, homeless service providers and researchers to evaluate the efforts of CoCs.

Using ArcGIS to Help Reduce Homelessness

Where to Start - GIS Toolkit

The [HUD GIS Toolkit](#) provides access to state shapefiles with CoC boundaries within each state, as well as an introduction and overview of how to use the toolkit, a quick start guide and mini tutorials for using the GIS toolkit. The [Quick Start Guide](#) gives instructions on how to get started with your shapefiles.

The HUD CoC GIS Toolkit for Communities expands the mapping resources available to HUD Exchange users by providing a no-cost, downloadable software tool that allows users to interact with professional quality GIS maps. Other resources and alternatives are also presented. A best path forward for CoCs should be determined on a case-by-case basis. The [Quick Start Guide](#) is designed to provide an overview of options available.

The toolkit includes data on CoC Boundaries, HUD Geocodes and Preliminary Pro Rata Need (PPRN), U.S. Census Bureau produced demographics, detailed street maps, and more. Toolkit capabilities include mapping and saving addresses and other custom locations, producing custom routes with intermediate way points, and producing custom maps with annotation. Since 2013, the toolkit has also included annually updated block group level datasets of American Community Survey (ACS) 5-year estimates that allow communities to explore ACS data on demographic, housing, and economic characteristics at the neighborhood and regional level. Current Toolkit ACS data cover the latest available 5-year period, 2010-

14. Since 2014, the Toolkit has included Housing Inventory Count (HIC) data visualization by geocode. Users can query the map by program type for sheltered point-in-time (PIT) count data, beds reported by population served, and more.

Users access pre-compiled projects through a free software product called ArcReader, and are able to open and explore HUD specific project data as well as design and print custom maps. No special software or map skills beyond basic computer skills are required, meaning users can quickly get started working with maps of their communities.

Additional Considerations

The [Quick Start Guide](#) enables you to map the community that your CoC covers, set your boundaries and begin to work with data to manage your CoC - a great starting point! Many people aren't aware of the services that are available or don't know where and how to access them, limiting their impact and reach.

To meet these challenges and respond to homelessness in your community, the right tools and a clear strategy for using them can be a key differentiator. Today, the tools and strategy used to tackle social issues must include both technology and people. By equipping your staff and the community with purpose-built technology, you can improve the way you approach homelessness and mitigate its impact.

Objectives for Tackling Problems Related to Homelessness

CoCs coordinate the efforts of state and local governments, nonprofits and volunteers to reduce homelessness. These groups are acting at the community level, providing direct intervention, outreach and education to people affected by homelessness as well as persons at-risk of homelessness. Through these efforts, they aim to maximize the utilization of homeless services to end homelessness.

Successfully achieving these goals requires organizations to work together. They must be able to efficiently gather and analyze current, accurate data so they can understand the needs of their homeless populations, coordinate their activities, and increase the reach of their services. At the same time, they need to connect people with the right resources to help them get back on their feet. Because homelessness is such a complex issue, everyone needs to be involved in addressing it.

To help communities respond effectively to homelessness, Esri (the provider of ArcReader) has worked closely with local governments, homeless services experts, health and human services agencies, and other CoC stakeholders to define use cases for location-based tools and analysis. Through this process, we've identified four key areas where mapping and spatial analytics technology can improve your community's ability to end homelessness.

These areas include:

- Counting your homeless population
- Connecting people with support and services
- Reporting and analyzing homeless activity
- Assessing risk factors and indicators

The ArcGIS Solution to Reduce Homelessness

Esri has prepared a specific solution offering that includes core ArcGIS software as well as map and app templates built for homelessness response workflows. CoCs may have already have access to these resources by nature of association with a county or city government. If you're unsure as to whether or not these resources are available to you, please contact your Esri CoC representative (listed on page 6).

These maps and apps help agencies, service providers and CoCs (1) conduct homeless PIT counts, (2) inventory homeless services, (3) report homeless activity, and (4) analyze factors related to homelessness. They are designed to work together as one integrated system that supports the community's overall efforts to assist people who are homeless or at risk of becoming homeless. Each component of the ArcGIS Solution is described below and can be found [HERE](#).

Conduct Point-in-Time Counts

HUD requires communities to conduct annual PIT counts of homeless persons. Information collected through these surveys allows leaders and service providers to understand the scope of homelessness in their communities, investigate trends, identify needs and plan and allocate resources effectively. Esri has applied best practices and input from leading homeless survey methodology experts to develop a series of homeless count apps. These apps allow you to not only simplify the survey collection process but also more readily visualize and analyze the results.

ArcGIS apps for the homeless count:

Homeless Count Survey—This digital survey app allows communities to conduct PIT counts of sheltered and unsheltered homeless persons using laptops, smartphones, or tablets. When users capture data with the app, the information is automatically stored in your database and can be immediately used in reporting, analysis, and decision making. You can also capture location data as part of the survey, and the app works even when disconnected from the network, so you can gather survey data anywhere. The mobile app streamlines many parts of the PIT count process, saving CoCs time and money while also gathering more complete, more accurate data on people experiencing homelessness in their community.

Homeless Count Dashboard—This preconfigured, map-based dashboard lets you highlight specific key performance indicators (KPIs) that are relevant to homelessness, based on the results of a PIT count survey. For example, the dashboard shows the breakdown of sheltered and unsheltered individuals as well as the average number of days that respondents have been homeless. Since the dashboard is configurable, you can insert maps indicating areas with the highest levels and risk of homelessness, along with tools to track the success of your program offerings. No matter which KPIs

you choose to measure your progress, this dashboard view helps you monitor the state of homelessness in your community so you can evaluate the results of your services and refine your program offerings in the future.

Homeless Count Results—This report-based app lets you view detailed results for each survey question in your PIT count. You can see the counts and percentages for each survey response, as well as visualize the results using charts, graphs, and maps. This out-of-the-box interface makes it easier to review survey responses, understand patterns and trends, and gain insight into how you can more effectively target homeless resources and services.

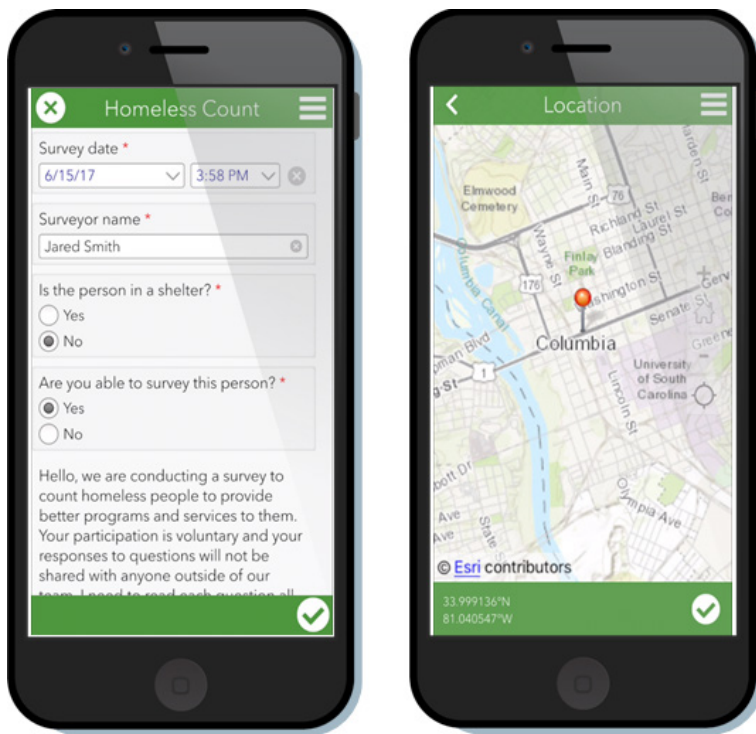


Image 1. [Mobile Homeless Count Survey App](#)

Locate Homeless Services

Government, nonprofit, and health and human services organizations work together to coordinate programs designed to provide shelter, food, and other assistance to homeless people. These programs make a real difference in supporting people on the street, stabilizing their health and wellbeing, and moving them into permanent housing, but they're often not fully utilized by the people that need them.

ArcGIS apps for the locating homeless services:

Health Resource Inventory—This web app lets health and human services agencies inventory homeless service providers in their community. You can catalog any kind of resource for the homeless—including shelters, housing or food assistance, medical assistance and counseling, life and work skills training, or services tailored for women, children, or veterans. In addition, you can distinguish facilities like urgent care clinics, physical therapy facilities, mental health offices, drug drop-off and treatment centers, health and human services offices, and more. The app allows you to designate contacts for each provider to keep the information current, helping you maintain a complete, up-to-date listing of all available homeless services in your community.

Homeless Service Locator—This web app allows users to locate facilities that provide assistance to homeless individuals and families. Both the homeless and at-risk households can use the app to find local agencies that offer services like food assistance, emergency shelter, housing assistance, life and work skills training, health care, and more. In addition, the app lets organizations locate and promote resources and opportunities for volunteers to donate time, knowledge, food, and supplies to support the homeless. Because the app is web based, you can embed it in your organization's website and share it through social media so it's easy to find and use from both a smartphone and a web browser.

By providing a way for people to locate and connect with homeless services in your community, you can increase awareness of these services and broaden their reach. This allows you to encourage more people to utilize the resources available to them so your programs can deliver a more positive impact.

Report Homeless Activity

While PIT counts capture a snapshot of homelessness in your community based on surveys conducted on a single night in January, homelessness is a dynamic, often fast-moving issue—the number of homeless people changes every day. To stay updated on these changes and effectively manage the needs and activities of your homeless population, you need a consistent way for citizens and social services providers to communicate their observations.

ArcGIS apps for reporting homeless activity:

Homeless Activity Reporter—This web-based app that allows both engaged organizations and the public to report the locations of homeless individuals and encampments (a process you may know termed ‘crowdsourcing’). They can also provide details about the activities, observations, or interactions that prompted the report. For example, they can describe a recently formed encampment or indicate a newly identified household experiencing homelessness. In addition, they can file complaints about problems that impact livability for residents and visitors—such as accumulations of waste or encroachments on popular tourist stops. By crowdsourcing this information, you can better understand ongoing homelessness conditions and render help more responsively when necessary.

Homeless Activity Manager—This back-office app helps health and human services personnel review and manage homeless reports that have been submitted by citizens and engaged organizations. The app provides all the data collected through the Homeless Activity Reporter app (including photo attachments, if provided) so you can evaluate each report. You can also use the app

to assign internal staff or external volunteers to respond to the report, as well as track the status of follow-up activities. With this app, you can more effectively coordinate your homelessness response resources, allowing you to validate reports faster, resolve issues quickly, and deliver aid and assistance when and where it’s needed.

Homeless Activity Dashboard—This dashboard app can be used by executives to monitor crowdsourced reports of homeless activities. The app provides a high-level view of open reports, including a map of their locations, summary statistics, and the number of reports. Decision makers can use the app to get a quick snapshot of newly reported homeless activity in their community so they can understand current trends and make sure reports are being addressed in a timely manner.

Assess Risk Factors and Indicators

To effectively reduce homelessness, you need a way to analyze the data you collect and share so you can understand the context behind issues faced by homeless and at-risk populations. Specifically, you need tools that help you examine the risk factors that drive homelessness and measure indicators that are tied to the accessibility and efficacy of homeless services in your commu-

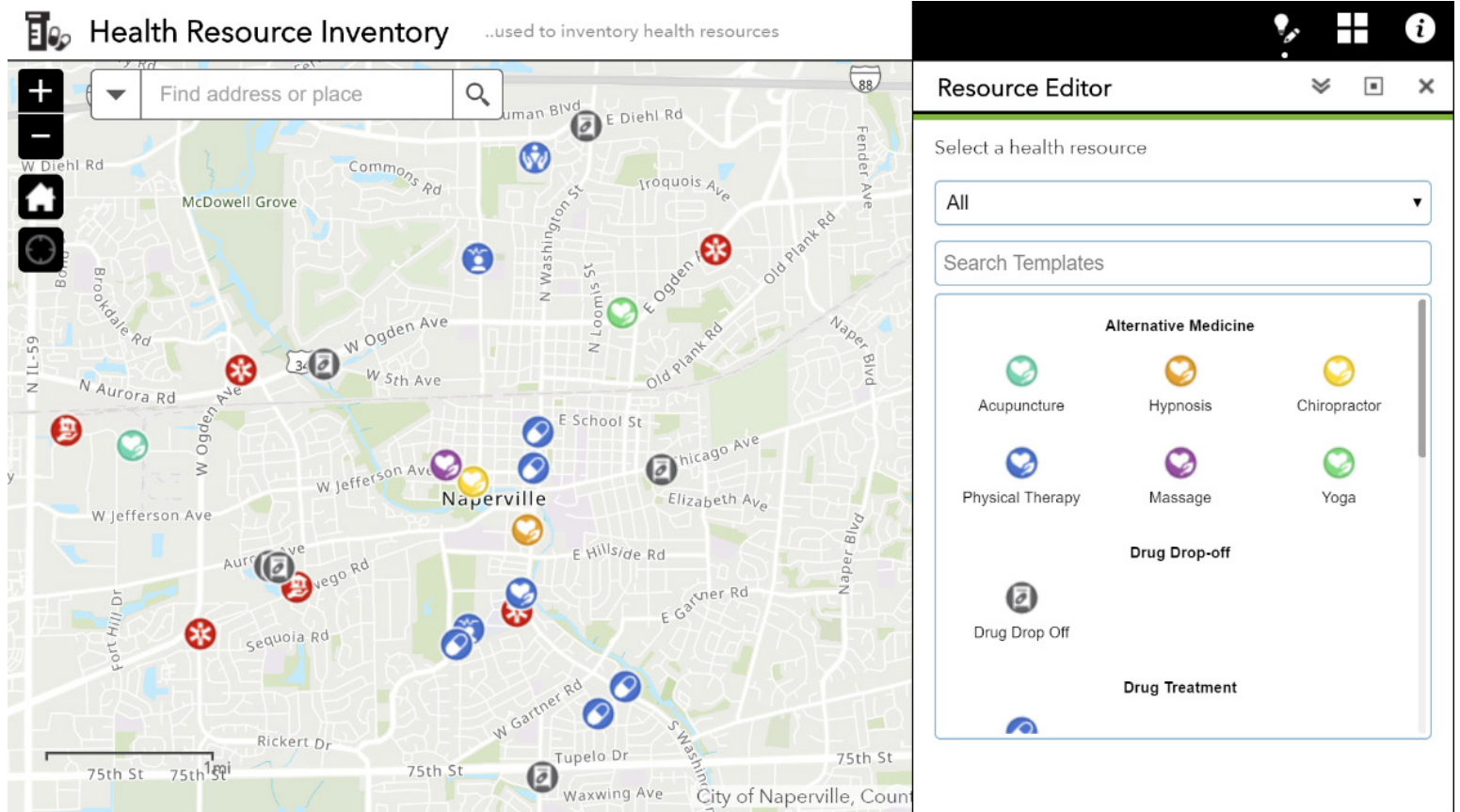


Image 2. Health Resource Inventory App

nity. These capabilities let you go beyond collecting and sharing information to get answers that support your efforts to reduce homelessness.

ArcGIS apps for assessing risk factors and indicators:

Community Analyst –This web-based app allows analysts to incorporate thousands of demographic variables in community assessments so you can better understand the challenges faced by residents and make more informed policy decisions. These variables include statistics for poverty, unemployment, housing, age, race, levels of insurance, and more, as well as detailed segmentation profiles. For a complete list of 2018/2023 variables please visit the [Community Analyst Data Page](#). The insights you gain from your analysis can help you identify ways you can more effectively combat homelessness. For example, you can quickly find high-risk neighborhoods using a customizable search wizard, then publish reports and maps that show which areas you should target for intervention and outreach initiatives. You can also use travel time analysis to determine whether affected populations have adequate access to resources.

ArcGIS Desktop –This desktop app allows analysts to perform complex analysis and author additional maps in support of your mission. For example, you can use desktop analysis tools to plan your PIT counts, allocate re-

sources efficiently, update and maintain your homelessness datasets, and build the underlying maps you use to explore and share data in paper materials, websites, and other ArcGIS apps. You can also apply ArcGIS desktop tools to a variety of use cases beyond the business areas defined in this offer, giving you broad-reaching capabilities that help you understand and address any problem or situation where location is a factor.

Esri Resources

If you have questions regarding the ways in which these solutions can be implemented in your community, or to find out if ArcGIS resources are already available to you for these activities, we want to hear from you! We are working to help facilitate the usage of ArcGIS resources and solutions by CoCs, and have set up a single point of contact to assist you. ArcGIS offers flexible deployment options that let you get started with what you need, then build toward an integrated enterprise system as you find other opportunities to apply spatial insights. This is possible because ArcGIS is a commercial off-the-shelf (COTS) platform with configurable, integrated apps that are easy to deploy. These apps minimize or eliminate the need for custom development and let you benefit from proven best practices. ArcGIS is also continuously updated, giving you new capabilities that you can apply as they're released.

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Additional Resource & Links

[Esri ArcGIS Solution Offerings to Reduce Homelessness](#)

[ArcGIS 'Point-in-Time Counts'](#)

[ArcGIS 'Health Resource Inventory'](#)

[ArcGIS 'Homeless Activity Reporter'](#)

[ArcGIS 'Find Warming & Cooling Centers'](#)

[Esri Homepage](#)

[HUD eGIS Open Data Storefront](#)