# Arizona Cooperative Extension Statewide Needs Assessment Survey 

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## ABOUT THIS REPORT

Arizona Cooperative Extension is the outreach arm of the University of Arizona and the Division of Agriculture, Life and Veterinarian Sciences, and Cooperative Extension (ALVSCE) with the mission of engaging with people through applied research and education to Improve lives, familles, communities, the environment and economies In Arizona and beyond. Arizona Cooperative Extension has offices in every county and five tribal reservations. It is part of a nationwide network of scientists and educators who work with communities to solve problems using scientific and local knowledge.

To better understand community needs and priorities, Arizona Cooperative Extension partnered with the Community Research, Evaluation, and Development (CRED) team within the Norton School of Human Ecology to lead a statewide needs assessment survey effort in 2022. The results summarized in this report can be used to inform strategic planning efforts and to facilitate dialogue about how best to meet community needs.

The needs assessment survey, available in English and Spanish, included 99 items across the following topics:

- Health and community well-being (26 items)
- Education and youth development (14 items)
- Agriculture (22 items)
- Natural resources and the environment (21 items)
- Community and economic development (16 items)

Participants were asked to rank how important it is to prioritize each item in their community using the following scale: (5) extremely important, (4) very important, (3) somewhat important, (2) a little important, (1) not at all important, or I don't know (not included in analysis). More details about the survey development and methods can be found in the appendix (beginning on page 18).

## SURVEY RESPONSES PER COUNTY

## 3,236 survey responses were included in the final analyses. <br> Each county had at least 7 respondents.




## SURVEY RESPONSES PER 1,000 GENERAL POPULATION

52\% of respondents identified as rural residents.

Compared with urban counties (Pima, Pinal, and Maricopa), rural counties had more survey responses per 1,000 population.

## CROSS-CONTENT RANKED PRIORITIES



## HEALTH \& COMMUNITY WELLBEING

"How important is it to make each of the following issues a priority in your community?"


## EDUCATION \& YOUTH DEVELOPMENT

"How important is it to make each of the following issues a priority in your community?"


## AGRICULTURE

"How important is it to make each of the following issues a priority in your community?"


## NATURAL RESOURCES \& THE ENVIRONMENT

"How important is it to make each of the following issues a priority in your community?"


## COMMUNITY \& ECONOMIC DEVELOPMENT

"How important is it to make each of the following issues a priority in your community?"


## SURVEY RESPONDENTS

Efforts were made to recruit diverse survey participants from across the state. Details of the recruitment process are included in the appendix (beginning on page 18). The following sections describe what we know of those who responded compared with the general population of Arizona (as estimated by the 2020 American Community Survey (ACS)).

Tribal considerations: Arizona Tribal Extension has offices on the lands of the Navajo Nation, Hopi Tribe, Hualapai Tribe, Colorado River Indian Tribes, and San Carlos Apache Tribe. Arizona Extension also partners with other tribes to offer programming. The current survey process was designed to identify needs and priorities at the state and county level. Collecting data to meaningfully inform Extension's partnership with Arizona tribes will require a tribalspecific needs assessment that honors the data sovereignty of individual tribal nations. Tribal community members were not excluded from participation in this survey, however, and are included as state and county residents.

Data considerations: For each demographic question, there were participants who did not provide a response. The proportions of survey-takers who answered the question, selected 'Prefer not to respond,' selected 'I don't know,' or left the question blank are indicated by the dial within the section header. Because we cannot make assumptions about the survey-takers who did not provide responses, the demographics presented in this report may not fully reflect the complete survey sample.

## LANGUAGE

The ACS estimates that 15.3\% of Arizona residents over 18 speak Spanish at home.

## 15.3\%

About a quarter of these (or 3.6\% of the total population) speak English less than "very well."
$1.8 \%$ of the surveys were taken in Spanish.


Note: Responses from residents of tribal lands are not included in this figure. However, their responses are included in the results as state and county residents.

## RACE AND ETHNICITY



Provided a response
Selected 'Prefer not to answer' Blank

Compared with all Arizona residents, a larger portion of survey respondents who provided their race and ethnicity identified as White (76\% compared with $53 \%$ ) and smaller portions identified as Hispanic or Latino ( $17 \%$ compared with $31 \%$ ), multiracial ( $5 \%$ compared with $14 \%$ ), Black or African American (2\% compared with 5\%), or Asian (2\% compared with 4\%). Please note that $26 \%$ of survey respondents did not elect to provide a race or ethnicity.


Black or African American
2\% 5\%
Asian

## 2\% 4\%

## Native Hawaiian or Other Pacific Islander

## 1\%

Note: Percents sum to more than $100 \%$ because the race and ethnicity categories are inclusive, meaning that respondents are included in every category that they selected.

## GENDER



Provided a response Selected 'Prefer not to answer' Blank

More women completed the survey, representing 3 out of every 4 survey-takers.


Woman, 75\%


Man, 25\%

## Non-binary, 1\%

Note: Percentages do not sum to $100 \%$ due to rounding.

## HOUSEHOLDS



Provided a response Selected 'Prefer not to answer' Blank

2.9

Average household size

$30 \%$ had child(ren) under 18


11\% had child(ren) under 6

## EDUCATION

 Blank

Survey participants were more highly educated than the overall adult population in Arizona. About 6 in 10 survey respondents had a bachelor's degree or higher (61\%), compared with just over 3 in 10 Arizona residents (33\%).

Graduate or professional degree


## INCOME

Provided a response Selected 'Prefer not to answer' Selected 'I don't know' Blank

Among those who were willing to report their household incomes, survey respondents also had higher household Incomes than the general population of Arizona, with a smaller portion of respondents living in households making less than \$50,000 and larger portion living in households making between \$50,000 and \$200,000 each year.

Share of Arizona
population (2020 ACS)

Share of survey respondents


## AGE DISTRIBUTION

The age of participants ranged from 14 to 100 , with an average age of 54 years old. A larger portion of survey-takers were between the ages of 40 and 80 than the general population of Arizona, and fewer were younger than 40.


## RESIDENTIAL LOCATION

 Blank

A majority (52\%) of respondents lived in rural areas, including small towns (26\%), rural areas (not a farm or ranch, $18 \%$ ), or on a farm or ranch (8\%). About a quarter (28\%) of respondents lived in cities.

## CONTENT EXPERTISE


$86 \%$ of participants had work, volunteer, or educational experience related to at least one of these content areas:


## EXTENSION AWARENESS



In addition to those who have been engaged with Cooperative Extension, the survey successfully reached Arizona residents who were unfamillar with Cooperative Extension.

Approximately 1 in 3 respondents knew "nothing" or "a little bit" about Extension (35\%), and almost 1 in 3 didn't think they had participated in an Extension program or event (31\%).


When asked "When you need in-depth information about something, how do you like to get that information?" participants were most likely to indicate:


Website or online article, 74\%

Talk with an expert, 53\%


## APPENDIX: METHODS

## Guiding frameworks

The Community Research, Evaluation, and Development (CRED) team drew upon multiple existing frameworks to inform the scope of the needs assessment survey. In Spring 2022, TEConomy was finalizing a report on the economic and social impacts of the Arizona Extension system. The report organizes Arizona Extension's work into several focus areas: agricultural production; natural resources and environmental stewardship; family, consumer and health sciences; and consumer and economic development. This was used as the base framework for the needs assessment. Several other frameworks are important to the Extension system, namely the Cooperative Extension National Framework for Health Equity and Wellbeing, ${ }^{1}$ Land Grant Impacts, ${ }^{2}$ and Community Capitals. ${ }^{3}$ Finally, the Center for the Future of Arizona (CFA)'s Gallup Arizona Project ${ }^{4}$ performs a decennial, representative survey to identify Arizonans' priorities across a wide set of issues and provide guidance for policy and other community action. Each of these contributed to the range of issues and topics addressed in the needs assessment survey.

## Survey development

CRED reviewed several needs assessments that had been recently conducted by Extension offices at Colorado State University, Montana State University, University of Nevada, and Utah State University in order to generate an initial survey item bank of Extension-related priorities across other western states. CRED then added locally-prioritized items through the review of secondary reports by local governments and other organizations (published in 2016 or more recently) identified via key informants and internet searches. These included County Health Needs Assessments (CHNAs) and County Health Implementation Plans (CHIPs), County Economic Development Plans, locally-implemented needs assessments, and topical reports on agriculture, natural resources, tourism, education, youth development and other specific issues facing communities. To ensure a diversity of perspectives, at least five reports were reviewed per Arizona county.

The item bank was reviewed iteratively by the CRED team as well as Extension faculty and staff to narrow it down to a total of 116 items across the following topics: health and community wellbeing (26), education and youth development (14), community and economic development (16), agriculture (22), natural resources and the environment (21), and participant demographics (17). The draft survey instrument was also reviewed by Extension faculty and staff, and CRED performed several rounds of cognitive interviewing with community members to improve question validity. ${ }^{5}$

The final survey included five topical sections broken into 19 sub-sections (see figure below). Participants were asked to rank how important it is to prioritize each item in their community using the following scale: (5) extremely important, (4) very important, (3) somewhat important, (2) a little important, (1) not at all important, or I don't know (not included in analysis).

## Figure 1. Needs Assessment Survey: Topical Sections and Sub-sections

## Health and community well-being (26 items)

- Food and finances
-Family support
- Health care systems
- Early childhood health \& development
- Health


## Education and youth development (14 items)

- Youth well-being
- School-based supports
- College and careers


## Community and economic development (16 items)

-Economic opportunity

- Housing
- Infrastructure
-Community engagement


## Agriculture (22 items)

- Food systems
- Natural resources
- Farm and ranch management


## Natural resources and the environment (21items)

- Sustainability
-Conservation
- Climate and energy
- Environmental health

Both a web-based version and a paper and pencil version of the community needs assessment survey were developed. Web-based surveys were administered online via Qualtrics. The webbased survey randomized the presentation of survey sections to avoid response bias and to protect against systematic incomplete responses (i.e., participant drop out before completing the last section, for example). The finalized survey and recruitment materials were translated into Spanish by Arizona Extension's Support Services. The study was deemed exempt by University of Arizona's Institutional Review Board.

## Sampling plan

Given a goal of usable information at both the county and state level, the minimum sampling target was 200 to 400 responses per county to achieve a sampling error of $+/-5 \%$ (Dillman, $p$. 207). In an effort to ensure that the perspectives of a wide variety of people were included, specific targets were set for reaching (1) Cooperative Extension users, (2) topical experts, and (3) members of the general public from each county. Cooperative Extension (CE) users were defined as people who have attended programming or volunteered with Extension (e.g., ranchers, farmers, Master Gardeners, adults and youth in nutrition education, parenting classes, 4-H youth and volunteers). Non-users, but Experts included people who are familiar with issues in the community but not necessarily with Cooperative Extension (e.g., directors or program coordinators at local agencies; agriculture and rangeland experts; superintendents or school principals; faith-based leaders; members of local youth organizations; members of city or county government, the chamber of commerce, and other economic development agencies). Counties were asked to recruit CE Users and non-user experts broadly across Extension-relevant topical areas. Additionally, each county aimed to recruit 10 youth (age 14 or older) CE users and 10 youth CE non-users.
Across these groups, counties with major urban areas (Maricopa, Pima, and Pinal) were asked to recruit a minimum of 400 respondents, and the remaining 12 counties were asked to recruit a minimum of 240 respondents (Table 1). Three of 15 counties met these targets.

## Table 1. Urban and Rural County Sampling Targets

|  | CE Users |  | Non-users, but Experts |  | General Public |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CE Program Area | Urban <br> counties | Rural <br> counties | Urban <br> counties | Rural <br> counties | Urban <br> counties | Rural <br> counties |
| Agriculture and Natural <br> Resources | 30 | 20 | 30 | 20 |  |  |
| Family and Consumer Health <br> Sciences | 30 | 20 | 30 | 20 | 200 | 100 |
| Youth Development | 30 | 20 | 30 | 20 |  |  |
| Youth participants (14 years <br> old or older) | 10 | 10 | 10 | 10 |  |  |
| Total | 100 | 70 | 100 | 70 |  |  |

While the first two categories could be specifically recruited via personal connections, general public participants were recruited in-person in public areas and at community events, and by snowball sampling through friends, family, partnering agencies' listservs and newsletters.

Because Arizona's counties are large and diverse, 6 it was important to sample across the different communities within each county. CRED created general public sampling targets to encourage purposeful sampling across different types of communities in each county. Zip codebased communities were grouped together by socioeconomic and demographic factors using ESRI's Tapestry Segmentation, ${ }^{7}$ with the goal of each county sampling evenly across their segmentation types rather than focusing on population centers. Tapestry segmentation has been used by other states in their Extension needs assessment, most recently Colorado, to describe variability across communities.

Figure 2. Tapestry Segmentation Example with "Life Modes"


Table 2. Purposeful General Public Sampling Targets Based on Segmentation (Cochise County Example)

| Segment | Pop. (2020) | Housing Units (2020) | County <br> Share (\%) | Survey Target (Min.) | Communities |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LM 4 (Family Landscapes) | 14,857 | 6,652 | 12\% | 12 | Sierra Vista (85650) |
| LM 5 (GenX Metro) | 35,095 | 17,139 | 28\% | 28 | Sierra Vista (85635) |
| LM 6 (Rural Lifestyles) | 9,063 | 4,305 | 7\% | 7 | Hereford/Palominas |
| LM 7 <br> (Southwestern Families) | 18,744 | 7,399 | 15\% | 15 | Douglas, Pirtleville |
| LM 9 (Senior Styles) | 26,350 | 15,256 | 21\% | 21 | Benson, Bisbee, Bowie, Cochise, Dragoon, Elgin, McNeal, Pearce, Pomerene, Saint David, San Simon, Tombstone |
| LM 10 (Rural Roots) | 13,382 | 6,693 | 11\% | 11 | Elfrida, Huachuca City, Willcox |
| LM 12 (Hometown) | 734 | 277 | 1\% | 1 | Naco |
| LM 14 (Military/College) | 5,239 | 925 | 4\% | 4 | Fort Huachuca |

## Survey distribution

County Extension offices led survey distribution using a protocol for rural and urban counties, county-based sampling plans, recruitment materials, and other support from CRED. Other Extension affiliates (i.e., Extension Specialists, Experiment Stations) assisted with statewide recruitment. The survey was open for eight weeks in fall 2022. Surveys completed on paper were also added into the Qualtrics system.

Throughout the distribution period, CRED generated bi-weekly reports to compare the demographics of survey participants to date with recruitment targets and county demographics (using ACS 2015-19 estimates, the most recent available). The goal of these biweekly reports was to help county Extension offices target and refine their recruitment strategy to achieve as close to a representative sample as possible.

