

Athens Wellbeing Project Overview & Technical Documentation, v. 3.0

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Athens Wellbeing Project: Introduction & Overview

The purpose of the Athens Wellbeing Project (AWP) is to assist our community leaders and institutions by providing a comprehensive snapshot of our community's unique needs and assets in Athens-Clarke County. Our mission is to empower the Athens community with meaningful data that will lead to more informed decision-making, improvements in service delivery, and greater quality of life for its citizens. This is accomplished through contributing to the integration of planning activities of local institutions, organizations, and community stakeholders through the collection and sharing of a primary, representative data set with greater geographic specificity than was previously available in our community.

The AWP is an unprecedented collaboration among the Athens-Clarke County Unified Government, Clarke County School District, Athens Area Community Foundation, Family Connection-Communities in Schools, United Way of Northeast Georgia, the Athens Housing Authority, Piedmont Athens Regional Medical Center, St. Mary's Hospital System, Envision Athens, and the University of Georgia. The nature of the AWP collaboration should also allow for increases in efficiency and more effective use of public funds to conduct needs assessments to meet legal requirements and accreditation criteria of local institutions to both state and federal agencies. AWP is designed to be a longitudinal project that assesses community wellbeing using a Social Determinants of Health (SDOH) framework. Data have been collected three times: v1.0 in Fall 2016, v2.0 in Fall 2018/Winter 2019, and v3.0 in Fall 2021/Winter 2022.

Athens Wellbeing Survey Instrument

The Athens Wellbeing Survey was developed through a participatory process that included the AWP research team, AWP institutional partners, and community stakeholders that contributed input into the kinds of information desired to assess well being in Athens-Clarke County. In the first iteration of AWP in 2016, over nine months, social service providers and leaders of community institutions were asked what they wanted to know in order to have the necessary information to improve service delivery to their clients and to make progress in achieving their organizations' mission. This feedback was collected by AWP institutional partners and submitted to the research team. The research team then compiled the input into a list of variables/constructs to include in the survey. Since the initial iteration of AWP, this process has been repeated. The research team has worked closely with the institutional partners and community-based organizations to further identify gaps in secondary data and knowledge so that subsequent survey iterations adapt to the community's needs.

Using the Social Determinants of Health (SDOH) as the framework for organizing the survey, it (also referred to as the "survey instrument") was ultimately organized into several topic areas. For this project, each topical area is called a "domain." Domains included in the survey have broad applicability across stakeholders and community institutions and include health, lifelong learning (education across the lifespan), housing, community safety, and civic vitality. In addition to these domains, the survey included a set of demographic and household characteristic questions. These items are hereafter referred to as the "survey core." The survey core includes important questions on age, family size, race, ethnicity, income, program participation, education level, veteran status, county residence, and other indicators essential in quantitative analysis.

In order to make sure the survey instrument collected the information needed by community stakeholders, validated questions were used when possible. In each domain, many of the questions were validated measures collected from other surveys used in communities across the United States. This serves two purposes. First, it ensures that our individual questions were validated and measured what we intended to measure. Second, it provides an opportunity to compare Athens-Clarke County findings to national surveys such as the American Housing Survey (from which we pulled relevant housing domain questions) and the National Election Survey (civic vitality domain measures).

The process for each survey instrument development was an iterative, collaborative process between the research team and AWP institutional partners. The approach focused on creating an instrument that met the needs of community stakeholders operating across survey domains to facilitate better cross-sector alignment.

A critical component of executing this work was achieving approval from the University of Georgia's Institutional Review Board (IRB) to conduct the project. IRB approval was received for v. 3.0 in September 2021 (Project ID#00004369).

Athens Wellbeing Sampling Frame

The sampling plan for the Athens Wellbeing Project (AWP) was designed to obtain a random sample of county residents, representative of the total population of Athens-Clarke County. The first step in selecting the AWP sample was to create a list of all residence or living communities (*i.e.*, apartment buildings, public housing communities, mobile home parks, and retirement communities) in Athens-Clarke County. This list, referred to as the *sampling frame*, was used to select a residence. For the purposes of the AWP, the unit of analysis is conceptualized as the household. Within each selected residence, a single resident living in the household received the AWP survey and was asked to respond on behalf of all residents living in the household. This person is hereafter referred to as the *respondent*.

To create a sample representing the population of interest the sampling frame needed to include all Athens-Clarke County residences. Sources for these lists included the Athens Clarke County Unified Government Department of Housing & Community Development and the Athens Housing Authority. The list of residences includes the following types of dwellings:

- Single family residences, condos, apartment complexes, and duplex buildings from the Athens Clarke County Planning Department
- Public Housing communities
- Mobile home parks
- Retirement communities

Next, the sampling frame was evaluated to determine which Athens-Clarke county residents might be underrepresented or missing from the frame completely. During the evaluation of the sampling frame, we determined that homeless and transitional residents could be missing from the

¹ We recognize due to residents moving, deaths, and potential inaccuracies in the lists that some individuals may not have been represented by our list of Athens--Clarke County homes.

frame. For the purposes of the AWP, we defined homelessness according to the McKinney– Vento Homeless Assistance Act of 1987 (Pub. L. 100-77, July 22, 1987, 101 Stat. 482, 42 U.S.C. § 11301).

Using the McKinney-Vento definition means that we defined homelessness more broadly than only including individuals with no shelter or residing in homeless shelters. This definition also encompasses individuals living with friends, family members, or otherwise in temporary or "transitional" housing situations. The vulnerable nature of homeless and transitional residents presented special challenges in constructing the sampling frame. As a result, we had to "select" them into the AWP sample differently from other residents.

The approach taken for this special population included sampling from nonprofit and faith-based service providers and working with the Clarke County School District to offer the survey to families who might meet the McKinney-Vento criteria.

Athens Wellbeing Sample Design

After building the sampling frame, the next step was determining the sample design, which dictates how residents are selected to be a part of the sample. Taking into account the many goals of the AWP, it was determined that a single-stage stratified random sample of Athens-Clarke County residences would be the most efficient and provide the most valuable data to address these project's goals.

A stratified random sample is a sample design where the population of interest (in this case, Athens Clarke County residents for the AWP study) is divided into smaller groups known as *strata*. The strata are typically formed based on analysis goals or similarities of the members in the population. Within each stratum, a random sample is selected. The random samples from each stratum are pooled together to form the overall random sample representing the population of interest. In this third round of AWP, six strata were created. They included:

- 1. Single-family residences, condos, and duplex buildings from the Athens Clarke County Planning Department
- 2. Apartment complexes
- 3. Mobile home parks
- 4. Retirement communities
- 5. Public Housing units
- 6. Homeless and Transitional Individuals

A mixed design was used to sample these strata. A stratified random sample design was used for some housing types, but for other housing types, it was more appropriate to use a census approach. In this approach, we try to get as many respondents as possible within a defined population or group. While it is often impossible to survey everyone with this approach, we strive to get as many respondents as possible within the group.

The censusing approach was used to sample higher counts of vulnerable populations: low-income households in public housing, low-income Latinx, seniors in retirement apartments/living, and the homeless/transitional population. For this reason, strata three through six, as listed above, were

the strata that required a censusing approach.

Strata one and two, conversely, were most appropriately suited by a stratified random sampling (SRS) approach. Again, this was to ensure that the sample data were representative of *all* Athens Clarke County residents. In total, there were six mutually exclusive strata. Within each SRS stratum, residences were randomly selected using a simple random sample with numbers generated from a statistical software package (SAS®).

In addition to the randomly selected individuals, we also decided to allow non-randomly selected individuals, voluntarily responding, to be included in the study.

Furthermore, new to this round, CCSD agreed to provide the email addresses to all the families with children in CCSD schools. Having access to this inexpensive and simple data collection method, we decided to census all families with children in CCSD schools. Selecting a census of all families with children in CCSD schools eliminated the need for the second stage of stratification used in the sample design for the first two rounds of Athens Wellbeing Project data collection.

² Although the strata for sampling purposes were mutually exclusive, individuals can be re-- assigned to other strata for analysis purposes. For example, responders from the mobile home stratum may be grouped with responders from the public housing stratum.

Athens Wellbeing Sampling Results

Table 1. Estimated population counts for Athens Clarke County residents, number of selected residents for AWP, and number of completed responses to the AWP survey.

Stratum	Population	Random Sample	Added Sample	Completes
Single Family Homes	36,847	3,333	(2,161 responded that weren't randomly sampled)	2,895
2. Apartments	15,111	3,333	(246 responded that weren't randomly sampled)	677
3. Mobile Homes	1,755	1,755		137
4. Retirement Communities	1,098	1,098		34
5. Public Housing	1,113	1,113	(73 responded that weren't included on our frame sampled)	170
6. Homeless	unknown	84		84
Total	55,924	13,120		3,997

In total, 3,997 Clarke County residents responded to the AWP survey. At the county level, this will allow us to make proportional estimates around 0.5 with 95% confidence and 80% power with a margin of error of \pm 2 percentage points.

Data Collection Strategy

The data collection strategy included a multi-prong approach, and was designed to increase the probability of having as many surveys completed as possible. This strategy included offering the survey in several modalities: an online-version respondents could access with their unique survey identification number (described below) using the Qualtrics system; or a paper-based version for respondents who did not have internet access or felt more comfortable completing the survey in this manner. The survey instrument was available in both English and Spanish versions. Individuals could also go to the homepage of the Athens Wellbeing Project website to take the survey or click on the URL sent to them via email for the households that had a registered email with the Clarke County School District.

Data collection began at the beginning of October 2018, when we launched two rounds of postcard mailers into the field to all households selected in the random sampling process. These postcards included basic information about how to complete the survey, along with the Survey ID and instructions on how to claim incentives.

In-person data collection occurred from mid-October of 2021 through mid-February of 2022 over a fifteen-week period. Online and paper-based survey collection was extended through the month of February, with a special focus on vulnerable populations.

Each household in the sample was assigned a unique 7-digit identification number. By using this number, hereafter referred to as the *Survey ID*, data analysis connecting each unique response with the geographic location of the household is possible. The Survey ID was not connected to the identity of respondents. Respondents were given their Survey ID and asked to enter the identification number (for online versions), or to record the number on the paper-based version, before completing the survey.

In order to increase response rates, incentives for participants were included as part of the methods for survey collection. To incentivize survey completion, respondents were entered into a weekly drawing for a Visa gift card. Weekly raffles were conducted using randomly drawn Survey ID numbers. Once the respondent completed the survey, they were instructed to use their Survey ID to check the AWP website and claim their prize if their number was drawn. In addition, respondents were offered a \$5 Starbucks gift card for responding to the survey. The gift card was mailed to each residence once the survey was completed.

Weighting the Data

After data collection was complete, an analysis dataset was created. The analysis dataset included the survey responses from online, paper-based, and in-person surveys. The next step in the process was to create analysis weights. To make inferences about the target population (all Athens Clarke County residents), or any subpopulations of the target population (strata described above), sample weights are needed. First, for all Athens Clarke County residents, we calculated the sample-design base weight reflecting each respondent's probability of inclusion in the sample. Next, an ineligibility adjustment was applied to the weights to account for residents that were deemed to be ineligible. Finally, a nonresponse adjustment was calculated to account for sampled residents that did not respond. The final analysis weights are the product of

the sample-design weights, ineligibility adjustment, and nonresponse adjustment.

The analysis weights account for variation in the probability of being included in the sample, and for varying rates of response across the sampling strata. These weights allow estimates to more accurately reflect the population totals of Athens Clarke County as a whole and populations within individual strata.

Limitations

This iteration of the Athens Wellbeing Project data collection process is not without limitations. First, the sample design used for this project was a stratified random sample. As discussed, for homeless and transitional households, a complete list of households was not available. This is a limitation that inhibits the ability to truly randomly select these households from the total population for their respective stratum. Obtaining such lists would have allowed for random selection, but the available residential data and the status of homeless/transitional families were two barriers to achieving this in constructing the sample design. To overcome these barriers, we worked with community partners and social service providers to create a list that was as comprehensive as possible. We cannot; however, guarantee that all households in this specific population strata were included in the list used to construct the sample.

The second limitation concerns individuals living in apartments, condominiums, and mobile homes in Athens Clarke County. Unlike single-family homes, a list of individual units and residents was unable to be obtained. Instead, a list of complexes and mobile home parks was relied upon to construct the sample. The information on these complexes and parks that was used provided, for example, the location of the complex and the total number of units therein. However, we did not have a list of individual families living in each unit.