AZ Health Zone (SNAP-Ed)
2023 Needs Assessment
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About this report

The Supplemental Nutrition Assistance Program – Education (SNAP-Ed) is a federally funded program. In Arizona, AZ Health Zone administers these funds, which are used to support "evidence-based nutrition education and obesity prevention interventions and projects for persons eligible for the Supplemental Nutrition Assistance Program (SNAP) through complementary direct education, multi-level interventions, and community and public health approaches to improve nutrition."[1] This needs assessment aims to document the resources and needs related to nutrition and active living for Arizona and its people to inform the work of AZ Health Zone. An array of data sources, detailed in the table below, were compiled to highlight different elements that merit consideration in program planning.

There is growing acknowledgement of the role our physical, social, and economic environments play in our day-to-day health and wellbeing.[2] These factors, known as the social determinants of health, affect everyone in our communities and accumulate over generations.[2, 3] Measuring and addressing these conditions can significantly impact health, educational, and economic circumstances across the lifespan.[1, 4, 5] It is important to acknowledge that structural inequities in access to quality health care, education, and food retailers as well as living, working and leisure conditions lead to disparate outcomes within and between groups of people.[6] This needs assessment covers many structural and social determinants of health including population and economic characteristics, access to nutrition and physical activity opportunities, care and education systems, and mental and physical wellbeing.

This report begins with an overview of Arizona data on individuals and families who may be eligible for SNAP-Ed programs. Throughout the report the phrase 'SNAP-eligible' is used to refer to individuals and households with incomes below 185% of the federal poverty level (FPL), a calculation that accounts for both income and household size. For example, the thresholds for 185% FPL in 2020 were $23,606 for single individuals, $31,894 for a family of two, and $48,470 for a family of four.[7] It is important to note that there are additional requirements for SNAP eligibility beyond income such as citizenship/resident status,[8] such that the actual SNAP-eligible population is likely slightly different than identified using this one indicator.

In most tables in this report, data are presented for the state as a whole. Where possible, data are also presented at the county-level and/or disaggregated by demographics including race and ethnicity, gender, age group, and educational attainment. Data tables and graphs are as complete as possible, but data which are not available for a particular geography or demographic are indicated by the abbreviation "N/A." Table entries of "DS" indicate that data have been suppressed either because of small values or large margins of error indicating unreliable estimates (e.g., for American Community Survey estimates from small samples).

This report includes a custom analysis of access to SNAP and WIC retailers and recreation opportunities by urbanicity (at the state and county-levels). The National Center for Education Statistics (NCES) uses locale boundaries to describe the type of area where a school is located.[a] NCES classifies all U.S. territories into four types—rural, town, suburban, and city—based on population size and proximity to populated areas as well as standard urban and rural designations by the U.S. Census Bureau. This report uses NCES local boundaries but with the terminology revised through public hearing held by Arizona Department of Health Services (ADHS) in 2022 to wilderness, rural, suburban, and urban.[b]

As the current secondary data needs assessment was designed to identify priorities and opportunities at the state and county levels, there is minimal data presented on tribal communities within Arizona. Collecting data that can meaningfully inform AZHZ's partnership with Arizona tribes will require a tribal-specific process which

[a] *For more information, see https://nces.ed.gov/programs/edge/Geographic/LocaleBoundaries*

[b] *Accessed at https://services1.arcgis.com/mpVYz37anSdrK4d8/arcgis/rest/services/NCESLocales_Revised/FeatureServer/0*

honors the data sovereignty of individual tribal nations. Tribal data included in this report primarily come from the U.S. Census Bureau's My Tribal Area, which presents estimates based on a sample of persons living within tribal reservation boundaries (both tribal members and people of other races/ethnicities). More information on this data source is included in the table below.

Data sources

This assessment is primarily a compilation of several secondary reports along with publicly available and specially requested secondary data. Data sources and years are included with tables and figures throughout the report. Please note that data sources and methodology for the maps are detailed in the next section.

Table 1. Needs Assessment Data Sources

Data Source	Description	Years
Arizona Department of Health Services (ADHS) Bureau of Nutrition and Physical Activity (BNPA) draft data compilation[c]	Arizona Department of Health Services (ADHS) staff provided a draft of a secondary data report compiled by the Bureau of Nutrition and Physical Activity (BNPA) in 2023. Data in this report come from: ADHS Empower Program Database ADHS Hospital Discharge Database ADHS Vital Records, Births and Deaths data Arizona Health Zone (AZHZ) Target Population Study (2019) of 18- to 49-year-old SNAP-eligible women with a child under 12 years old Center for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) CDC National Immunization Survey (NIS) CDC Pregnancy Risk Assessment Monitoring System (PRAMS) CDC School Health Policies and Practices Survey (SHPS) CDC Youth Risk Behavior Surveillance System (YRBSS) National Maternity Practices in Infant Nutrition and Care (mPINC) hospitals survey United States Decennial Census (2010, 2020) and American Community Survey (ACS) 5-year estimates U.S. Census Bureau's annual National Survey of Children's Health (NSCH)	2023 (draft)
ADHS Vital Statistics	The Bureau of Vital Records within ADHS stores birth and death certificate data for all Arizona residents. Data in this report come from the 2020 Arizona Health Status and Vital Statistics Report.	
Arizona Health Zone (AZHZ)	Arizona Health Zone (AZHZ) is Arizona's SNAP-Ed program with a primary goal of increasing healthful nutrition and physical activity behaviors among persons eligible for SNAP benefits through	FY2021 & FY2022

[c] *Draft not yet available for public dissemination*

Evaluation Reports	policy, systems, and environmental approaches and direct education. **FY2021 report[d] data sources:** Evaluation narratives submitted by Local Implementing Agencies (LIAs) Trauma-Informed Approaches (TIA) LIA staff survey and educator interviews Physical Activity Resource Assessment (PARA) Arizona Department of Education's Activity & Assessment Tool (AAT) to measure districts' implementation of local wellness policies (LWPs) Nutrition and Physical Activity Self-Assessment for Child Care (Go NAPSACC) Stocking Opportunities in the Retail Environment (STORE) tool Around the Table (ATT) curriculum evaluation **FY2022 report[e] data sources:** Evaluation narratives submitted by Local Implementing Agencies (LIAs) Community engagement focus group with LIA staff Trauma-Informed Approaches (TIA) interviews with SNAP-Ed participants and LIA managers Smarter Lunchroom Movement (SLM) program evaluation LWP strength and comprehensiveness analysis ATT curriculum evaluation	
Empower Program Implementation Report, Y4-Y7[f]	The Arizona Department of Health Services implements the Empower Program for children in Arizona's licensed child care facilities to promote healthy environments and behaviors. Facilities who enroll in the program receive discounted annual licensing fees for implementing ten standards related to physical activity, sun safety, breastfeeding-friendly environments, Child and Adult Care Food Program (CACFP), sugar-sweetened beverages, family-style meals, oral health, staff training, education materials on the smoker's helpline, and smoke-free campuses. The report used in this needs assessment covers years 4 through 7 (2017-2020) of the Empower Program and includes data on the percentage of facilities implementing components of each of the 10 standards.	2021
Food Distribution Program on Indian Reservations (FDPIR)	The Food Distribution Program on Indian Reservations (FDPIR) provides USDA Foods to income-eligible households living on Indian reservations. USDA distributes both food and administrative funds to participating Indian Tribal Organizations and state agencies to operate FDPIR. Monthly data (October 2022 through February 2023) on certified households, participating households, and participating people were received by special request for the eight participating tribes in Arizona.[g]	October 2022-February 2023
My Tribal Area[h]	My Tribal Area is a U.S. Census Bureau web application that collates American Community Survey (ACS) data on people, jobs, housing, the economy, and education within Federally-recognized tribal reservations. The estimates used in this report come from the 2017-2021 ACS. It is important to note that these estimates reflect a sample of persons living within tribal reservation	2017-2021

[d] *Available at: https://www.azhealthzone.org/collaborators/documents/fy21-az-health-zone-evaluation-report/*
[e] *Available at: https://www.azhealthzone.org/collaborators/documents/fy22-az-health-zone-evaluation-report/*
[f] *Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf*
[g] *Statewide participation data from FY2018 to FY2022 were also retrieved from: https://www.fns.usda.gov/pd/food-distribution-program-tables*
[h] *Retrieved from: https://www.census.gov/tribal/*

	boundaries (both tribal members and people of other races/ethnicities), and that many enrolled or affiliated tribal members do not live on the reservation.	
SNAP Target Population Research Report[i]	A report on a survey of 794 SNAP-eligible women ages 18-49 with at least one child ages 0-11.	2019
University of Arizona Statewide Cooperative Extension Needs Assessment Survey	Arizona Cooperative Extension (Extension) is the outreach arm of the University of Arizona with the mission of engaging with people through applied research and education to improve lives, families, communities, the environment and economies in Arizona and beyond. To better understand community needs and priorities, Extension conducted a statewide needs assessment survey in 2022. A total of 3,236 survey responses were collected, representing all 15 Arizona counties. Participants were asked to rank how important it is to prioritize 99 items across five overarching topics in their communities.[j]	2022

Maps: Use, Methodology, and Data Sources

AZ Health Zone Interactive Maps

A set of interactive web maps were developed in partnership between UArizona AZ Health Zone (UA SNAP-Ed) and the Community Research, Evaluation, and Development (CRED) Team within University of Arizona's Norton School of Human Ecology. These maps synthesize data from an array of publicly available sources into one platform to explore access to healthy foods and physical activity at the county and community levels for AZHZ program planning purposes. Map data are updated periodically as possible (e.g., every 2-3 years for American Community Survey data).

Access the AZ Health Zone Interactive Maps here: https://uarizona-snap-ed-maps-uagis.hub.arcgis.com/

Percent of population living within walking (one mile) or driving (10 miles) distance of food retail and physical activity opportunities

This analysis presents, within a given geography, the proportion of the total population that is living within walking distance (one mile) or driving distance (10 miles) of a food retailer or physical activity opportunity. Counties are split into urban, suburban, rural, and wilderness areas using the 2021 National Center for Education Statistics (NCES) locales classification.[k]

Walking and driving distances follow distance measures used in the USDA Food Access Research Atlas.[l] One mile is used for urban and suburban locations to approximate more walkable environments, whereas 10 miles is used for rural and wilderness locations where driving or other non-walking transit is necessary.

The proportion of the population living within these distance thresholds was calculated by using ESRI Network Analyst to generate service areas and identifying census blocks with mean centers within these service areas.

[i] *Available at www.azhealthzone.org/wp-content/uploads/2021/10/2019-az-health-zone-target-population-report.pdf*

[j] *Community Research, Evaluation & Development Team, University of Arizona. (2023). Arizona Cooperative Extension Statewide Needs Assessment Survey. Retrieved from https://extension.arizona.edu/statewide-needs-assessment*

[k] *Accessed at https://nces.ed.gov/programs/edge/Geographic/LocaleBoundaries*

[l] *Accessed at https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx*

Food retail locations: The locations of WIC retailers were obtained in July 2022 from the ADHS WIC Vendor List[m] as well as the Intertribal Council of Arizona WIC Program Find a Store tool.[n] Based on the comprehensive nutritious foods requirements for WIC vendors, these locations are a close proxy for full-service grocery stores.

The locations of SNAP retailers were obtained from the USDA SNAP Retailer Locator[o] in June 2022. These retailers were coded as convenience stores, grocery stores, or other retailers (including discount and dollar stores, small and specialty grocers, farmers markets, and pharmacies) by matching the USDA retailer dataset with data drawn from ReferenceUSA that includes information on North American Industry Classification System (NAICS) codes and location sales volumes. Following definitions used in the USDA Food Environment Atlas,[p] convenience stores were defined as those with NAICS codes 44520 and 447110. Grocery stores were defined as large supermarkets with NAICS code 445110 or superstores with NAICS code 452910 with annual sales volume of two million dollars or more. Stores for whom NAICS codes or sales volume could not be found were coded based on store name and data available online and cross-validated by a second coder to identify full-service grocery stores.

Recreation opportunities: Recreation opportunities include public parks, recreation areas, recreation centers, and trails. All polygon features, such as parks and recreation areas, and line features, such as trails, were converted to points for the creation of service areas.

Locations of public parks are a combination of local and regional parks from the ESRI USA Parks dataset,[q] and the Central Arizona Project parks dataset[r] in November 2022. Given the poor coverage by these sources of parks in certain areas of the state, public parks in La Paz County, Greenlee County, and the Navajo Nation were digitized from satellite imagery on Google Maps and refined based on community feedback.

Recreation areas were defined as National Park and National Monument lands, U.S. Forest Service Land, and public recreation sites such as picnic areas and campgrounds. These locations were obtained from the ESRI USA Parks dataset and the U.S. Forest Service Recreation Facility dataset[s] in March 2021.

Recreation centers were defined as recreation centers operated by local parks and recreation departments. These centers were identified through an online search of county and local municipality websites by a team of research assistants in June 2019. The recreation center dataset was last updated in November 2022.

Trails location data were accessed in April 2023. Trails were obtained from the Arizona Trail shapefile, BLM Routes datasets, and USGS trails compilation;[t] the National Forest Service Trails, Transport, and Motor Vehicle Use shapefiles;[u] and trails in the National Park Service Data Store.[v]

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[m] *Accessed at https://www.azdhs.gov/prevention/azwic/families/index.php#vendors*
[n] *Accessed at http://itcaonline.com/?page_id=1064*
[o] *Accessed at https://www.fns.usda.gov/snap/retailerlocator*
[p] *https://www.ers.usda.gov/data-products/food-environment-atlas*
[q] *Accessed at http://www.arcgis.com*
[r] *Accessed at https://azgeo.az.gov/*
[s] *Accessed at https://data.fs.usda.gov/geodata/*
[t] *Accessed at https://azgeo.az.gov/*
[u] *Accessed at https://data.fs.usda.gov/geodata/*
[v] *Accessed at https://irma.nps.gov/DataStore/*

Food deserts and low vehicle access

Low income and low access (LILA) census tracts were designated in 2019 by the USDA and accessed through the Food Access Research Atlas.[w] Data on vehicle access came from the 2021 American Community Survey (5-year estimates).[x] The map displays Census tracts where more than 8.3% of occupied housing units had no vehicle, which was the mean for the state.

SNAP-eligible incomes and household SNAP use

Tract-level estimates of personal income and household Food Stamp/SNAP use came from the 2021 American Community Survey (5-year estimates). Income under 185% of the federal poverty level is used as a proxy for SNAP eligibility; "high SNAP eligibility" tracts where a larger portion of the population has incomes below 185% FPL than the state as a (29% of the population) are displayed. Conversely, "low SNAP use" tracts where a lower portion of the households are receiving SNAP than the state as a whole (10.2% of households) are displayed to highlight geographic areas where eligibility may be high but the need is not being filled.

Locations of Arizona Health Zone (AZHZ) 2022 active sites were provided by Arizona Department of Health Service by request.

[w] *Data are available at https://www.ers.usda.gov/data-products/food-access-research-atlas/; definitions are available at https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/*

[x] *Accessed at data.census.gov*

Summary of findings

Population characteristics and economic circumstances

There is significant need for programmatic and policy, systems, and environmental change efforts to support nutrition and physical activity across the state of Arizona. Based on the proportion of births paid by AHCCCS, almost half of babies born in the state are likely eligible for SNAP. While a quarter of Arizonans live in households meeting income-eligibility for SNAP, only 10% of Arizona households are receiving SNAP, indicating that this resource is not reaching all families in need.

There is a particular need to concentrate efforts on serving areas with disproportionate levels of poverty (such as rural areas and tribal lands) and populations who are more likely to be impacted by poverty (including women, young children, and teens; individuals who identify as American Indian or Alaska Native, Black or African American, or Hispanic; and individuals with less than a high school education). Individuals in single-parent households in Arizona are more likely to be eligible for SNAP than those in married-couple households, especially those in single-female-headed households. SNAP income eligibility is also higher among persons speaking Spanish or another language at home and those who speak English less than 'very well'; based on this, multi-lingual resources and language assistance are key for ensuring access and engagement with program efforts.

About 1 in 10 individuals in Arizona, and in the US, are experiencing nutrition insecurity. Since 2008, the proportion of individuals with very low food insecurity in Arizona has decreased from 5.9% to 3.1%. While the number of individuals eligible for WIC has decreased since 2012, since 2018 the proportion of the eligible population being served has steadily increased from 49% to 55%. Similar to WIC, just over half of individuals experiencing food insecurity were participating in any federal nutrition assistance program in 2021. It is positive that nutrition security appears to be increasing across the state, however approximately 1 in 20 individuals are using assistance programs and still not meeting nutritional needs, and another 1 in 20 are not able to use any federal resources to support meeting their needs.

For Arizonans responding to the 2022 Arizona Cooperative Extension Statewide Needs Assessment survey, 'access to affordable, healthy food' was identified as one of the top ten issues (of 99 total issues) in their communities, with 90% of respondents across the state saying it was either 'extremely' or 'very' important to address. This was similarly true for individuals in both rural and urban communities, as well as SNAP-eligible individuals who completed the survey. Access to affordable, healthy food was among the top 5 issues prioritized for residents of Graham, Greenlee, Cochise, and Navajo counties.

Nutrition and physical activity environments

Statewide, household SNAP use varies significantly based on rurality. For example, rural residents are almost three times as likely to be living in a household where someone is receiving SNAP compared with suburban residents. Households receiving SNAP are more likely to live in a low-income, low-access area, with more low-income, low-access areas being designated as rural or wilderness. At the county level, there are dramatic differences in the proportions of residents living in low-income, low-access areas. About half or more of people in Apache, La Paz, Navajo, Santa Cruz, and Mohave counties reside in areas with limited commercial food resources, with higher proportions of families receiving SNAP living in these areas.

Based on geographic analyses, the majority of Arizonans live within an accessible distance (1 mile for urban, 10 miles for rural) of a SNAP retailer. Access is highest in urban Maricopa, Pinal, and Pima counties and most limited in Apache County, where just over half of households live within an access area. Access to different types of SNAP retailers varies significantly by rurality; for instance, 100% of households (including those

receiving SNAP) in suburban areas can reach a full-service grocery store within 10 miles; this is only true for 15% of SNAP recipient households in wilderness areas. In more rural counties, and rural areas within all counties, there is greater access to dollar and convenience stores than to supermarkets or superstores. WIC retailers, which must meet stricter eligibility criteria compared to SNAP retailers, are less accessible than SNAP retailers; while 94% of all SNAP recipient households live an accessible distance from a SNAP retailer, only 71% of these households live close to a WIC retailer. WIC retailer access is especially limited in Greenlee and Apache counties, where only 9% and 28%, respectively, of SNAP-receiving households live near a WIC retailer.

SNAP-eligible individuals are more than twice as likely to lack access to a vehicle when compared to the state overall, and they are also more likely to use an "active" mode of transportation to commute to work (e.g., walk, bike, bus, trolley, or streetcar). When looking at the map of low-income, low-access areas overlayed with low-vehicle access areas, we see that these areas overlap almost perfectly with the geographical boundaries of Arizona's tribal lands. People living on tribal lands face unique economic, social, and environmental challenges due to a history of severe discrimination and vacillating national policies. AZ Health Zone Local Implementation Agencies have relationships with some tribal nations in Arizona and should continue to support efforts to increase tribal food sovereignty.

Analyses also showed that between two-thirds and three-quarters of Arizonans live within a reasonable distance from a recreation opportunity, including recreation sites/centers, public parks, and trails. Suburban residents are about half as likely to live within a mile of a recreation opportunity as their urban counterparts. Speaking to the natural resource-rich environment of Arizona, the majority of even those living in more remote rural and wilderness areas live within a reasonable driving distance to at least one recreational opportunity. Access to recreation opportunities appears to be highest in Santa Cruz County and lowest in Gila County.

In the NSCH survey, Arizona parents were less likely to rate their neighborhood as 'supportive,' and less likely to 'definitely agree' that their neighborhood was safe for children under 18 than parents nationally. Conversely, Arizona children were more likely to have access to key physical activity amenities in their neighborhood including sidewalks, walking paths, parks, and playgrounds. Most Arizonans felt that their neighborhood did not have key inhibitors to physical activity (e.g., litter, rundown housing, vandalism), however parents of Hispanic children were more likely to report one or more inhibitor and feel their neighborhood was less safe than parents of White children. This likely contributes to a disparity in physical activity, as children's level of physical activity was found to be positively associated with living in both a supportive and safe neighborhood.

Personal nutrition and physical activity behaviors

When looking at personal nutrition behaviors, Arizonans fare slightly worse than the US as a whole. Specifically, Arizonans are less likely to eat fruits or vegetables at least once a day. In a target population survey, most mothers receiving SNAP reported a desire to prepare and consume healthy meals, however individuals using food assistance programs consumed fewer average servings of fruits and vegetables than Arizonans as a whole. In fact, vegetable consumption fell on a clear income gradient, with two-thirds of the lowest income adults and 89% of the highest income adults eating vegetables daily.

Despite purportedly better access to physical activity amenities, Arizonans report being less physically active than peers across the country. While over half of Arizona adults were considered either 'active' or highly active,' less than a quarter met aerobic and strength guidelines from 2011 to 2019. Adults on food assistance were consistently less likely to meet physical activity guidelines and more likely to be considered 'insufficiently active' or 'inactive' compared to adults not on food assistance. More than one in five adults in Arizona reported no leisure time physical activity during the past 30 days in 2020. This was most prevalent among adults who did not graduate high school, who were on food assistance, and who were over 65 years old. A larger proportion of

women had no leisure physical activity compared to men. By race and ethnicity, more than 1 in 4 adults who identified as another race, as Black or African American, or Hispanic had no leisure physical activity outside of work during the past 30 days.

Less than half of Arizona boys (45.7%) and girls (40.4%) were active 5 or more days a week, and similar proportions participated on a sports team or participated in physical education weekly in 2019. Among children ages 6-17, physical activity showed an inverse relationship with screentime, which has been increasing substantially. Just over half of children under 2 and under half of children ages 6 to 17 were meeting screentime recommendations. While television consumption has been declining, the proportion of teens playing video or computer games or using the computer for 3 or more hours per day more than doubled from 2007 to 2019.

Physical and mental health

More than half of adults in Arizona rate their health as 'excellent' or 'very good,' and a majority did not experience any days of poor physical or mental health in the previous month. However, more than 1 in 6 adults in Arizona considered their health 'fair' or 'poor,' and over 1 in 10 experienced 14 or more days of poor physical or mental health. More than twice the proportion of adults using food assistance rated their health as 'fair' or 'poor' compared with adults not on food assistance. Overall health also differs between racial and ethnic groups in Arizona. Based on ADHS's health indicators scoring system, Asian individuals in Arizona had the highest health scores, driven by lower rates of mortality from chronic diseases, injuries, and drug or alcohol use, while American Indian individuals had the lowest health scores, driven by higher rates of diabetes, maternal health factors, and infant mortality.

In recent years, rates of diabetes and obesity have been increasing among both Arizona adults and children, with rates varying based on food assistance participation, race/ethnicity, and educational attainment. Disproportionate to rates of youth overweight and obesity (30.7%), at least half of youth said they were actively trying to lose weight. Around 1 in 10 youth surveyed reported disordered eating, including going 24 hours or more without eating, vomiting or taking laxatives to lose weight, and taking diet supplements without a doctor's advice. In addition to efforts to improve access to appropriate, nutritious foods and physical activity opportunities, there is significant need to reframe healthy weight guidelines and focus on body positivity.

Since 2015, the majority of babies born in Arizona and the US were breastfed at least once, while the proportion of babies exclusively breastfed through 6 months was closer to 1 in 4. Exclusive breastfeeding at 6 months in Arizona has been increasing since 2009, though it is still well below the Healthy People 2030 target of 42.4% of babies exclusively breastfed through 6 months. Breastfeeding at 12 months in Arizona nearly doubled from 2009 to 2019 (to 40.7%). On the Maternity Practices in Infant Nutrition and Care (mPINC) instrument, Arizona scored highest on feeding education and support (e.g., in-person follow-up visits to breastfeeding mothers) and lowest on institutional management (e.g., paying fair market price for infant formula), scoring slightly lower overall than the US as a whole.

Impact of Arizona Health Zone programming

AZ Health Zone SNAP-Ed programming aims to promote positive changes to policies, systems, and environments that affect nutrition programming to improve the health of communities. It also offers classes, lesson series, and food demonstrations to individuals to help them maximize their available resources. The network of AZ Health Zone agencies spans the state of Arizona, working to serve Arizonans across low-income rural and urban communities. The majority of AZ Health Zone sites are located in areas of the state with higher-than-mean SNAP income-eligibility, and many are in or near areas with both high eligibility and lower-than-mean household SNAP use, which may be more likely to have families whose nutritional needs are not being met through existing resources.

AZ Health Zone local implementing agencies (LIAs) have developed relationships to promote physical activity resources, supporting built environment projects in 9 counties in 2021. This included advocating for and assisting with the implementation of bus, walking, and biking infrastructure improvements as well as parks and connector trail systems. LIAs assessed the quality of some physical activity resources in 12 counties, with mean scores remaining stable over time between 'mediocre' and 'good.'

LIAs also supported early care and education (ECE) partners by offering Go NAPSACC (Nutrition and Physical Activity Self-Assessment for Child Care) modules and the Empower Program to improve young child health. Go NAPSACC assessments indicated notable changes for infant feeding practices, child nutrition, infant and child physical activity, and screen time, with Head Starts showing more changes than other participating providers. From year 4 to 7, Empower assessments showed the largest increases in the proportion of facilities implementing all components related to physical activity, oral health, limiting fruit juice, and sun safety. Areas for improvement across these programs include outdoor play and learning, farm to ECE, the Child and Adult Care Food Program (CACFP), breastfeeding friendly standards, and smoking cessation policies and services. Learning collaborative actions to improve Go NAPSACC partnerships focused highly on Maricopa County.

AZ Health Zone has been supporting schools through the School Lunch Movement (SLM) program, a variety of multi-level, school-based interventions, and assessing and revising local school wellness policies (LWP) with the following results:

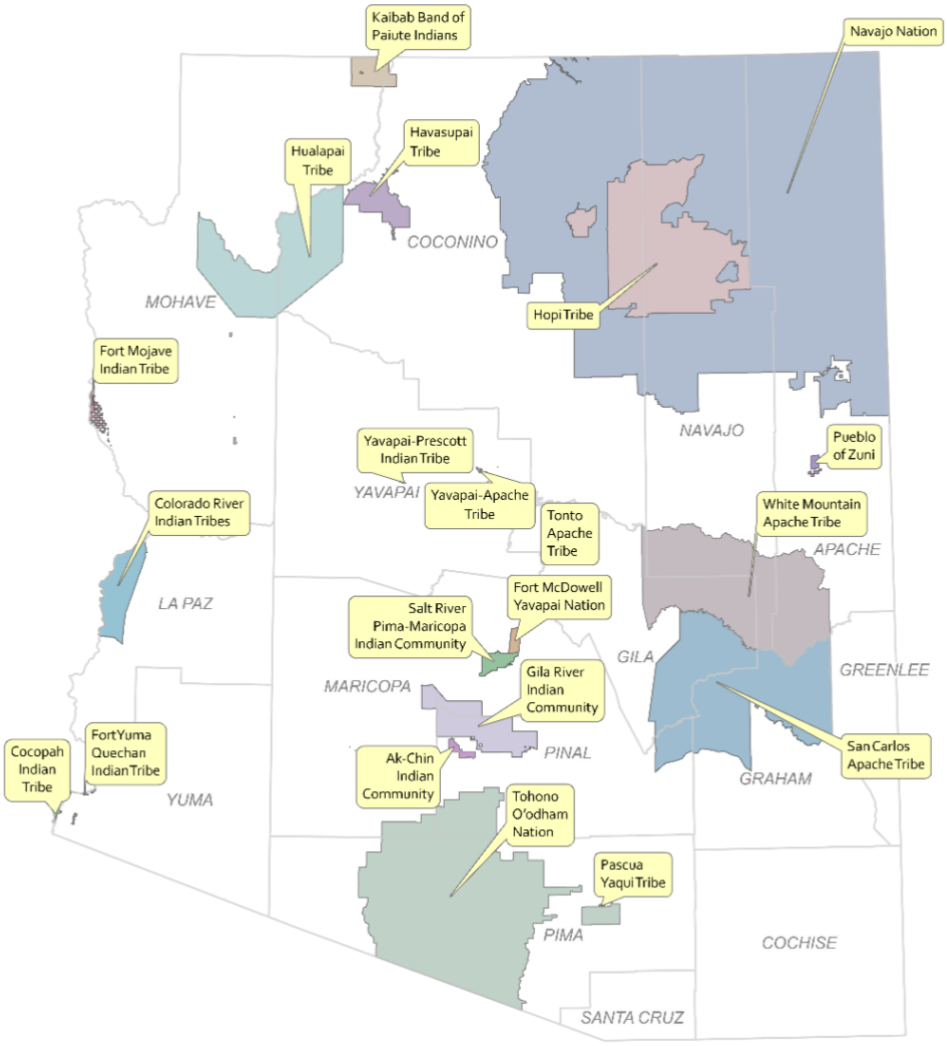
- Of the 23 schools participating in SLM, moving more white milk, focusing on fruit, varying vegetables, and lunchroom atmosphere scored highest. Across the 7 schools that completed a follow-up scorecard, scores were initially low but improved the most for student involvement and boosting reimbursable meals.
- Arizona school districts had the strongest and most comprehensive policies related to nutrition education, implementation and evaluation, and competitive food and drinks. Most LWPs categories were rated more highly in terms of strength in FY22 compared with FY20. K-12 districts had less strong and comprehensive LWPs compared to K-8 districts and should be targeted in further efforts.
- Post-assessments for school-based interventions (in 10 counties, with most participants in Santa Cruz, Apache, and Maricopa) showed that only about half of students knew the USDA guidelines for fruits and vegetables and physical activity, with even smaller portions knowing the guidelines for (and having positive attitudes towards) whole grains and low-fat milk. Fourth through eighth graders were more likely to be physically active at recess than P.E. or team sports, in districts with better LWPs, and in schools participating in SLM.

AZ Health Zone has prioritized community engagement to better involve SNAP-eligible residents in programming decisions and collaborations, and community coordination efforts to align and amplify the work of community partners with similar policy, systems, and environmental goals. AZ Health Zone has also identified trauma-informed approaches (TIA) as foundational to deepening SNAP-Ed work in Arizona, especially considering that more than 1 in 5 adults in the state report having experienced 2 or more adverse childhood experiences (ACEs). The Around the Table, Nourishing Families (ATT) program uses a trauma-informed curriculum, and participants have shown increases in fruit consumption, food skills, reading food labels, and planning meals. Interviews and surveys documented improvements in LIA staff knowledge and self-efficacy in implementing TIA; increases in coworker and supervisor support; overall decreases in organizational support; and middling support from top leaders and direct supervisors. More work is needed to improve organizational understanding of and support for TIA.

Arizona overview

A large Western state, Arizona is comprised of 15 counties – some of which rank among the largest in the nation – and 22 federally recognized tribes, with tribal lands making up 27% of Arizona (Figure 1). Providing services to Arizona residents can mean crossing large expanses of land, navigating around mountains and canyons, or working in one of the U.S.'s largest urban areas. It necessitates an awareness of the many cultures found among Arizonans and an understanding of the different social, service, and environmental landscapes that comprise the state.

Figure 1. Counties and American Indian Tribal lands in Arizona



Source: 2020 TIGER/Line Shapefiles prepared by the U.S. Census. Map produced by CRED.

Population characteristics and economic circumstances

Population size and change

According to the 2020 U.S. Census, the total population of Arizona is 7,151,502. The majority (62%) of these people live in the Phoenix metropolitan area. Located in Maricopa County, this urban area is densely populated, with about 480 people per square mile. This is considerably higher than Arizona overall (about 63 people per square mile), which ranks 35th nationally for population density (Table 2).[9]

The population of Arizona is growing, increasing by nearly 12% between 2010 and 2020 (Table 3). Recent growth is attributed to new residents moving to the state, with a much smaller proportion of population change related to births and deaths (Table 4). The majority of the state's new residents have moved to the Phoenix metropolitan area.

Among the youngest new residents of Arizona, almost half (47.7%) of births in the state were paid for by the Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid agency. Given that the income thresholds for enrollment in AHCCCS are lower than the income threshold for SNAP eligibility (e.g., 147% of the federal poverty level (FPL) for children under age 1 to enroll in AHCCCS medical services), this means that nearly half of children born in Arizona in 2020 were potentially eligible for SNAP benefits.[10] Rates varied by county; AHCCCS covered nearly three-quarters of births in La Paz (74%) and Apache (72.3%) counties compared with just around a quarter of births in Greenlee County (28.9%) (Figure 2).

Table 2. Arizona population, population density (2020)

Arizona population	7,151,502
	Percent of Arizona's population
Maricopa County	62%
Pima County	15%
Pinal County	6%
Remaining counties	17%
	Density (people per sq mi)
State as a whole	62.9
La Paz County (lowest)	3.7
Maricopa County (highest)	480.4

Source: Census Quickfacts (Arizona), July 2021

Table 3. Arizona population change

	2010	2020	% Increase 2010 to 2020
Total population	6,392,017	7,151,502	11.9%

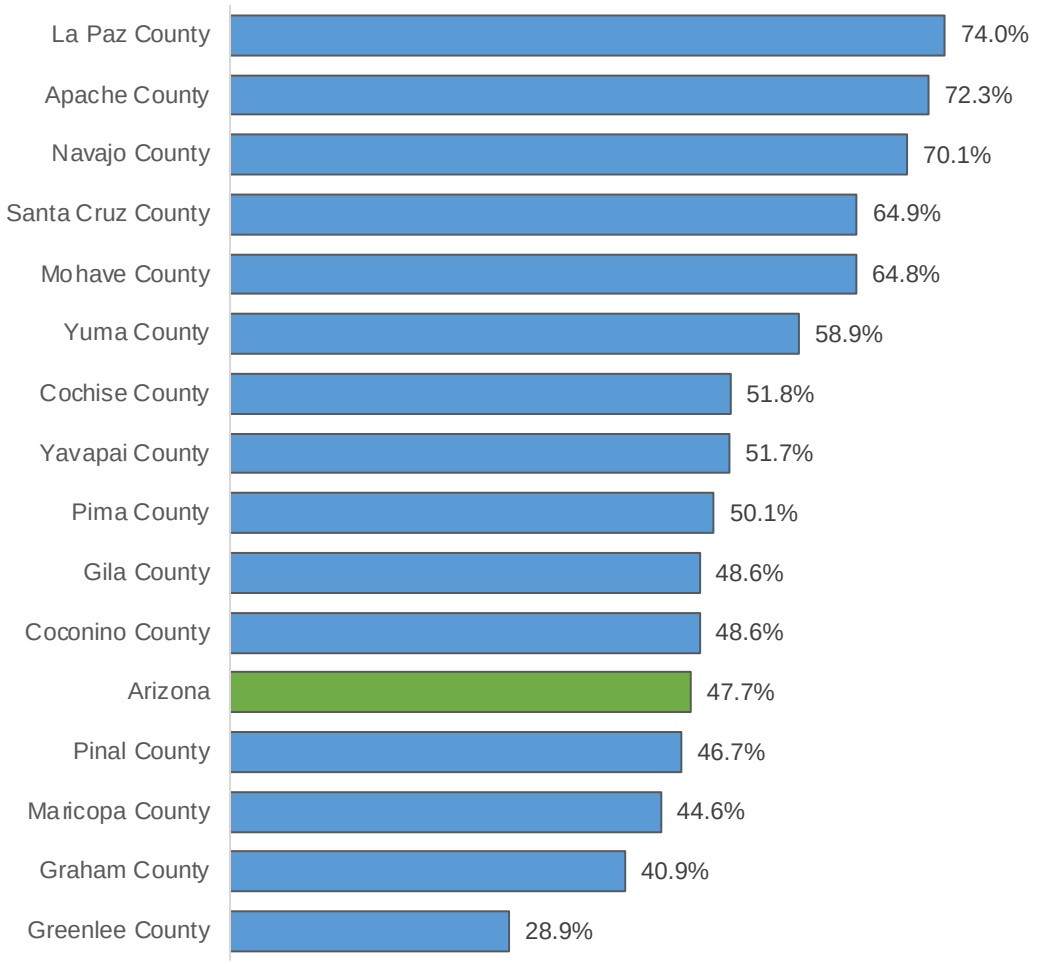
Source: Census 2010, 2020

Table 4. Factors influencing Arizona population change, July 2020 to July 2021

	#
Natural change (births and deaths)	832
New Arizona residents (total)	97,498
New Phoenix-Mesa-Chandler metropolitan area residents	66,850

Source: BNPA, 2023 (draft)

Figure 2. Percent of Total Births Paid by AHCCCS, 2020

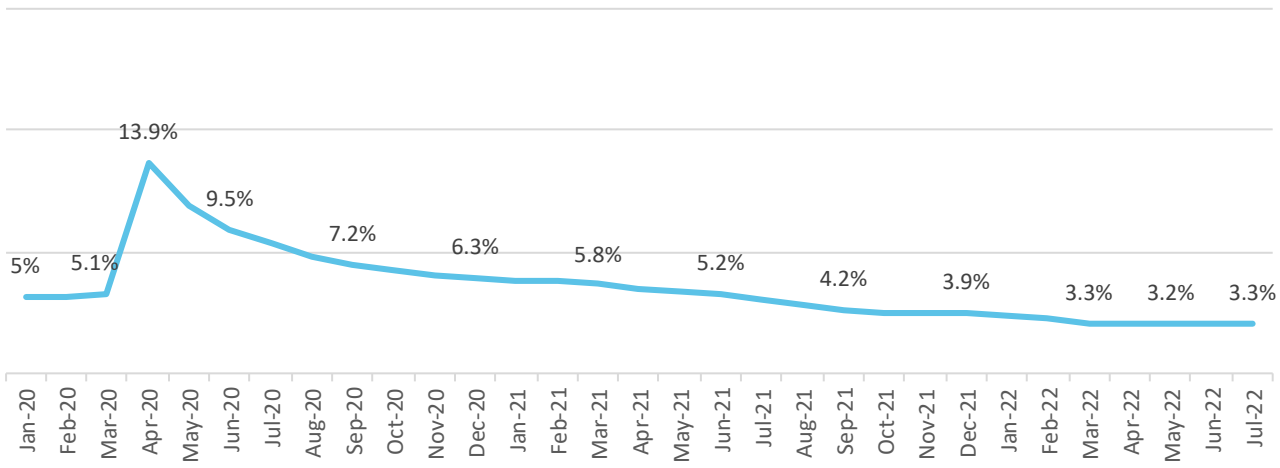


Source: ADHS Vital Records, Births dataset, 2020

Employment and income

In the months before the COVID-19 pandemic, the unemployment rate in Arizona was 5%. Unemployment varied significantly across the state, with the highest rate in the Yuma MSA (13%) and lowest in the Greenlee MSA (2.5%). Unemployment rates across Arizona peaked at 13.9% in April 2020, following the statewide stay-at-home order issued in March 2020 which implemented safety measures to mitigate the spread of COVID-19.[11] Unemployment rates returned to pre-pandemic levels by July 2021 and continued to decline to eventually settle around 3.2 to 3.3% in spring and summer of 2022 (Figure 3).

Figure 3. Arizona unemployment rate, January 2020 - July 2022



Source: US Bureau of Labor Statistics

In 2020, the median household income in Arizona was $64,652, slightly lower than the national median income of $67,340. Between 2021 and 2022, per capita income in Arizona was lower than most other western states. In the second quarter of 2022, Arizona's per capita income ($56,002) was notably lower than that in California ($76,898) and only surpassed two other western states, New Mexico ($50,189) and Idaho ($53,304) (Table 5).

Table 5. Per capita income in Western States, Q2 2021- Q2 2022

Geography	2022 Q2	% change from year ago
United States	$64,993	3.13%
Arizona	$56,002	3.28%
California	$76,898	2.00%
Colorado	$73,357	5.96%
Idaho	$53,304	4.84%
Nevada	$60,186	1.60%
New Mexico	$50,189	2.26%
Oregon	$62,478	3.54%
Texas	$61,780	5.46%
Utah	$56,773	4.00%
Washington	$75,099	3.02%

Source: U.S. Bureau of Economic Analysis, FY21-22 https://www.azeconomy.org/per-capita-personal-income-western-states/

In Arizona, poverty[y] is more likely to impact women, young children, and teens; individuals who identify as American Indian or Alaska Native, Black or African American, or Hispanic; and individuals with less than a high school education. When comparing Arizona counties, poverty is notably highest in Navajo and Apache counties, where more than one in four people (27.1%) live in poverty. More than half of the land in these counties is also designated as Indian reservation land, and a quarter of individuals in Arizona who identify as Native American live in Apache County alone (Table 6).[12,13]

[y] Poverty is defined here as living in a household where the income is less than 100% of the federal poverty level (FPL)

Table 6. Characteristics of people living in households below 100% FPL

	Percent of the total population
Total population living in households below 100% FPL	12.8%
Gender	
Females	13.8%
Males	11.9%
Age	
0-5	18.2%
6-13	18.0%
13-18	16.9%
18-26	17.0%
26-39	12.2%
40-65	10.6%
65+	9.4%
Ethnicity	
Hispanic ethnicity	16.8%
Non-Hispanic ethnicity	11.0%
Race	
White alone	9.9%
Black/African American alone	20.4%
American Indian or Alaska Native	29.7%
Asian	9.5%
Native Hawaiian and other Pacific Islander	14.3%
Some other race alone	20.2%
Two or more races	13.5%
Education	
Less than high school diploma	19.1%
High school graduate (or equivalency)	13.5%
Some college or associate's degree	11.2%
Bachelor's degree	7.1%
Graduate or professional degree	4.6%
Region	
Navajo & Apache (Northeast)	27.1%
Coconino	18.1%
Pima	15.0%
La Paz & Mohave	14.7%
Yuma	14.1%
Gila, Graham, Greenlee. & Pinal (East)	12.6%
Maricopa	11.9%
Cochise & Santa Cruz (Southeast)	11.9%
Yavapai	10.4%
Pinal	10.4%

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates.

Unhoused population

Among the most economically vulnerable Arizonans are those who are unhoused. In 2020, 10,979 individuals in Arizona were identified as unhoused. Of those individuals, 18.8% were experiencing chronic homelessness, defined as individuals who have been unhoused for at least a year (or repeatedly) and have a disabling condition (e.g., mental illness, substance use disorder, or physical disability) (Table 7).[14] From 2020 to the end of 2021, the number of unhoused Arizonans increased by 30%, according to Arizona Department of Economic Security statistics, likely reflecting the economic impacts of the COVID-19 pandemic.

The US Department of Education reported that, during the 2018-19 school year, 21,062 students in Arizona public schools were unhoused. Almost 2,000 of these students were unaccompanied (9%). The majority (63.2%) lived in shared living arrangements, or 'doubled-up' with other related or unrelated household members, with smaller proportions living in shelters (11.7%) or hotels/motels (9.4%) (Table 8).

In 2021, more than half (51.5%) of the 38,833 unhoused individuals in Arizona who received services through the Department of Economic Security were provided temporary housing in an emergency shelter and 39.7% were provided resources and services through street outreach efforts. More than one in four (27.5%) engaged in the Rapid Rehousing Program, which provides case management and financial assistance for individuals and families experiencing homelessness and prioritizes moving them into permanent housing as quickly as possible. Finally, 9% of individuals considered at-risk for becoming unhoused received expedited case management and financial assistance in an effort to keep them in their current home (Table 9).[15]

Table 7. Demographics of the unhoused population in Arizona, 2020

	n	%
Total unhoused population	10,979	100%
Chronically unhoused	2,086	18.8%
Veterans	921	8.4%
Family households	809	7.4%
Unaccompanied young adults (18-24 years old)	633	5.8%

Source: Arizona Department of Economic Security; US Interagency Council on Homelessness, 2020

Table 8. Arizona students experiencing houselessness (2018-19 school year)

	#	%
Arizona public school students experiencing houselessness	21,062	100%
Double-up residence	13,311	63.2%
Resided in shelters	2,464	11.7%
Resided in hotels/motels	1,980	9.4%
Unaccompanied students	1,894	9%

Source: US Department of Education, 2018-19

Table 9. At-risk or currently unhoused people reached by different Arizona housing interventions, FY2021

	% of at-risk or currently houseless population
Emergency shelter	51.5%
Street outreach	39.7%
Rapid rehousing	27.5%
Homeless prevention	9.0%

Source: AZ Dept of Economic Security, FY2021

Characteristics of the SNAP-eligible population

Roughly one-quarter of Arizonans live in households that meet income-eligibility standards for SNAP. According to the ACS, 12.8% of Arizonans live at or below 100% FPL and a quarter (25.7%) live at or below 185% FPL, the income threshold for participation in SNAP (Table 10).[z] However, according to ACS estimates, only 10% of Arizona households reported receiving SNAP (Table 11). Some of this is attributable to the presence of additional criteria that may exclude some who are income-eligible, but it also likely reflects that SNAP does not succeed in reaching all who may be eligible.

Statewide, larger portions of rural households, including those classified under wilderness (16%) and rural (12%), receive SNAP benefits. Use is lowest (8%) in suburban areas. The proportion of households reporting SNAP usage ranges between a low of 8% in Maricopa and Greenlee counties to a high of 29% in Apache County. Within counties, rates of SNAP uptake can differ substantially between more urban and more remote

[z] According to the 2020 federal poverty guidelines, an individual is considered to be living in poverty (100% FPL) if their annual income is at or below $12,760. The poverty threshold increases by $4,480 for each additional person in the family, equating to $17,240 for a family of two and $26,200 for a family of four. The thresholds for 185% FPL in 2020 were $23,606 for single individuals, $31,894 for a family of two, and $48,470 for a family of four.[z]

areas. For example, in Pima County 16% of urban households, 8% of suburban, 6% of rural, and 23% of wilderness households report SNAP usage (Table 11 & Table 12).

More than a third (35%) of households in Arizona include children. The majority of children in Arizona live with both parents (62.6%). Of the 37.4% of children living with a single parent in the state, most live with their mother (Table 13). Individuals in single-parent households in Arizona are more likely to be eligible for SNAP than those in married-couple households. More than a third (38.4%) of individuals in single-parent households live below 185% FPL, though they make up closer to a quarter (23.4%) of the state population. This difference is even more pronounced for individuals specifically living in single-female households (29.1% and 16.5%, respectively). Men and women who live alone or with non-family members are also more likely to be low-income (Table 14).

Members of SNAP-eligible households have other demographic differences from Arizona as a whole, reflecting a constellation of causes related to the social determinants of health. For example, while there is a smaller proportion of the SNAP-eligible population that identifies as White compared to the state overall (47.7% and 60.6%, respectively), the inverse of this is true for individuals who identify as Hispanic. About one-third of the population of Arizona identifies as Hispanic compared to 43.7% of SNAP-eligible individuals. This over-representation in the SNAP-eligible population is also true for individuals who identify as American Indian or Alaskan Native, Black or African American, another race, or two or more races (Figure 5).

A comparable trend is seen when viewing the population by the languages they speak at home. A smaller proportion of SNAP-eligible individuals speak only English at home compared to the overall population (65.1% and 53.5%, respectively). This is in contrast to individuals who speak Spanish or another language[aa] at home, who are overrepresented in the SNAP-eligible population (36% and 25.7%, respectively; Figure 6). Individuals considered limited-English speaking, who speak English less than 'very well,' are also overrepresented in the SNAP-eligible population (Figure 7).

SNAP-eligible individuals tend to have lower educational attainment, with more than half (51.2%) having a high school education or less compared to about a third (34.4%) of people in the state overall (Figure 8). SNAP-eligible individuals in Arizona are also more than twice as likely to lack access to a vehicle compared to the state overall (10.6% and 4.2%, respectively; Figure 9).

Table 10. People living in households at different Federal Poverty Level thresholds, 2015-20

Household income relative to the FPL	% of the population (cumulative)
<400% FPL	58.3%
<200% FPL	28.4%
<185% FPL	25.7%
<130% FPL	17.1%
<100% FPL	12.8%
<50% FPL	6.4%

Source: U.S. Census Bureau, 2015-2021 American Community Survey 5-Year Estimates.

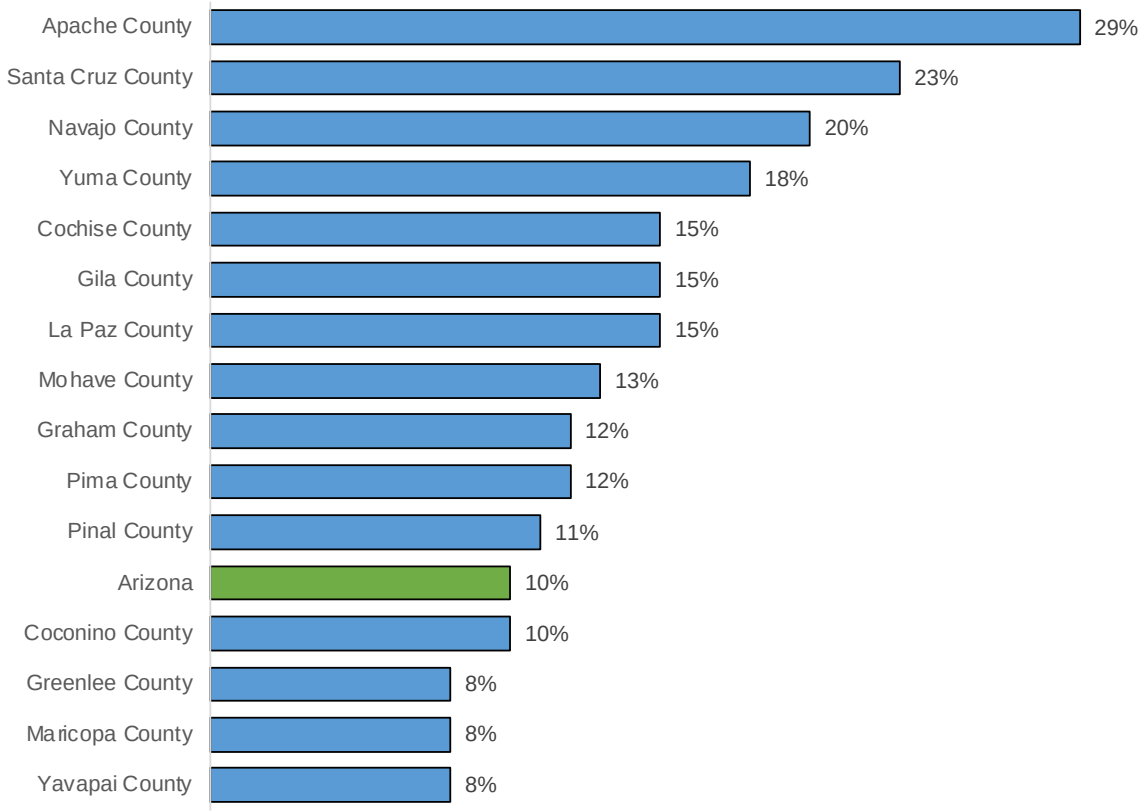
[aa] In addition to English and Spanish, the most common languages spoken at home in Arizona are Native American languages (including Apache, Hopi, Navajo, and O'odham), which are spoken in 2% of households. For more information see https://www.firstthingsfirst.org/wp-content/uploads/2021/12/State-Needs-and-Assets-Report-2021.pdf

Table 11. Total population (2020) and households receiving SNAP (2017-21) across Arizona geographies

Geography	Total population (Census 2020)	Households receiving SNAP (ACS 2017-21)	% of total households that received SNAP benefits
Urban	3,697,398	146,631	10%
Suburban	1,970,864	58,157	8%
Rural	1,117,811	48,140	12%
Wilderness	365,487	21,355	16%
AZ total	**7,151,560**	**274,283**	**10%**

Source: Custom tabulation by CRED

Figure 4. Households receiving SNAP in Arizona counties, 2017-2021



Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Table 12. Households receiving SNAP (ACS 2017-21), by county and geography

	Count	Proportion
Apache County	**5,588**	**29%**
Rural	1,596	23%
Wilderness	3,992	32%
Cochise County	**7,208**	**15%**
Urban	2,058	12%
Suburban	462	14%
Rural	3,539	19%
Wilderness	1,149	11%
Coconino County	**5,193**	**10%**
Urban	2,023	8%
Suburban	147	6%
Rural	1,395	11%
Wilderness	1,628	17%
Gila County	**3,442**	**15%**
Rural	2,693	17%
Wilderness	749	12%
Graham County	**1,394**	**12%**
Rural	1,050	12%
Wilderness	344	13%
Greenlee County	**268**	**8%**
Rural	46	3%
Wilderness	222	15%
La Paz County	**1,290**	**15%**
Rural	698	18%
Wilderness	592	12%
Maricopa County	**138,154**	**8%**
Urban	94,743	9%
Suburban	38,723	8%
Rural	3,389	5%
Wilderness	1,299	9%

	Count	Proportion
Mohave County	**11,995**	**13%**
Urban	1,808	7%
Suburban	89	7%
Rural	8,100	15%
Wilderness	1,998	15%
Navajo County	**7,239**	**20%**
Rural	3,521	16%
Wilderness	3,718	26%
Pima County	**51,583**	**12%**
Urban	34,864	16%
Suburban	11,105	8%
Rural	3,909	6%
Wilderness	1,705	23%
Pinal County	**15,581**	**11%**
Urban	2,759	15%
Suburban	5,206	8%
Rural	5,919	12%
Wilderness	1,697	13%
Santa Cruz County	**3,807**	**23%**
Rural	3,485	26%
Wilderness	322	11%
Yavapai County	**8,181**	**8%**
Urban	2,760	7%
Suburban	311	6%
Rural	3,592	8%
Wilderness	1,518	10%
Yuma County	**13,360**	**18%**
Urban	5,616	17%
Suburban	2,114	12%
Rural	5,208	29%
Wilderness	422	14%

Source: Custom tabulation by CRED

Table 13. Living arrangements for children, 2020

	%
Households including child(ren) related to the householder	35.0%
Children living with both parents	62.6%
Children living with a single parent	37.4%
Children living with father alone	9.6%
Children living with mother alone	27.8%

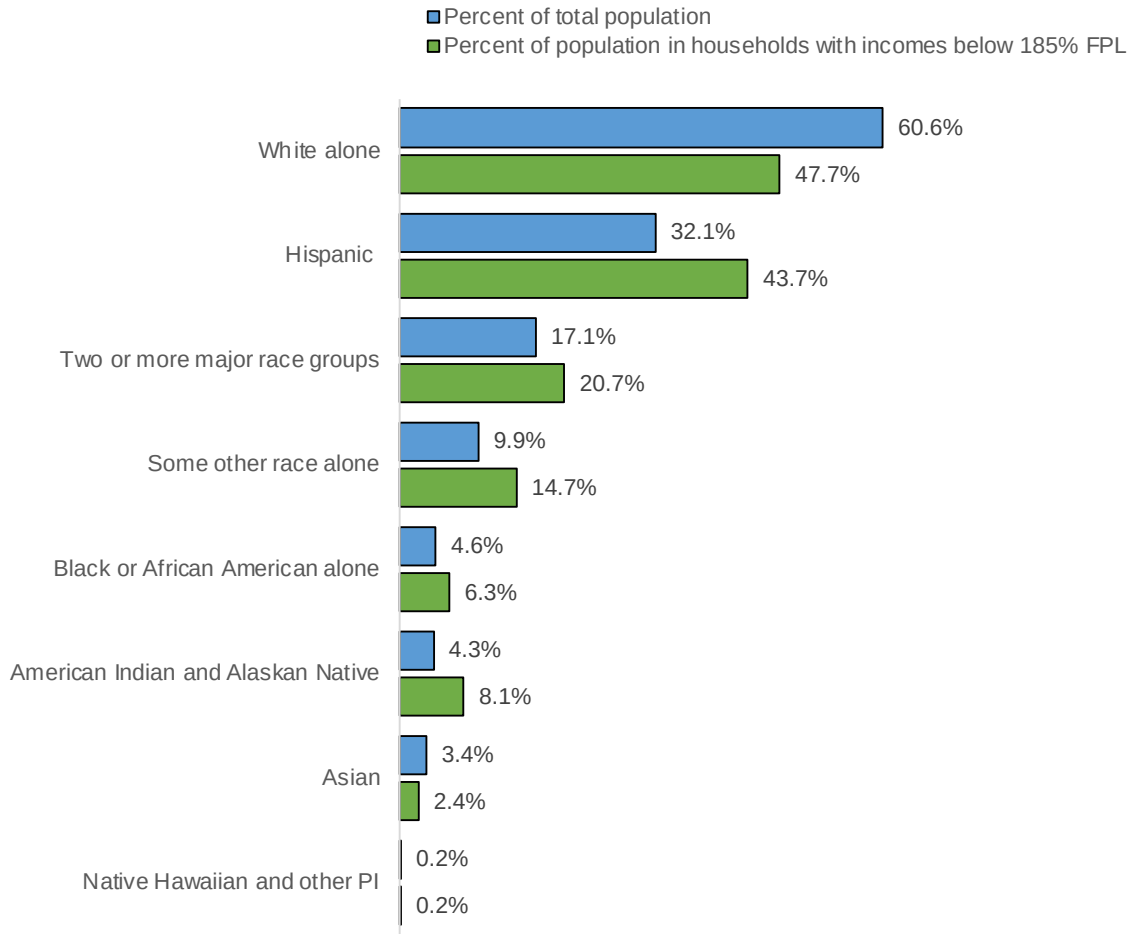
Source: U.S. Census Bureau, 2015-2021 American Community Survey 5-Year Estimates

Table 14. Household composition as percent of total households, total population, and population with incomes <185% FPL

Household Composition	Percent of Households	Percent of Total Population	Percent of population in households with incomes below 185% FPL
Family: Married-couple	48.2%	58.6%	37.2%
Family: Households with no spouse present	15.6%	23.4%	38.4%
Family: Male Householder with no wife present	4.9%	6.9%	9.3%
Family: Female householder, no husband present	10.7%	16.5%	29.1%
Nonfamily: Male alone	13.2%	5.0%	6.0%
Nonfamily Female alone	15.3%	5.9%	7.8%
Nonfamily: Male not alone	4.1%	3.7%	5.2%
Nonfamily: Female not alone	3.7%	3.4%	5.3%
Multigenerational households		9.7%	11.4%

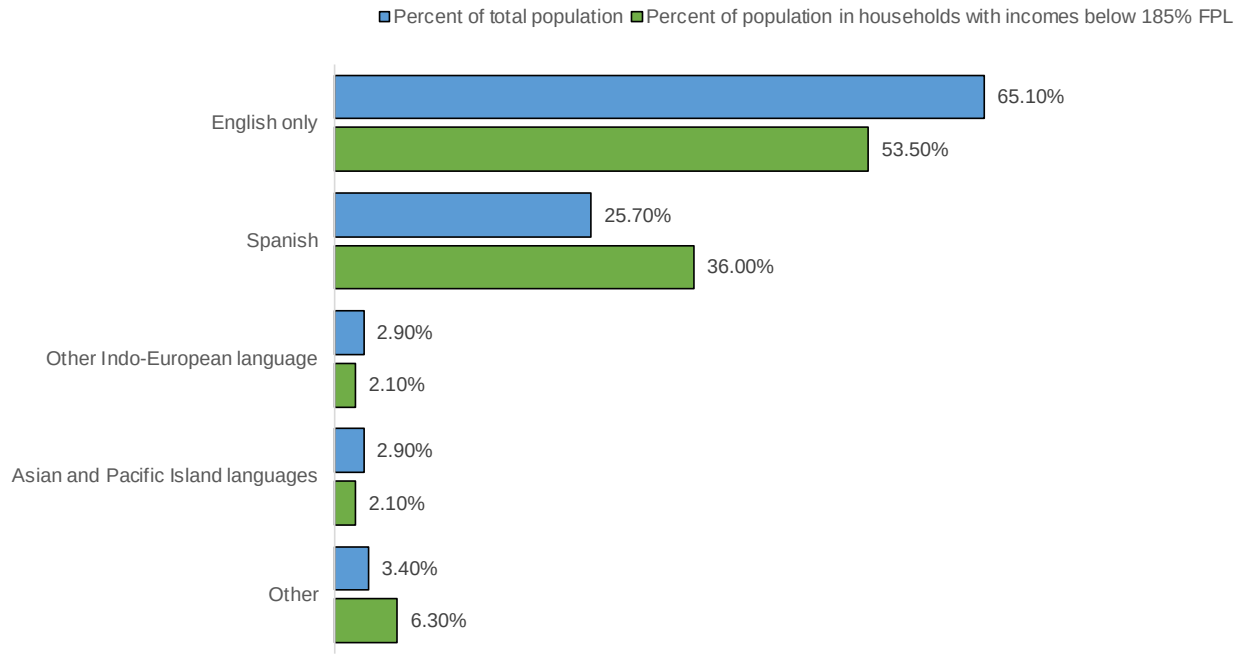
Source: U.S. Census Bureau, 2015-2021 American Community Survey 5-Year Estimates

Figure 5. Total population and population in households with incomes below 185% of the Federal Poverty Level (FPL), by Race and Hispanic Ethnicity



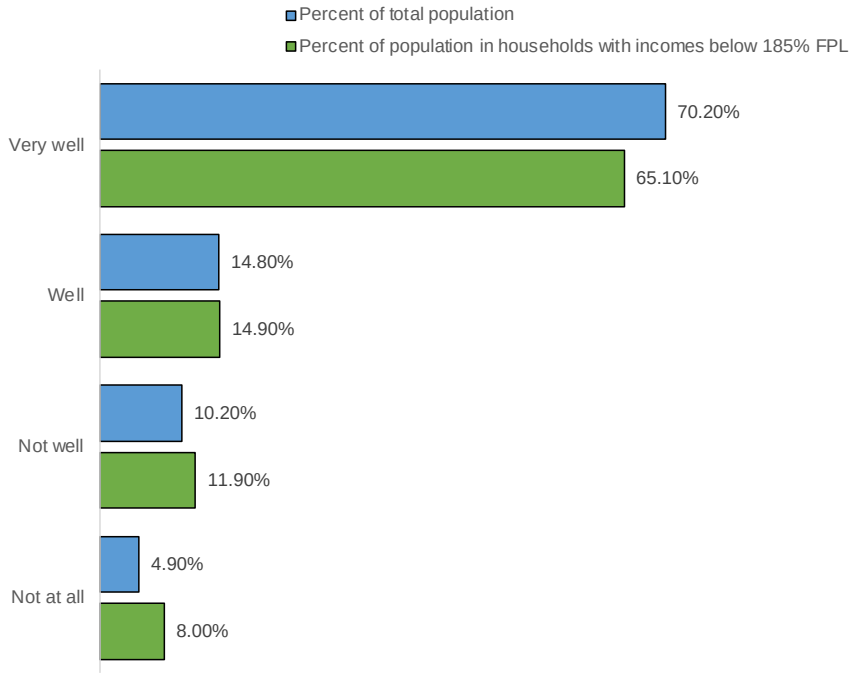
Source: U.S. Census Bureau, 2020 Decennial Census.

Figure 6. Language spoken at home, 2020



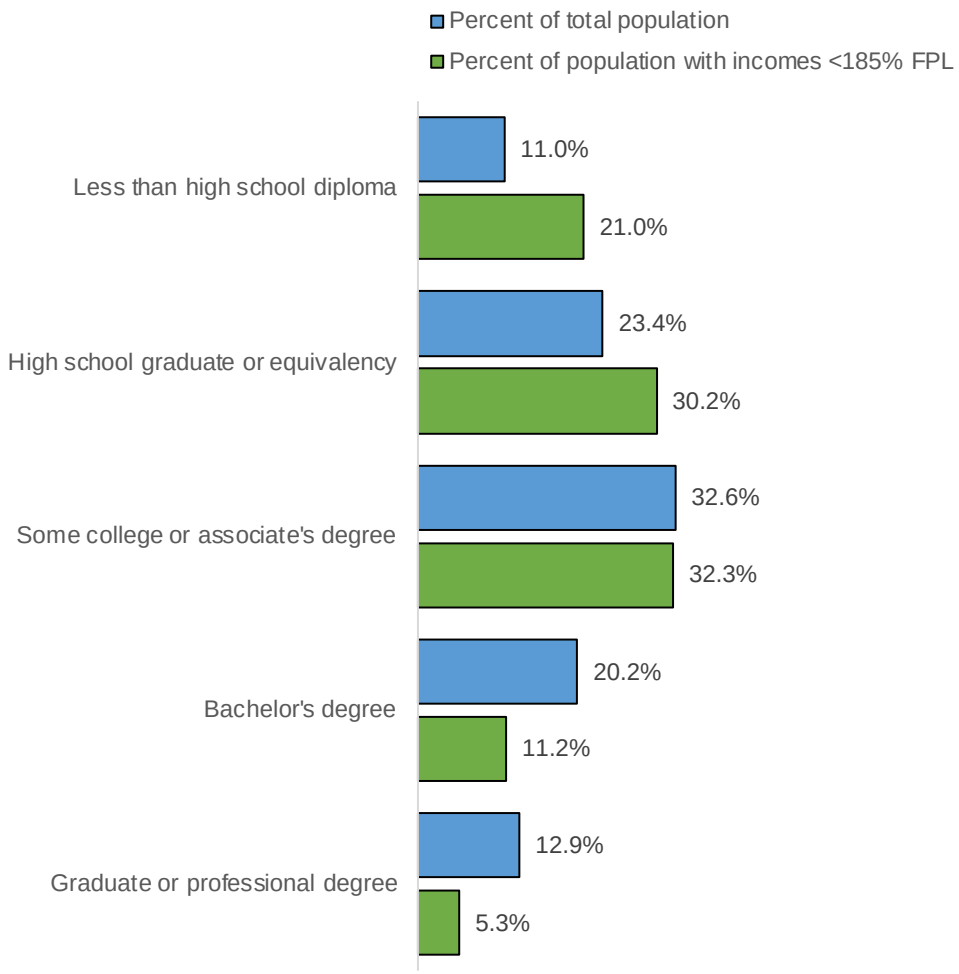
Source: U.S. Census Bureau, 2015-2021 American Community Survey 5-Year Estimates.

Figure 7. English speaking ability among total population and population with income < 185% FPL, 2020



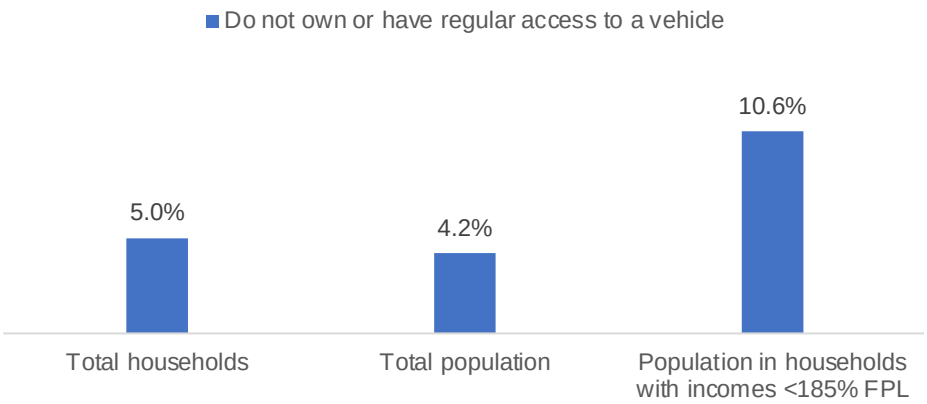
Source: Census Bureau, 2015-2021 American Community Survey 5-Year Estimates.

Figure 8. Educational Attainment of Arizona Adults Age 25 and Older



Source: U.S. Census Bureau, 2015-2021 American Community Survey 5-Year Estimates

Figure 9. Percent of households, the total population, and population in low-income households without vehicle access



Source: U.S. Census Bureau, 2015-2021 American Community Survey 5-Year Estimates

Native American Nations

Arizona is home to 22 federally-recognized tribes; American Community Survey data is available for 21 of these tribes. Tribes vary significantly in land and population size, with the Navajo Nation having the largest

population at nearly 170,000 people. Across the different tribes, children under 18 comprise one-fifth to one-third of the population (Table 15).

The majority of adults in Arizona's tribal nations have a high school education or higher. Attainment of a bachelor's degree or higher is most common on the Fort Mojave Indian Tribe Reservation and Trust Land (16%), Cocopah Indian Tribe Reservation (14%), Salt River Pima-Maricopa Indian Tribe Reservation (10%), and Colorado River Indian Tribes Reservation (10%). In contrast, a larger proportion of adults on the White Mountain Apache Tribe Reservation (30%) and Gila River Indian Community Reservation (30%) have less than a high school education compared to other tribal nations (Table 16).

The labor force includes all individuals who are working (employed) or looking for work (unemployed). In tribal nations in Arizona, the proportion of individuals in the labor force ranges from a low of 34% on the Cocopah Indian Tribe Reservation to a high of 77% on the Kaibab Band of Paiute Indians Reservation. Rates of unemployment in tribal nations also vary, although they are all notably higher than unemployment rates seen for the state (Table 17). In three tribal nations, at least one in five individuals in the labor force are considered unemployed (Salt River Pima-Maricopa Indian Tribe Reservation, 27%; San Carlos Apache Tribe Reservation, 20%; Ak Chin Indian Community Reservation and Trust Land, 20%) (Table 17).

In 2020, the median household income in Arizona was $64,652. For all tribal nations for which data were available, median household income was lower than the state. For four tribal nations, median household income was less than half that of the state (Gila River Indian Community Reservation, $27,341; Tonto Apache Tribe Reservation and Trust Land, $29,500; Navajo Nation Reservation and Trust Land, $29,884; Quechan Indian Tribe Reservation, $30,875) (Figure 10).

Rates of poverty for the overall population in tribal nations range from 14% on the Yavapai-Prescott Indian Tribe Reservation to 45% on the San Carlos Apache Tribe Reservation. Children under 18 consistently experience higher rates of poverty compared to adults, and older adults (65 and older) generally experience the lowest rates of poverty. At least half of children live in poverty in seven tribal nations, with the highest rates of childhood poverty on the Kaibab Band of Paiutes Indians Reservation (59%) and Cocopah Indian Tribe Reservation (59%) (Table 18).

Married-couple families are consistently less likely to be living in poverty compared to single female-headed families across all tribal nations. Single female-headed families with children, in particular, have high rates of poverty, impacting more than two-thirds of such families in the Yavapai-Apache Nation (74%), San Carlos Apache Tribe (72%), Quechan Indian Tribe (69%), and Tohono O'odham Nation (68%) (Table 19).

For the majority of the tribal nations in Arizona, owner-occupied housing units make up more than half of housing units, ranging up to 88% on the Fort McDowell Yavapai Nation Reservation. Renter-occupied housing units are notably more common for smaller tribal nations located near urban areas, with the largest proportion on the Ak Chin Indian Community Reservation (89%), located near the Phoenix metro area, and Pascua Yaqui Tribe Reservation and Land Trust (74%), located near the Tucson metro area (Table 20).

Households are considered 'housing cost-burdened' if they're spending more than 30% of their annual income on housing expenses.[16] For eight tribal nations in the state (denoted with a * in Table 21), median annual housing costs for owner-occupied units exceed 30% of median household income, meaning that at least half of homes in these tribal nations are considered housing-cost burdened. Housing costs as a proportion of median income are most notable for the Gila River Indian Community Reservation, where the median annual cost of an owner-occupied unit ($19,152) equates to 70% of median annual income ($27,341) (Table 21).

Access to a computer and internet at home has become fundamental for day-to-day life for most people.[17] Unfortunately, there exists a 'digital divide' in access that is particularly prevalent on tribal lands, driven in large part by a lack of broadband infrastructure.[18] More than one-third of households lack a computer in the Navajo Nation (41%), White Mountain Apache Tribe (36%), and Gila River Indian Community (34%), and more than half of households lack access to a broadband internet connection in the Navajo Nation (67%), Hopi Tribe (67%), White Mountain Apache Tribe (57%), and Pueblo of Zuni (54%) (Figure 11).

In 2021, 10.7% of Arizonans lacked health insurance coverage.[19] Two tribal nations had comparable rates of health insurance coverage (Fort Mojave Indian Tribe, 11%; Tohono O'odham Nation, 11%), while the other tribal nations had lower rates of health insurance coverage compared to the state. Trends in access to health insurance show that children in tribal nations are generally more likely to have health insurance coverage than the overall population. On the Fort McDowell Yavapai Nation Reservation, more than one-third (38%) of children and 41% of the overall population lacks health insurance coverage (Figure 12). It is important to note, however, that the American Community Survey considers individuals who are covered by the Indian Health Services (IHS) uninsured.[20]

AZ Health Zone has Local Implementing Agencies (LIAs) in the following communities within tribal nations:[bb]

- Apache County: Chinle, Fort Defiance
- Coconino County: Kaibeto, Leupp, Page, Tuba City
- La Paz County: Parker
- Maricopa County: Salt River Pima Maricopa Indian Community/South Scottsdale
- Mohave County: Fort Mohave Indian Tribe Area, Peach-Valentine
- Navajo County: Chinle, Whiteriver, Winslow
- Pima County: Pascua Yaqui

Most of the LIAs are University of Arizona Cooperative Extension offices, with the addition of Coconino County Health & Human Services and Mohave County Department of Public Health.

[bb] *Retrieved from https://des.az.gov/sites/default/files/media/AZ-Health-Zone-Communities-within-Tribal-Nations.pdf*

Table 15. Population, by age group

	Total population	Under 5 years, %	Under 18 years, %	18 to 64 years, %	65 years and over, %
Ak Chin Indian Community Reservation and Trust Land	1,241	9%	33%	60%	N/A
Cocopah Indian Tribe Reservation	1,252	7%	25%	44%	31%
Colorado River Indian Tribes Reservation	8,717	7%	25%	54%	19%
Fort McDowell Yavapai Nation Reservation	1,057	3%	28%	64%	N/A
Fort Mojave Indian Tribe Reservation and Trust Land	1,735	6%	22%	45%	32%
Gila River Indian Community Reservation	12,083	7%	27%	61%	9%
Havasupai Tribe Reservation and Trust Land	DS	DS	DS	DS	DS
Hopi Tribe Reservation and Trust Land	8,655	9%	28%	56%	15%
Hualapai Tribe Reservation	1,576	9%	37%	53%	N/A
Kaibab Band of Paiute Indians Reservation	300	11%	N/A	N/A	N/A
Navajo Nation Reservation and Trust Land	169,688	6%	27%	61%	13%
Pascua Yaqui Tribe Reservation and Trust Land	3,742	5%	33%	59%	N/A
Pueblo of Zuni Reservation and Trust Land	8,445	5%	28%	61%	N/A
Quechan Indian Tribe Reservation	1,372	4%	37%	54%	N/A
Salt River Pima-Maricopa Indian Tribe Reservation	6,943	8%	23%	55%	N/A
San Carlos Apache Tribe Reservation	10,815	10%	35%	57%	8%
Tohono O'odham Nation Reservation and Trust Land	10,554	7%	31%	54%	14%
Tonto Apache Tribe Reservation and Trust Land	137	N/A	N/A	N/A	N/A
White Mountain Apache Tribe Reservation	14,854	9%	37%	56%	6%
Yavapai-Apache Nation Reservation	871	11%	30%	61%	N/A
Yavapai-Prescott Indian Tribe Reservation	309	9%	N/A	N/A	N/A

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Table 16. Educational attainment of adults 25 and older

	Total population 25 years and over	Percent less than high school graduate (or equivalency)	Percent high school graduate or higher	Percent bachelor's degree or higher
Ak Chin Indian Community Reservation and Trust Land	675	27%	73%	N/A
Cocopah Indian Tribe Reservation	856	16%	84%	13%
Colorado River Indian Tribes Reservation	5871	19%	81%	10%
Fort McDowell Yavapai Nation Reservation	656	26%	74%	9%
Fort Mojave Indian Tribe Reservation and Trust Land	1257	16%	84%	16%
Gila River Indian Community Reservation	7027	30%	70%	6%
Havasupai Tribe Reservation and Trust Land	N/A	N/A	N/A	N/A
Hopi Tribe Reservation and Trust Land	5347	12%	88%	8%
Hualapai Tribe Reservation	811	N/A	79%	N/A
Kaibab Band of Paiute Indians Reservation	191	N/A	85%	N/A
Navajo Nation Reservation and Trust Land	107116	24%	76%	9%
Pascua Yaqui Tribe Reservation and Trust Land	2071	28%	73%	4%
Pueblo of Zuni Reservation and Trust Land	5112	24%	77%	6%
Quechan Indian Tribe Reservation	709	20%	80%	6%
Salt River Pima-Maricopa Indian Tribe Reservation	4906	25%	75%	10%
San Carlos Apache Tribe Reservation	5906	25%	75%	4%
Tohono O'odham Nation Reservation and Trust Land	6010	24%	76%	7%
Tonto Apache Tribe Reservation and Trust Land	86	N/A	70%	N/A
White Mountain Apache Tribe Reservation	8072	30%	70%	8%
Yavapai-Apache Nation Reservation	480	18%	82%	N/A
Yavapai-Prescott Indian Tribe Reservation	173	N/A	N/A	N/A

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

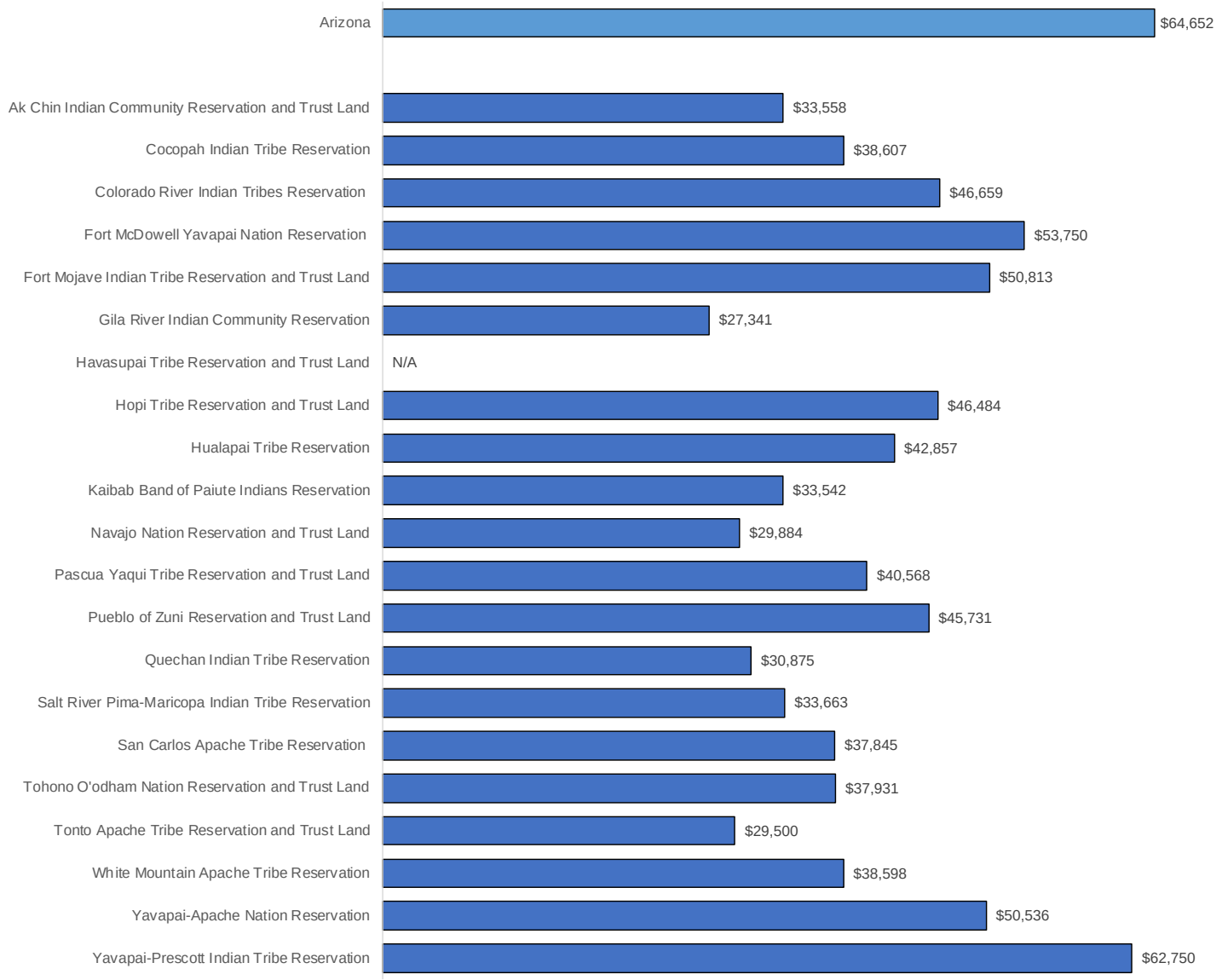
Table 17. Employment Status

	Population 16 years and over	% of population (16+) in the labor force	Employment rate	Unemployment rate
Ak Chin Indian Community Reservation and Trust Land	851	57%	80%	20%
Cocopah Indian Tribe Reservation	1,009	34%	84%	16%
Colorado River Indian Tribes Reservation	6,769	57%	93%	7%
Fort McDowell Yavapai Nation Reservation	813	50%	87%	13%
Fort Mojave Indian Tribe Reservation and Trust Land	1,383	36%	87%	13%
Gila River Indian Community Reservation	9,197	41%	91%	9%
Havasupai Tribe Reservation and Trust Land	N/A	DS	DS	DS
Hopi Tribe Reservation and Trust Land	6,422	49%	89%	11%
Hualapai Tribe Reservation	1,030	51%	87%	14%
Kaibab Band of Paiute Indians Reservation	223	77%	90%	10%
Navajo Nation Reservation and Trust Land	129,966	44%	85%	15%
Pascua Yaqui Tribe Reservation and Trust Land	2,637	58%	93%	8%
Pueblo of Zuni Reservation and Trust Land	6,408	56%	86%	14%
Quechan Indian Tribe Reservation	930	45%	84%	16%
Salt River Pima-Maricopa Indian Tribe Reservation	5,470	45%	73%	27%
San Carlos Apache Tribe Reservation	7,331	49%	80%	20%
Tohono O'odham Nation Reservation and Trust Land	7,811	46%	81%	19%
Tonto Apache Tribe Reservation and Trust Land	108	52%	93%	N/A
White Mountain Apache Tribe Reservation	9,963	46%	84%	16%
Yavapai-Apache Nation Reservation	633	68%	92%	8%
Yavapai-Prescott Indian Tribe Reservation	188	75%	92%	N/A

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "unemployment rate" is the fraction of the civilian labor force which are unemployed.

Figure 10. Median household income (in 2021 inflation-adjusted dollars)



Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Table 18. Individuals living in households with incomes below the poverty level (in the past 12 months) by age

	Total people	Children under 18	Adults (18 and older)	Older adults (65 and older)
Ak Chin Indian Community Reservation and Trust Land	33%	36%	31%	33%
Cocopah Indian Tribe Reservation	36%	59%	28%	8%
Colorado River Indian Tribes Reservation	19%	24%	17%	12%
Fort McDowell Yavapai Nation Reservation	22%	28%	20%	10%
Fort Mojave Indian Tribe Reservation and Trust Land	21%	45%	15%	7%
Gila River Indian Community Reservation	41%	49%	38%	35%
Havasupai Tribe Reservation and Trust Land	N/A	N/A	N/A	N/A
Hopi Tribe Reservation and Trust Land	31%	38%	28%	25%
Hualapai Tribe Reservation	33%	50%	22%	N/A
Kaibab Band of Paiute Indians Reservation	43%	59%	36%	N/A
Navajo Nation Reservation and Trust Land	38%	47%	34%	30%
Pascua Yaqui Tribe Reservation and Trust Land	31%	43%	25%	15%
Pueblo of Zuni Reservation and Trust Land	30%	36%	28%	24%
Quechan Indian Tribe Reservation	41%	51%	36%	23%
Salt River Pima-Maricopa Indian Tribe Reservation	33%	46%	29%	23%
San Carlos Apache Tribe Reservation	45%	56%	39%	29%
Tohono O'odham Nation Reservation and Trust Land	43%	56%	37%	35%
Tonto Apache Tribe Reservation and Trust Land	17%	N/A	19%	N/A
White Mountain Apache Tribe Reservation	39%	46%	36%	26%
Yavapai-Apache Nation Reservation	33%	50%	27%	27%
Yavapai-Prescott Indian Tribe Reservation	14%	N/A	15%	N/A

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Table 19. Families living in households with incomes below the poverty level (in the past 12 months)

	All families		Married couple families		Single female-headed families	
	All	With children under 18	All	With children under 18	All	With children under 18
Ak Chin Indian Community Reservation and Trust Land	30%	31%	23%	21%	33%	39%
Cocopah Indian Tribe Reservation	27%	44%	14%	25%	51%	51%
Colorado River Indian Tribes Reservation	13%	18%	9%	14%	25%	31%
Fort McDowell Yavapai Nation Reservation	21%	25%	9%	14%	20%	20%
Fort Mojave Indian Tribe Reservation and Trust Land	17%	37%	10%	N/A	34%	47%
Gila River Indian Community Reservation	34%	41%	25%	33%	39%	47%
Havasupai Tribe Reservation and Trust Land	N/A	N/A	N/A	N/A	N/A	N/A
Hopi Tribe Reservation and Trust Land	22%	26%	11%	21%	25%	25%
Hualapai Tribe Reservation	30%	33%	24%	20%	30%	32%
Kaibab Band of Paiute Indians Reservation	37%	41%	N/A	N/A	64%	64%
Navajo Nation Reservation and Trust Land	33%	42%	24%	31%	42%	50%
Pascua Yaqui Tribe Reservation and Trust Land	25%	31%	N/A	11%	35%	47%
Pueblo of Zuni Reservation and Trust Land	31%	35%	22%	24%	37%	45%
Quechan Indian Tribe Reservation	36%	48%	21%	35%	60%	69%
Salt River Pima-Maricopa Indian Tribe Reservation	26%	35%	N/A	N/A	21%	35%
San Carlos Apache Tribe Reservation	38%	50%	25%	30%	51%	72%
Tohono O'odham Nation Reservation and Trust Land	39%	50%	17%	19%	54%	68%
Tonto Apache Tribe Reservation and Trust Land	N/A	N/A	N/A	N/A	N/A	DS
White Mountain Apache Tribe Reservation	37%	40%	22%	24%	53%	61%
Yavapai-Apache Nation Reservation	27%	34%	N/A	N/A	49%	74%
Yavapai-Prescott Indian Tribe Reservation	23%	N/A	N/A	N/A	45%	56%

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Table 20. Housing arrangements, 2017-2021

	Occupied housing units	Owner-occupied units	Renter-occupied units
Ak Chin Indian Community Reservation and Trust Land	349	11%	89%
Cocopah Indian Tribe Reservation	498	50%	50%
Colorado River Indian Tribes Reservation	3,710	64%	36%
Fort McDowell Yavapai Nation Reservation	306	88%	12%
Fort Mojave Indian Tribe Reservation and Trust Land	660	68%	32%
Gila River Indian Community Reservation	3,426	54%	46%
Havasupai Tribe Reservation and Trust Land	DS	DS	DS
Hopi Tribe Reservation and Trust Land	2,335	69%	31%
Hualapai Tribe Reservation	440	48%	53%
Kaibab Band of Paiute Indians Reservation	113	56%	44%
Navajo Nation Reservation and Trust Land	48,978	76%	24%
Pascua Yaqui Tribe Reservation and Trust Land	976	26%	74%
Pueblo of Zuni Reservation and Trust Land	1,804	84%	16%
Quechan Indian Tribe Reservation	335	44%	56%
Salt River Pima-Maricopa Indian Tribe Reservation	2,417	83%	17%
San Carlos Apache Tribe Reservation	2,510	57%	43%
Tohono O'odham Nation Reservation and Trust Land	2,914	65%	35%
Tonto Apache Tribe Reservation and Trust Land	52	87%	N/A
White Mountain Apache Tribe Reservation	3,751	56%	44%
Yavapai-Apache Nation Reservation	247	66%	34%
Yavapai-Prescott Indian Tribe Reservation	71	79%	21%

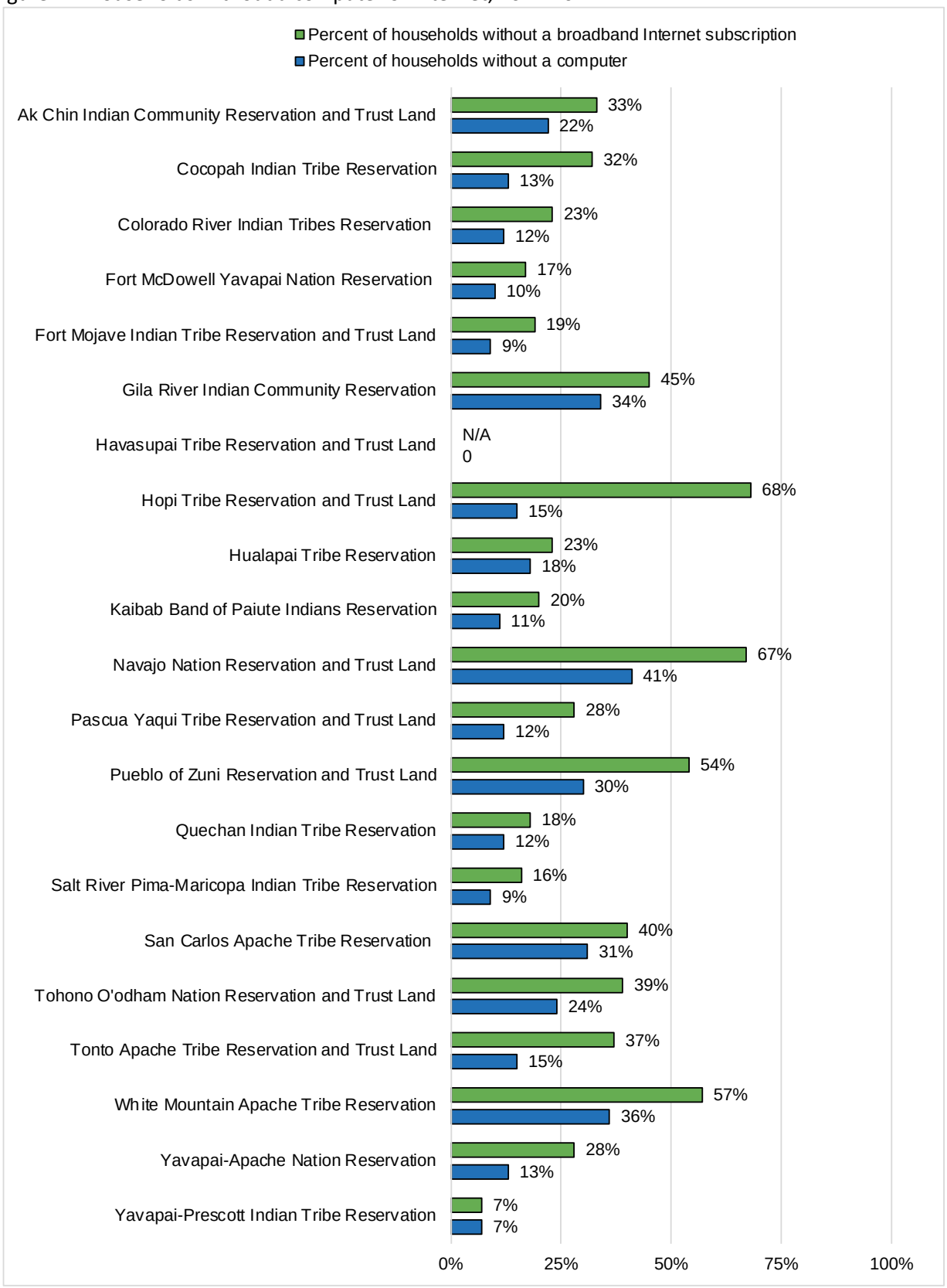
Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Table 21. Median annual housing cost and housing cost burden

	Median household income	30% of median household income	Median annual housing cost – owner-occupied units	Median annual housing cost – renter-occupied units
Ak Chin Indian Community Reservation and Trust Land	$33,558	$10,067.40	N/A	N/A
Cocopah Indian Tribe Reservation	$38,607	$11,582.10	$9,768	$5,904
Colorado River Indian Tribes Reservation	$46,659	$13,997.70	$13,872*	$7,980
Fort McDowell Yavapai Nation Reservation	$53,750	$16,125.00	$18,756*	$6,900
Fort Mojave Indian Tribe Reservation and Trust Land	$50,813	$15,243.90	$10,776	$6,792
Gila River Indian Community Reservation	$27,341	$8,202.30	$19,152*	$5,160
Havasupai Tribe Reservation and Trust Land	DS	N/A	N/A	N/A
Hopi Tribe Reservation and Trust Land	$46,484	$13,945.20	$7,704	$7,668
Hualapai Tribe Reservation	$42,857	$12,857.10	$15,396*	$6,732
Kaibab Band of Paiute Indians Reservation	$33,542	$10,062.60	N/A	$6,480
Navajo Nation Reservation and Trust Land	$29,884	$8,965.20	$10,224*	$7,080
Pascua Yaqui Tribe Reservation and Trust Land	$40,568	$12,170.40	N/A	$7,116
Pueblo of Zuni Reservation and Trust Land	$45,731	$13,719.30	$8,160	$6,252
Quechan Indian Tribe Reservation	$30,875	$9,262.50	N/A	$7,872
Salt River Pima-Maricopa Indian Tribe Reservation	$33,663	$10,098.90	$12,852*	$8,892
San Carlos Apache Tribe Reservation	$37,845	$11,353.50	$8,484	$4,740
Tohono O'odham Nation Reservation and Trust Land	$37,931	$11,379.30	$11,544*	$7,608
Tonto Apache Tribe Reservation and Trust Land	$29,500	$8,850.00	N/A	N/A
White Mountain Apache Tribe Reservation	$38,598	$11,579.40	$8,688	$5,952
Yavapai-Apache Nation Reservation	$50,536	$15,160.80	$25,296*	$3,900
Yavapai-Prescott Indian Tribe Reservation	$62,750	$18,825.00	$10,596	N/A

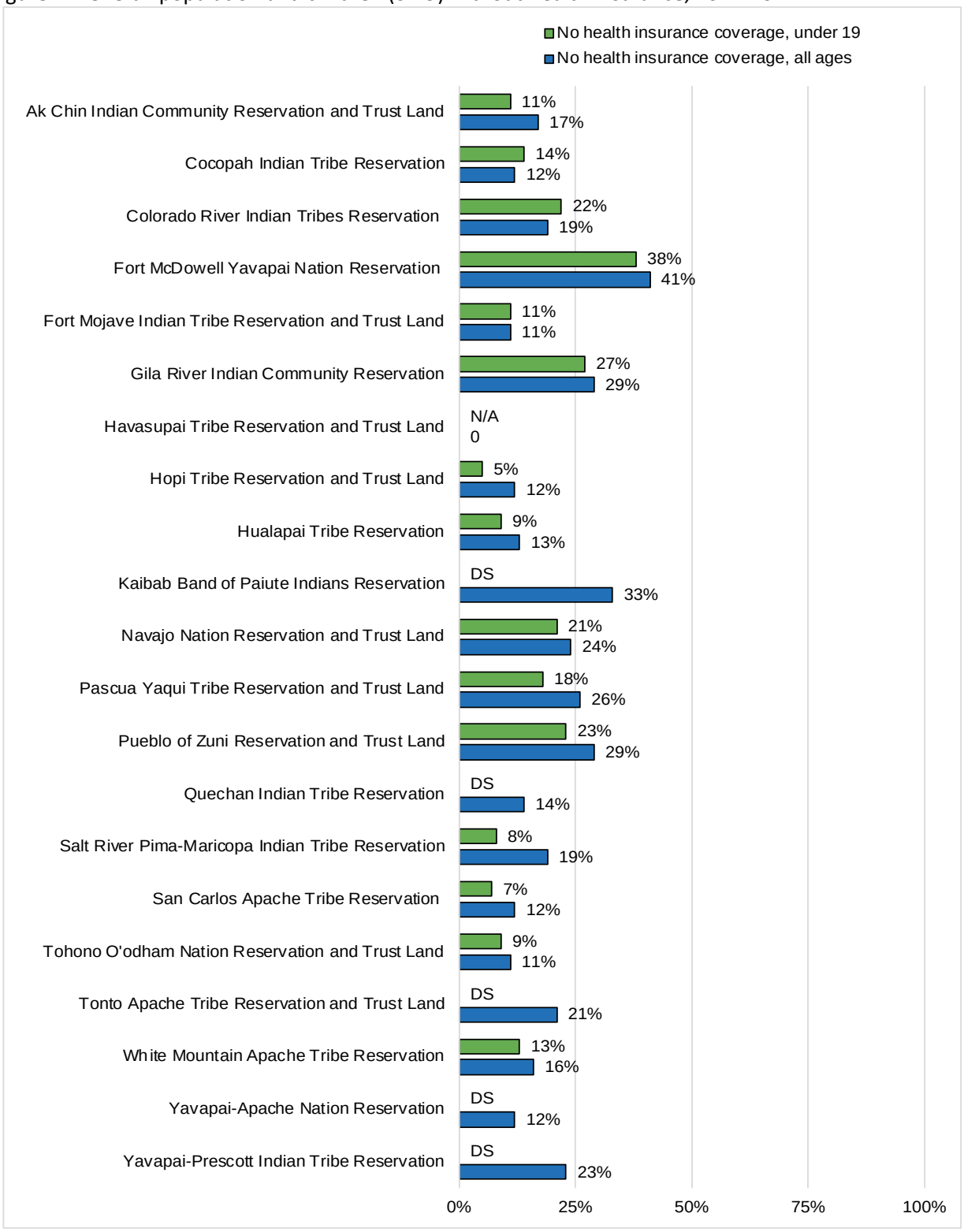
Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
Note: * denotes a median annual housing cost considered ‘housing-cost burdened’ or above 30% of median household income

Figure 11. Households without a computer or internet, 2017-2021



Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Figure 12. Overall population and children (0-19) without health insurance, 2017-2021



Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
Note: The American Community Survey considers individuals covered by Indian Health Services (IHS) uninsured.

Nutrition

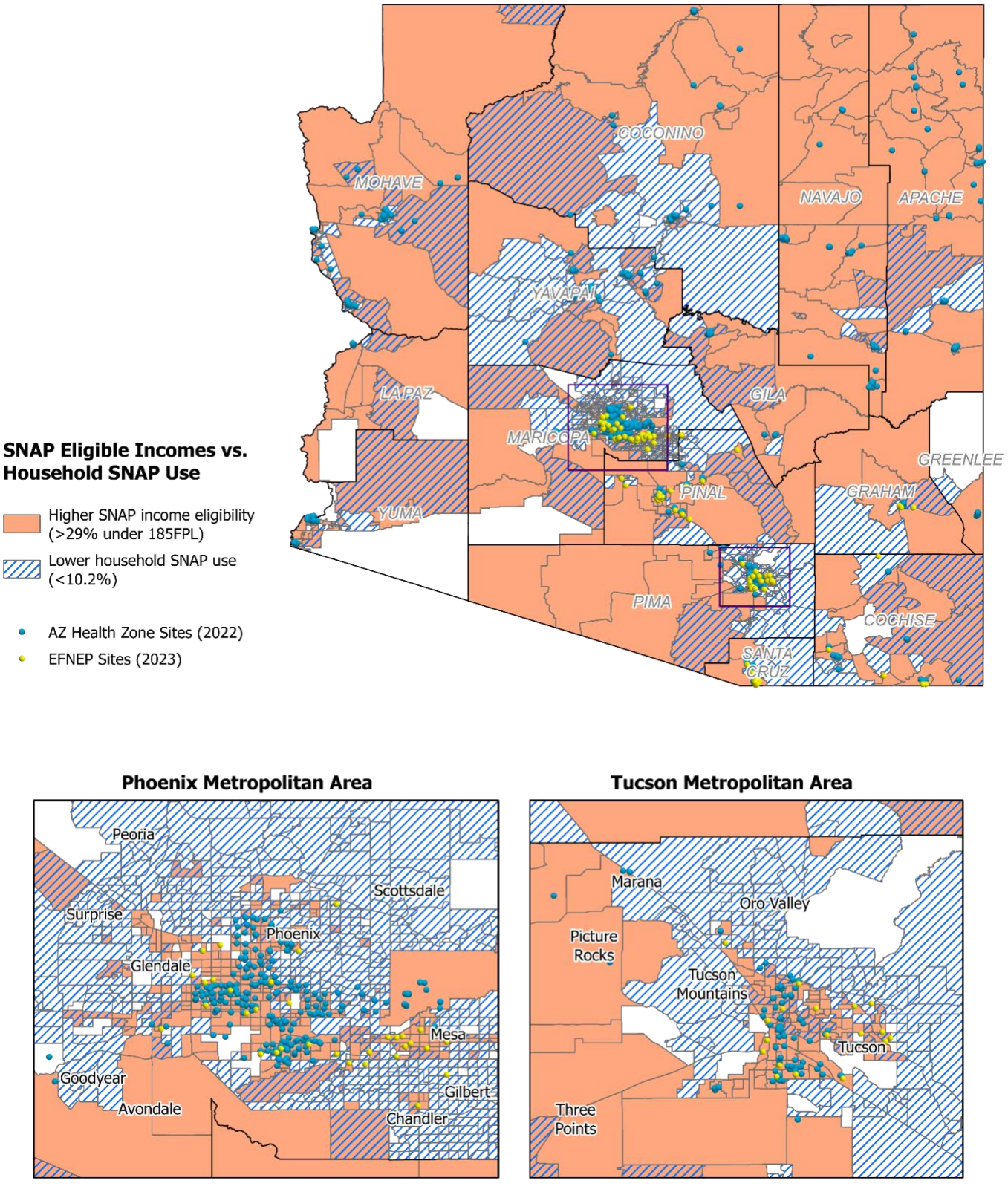
Access to adequate, healthy, culturally- and dietarily-appropriate food options for individuals and communities promotes proper nutrition, prevents diet-related diseases, reduces health disparities, and supports the healthy development of children and the well-being of the population. Accessible, affordable, and nutritious food is a critical component of maintaining a healthy lifestyle and reducing diet-related health issues.

Multiple socioeconomic factors contribute to the availability of affordable healthy food. These factors can vary across regions and communities and are influenced by policy, systems, and environmental factors. At the policy level, policies and initiatives aimed at promoting healthy food access can contribute to affordability. These may include zoning regulations, incentives for grocery store development in underserved areas, or programs that support local agriculture and farmers' markets, including SNAP redemption at such markets. On a systems level, efficient food production and distribution systems support the availability of affordable healthy food. Factors such as agricultural practices, transportation infrastructure, supply chains, and storage facilities impact the cost and accessibility of fresh produce, whole grains, and other nutritious foods. Within a local environment, the types of food retail establishments in a given area influence the availability and affordability of healthy food options. Access to such retailers can be considered across dimensions of time (e.g., store hours), distance, affordability, and cultural acceptability.

AZ Health Zone SNAP-Ed programming aims to promote positive changes to policies, systems, and environments that affect nutrition programming to improve the health of communities. It also offers classes, lesson series, and food demonstrations to individuals to help them maximize their available resources. The network of AZ Health Zone agencies spans the state of Arizona, working to serve Arizonans across low-income rural and urban communities. Their programming and intervention sites are mapped below (Figure 13). Note that the majority of AZ Health Zone sites are located in areas with higher-than-mean SNAP income-eligibility (<185% FPL, Arizona mean is 29%). Areas with both higher-than-mean SNAP income-eligibility and lower-than-mean household SNAP use (Arizona mean is 10.2%) may be more likely to have families whose nutritional needs are not being met through existing resources. Many AZ Health Zone sites are within or close to these areas, and future locations could be planned using a resource-gap analysis.

Additionally, the Expanded Food and Nutrition Education Program (EFNEP), funded by the National Institute of Food and Agriculture (NIFA), provides direct nutrition education to low-income families. Unlike AZ Health Zone, which has locations across the state, EFNEP sites are concentrated in central and southeastern Arizona.

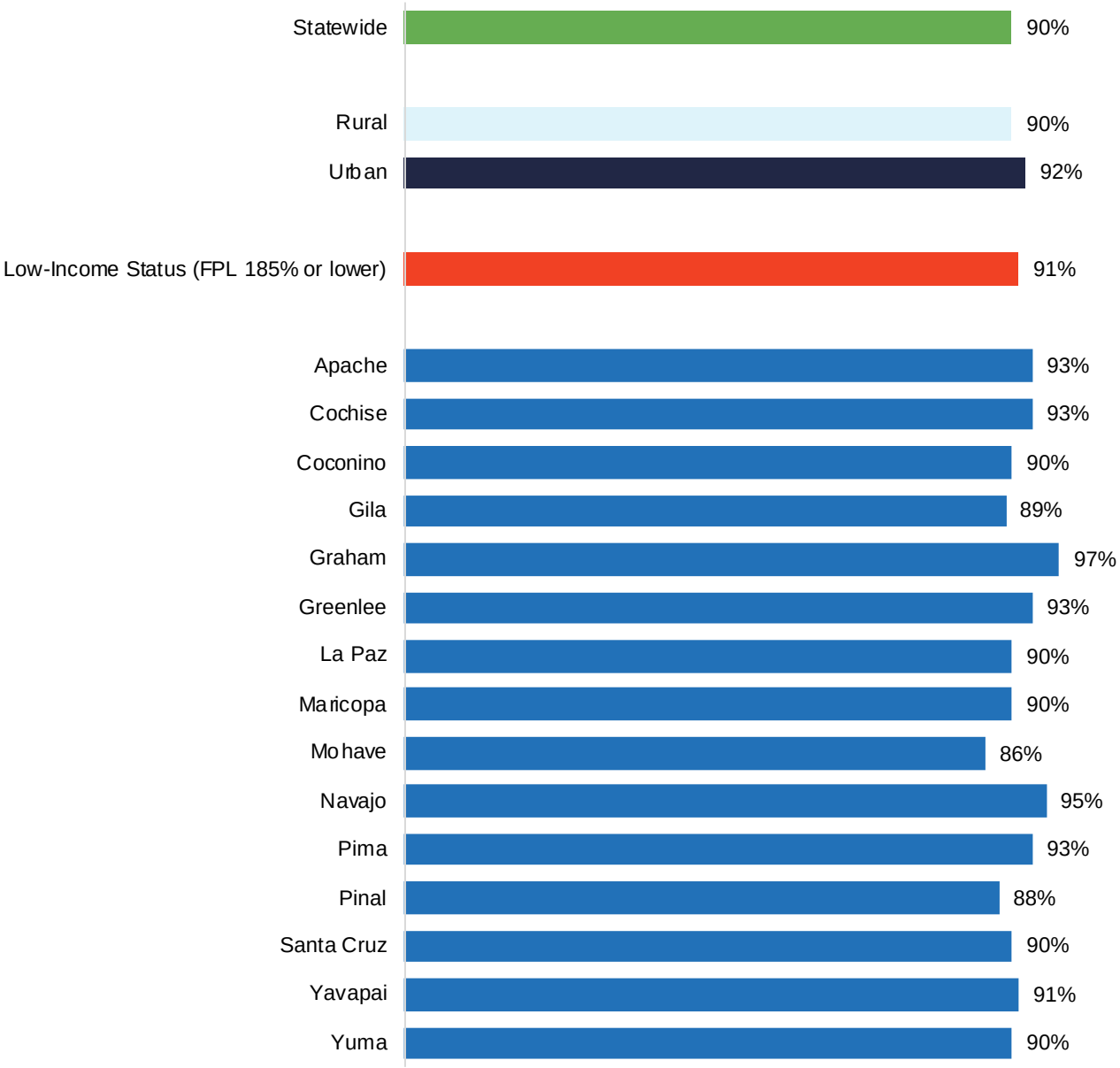
Figure 13. AZ Health Zone Sites (2022) relative to areas of higher SNAP income eligibility and lower household SNAP use



Source: 2020 TIGER/Line Shapefiles prepared by the U.S. Census. Map produced by CRED.

For Arizonans responding to the 2022 Arizona Cooperative Extension Statewide Needs Assessment survey, 'access to affordable, healthy food' was identified as one of the top ten issues in their communities, with 90% of respondents across the state saying it was either 'extremely' or 'very' important to address. This was similarly true for individuals in both rural and urban communities, as well as SNAP-eligible individuals who completed the survey. A large majority of respondents across each county also indicated that food access was a key issue. In Graham County, this was the top issue (among 99) that residents strongly felt deserved prioritization. It also ranked among the top 5 for Greenlee, Cochise, and Navajo County residents (Figure 14).

Figure 14. Arizona survey respondents who rated "Access to affordable, health food" as an 'extremely' or 'very' important priority to address in their community

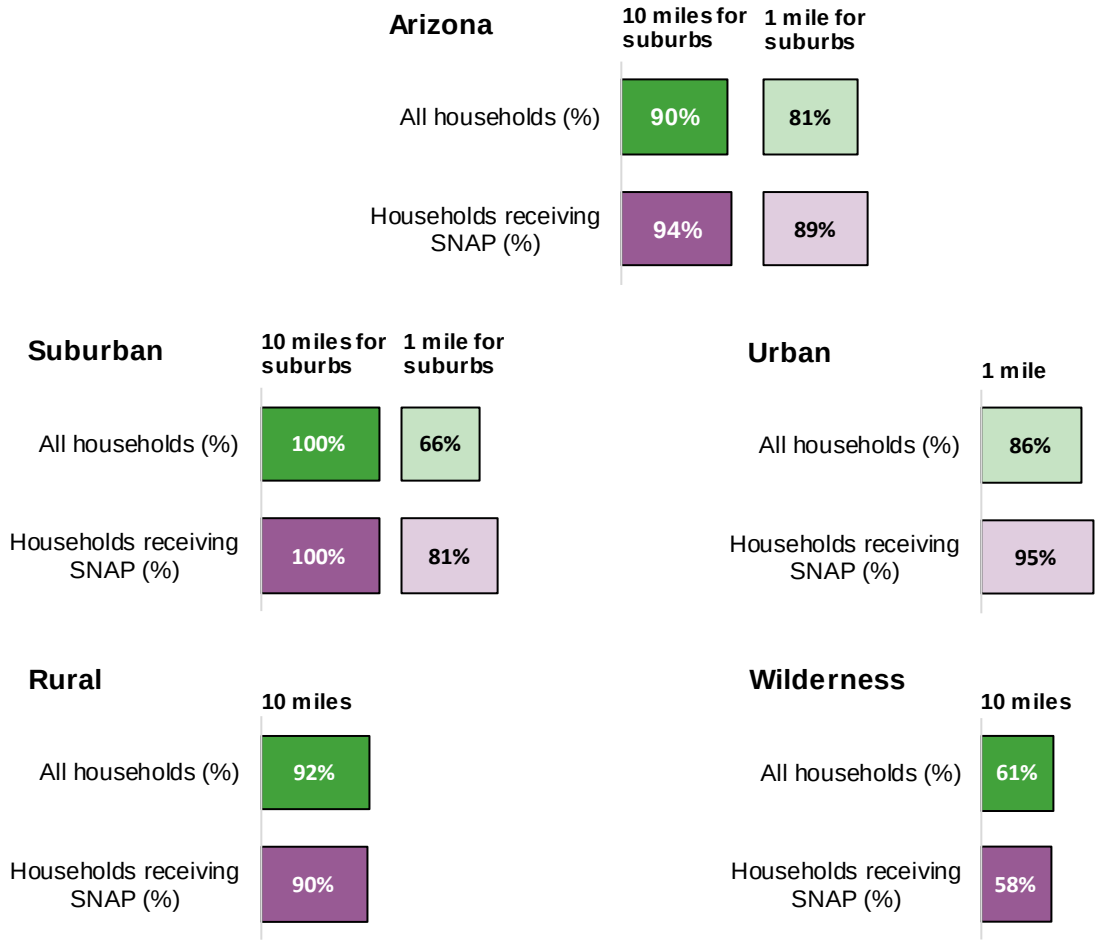


Source: 2022 Arizona Cooperative Extension Needs Assessment

Access to SNAP and WIC retailers

Generated through geographic analyses, the following tables indicate accessibility of different kinds of food retailers who accept SNAP. SNAP retailers must meet specific stocking requirements to ensure an adequate variety of staple food items including perishable and non-perishable food items in each of the four staple food groups: fruits and vegetables; dairy products; meats, poultry, and fish; and bread or cereals. These retail entities include supermarkets and superstores, farmers markets, convenience stores, discount and dollar stores, small and specialty grocers, and pharmacies. A retailer is considered accessible if it's one mile from one's home address for those living in urban areas, and 10 miles in rural and wilderness areas. For suburban areas, access at both 1- and 10-mile dimensions is included, recognizing that suburban areas do tend to be car-centric, but that active transportation (e.g., not relying on cars) is a goal that is potentially feasible in these areas. In Arizona as a whole, 90% of all households are located an accessible distance from food retailers who accept SNAP when suburban areas are given 10 miles for access. Limiting suburban areas to one mile drops the proportion of households statewide to 81%. Households receiving SNAP actually fare better; with 94% (10 miles for suburbs) and 89% (1 mile for suburbs) of SNAP-receiving households living reasonably close to a food retailer who accepts SNAP (Figure 15).

Figure 15. Access to all SNAP retailers by urbanicity

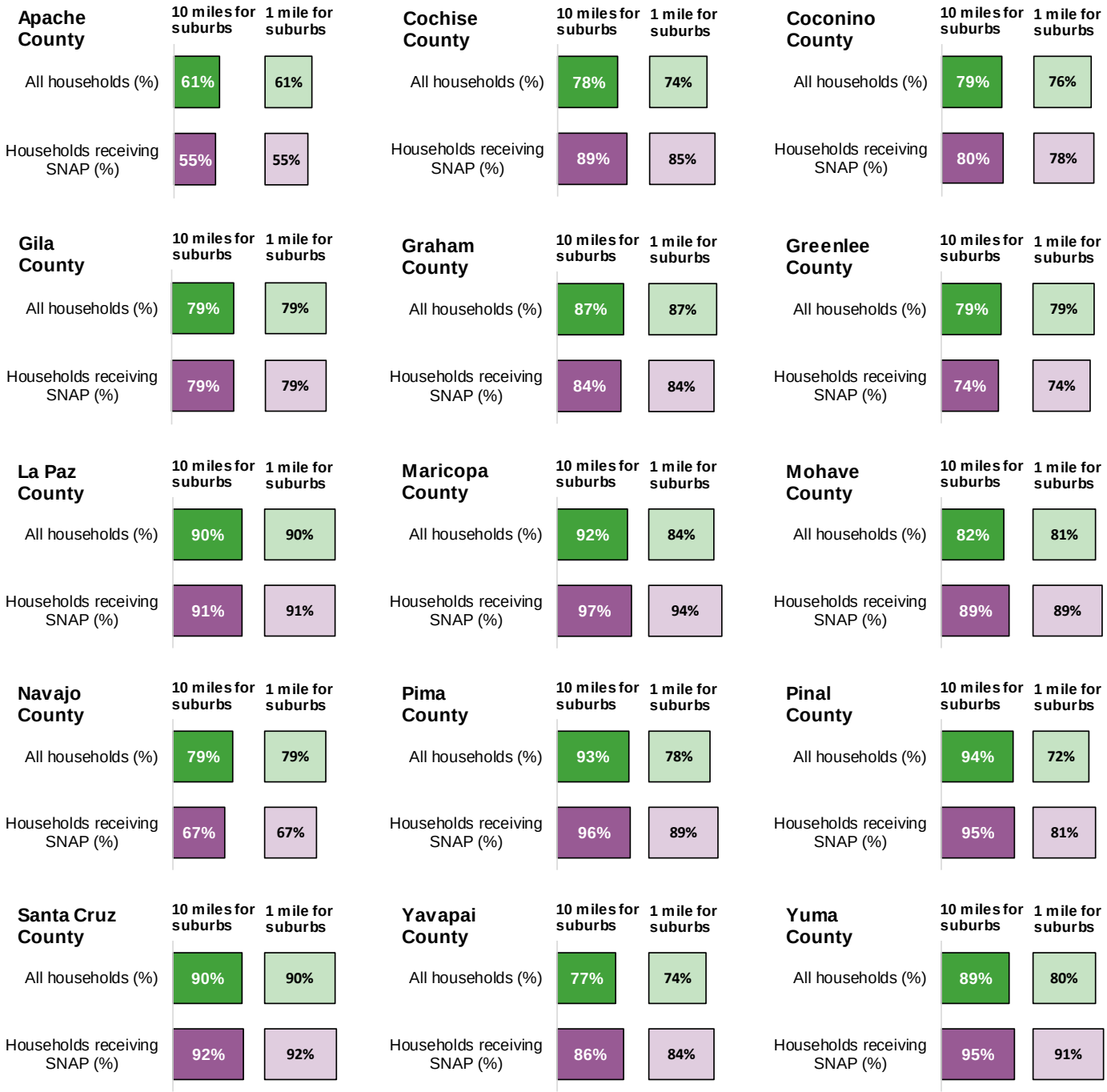


Source: CRED custom tabulation

Looking by county, the majority of all households, including the majority of those using SNAP, live an accessible distance from some type of SNAP retailer. Access is the most limited in Apache County, where only 55% of households using SNAP and 61% of households overall have ready access to a SNAP food retailer. In

some counties, the proportion of SNAP-using households who live an accessible distance from a retailer is lower than the general population. For example, in Navajo County, 79% of all households live within a reasonable distance of a SNAP-retailer, but the same is true for only 67% of households using SNAP. Access to SNAP retailers is especially high in the more urban counties of Maricopa, Pinal, and Pima, where 94%, 95%, and 96% of households receiving SNAP live an accessible distance from a retailer. Notably, these proportions assume that suburban households tend to rely on cars and considers "accessible" to be a 10-mile radius. Limiting suburban neighborhoods to a more walkable distance of one mile reduces access substantially, especially in Pinal where it drops from 95% to 81% of SNAP households (Figure 16).

Figure 16. Access to all SNAP retailers, by county

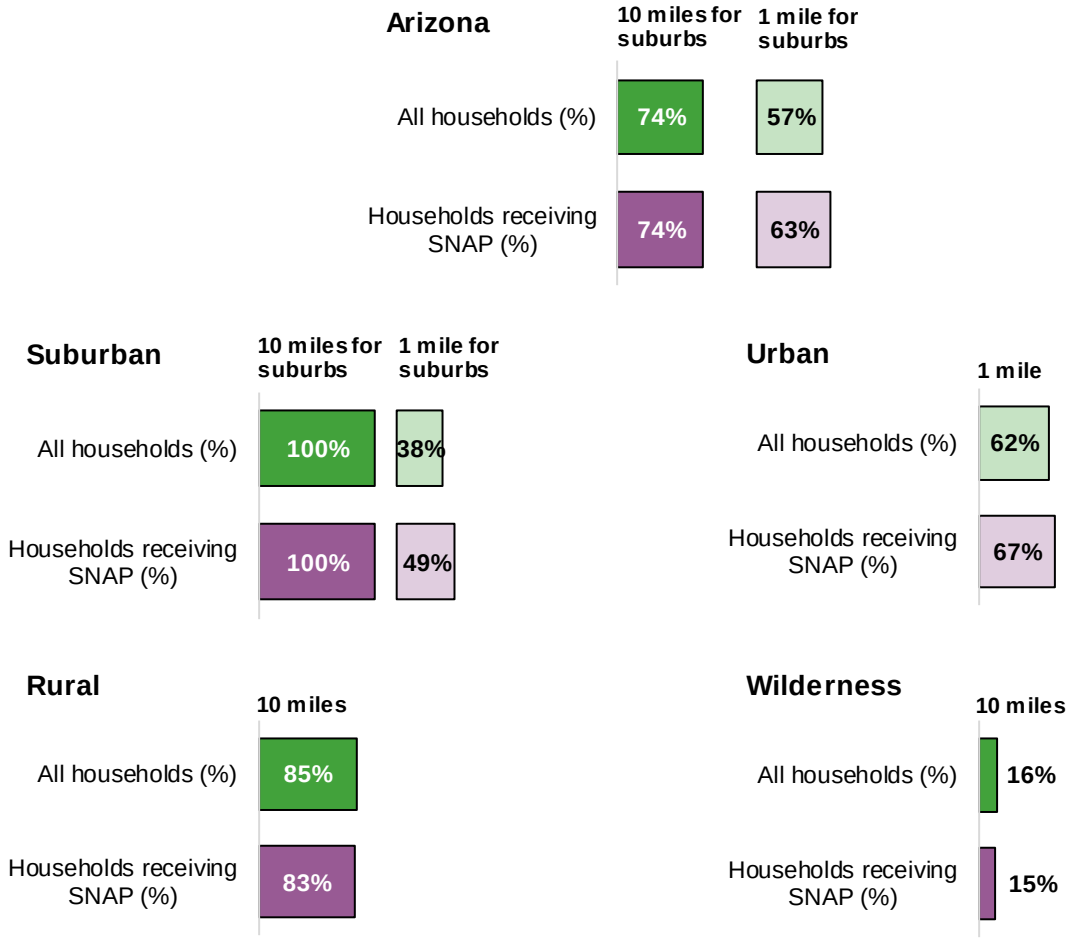


Source: CRED custom tabulation

Although any SNAP retailer has to carry some fresh, nutritious foods, research suggests that dollar stores tend to have a higher proportion of energy-dense, nutrient-poor foods compared to larger grocery stores.[21] Dollar stores, particularly those operating under the brands Dollar General and Family Dollar, have become a significant part of the food environment in rural and low-income areas.[22] These stores often serve as primary sources of food and household goods for residents in these communities where access to traditional, larger grocery stores may be more limited. Across Arizona, the majority of households are within an accessible distance of a supermarket or superstore. However, there are stark differences across the type of community. All (100%) of suburban households, including those receiving SNAP, can reach a grocer within a 10-mile radius. This is true for only 15% of SNAP recipient households living in wilderness areas. Supermarkets within walking distance are more limited; 67% of SNAP recipient urban households and 49% of SNAP recipient suburban households have a supermarket within a mile of their home (Figure 17). Additional data tables including those looking at the within-county urbanicity breakdowns are available in the appendix beginning with Table 120.

Access to traditional supermarkets is most limited in more rural counties such as Apache, Greenlee, and La Paz where 33%, 29%, and 44%, respectively, of SNAP households live an accessible distance from a supermarket or superstore. Access appears easier in Santa Cruz County, where 87% of SNAP using households live a reasonable distance to such stores (Figure 18).

Figure 17. Access to SNAP supermarkets or superstores, by urbanicity



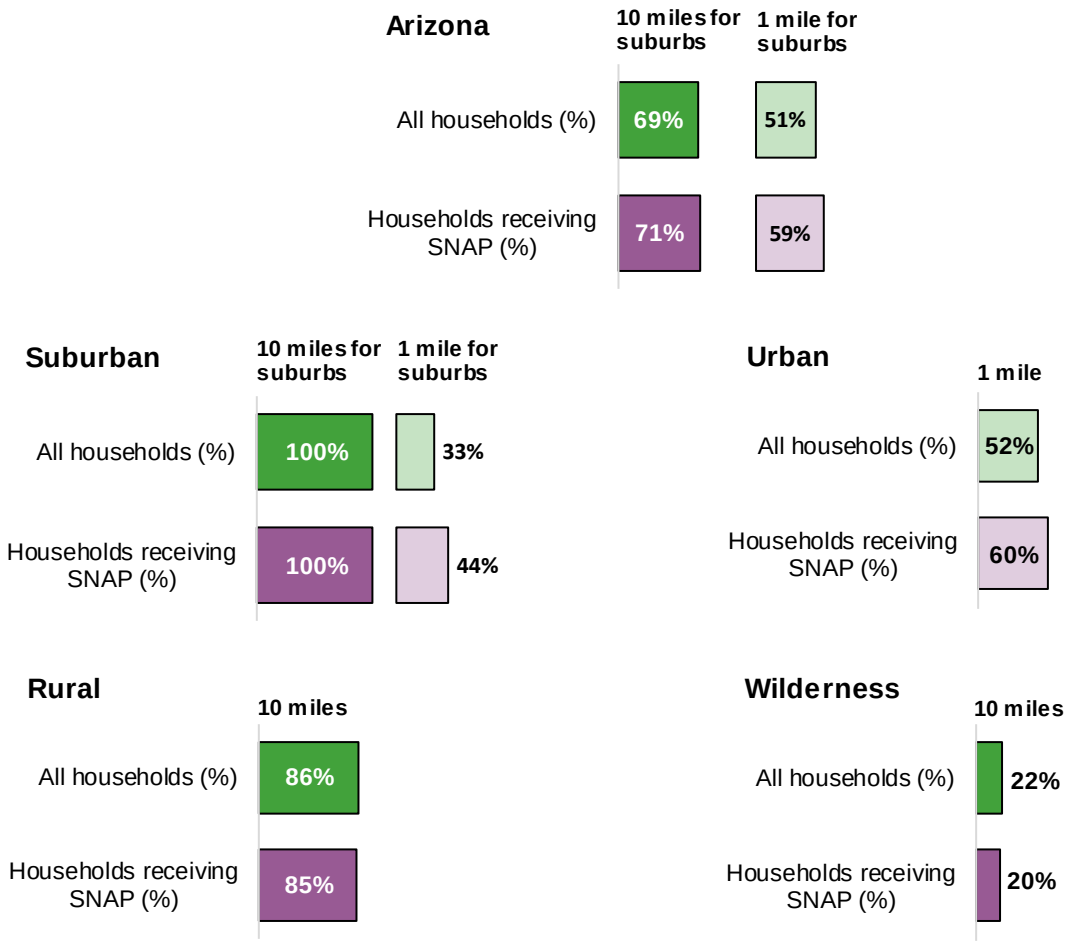
Source: CRED custom tabulation

Figure 18. Access to SNAP supermarkets or superstores, by county

Source: CRED custom tabulation

In addition to accepting SNAP benefits, retailers can also choose to accept benefits from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). WIC retailers must meet even more criteria than SNAP retailers, making them scarcer than SNAP retailers. For example, whereas 94% (10 miles for suburbs) of all SNAP recipient households live an accessible distance from a SNAP retailer, that is true for only 71% of households when looking at access to WIC retailers. Only 20% of wilderness households using SNAP can readily access a WIC retailer (Figure 19).

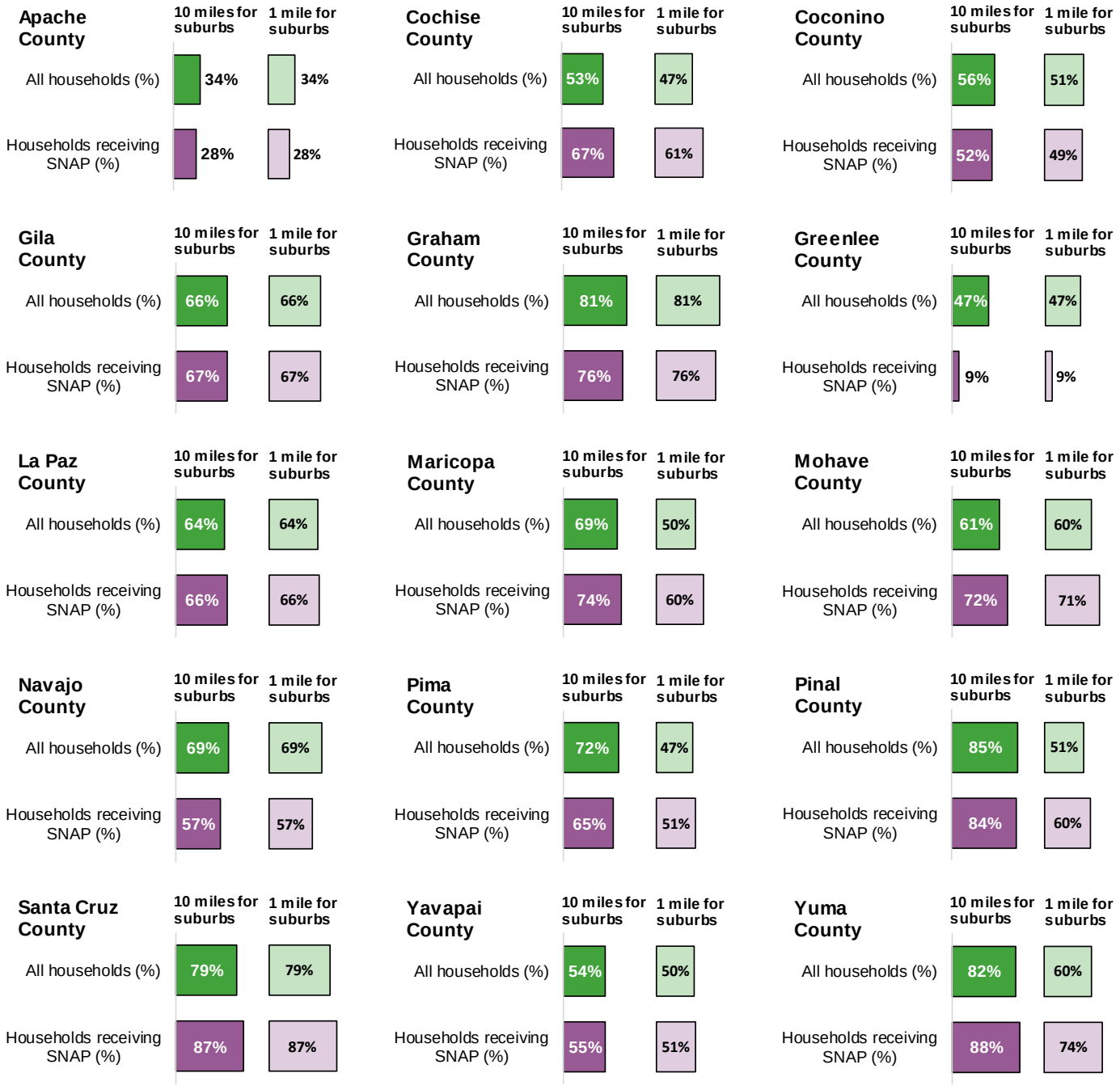
Figure 19. Access to WIC retailers, by urbanicity



Source: CRED custom tabulation

WIC retailer access is especially limited in Greenlee and Apache Counties, where only 9% and 28%, respectively, of SNAP-receiving households live near a WIC retailer. In all other counties, the majority of SNAP-receiving households are a reasonable distance from a WIC retailer using a 10-mile radius for suburban households. Limiting suburbs to the more walkable 1-mile radius means that just under half (49%) of households receiving SNAP in Coconino can reasonably access a WIC retailer (Figure 20). Additional data looking at the within-county urbanicity breakdowns are available in the appendix in Table 131.

Figure 20. Access to WIC retailers, by county



Source: CRED custom tabulation

Low-income and low-access areas

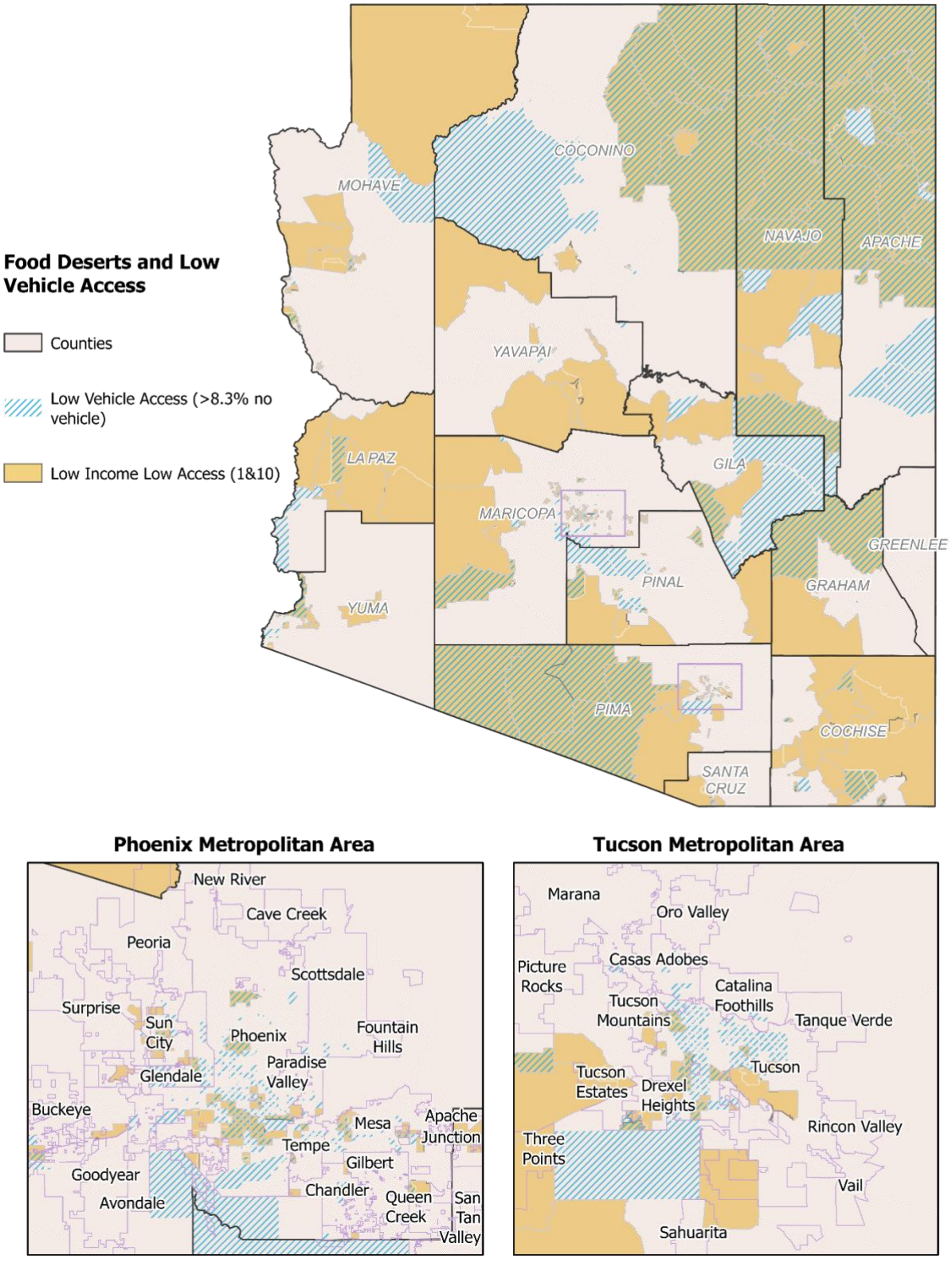
Low-income, low-access (LILA) areas highlight the intersection of economic factors and limited food access. A low-income, low-access area, as defined by the United States Department of Agriculture (USDA), refers to a geographic region where a significant number of residents have limited financial resources and face challenges in accessing affordable and nutritious food.[cc] They are characterized by a high poverty rate or low median family income, along with limited proximity to supermarkets or large grocery stores (1 mile in urban areas or 10 miles in rural areas), which creates barriers for residents to access affordable and nutritious food options. Figure 21 highlights the large portions of rural Arizona that are considered low-income, low-access areas. It further indicates areas where communities have more limited access to personal vehicles, with yellow and blue hatching indicating where communities may face particular struggles in reaching food resources due to challenges with distance, economic means, and transportation access. Note that many of the areas indicated in the map overlap with American Indian Tribal lands in Arizona.

Unsurprisingly, across Arizona, food access varies by rurality. Half (50%) of wilderness area residents and a quarter (25%) of rural area residents are living within low income/low access areas, compared with only 10% of suburban residents. Statewide, 17% of all households receiving SNAP live in a low-income, low-access area. Relatively more SNAP recipients live in low-income, low-access rural and wilderness areas. Within low income/low access wilderness areas, 69% of households receive SNAP benefits, compared to 18% of suburban and 17% of urban households in low-income low-access areas (Table 23).

At the county level, there are dramatic differences in the proportions of residents living in low-income, low-access areas. In Apache and La Paz counties, for example, 61% and 59% of the population resides in areas with limited commercial food resources. Navajo (53%), Santa Cruz (47%), and Mohave (46%) also have nearly half of their residents in low-income, low-access areas. In contrast, Maricopa (9%), Pima (13%), and Greenlee (0%) counties have much lower proportions of residents in such areas. Low-income, low-access areas appear throughout the state, with each county a patchwork of areas considered low-income, low-access and those not. In six counties (Apache, Navajo, La Paz, Mohave, Cochise, Santa Cruz), a majority of SNAP-receiving households live in low-income, low-access areas (Figure 22).

[cc] *The USDA provides the following definitions: "A low-income community is any census tract where the poverty rate is at least 20 percent, or where median family income does not exceed 80 percent of the area median income." "A low-access community is any census tract where at least 500 people or 33 percent of the population live more than one mile (urban areas) or more than 10 miles (rural areas) from the nearest supermarket, supercenter, or large grocery store." USDA. Low-Access Communities. Retrieved from https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/#Low_Access*

Figure 21. Low-Income, Low Access and Low Vehicle Access



Source: 2010 TIGER/Line Shapefiles prepared by the U.S. Census. Map produced by CRED.

Table 22. Population in low-income, low-access areas by urbanicity

Urbanicity	Total population in LILA areas (2020 Census)	% of the population living in LILA tracts
Urban	393,287	11%
Suburban	196,634	10%
Rural	274,983	25%
Wilderness	182,202	50%
Total	1,047,106	15%

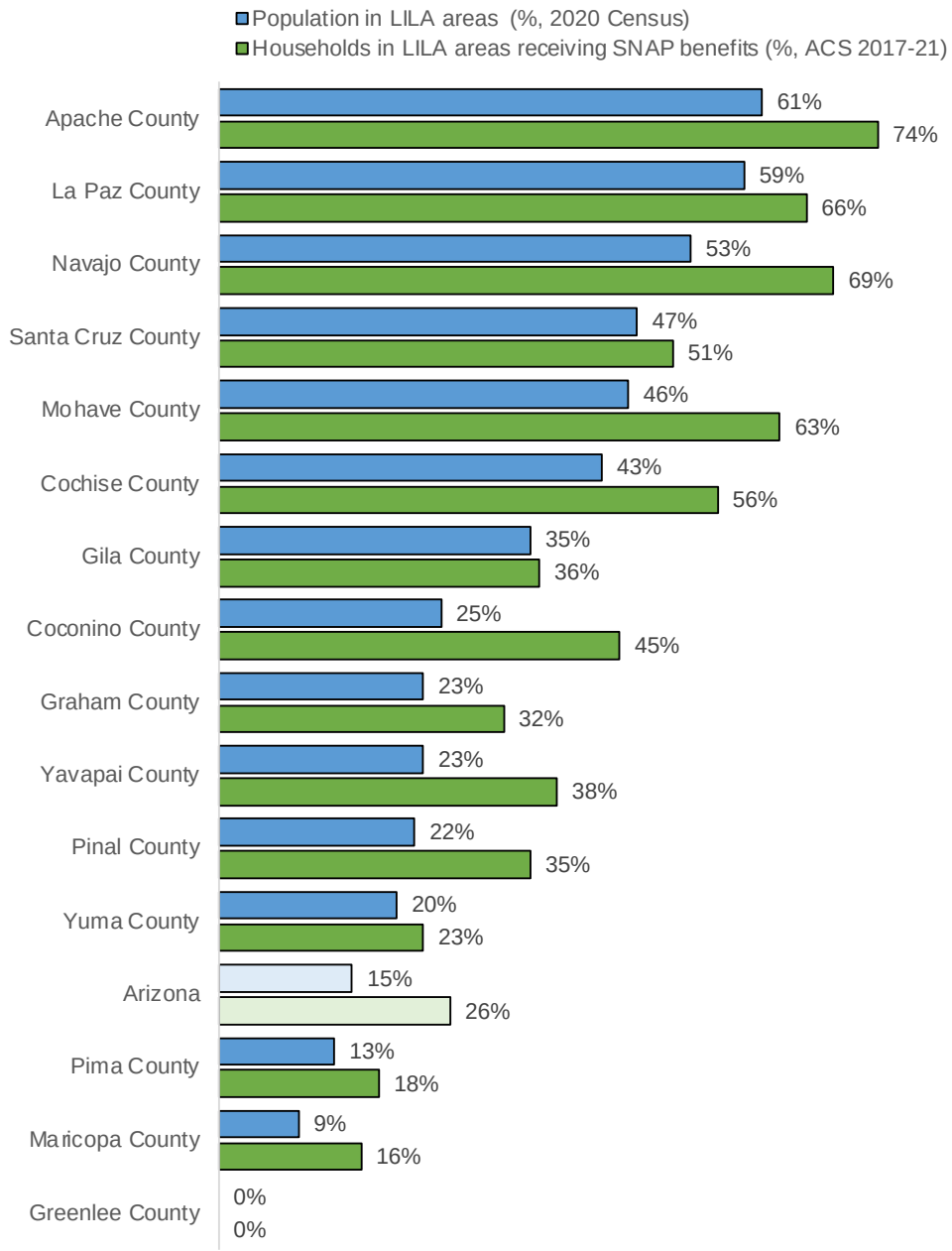
Source: CRED custom tabulation

Table 23. SNAP use in low-income, low-access areas by urbanicity

Urbanicity	Households in LILA areas receiving SNAP (ACS 2017-21)	% of total households in LILA areas that received SNAP benefits
Urban	23,887	17%
Suburban	10,719	18%
Rural	19,893	42%
Wilderness	14,642	69%
Total	69,141	26%

Source: CRED custom tabulation

Figure 22. Total population and households receiving SNAP benefits in low-income, low-access areas, by county



Source: CRED custom tabulation

Preparing and consuming healthy foods

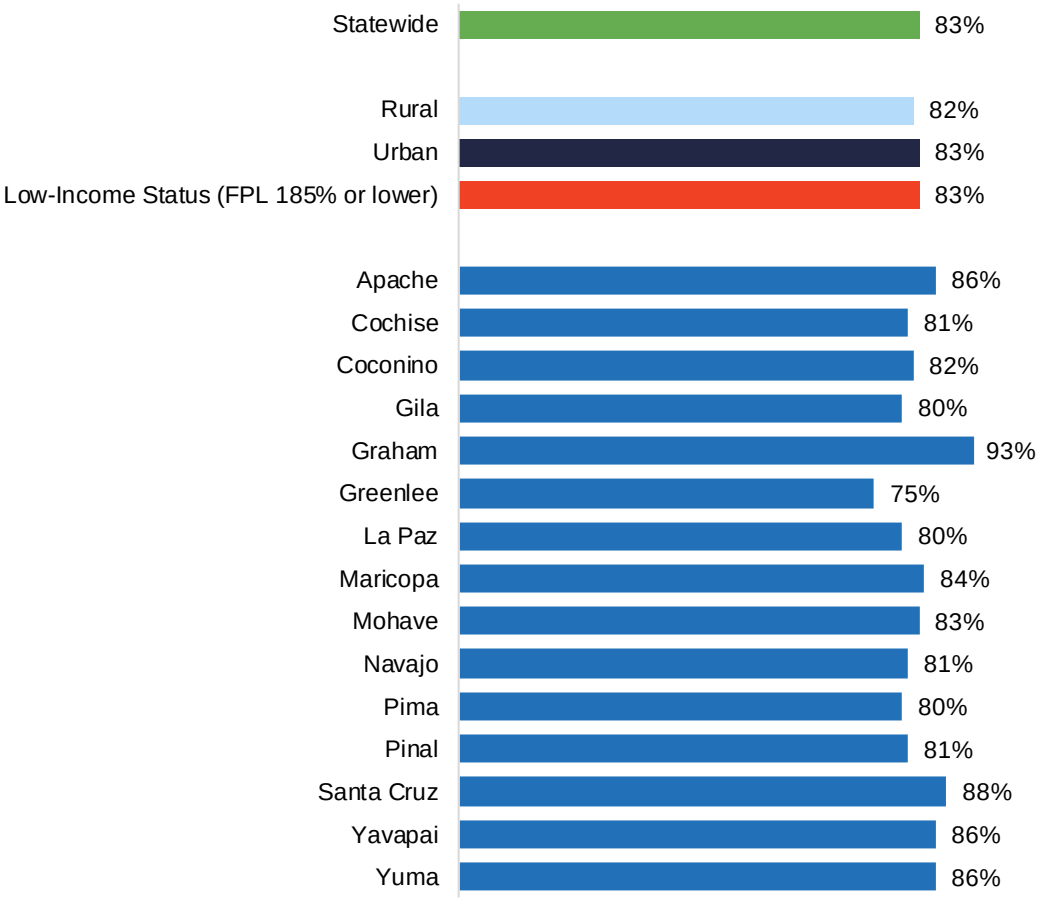
Arizonans also feel that 'preparing healthy food' is an important issue in their communities, with 83% of all respondents across the state saying it was either 'extremely' or 'very' important. This was just as much of a priority for SNAP-eligible individuals. This issue was particularly salient for Graham County residents, where 93% indicated it should be a high priority. Conversely, it was least important to Greenlee residents, where only 75% felt it was a priority issue (Figure 23).

A survey of SNAP-eligible women with children found that a similar proportion (79%) indicated a desire to eat healthful foods most of the time. In that same survey, 89% of respondents reported always purchasing fresh produce when shopping, and 61% reported typically doing meal planning before shopping. In these families, women reported cooking an average of 8.9 meals per week at home (Table 24).

According to BRFSS survey data, Arizonans are slightly more likely to eat vegetables less than once a day than across the U.S. as a whole (21.6% and 20%, respectively). In terms of reported consumption of nutritious foods, there is variation across demographic groups. In Arizona, vegetable consumption is slightly higher (although still low at 1.6 servings per day) for residents not using food assistance programs (including SNAP) than those who do (1.4 servings per day). Furthermore, among those on food assistance, about 30% report not eating any vegetables in a given day, compared to 21% among those not on food assistance. Looking across other demographic categories, other groups at elevated risk for minimal vegetable intake include men, Hispanic persons, Native Hawaiian or other Pacific Islanders, Black or African Americans, those identifying as multiracial or other race, youth ages 18-24, young adults ages 25-34, adults aged 55-64, and those with higher education (Table 25).

There is a clear income gradient when it comes to the proportion of Arizona adults who consume vegetables at least once daily. Only about two-thirds (67%) of the lowest income adults eat vegetables daily, compared to 89% of the highest income individuals (Figure 24). Arizona youth also report only modest vegetable intake, and it appears that the proportion who eat 3 or more vegetables a day has been declining (Figure 25).

Figure 23. Arizona survey respondents who rated “Preparing healthy food” as an ‘extremely’ or ‘very’ important priority to address in their community



Source: 2022 Arizona Cooperative Extension Needs Assessment

Table 24. Nutrition and shopping behaviors of SNAP-eligible women, 2019

Behaviors	% of respondents (N=794)
Always/often purchase fresh fruits and vegetables when shopping	89%
Desire to eat healthful foods most of the time	79%
Bring children shopping	75%
Plan meals before shopping (always/often)	61%
Plan to refrigerate leftovers	58%
Can cope with negative emotions without turning to food for comfort	56%
Use written shopping list	55%
Visit several stores for best prices	49%
Turn to food when they are stressed or feeling emotional	44%
Always/often purchase canned fruits and vegetables when shopping	41%
Always/often purchase frozen fruits and vegetables when shopping	37%
Use coupons	29%
Average meals cooked at home per week	8.9
Average restaurant meals per week	2

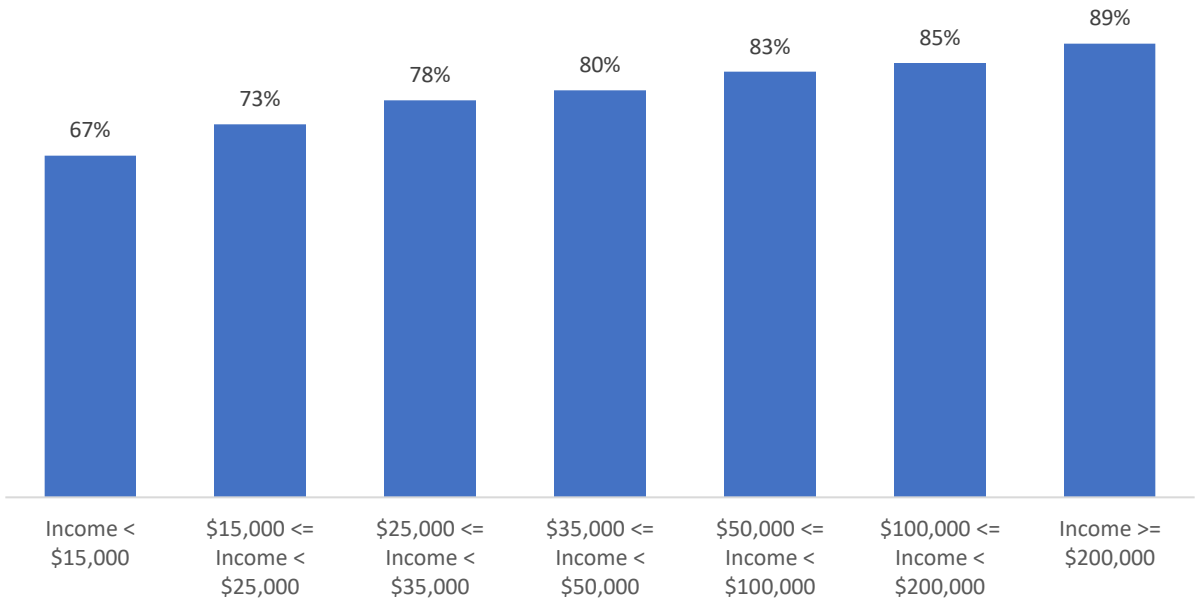
Source: Target Population Study, 2019
18-49-year-old SNAP-eligible women with at least one child 11 years old or younger

Table 25. Adult vegetable consumption, 2019

	Percent eating vegetables less than once a day
US	20%
Arizona overall	21.6%
Not on Food Assistance	21.0%
On Food Assistance	29.6%
Men	23.9%
Women	19.5%
Hispanic	28.6%
Non-Hispanic	18.9%
Native Hawaiian or other PI	65.0%
Other race	30.2%
Black or African American	30.0%
Multiracial	24.7%
White only	20.3%
AIAN	16.0%
Asian only	14.6%
18-24	31.5%
25-34	22.0%
35-44	18.7%
45-54	19.9%
55-64	22.5%
65+	18.6%
Less than high school	32.0%
Graduated high school	23.6%
Attended college or technical school	19.0%
Graduated college or technical school	14.3%

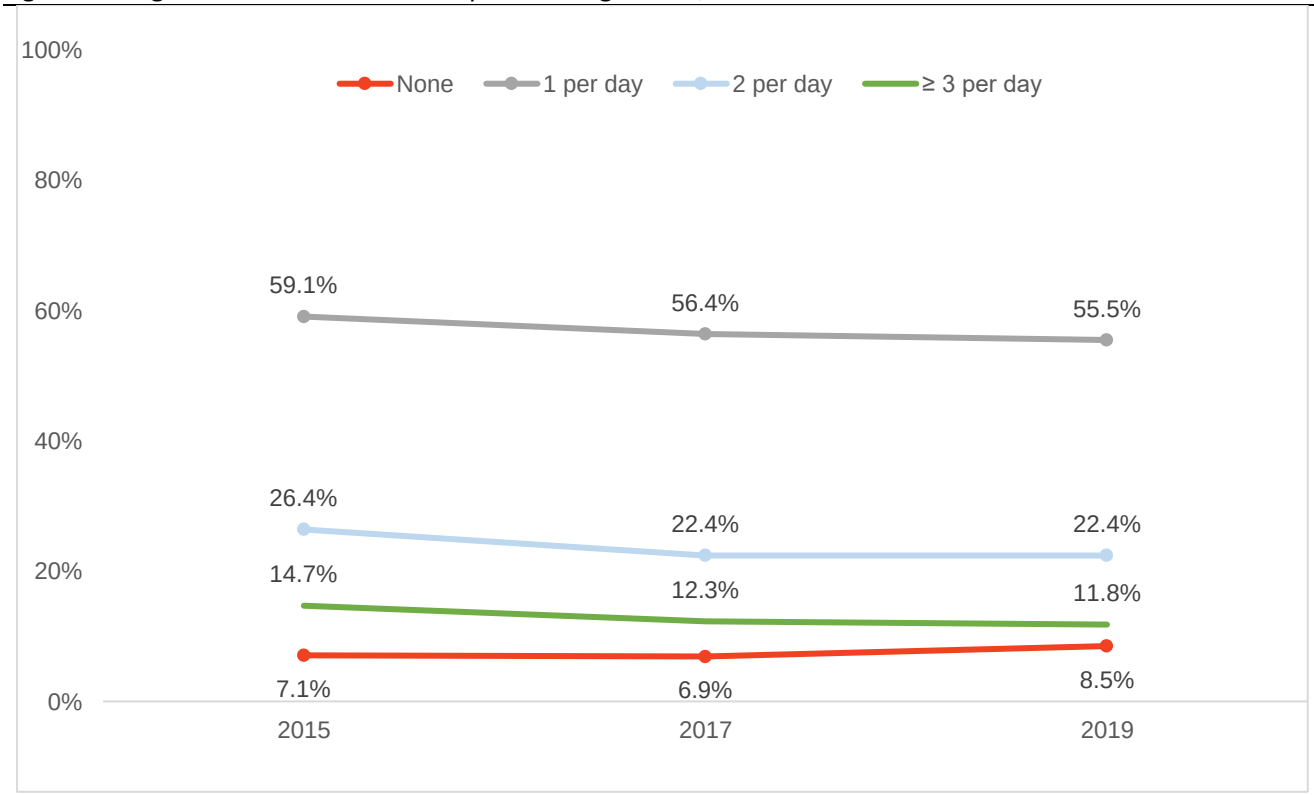
Source: BRFSS, 2019

Figure 24. Proportion of Arizona adults eating at least one serving of vegetables per day, by income



Source: 2021 BRFSS data, retrieved from https://nccd.cdc.gov/weat/#/crossTabulation/viewReport

Figure 25. High School Student Consumption of Vegetables, 2015-2019



Source: YRBSS, 2015-2019

Rates of fruit consumption are worse than vegetable consumption. On average, Arizonans eat 1 serving of fruit per day. Over a third (38%) report not eating fruit even once a day. This climbs to 41% among those on food assistance. This is also a particularly pronounced issue for young adults, of whom nearly half (48%) report eating fruit less than once a day (Table 26). A survey of SNAP-eligible women found a reported consumption of 1 serving of fruit and 1.1 servings of vegetables or salad per day (Table 27).

Table 26. Adult fruit consumption, 2019

	Percent eating fruit less than once a day
Arizona overall	38.3%
Not on Food Assistance	36.6%
On Food Assistance	41.2%
Men	41.8%
Women	34.9%
Hispanic	
Non-Hispanic	39.6%
Native Hawaiian or other PI only	68.7%
Multiracial	55.3%
Black or African American only	47.5%
White only	39.1%
Other race	37.4%
AIAN only	37.0%
Asian only	26.2%
18-24	48.4%
25-34	38.1%
35-44	34.7%
45-54	39.8%
55-64	38.1%
65+	34.6%
Graduated college or technical school	33.0%
Some college or technical school	38.9%
Graduated high school	39.6%
Less than high school	34.7%

Source: BRFSS, 2019

Table 27. Fruit and vegetable consumption among SNAP-eligible women, 2019

Daily consumption of:	Mean servings per day
Fruit	1
Leafy green or lettuce salad	0.43
Other vegetables that are not potatoes or lettuce salad	0.71

Source: SNAP Target Population Study, 2019

Sugar-sweetened beverages are associated with a variety of health concerns including an increased risk of dental problems and a reduction in overall diet quality.[23,24] Over a quarter (26.8%) of Arizonans consume at least one sugar-sweetened beverage daily (Table 28). This rate is higher among those living in households who receive food assistance, where 37.3% of adults consume at least one sugar-sweetened drink a day (Table 29). Among teens, 14.9% of teens reported consuming soda at least once a day; this was higher among boys (18.1%) than girls (11.2%) (Table 30).

Table 28. Adult Sugar-Sweetened Beverage Daily Consumption in Arizona

	2013	2014	2015	2016	2017	2018
None	28.5%	24.7%	27.6%	24.6%	29.4%	30.9%
<1 time/day	43.9%	45.4%	46.2%	44.9%	43.9%	42.2%
1 or more times/day	27.6%	29.9%	26.2%	30.5%	26.7%	26.8%

Source: BRFSS, 2018

Table 29. Daily Consumption of Sugar-Sweetened Beverages among Adults in Arizona in 2018

Households Food Assistance Status	None	Less than Once per Day	One or More Times per Day
Receiving Food Assistance	15.0%	47.7%	37.3%
Not Receiving Food Assistance	35.0%	40.9%	24.1%
All Households	30.9%	42.2%	26.8%

Source: BRFSS, 2018

Table 30. High School Students Drinking Soda or Pop in the past 7 days, 2021

	One or More Times per Day	Two or More Times per Day
Overall	14.9%	8.0%
Girls	11.2%	5.3%
Boys	18.1%	10.1%

Source: YRBSS, 2019

Nutrition security

As defined by USDA, nutrition security refers to the goal that all individuals and communities have consistent and equitable access to healthy, safe, and affordable foods that promote optimal health and well-being. USDA notes that structural inequities increase food insecurity and the risk of diet-related chronic diseases for historically under served populations. Efforts to improve nutrition security also promote health equity. The USDA emphasizes two key components of nutrition security: the availability of nutritionally adequate and safe food, and the ability to acquire acceptable food in socially acceptable ways without resorting to emergency food supplies or similar strategies. Achieving nutrition security requires addressing various factors, including income inequality, geographic disparities, food deserts, education, health disparities, and social determinants of health.[25]

The USDA characterizes nutrition security along a four-part spectrum, from 'high food security' where there are no reported problems or limitations, to 'marginal food security' where one may have anxiety about adequate foods in their home but no marked change in diet, to 'low food security' where someone is reducing the quality of their diet but with little reduction in food, and 'very low food security' where there are multiple indicates of changes and reductions in eating patterns as a result of food availability.

In 2021, 10.2% of households in the US experienced food insecurity, meaning they lacked money and other resources to access adequate food. A smaller proportion, 3.8%, experienced very low food security, meaning that one or more individuals in the household reduced their food intake or experienced disrupted eating patterns because they lacked money or resources to access adequate food.[26] There are many resources across the state aimed at supporting nutrition security for all (Table 34), however only just over half (56%) of individuals experiencing food insecurity were participating in Federal nutrition assistance programs in 2021 (Table 31). Since 2008, food insecurity in Arizona has, for the most part, been declining. Very low food security has been cut in half, from 5.9% in 2008-2010 to 3.1% in 2019-2021. Overall food insecurity in Arizona in 2019-2021 was comparable to food insecurity nationwide in 2021 (10.1% and 10.2%, respectively; Table 31 & Figure 26).

Additional food insecurity data for adults in Arizona is available from the 2018 Behavioral Risk Factor Surveillance System (BRFSS) survey. When asked how often in the past months they were worried or stressed

about having enough money to buy nutritious meals on the BRFSS, 20.3% of adults surveyed in Arizona expressed some level of food insecurity, including 4.6% of adults who expressed 'always' being worried or stressed about having enough money to buy nutritious meals (Table 32).

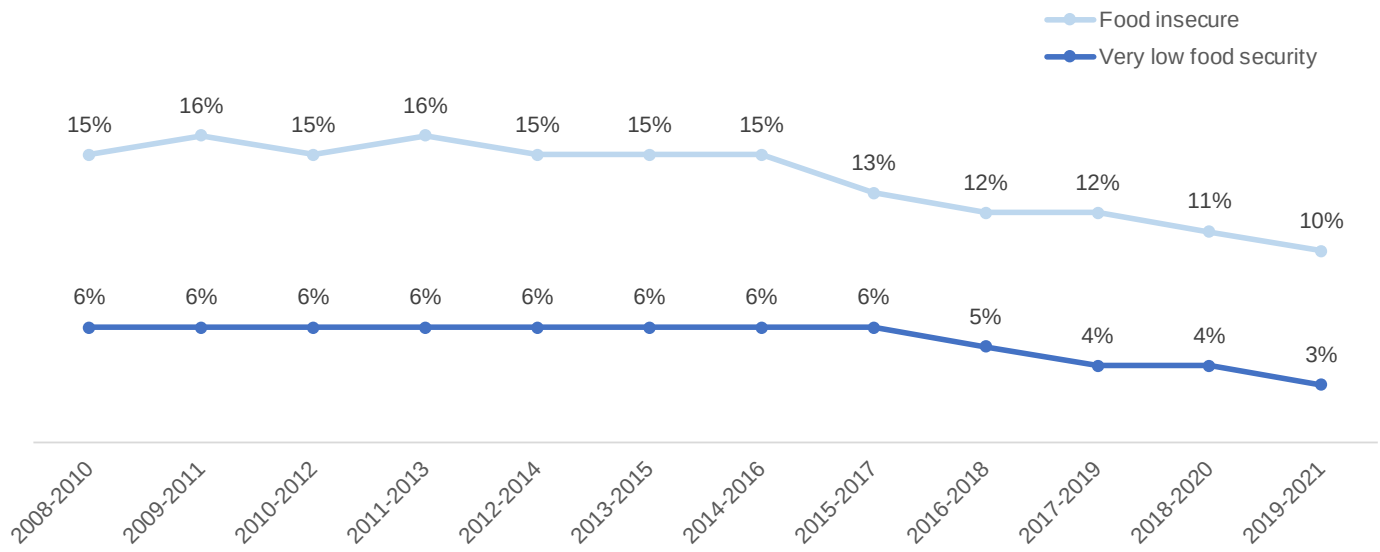
The 2019 Youth Risk Behavior Surveillance System (YRBSS) survey provides additional data on food insecurity among youth in Arizona. When asked how often they went hungry during the past 30 days because there was not enough food in their home, 3.7% of surveyed youth under 18 said most of the time or always (Table 33).

Table 31. Levels of household food security, 2020-2021

US Households	2020	2021
Food secure	89.5%	89.9%
Food insecure	10.5%	10.2%
Very low food security	3.9%	3.8%
Food insecure household participating in Federal nutrition assistance programs		56%

Source: U.S. Department of Agriculture's Economic Research Service (ERS), 2020-2021

Figure 26. Food insecurity in Arizona



Source: U.S. Department of Agriculture's Economic Research Service (ERS), 2020-2021

Table 32. How often in the past months would you say you were worried or stressed about having enough money to buy nutritious meals?

	% of adults over 17
Always	4.6%
Usually	3.5%
Sometimes	12.2%

Source: BRFSS, 2018

Table 33. Percent of youth who went hungry during the past 30 days because there was not enough food in their home

	% of youth under 18
Most of the time, or always	3.7%

Source: YRBSS, 2019

Table 34. Food Programs and Descriptions

Food Programs	Description
Arizona Farm to School Network	Supports meal service operators, educators and producers to build out farm to school early/ECE programs across the state. Focuses on buying local food, building school/ECE gardens, and engagement in food education. Administered by ADE.
The Arizona Food Bank Network	Coalition of 5 regional food banks and nearly 1,000 food pantries and agencies, work together to address hunger in Arizona. Each month this network helps feed more than 450,000 food insecure people in all 15 counties in Arizona.
AZ Health Zone	The AZ Health Zone (Arizona's SNAP-Ed Program) sis an evidence-based health engagement program that supports communities to lead healthier lives. SNAP-Ed works by contracting local public and non-profit organizations to implement community-level interventions in a collaborative way to build resilient and healthy communities. These Local Implementing Agencies (LIAs) work to implement behavior change through education and address barriers of nutrition and physical activity access and resources through policy, system, environmental (PSE) changes and marketing approaches, supported by complimentary educational outreach.
Commodity Senior Food Program (CSFP) aka "Food Plus"	Works to improve the health of low-income persons age 60 and over by supplementing their diets with a monthly package of nutritious food at no cost. Eligibility: Age 60 and over, 130% of FPL, participation is limited, new applicants may be put on waiting list. USDA FNS Program administered in Arizona through ADES.
Congregate Meal Programs	Provides older adults with positive social contacts with other seniors at meal sites, which provide hot meals once a day at a nutrition site, senior center or other group setting, and h**ome-delivered meals by v**olunteers and paid staff who spend additional time to decrease feelings of isolation and check on welfare. Many programs are offered in partnership with ADES and are funded through the Older Americans Act. For more information, see https://des.az.gov/services/older-adults/area-agency-on-aging-locations
Coordinated Hunger Relief Program	Community partners provide emergency food support.
DES Hunger Advisory Council	Exists to help end hunger in Arizona by providing a forum for the development and advocacy of strategies to end hunger, with particular attention to empowering the disenfranchised in order to attain food security for everyone; and to promote cooperation and collaboration among all agencies and decision makers (both public and private) to eliminate the causes of hunger and reduce hunger where it exists.
The Disaster Nutrition Assistance Program (DNAP)	Helps people involved in a disaster receive food assistance quickly. Requires the President of the United States declare a "Major Disaster with Individual Assistance" for the area. Food and Nutrition Service (FNS) must approve the use of DNAP procedures.
Double Up Food Bucks	Provides $1 to spend on Arizona grown fruits and vegetables, up to $20 per day, for every $1 spent on SNAP eligible food. Eligibility: Current SNAP participant. Administered through ADES .
Emergency Food Assistance Program (TEFAP)	Supplement diets of low-income Americans, including elderly people, by providing them with emergency food and nutrition assistance at no cost. Emergency food packages contain shelf-stable foods that do not require refrigeration, and meals served at congregate feeding sites (soup kitchens). Eligibility: 185% FPL. Administration ADES/USDA www.fns.usda.gov/tefap
Food Assistance	Arizona's Supplemental Nutrition Assistance Program (SNAP). Provides monthly benefits that can be used to purchase nutritious foods through electronic benefits at participating retailers. Administered in Arizona by ADES for FNS. Eligibility: <130% FPL gross and < 100% FPL net (unless elderly or disabled).
National School Lunch Program (NSLP) and School Breakfast Program (SBP)	Provide nutritionally balanced, low-cost or free breakfast and lunches to children each school day in public and nonprofit private schools and residential child care institutions. Eligibility: Children in families whose incomes are at 130% or below the FPL are eligible to receive free meals; families with incomes between 130% and 185% are eligible to buy meals at a

	low price - no more than 40 cents. Administered by ADE at the state level, and local school food authorities operate the program in schools.
Senior Farmers Market Nutrition Program	Works to improve the health of low-income seniors. Eligibility: 185% FPL, Age 60 and over or participating in CSFP.
State Nutrition Action Committee (SNAC)	Strategically align nutrition and physical activity efforts across programs to ensure Arizonans have access to resources that support increased knowledge and cultivate the environment to live a healthy lifestyle. Lead by state representatives from SNAP-Ed, SNAP, SNAP Outreach, WIC, Child and Adult Care Food Program (CACFP), National School Lunch Program (NSLP), Commodity Supplemental Food Program (CSFP), The Emergency Food Assistance Program (TEFAP), Double Up Food Buck (DUFB), Farmers' Market Nutrition Program (FMNP), and the AZ Dairy Council.
Summer Meal Service	The United States Department of Agriculture's (USDA) Summer Food Service Program (SFSP) and the National School Lunch Program (NSLP) Seamless Summer Option (SSO), provides kids and teens in low-income areas free snacks and/or meals when school is out.
Supplemental Nutrition Program for Women, Infants, and Children (WIC)	Provides nutrition education and breastfeeding support services, supplemental nutritious foods and referrals to health and social services to income eligible pregnant, breastfeeding and postpartum participants, infants and children under the age of five. Income eligibility: Arizona residents with incomes below 185 percent of the federal poverty level or are enrolled in adjunctively eligible programs (i.e., Medicaid, Temporary Assistance to Needy Families, Supplemental Nutrition Assistance Program, Food Distribution Program on Indian Reservations, and Section 8 Housing). Three state-level agencies administer WIC: ADHS, Navajo Nation, Inter Tribal Council of Arizona.

Sources:
https://www.fns.usda.gov/contact/navajo-nation-wic-nutrition-program
https://itcaonline.com/programs/wic-program/clients-2/about-wic-and-using-wic-benefits/

National nutrition programs

Arizona's Supplemental Nutrition Assistance Program (SNAP) provides monthly benefits that can be used to purchase foods through electronic benefits at participating retailers. In August 2022, a total of 913,449 individuals were enrolled in SNAP benefits in Arizona, including 514,721 adults (56%) and 398,728 children (44%). While adults comprised the majority of individuals enrolled in SNAP in all Arizona counties, in Pinal (47%) and Maricopa (46%) counties there was a larger proportion of children enrolled in SNAP compared to the state overall. In contrast, children made up just 33% of enrollees in Mohave County (Table 35).

Table 35. SNAP Benefits by Household and Persons in Arizona, August 2022

County	Households	Persons	Adults	Children
Apache	9,970	22,597	13,429	9,168
Cochise	11,285	22,856	14,132	8,724
Coconino	8,021	17,556	10,000	7,556
Gila	5,103	10,508	6,283	4,225
Graham	2,736	5,986	3,343	2,643
Greenlee	348	675	419	256
La Paz	1,704	3,234	2,002	1,232
Maricopa	226,539	483,540	260,796	222,744
Mohave	18,586	33,926	22,644	11,282
Navajo	12,040	27,997	15,905	12,092
Pima	75,055	148,001	88,716	59,285
Pinal	24,439	57,179	30,502	26,677
Santa Cruz	4,767	11,313	6,465	4,848
Yavapai	11,365	20,900	13,435	7,465
Yuma	19,738	47,181	26,650	20,531
Arizona	431,696	913,449	514,721	398,728

Source: BNPA, 2023 (draft)

In addition to SNAP, multiple other federally-funded programs provide resources to low-income individuals and families who may be at risk of nutrition insecurity. The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides nutrition education and breastfeeding support services, supplemental nutritious foods and referrals to health and social services to income eligible pregnant, breastfeeding, and postpartum participants, infants and children under the age of five. In 2021, nearly $93 million was paid to the 523 WIC vendors in Arizona.[27] The number of individuals eligible for WIC in Arizona has steadily declined since 2012, though the percentage of the eligible population served has been on an upward trend since 2018, increasing from 49% to 55% (Table 36).

Table 36. Arizona WIC eligibility and use, 2012-2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Eligible population	295,535	289,622	293,130	285,104	283,832	269,320	266,771	254,239	243,939	235,467
Average caseload	169,049	158,340	152,733	148,323	143,034	136,852	131,989	126,456	129,669	129,467
% eligible served	57%	55%	52%	52%	50%	51%	49%	50%	53%	55%

Source: Arizona WIC, 2012-2021

The Commodity Senior Food Program (CSFP) aka "Food Plus" works to improve the health of low-income persons aged 60 and over by supplementing their diets with a monthly package of nutritious food at no cost. In FY2022, a total of 19,806 individuals participated in the Commodity Senior Food Program (CSFP), an increase from the previous two years during the COVID-19 pandemic (Table 37).

Table 37. Participation in Commodity Senior Food Program (CSFP), FY 2018- FY 2022

State	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 *Preliminary*
Arizona	15,523	21,299	18,660	18,186	19,806
Percent change		37%	-12%	-3%	9%
Total	675,998	702,565	692,467	661,117	657,930
Percent change		4%	-1%	-5%	0%

Source: USDA Food Distribution Program Tables, available at: https://www.fns.usda.gov/pd/food-distribution-program-tables

The Emergency Food Assistance Program (TEFAP) supplements diets of low-income Americans, including elderly people, by providing them with emergency food and nutrition assistance at no cost. Food assistance is provided through emergency food packages that contain shelf-stable foods that do not require refrigeration and meals served at congregate feeding sites (e.g., soup kitchens). Spending on emergency food packages through the Emergency Food Assistance Program (TEFAP) in Arizona peaked in FY2021 at nearly $35 million, a 113% increase over the previous year that mirrored trends seen nationally (Table 38). This dramatic increase was likely due to additional funds allocated to the program through multiple pandemic-related legislative appropriations acts.[28]

Table 38. The Emergency Food Assistance Program (TEFAP): Total Food Costs, FY 2018- FY 2022

State	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 *Preliminary*
Arizona	$12,600,426	$19,678,874	$16,398,031	$34,922,025	$24,034,808
Percent change		*56%*	*-17%*	*113%*	*-31%*
Total	$540,139,687	$620,660,757	$653,570,355	$1,115,425,938	$915,328,782
Percent change		*15%*	*5%*	*71%*	*-18%*

Source: USDA Food Distribution Program Tables, available at: https://www.fns.usda.gov/pd/food-distribution-program-tables

The Food Distribution Program on Indian Reservations (FDPIR) enables families meeting eligibility requirements based on income and household size to receive a monthly package of USDA foods from an Indian Tribal Organization (ITO) or state agency.[29] In Arizona, a total of 4,514 individuals across 8 tribal nations participated in the FDPIR program in February 2023 (Table 39). Participation in FDPIR has declined each year since 2018, from 11,100 people in FY2018 to 4,211 in FY2022, a trend that follows those seen nationally (Table 40).

Table 39. Persons participating in FDPIR in February 2023

Tribe	Persons participating	% of population
Colorado River Indian Tribes	301	4%
Gila River Indian Community	306	2%
Navajo Nation	2,323	2%
Pascua Yaqui	4	DS
Quechan Indian Tribe	219	DS
San Carlos Apache Tribe	892	9%
Tohono O'odham Nation	248	3%
White Mountain Apache Tribe	221	2%
Arizona Total	4,514	3%

Source: FDPIR participation data received by special request.
U.S. Census Bureau (March 2022). *Census Bureau Releases Estimates of Undercount and Overcount in the 2020 Census*. Retrieved from: https://www.census.gov/newsroom/press-releases/2022/2020-census-estimates-of-undercount-and-overcount.html
Note: The 2020 Census recorded 22 only persons living on the Fort Yuma-Quechan Indian Reservation (Arizona part). Analysis by the U.S. Census Bureau show that several groups that have been historically undercounted were also undercounted in 2020. For American Indian/Alaska Native residents of tribal reservations, the undercount rate was estimated at 5.64%.

Table 40. Participation in FDPIR, FY 2018- FY 2022

State	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 *Preliminary*
Arizona	11,100	10,714	7,863	4,407	4,211
Percent change		-3%	-27%	-44%	-4%
TOTAL	87,216	83,811	74,878	47,983	45,193
Percent change		-4%	-11%	-36%	-6%

Source: USDA Food Distribution Program Tables, available at: https://www.fns.usda.gov/pd/food-distribution-program-tables

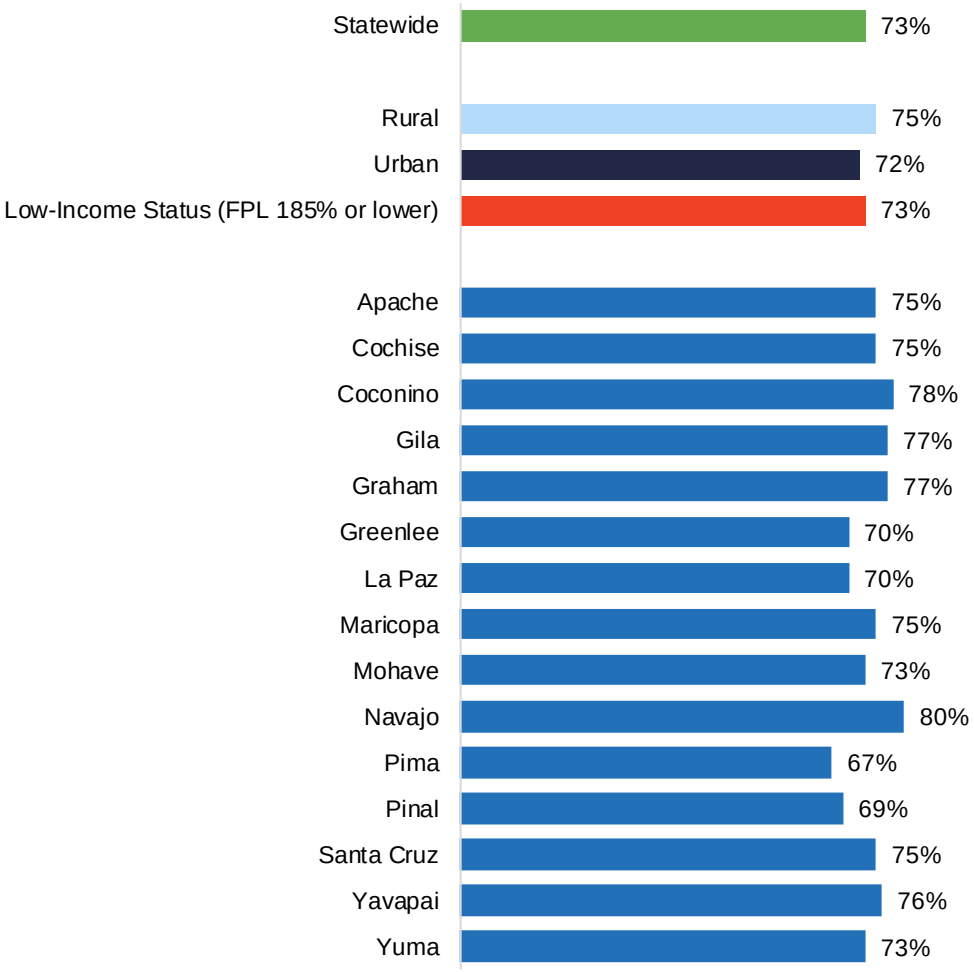
Agriculture and food systems

In assessing nutrition and food security in Arizona, it is important to consider the broader food system, including the growing and processing of food. In 2022, the Arizona Food Systems Network developed a Statewide Food Action Plan. This plan outlined four priority areas to improve Arizona's food system for 2022-2024, including: food access and distribution, land and water access and protection, climate smart foodways, and agriculture workforce development.[30]

In the Extension Needs Assessment, 73% of respondents statewide considered learning where food comes from to be a priority in their community. Navajo County had the highest proportion of respondents who rated this as a key priority (80%) (Figure 27). A slightly larger proportion (77%) of individuals statewide felt local food system development (e.g., home and community gardens, farmers markets) was a priority in their community, particularly in Apache (84%), Navajo (83%), and Graham (80%) counties (Figure 28). Support for new farmers and ranchers was identified as an important issue by 81% of survey respondents, including a larger proportion of rural (83%) compared to urban respondents (77%). This support was especially prioritized in Apache County (92%) and was the least important among Pima County residents (75%) (Figure 29).

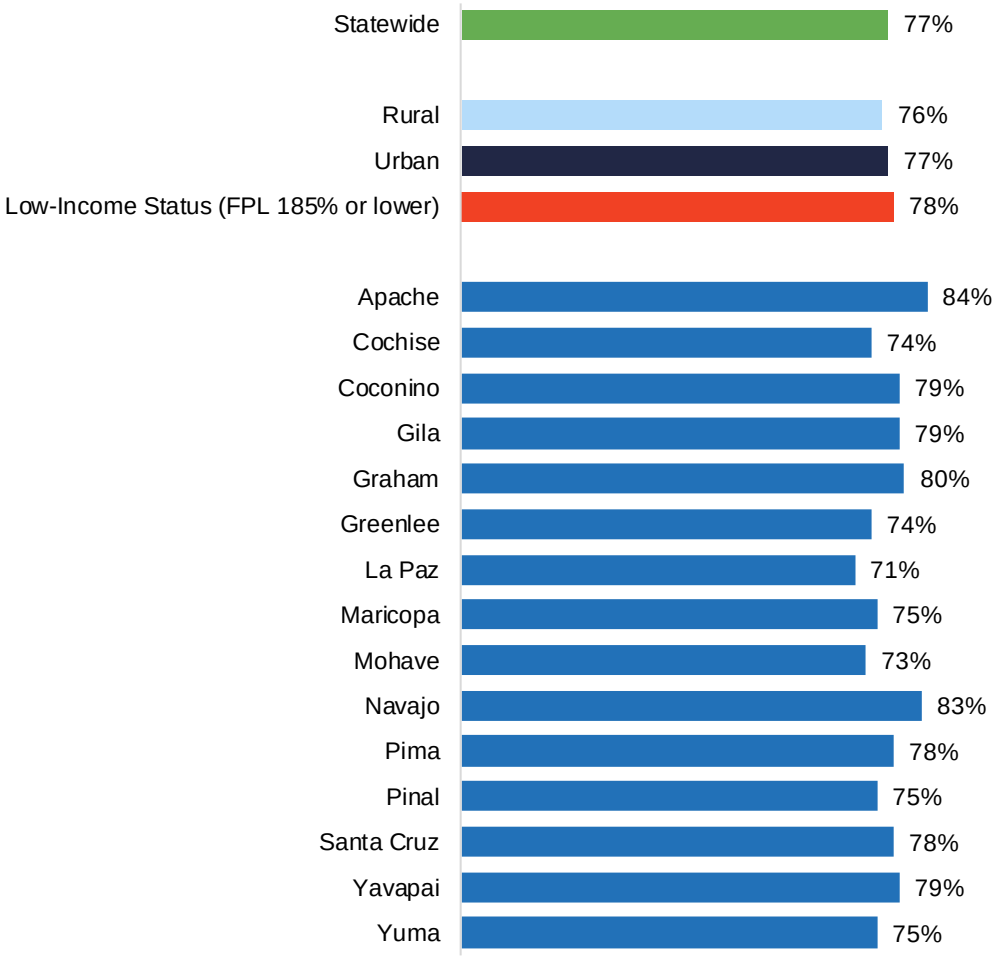
Indigenous food sovereignty is a critical issue for tribal nations, connected to community health, cultural practices, economic empowerment, and community response to complex challenges like the COVID-19 pandemic.[31] When asked about food systems issues, 62% of Extension Needs Assessment respondents agreed that traditional Native American agricultural practices were extremely or very important to prioritize in their community. This was most prevalent in Apache (70%) and Coconino (70%) counties, which share a large portion of their area with tribal nations (Figure 30).

Figure 27. Arizona survey respondents who rated "Learning where food comes from" as an 'extremely' or 'very' important priority to address in their community



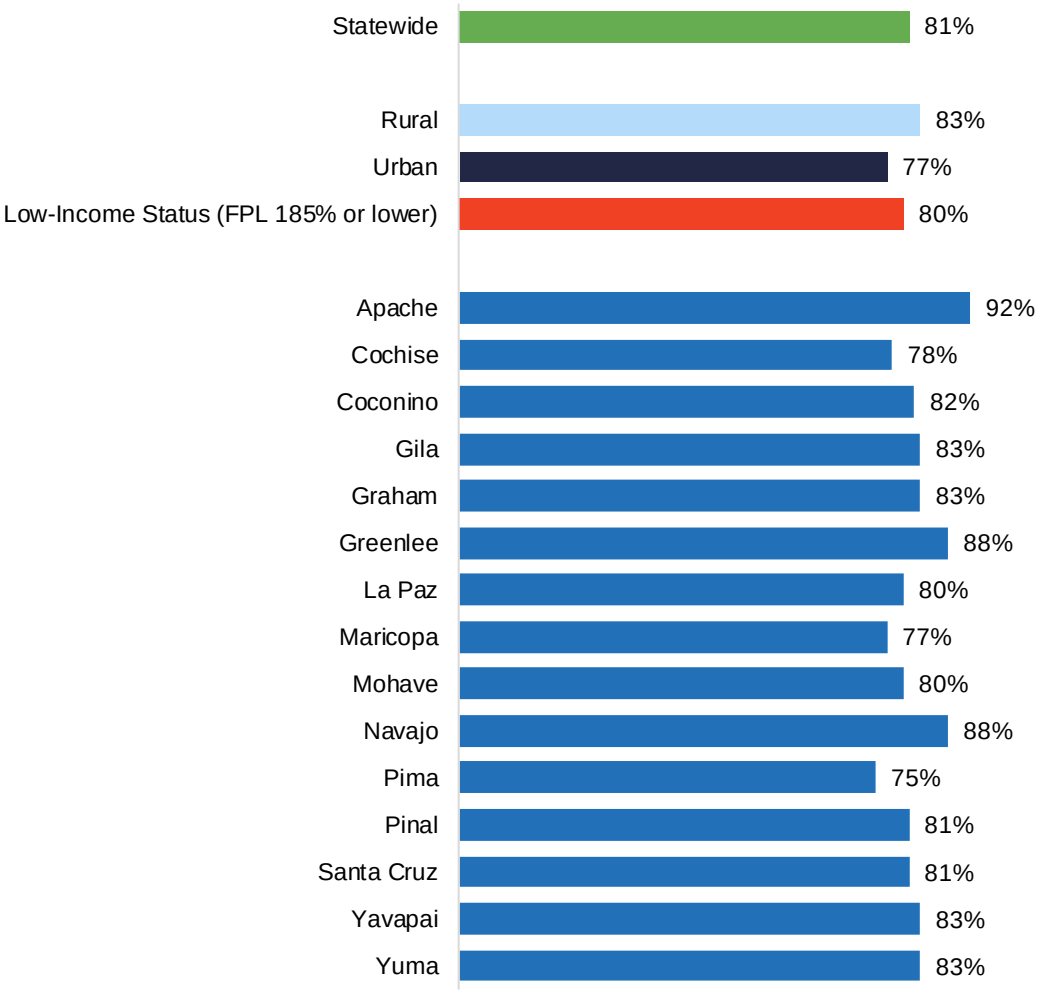
Source: 2022 Arizona Cooperative Extension Needs Assessment

Figure 28. Arizona survey respondents who rated “Local food system development (e.g., home and community gardens, farmers markets” as an ‘extremely’ or ‘very’ important priority to address in their community



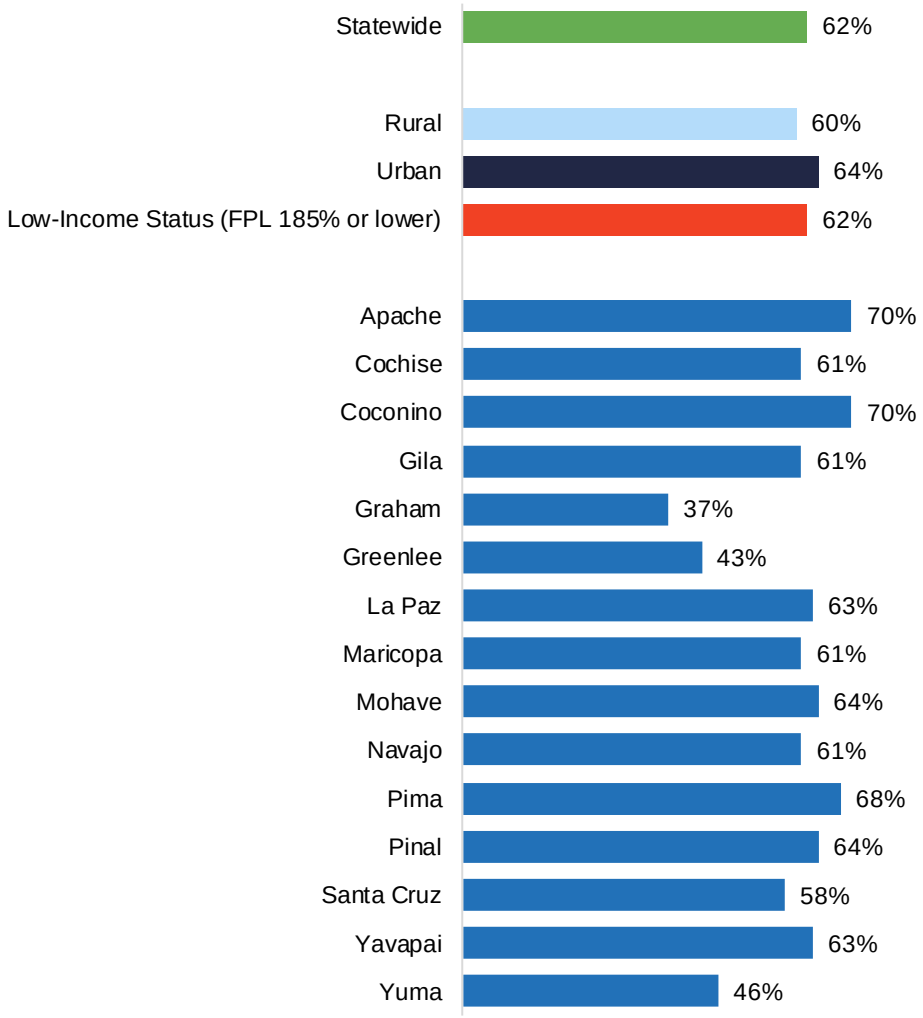
Source: 2022 Arizona Cooperative Extension Needs Assessment

Figure 29. Arizona survey respondents who rated “Support for new farmers and ranchers” as an ‘extremely’ or ‘very’ important priority to address in their community



Source: 2022 Arizona Cooperative Extension Needs Assessment

Figure 30. Arizona survey respondents who rated “Traditional Native American agricultural practices” as an ‘extremely’ or ‘very’ important priority to address in their community

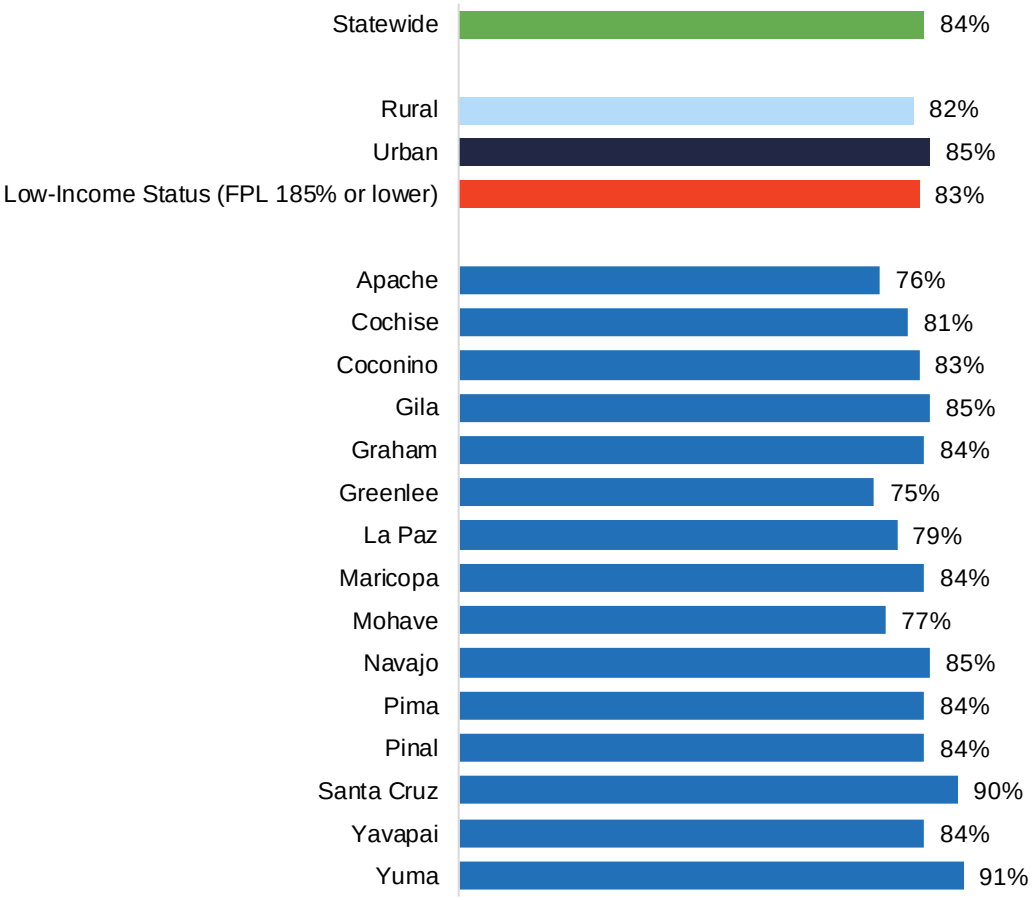


Source: 2022 Arizona Cooperative Extension Needs Assessment

Physical activity

Physical activity is essential for maintaining overall health and well-being. It offers physical health benefits such as improved cardiovascular fitness and musculoskeletal health as well as mental health benefits while reducing risk of chronic disease. Across Arizona, 84% of surveyed residents felt it was ‘very’ or ‘extremely’ important to have opportunities for healthy physical activity in their communities. Respondents in Yuma and Santa Cruz counties were especially emphatic about this need where 91% and 90% of respondents, respectively, identified it as a priority (Figure 31).

Figure 31. Arizona survey respondents who rated “Healthy physical activity” as an ‘extremely’ or ‘very’ important priority to address in their community



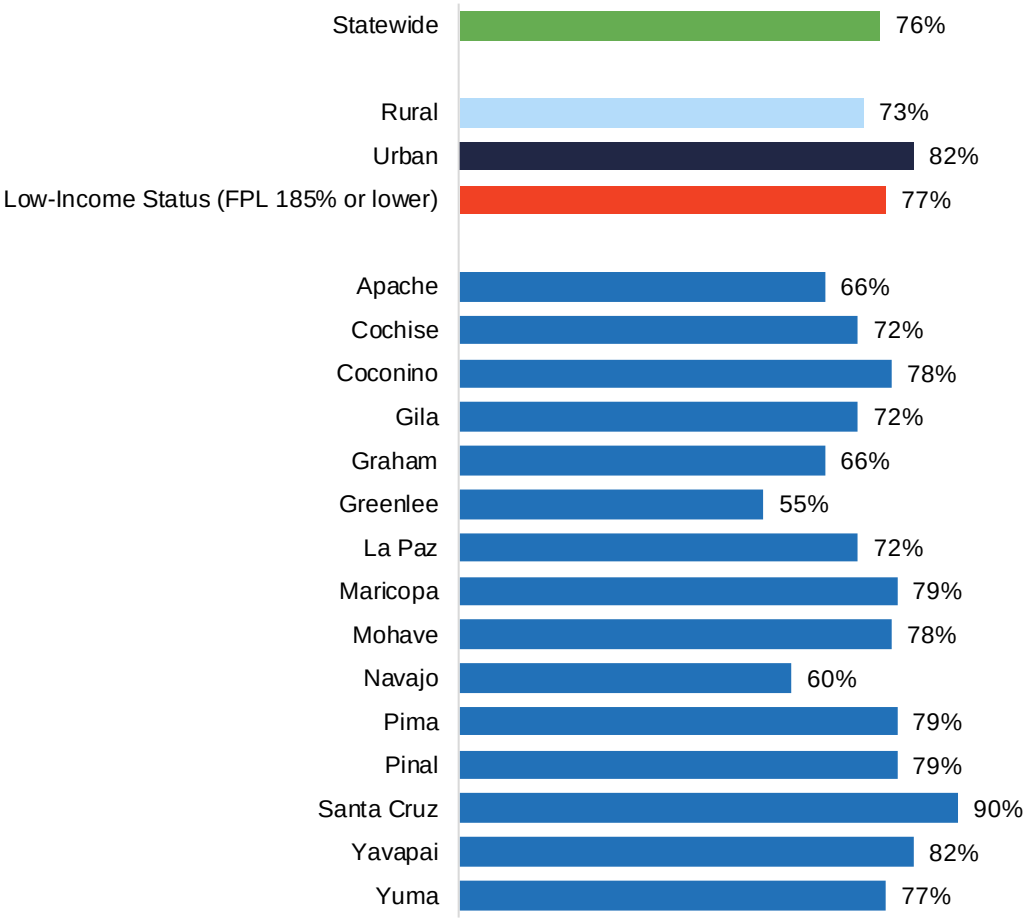
Source: 2022 Arizona Cooperative Extension Needs Assessment

Physical activity resource quality and infrastructure

Public spaces for physical activity ensure that everyone, not just those with private yards or home gyms, can be physically active. The Extension Needs Assessment included multiple questions about factors in the physical environment that promote active living. Statewide, 76% of respondents agreed that ‘natural spaces for outdoor recreation’ and ‘safe community spaces for recreation and social connection’ were key issues in their community (Figure 32 & Figure 33). Respondents in urban communities rated these issues slightly higher than respondents in rural communities. The SNAP-eligible population did not feel differently about these issues than the overall population of respondents.

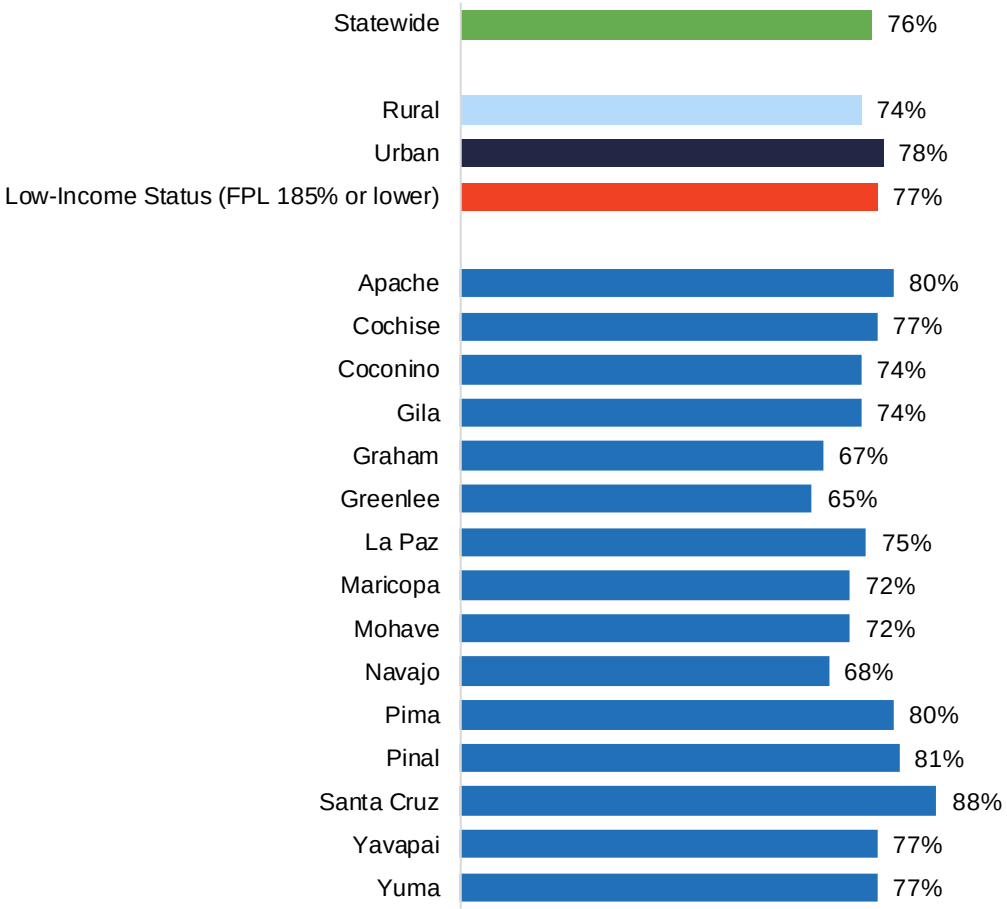
Respondents from Santa Cruz County were the most enthusiastic about these resources, with 90% of Santa Cruz respondents identifying natural spaces for outdoor recreation and 88% identifying safe community spaces for recreation and social connection as key issues. Respondents from Greenlee felt the least strongly about the need for these resources, with only 55% and 65% of respondents flagging these topics as priorities (Figure 32 & Figure 33).

Figure 32. Arizona survey respondents who rated “Natural spaces for outdoor recreation” as an ‘extremely’ or ‘very’ important priority to address in their community



Source: 2022 Arizona Cooperative Extension Needs Assessment

Figure 33. Arizona survey respondents who rated “Safe community spaces for recreation and social connection” as an ‘extremely’ or ‘very’ important priority to address in their community

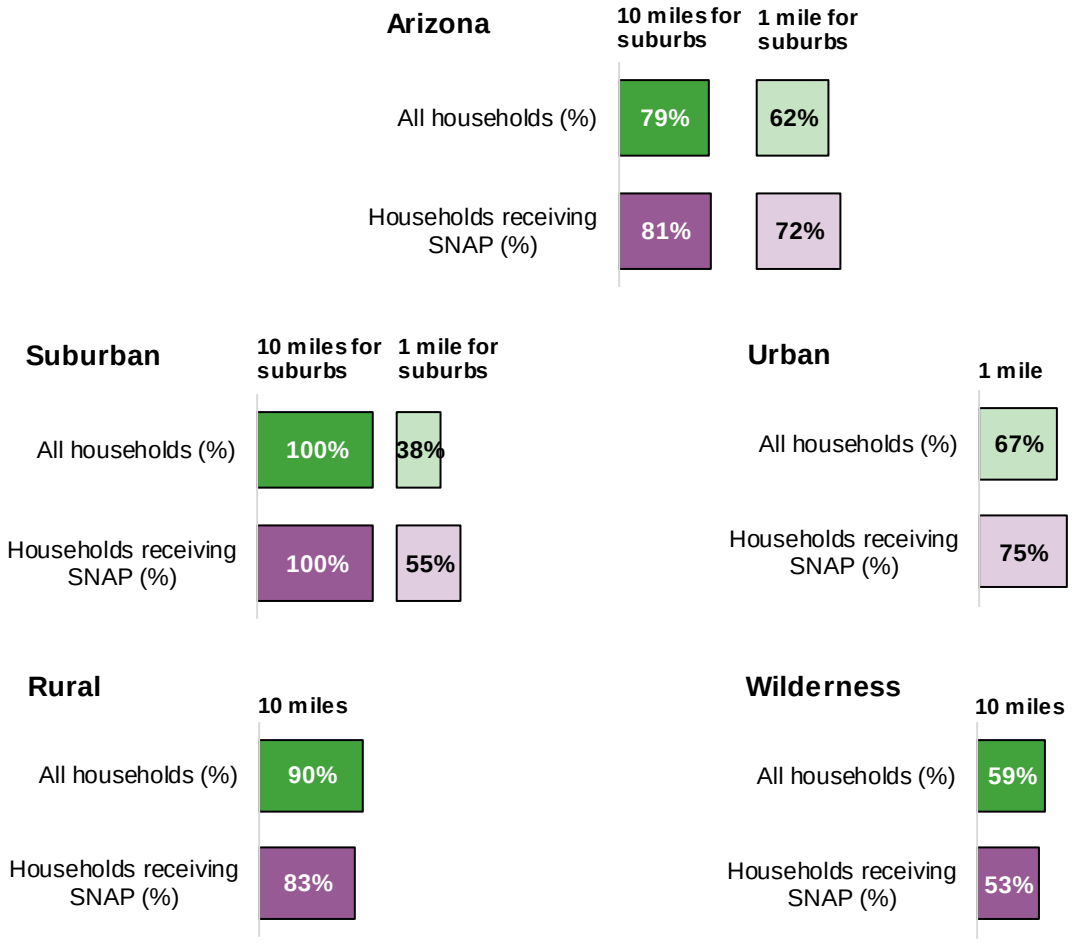


Source: 2022 Arizona Cooperative Extension Needs Assessment

Generated through geographic analyses, the following tables indicate accessibility of recreational areas. These recreation opportunities include U.S. Forest Service recreation sites, National Forest System trails, Arizona Trail trailheads, Arizona Trail Association connector trails, USGS trails, public parks, recreation centers, and recreation areas. An area is considered accessible if it’s one mile from one’s home address for those living in urban areas, and 10 miles in rural and wilderness areas. For suburban areas, access at both 1- and 10-mile dimensions are included, recognizing that suburban areas in Arizona tend to be car-centric but that active transportation (e.g., not relying on cars) is a goal that is potentially feasible in these areas. In Arizona as a whole, 79% of households are located an accessible distance from recreation opportunities when suburban areas are given 10 miles for access. Limiting suburban areas to one mile drops the proportion of households statewide to 62%. Households receiving SNAP actually fare better, with 81% (suburban at 10 miles; 72% for suburban at one mile) of SNAP households living reasonably close to a recreational area (Figure 34).

The difference in accessibility for the suburban areas is dramatic; only 38% of suburban households live a walkable distance (1 mile) from a recreation area, compared to 67% of urban residents. However, all suburban-area residents live within driving distance of a recreational opportunity. Speaking to the natural resource-rich environment of Arizona, the majority of even those living in more remote rural and wilderness areas live within a reasonable driving distance to at least one recreational opportunity (Figure 34).

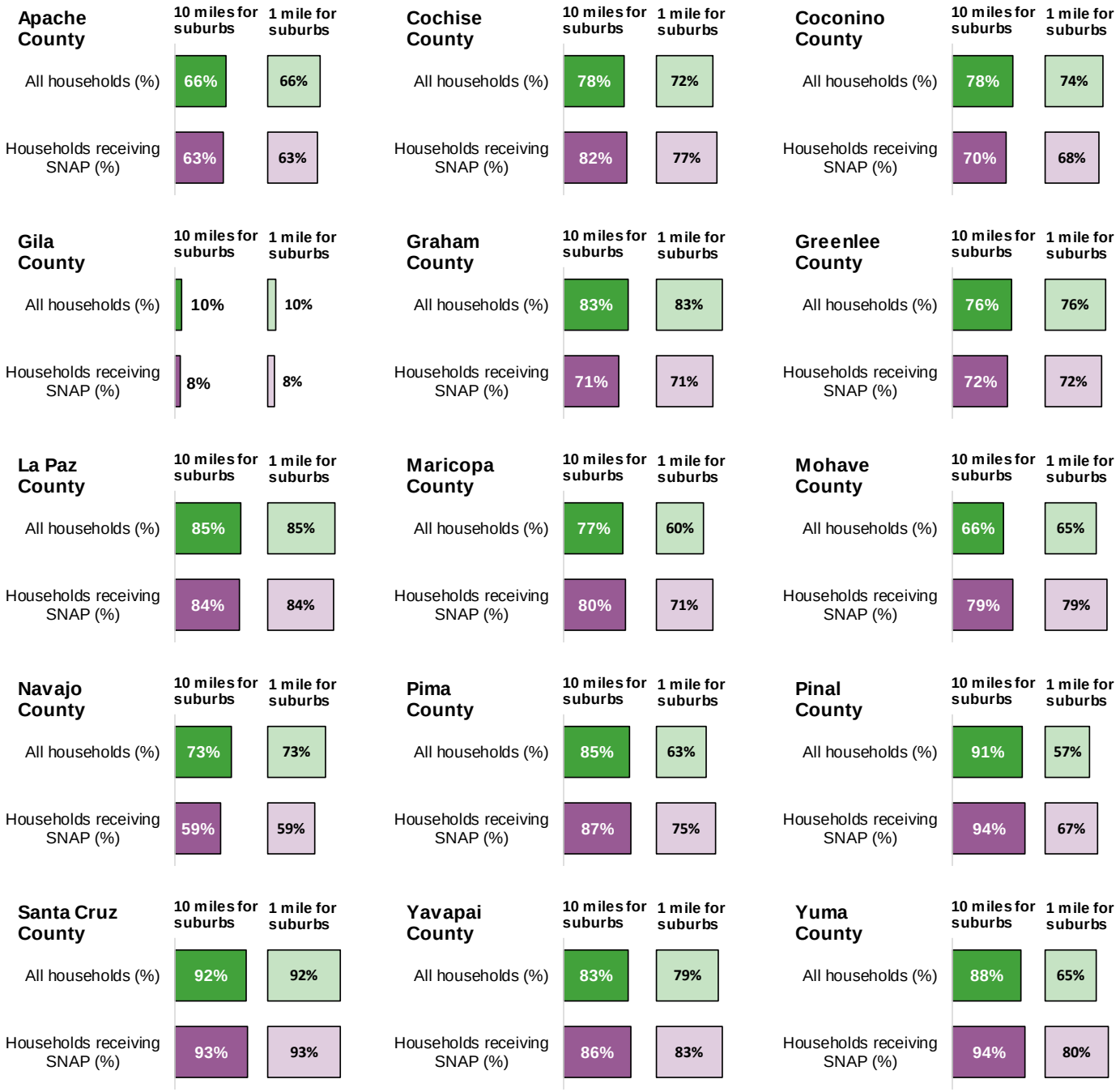
Figure 34. Proportion of households living in accessible distance to recreation opportunities, by urbanicity



Source: CRED custom tabulation.

Looking by county, Santa Cruz County has the greatest proportion (92% overall, 93% of SNAP recipients) of households who live near some sort of recreational area. Given that all of the areas in Santa Cruz are considered rural or wilderness in this system, that means households are within a 10-mile access range. Conversely, very few (10% overall, 8% among SNAP recipients) households in Gila County live within an accessible distance of recreation opportunities. All other counties have at least half of their residents living accessible distances from recreational areas (Figure 35). Additional details about access by urbanicity within each county are available in the Appendix (Table 139).

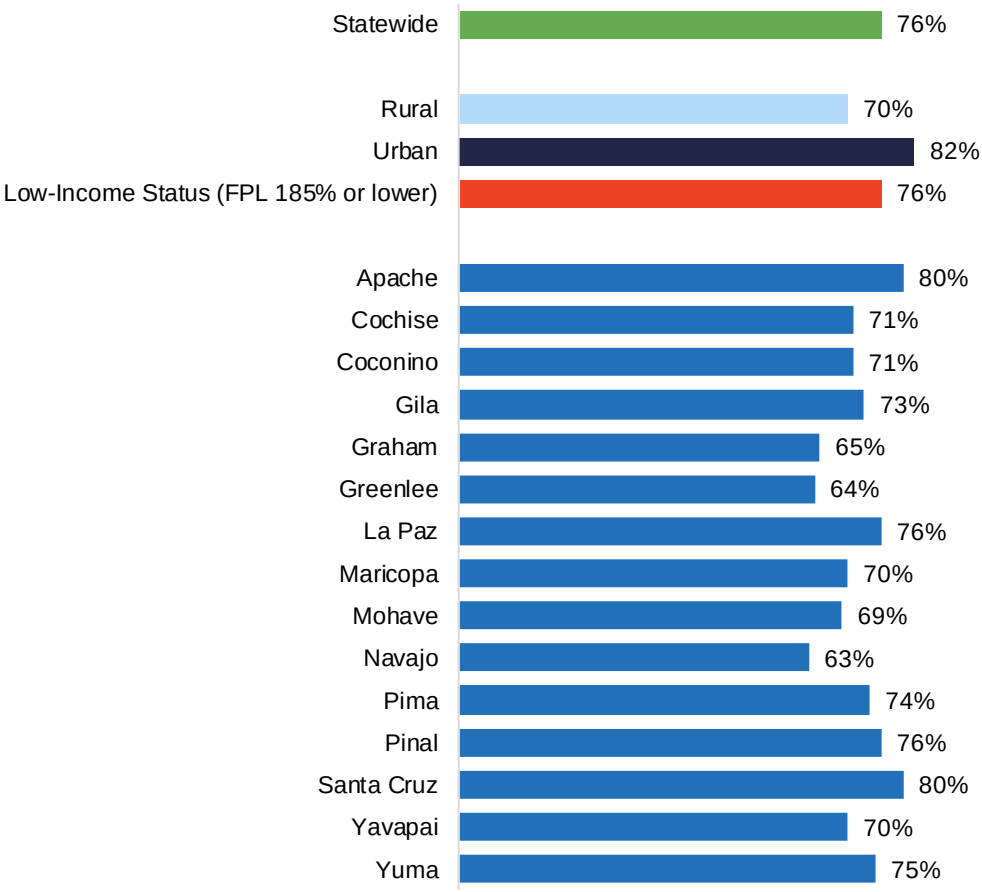
Figure 35. Proportion of households living an accessible distance to recreation opportunities, by county



Source: CRED custom tabulation

Alternative modes of transportation, i.e., not driving a personal vehicle, are one way to integrate physical activity into daily responsibilities and routines. Statewide, three-quarters (76%) of survey respondents felt it was 'extremely' or 'very' important to support these modes of transportation. This was especially true for urban respondents (82%) who are more likely to live in a dense community where these alternative modes are more feasible compared to more rural respondents (70%). The counties with more urban areas (Maricopa, Pima, Pinal, Coconino) all appear near the top of the county rankings (Figure 36).

Figure 36. Arizona survey respondents who rated “Safe, reliable, and affordable transportation (e.g., public transit, walking, biking)” as an ‘extremely’ or ‘very’ important priority to address in their community



Source: 2022 Arizona Cooperative Extension Needs Assessment

In 2021, all AZ Health Zone (Arizona SNAP-Ed) local implementing agencies (LIAs) established partnerships in their counties to promote physical activity resources, and 42% specifically developed partnerships with local parks and recreation (up from 26% of LIAs in 2019). From 2019 to 2021, 79% of the 19 PA resources assessed across LIAs in the state showed improvements (Table 41). LIAs supported built environment projects across 9 counties in 2021: Walking, biking, and transit projects were supported in Maricopa, Yavapai, Pima, and Mohave counties; a community land use needs assessment was conducted for the Sawmill community on the Navajo Nation, located in Apache County; new parks were created in La Paz and Pinal counties; trail systems were expanded in Santa Cruz County; and equitable public resource distribution and improved transportation connectivity was advocated for in Yuma County (Table 42).

Table 41. LIA partnerships and improvements relating to physical activity resources in 2019 vs. 2021

	2019	2021
Percent of LIAs reporting partnerships around PA resources	74%	80%
Percent of LIAs reporting partnerships with local parks and recreation	26%	42%
Improvements reported at PA resources assessed in 2019 and 2021 (n=19)	N/A	79%

Source: AZ Health Zone FY21 Evaluation Report

Table 42. Built environment projects supported by LIAs, FY21

Walking, biking, and transit projects supported by LIAs:	
Maricopa County	Bus advocacy
Maricopa County	Bike advocacy
Yavapai County	Bus/bike advocacy (City of Cottonwood)
Pima County	Slow streets (City of Tucson)
Mohave County	Downtown infrastructure (Kingman)

Parks, trails, and other physical activity resources projects supported by LIAs:	
Apache County	Community land use needs assessment for Sawmill on the Navajo Nation
La Paz County	Created a nature park in Town of Parker
Pinal County	Partnered with Town of Florence to create a community park
Santa Cruz County	Advocated for expanded trail system to connect destinations in Rio Rico
Yuma County	Advocated for equitable public resource distribution and improved active transportation connectivity in City of San Luis

Source: AZ Health Zone FY21 Evaluation Report

In 2021, 7 AZ Health Zone LIAs assessed usability and access to physical activity resources in 12 of Arizona's 15 counties using the Physical Activity Resource Assessments (PARA). The PARA assesses physical activity resources across three categories – features (e.g., sports fields, equipment, pools), amenities (e.g., bathrooms, drinking fountains, tables, lighting), and incivilities (e.g., litter, graffiti, broken glass).[32] For features and amenities, scores range from 0 to 3 (0 – not present, 1 – poor, 2 – mediocre, 3 – good).[33] For incivilities, scores also range from 0 to 3 (0 – no evidence of incivilities, 1 – a little, 2 – some, 3 – a lot). Total PARA scores (ranging from 0 to 3) are calculated by taking the mean of all three categories, with incivilities reverse-coded so that a higher value equates to a park with more features and amenities and fewer incivilities.

PARA assessments were conducted on 32 physical activity (PA) resources in Arizona, the majority of which were parks (n=28) along with four standalone trails. Repeated PARA measures across three timepoints (2017, 2019, and 2021) were available for 11 of the PA resources (Table 43). Overall, PARA scores remained relatively consistent over time, with features and amenities scoring between 'mediocre' and 'good' and incivility scoring between 'no evidence of incivilities' and 'a little' (Table 44). Similar results were seen for the 19 PA resources with two years of available data (2019 and 2021; Table 45).

Table 43. PARA assessments implemented in FY2021

	n
LIAs	7
Counties	12
PA resources	32
Parks	32
Large parks with trails	3
Standalone trails	4
Newly evaluated PA resources	13
Repeat assessments from 2019	19
Repeat assessments in 2017, 2019, and 2021	11

Source: AZ Health Zone FY21 Evaluation Report

Table 44. Mean PARA scores from 2017 to 2021 (n=11)

	2017	2019	2021
Total	2.6	2.7	2.5
Features	2.6	2.6	2.5
Amenities	2.6	2.7	2.3
Incivilities	0.4	0.3	0.4

Source: AZ Health Zone FY21 Evaluation Report

Table 45. Mean PARA scores from 2019 to 2021 (n=19)

	2019	2021
Total	2.4	2.5
Features	2.4	2.5
Amenities	2.6	2.4
Incivilities	0.5	0.5

Source: AZ Health Zone FY21 Evaluation Report

Neighborhood factors influencing physical activity

The National Survey of Children's Health provides national and state-level estimates on indicators of the health and well-being of children, their families, and their communities.[34] To understand neighborhood factors that influence physical activity, parents or caregivers of children (ages 6 to 12) were asked a series of questions about different facilitators and inhibitors to physical activity in their neighborhood. A smaller proportion of Arizona parents rated their neighborhood as 'supportive' compared to the national average (50% and 55.2%, respectively), including whether people in the neighborhood help each other out, watch out for each other's children, and know where to go for help when encountering difficulties. Arizona parents were also less likely to 'definitely agree' that their neighborhood was safe for 0–17-year-olds than parents nationally (60.1% and 65%, respectively). In contrast, Arizona children were more likely to have access to key physical activity amenities in their neighborhood, including sidewalks, walking paths, parks, and playgrounds, with 40.3% of Arizona children having access to two amenities compared to 29.8% of children across the US. Just under three-quarters of parents in Arizona and parents across the whole US expressed that their neighborhood didn't have key inhibitors to physical activity (e.g., litter, rundown housing, vandalism) (71% and 72.5%, respectively) (Table 46).

Across the multiple neighborhood facilitators of physical activity, White children in Arizona are slightly more likely to have access to positive facilitators of physical activity than their Hispanic peers. Most notably, 64.8% of parents of White children 'definitely agreed' that their neighborhood was safe, compared to just 52.7% of parents of Hispanic children. Positively, across race/ethnicity the large majority of parents in Arizona said their children had access to sidewalks or walking paths in their neighborhood (Table 47). While the majority of parents in Arizona shared that their children did not experience key neighborhood inhibitors to physical activity (e.g., litter, rundown housing, vandalism), 37.5% of parents of Hispanic children said their neighborhood had one or more inhibitors compared to just 21.7% of parents of White children (Table 48).

Children's level of physical activity was positively associated with living in both a supportive and safe neighborhood (Table 49 & Table 50). While across the board more than half of parents agreed that their child lived in a safe neighborhood in Arizona, the proportion who 'strongly agreed' increased as children's weekly physical activity increased.

Table 46. Neighborhood factors that influence physical activity among 6-to-12-year-old children, 2019-20

Neighborhood factors that influence physical activity among 6-to-12-year-old children (NSCH, 2019-2020)	Population Estimates, Arizona	Population Estimates, U.S.
Facilitators		
[a] **Supportive Neighborhood**	**50.00%**	**55.20%**
[b] **Safe Neighborhood (0-17 years)**	**60.10%**	**65.00%**
Neighborhood Amenities	-	-
Sidewalks or walking paths	86.80%	75.40%
Park or playground	80.10%	74.90%
Recreation center, community center, or Boys and Girls Club	46.00%	48.00%
[c] **Neighborhood Amenities Score**	39.80%	40.60%
Neighborhood contains 2 amenities	40.30%	29.80%
Neighborhood contains 1 amenity	12.80%	16.50%
Neighborhood does not contain any amenities	7.10%	13.00%
[d] **Inhibitors**		
Litter or garbage in streets/sidewalks	20.90%	21.50%
Poorly kept or rundown housing	13.20%	13.30%
Vandalism such as broken windows/graffiti	11.10%	8.10%
Neighborhood Inhibitors Score	**-**	**-**
None	71.00%	72.50%
One	18.00%	16.90%
Two	6.30%	6.20%
Three	4.70%	4.50%

Source: NSCH, 2019-20

Notes: [a] Based on agreement with three statements on the NSCH (2019-2020) that asked if respondents definitely agree, somewhat agree, somewhat disagree, or definitely disagree with 1) People in this neighborhood help each other out, 2) We watch out for each other's children in this neighborhood, and 3) When we encounter difficulties, we know where to go for help in our community. 'Definitely agree' on at least one statement and somewhat agree or better on at least two statements were used to estimate the percentage of children living in a 'supportive neighborhood'. [b] Respondent 'definitely agrees' with the statement. [c] Composite score of how many of the three amenities - sidewalks or walking paths, parks or playgrounds, recreation centers, community centers, or boys' and girls' clubs - were present in children's neighborhoods. Valid responses to all three items were required for this measure. [d] Respondents indicated if their children lived in a neighborhood where there is litter or garbage on the street or sidewalk, poorly kept or rundown housing, or vandalism such as broken windows and graffiti.

Table 47. Neighborhood Facilitators of Physical Activity by Race/Ethnicity in Arizona, 2019-20

	All groups	Hispanic	White, non-Hispanic	Other, non-Hispanic
Supportive neighborhood	50.0%	46.6%	53.4%	41.6%
Safe neighborhood	60.1%	52.7%	64.8%	65.4%
Sidewalks or walking paths	86.8%	87.2%	85.5%	85.1%
Parks or playgrounds	80.1%	78.7%	80.3%	78.9%
Recreation center or Boys and Girls Club	46.0%	46.2%	44.3%	41.7%
One or more neighborhood amenities	80.1%	79.6%	79.8%	77.0%

Source: NSCH, 2019-20

Note: Black, non-Hispanic group not shown because population estimates may be unreliable due to small sample size.

Table 48. Presence of neighborhood inhibitors of physical activity by race/ethnicity in Arizona, 2019-20

	All groups	Hispanic	White, non-Hispanic	Other, non-Hispanic
Litter or garbage in the streets or sidewalks	20.9%	27.8%	15.2%	14.9%
Poorly kept or rundown housing	13.2%	16.5%	11.7%	10.7%
Vandalism such as broken windows/graffiti	11.1%	16.6%	6.7%	5.6%
One or more neighborhood inhibitors	29.0%	37.5%	21.7%	22.1%

Source: NSCH, 2019-20
Note: Black, non-Hispanic group not shown because population estimates may be unreliable due to small sample size.

Table 49. Assessment of supportive neighborhood by physical activity levels in Arizona, 2019-20

	0 days	1 to 3 days	4 to 6 days	Every day
Supportive neighborhood	**44.2%**	**46.6%**	**57.5%**	**62.1%**

Source: NSCH, 2019-20
Note: Based on agreement with three statements on the NSCH (2019-2020) that asked if respondents definitely agree, somewhat agree, somewhat disagree, or definitely disagree with 1) People in this neighborhood help each other out, 2) We watch out for each other's children in this neighborhood, and 3) When we encounter difficulties, we know where to go for help in our community. 'Definitely agree' on at least one statement and somewhat agree or better on at least two statements were used to estimate the percentage of children living in a 'supportive neighborhood'.

Table 50. Assessment of safe neighborhood by physical activity levels in Arizona, 2019-20

Safe neighborhood	0 days	1 to 3 days	4 to 6 days	Every day
Strongly agree	57.5%	57.4%	63.9%	69.0%
Agree	30.8%	32.2%	30.1%	23.9%
Disagree	3.3%	5.8%	2.8%	0.5%
Strongly disagree	8.4%	4.7%	3.1%	6.5%

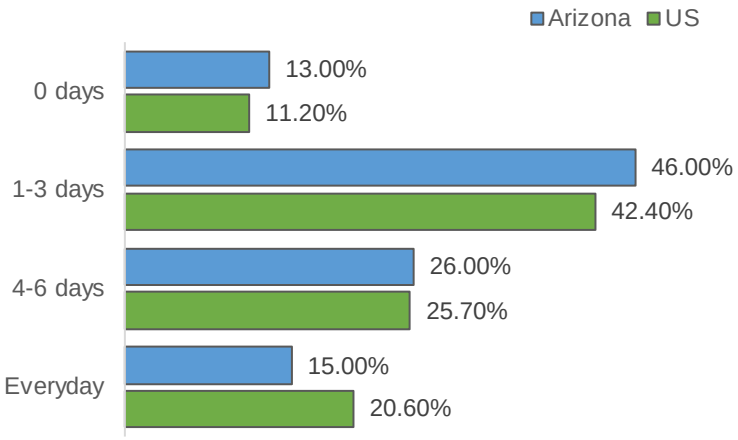
Source: NSCH, 2019-20

Physical activity behaviors

According to the National Survey of Children's Health (NSCH), Arizona children (ages 6-17) had fewer days with physical activity than US children. A larger proportion of US children were active every day (20.6%) compared to Arizona children (15%), while in contrast Arizona children were more likely to be active for 0-3 days (59%) compared to US children (53.6%) (Figure 37).

Focusing specifically on high school age youth, Arizona boys have shown consistently more days of physical activity than girls since 2011, with 45.7% of boys active 5 or more days in a week compared to 40.4% of girls. While boys were consistently more likely to play on a sports team than girls, their rates of participation have become more similar over time, with boys' participation declining and girls' participation increasing. Overall, nearly half (48.4%) of Arizona youth participated on a sports team in 2019. High school boys were also more likely to participate in physical education classes over time. Notably, less than half (45.9%) of Arizona high school students participated in physical education weekly and just 37.8% participated daily in 2019 (Table 51).

Figure 37. Prevalence of 60 minutes of physical activity (exercise, play a sport, participate in physical activity) in children (ages 6-17) in Arizona, 2019-2020



Source: NSCH, 2019-2020

Table 51. Prevalence of physical activity among Arizona high school students, 2011-2019

Percent of High School Students Physically Active Five or More Days Out of the Last Seven

	2011	2013	2015	2017	2019
Total	47.4%	41.9%	46.4%	46.3%	45.7%
Boys	56.2%	50.4%	52.8%	54.1%	51.3%
Girls	38.8%	33.2%	40.0%	38.1%	40.4%

Percent of High School Students Physically Active All Seven Days

	2011	2013	2015	2017	2019
Total	25.0%	21.7%	26.0%	24.5%	22.0%
Boys	31.9%	27.8%	32.1%	31.7%	29.0%
Girls	18.1%	15.5%	19.3%	17.1%	15.0%

Percent of High School Students Who Played on One or More Sports Teams in Past 12 Months

	2011	2013	2015	2017	2019
Total	50.4%	50.5%	49.2%	51.6%	48.4%
Boys	54.8%	53.7%	52.4%	54.7%	49.4%
Girls	46.2%	47.3%	45.8%	48.8%	47.7%

Percent of High School Students Who Attended Physical Education Classes Weekly

	2011	2013	2015	2017	2019
Total	41.7%	39.9%	40.9%	46.4%	45.9%
Boys	49.0%	48.1%	47.3%	53.9%	53.3%
Girls	34.4%	31.3%	34.0%	38.8%	38.6%

Percent of High School Students Who Attended Physical Education Classes Daily

	2011	2013	2015	2017	2019
Total	29.6%	23.0%	26.3%	36.5%	31.9%
Boys	36.3%	27.7%	30.6%	40.7%	37.8%
Girls	23.2%	18.5%	21.5%	31.9%	26.1%

Source: YRBSS, 2011-2019

Since 2011, between one-in-four and one-in-five adults in Arizona met both aerobic and strength physical activity guidelines, though at least half of Arizona adults were considered 'active'[dd] or 'highly active'[ee] during this time. While a higher proportion of adults met aerobic activity guidelines over time, the prevalence of strength-based physical activity has been steadily increasing since 2013. Adults on food assistance were consistently less likely to meet physical activity guidelines and more likely to be considered 'insufficiently active' or 'inactive' compared to adults not on food assistance (Table 52).

More than one in five (22.4%) adults in Arizona had no leisure time physical activity during the past 30 days in 2020. This was most prevalent among adults who did not graduate high school (38.8%), who were on food assistance (29.4%), and who were over 65 years old (29.2%). A larger proportion of women had no leisure physical activity compared to men (24.3% and 20.4%, respectively). By race and ethnicity, more than one in four adults who identified as another race, as Black or African American, or Hispanic had no leisure physical activity outside of work during the past 30 days (Table 53).

Table 52. Physical activity among adults in Arizona, 2011-2019

	2011	2013	2015	2017	2019
Highly active or active	**52.6%**	**51.5%**	**53.6%**	**52.4%**	**53.5%**
Highly active	33.1%	33.9%	33.4%	33.0%	35.1%
Active	19.5%	17.6%	20.2%	19.4%	18.4%
Insufficiently active or inactive	**47.4%**	**48.5%**	**46.4%**	**47.6%**	**46.5%**
Insufficiently active	21.6%	21.1%	19.1%	20.1%	19.3%
Inactive	25.8%	27.4%	27.3%	27.5%	27.2%
	2011	2013	2015	2017	2019
Met both guidelines	24.2%	22.0%	21.8%	22.1%	25.5%
Met aerobic only	28.6%	29.6%	32.0%	30.3%	28.2%
Met strength only	8.4%	9.0%	9.1%	9.4%	12.1%
Did not meet either	38.8%	39.4%	37.1%	38.2%	34.2%
Insufficiently active or inactive	2011	2013	2015	2017	2019
On Food Assistance	57.4%	58.8%	51.3%	55.6%	57.8%
Not On Food Assistance	44.3%	46.7%	45.6%	45.3%	44.5%
Met both guidelines	2011	2013	2015	2017	2019
On Food Assistance	19.6%	13.9%	16.8%	17.2%	18.3%
Not On Food Assistance	24.9%	23.3%	22.1%	23.7%	26.1%
Met aerobic guidelines	2011	2013	2015	2017	2019
On Food Assistance	42.7%	41.3%	48.9%	44.7%	43.0%
Not On Food Assistance	55.8%	53.9%	54.5%	54.9%	55.7%
Met strength guidelines	2011	2013	2015	2017	2019
On Food Assistance	26.6%	21.5%	23.4%	25.1%	31.2%
Not On Food Assistance	33.7%	31.7%	31.6%	33.0%	37.6%
Met neither aerobic nor strength guidelines	2011	2013	2015	2017	2019
On Food Assistance	50.9%	51.1%	44.1%	47.8%	43.8%
Not On Food Assistance	35.2%	37.7%	35.7%	35.7%	32.7%

Source: BRFSS, 2011-2019

[dd] BRFSS defines 'active' as - Respondent reports at least 150 minutes per week of moderate-intensity activity, or at least 75 minutes per week of vigorous-intensity activity, or an equivalent combination of moderate-intensity and vigorous-intensity activity (multiplied by 2) totaling at least 150 minutes per week.

[ee] BRFSS defines 'highly active' as - Respondent reports greater than 300 minutes per week of moderate-intensity activity, greater than 150 minutes per week of vigorous-intensity activity, or an equivalent combination of moderate- and vigorous-intensity activity (multiplied by 2) totaling more than 300 minutes per week.

Table 53. Adults with No Leisure Time Physical Activity (such as running, calisthenics, golf, gardening, or walking) Outside of Work

Year	2020
Total %	22.4%
On Food Assistance	29.4%
Not on Food Assistance	18.9%
Females	24.3%
Males	20.4%
Hispanic	25.4%
Non-Hispanic	21.0%
Other race only	27.7%
Black or African American only	26.1%
AIAN only	24.8%
White only	21.0%
Native Hawaiian or other PI only	19.4%
Multiracial	19.4%
Asian only	17.6%
18-24	16.3%
25-34	18.2%
35-44	18.2%
34-54	22.1%
55-64	26.1%
65+	29.2%
Did not graduate high school	38.8%
Graduated high school	28.8%
Attended college or technical school	21.5%
Graduated college or technical school	13.5%

Source: BRFSS, 2016-2020

Screen time

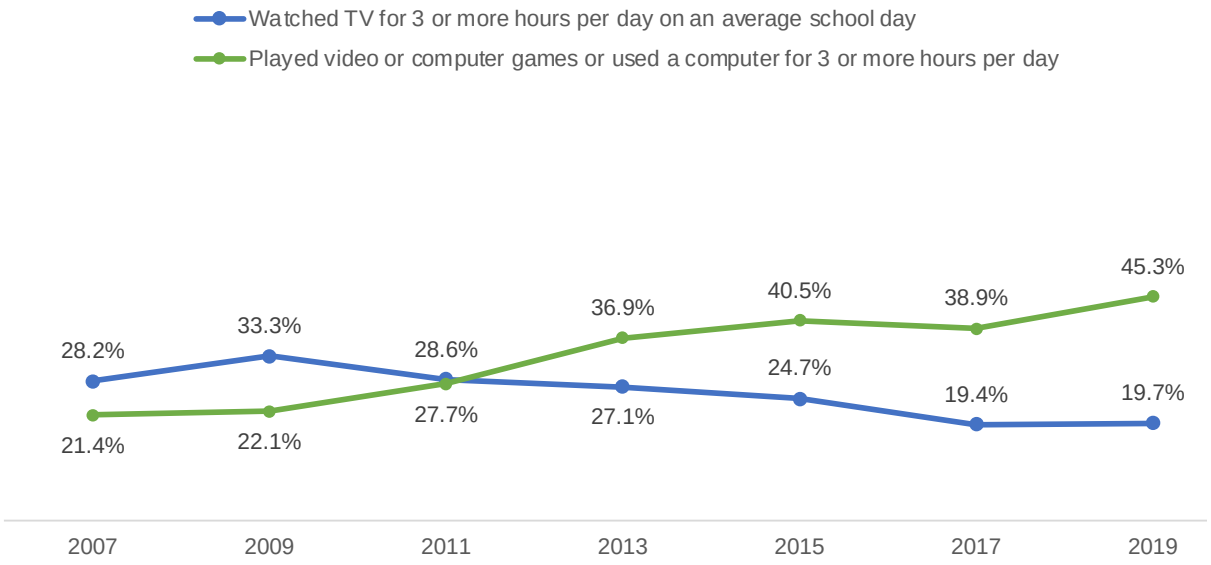
To understand screen time among children, The National Survey of Child Health (NSCH) asked parents "On most weekdays, about how much time does this child usually spend in front of a TV, computer, cellphone or other electronic device watching programs, playing games, accessing the internet or using social media?" The CDC recommends that children under age 2 have no screen time and ages 8 to 18 are limited to 1-2 hours per day.[35] In Arizona, only 57.5% of children under two had less than an hour per day of screen time and less than half (45%) of children 6-17 years old had 2 or fewer hours of screen time per day. Among children ages 6-17, screen time showed an inverse relationship with days of physical activity. More than half of children who were active 4 or more days per week met the screen time goal of 2 or fewer hours per day, compared to just 26.2% of children who had zero days of physical activity. The majority (64.7%) of children with zero days of physical activity also had 4 or more hours of screen time per day (Table 54). Since 2007, teen television consumption has declined while video game and computer usage has more than doubled, with 45.3% of teens surveyed saying they played video or computer games or used a computer for 3 or more hours per day in 2019 compared to 21.4% in 2007 (Table 55).

Table 54. Screen time by age group (0-17 years old) and by days of physical activity per week (6-17 years old) in Arizona

Age group	<1 hour per day	1 hour per day	2 hours per day	3 hours per day	4+ hours per day
<2 years old	57.5%	15.7%	12.9%	9.7%	4.2%
2-5-years-old	10.8%	21.8%	31.5%	24.1%	11.8%
6-17-years-old	5.3%	10.1%	29.6%	25.0%	30.0%
Among 6-17-year-olds					
Days of physical activity per week	<1 hour per day	1 hour per day	2 hours per day	3 hours per day	4+ hours per day
0 days	5.3%	6.1%	14.8%	9.1%	64.7%
1-3 days	3.8%	9.5%	29.7%	24.7%	32.3%
4-6 days	4.6%	12.2%	37.6%	31.5%	14.1%
Every day	10.6%	12.1%	29.1%	28.4%	19.7%

Source: NSCH, 2019-2020

Table 55. Screen-based behaviors among high school students



Source: YRBSS, 2007-2019

Active transportation

Since 2015, SNAP-eligible individuals have been consistently more likely to use active forms of transportation (e.g., walk, bike, bus, trolley, or streetcar) to travel to work compared to the overall population in Arizona, though active transportation has been steadily declining among both groups over time. In 2020, 7.1% of SNAP-eligible individuals traveled to work using active transportation compared to 3.8% of the overall population (Table 56).

Table 56. Mode of transportation to work, Arizona

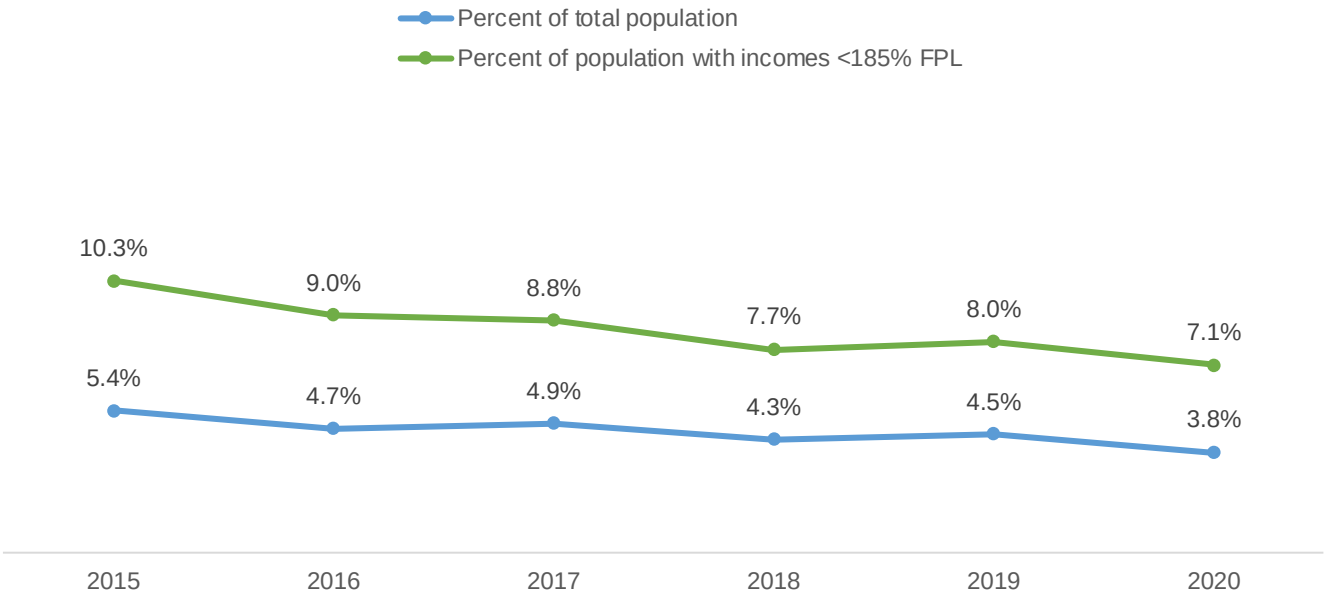
Mode of Transportation	2015	2016	2017	2018	2019	2020
Active transportation	**5.4%**	**4.7%**	**4.9%**	**4.3%**	**4.5%**	**3.8%**
Walk	2.2%	2.0%	2.0%	1.8%	2.0%	2.0%
Bicycle	1.1%	0.9%	0.9%	0.9%	0.8%	0.7%
Bus, trolley, or streetcar	2.1%	1.8%	2.0%	1.7%	1.6%	1.2%
Passive transportation	**94.6%**	**95.3%**	**95.1%**	**95.6%**	**95.4%**	**96.2%**
Motorcycle	0.5%	0.4%	0.4%	0.3%	0.3%	0.3%
Car, truck, or van	92.8%	93.4%	93.4%	93.6%	93.4%	93.8%
Other method	1.3%	1.5%	1.3%	1.7%	1.7%	2.1%

SNAP eligible population (<185% FPL)

Mode of Transportation	2015	2016	2017	2018	2019	2020
Active transportation	**10.3%**	**9.0%**	**8.8%**	**7.7%**	**8.0%**	**7.1%**
Walk	4.1%	3.5%	3.6%	2.7%	3.1%	2.9%
Bicycle	1.9%	1.6%	1.4%	1.7%	1.7%	1.2%
Bus, trolley, or streetcar	4.4%	3.9%	3.9%	3.3%	3.2%	3.0%
Passive transportation	**89.7%**	**91.0%**	**91.2%**	**92.3%**	**92.0%**	**93.0%**
Motorcycle	0.4%	0.2%	0.3%	0.3%	0.3%	0.2%
Car, truck, or van	87.3%	88.3%	89.0%	89.4%	88.7%	89.7%
Other method	2.0%	2.5%	1.9%	2.6%	3.0%	3.1%

Source: U.S. Census Bureau, 2015-2020 American Community Survey 5-Year Estimates

Figure 38. Percent of the total population and SNAP-eligible population using active transportation to work, 2015 to 2020



Source: U.S. Census Bureau, 2015-2020 American Community Survey 5-Year Estimates

Population health

Overall physical and mental health

Ratings of physical and mental health for adults and children in Arizona mirror that of adults and children across the US. A little over half (55.1%) of adults in Arizona rate their health as excellent or very good while 15.3% consider their health fair or poor. Children in Arizona and across the US were more likely to have overall health rated as excellent or very good (89.5% and 90.4%, respectively) compared to adults. While the majority of Arizona adults did not experience any days of poor physical or mental health in the previous month, it is worth noting that over 1 in 10 experienced 14 or more days of poor physical or mental health (10.1% and

13.5%, respectively). More Arizona adults reported experiencing days of poor mental health (38%) than days of poor physical health (28%) (Table 57). This pattern of better physical health than mental health is also seen across all race/ethnicity groups (Table 58).

Hispanic adults were more likely report being healthier, i.e., having zero days of poor physical (74.6%) or mental health (64.6%) in the past month compared to White, Black, and American Indian adults. While the majority of Asian and multi-racial adults rated their physical health positively over the past month, they were more likely to experience poor mental health (Table 58).

Adults participating in food assistance programs in Arizona have shown consistently higher rates of poor health compared to those that didn't participate. In 2020, 24.3% of adults on food assistance rated their health as fair or poor compared to 10.8% of adults not on food assistance (Table 59).

Health behaviors related to nutrition and physical activity tend to be more prevalent among individuals who rated their health as good or better in Arizona. Though health behaviors can positively influence health outcomes, the relationship between health behaviors and health outcomes is also significantly influenced by broader social, economic, and environmental factors.[36] And importantly, a large proportion of individuals who rated their health positively also did not meet key health behavior recommendations. Just 54.5% of individuals with good health and 41.6% of individuals with fair or poor health ate fruits and vegetables one or more times per day in the past 30 days. Similarly, only 28.7% of individuals with good health and 16.2% of individuals with fair or poor health met physical activity recommendations for both aerobic- and strength-based exercise (Table 60).

The Arizona Department of Health Services compared different racial and ethnic groups on 65 health indicators related to maternal health, child health, morbidity, and mortality to determine their relative health standing.[37] Zero is the average for all Arizonans, a negative score is better than average, and positive is worse than average. Scores ranged from -33.1 for Asian individuals to 77.2 for American Indian individuals. Some of the factors influencing the better-than-average score for Asian individuals were low mortality from chronic diseases and injuries and low incidence of drug or alcohol-induced deaths. For American Indian individuals, factors that led to the worse-than-average score included diabetes, maternal health factors, and infant mortality (Table 61).

Table 57. Overall physical and mental health status of adults (18 years and older) and children and adolescents 17 and under

Adults (18 years and older), 2020	Arizona *Weighted Estimates*	US *Median*
Overall Health		
Excellent	22.4%	22.2%
Very Good	32.7%	34.8%
Good	29.6%	29.7%
Fair	12.1%	10.2%
Poor	3.2%	3.1%
Days of Poor Physical Health		
0 days	71.8%	71.9%
1- 13 days	18.1%	18.4%
14+ days	10.1%	9.9%
Days of Poor Mental Health		
0 days	62.0%	61.7%
1 - 13 days	24.5%	23.7%
14+ days	13.5%	13.1%
Children (17 years and under), 2019-2020	Arizona *Weighted Estimates*	US *Median*
Overall Health		
Excellent or Very Good	89.5%	90.4%
Good	9.6%	8.0%
Fair or Poor	DS	1.5%

Source: BRFSS, 2020; NSCH 2019-2020

Table 58. Percent of Arizona adults who had zero days that they rated their physical and mental health as 'not good' by race/ethnicity, 2020

	Physical health	Mental health
American Indian or Alaska Native, non-Hispanic	66.6%	61.9%
Asian, non-Hispanic	77.4%	58.5%
Black, non-Hispanic	67.9%	59.4%
Hispanic	74.6%	64.6%
Multiracial, non-Hispanic	73.3%	47.3%
White, non-Hispanic	70.6%	61.3%
Other, non-Hispanic	71.2%	68.6%

Source: BRFSS, 2015-2020

Table 59. Fair or poor health among Arizona adults and adults on food assistance, 2015-2020

	2015	2016	2018	2019	2020
All adults	19.2%	18.4%	19.5%	20.1%	15.5%
On food assistance	30.7%	34.9%	31.6%	30.1%	24.3%
Not on food assistance	15.7%	13.6%	16.3%	17.4%	10.8%

Source: BRFSS, 2015-2020

Table 60. Nutrition and physical activity behaviors by health status, 2019

	Good or better health	Fair or poor health
Nutrition behaviors		
Ate fruits one or more times per day	62.7%	57.3%
Ate vegetables one or more times per day	80.7%	68.3%
Ate both fruits and vegetables one or more times per day	54.5%	41.6%
Physical activity behaviors		
Exercised in the past 30 days	80.1%	58.8%
Met aerobic recommendations	57.8%	37.5%
Met strength recommendations	39.9%	28.4%
Met both aerobic and strength recommendations	27.8%	16.2%
Level of physical activity		
Highly active	37.9%	22.8%
Active	19.5%	14.1%
Insufficiently active	19.7%	18.1%
Inactive	22.9%	45.1%

Source: BRFSS, 2020

Table 61. Health scores of racial/ethnic groups in Arizona, 2019

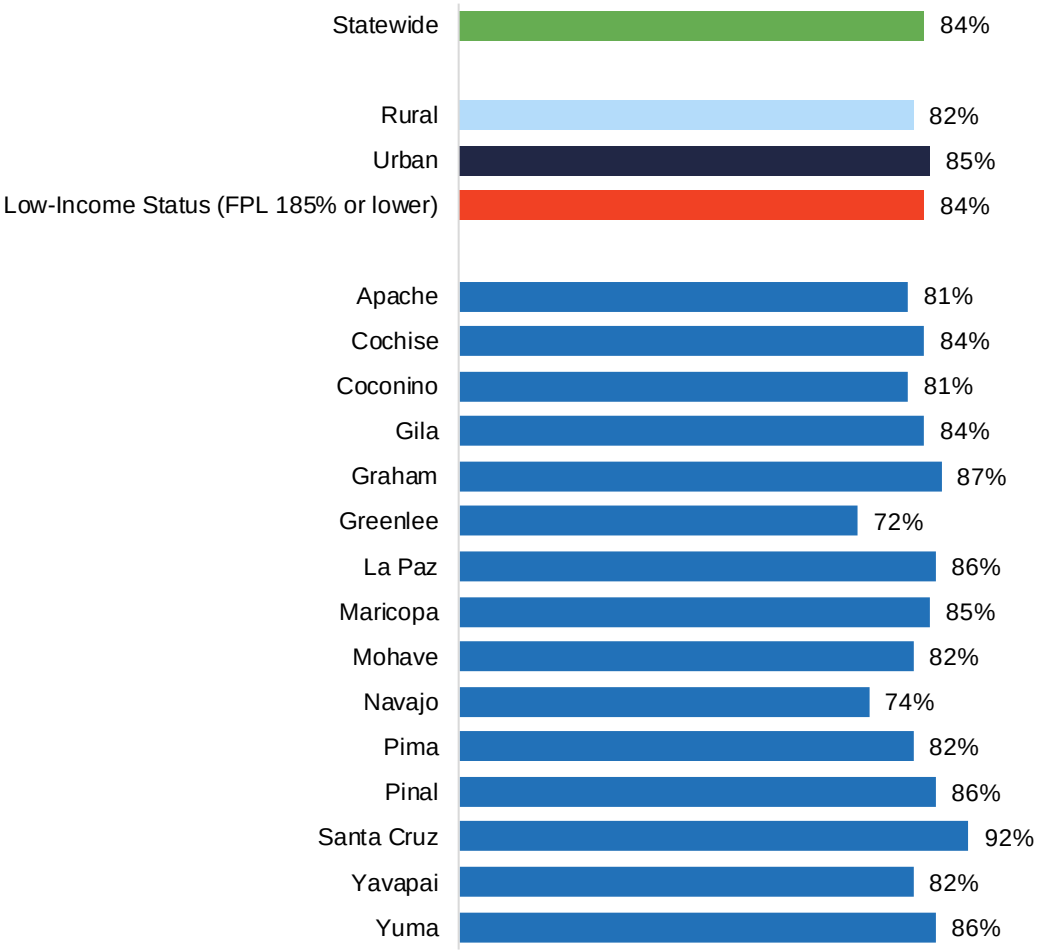
	Average scores in 2019
Asian	-33.1
White, non-Hispanic	-10.3
Hispanic	-2
Black	41.2
American Indian	77.2

Source: Arizona Department of Health Services
Note: 0 is the average for all Arizonans, negative is better than average, and positive is worse than average.

Chronic diseases and health conditions

In the United States, chronic diseases pose substantial health burdens on individuals, families, and the healthcare system. For Arizonans responding to the 2022 Arizona Cooperative Extension Statewide Needs Assessment survey, chronic disease prevention and management was identified as ‘extremely’ or ‘very’ important to address by 84% of respondents statewide. A majority of respondents across each county indicated that chronic disease prevention and management was a key issue in their community. In particular, it stood out in Santa Cruz County, where 92% of respondents noted it as extremely or very important (Figure 39).

Figure 39. Arizona survey respondents who rated "Chronic disease prevention and management (e.g., cancer, heart disease, stroke, diabetes)" as an 'extremely' or 'very' important priority to address in their community

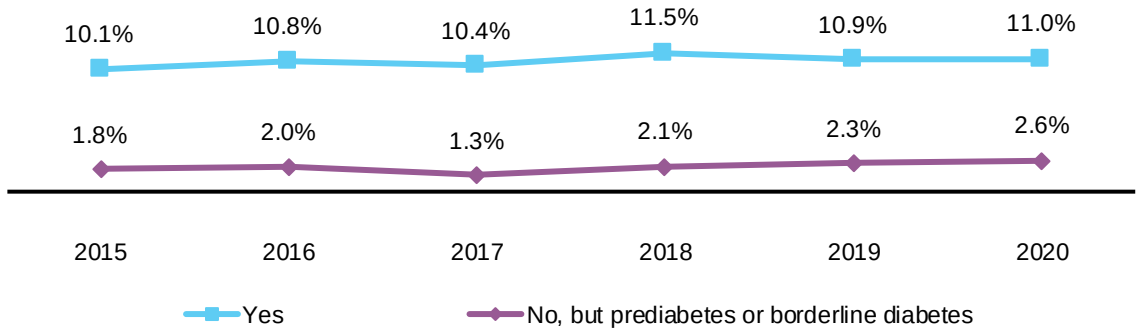


Source: 2022 Arizona Cooperative Extension Needs Assessment

From 2015 to 2020, the proportion of Arizona adults surveyed by BRFSS who were ever told they had diabetes fluctuated between 10.1 and 11.5%. Prediabetes or borderline diabetes during this time varied slightly, remaining between 1.3 and 2.6% (Figure 40).[ff] Diabetes among individuals on food assistance has trended upwards since 2018, in contrast to individuals not receiving food assistance whose prevalence of diabetes declined during this time (Figure 41). When comparing individuals by race and ethnicity, diabetes was most prevalent among Arizona adults who identified as American Indian or Alaska Native (16.4%), Black or African American (13.9%), and Hispanic (11.3%) in 2020 (Figure 42).

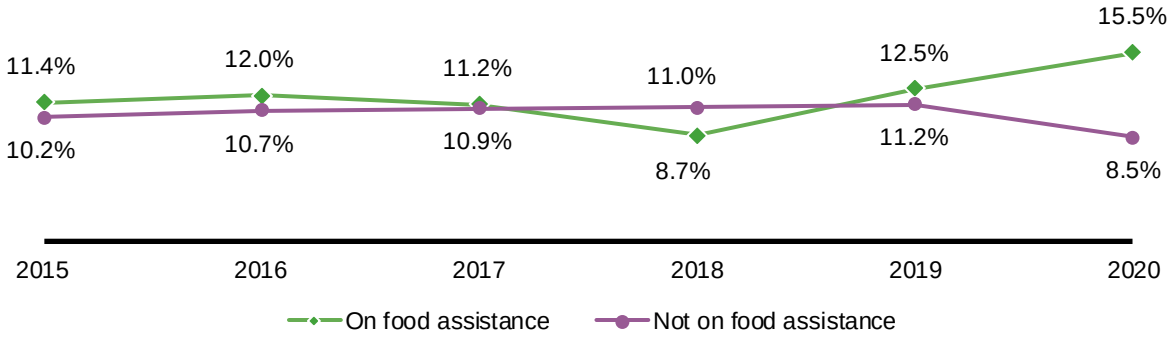
[ff] *Please note that these data may underestimate rates of prediabetes. Based on a report by the Centers for Disease Control, approximately a third of adults in the U.S. had prediabetes from 2017-2020. Half (19%) reported being told by a health professional that they had this condition. For more information, see:* ***Centers for Disease Control and Prevention. (September 30, 2022). Prevalence of Prediabetes Among Adults. Accessed at*** ***https://www.cdc.gov/diabetes/data/statistics-report/prevalence-of-prediabetes.html***

Figure 40. Ever Told You Have Diabetes, 2015-2020



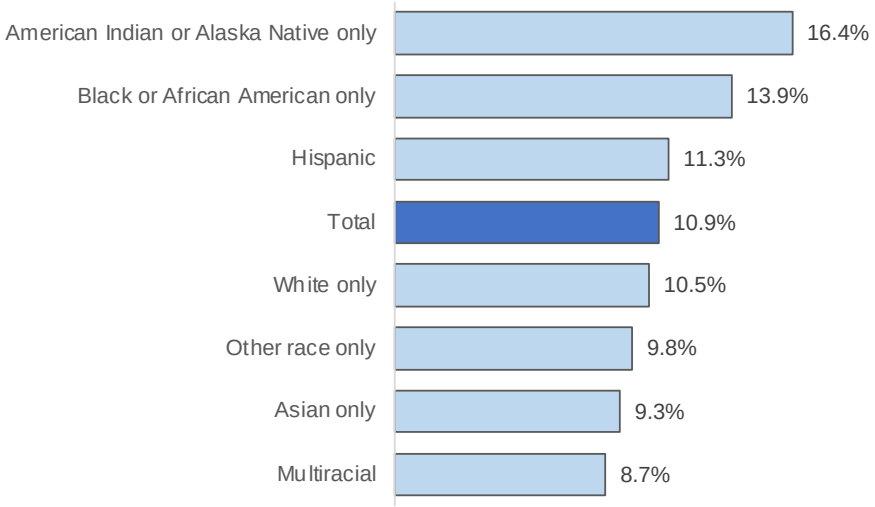
Source: BRFSS, 2015-20

Figure 41. Ever Told You Have Diabetes by Food Assistance Participation, 2015-2020



Source: BRFSS, 2015-20

Figure 42. Ever Told You Have Diabetes by Race and Ethnicity, 2020



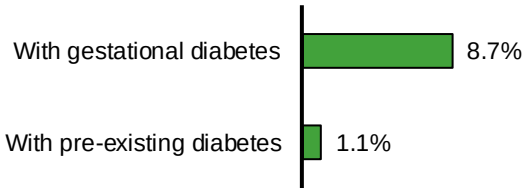
Source: BRFSS, 2020

Diabetes can also appear as a transient disease for pregnant women. Gestational diabetes develops during pregnancy, typically around the 24th to 28th week of pregnancy when the body is unable to produce and use enough insulin to meet the increased demands of pregnancy. The condition is temporary and usually resolves

after childbirth. However, women who have had gestational diabetes are at a higher risk of developing type 2 diabetes later in life.

Of all births in Arizona in 2019, 8.7% were to mothers who had gestational diabetes and 1.1% were to mothers who had pre-existing diabetes (Figure 43). Gestational diabetes and pre-existing diabetes were both more common among births to mothers who identified as American Indian or Alaska Native (17.4% and 3.5%, respectively). Gestational diabetes was also notably more common among births to mothers who identified as Asian or Pacific Islander (14.5%) (Table 62). These trends by race and ethnicity are comparable to those seen nationally.[38]

Figure 43. Arizona births to mothers with diabetes, 2019



Source: ADHS Vital Statistics, Births dataset, 2019

Table 62. Proportion of births to mothers with gestational diabetes by race/ethnicity in Arizona, 2019

	% of births to mothers with gestational diabetes	% of births to mothers with pre-existing diabetes
White, non-Hispanic	6.8%	0.7%
Hispanic or Latino	9.2%	1.2%
Black or African American	6.6%	1.3%
American Indian or Alaska Native	17.4%	3.5%
Asian or Pacific Islander	14.5%	0.9%

Source: ADHS Vital Statistics, Births dataset, 2019

In 2019, nearly a third (32.5%) of adults in Arizona surveyed by the BRFSS had been told at least once that they had hypertension or high blood pressure, a proportion that was only slightly higher than in 2015 (30.8%) and 2017 (30.7%) (Table 63). Less than 1% of individuals surveyed said they were specifically told they had hypertension or high blood pressure during pregnancy or that they were borderline or prehypertensive.[gg] Interestingly, individuals on food assistance were slightly less likely to report having been told they had hypertension or high blood pressure between 2015 and 2019 compared to individuals not on food assistance (Table 63 & Figure 44). Rates of gestational hypertension and pre-existing hypertension during pregnancy were similar to those seen for gestational and pre-existing diabetes, with 8% of births in 2019 to mothers with gestational hypertension and 1.5% to mothers with pre-existing hypertension (Figure 45).

[gg] [gg] *Please note that these data may underestimate rates of hypertension and pre-hypertension. Based on a report by the Centers for Disease Control, almost half (48.1%) of all people in the U.S. are estimated to have hypertension. For more information, see:* ***Centers for Disease Control and Prevention. (May 12, 2023). Hypertension Cascade: Hypertension Prevalence, Treatment and Control Estimates Among US Adults Aged 18 Years and Older Applying the Criteria From the American College of Cardiology and American Heart Association's 2017 Hypertension Guideline—NHANES 2017–2020. Accessed at https://millionhearts.hhs.gov/data-reports/hypertension-prevalence.html***

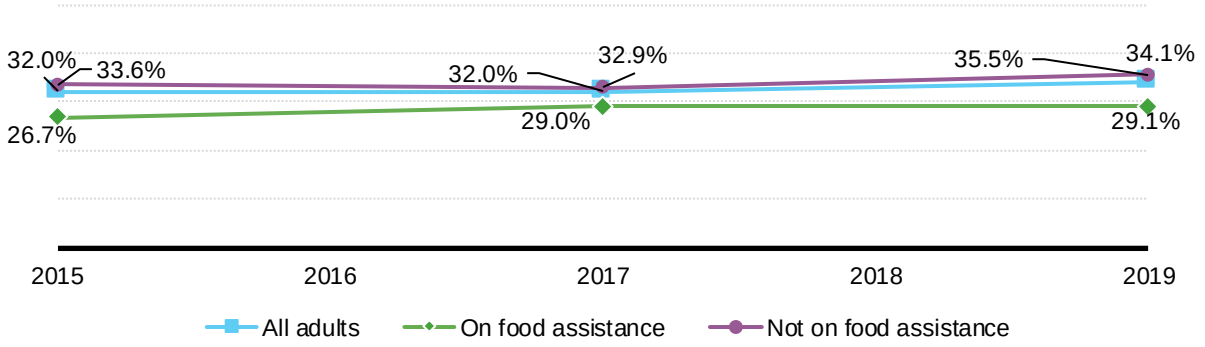
Table 63. Ever Told You Have Hypertension or High Blood Pressure, 2015 – 2019

Ever Told You Have Hypertension or High Blood Pressure?	2015	2017	2019
Yes	30.8%	30.7%	32.5%
Yes, only during pregnancy	0.6%	0.8%	0.6%
No, but borderline or prehypertensive	0.9%	0.5%	0.6%
No	67.7%	68.1%	66.3%

Yes	2015	2017	2019
All adults	32.0%	32.0%	34.1%
On food assistance	26.7%	29.0%	29.1%
Not on food assistance	33.6%	32.9%	35.5%

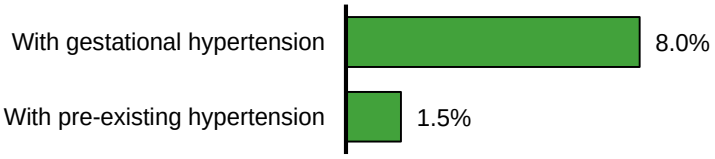
Source: BRFSS, 2015-2019

Figure 44. Ever Told You Have Hypertension or High Blood Pressure, 2015-2019



Source: BRFSS, 2015-2019

Figure 45. Births with hypertension, 2019



Source: ADHS Vital statistics, births dataset, 2019, https://pub.azdhs.gov/health-stats/report/ahs/ahs2019/pdf/1b25.pdf

Weight status

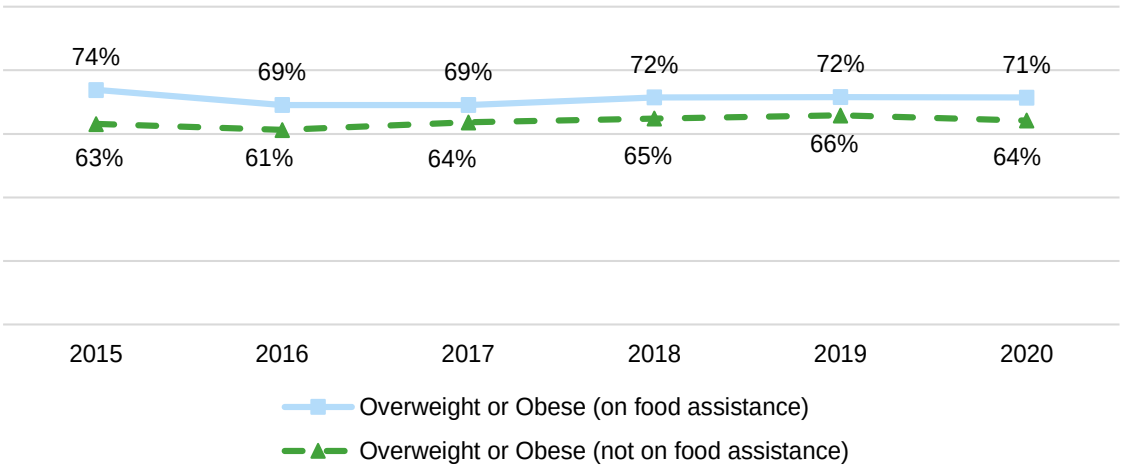
In 2020, 30.9% of Arizona adults surveyed through the BRFSS had weights that fell in the 'obese' range, meaning they had a body mass index of 30 or higher. Obesity was most prevalent among adults who identified as Native Hawaiian or Pacific Islander (44.7%) or American Indian or Alaska Native (41.4%), as well as among adults between the ages of 35 and 54 (Table 64). By educational level, adults who had a college degree had the lowest prevalence of obesity. When split out by participation in food assistance programs, a consistently larger proportion of adults on food assistance were considered obese compared to adults not on food assistance between 2015 and 2020. In 2020, 71% of adults on food assistance were considered obese compared to 64% of adults not on food assistance (Figure 46).

Table 64. Obesity Among Arizona Adults, 2020

By race	% with obesity
Total	**30.9%**
Native Hawaiian or other PI	44.7%
AIAN	41.4%
Black or African American	37.8%
Other race	37.2%
Multiracial	31.7%
White only	29.3%
Asian only	15.6%
By age group	
18-24	21%
25-34	32%
35-44	37%
45-54	37%
55-64	34%
65+	26%
By educational attainment	
Less than high school	38%
Graduated high school	34%
Some college or technical school	36%
Graduated college or technical school	25%

Source: BRFSS, 2020

Figure 46. Arizona Adults Weight Classification by Food Assistance Participation, 2015-2020

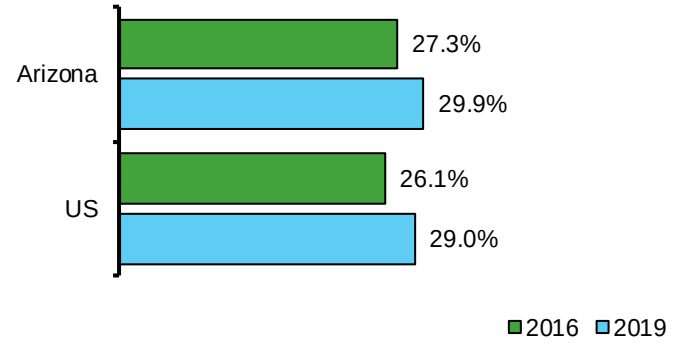


Source: BRFSS, 2015-2020

https://nccd.cdc.gov/dnpao_dtm/rdPage.aspx?rdReport=DNPAO_DTM.ExploreByLocation&rdRequestForwarding=Form

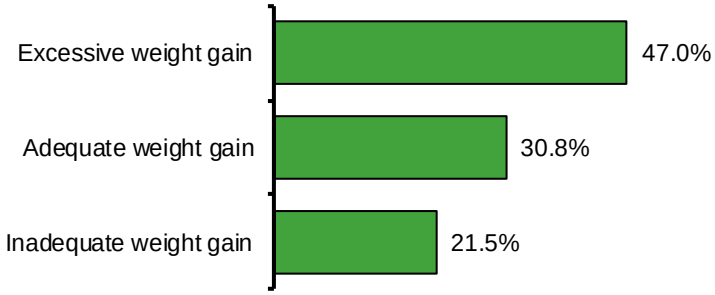
In terms of maternal weight status, pre-pregnancy obesity among mothers in Arizona was comparable to mothers across the US in both 2016 and 2019, with 29.9% of mothers in Arizona classified as having pre-pregnancy obesity in 2019 (Figure 47). Taking factors such as pre-pregnancy body mass index (BMI) and individual circumstances into account, the amount of recommended weight gain during pregnancy varies across individuals. During pregnancy, just about a third (30.8%) of Arizona mothers were classified as having adequate weight gain during pregnancy in 2019, with 21.5% of mothers having inadequate weight gain and 47% having excessive weight gain (Figure 48). Excessive or inadequate weight gain during pregnancy can affect the health of the mother and infant.[39]

Figure 47. Prepregnancy obesity rates, 2016 & 2019



SOURCE: National Center for Health Statistics, National Vital Statistics System, Natality file, 2016-19, https://www.cdc.gov/nchs/data/databriefs/db392-H.pdf, https://www.cdc.gov/nchs/data/databriefs/db392-tables-508.pdf#3

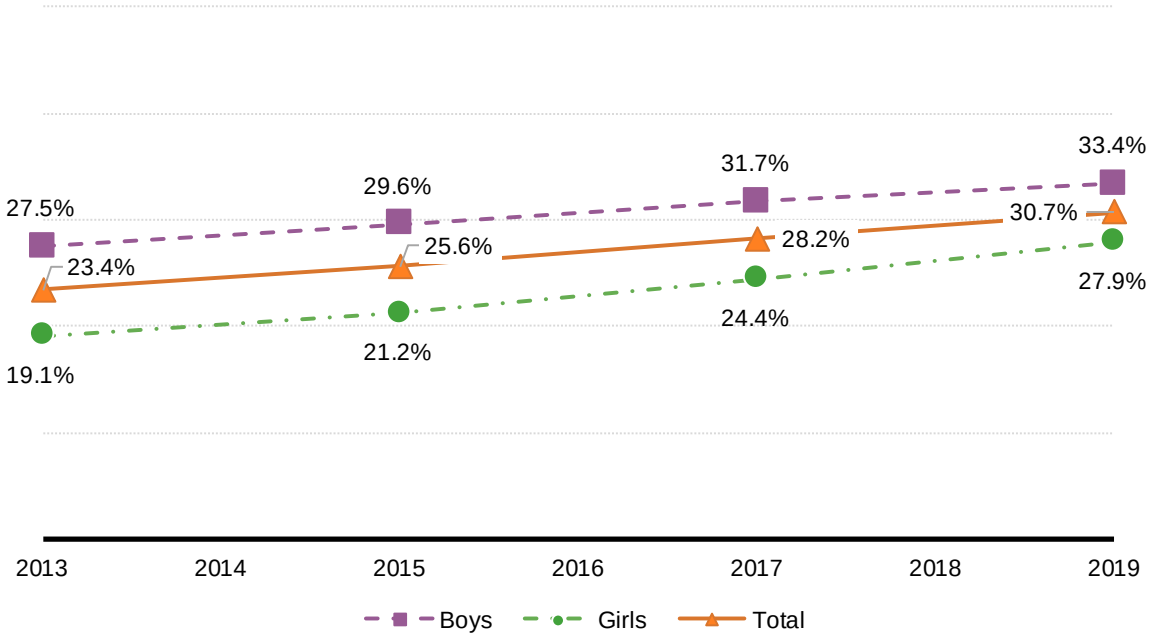
Figure 48. Weight gain during pregnancy classified by IOM guidelines, 2019



Source: ADHS Vital Statistics, 2019

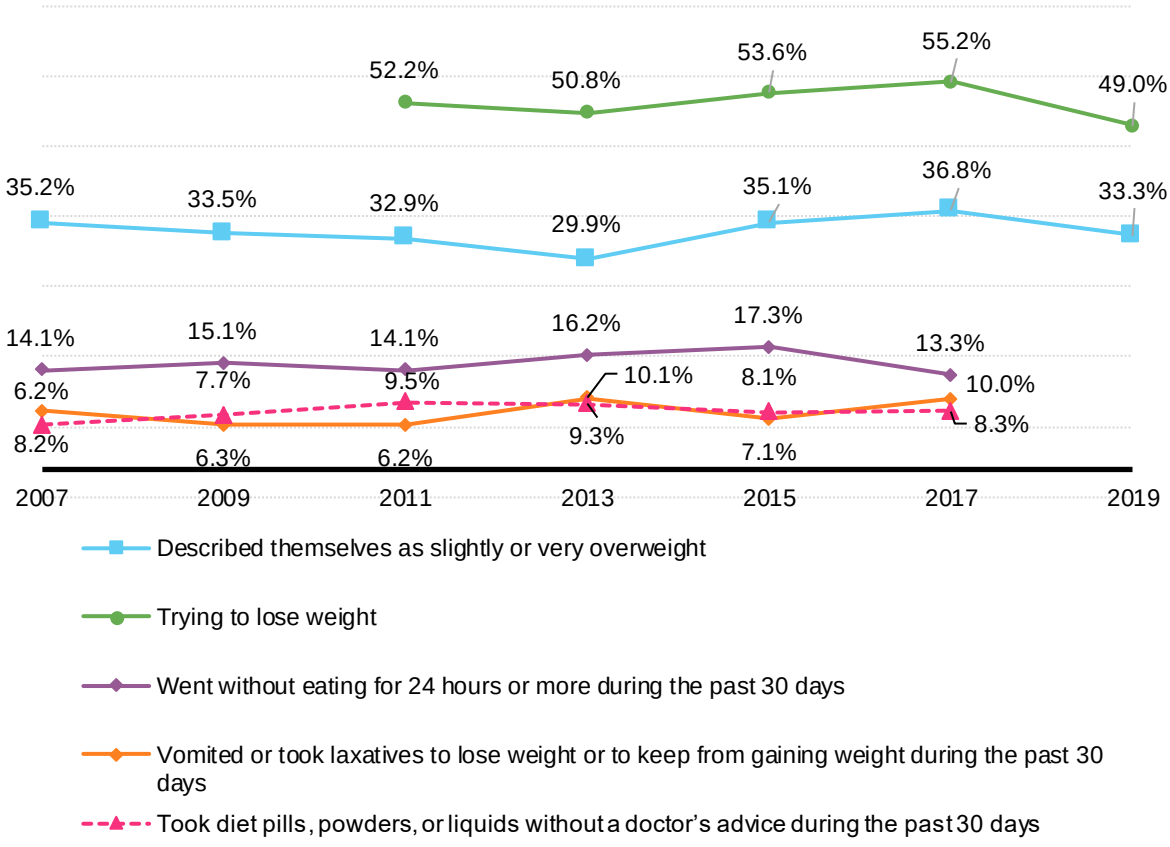
Since 2013, overall youth (grades 9-12) overweight and obesity in Arizona has increased consistently, from 23.4% in 2013 to 30.7% in 2019. This trend is seen across both boys and girls, with higher rates of obesity among boys. In 2019, 33.4% of boys in Arizona were considered obese compared to 27.9% of girls (Figure 49). In the same survey, youth were asked about their perceptions of their own weight and several disordered eating behaviors. Since 2007, around a third of youth agreed that they would describe themselves as slightly or very overweight. Since 2011, at least half of youth said they were actively trying to lose weight. Disordered eating remained relatively consistent over time. In 2017, 13.3% of youth surveyed said that in the last 30 days they went 24 hours or more without eating, 10% vomited or took laxatives to lose or keep from gaining weight, and 8.3% said they took diet pills, powders, or liquids without a doctor's advice (Figure 50).

Figure 49. Youth (grades 9-12) overweight and obesity in Arizona, 2013-2019



Source: YRBS 2013-2019

Figure 50. Youth (grades 9-12) perceptions of weight and disordered eating

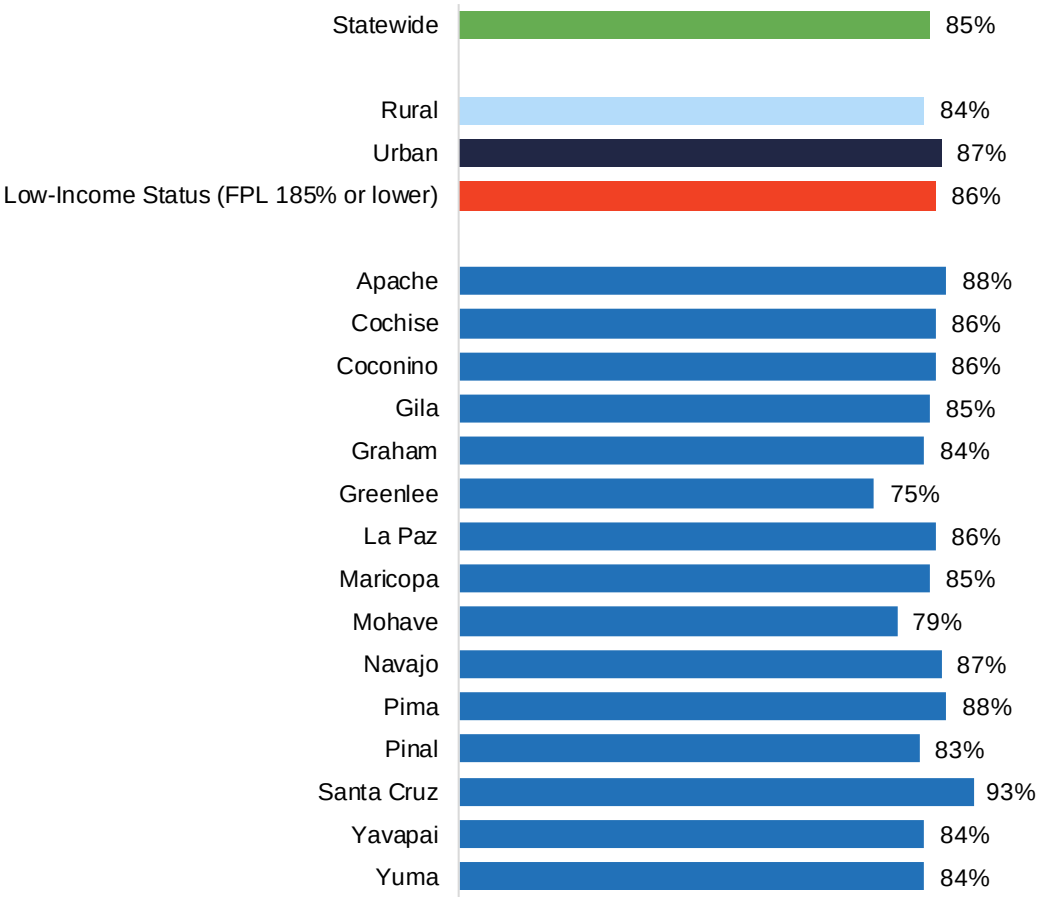


Source: YRBSS, 2015-2019

Maternal and infant health

Through the lens of life course epidemiology, prenatal health and the health of mothers and their infants and young children are understood to be especially important to ensuring healthful futures. The majority of Extension Needs Assessment respondents agreed that the physical and mental health of mothers before, during, and after pregnancy is extremely or very important in their community. This was particularly true in Santa Cruz County (93%) (Figure 51).

Figure 51. Arizona survey respondents who rated "The physical and mental health of mothers before, during and after pregnancy" as an 'extremely' or 'very' important priority to address in their community



Source: 2022 Arizona Cooperative Extension Needs Assessment

One important measure of the health of mothers and their babies is the Pregnancy Risk Assessment Monitoring System (PRAMS), a population-based survey designed to examine maternal behaviors and experiences before, during, and after pregnancy.[40] Before pregnancy, only about a third (36.1%) of Arizona survey respondents said their healthcare provider talked to them about how to improve their health before pregnancy. Discussion of smoking cigarettes, including before, during, and after pregnancy, was one of the most prevalent topics with healthcare providers. While discussion of folic acid use only occurred with about a third (35.4%) of respondents before pregnancy, this was true for more than half (54.1%) of respondents after pregnancy (Table 65).

Table 65. Percentage of women asked about health-related behaviors before, during, and after pregnancy in Arizona, 2020

[a]Before Pregnancy	%
Ask me if was smoking cigarettes	77.6%
Talk to me about maintaining a healthy weight	38.4%
Talk to me about how I could improve my health before a pregnancy	36.1%
Tell me to take a vitamin with folic acid	35.4%
Talk to me about controlling any medical conditions such as diabetes or high blood pressure	16.5%
[b]Prenatal Care	%
If I was smoking cigarettes	94.1%
If I was drinking alcohol	93.6%
If I planned to breastfeed my new baby	88.2%
If I was using drugs such as marijuana, cocaine, crack, or meth	83.5%
If I knew how much weight I should gain during pregnancy	49.1%
[c]After Pregnancy	%
Ask me if someone was hurting me emotionally or physically	63.1%
Talk to me about healthy eating, exercise, and losing weight gained during pregnancy	55.4%
Ask me if I was smoking cigarettes	54.3%
Tell me to take a vitamin with folic acid	54.1%
Talk to me about how long to wait before getting pregnant again	53.1%

Note. [a] During any of your healthcare visits in the 12 months before you got pregnant, did a doctor, nurse, or other health care worker do any of the following things? [b]19. During any of your prenatal care visits, did a doctor, nurse, or other health care worker ask you of any of the things listed below? [c] During your postpartum checkup, did a doctor, nurse or health care worker do any of the following things?
Source: PRAMS, 2020

Dental care during pregnancy is critical, both because pregnancy can lead to greater risk of dental complications, and poor dental health during pregnancy can lead to poor outcomes for mothers and babies.[41] Of all Arizona women surveyed with the PRAMS in 2020, only a third (32.4%) had a teeth cleaning during pregnancy. This was more common among mothers who identified as Asian (56.9%) and had more than a high school education (41.2%). A notably smaller proportion of mothers with a high school education or less (18.7%) or who identified as Black or African American (27.2%) or Hispanic or Latino (21.7%) received preventative dental care during pregnancy (Table 66).

Table 66. Preventive dental practices during pregnancy in Arizona, 2020

	Percent of pregnant women who had a teeth cleaning at a dentist
All women	32.4%
Asian mothers	56.9%
White, non-Hispanic mothers	40.2%
Black/African American mothers	27.4%
Hispanic/Latino mothers	21.7%
More than a high school diploma	41.2%
High school diploma	18.7%

Source: PRAMS, 2020

Anxiety and depression are common complications of pregnancy and also often co-occur.[42] Across all pregnant women surveyed, it was more common to experience anxiety before and during pregnancy compared to depression. Anxiety and depression before and during pregnancy were also more common among Black mothers compared to Hispanic/Latino mothers (Table 67).

Table 67. Anxiety and depression before and during pregnancy in Arizona, 2020

	3 months prior to pregnancy		During pregnancy	
	Anxiety	Depression	Anxiety	Depression
All pregnant women	24.3%	13.6%	22.5%	14.3%
Black mothers	39.9%	25.8%	26.9%	28.1%
Hispanic/Latino mothers	21.2%	10.2%	20.7%	11.5%

Source: ADHS Vital Statistics, PRAMS 2020

The American Academy of Pediatrics recommends exclusive breastfeeding for the first 6 months of a child's life and continued breastfeeding alongside solid foods to 1 year of age and beyond.[43] Since 2015, the majority of babies born in Arizona and the US were breastfed at least once, while the proportion of babies exclusively breastfed through 6 months was closer to one-in-four (Table 68). Exclusive breastfeeding at 6 months in Arizona has been increasing since 2009 (16%), though it is still well below the Healthy People 2030 target of 42.4% of babies exclusively breastfed through 6 months (Table 68).[44] Breastfeeding at 12 months in Arizona has increased notably over time, from 2009 (22.3%) to 2019 (40.7%) (Table 69).

Table 68. Arizona's breastfeeding rates compared to national trends, 2015-2019

	2015	2016	2017	2018	2019
US, ever breastfed	83.2%	83.8%	84.1%	83.9%	83.2%
Arizona, ever breastfed	82.7%	83.2%	89.9%	76.9%	85.4%
US, exclusively 6 months	24.9%	25.4%	25.6%	25.8%	24.9%
Arizona, exclusively 6 months	26.3%	25.1%	24.6%	24.6%	24.0%

Source: National Immunization Survey, CDC
The Healthy People 2030 goal is 42.4% of babies exclusively breastfeed through 6 months of age and 54.1% of babies continued breastfeeding through 12 months of age.

Table 69. Breastfeeding status by year of birth for infants in Arizona, 2009-2019

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Ever breastfed	72.1%	81.9%	81.6%	75.3%	85.0%	-	82.7%	83.2%	89.9%	76.9%	85.4%
At 6 months	40.6%	50.6%	47.8%	45.1%	54.8%	-	55.3%	58.4%	64.3%	51.4%	58.3%
At 12 months	22.3%	28.6%	23.9%	25.0%	30.0%	-	35.5%	33.0%	39.3%	32.9%	40.7%
Exclusively at 3 months	35.3%	44.3%	37.5%	39.2%	46.3%	-	51.8%	45.7%	48.8%	39.5%	43.2%
Exclusively at 6 months	16.0%	22.9%	18.0%	17.2%	23.8%	-	26.3%	25.1%	24.6%	24.6%	24.0%

Source: NIS, 2009-2019

The CDC Breastfeeding Report Card, released every two years, highlights indicators that support breastfeeding behaviors.[45] Since 2013, the percentage of births in Baby-Friendly facilities, a designation that indicates that the facility enacts specific breastfeeding-promoting practices, has increased from 0.9% to 6.8% in Arizona. The percentage of breastfed infants given formula within their first two days of life was trending downward during this same time but increased to 24.9% in 2017 (Table 70).

The CDC also measures maternity care practices using the Maternity Practices in Infant Nutrition and Care (mPINC) instrument. Scores range from 0 to 100, with higher scores indicating better maternity care practices and policies.[46] Arizona scored highest on feeding education and support (e.g., in-person follow-up visits to breastfeeding mothers) and lowest on institutional management (e.g., paying fair market price for infant formula), similar to the US overall. Rooming in (e.g., mother-infant dyads are rooming in 24 hours/day) was the only domain where Arizona scored higher than the national average (Table 71 & Table 72).

Table 70. CDC Report Card - Individual Breastfeeding Support Scores for Arizona, 2013-2017

Individual Breastfeeding Support Scores	2013	2014	2015	2017
Percentage of live births occurring at Baby-Friendly facilities	0.90%	1.70%	2.20%	6.80%
Percentage of breastfed infants receiving formula before two days of age	33.30%	26.60%	18.00%	24.90%

Source: ADHS BNPA 2013-2017
https://www.azdhs.gov/documents/prevention/nutrition-physical-activity/bnpa-breastfeeding-report.pdf?v=20220803

Table 71. mPINC Domain Subscores: Arizona versus National Averages, 2020

Domain	Arizona Subscore	National Subscore
Immediate Postpartum Care	79	83
Rooming In	80	76
Feeding Practices	79	82
Feeding Education and Support	90	92
Discharge Support	73	79
Institutional Management	66	71
Total Score	78	81

Source: CDC Maternity Practices in Infant and Nutrition Care (mPINC), 2020

Table 72. Percent of Hospitals Following Immediate Postpartum Care Measures in Arizona, 2020

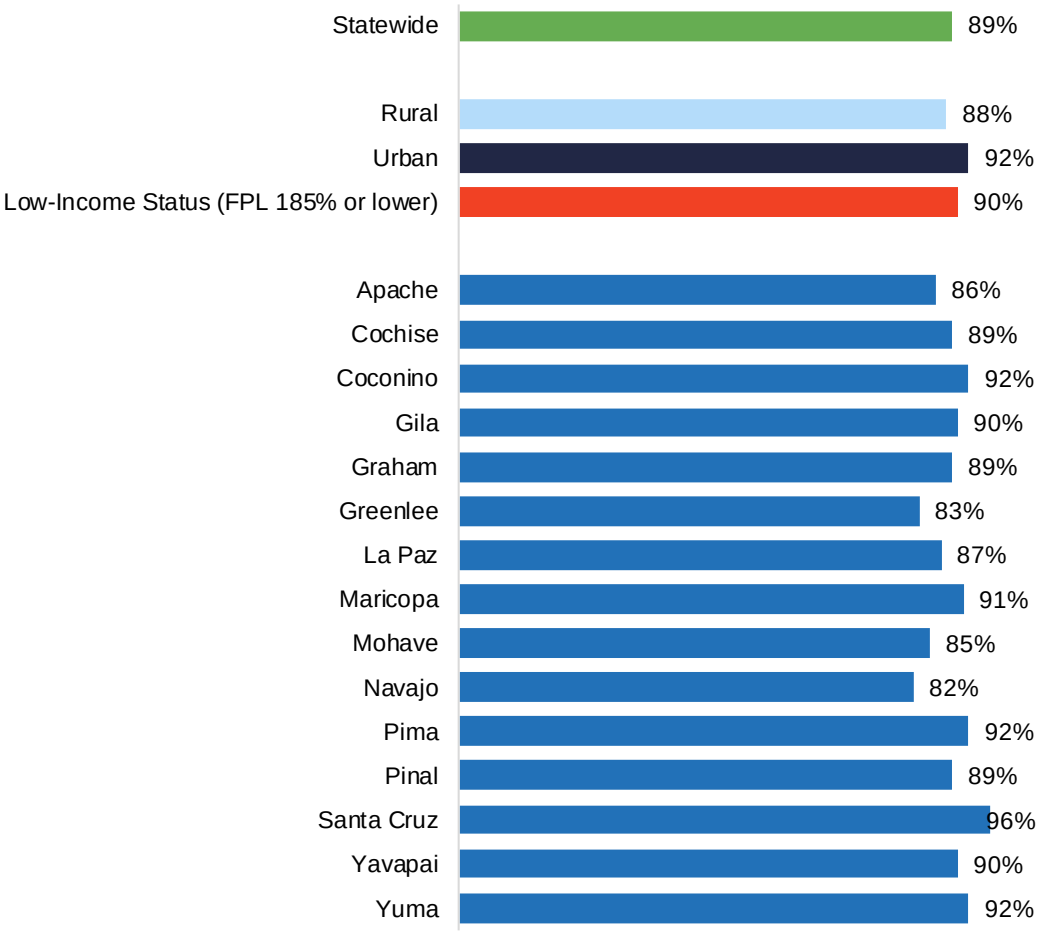
Immediate Postpartum Care	Hospitals with Ideal Response (%)
Newborns remain in uninterrupted skin-to-skin contact for at least 1 hour or until breastfed (vaginal delivery)	65%
Newborns remain in uninterrupted skin-to-skin contact for at least 1 hour or until breastfed (cesarean delivery)	41%
Mother-infant dyads are NOT separated before rooming in (vaginal delivery)	87%
Newborns are monitored continuously for the first 2 hours after birth	70%
Rooming In	
Mother-infant dyads are rooming in 24 hours/day	96%
Routine newborn exams, procedures, and care occur in the mother's room	22%
Hospital has a protocol requiring frequent observations of high-risk mother-infant dyads	83%
Feeding Practices	
Few breastfeeding newborns receive infant formula	26%
Hospital does NOT perform routine blood glucose monitoring on newborns not at risk for hypoglycemia	87%
When breastfeeding mothers request infant formula, staff counsel them about possible consequences	57%
Feeding Education and Support	
Mothers whose newborns are fed formula are taught feeding techniques and how to safely prepare/feed formula	61%
Breastfeeding mothers are taught/shown how to recognize/respond to feeding cues, to breastfeed on demand, and to understand the risks of artificial nipples/pacifiers	73%
Breastfeeding mothers are taught/shown how to position and latch their newborn, assess effective breastfeeding, and hand express milk	64%
Discharge Support	
Discharge criteria for breastfeeding newborns requires direct observation of at least 1 effective feeding at the breast within 8 hours of discharge	74%
Discharge criteria for breastfeeding newborns requires scheduling of the first follow-up with a health care provider	83%
Hospital's discharge support to breastfeeding mothers includes in-person follow-up visits/appointments, personalized phone calls, or formalized, coordinated referrals to lactation providers	91%
Hospital does NOT give mothers any of these items as gifts or free samples: infant formula; feeding bottles/nipples, nipple shields, or pacifiers; coupons, discounts, or educational materials from companies that make/sell infant formula/feeding products	43%
Institutional Management	

Nurses are required to demonstrate competency in assessing breastfeeding (milk transfer and maternal pain), assisting with breastfeeding (positioning and latch), teaching hand expression and safe formula preparation/feeding, and demonstrating safe skin-to-skin practices	61%
Hospital requires nurses to be formally assessed for clinical competency in breastfeeding support/lactation management	61%
Hospital records/tracks exclusive breastfeeding throughout the entire hospitalization	91%
Hospital pays a fair market price for infant formula	30%
Hospital has 100% of written policy elements	26%

Source: CDC Maternity Practices in Infant and Nutrition Care (mPINC), 2020

The Extension Needs Assessment also asked about infant and child health, which 89% of respondents (and 92% of urban respondents) considered extremely or very important. Statewide, infant and child health was ranked 14th of all 99 priorities across the multiple content areas and ranked 6th of the 26 health and community wellbeing topics. As with maternal health, infant and child health was prioritized highest in Santa Cruz County (96%), though it is worth noting that several counties had more than 90% of people rate infant and child health as an important priority (Figure 52).

Figure 52. Arizona survey respondents who rated "Infant and child health" as an 'extremely' or 'very' important priority to address in their community



Source: 2022 Arizona Cooperative Extension Needs Assessment

The Healthy People 2030 target for preterm birth is 9.4%, which Arizona met in 2019 (9.3%), though there was a higher proportion of preterm births among those paid for by AHCCCS. A similar trend was seen for low birthweight births, which were slightly higher among births paid for by AHCCCS (8%) compared to all births in

the state (7.4%). Additionally, 8% of births in 2019 required newborn intensive care and 4.7% involved abnormal conditions of the newborn (e.g., ventilation, neonatal sepsis, birth injury) (Table 73).

Table 73. Characteristics of births, 2019

	Total births	Paid by AHCCCS
Preterm births (<37 weeks)	9.3%	10.0%
Low birthweight births (<2,500 grams)	7.4%	8.0%
Required newborn intensive care	8.0%	
Abnormal conditions of the newborn	4.7%	

Source: AZDH Vital Statistics, Table 1B-32 https://pub.azdhs.gov/health-stats/report/ahs/ahs2019/excel/t1b32.xlsx

Care and education systems

Early childhood education systems

In fiscal year 2022 (FY22), SNAP-Ed local implementing agencies (LIAs) reported 29 active early care and education (ECE) partnerships with providers and 17 active partnerships with regional and community organizations across Arizona (Table 74). Nearly all of these partnerships, across organization type, involved efforts to address policy, systems, and environmental changes. Partnerships with providers were more likely to address direct education (DE) and provide one-way assistance, while partnerships with regional and community organizations were more likely to involve two-way mutual support and services (Table 75). The strength of partnership with ECEs, related to communication, coordination, cooperation, and collaboration, varied across the five-level spectrum. Two-thirds (67%) of ECE partnerships were rated as the two highest levels of collaboration, with well-established or maturing relationships around PSE and/or multilevel interventions (Table 76).

Table 74. SNAP-Ed local implementing agencies' (LIA) partnerships in early care & education (ECE) system, FY22

	n
AZ counties with LIAs	15
AZ counties with LIAs working in ECE-based systems in FY22	13
Active partnerships with ECE providers	29
Active partnerships with regional/community organizations	17

Source: AZ Health Zone FY22 Evaluation Report

Table 75. Activities of LIA partnerships in FY22

	LIA-ECE provider partnerships	LIA-regional or community organization partnerships
Addressed policy, systems and environmental change (PSEs)	100%	94%
Addressed direct education (DE)	72%	24%
Involved Social Media	7%	0%
LIA to ECE Assistance (one-way exchange)	72%	24%
Mutual Support and Services (two-way exchange)	28%	76%

Source: AZ Health Zone FY22 Evaluation Report

Table 76. How LIAs described their relationships with ECE partners in FY22 report narratives

	Percent of LIA-ECE partnerships	Number of communities	Number of counties
Well-established relationships around rich PSE and/or multilevel interventions	36%	14	9
Maturing relationships around rich PSE and/or multilevel interventions	33%	13	7
Low-intensity relationships through simple information sharing and/or direct education (DE)	31%	12	7
Starting, rebuilding, or maintaining relationships	21%	8	6
Difficulty starting relationships with non-responsive or disinterested ECEs	12%	4	3

Source: AZ Health Zone FY22 Evaluation Report

Go NAPSACC (University of North Carolina at Chapel Hill's Nutrition and Physical Activity Self-Assessment for Child Care tool) is a national program focused on helping ECEs improve the health of young children through practices, policies, and environmental changes focused on healthy eating, physical activity, and oral health.[47] Go NAPSACC addresses topics (child nutrition, breastfeeding and infant feeding, farm to ECE, oral health, infant and child physical activity, outdoor play and learn, and screen time) and has an associated self-assessment module for each.

In FY21, AZ Health Zone adopted six of the seven modules (excluding oral health), and partner ECEs could select any of the six. A total of 276 assessments were completed by partner ECEs. Changes in mean scores were calculated from pre-assessment to post-assessment to show change over time. Mean scores for four out of six showed significant change over time. The most notable change was in breastfeeding and infant feeding practices (d=0.76), with smaller practical changes seen in child nutrition, infant and child physical activity, and screen time (Table 77). When comparing mean changes by type of provider, Head Starts showed significant changes over time in practices compared to other ECEs. While both types of providers showed significant changes in child nutrition and breastfeeding, Head Starts also showed significant changes in infant and child physical activity and screen time (Table 78).

In FY22, Arizona SNAP-Ed LIAs in five counties participated in learning collaboratives (i.e., communities of practice) as part of the Nemours Foundation "Better Together" grant. The learning collaboratives were intended to bring LIAs and ECEs together to work collaboratively on improving their Go NAPSACC efforts. There were a total of 73 learning collaborative actions across the state, the majority of which took place in Maricopa County (n=53) (Table 79).

Table 77. Go NAPSACC Assessments - mean score changes (from 1 - weakest to 4 - best practice)

	Pre	Post	Significance	Effect size (Cohen's d)
Breastfeeding and infant feeding (n=47)	2.5	3	p<0.001	0.76
Child nutrition (n=48)	3.3	3.6	p<0.001	0.69
Infant and child physical activity (n-48)	3.2	3.4	p<0.001	0.48
Screen time (n=45)	3	3.2	p<0.001	0.46
Outdoor play and learning (n=10)	2.9	3.2		
Farm to ECE (n=4)	2.1	2.2		

Source: AZ Health Zone FY22 Evaluation Report

Table 78. Go NAPSACC score changes (from 1 - weakest practice to 4 - best practice) for Head Start and other ECE providers

	Head Start			Other ECE		
	Pre	Post	Significance	Pre	Post	Significance
Child nutrition	3.5	3.7	p<0.001	3	3.4	p<0.001
Infant and child physical activity	3.2	3.5	p<0.001	3.2	3.3	
Screen time	3	3.3	p<0.001	2.9	3.1	
Breastfeeding	2.6	2.9	p<0.01	2.2	3	p<0.001
Outdoor play and learning	3	3.2		2.9	3.2	
Farm to ECE	2	2.3		2.6	2.1	

Source: AZ Health Zone FY22 Evaluation Report

Table 79. Go NAPSACC Learning Collaborative activities reported in FY22, by County

	n
Total Learning Collaborative actions	73
Maricopa	53
Cochise	9
Pima	8
Coconino	2
Yuma	1

Source: AZ Health Zone FY22 Evaluation Report

Empower Program

The Empower Program, overseen by the Arizona Department of Health Services (ADHS), is a public health program for state licensed and certified child care facilities in Arizona focused on strategies to improve child health. By participating in Empower, facilities receive a 50% discount on child care licensing fees.[48] Empower promotes the implementation of ten standards –

1. Physical activity
2. Sun safety
3. Breastfeeding friendly
4. Child & Adult Care Food Program (CACFP)
5. Limiting fruit juice
6. Family-style meals
7. Oral health
8. Staff training
9. ASHLine (Arizona Smokers' Helpline)
10. Smoke-free campus

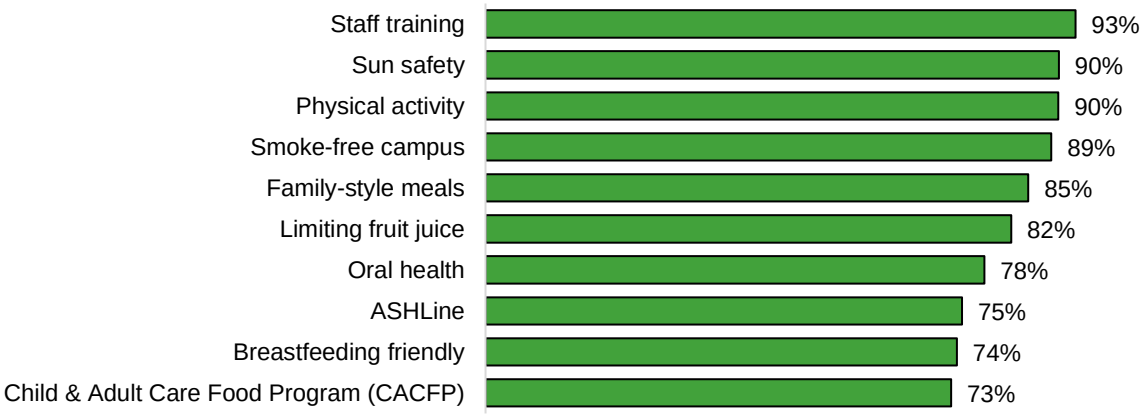
Data on implementation of Empower standards is available for seven years (SFY14-SFY20) (Table 80). Of the 1,208 facilities surveyed in 2019-2020 (Year 7), the majority of facilities had reported that they had implemented written policies for all 10 Empower standards. The most common standards with written policies were staff training (93%), sun safety (90%), and physical activity (90%), while the least common were the CACFP program (73%), breastfeeding friendly standards (74%), and ASHline (75%) (Figure 53).

Table 80. Number of Surveys Analyzed Each Year

Year	State Fiscal Year	N
1	July 1, 2013 – June 30, 2014	1,527
2	July 1, 2014 – June 30, 2015	1,109
3	July 1, 2015 – June 30, 2016	1,667
4	July 1, 2016 – June 30, 2017	2,100
5	July 1, 2017—June 30, 2018	2,009
6	July 1, 2018 – June 30, 2019	2,050
7	July 1, 2019 – June 30, 2020	1,308

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Figure 53. Percent of facilities reporting having written policies by Empower standard in Year 7, 2019-2020



Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Each Empower standard includes multiple associated components. ADHS tracked the proportion of facilities meeting all or some of the components of each standard over time. The largest increases in the percentage of facilities implementing all components of an Empower standard were for physical activity (43.8% in Year 1 to 73.8% in Year 7), oral health (28.5% in Year 1 to 53.9% in Year 7), and limiting fruit juice (50.4% in Year 1 to 72.6% in Year 7). In addition to having the lowest rate of written policy implementation in Year 7, the proportion of facilities with all components of the CACFP standard in place remained relatively steadily around 62% from Year 4 to 7 (Table 81 through Table 90).

Table 81. Empower Implementation Report: Physical Activity Standards Implementation in Licensed Child Care Facilities

1. Physical activity	All	Some
Year 1	43.8%	55.9%
Year 2	51.4%	47.9%
Year 3	55.3%	44.3%
Year 4	69.1%	30.7%
Year 5	73.0%	27.0%
Year 6	74.4%	25.1%
Year 7	73.8%	25.1%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 82. Empower Implementation Report: Sun Safety Standards Implementation in Licensed Child Care Facilities

2. Sun safety	All	Some
Year 1	50.1%	49.1%
Year 2	60.0%	39.0%
Year 3	63.6%	35.8%
Year 4	66.4%	33.2%
Year 5	68.9%	30.9%
Year 6	72.7%	26.6%
Year 7	70.8%	27.8%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 83. Empower Implementation Report: Breastfeeding Standards Implementation in Licensed Child Care Facilities

3. Breastfeeding	**All**	**Some**
Year 1	39.9%	34.9%
Year 2	45.2%	34.6%
Year 3	49.1%	32.1%
Year 4	48.7%	31.8%
Year 5	50.7%	30.4%
Year 6	54.1%	28.0%
Year 7	54.1%	30.7%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 84. Empower Implementation Report: Child and Adult Food Program Standards Implementation

4. Child and adult care food program	Full	Partial
Year 4	61.8%	2.5%
Year 5	62.5%	2.5%
Year 6	62.5%	2.0%
Year 7	62.3%	2.4%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 85. Empower Implementation Report: Fruit Juice Standards Implementation in Licensed Child Care Facilities

5. Fruit juice	All	Some
Year 1	50.4%	49.2%
Year 2	60.7%	38.6%
Year 3	62.7%	37.0%
Year 4	72.3%	27.3%
Year 5	75.1%	24.5%
Year 6	74.5%	24.3%
Year 7	72.6%	25.9%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 86. Empower Implementation Report: Family-style meals Standards Implementation in Licensed Child Care Facilities

6. Family-style meals	All	Some
Year 1	57.4%	41.4%
Year 2	62.6%	35.3%
Year 3	68.0%	30.1%
Year 4	69.8%	29.0%
Year 5	70.7%	27.9%
Year 6	72.1%	26.0%
Year 7	70.7%	26.5%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 87. Empower Implementation Report: Oral Health Standards Implementation in Licensed Child Care Facilities

7. Oral health	All	Some
Year 1	28.5%	69.0%
Year 2	33.1%	65.1%
Year 3	35.1%	62.5%
Year 4	45.6%	51.8%
Year 5	54.3%	43.1%
Year 6	56.5%	40.6%
Year 7	53.9%	42.8%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 88. Empower Implementation Report: Staff Training Standards Implementation in Licensed Child Care Facilities

8. Staff Training	All	Some
Year 4	76.0%	21.3%
Year 5	86.5%	11.2%
Year 6	87.7%	9.3%
Year 7	85.4%	10.6%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 89. Empower Implementation Report: ASHLine Standards Implementation in Licensed Child Care Facilities

9. ASHLine	All	Some
Year 4	67.1%	24.4%
Year 5	72.9%	19.8%
Year 6	72.6%	27.4%
Year 7	71.0%	29.0%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 90. Empower Implementation Report: Smoke-free campus Standards Implementation in Licensed Child Care Facilities

10. Smoke-free campus	All	Some
Year 1	68.9%	26.7%
Year 2	74.8%	22.2%
Year 3	75.3%	22.2%
Year 4	77.4%	19.6%
Year 5	79.9%	16.8%
Year 6	79.8%	16.1%
Year 7	77.4%	18.0%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

School systems

A local school wellness policy (LWP) is a written document that guides a school district or local educational agency's (LEA) efforts to promote student health, well-being, and ability to learn.[49] In FY22, the State Evaluation Team (SET) assessed the quality of written LWPs using the Rudd Center for Food Policy & Obesity's WellSAT 3.0, a quantitative best practices assessment tool to score and improve LWPs.[50] Policies are scored on their comprehensiveness (i.e., the extent to which recommended content areas are covered in the policy) and strength (i.e., how strongly the content is stated), with scores ranging from 0 to 100.[51]

In FY22, participating Arizona districts had, on average, the strongest and most comprehensive policies related to nutrition education, implementation and evaluation, and competitive food and drinks (Table 91). From FY20 to FY22, most LWP best practices showed significant increases in strength, with medium effect sizes seen for competitive food and drinks, wellness promotion and marketing, PE and physical activity, and nutrition education (Table 92). When split out by K-8 versus K-12 school districts, K-8 districts showed notably stronger and more comprehensive LWPs compared to K-12 districts in both FY20 and FY22 (Table 93).

Table 91. Mean scores for 35 Local Wellness Policies (LWPs) assessed, FY22

	Comprehensiveness	Strength
Nutrition Education	88	51
Implementation and evaluation	83	57
Competitive Foods & Drinks	71	43
School Meals	58	33
PE & physical activity	58	28
Marketing	56	38
TOTAL	69	42

Source: AZ Health Zone FY22 Evaluation Report
Sample: 20 matched LWPs within districts partnering with SNAP-Ed

Table 92. Local Wellness Policy (LWP) mean strength scores (from 0, worst to 100, best) across WellSAT sections, FY20 and FY22

	FY20	FY22	Significance	Effect size (Cohen's d)
Total strength	**47**	**53**		**d=0.63**
Competitive foods & drinks	45	50	p<0.05	d=0.79
Wellness promotion & marketing	46	50	p<0.05	d=0.77
PE & physical activity	33	39	p<0.05	d=0.74
Nutrition education	56	65	p<0.05	d=0.66
School meals	36	43		d=0.55
Implementation, evaluation, & communication	66	69		

Source: AZ Health Zone FY22 Evaluation Report
Sample: 20 matched LWPs within districts partnering with SNAP-Ed

Table 93. Comprehensiveness and strength of LWPs in K-8 and K-12 Districts, FY20 and FY22

	FY20	FY22
K-8 Comprehensiveness	83	86
K-12 Comprehensiveness	68	72
K-8 Strength	61	68
K-12 Strength	36	40

Source: AZ Health Zone FY22 Evaluation Report
Sample: 20 matched LWPs within districts partnering with SNAP-Ed

The Smarter Lunchrooms Movement (SLM) promotes evidence-based, low- and no-cost approaches to encourage students to select and consume the healthiest food in the lunchroom.[52] SLM includes four steps for improving lunchrooms –

1. Spot – Complete the baseline SLM scorecard
2. Plan – Develop an action plan based on Step 1
3. Do – Enact the Step 2 action plan
4. Prove – Complete a follow-up SLM scorecard

In FY22, a total of 23 schools participated in SLM, including 7 that completed all four steps of the SLM (Table 94). Baseline (Step 1) scores varied for schools assessed in 2020 versus 2022, though across both years moving more white milk, focusing on fruit, varying vegetables, and lunchroom atmosphere scores were highest (Table 95). Student involvement and boosting reimbursable meals scores were lowest at baseline, though they showed some of the largest increases over time for schools that completed the follow-up survey. Focus on fruit also had one of the highest increases over time and the highest mean score at follow-up (91%) (Table 96).

Table 94. Schools participating in the Smarter Lunchrooms Movement (SLM), FY22

	Number of schools
Elected to participate in the 4-step SLM program	23
Completed step 1	23
Completed all 4 steps	7

Source: AZ Health Zone FY22 Evaluation Report

Table 95. Mean Step 1 (baseline) SLM scorecard results, 2020 and 2022

	2020	2022
Move More White Milk	65%	67%
Focus on Fruit	63%	62%
Vary the Vegetables	63%	68%
Highlight the Salad	61%	48%
Lunchroom Atmosphere	60%	70%
Total Mean Score	51%	57%
School Community Involvement	47%	63%
Student Involvement	34%	36%
Boost Reimbursable Meals	33%	41%

Source: AZ Health Zone FY22 Evaluation Report
Sample - All 23 schools that completed step 1

Table 96. SLM mean scorecard change from Step 1 (baseline) to Step 4 (follow-up), 2022

	Step 1	Step 4	Change
Student Involvement	31%	69%	38%
Focus on Fruit	69%	91%	22%
Boost Reimbursable Meals	48%	61%	13%
Highlight the Salad	61%	72%	11%
Total Mean Score	64%	75%	11%
Vary the Vegetables	70%	80%	10%
Lunchroom Atmosphere	83%	91%	8%
Move More White Milk	80%	86%	6%
School Community Involvement	63%	65%	2%

Source: AZ Health Zone FY22 Evaluation Report
Sample - 7 schools that completed steps 1 through 4

The Kid's Activity and Nutrition Questionnaire (KAN-Q) assesses behavior, knowledge, and attitudes related to nutrition and physical activity among 4th-8th graders using a post-intervention assessment. The KAN-Q is specifically encouraged for use with multi-level interventions in schools (i.e., direct education and PSEs).[53] In FY22, a total of 751 youth participants were surveyed across 10 counties, with the largest proportion in Santa Cruz, Apache, and Maricopa counties. The majority of youth surveyed were in 4th grade (56%) and they were evenly split between boys and girls (Table 97).

Students were assessed on their knowledge of USDA Dietary Guidelines and, overall, only about half (47%) of students knew the guidelines for fruits and vegetables and physical activity, with even smaller proportions knowing the guidelines for whole grains (34%) and milk type (28%) (Table 98). Respondents showed generally positive attitudes towards MyPlate food categories and physical activity, with the highest mean ratings for fruit (4.7/5) and physical activity (4.5/5), and lowest ratings for whole grains (3.7/5) and low-fat milk (3.7/5) (Table 99). In terms of physical activity, respondents were most likely to be physically active three or more days per week during recess (50%), and least likely during P.E. (15%) or team sports (13%) (Table 100). Respondents were also significantly more likely to be physically active in districts with stronger and more comprehensive LWPs and, on average, had more weekly bouts of physical activity at schools participating in SLM (Table 101 & Table 102).

Table 97. KAN-Q survey participant characteristics, FY22

	n
Apache	145
Coconino	27
Gila	53
Greenlee	48
La Paz	16
Maricopa	111
Mohave	87
Pima	60
Santa Cruz	181
Yavapai	23
Total participants	751
	%
8th	5%
7th	11%
6th	15%
5th	12%
4th	56%
3rd	1%
	%
Girls	47%
Boys	47%
No answer	6%

Source: AZ Health Zone FY22 Evaluation Report

Table 98. KAN-Q respondents' knowledge of the USDA Dietary Guidelines, FY22

	%
Fruits and vegetables	47%
Physical activity	47%
Whole grains	34%
Milk type	28%

Source: AZ Health Zone FY22 Evaluation Report

Table 99. KAN-Q respondents' attitudes toward MyPlate food categories and physical activity, rated on a scale of 1 (really don't like) to 5 (really like), FY22

	%
Fruit	4.7
Physical activity	4.5
Low-sugar beverages	3.9
Vegetables	3.8
Whole grains	3.7
Low-fat milk	3.7

Source: AZ Health Zone FY22 Evaluation Report

Table 100. KAN-Q settings where students are active for 3+ weekdays, FY22

	%
Recess	50%
After school	36%
Weekend	36%
Before school	27%
P.E.	15%
Team sports	13%

Source: AZ Health Zone FY22 Evaluation Report

Table 101. KAN-Q outcomes in districts with varying Local Wellness Policies (LWPs), FY22

	Less comprehensive LWPs	More comprehensive LWPs	Weaker LWPs	Stronger LWPs
Active 3+ days before school	18%	31%*	14%	30%**
Active 3+ days during recess	32%	63%***	23%	59%***
Active 3+ days after school	24%	41%**	17%	40%***
Active both weekend days	23%	38%*	17%	37%***

*p<.05, **p<.01, ***p<.001
Source: AZ Health Zone FY22 Evaluation Report

Table 102. KAN-Q respondents' average number of weekly activity bouts by SLM-participation, FY22

	SLM schools	Non-SLM schools
Recess	3	2.6
After school	2.4	2
On weekends	1.4	1.2

Number of weekly activity bouts were significantly higher (p<.05) for each of the above settings
Source: AZ Health Zone FY22 Evaluation Report

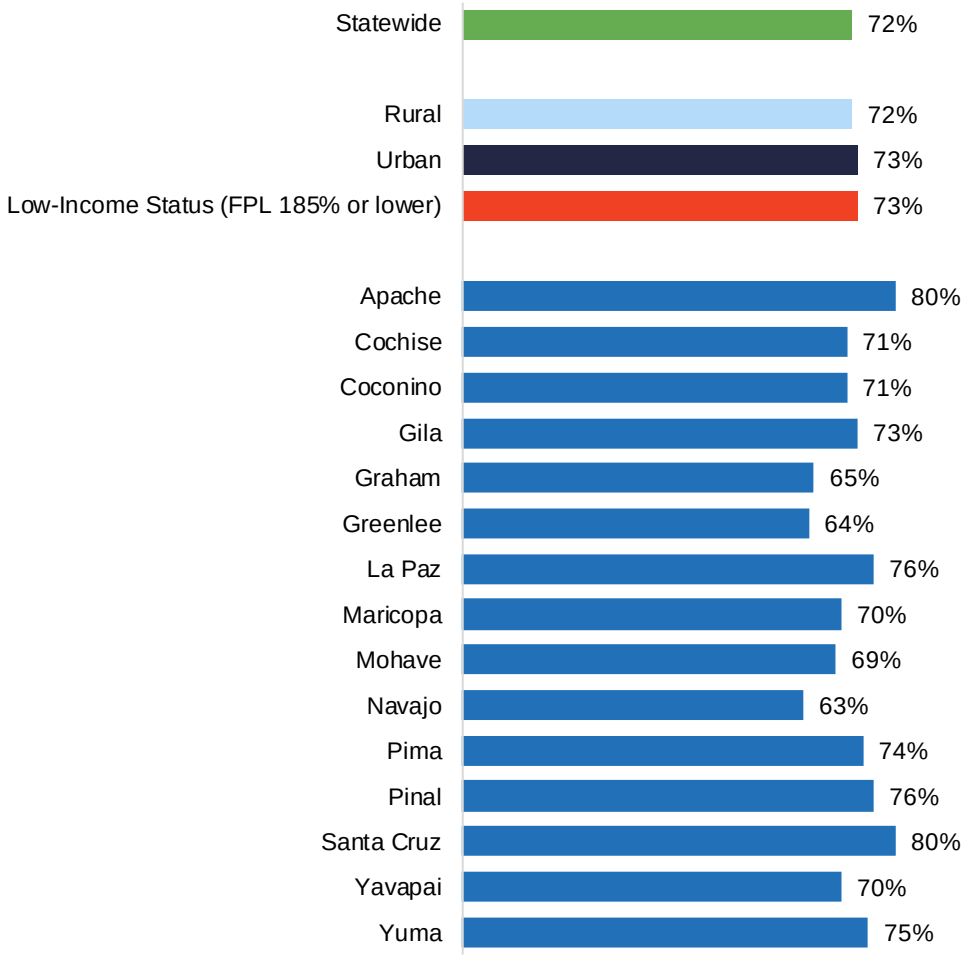
Community engagement and coordination

Community engagement has been identified as a key component of successful SNAP-Ed work. AZ Health Zone identified three foundational principles to deepen policy, systems, and environmental change work in SNAP-Ed's efforts in Arizona – community engagement, trauma informed approaches, and health equity.[54] AZ Health Zone defines community engagement as "engaging residents in SNAP-Ed eligible communities in the program's process and planning, using consulting, involving, and collaborating techniques."

In the Extension Needs Assessment, 72% of Arizona residents surveyed identified 'civic engagement and community leadership (e.g., volunteering, community involvement)' as a priority in their community, with an even larger proportion in Apache and Santa Cruz counties (80%) (Figure 54).

AZ Health Zone assessed LIAs on their community coordination efforts related to early childhood education. AZ Health Zone defines community coordination as "coordinating with community partners such as schools, organizations, and service providers to support shared PSE goals." In FY22, there were a total of 55 Community Coordination actions taken across six counties in the state, with the largest number in Pima County (n=19) (Table 103).

Figure 54. Arizona survey respondents who rated “Civic engagement and community leadership (e.g., volunteering, community involvement)” as an ‘extremely’ or ‘very’ important priority to address in their community



Source: 2022 Arizona Cooperative Extension Needs Assessment

Table 103. Community Coordination activities reported in FY22, by County

	n
Total Community Coordination actions	55
Pima	19
Maricopa	14
Cochise	10
Apache	6
Navajo	4
Mohave	2

Source: AZ Health Zone FY22 Evaluation Report

Trauma-informed approaches

AZ Health Zone defines a trauma-informed approach as "a systems approach to understanding the many factors that may influence an individual's readiness and/or ability to change their behaviors. This ensures that programs, services, and supports identify, respond to, and reduce the impact of trauma."[55] A trauma-informed lens has been identified as foundational to deepening both the direct education and policy, systems, and environmental change work that SNAP-Ed is undertaking in Arizona.

One way to measure potential experiences of trauma in childhood (0-17 years) is using the Adverse Childhood Experiences (ACEs) score. The National Survey of Children's Health asks parents/caregivers whether their child has experienced any of eight adverse childhood experiences, using an adapted set of questions modeled after the original ACE instrument which was intended for adults.[56] Compared to U.S. children, Arizona children are slightly more likely to have two or more ACEs (Table 104).

Table 104. ACES experienced by children, 2019-2020

	US	Arizona
0 ACEs	60.2%	56.5%
1 ACE	21.7%	21.1%
2 or more ACEs	18.1%	22.4%

Source: NSCH, 2019-2020

SNAP-Ed local implementing agencies (LIAs) began implementing trauma-informed approaches (TIA) in FY21. In FY22, 15 managers in 12 counties were interviewed about their experiences with TIAs (Table 105). Nearly all (93%) reported that their staff applied TIA principles and a majority (60%) used concepts aligned with AZHZ's Language of Health guide. A smaller proportion noted the disconnect between some of the TIA concepts and their communities' values or requested TIA training and content specific to tribal communities (Table 106). When asked about their leadership's stance on TIA, just over half (53.3%) felt that top leaders in their organization had a positive or neutral stance, and a slightly lower portion felt their direct supervisor had a positive or neutral stance (46.7%) (Table 107). LIA staff were also surveyed about their progress in implementing TIA using a matched pre-post survey and showed increases over time in their knowledge and self-efficacy related to TIA. While they expressed that coworker and supervisor support for TIA increased over time, organizational support decreased (Table 108).

Table 105. Characteristics of LIA Managers interviewed in FY22

	n
Total managers interviewed	15
Counties represented	12
Urban counties (Maricopa, Pima)	4
Rural counties	11
5 or fewer years of managerial experience	5
6-10 years of managerial experience	5
More than 10 years of managerial experience	5

Source: AZ Health Zone FY22 Evaluation Report

Table 106. Interviews that included the following information about implementing TIA

	n	%
Reported that their staff apply TIA principles	14	93%
Used concepts aligned with AZHZ's Language of Health guide	9	60%
Described their own motivation for implementing TIA	6	40%
Reported concern around triggering trauma	5	33%
Connected TIA with community engagement	4	27%
Described a lack of resonance between their communities' values and some TIA concepts (especially related to historical/cultural issues)	3	20%
Requested tailored TIA training and content for tribal communities	3	20%

Source: AZ Health Zone FY22 Evaluation Report

Table 107. Perception of organizational stances on TIA

	Positive or neutral stance	Mixed stance	Negative stance	Unsure
Top leader (e.g., Health Department or Extension Director)	53.3%	13.3%	0%	33.3%
Supervisor	46.7%	13.3%	13.3%	26.7%

Source: AZ Health Zone FY22 Evaluation Report

Table 108. LIA Staff Survey (matched pre-post)

	Pre score	Post score	Maximum score
TIA Knowledge	3.9	4.4	5
TIA Self-efficacy	4.8	5.8	7
Positive beliefs	6.2	6.2	7
Perceived co-worker and supervisor support		Increased	
Perceived organizational support		Decreased	

Source: AZ Health Zone FY22 Evaluation Report

Around the Table, Nourishing Families (ATT) is a trauma-informed curriculum for adults focused on food preparation skills and healthy eating. In FY22, four LIAs in eight counties implemented ATT and a total of 40 ATT surveys were collected across the eight counties (Table 109 & Table 110). The majority of respondents were female (90%) and had children (60%). A large proportion of respondents were also Hispanic (65%), with nearly half completing the survey in Spanish (48%). Participants showed a notable increase in their daily fruit consumption after completing ATT, with 47% of participants saying they ate more fruits after participating (Table 111 & Table 112). Participants also showed a notable increase in food skills, including reading food labels and planning meals (Table 113).

Table 109. Around the Table (ATT) participant characteristics for participating counties, FY22

	n
LIAs that implemented ATT workshop series	4
Counties that implemented ATT workshop series	8
	Number of assessments
Coconino	9
Cochise	5
Gila	5
Maricopa	11
Mohave	2
Pima	1
Santa Cruz	1
Yuma	6
Total assessments	40

Source: AZ Health Zone FY22 Evaluation Report

Table 110. Around the Table (ATT) participant characteristics by demographics, FY22

	n	%
Total surveys	40	100%
Respondents enrolled in SNAP	7	18%
Female	36	90%
Aged 30-49	27	68%
Hispanic	26	65%
Took surveys in Spanish	19	48%
Have kids age 2-18	24	60%

Source: AZ Health Zone FY22 Evaluation Report

Table 111. Fruit and Vegetable Consumption per day

	Before ATT	After ATT
Mean daily fruit consumption*	1.3	1.7
Mean daily vegetable consumption	1.4	1.6

*Large effect (d=0.85, p<.001)

Source: AZ Health Zone FY22 Evaluation Report

Table 112. Mean scores on ATT survey sections, from pre to post

	Pre	Post
Family Food Habits	3.8	3.6
Feelings	3.9	4
Food and nourishment	4.3	4.4
Food habits (mindfulness)	3.1	3.2
Food skills*	3.6	4

*Medium effect size (d=0.51)

Source: AZ Health Zone FY22 Evaluation Report

Table 113. Food skills that improved the most from pre to post

	Percent that improved in the skill from pre to post
Label reading (d=0.80)	53%
Meal planning (d=0.79)	47%
Preparing a healthy meal with few ingredients (d=0.53)	45%
Using nutrition advice to prepare balanced meals (d=0.47)	37%

Source: AZ Health Zone FY22 Evaluation Report

The next section is an appendix of additional tables related to the data already included in this report. Please see the beginning of the report for a Summary of findings and conclusions.

Appendix 1: Additional Tables and Figures

Population characteristics and economic circumstances

Demographics of the state and the SNAP-Ed population

Table 114. Age of Related Children Living in Households

Presence of Children	Percent of Total Population	Percent of population in households with incomes below 185% FPL
Children under 6 years only	8.8%	8.6%
Children 6-17 years only	26.2%	27.0%
Children in both age groups	13.8%	22.2%
No related children	51.5%	42.2%
Total	100%	100%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

Table 115. Employment Status of Parents Living in Households with Children

Parental employment status	Percent of Total Population	Percent of population in households with incomes below 185% FPL
Living with two parents: Both parents in labor force	37.1%	13.4%
Living with two parents: Father only in labor force	21.1%	20.9%
Living with two parents: Mother only in labor force	2.7%	2.8%
Living with two parents: Neither parent in labor force	1.7%	3.3%
Living with 1 parent: Father-in the labor force	8.4%	8.7%
Living with 1 parent: Father-not in labor force	1.2%	3.1%
Living with 1 parent: Mother in the labor force	21.2%	32.5%
Living with 1 parent: Mother not in labor force	6.6%	15.4%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates
Notes: From February-May 2020, approximately 338.7 thousand jobs were lost. From April 2020 to July 2022, 425.7 thousand jobs were gained, representing a replacement rate of 125.7 percent across the state
Top sectors: trade, transportation and utilities, financial activities, manufacturing, education and health services, construction, professional and business services, and information

Table 116. Number of workers in family during the past 12 months

Workers in family	Percent of Total Population	Percent of population in households with incomes below 185% FPL
No workers	14.4%	21.2%
1 Worker	30.4%	46.7%
2 workers	38.4%	24.9%
3 or more workers	16.8%	7.2%
Total	100%	100%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

Table 117. Households with kitchen and plumbing facilities, 2020

	Total households	Total population	Percent of population in households with incomes below 185% FPL
Complete kitchen facilities	98.6%	99.3%	98.5%
Complete plumbing facilities	98.6%	99.4%	98.5%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

Table 118. 2020 Federal Poverty Guidelines

2020 100% Federal Poverty Guideline	
Single person	$12,760
Additional person	$4,480

Source: U.S. Census Bureau, 2020 Decennial Census.

Native American Nations

Table 119. Households with a computer and internet

	Percent of households with a computer	Percent of households with a broadband Internet subscription
Cocopah Indian Tribe Reservation	87%	68%
Colorado River Indian Tribes Reservation	88%	77%
White Mountain Apache Tribe Reservation	64%	43%
Fort McDowell Yavapai Nation Reservation	90%	83%
Fort Mojave Indian Tribe Reservation and Trust Land	91%	81%
Quechan Indian Tribe Reservation	88%	82%
Gila River Indian Community Reservation	66%	55%
Havasupai Tribe Reservation and Trust Land		
Hopi Tribe Reservation and Trust Land	85%	32%
Hualapai Tribe Reservation	82%	77%
Kaibab Band of Paiute Indians Reservation	89%	81%
Ak Chin Indian Community Reservation and Trust Land	79%	67%
Navajo Nation Reservation and Trust Land	59%	33%
Pascua Yaqui Tribe Reservation and Trust Land	88%	72%
Salt River Pima-Maricopa Indian Tribe Reservation	91%	84%
San Carlos Apache Tribe Reservation	69%	60%
Tohono O'odham Nation Reservation and Trust Land	76%	61%
Tonto Apache Tribe Reservation and Trust Land	85%	64%
Yavapai-Apache Nation Reservation	87%	73%
Yavapai-Prescott Indian Tribe Reservation	93%	93%
Pueblo of Zuni Reservation and Trust Land	71%	46%

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Nutrition

Access to food retailers

Table 120. Access to all SNAP retailers by urbanicity

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Arizona	**90%**	**94%**	**81%**	**89%**
Urban	86%	95%	86%	95%
Suburban	100%	100%	66%	81%
Rural	92%	90%	92%	90%
Wilderness	61%	58%	61%	58%

Source: CRED custom tabulation

Table 121. Access to all SNAP retailers, by county

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	61%	55%	61%	55%
Cochise County	78%	89%	74%	85%
Coconino County	79%	80%	76%	78%
Gila County	79%	79%	79%	79%
Graham County	87%	84%	87%	84%
Greenlee County	79%	74%	79%	74%
La Paz County	90%	91%	90%	91%
Maricopa County	92%	97%	84%	94%
Mohave County	82%	89%	81%	89%
Navajo County	79%	67%	79%	67%
Pima County	93%	96%	78%	89%
Pinal County	94%	95%	72%	81%
Santa Cruz County	90%	92%	90%	92%
Yavapai County	77%	86%	74%	84%
Yuma County	89%	95%	80%	91%

Source: CRED custom tabulation

Table 122. Access to all SNAP retailers, by county and urbanicity

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	**61%**	**55%**	**61%**	**55%**
Rural	95%	93%	95%	93%
Wilderness	42%	39%	42%	39%
Cochise County	**78%**	**89%**	**74%**	**85%**
Urban	66%	86%	66%	86%
Suburban	100%	100%	44%	39%
Rural	93%	97%	93%	97%
Wilderness	64%	63%	64%	63%
Coconino County	**79%**	**80%**	**76%**	**78%**
Urban	81%	97%	81%	97%
Suburban	100%	100%	31%	46%
Rural	96%	97%	96%	97%
Wilderness	46%	42%	46%	42%
Gila County	**79%**	**79%**	**79%**	**79%**
Rural	89%	88%	89%	88%
Wilderness	54%	47%	54%	47%
Graham County	**87%**	**84%**	**87%**	**84%**
Rural	96%	95%	96%	95%
Wilderness	58%	52%	58%	52%
Greenlee County	**79%**	**74%**	**79%**	**74%**
Rural	91%	93%	91%	93%
Wilderness	66%	70%	66%	70%
La Paz County	**90%**	**91%**	**90%**	**91%**
Rural	97%	97%	97%	97%
Wilderness	84%	83%	84%	83%
Maricopa County	**92%**	**97%**	**84%**	**94%**
Urban	89%	97%	89%	97%
Suburban	100%	100%	73%	88%
Rural	94%	95%	94%	95%
Wilderness	56%	87%	56%	87%
Mohave County	**82%**	**89%**	**81%**	**89%**
Urban	59%	65%	59%	65%
Suburban	100%	100%	54%	25%
Rural	94%	98%	94%	98%
Wilderness	75%	75%	75%	75%
Navajo County	**79%**	**67%**	**79%**	**67%**
Rural	95%	93%	95%	93%
Wilderness	54%	43%	54%	43%

Pima County	**93%**	**96%**	**78%**	**89%**
Urban	90%	96%	90%	96%
Suburban	100%	100%	51%	70%
Rural	95%	97%	95%	97%
Wilderness	59%	60%	59%	60%
Pinal County	**94%**	**95%**	**72%**	**81%**
Urban	72%	83%	72%	83%
Suburban	100%	100%	48%	58%
Rural	99%	101%	99%	101%
Wilderness	77%	82%	77%	82%
Santa Cruz County	**90%**	**92%**	**90%**	**92%**
Rural	95%	94%	95%	94%
Wilderness	71%	71%	71%	71%
Yavapai County	**77%**	**86%**	**74%**	**84%**
Urban	51%	74%	51%	74%
Suburban	100%	100%	39%	34%
Rural	96%	98%	96%	98%
Wilderness	76%	78%	76%	78%
Yuma County	**89%**	**95%**	**80%**	**91%**
Urban	78%	89%	78%	89%
Suburban	100%	100%	61%	76%
Rural	99%	100%	99%	100%
Wilderness	85%	93%	85%	93%

Source: CRED custom tabulation

Table 123. Access to WIC retailers, by urbanicity

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Arizona	**69%**	**71%**	**51%**	**59%**
Urban	52%	60%	52%	60%
Suburban	100%	100%	33%	44%
Rural	86%	85%	86%	85%
Wilderness	22%	20%	22%	20%

Source: CRED custom tabulation

Table 124. Access to WIC retailers, by county

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	34%	28%	34%	28%
Cochise County	53%	67%	47%	61%
Coconino County	56%	52%	51%	49%
Gila County	66%	67%	66%	67%
Graham County	81%	76%	81%	76%
Greenlee County	47%	9%	47%	9%
La Paz County	64%	66%	64%	66%
Maricopa County	69%	74%	50%	60%
Mohave County	61%	72%	60%	71%
Navajo County	69%	57%	69%	57%
Pima County	72%	65%	47%	51%
Pinal County	85%	84%	51%	60%
Santa Cruz County	79%	87%	79%	87%
Yavapai County	54%	55%	50%	51%
Yuma County	82%	88%	60%	74%

Source: CRED custom tabulation

Table 125. Access to SNAP supermarkets or superstores, by urbanicity

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Arizona	**74%**	**74%**	**57%**	**63%**
Urban	62%	67%	62%	67%
Suburban	100%	100%	38%	49%
Rural	85%	83%	85%	83%
Wilderness	16%	15%	16%	15%

Source: CRED custom tabulation

Table 126. Access to SNAP supermarkets or superstores, by county

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	39%	33%	39%	33%
Cochise County	52%	66%	46%	60%
Coconino County	58%	55%	53%	53%
Gila County	64%	65%	64%	65%
Graham County	81%	77%	81%	77%
Greenlee County	54%	29%	54%	29%
La Paz County	44%	44%	44%	44%

Maricopa County	76%	77%	59%	65%
Mohave County	60%	70%	59%	69%
Navajo County	63%	51%	63%	51%
Pima County	78%	74%	56%	61%
Pinal County	83%	81%	49%	58%
Santa Cruz County	79%	87%	79%	87%
Yavapai County	56%	57%	52%	54%
Yuma County	80%	86%	59%	72%

Source: CRED custom tabulation

Table 127. Access to SNAP supermarkets or superstores, by county and urbanicity

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	**39%**	**33%**	**39%**	**33%**
Rural	92%	90%	92%	90%
Wilderness	9%	10%	9%	10%
Cochise County	**52%**	**66%**	**46%**	**60%**
Urban	26%	38%	26%	38%
Suburban	96%	96%	3%	0%
Rural	84%	93%	84%	93%
Wilderness	21%	23%	21%	23%
Coconino County	**58%**	**55%**	**53%**	**53%**
Urban	54%	67%	54%	67%
Suburban	98%	97%	0%	0%
Rural	93%	95%	93%	95%
Wilderness	9%	3%	9%	3%
Gila County	**64%**	**65%**	**64%**	**65%**
Rural	86%	80%	86%	80%
Wilderness	8%	10%	8%	10%
Graham County	**81%**	**77%**	**81%**	**77%**
Rural	94%	94%	94%	94%
Wilderness	36%	24%	36%	24%
Greenlee County	**54%**	**29%**	**54%**	**29%**
Rural	91%	93%	91%	93%
Wilderness	11%	15%	11%	15%
La Paz County	**44%**	**44%**	**44%**	**44%**
Rural	60%	59%	60%	59%
Wilderness	32%	28%	32%	28%
Maricopa County	**76%**	**77%**	**59%**	**65%**
Urban	65%	69%	65%	69%
Suburban	100%	100%	44%	57%

Rural	87%	85%	87%	85%
Wilderness	2%	0%	2%	0%
Mohave County	**60%**	**70%**	**59%**	**69%**
Urban	22%	30%	22%	30%
Suburban	100%	100%	0%	0%
Rural	90%	93%	90%	93%
Wilderness	9%	12%	9%	12%
Navajo County	**63%**	**51%**	**63%**	**51%**
Rural	94%	92%	94%	92%
Wilderness	13%	12%	13%	12%
Pima County	**78%**	**74%**	**56%**	**61%**
Urban	66%	69%	66%	69%
Suburban	99%	99%	29%	39%
Rural	82%	71%	82%	71%
Wilderness	18%	19%	18%	19%
Pinal County	**83%**	**81%**	**49%**	**58%**
Urban	45%	57%	45%	57%
Suburban	100%	100%	22%	32%
Rural	91%	91%	91%	91%
Wilderness	22%	25%	22%	25%
Santa Cruz County	**79%**	**87%**	**79%**	**87%**
Rural	95%	94%	95%	94%
Wilderness	10%	14%	10%	14%
Yavapai County	**56%**	**57%**	**52%**	**54%**
Urban	22%	33%	22%	33%
Suburban	100%	100%	17%	16%
Rural	88%	90%	88%	90%
Wilderness	27%	17%	27%	17%
Yuma County	**80%**	**86%**	**59%**	**72%**
Urban	60%	69%	60%	69%
Suburban	100%	100%	13%	11%
Rural	98%	99%	98%	99%
Wilderness	75%	83%	75%	83%

Source: CRED custom tabulation

Table 128. Access to SNAP-accepting farmers markers, by county and urbanicity

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	**0%**	**0%**	**0%**	**0%**
Rural	0%	0%	0%	0%
Wilderness	0%	0%	0%	0%

Cochise County	**17%**	**17%**	**11%**	**11%**
Urban	10%	15%	10%	15%
Suburban	93%	95%	1%	0%
Rural	15%	12%	15%	12%
Wilderness	7%	7%	7%	7%
Coconino County	**0%**	**0%**	**0%**	**0%**
Urban	0%	0%	0%	0%
Suburban	0%	0%	0%	0%
Rural	0%	0%	0%	0%
Wilderness	0%	0%	0%	0%
Gila County	**35%**	**25%**	**35%**	**25%**
Rural	47%	30%	47%	30%
Wilderness	5%	4%	5%	4%
Graham County	**0%**	**0%**	**0%**	**0%**
Rural	0%	0%	0%	0%
Wilderness	0%	0%	0%	0%
Greenlee County	**0%**	**0%**	**0%**	**0%**
Rural	0%	0%	0%	0%
Wilderness	0%	0%	0%	0%
La Paz County	**0%**	**0%**	**0%**	**0%**
Rural	0%	0%	0%	0%
Wilderness	0%	0%	0%	0%
Maricopa County	**12%**	**16%**	**4%**	**4%**
Urban	4%	4%	4%	4%
Suburban	27%	42%	0%	1%
Rural	28%	53%	28%	53%
Wilderness	1%	1%	1%	1%
Mohave County	**24%**	**30%**	**25%**	**31%**
Urban	0%	0%	0%	0%
Suburban	0%	0%	44%	125%
Rural	39%	40%	39%	40%
Wilderness	13%	20%	13%	20%
Navajo County	**0%**	**0%**	**0%**	**0%**
Rural	0%	0%	0%	0%
Wilderness	0%	0%	0%	0%
Pima County	**38%**	**22%**	**12%**	**6%**
Urban	7%	4%	7%	4%
Suburban	81%	76%	2%	0%
Rural	58%	41%	58%	41%
Wilderness	0%	0%	0%	0%
Pinal County	**34%**	**29%**	**3%**	**3%**

Urban	0%	0%	0%	0%
Suburban	73%	80%	1%	3%
Rural	8%	5%	8%	5%
Wilderness	0%	0%	0%	0%
Santa Cruz County	**0%**	**0%**	**0%**	**0%**
Rural	0%	0%	0%	0%
Wilderness	0%	0%	0%	0%
Yavapai County	**26%**	**18%**	**26%**	**18%**
Urban	5%	9%	5%	9%
Suburban	64%	46%	0%	0%
Rural	10%	4%	10%	4%
Wilderness	0%	0%	0%	0%
Yuma County	**59%**	**55%**	**59%**	**55%**
Urban	13%	18%	13%	18%
Suburban	33%	62%	1%	1%
Rural	19%	9%	19%	9%
Wilderness	0%	0%	0%	0%

Source: CRED custom tabulation

Table 129. Access to SNAP convenience stores, by county and urbanicity

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	**51%**	**47%**	**51%**	**47%**
Rural	95%	93%	95%	93%
Wilderness	27%	29%	27%	29%
Cochise County	**72%**	**85%**	**68%**	**80%**
Urban	61%	83%	61%	83%
Suburban	100%	100%	33%	27%
Rural	91%	95%	91%	95%
Wilderness	47%	49%	47%	49%
Coconino County	**77%**	**75%**	**73%**	**72%**
Urban	81%	97%	81%	97%
Suburban	100%	100%	11%	23%
Rural	96%	97%	96%	97%
Wilderness	35%	26%	35%	26%
Gila County	**68%**	**73%**	**68%**	**73%**
Rural	89%	88%	89%	88%
Wilderness	14%	18%	14%	18%
Graham County	**84%**	**78%**	**84%**	**78%**
Rural	96%	95%	96%	95%
Wilderness	42%	29%	42%	29%
Greenlee County	**78%**	**73%**	**78%**	**73%**
Rural	91%	93%	91%	93%
Wilderness	62%	69%	62%	69%
La Paz County	**82%**	**80%**	**82%**	**80%**
Rural	97%	97%	97%	97%
Wilderness	69%	61%	69%	61%
Maricopa County	**86%**	**95%**	**72%**	**88%**
Urban	79%	93%	79%	93%
Suburban	100%	100%	56%	77%
Rural	90%	92%	90%	92%
Wilderness	53%	82%	53%	82%
Mohave County	**73%**	**83%**	**73%**	**82%**
Urban	33%	42%	33%	42%
Suburban	100%	100%	44%	10%
Rural	92%	95%	92%	95%
Wilderness	73%	71%	73%	71%
Navajo County	**76%**	**62%**	**76%**	**62%**
Rural	95%	93%	95%	93%
Wilderness	46%	32%	46%	32%

Pima County	**91%**	**94%**	**72%**	**86%**
Urban	86%	95%	86%	95%
Suburban	100%	100%	40%	60%
Rural	95%	97%	95%	97%
Wilderness	50%	45%	50%	45%
Pinal County	**91%**	**93%**	**65%**	**76%**
Urban	54%	72%	54%	72%
Suburban	100%	100%	39%	48%
Rural	98%	101%	98%	101%
Wilderness	71%	78%	71%	78%
Santa Cruz County	**80%**	**87%**	**80%**	**87%**
Rural	93%	93%	93%	93%
Wilderness	23%	25%	23%	25%
Yavapai County	**72%**	**80%**	**68%**	**78%**
Urban	46%	68%	46%	68%
Suburban	100%	100%	28%	24%
Rural	96%	98%	96%	98%
Wilderness	52%	58%	52%	58%
Yuma County	**87%**	**94%**	**70%**	**86%**
Urban	73%	86%	73%	86%
Suburban	100%	100%	32%	50%
Rural	99%	100%	99%	100%
Wilderness	84%	92%	84%	92%

Source: CRED custom tabulation

Table 130. Access to 'other' SNAP retailers, by county and urbanicity

	SNAP Retailer- Other: Discount and Dollar Stores				SNAP Retailer- Other: Small and Specialty Grocers				SNAP Retailer- Other: Pharmacies			
	10 miles for suburbs		1 mile for suburbs		10 miles for suburbs		1 mile for suburbs		10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	**26%**	**16%**	**26%**	**16%**	**16%**	**14%**	**16%**	**14%**	**0%**	**0%**	**0%**	**0%**
Rural	48%	34%	48%	34%	30%	32%	30%	32%	0%	0%	0%	0%
Wilderness	14%	8%	14%	8%	9%	6%	9%	6%	0%	0%	0%	0%
Cochise County	**65%**	**80%**	**60%**	**76%**	**41%**	**59%**	**35%**	**54%**	**27%**	**37%**	**21%**	**31%**
Urban	35%	62%	35%	62%	16%	38%	16%	38%	14%	15%	14%	15%
Suburban	100%	100%	27%	34%	82%	90%	5%	19%	85%	90%	0%	1%
Rural	93%	97%	93%	97%	73%	82%	73%	82%	42%	53%	42%	53%
Wilderness	55%	54%	55%	54%	8%	12%	8%	12%	1%	3%	1%	3%
Coconino County	**50%**	**51%**	**46%**	**49%**	**33%**	**33%**	**28%**	**30%**	**28%**	**19%**	**23%**	**17%**
Urban	37%	45%	37%	45%	27%	47%	27%	47%	27%	34%	27%	34%
Suburban	100%	100%	29%	41%	100%	100%	0%	0%	98%	97%	0%	0%
Rural	86%	95%	86%	95%	41%	13%	41%	13%	38%	12%	38%	12%
Wilderness	22%	16%	22%	16%	18%	25%	18%	25%	1%	0%	1%	0%
Gila County	**67%**	**59%**	**67%**	**59%**	**77%**	**73%**	**77%**	**73%**	**61%**	**55%**	**61%**	**55%**
Rural	82%	68%	82%	68%	87%	82%	87%	82%	82%	68%	82%	68%
Wilderness	27%	27%	27%	27%	51%	43%	51%	43%	7%	7%	7%	7%
Graham County	**80%**	**66%**	**80%**	**66%**	**84%**	**82%**	**84%**	**82%**	**75%**	**61%**	**75%**	**61%**
Rural	90%	76%	90%	76%	93%	94%	93%	94%	90%	76%	90%	76%
Wilderness	46%	34%	46%	34%	50%	48%	50%	48%	27%	16%	27%	16%
Greenlee County	**72%**	**64%**	**72%**	**64%**	**17%**	**29%**	**17%**	**29%**	**0%**	**0%**	**0%**	**0%**
Rural	91%	93%	91%	93%	0%	0%	0%	0%	0%	0%	0%	0%
Wilderness	50%	58%	50%	58%	38%	35%	38%	35%	0%	0%	0%	0%
La Paz County	**76%**	**77%**	**76%**	**77%**	**69%**	**75%**	**69%**	**75%**	**39%**	**42%**	**39%**	**42%**
Rural	97%	97%	97%	97%	85%	83%	85%	83%	60%	59%	60%	59%
Wilderness	60%	54%	60%	54%	55%	67%	55%	67%	22%	21%	22%	21%
Maricopa County	**62%**	**74%**	**39%**	**58%**	**53%**	**67%**	**29%**	**50%**	**68%**	**67%**	**50%**	**52%**
Urban	43%	63%	43%	63%	34%	56%	34%	56%	52%	54%	52%	54%
Suburban	99%	100%	26%	44%	93%	97%	15%	38%	100%	100%	41%	44%
Rural	76%	91%	76%	91%	48%	40%	48%	40%	91%	92%	91%	92%
Wilderness	39%	76%	39%	76%	20%	50%	20%	50%	7%	2%	7%	2%
Mohave County	**73%**	**83%**	**71%**	**82%**	**65%**	**76%**	**64%**	**76%**	**56%**	**66%**	**55%**	**66%**
Urban	32%	41%	32%	41%	18%	22%	18%	22%	9%	12%	9%	12%
Suburban	100%	100%	0%	0%	100%	100%	39%	25%	100%	100%	0%	0%
Rural	94%	97%	94%	97%	93%	96%	93%	96%	89%	91%	89%	91%

Wilderness	63%	60%	63%	60%	40%	45%	40%	45%	12%	15%	12%	15%
Navajo County	**57%**	**33%**	**57%**	**33%**	**54%**	**40%**	**54%**	**40%**	**28%**	**12%**	**28%**	**12%**
Rural	80%	61%	80%	61%	70%	57%	70%	57%	44%	25%	44%	25%
Wilderness	19%	6%	19%	6%	30%	25%	30%	25%	2%	1%	2%	1%
Pima County	**71%**	**73%**	**45%**	**60%**	**61%**	**64%**	**33%**	**47%**	**71%**	**61%**	**48%**	**45%**
Urban	53%	65%	53%	65%	41%	55%	41%	55%	54%	51%	54%	51%
Suburban	100%	100%	17%	37%	93%	96%	5%	14%	99%	99%	25%	27%
Rural	78%	90%	78%	90%	64%	67%	64%	67%	80%	68%	80%	68%
Wilderness	40%	37%	40%	37%	34%	42%	34%	42%	7%	3%	7%	3%
Pinal County	**83%**	**84%**	**49%**	**59%**	**76%**	**81%**	**40%**	**52%**	**76%**	**68%**	**43%**	**44%**
Urban	48%	60%	48%	60%	35%	56%	35%	56%	26%	18%	26%	18%
Suburban	89%	90%	9%	16%	91%	98%	7%	10%	99%	100%	22%	28%
Rural	93%	95%	93%	95%	79%	87%	79%	87%	79%	73%	79%	73%
Wilderness	66%	65%	66%	65%	44%	47%	44%	47%	27%	36%	27%	36%
Santa Cruz County	**87%**	**90%**	**87%**	**90%**	**88%**	**92%**	**88%**	**92%**	**61%**	**69%**	**61%**	**69%**
Rural	95%	94%	95%	94%	95%	94%	95%	94%	75%	75%	75%	75%
Wilderness	50%	47%	50%	47%	57%	65%	57%	65%	1%	1%	1%	1%
Yavapai County	**54%**	**64%**	**50%**	**60%**	**56%**	**63%**	**51%**	**59%**	**55%**	**57%**	**50%**	**53%**
Urban	14%	22%	14%	22%	22%	41%	22%	41%	22%	33%	22%	33%
Suburban	100%	100%	12%	10%	100%	100%	2%	3%	100%	100%	2%	1%
Rural	78%	90%	78%	90%	81%	77%	81%	77%	87%	89%	87%	89%
Wilderness	63%	71%	63%	71%	48%	60%	48%	60%	20%	15%	20%	15%
Yuma County	**74%**	**81%**	**62%**	**75%**	**68%**	**78%**	**45%**	**64%**	**54%**	**48%**	**32%**	**33%**
Urban	47%	57%	47%	57%	39%	53%	39%	53%	40%	47%	40%	47%
Suburban	100%	100%	52%	63%	100%	100%	8%	15%	100%	100%	13%	8%
Rural	98%	99%	98%	99%	97%	98%	97%	98%	43%	31%	43%	31%
Wilderness	74%	82%	74%	82%	27%	37%	27%	37%	0%	0%	0%	0%

Source: CRED custom tabulation

Table 131. Access to WIC retailers, by county and urbanicity

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	**34%**	**28%**	**34%**	**28%**
Rural	92%	90%	92%	90%
Wilderness	3%	3%	3%	3%
Cochise County	**53%**	**67%**	**47%**	**61%**
Urban	29%	39%	29%	39%
Suburban	97%	97%	4%	2%
Rural	84%	93%	84%	93%
Wilderness	23%	28%	23%	28%
Coconino County	**56%**	**52%**	**51%**	**49%**
Urban	47%	48%	47%	48%
Suburban	98%	97%	0%	0%
Rural	93%	95%	93%	95%
Wilderness	18%	15%	18%	15%
Gila County	**66%**	**67%**	**66%**	**67%**
Rural	87%	82%	87%	82%
Wilderness	11%	15%	11%	15%
Graham County	**81%**	**76%**	**81%**	**76%**
Rural	94%	94%	94%	94%
Wilderness	36%	24%	36%	24%
Greenlee County	**47%**	**9%**	**47%**	**9%**
Rural	86%	54%	86%	54%
Wilderness	0%	0%	0%	0%
La Paz County	**64%**	**66%**	**64%**	**66%**
Rural	85%	83%	85%	83%
Wilderness	48%	47%	48%	47%
Maricopa County	**69%**	**74%**	**50%**	**60%**
Urban	54%	64%	54%	64%
Suburban	100%	100%	39%	52%
Rural	87%	87%	87%	87%
Wilderness	17%	26%	17%	26%
Mohave County	**61%**	**72%**	**60%**	**71%**
Urban	23%	31%	23%	31%
Suburban	100%	100%	0%	0%
Rural	91%	94%	91%	94%
Wilderness	12%	18%	12%	18%

Navajo County	**69%**	**57%**	**69%**	**57%**
Rural	94%	92%	94%	92%
Wilderness	28%	23%	28%	23%
Pima County	**72%**	**65%**	**47%**	**51%**
Urban	53%	55%	53%	55%
Suburban	99%	100%	24%	34%
Rural	84%	77%	84%	77%
Wilderness	18%	20%	18%	20%
Pinal County	**85%**	**84%**	**51%**	**60%**
Urban	46%	58%	46%	58%
Suburban	100%	100%	19%	29%
Rural	95%	95%	95%	95%
Wilderness	35%	39%	35%	39%
Santa Cruz County	**79%**	**87%**	**79%**	**87%**
Rural	95%	94%	95%	94%
Wilderness	9%	12%	9%	12%
Yavapai County	**54%**	**55%**	**50%**	**51%**
Urban	17%	26%	17%	26%
Suburban	100%	100%	7%	5%
Rural	88%	89%	88%	89%
Wilderness	27%	17%	27%	17%
Yuma County	**82%**	**88%**	**60%**	**74%**
Urban	63%	74%	63%	74%
Suburban	100%	100%	13%	11%
Rural	98%	99%	98%	99%
Wilderness	75%	83%	75%	83%

Source: CRED custom tabulation

Table 132 Low-income, low-access areas by urbanicity within counties

	Total population (2020 Census)			Households receiving SNAP (ACS 2017-21)	
	#		%	#	%
Apache County	**66,039**			**5,588**	**29%**
Rural	**23,506**	**36%**		**1,596**	**23%**
Low Income Low Access	9,129	14%	39%	552	22%
Wilderness	**42,533**	**64%**		**3,992**	**32%**
Low Income Low Access	41,091	62%	97%	3,861	32%
Cochise County	**125,447**			**7,208**	**15%**
Urban	**42,908**	**34%**		**2,058**	**12%**

Low Income Low Access	9,801	8%	23%	1,168	26%
Suburban	**8,161**	**7%**		**462**	**14%**
Low Income Low Access	4,647	4%	57%	442	21%
Rural	**47,706**	**38%**		**3,539**	**19%**
Low Income Low Access	19,151	15%	40%	1,411	19%
Wilderness	**26,672**	**21%**		**1,149**	**11%**
Low Income Low Access	7,233	6%	27%	327	10%
Coconino County	**145,101**			**5,193**	**10%**
Urban	**74,908**	**52%**		**2,023**	**8%**
Low Income Low Access	17,567	12%	23%	331	5%
Suburban	**7,042**	**5%**		**147**	**6%**
Low Income Low Access	432	0%	6%	8	6%
Rural	**35,902**	**25%**		**1,395**	**11%**
Low Income Low Access	13,911	10%	39%	964	20%
Wilderness	**27,249**	**19%**		**1,628**	**17%**
Low Income Low Access	19,989	14%	73%	1,349	20%
Gila County	**53,272**			**3,442**	**15%**
Rural	**39,756**	**75%**		**2,693**	**17%**
Low Income Low Access	15,362	29%	39%	1,387	27%
Wilderness	**13,516**	**25%**		**749**	**12%**
Low Income Low Access	6,813	13%	50%	458	14%
Graham County	**38,533**			**1,394**	**12%**
Rural	**28,041**	**73%**		**1,050**	**12%**
Low Income Low Access	1,878	5%	7%	201	48%
Wilderness	**10,492**	**27%**		**344**	**13%**
Low Income Low Access	2,842	7%	27%	178	26%
Greenlee County	**9,563**			**268**	**8%**
Rural	**6,101**	**64%**		**46**	**3%**
Low Income Low Access	-	0%	0%	-	0%
Wilderness	**3,462**	**36%**		**222**	**15%**
Low Income Low Access	2,528	26%	73%	111	12%
La Paz County	**16,557**			**1,290**	**15%**
Rural	**8,685**	**52%**		**698**	**18%**
Low Income Low Access	2,095	13%	24%	244	24%
Wilderness	**7,872**	**48%**		**592**	**12%**
Low Income Low Access	2,946	18%	37%	259	15%
Maricopa County	**4,420,568**			**138,154**	**8%**
Urban	**2,766,441**	**63%**		**94,743**	**9%**
Low Income Low Access	294,584	7%	11%	16,322	15%
Suburban	**1,401,641**	**32%**		**38,723**	**8%**

Low Income Low Access	115,963	3%	8%	5,510	11%
Rural	**208,452**	**5%**		**3,389**	**5%**
Low Income Low Access	33,002	1%	16%	1,133	10%
Wilderness	**44,034**	**1%**		**1,299**	**9%**
Low Income Low Access	8,803	0%	20%	328	21%
Mohave County	**213,267**			**11,995**	**13%**
Urban	**54,934**	**26%**		**1,808**	**7%**
Low Income Low Access	23,306	11%	42%	1,077	11%
Suburban	**2,605**	**1%**		**89**	**7%**
Low Income Low Access	-	0%	0%	-	0%
Rural	**124,319**	**58%**		**8,100**	**15%**
Low Income Low Access	50,566	24%	41%	3,923	19%
Wilderness	**31,409**	**15%**		**1,998**	**15%**
Low Income Low Access	27,727	13%	88%	1,746	15%
Navajo County	**106,717**			**7,239**	**20%**
Rural	**65,205**	**61%**		**3,521**	**16%**
Low Income Low Access	29,628	28%	45%	1,856	19%
Wilderness	**41,512**	**39%**		**3,718**	**26%**
Low Income Low Access	27,529	26%	66%	2,904	33%
Pima County	**1,043,433**			**51,583**	**12%**
Urban	**534,857**	**51%**		**34,864**	**16%**
Low Income Low Access	81,850	8%	15%	6,102	21%
Suburban	**326,589**	**31%**		**11,105**	**8%**
Low Income Low Access	27,245	3%	8%	1,948	21%
Rural	**160,955**	**15%**		**3,909**	**6%**
Low Income Low Access	7,301	1%	5%	250	8%
Wilderness	**21,032**	**2%**		**1,705**	**23%**
Low Income Low Access	10,885	1%	52%	1,317	35%
Pinal County	**425,264**			**15,581**	**11%**
Urban	**50,246**	**12%**		**2,759**	**15%**
Low Income Low Access	3,346	1%	7%	544	43%
Suburban	**169,335**	**40%**		**5,206**	**8%**
Low Income Low Access	36,324	9%	21%	1,717	10%
Rural	**165,355**	**39%**		**5,919**	**12%**
Low Income Low Access	30,096	7%	18%	2,000	22%
Wilderness	**40,328**	**9%**		**1,697**	**13%**
Low Income Low Access	10,820	3%	27%	710	16%
Santa Cruz County	**47,669**			**3,807**	**23%**
Rural	**40,696**	**85%**		**3,485**	**26%**
Low Income Low Access	13,517	28%	33%	1,321	29%

Wilderness	**6,973**	**15%**		**322**	**11%**
Low Income Low Access	-	0%	0%	-	0%
Yavapai County	**236,249**			**8,181**	**8%**
Urban	**82,511**	**35%**		**2,760**	**7%**
Low Income Low Access	28,476	12%	35%	1,151	10%
Suburban	**12,386**	**5%**		**311**	**6%**
Low Income Low Access	4,072	2%	33%	47	3%
Rural	**105,167**	**45%**		**3,592**	**8%**
Low Income Low Access	25,036	11%	24%	1,376	12%
Wilderness	**36,185**	**15%**		**1,518**	**10%**
Low Income Low Access	12,659	5%	35%	686	12%
Yuma County	**203,881**			**13,360**	**18%**
Urban	**90,593**	**44%**		**5,616**	**17%**
Low Income Low Access	12,789	6%	14%	829	17%
Suburban	**43,105**	**21%**		**2,114**	**12%**
Low Income Low Access	14,422	7%	33%	1,148	20%
Rural	**57,965**	**28%**		**5,208**	**29%**
Low Income Low Access	20,216	10%	35%	1,691	28%
Wilderness	**12,218**	**6%**		**422**	**14%**
Low Income Low Access	1,982	1%	16%	108	11%
Arizona	**7,151,560**			**274,283**	**10%**

Source: CRED custom tabulation

Preparing and consuming nutritious foods

Table 133. Youth milk consumption, 2017 to 2019

	2017	2019
No milk in the past 7 days	25.5%	34.8%
One or more glasses in the past 7 days	27.5%	20.4%
Three or more glasses in the past 7 days	7.0%	5.0%

2019	One or more glasses per day
Males	26.7%
Females	14.3%

Source: YRBSS, 2017-2019

Table 134. Youth eating breakfast in the past 7 days, 2013 and 2019

	2013	2019
Did not eat breakfast at all in the past 7 days	16.1%	16.7%
Ate breakfast on all 7 days	31.4%	25.3%

2019	Ate breakfast on all 7 days
Hispanic/Latino	21.5%
Non-Hispanic White	30.6%

Source: YRBSS, 2019

Table 135. Number of times a week family members in the same household ate together

	US	Arizona
0 days	3.1%	3.6%
1-3 days	21.7%	20.6%
4-6 days	28.5%	27.6%
Every day	46.7%	48.2%

Source: NSCH, 2019-2020

National nutrition programs

Table 136. WIC Eligibility and Participation among Arizona Infants and Children: 2015-2019

	Percent of Population Eligible	Eligibility Margin of Error	Percent of Eligible Population Participating	Participation Margin of Error
2015	61.0%	1.6	63.4%	2.3
2016	59.1%	1.7	61.3%	2.6
2017	57.3%	1.7	62.3%	2.7
2018	57.0%	1.9	65.3%	3.1
2019	53.9%	1.9	61.3%	3.1

Source: ADHS WIC Eligibility and Enrollment Trends, 2022
https://www.azdhs.gov/documents/prevention/nutrition-physical-activity/wic-eligibility-and-enrollment-trends.pdf

Physical activity

Physical activity resources and opportunities

Table 137. Proportion of households by urbanicity living in accessible distance to recreation opportunities

	Recreation opportunities	
	Households (%)	Households receiving SNAP (%)
Arizona	79% (62%)	81% (72%)
Urban	67%	75%
Suburban (1 mile)	38%	55%
Suburban (10 mile)	100%	100%
Rural	90%	83%
Wilderness	59%	53%

Source: CRED custom tabulation.
Note: For the state overall, the primary value presents access using a 10-mile radius for suburban areas. The value in parentheses indicates the proportion with a 1-mile suburban radius.

Table 138. Proportion of households by county living an accessible distance to recreation opportunities

	10 miles for suburbs		1 mile for suburbs	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	66%	63%	66%	63%
Cochise County	78%	82%	72%	77%
Coconino County	78%	70%	74%	68%
Gila County	10%	8%	10%	8%
Graham County	83%	71%	83%	71%
Greenlee County	76%	72%	76%	72%
La Paz County	85%	84%	85%	84%
Maricopa County	77%	80%	60%	71%
Mohave County	66%	79%	65%	79%
Navajo County	73%	59%	73%	59%
Pima County	85%	87%	63%	75%
Pinal County	91%	94%	57%	67%
Santa Cruz County	92%	93%	92%	93%
Yavapai County	83%	86%	79%	83%
Yuma County	88%	94%	65%	80%

Source: CRED custom tabulation.

Table 139. Proportions of households living an accessible distance from recreational areas, by county and urbanicity

	Recreation opportunities, suburbs at 10 miles		Recreation opportunities, suburbs at 1 mile	
	Households (%)	Households receiving SNAP (%)	Households (%)	Households receiving SNAP (%)
Apache County	**66%**	**63%**	**66%**	**63%**
Rural	96%	96%	96%	96%
Wilderness	49%	50%	49%	50%
Cochise County	**78%**	**82%**	**72%**	**77%**
Urban	71%	71%	71%	71%
Suburban	100%	100%	13%	22%
Rural	91%	95%	91%	95%
Wilderness	56%	55%	56%	55%
Coconino County	**78%**	**70%**	**74%**	**68%**
Urban	75%	83%	75%	83%
Suburban	100%	100%	31%	46%
Rural	96%	96%	96%	96%
Wilderness	53%	28%	53%	28%
Gila County	**10%**	**8%**	**10%**	**8%**
Rural	3%	6%	3%	6%
Wilderness	27%	17%	27%	17%
Graham County	**83%**	**71%**	**83%**	**71%**
Rural	91%	77%	91%	77%
Wilderness	57%	51%	57%	51%
Greenlee County	**76%**	**72%**	**76%**	**72%**
Rural	91%	93%	91%	93%
Wilderness	59%	68%	59%	68%
La Paz County	**85%**	**84%**	**85%**	**84%**
Rural	85%	82%	85%	82%
Wilderness	86%	86%	86%	86%
Maricopa County	**77%**	**80%**	**60%**	**71%**
Urban	66%	72%	66%	72%
Suburban	100%	100%	45%	66%
Rural	95%	94%	95%	94%
Wilderness	55%	67%	55%	67%
Mohave County	**66%**	**79%**	**65%**	**79%**
Urban	28%	38%	28%	38%
Suburban	100%	100%	0%	0%
Rural	87%	94%	87%	94%
Wilderness	55%	58%	55%	58%
Navajo County	**73%**	**59%**	**73%**	**59%**
Rural	89%	83%	89%	83%
Wilderness	48%	36%	48%	36%
Pima County	**85%**	**87%**	**63%**	**75%**
Urban	74%	83%	74%	83%
Suburban	100%	100%	30%	44%
Rural	96%	98%	96%	98%
Wilderness	60%	58%	60%	58%
Pinal County	**91%**	**94%**	**57%**	**67%**
Urban	65%	79%	65%	79%
Suburban	99%	99%	18%	20%

Rural	96%	99%	96%	99%
Wilderness	76%	83%	76%	83%
Santa Cruz County	**92%**	**93%**	**92%**	**93%**
Rural	95%	94%	95%	94%
Wilderness	78%	77%	78%	77%
Yavapai County	**83%**	**86%**	**79%**	**83%**
Urban	65%	75%	65%	75%
Suburban	100%	100%	31%	21%
Rural	99%	100%	99%	100%
Wilderness	69%	72%	69%	72%
Yuma County	**88%**	**94%**	**65%**	**80%**
Urban	76%	86%	76%	86%
Suburban	100%	100%	4%	11%
Rural	99%	99%	99%	99%
Wilderness	84%	91%	84%	91%

Source: CRED custom tabulation

Neighborhood factors influencing physical activity

Table 140. Neighborhood factors that influence physical activity among 6-to-12-year-old children, 2019-20

	Population Estimates, Arizona	Confidence Interval, Arizona	Population Estimates, U.S.	Confidence Interval, U.S.
Facilitators				
[a] **Supportive Neighborhood**	**50.00%**	**46.1 - 53.9**	**55.20%**	**54.3 - 56.0**
People in the neighborhood help each other out.	32.80%	-	37.50%	-
We watch out for each other's children in this neighborhood.	39.50%	-	44.40%	-
When we encounter difficulties, we know where to go for help in our community.	42.70%	-	47.70%	-
[b] **Safe Neighborhood (0-17 years)**	**60.10%**	**56.1 - 63.9**	**65.00%**	**64.2 - 65.8**
Neighborhood Amenities	-	-	-	-
Sidewalks or walking paths	86.80%	84.1 - 89.2	75.40%	74.7 - 76.0
Park or playground	80.10%	76.7 - 83.1	74.90%	74.2 - 75.6
Recreation center, community center, or Boys and Girls club	46.00%	42.1 - 50.0	48.00%	47.1 - 48.8
[c] **Neighborhood Amenities Score**	39.80%	-	40.60%	-
Neighborhood contains 2 amenities	40.30%	-	29.80%	-
Neighborhood contains 1 amenity	12.80%	-	16.50%	-
Neighborhood does not contain any amenities	7.10%	-	13.00%	-
[d] **Inhibitors**				
Litter or garbage in streets/sidewalks	20.90%	17.7 - 24.6	21.50%	20.8 - 22.3
Poorly kept or rundown housing	13.20%	10.5 - 16.6	13.30%	12.7 - 13.9
Vandalism such as broken windows/graffiti	11.10%	8.4 - 14.4	8.10%	7.6 - 8.7
Neighborhood Inhibitors Score	**-**	**-**	**-**	**-**
None	71.00%	67.0 - 74.7	72.50%	71.6 - 73.2
One	18.00%	15.0 - 21.5	16.90%	16.2 - 17.5
Two	6.30%	4.3 - 9.1	6.20%	5.8 - 6.7
Three	4.70%	3.2 - 6.9	4.50%	4.1 - 4.9

Source: NSCH, 2019-20

Notes: [a] Based on agreement with three statements on the NSCH (2019-2020) that asked if respondents definitely agree, somewhat agree, somewhat disagree, or definitely disagree with 1) People in this neighborhood help each other out, 2) We watch out for each other's children in this neighborhood, and 3) When we encounter difficulties, we know where to go for help in our community. 'Definitely agree' on at least one statement and somewhat agree or better on at least two statements were used to estimate the percentage of children living in a 'supportive neighborhood'. [b] Respondent 'definitely agrees' with the statement. [c] Composite score of how many of the three amenities - sidewalks or walking paths, parks or playgrounds, recreation centers, community centers, or boys' and girls' clubs - were present in children's neighborhoods. Valid responses to all three items were required for this measure. [d] Respondents indicated if their children lived in a neighborhood where there is litter or garbage on the street or sidewalk, poorly kept or rundown housing, or vandalism such as broken windows and graffiti.

Table 141. Association between Neighborhood Inhibitors and Physical Activity in Children (6 to 17 years) in Arizona, 2019-20

Reported physical activity	One or more elements	Litter	Rundown Housing	Vandalism
0 days	31%	24%	16%	15%
1 to 3 days	25%	17%	11%	10%
4 to 6 days	30%	23%	20%	8%
Every day	26%	15%	5%	15%

Source: NSCH, 2019-20

Table 142. Association between neighborhood facilitators and physical activity in children, 2019-20

Reported physical activity	Sidewalks or walking paths	Parks	Recreation centers
0 days	85.9%	77.4%	38.0%
1 to 3 days	86.7%	80.8%	44.7%
4 to 6 days	88.0%	88.0%	47.3%
Every day	84.2%	72.5%	50.9%

Source: NSCH, 2019-20

Table 143. Number of neighborhood amenities (parks, playgrounds, and recreation centers) by physical activity levels in children 6 to 17 year olds, 2019-20

Reported physical activity	No amenities	One or more amenities
0 days	25.0%	75.0%
1 to 3 days	17.9%	82.1%
4 to 6 days	17.4%	82.6%
Every day	20.3%	79.7%

Source: NSCH, 2019-20

Adult physical activity

Table 144. Adults in Arizona Meeting Aerobic and Strength Guidelines

	2011	2013	2015	2017	2019
Met both guidelines	24.2%	22.0%	21.8%	22.1%	25.5%
Met aerobic only	28.6%	29.6%	32.0%	30.3%	28.2%
Met strength only	8.4%	9.0%	9.1%	9.4%	12.1%
Did not meet either	38.8%	39.4%	37.1%	38.2%	34.2%
Met both guidelines	2011	2013	2015	2017	2019
On Food Assistance	19.6%	13.9%	16.8%	17.2%	18.3%
Not On Food Assistance	24.9%	23.3%	22.1%	23.7%	26.1%
Met aerobic guidelines	2011	2013	2015	2017	2019
On Food Assistance	42.7%	41.3%	48.9%	44.7%	43.0%
Not On Food Assistance	55.8%	53.9%	54.5%	54.9%	55.7%
Women					52.0%
Men					55.7%
Hispanic					48.7%
Non-Hispanic					55.7%
Asian only					63.9%
Native Hawaiian or other Pacific Islander only					61.2%
White only					55.3%
Other race only					51.1%
Multiracial					47.1%
American Indian Alaska Native only					46.6%
Black or African American only					43.5%
18-24					51.7%
25-34					52.5%
35-44					49.3%
34-54					54.1%
55-64					52.2%
65+					59.8%
Graduated college or technical school					63.7%
Attended college or technical school					55.2%
Graduated high school					51.0%
Did not graduate high school					37.9%

Met strength guidelines	2011	2013	2015	2017	2019
On Food Assistance	26.6%	21.5%	23.4%	25.1%	31.2%
Not On Food Assistance	33.7%	31.7%	31.6%	33.0%	37.6%
Women					34.2%
Men					41.3%
Hispanic					39.2%
Non-Hispanic					37.1%
Multiracial					45.1%
AIAN only					43.1%
Other race only					43.0%
White only					37.4%
Black or African American only					33.0%
Asian only					26.9%
Native Hawaiian or other PI only					26.5%
18-24					50.5%
25-34					37.5%
35-44					38.6%
34-54					32.2%
55-64					33.0%
65+					36.8%
Graduated college or technical school					40.4%
Attended college or technical school					35.1%
Graduated high school					34.8%
Did not graduate high school					28.6%
Met neither aerobic nor strength guidelines	2011	2013	2015	2017	2019
On Food Assistance	50.9%	51.1%	44.1%	47.8%	43.8%
Not On Food Assistance	35.2%	37.7%	35.7%	35.7%	32.7%
Women					38.7%
Men					30.8%
Hispanic					38.6%
Non-Hispanic					33.7%
Black or African American only					49.5%
Native Hawaiian or other PI only					38.1%
AIAN only					37.3%
White only					33.3%
Multiracial					32.3%
Asian only					30.8%
Other race only					29.9%
18-24					28.7%
25-34					33.4%
35-44					37.5%
34-54					37.6%
55-64					37.6%
65+					31.2%
Graduated college or technical school					26.4%
Attended college or technical school					35.3%
Graduated high school					36.8%
Did not graduate high school					48.6%
	2011	2013	2015	2017	2019
Highly active	33.1%	33.9%	33.4%	33.0%	35.1%
Active	19.5%	17.6%	20.2%	19.4%	18.4%
Insufficiently active	21.6%	21.1%	19.1%	20.1%	19.3%
Inactive	25.8%	27.4%	27.3%	27.5%	27.2%
Highly active or active	*52.6%*	*51.5%*	*53.6%*	*52.4%*	*53.5%*
Insufficiently active or inactive	*47.4%*	*48.5%*	*46.4%*	*47.6%*	*46.5%*

Insufficiently active or inactive	2011	2013	2015	2017	2019
On Food Assistance	57.4%	58.8%	51.3%	55.6%	57.8%
Not On Food Assistance	44.3%	46.7%	45.6%	45.3%	44.5%
Women					48.4%
Men					44.7%
Hispanic					51.7%
Non-Hispanic					44.7%
Black or African American only					56.7%
Multiracial					54.1%
AIAN only					54.0%
Other race only					49.1%
White only					45.1%
Native Hawaiian or other PI only					38.8%
Asian only					36.1%
18-24					48.9%
25-34					47.9%
35-44					51.0%
34-54					46.4%
55-64					48.2%
65+					40.6%
Graduated college or technical school					36.5%
Attended college or technical school					45.2%
Graduated high school					49.7%
Did not graduate high school					62.2%

Source: BRFSS, 2011-2019

Table 145. Nutrition and physical activity behaviors by days of poor mental health, 2019

	0 days of poor mental health	1 or more days of poor mental health
Nutrition behaviors		
Ate only fruits one or more times per day	9.8%	14.9%
Ate only vegetables one or more times per day	9.7%	9.2%
Ate both fruits and vegetables one or more times per day	54.7%	48.7%
Physical activity behaviors		
Met aerobic recommendations	56.1%	50.1%
Met strength recommendations	38.1%	37.2%
Met both aerobic and strength recommendations	26.4%	24.3%

Source: BRFSS, 2019

Population health

Table 146. Overall Physical and Mental Health Status of Children and Adolescents 17 and under (2019-2020) and Adults (18 years and older) (2020)

	Arizona *Weighted Estimates* (95%CI)	US *(Median)*
Overall Health	-	-
Excellent	22.4% (21.2-23.6)	22.20%
Very Good	32.7% (31.3-34.0)	34.80%
Good	29.6% (28.4-30.9)	29.70%
Fair	12.1% (11.2-13.0)	10.20%
Poor	3.2% (2.7-3.6)	3.10%
Days of Poor Physical Health	-	-
0 days	71.8% (70.5-73.0)	71.90%
1- 13 days	18.1% (17.0-19.2)	18.40%
14+ days	10.1% (9.3-10.9)	9.90%
Days of Poor Mental Health	-	-
0 days	62.0% (60.6-63.4)	61.70%
1 - 13 days	24.5% (23.3-25.7)	23.70%
14+ days	13.5% (12.6-14.4)	13.10%
Children 17 and Under (NSCH 2019-2020)	-	-
[a]*Overall Health*	*Population Estimates* (95% CI)	*Population Estimates* (95% CI)
Excellent or Very Good	89.5% (86.6-91.9)	90.4% (89.9-91.0)
Good	9.6% (7.3-12.5)	8.0% (7.6-8.5)
Fair or Poor	[b]0.9% (0.5-1.6)	1.5% (1.3-1.8)

Source: BRFSS, 2020; NSCH 2019-2020

Table 147. Overall health status in Arizona adults by race/ethnicity, 2020

	Good or better	Fair or poor
Asian, non-Hispanic	92%	8%
American Indian or Alaska Native, non-Hispanic	79.5%	20.5%
Black, non-Hispanic	84.6%	15.4%
Multiracial, non-Hispanic	84.2%	15.8%
Native Hawaiian or Other PI, non-Hispanic	82.5%	17.5%
White, non-Hispanic	85.3%	14.7%
Other, non-Hispanic	85%	15%

Source: BRFSS, 2015-2020

Table 148. Ever Told You Have Diabetes: 2015-2020

	2015	2016	2017	2018	2019	2020
Yes	10.1%	10.8%	10.4%	11.5%	10.9%	11.0%
Yes, female, only when pregnant	1.2%	0.7%	1.0%	0.8%	1.0%	0.9%
No, but prediabetes or borderline diabetes	1.8%	2.0%	1.3%	2.1%	2.3%	2.6%
No	87.0%	86.5%	87.2%	85.6%	85.8%	85.5%
	2015	2016	2017	2018	2019	2020
All adults	10.5%	10.9%	11.0%	10.5%	11.5%	10.9%
On food assistance	11.4%	12.0%	11.2%	8.7%	12.5%	15.5%
Not on food assistance	10.2%	10.7%	10.9%	11.0%	11.2%	8.5%

Source: BRFSS, 2015-20

Table 149. Ever Told You Have Diabetes by Race and Ethnicity, 2020

Race	Yes	Yes- Female, only when pregnant	No, Prediabetes or Borderline	No
White only	10.5%	0.9%	2.6%	86.0%
Black or African American only	13.9%	1.0%	2.0%	83.0%
American Indian or Alaskan Native only	16.4%	1.3%	3.4%	78.9%
Asian only	9.3%	1. 3%	2.9%	86.5%
Native Hawaiian or other PI	8.2% (5.8%)	-	4.7%	87.1%
Other race only	9.8%	1.3%	2.8%	86.1%
Multiracial	8.7%	-	0.9%	90.4%
Total	10.9%	0.9%	2.6%	85.6%
Hispanic Origin	Yes	Yes- Female, only when pregnant	No, Prediabetes or Borderline	No
Hispanic	11.3%	1.6%	3.5%	83.6%
Not Hispanic	10.8%	0.6%	2.2%	86.4%
Total	10.9%	0.9%	2.6%	85.6%

Source: BRFSS, 2020

Table 150. Births with gestational diabetes, 2019

	% of Arizona births
With gestational diabetes	8.7%
With pre-existing diabetes	1.1%

Source: ADHS Vital Statistics, Births dataset, 2019, https://pub.azdhs.gov/health-stats/report/ahs/ahs2019/pdf/1b25.pdf

Table 151. Ever Told You Have High Blood Cholesterol, 2015 – 2019

Year	2015	2017	2019
All adults	39.0%	33.1%	32.6%
On food assistance	36.4%	28.6%	26.1%
Not on food assistance	39.7%	34.3%	34.3%

Source: BRFSS, 2015-2019

Table 152. Arizona Adults Weight Classification: 2015-2020

Weight classification	2015	2016	2017	2018	2019	2020
Obese	28.4%	29.0%	29.5%	31.1%	31.4%	30.9%
Obese (National median)	-	29.6%	30.1%	30.9%	31.4%	31.9%
Overweight	36.9%	34.2%	35.3%	35.5%	34.4%	35.2%
Overweight (National median)	-	35.2%	35.3%	35.0%	35.2%	34.8%
Overweight or Obese	65.3%	63.2%	64.8%	66.6%	65.8%	66.1%
Overweight or Obese (on food assistance)	73.8%	69.1%	69.1%	71.5%	71.6%	71.4%
Overweight or Obese (not on food assistance)	63.1%	61.2%	63.6%	64.8%	65.8%	64.2%
Normal	32.6%	34.6%	32.9%	30.8%	31.9%	31.8%
Underweight	2.1%	2.1%	2.3%	2.6%	2.4%	2.1%

Source: BRFSS, 2015-2020
https://nccd.cdc.gov/dnpao_dtm/rdPage.aspx?rdReport=DNPAO_DTM.ExploreByLocation&rdRequestForwarding=Form

Table 153. Prepregnancy obesity rates, 2016 – 2019

Pre-pregnancy obesity, by maternal race and Hispanic origin: United States, 2016–2019	2016	2017	2018	2019	% increase 2016-2019
US	26.1%	27.1%	28.1%	29.0%	11.0%
non-Hispanic White Women	24.1%	24.9%	25.8%	26.6%	10.0%
non-Hispanic Black Women	36.4%	37.0%	38.0%	39.1%	7.0%
Hispanic Women	28.9%	30.1%	31.3%	32.4%	12.0%
Prepregnancy obesity, by maternal age: United States, 2016–2019	**2016**	**2017**	**2018**	**2019**	**% increase 2016-2019**
Under 20	18.1%	19.1%	19.8%	20.5%	13.0%
20-29	27.2%	28.2%	29.4%	30.4%	12.0%
30-39	25.8%	26.6%	27.4%	28.3%	10.0%
40 and over	28.0%	28.9%	29.8%	30.4%	9.0%
Prepregnancy obesity, by maternal education: United States, 2016–2019	**2016**	**2017**	**2018**	**2019**	**% increase 2016-2019**
High school or less	33.2%	34.0%	35.3%	36.5%	10.0%
Some college	34.2%	35.2%	36.4%	37.5%	10.0%
Associate's degree	30.7%	32.0%	32.9%	34.1%	11.0%
Bachelor's degree	19.0%	19.9%	20.8%	21.5%	13.0%
Master's degree	15.3%	15.9%	16.7%	17.3%	13.0%
Prepregnancy obesity, by state	**2016**	**2019**	**% increase 2016-2019**		
US	26.1%	29.0%	11.0%		
Arizona	27.3%	29.9%	11.2%		

SOURCE: National Center for Health Statistics, National Vital Statistics System, Natality file, 2016-19
https://www.cdc.gov/nchs/data/databriefs/db392-H.pdf
https://www.cdc.gov/nchs/data/databriefs/db392-tables-508.pdf#3

Table 154. IOM guidelines for weight gain by pre-pregnancy BMI

Pre-pregnancy Weight Status	Less than ideal weight gain (pounds)	Ideal weight gain (pounds)	More than Ideal weight gain (pounds)
Underweight	< 28	28-40	>40
Healthy weight	< 25	25-35	>35
Overweight	< 15	15-25	>25
Obese	< 11	20-Nov	>20

Source: Institute of Medicine, 2009

Table 155. Weight gain during pregnancy classified by IOM guidelines, 2019

	Inadequate weight gain	Adequate weight gain	Excessive weight gain
Arizona	21.5%	30.8%	47.0%

Source: ADHS Vital Statistics, 2019

Table 156. Youth overweight and obesity in Arizona, 2013-2019

	2013	2015	2017	2019
Obese Males	14.1	14.5	16.7	17.6
Overweight Males	13.4	15.1	15	15.8
Obese Females	7.1	7	7.7	8.9
Overweight Females	12	14.2	16.7	19
Total Obese	10.7	10.9	12.3	13.3
Total Overweight	12.7	14.7	15.9	17.4

Overweight or Obese	2013	2015	2017	2019
Boys	27.5%	29.6%	31.7%	33.4%
Girls	19.1%	21.2%	24.4%	27.9%
Total	23.4%	25.6%	24.4%	30.7%

Source: YRBS 2013-2019

Table 157. Youth perceptions of weight and disordered eating

Behavior	2007	2009	2011	2013	2015	2017	2019
Described themselves as slightly or very overweight	35.2%	33.5%	32.9%	29.9%	35.1%	36.8%	33.3%
Trying to lose weight	–	–	52.2%	50.8%	53.6%	55.2%	49.0%
Went without eating for 24 hours or more during the past 30 days	14.1%	15.1%	14.1%	16.2%	17.3%	13.3%	–
Vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days	8.2%	6.3%	6.2%	10.1%	7.1%	10.0%	–
Took diet pills, powders, or liquids without a doctor's advice during the past 30 days	6.2%	7.7%	9.5%	9.3%	8.1%	8.3%	–

Source: YRBSS, 2007-2019

Table 158. Children's weight status (ages 10-17)

	With obesity	Overweight
US	16.2%	15.9%
Arizona	10.2%	16.4%
Hispanic	13.6%	19.1%
Non-Hispanic White	6.9%	14.8%

Source: 2019-2020 National Survey of Children's Health (NSCH)

Table 159. Trimester in which prenatal care was initiated, 2020

	1st trimester	2nd trimester	3rd trimester	Unknown
All pregnancies	68.9%	18.2%	6.8%	3.5%
Delivery paid by AHCCCS	43%	61%	63%	54%
White, non-Hispanic	90.5%			
American Indian or Alaska Native	63.4%			
High school diploma	92.3%			
Less than high school diploma	65.4%			

PRAMS, 2020

Table 160. Percentage of women asked about breastfeeding by available race and ethnicity, 2020

	%	American Indian or Alaska Native	White, non-Hispanic
Asked if I planned to breastfeed my new baby	88.2%		
(Either before or after birth) Received breastfeeding information from their doctor	66.7%	78.3%	59.7%
(Either before or after birth) Received breastfeeding information from their nurse, midwife, or doula	69.0%	81.6%	63.6%
(Either before or after birth) Received breastfeeding information from a lactation specialist	69.30%		
(Either before or after birth) Received breastfeeding information from their baby's health care provider	65.3%	81.9%	59.2%
(Either before or after birth) Received breastfeeding information from family or friends	63.5%		
(Either before or after birth) Received breastfeeding information from a support group	25.0%	35.0%	23.3%
(Either before or after birth) Received breastfeeding information from a breastfeeding hotline or toll-free number	15.0%	33.6%	7.8%
(Either before or after birth) Received breastfeeding information from other sources	17.0%		

Source: PRAMS, 2020

Table 161. Percentage of women asked about breastfeeding by age, 2020

	%	19 years old or younger	20-34	35+
Asked if I planned to breastfeed my new baby	88.2%			
(Either before or after birth) Received breastfeeding information from their doctor	66.7%			
(Either before or after birth) Received breastfeeding information from their nurse, midwife, or doula	69.0%			
(Either before or after birth) Received breastfeeding information from a lactation specialist	69.30%			
(Either before or after birth) Received breastfeeding information from their baby's health care provider	65.3%			
(Either before or after birth) Received breastfeeding information from family or friends	63.5%	80.6%	65.0%	53.6%
(Either before or after birth) Received breastfeeding information from a support group	25.0%	34.0%	26.4%	17.6%
(Either before or after birth) Received breastfeeding information from a breastfeeding hotline or toll-free number	15.0%			
(Either before or after birth) Received breastfeeding information from other sources	17.0%			

Source: PRAMS, 2020

Table 162. Percentage of women asked about breastfeeding by education, 2020

	%	Less than high school education	Greater than high school diploma
Asked if I planned to breastfeed my new baby	88.2%		
(Either before or after birth) Received breastfeeding information from their doctor	66.7%		
(Either before or after birth) Received breastfeeding information from their nurse, midwife, or doula	69.0%		
(Either before or after birth) Received breastfeeding information from a lactation specialist	69.30%		
(Either before or after birth) Received breastfeeding information from their baby's health care provider	65.3%		
(Either before or after birth) Received breastfeeding information from family or friends	63.5%		
(Either before or after birth) Received breastfeeding information from a support group	25.0%	34.1%	21.1%
(Either before or after birth) Received breastfeeding information from a breastfeeding hotline or toll-free number	15.0%	25.4%	10.5%
(Either before or after birth) Received breastfeeding information from other sources	17.0%		

Source: PRAMS, 2020

Table 163. Percentage of women asked about breastfeeding by setting, 2020

	%	Rural	Urban
Asked if I planned to breastfeed my new baby	88.2%		
(Either before or after birth) Received breastfeeding information from their doctor	66.7%		
(Either before or after birth) Received breastfeeding information from their nurse, midwife, or doula	69.0%		
(Either before or after birth) Received breastfeeding information from a lactation specialist	69.30%		
(Either before or after birth) Received breastfeeding information from their baby's health care provider	65.3%		
(Either before or after birth) Received breastfeeding information from family or friends	63.5%		
(Either before or after birth) Received breastfeeding information from a support group	25.0%		
(Either before or after birth) Received breastfeeding information from a breastfeeding hotline or toll-free number	15.0%	20.6%	14.6%
(Either before or after birth) Received breastfeeding information from other sources	17.0%		

Source: PRAMS, 2020

Table 164. Breastfeeding Status by Year of Birth for Infants in Arizona, 2020

Maternal characteristics	Breastfed 4 weeks or less	Breastfed 9 weeks or moreThes
Gave birth in 2020	28.7%	68.0%
American Indian/ Alaska Native	45.9%	54.1%
Asian/Pacific Islander	16.0%	84.0%
Black or African American	24.4%	75.6%
White, non-Hispanic	28.3%	71.7%
Teenage (<20)	60.9%	39.1%
20-34	30.2%	69.8%
35+	31.3%	68.7%

Source: PRAMS, 2020
https://www.azdhs.gov/documents/prevention/nutrition-physical-activity/bnpa-breastfeeding-report.pdf?v=20220803

Table 165. Caregivers Receiving Recommendations for Folic Acid Use, 2020

Characteristics	12 months before pregnancy	During a postpartum checkup
Overall	35.4%	54.1%
Asian/ Pacific Islander	52.4%	67.1%
White, non-Hispanic	35.8%	49.3%
Hispanic/ Latino	33.8%	57.8%
American Indian or Alaska Native	N/A	61.7%
Black or African American	N/A	51.2%
Less than high school	22.4%	61.2%
High school	28.2%	54.6%
More than high school	39.8%	52.2%
Urban	36.3%	54.4%
Rural	27.4%	52.3%

Source: PRAMS, 2020

Table 166. Daily folic acid use by race, ethnicity, education level and location

Total population	37%
Asian/ Pacific Islander	47.9%
White, non-Hispanic	42.9%
Hispanic/Latino	33.3%
American Indian/ Alaska Native	25.2%
Black/African American	23.2%
Less than High School	25.9%
High School Diploma	27.5%
High School or Greater	44.2%
Urban	36.8%
Rural	38.7%

Source: PRAMS, 2020
https://www.azdhs.gov/documents/prevention/nutrition-physical-activity/folic-acid-among-women-of-childbearing-age-in-arizona.pdf?v=20220614

Care and education systems

Table 167. Pre-intervention scores

Child Nutrition (n=69)	
Policy	54%
Education and professional development	74%
Menus and variety	89%
Feeding practices	82%
Feeding environment	88%
Beverages provided	91%
Foods provided	88%

Breastfeeding & infant feeding (n=50)	
Infant feeding policy	64%
Infant education and professional development	70%
Infant feeding practices	93%
Infant foods	94%
Breastfeeding policy	49%
Breastfeeding education and professional development	51%
Breastfeeding support practices	74%
Breastfeeding environment	68%

Farm to ECE (n=26)	
Policy	27%
Education and professional development	66%
Gardening	42%
Local foods provided	58%

Infant and child physical activity (n=57)	
Policy	57%
Education and professional development	82%
Teacher practices	93%
Indoor play environment	80%
Time provided	75%

Screentime (n=50)	
Policy	51%
Education and professional development	65%
Teacher practices	90%
Availability	92%

Outdoor play and learning (n=24)	
Policy	61%
Education and professional development	72%
Outdoor play environment	75%
Outdoor playtime	69%

Source: AZ Health Zone FY22 Evaluation Report

Table 168. Go NAPSACC Assessments - mean score changes (from 1 - weakest to 4 - best practice)

	Pre	Post	Significance	Effect size (Cohen's d)
Breastfeeding and infant feeding (n=47)	2.5	3	p<0.001	0.76
Child nutrition (n=48)	3.3	3.6	p<0.001	0.69
Infant and child physical activity (n-48)	3.2	3.4	p<0.001	0.48
Screen time (n=45)	3	3.2	p<0.001	0.46
Outdoor play and learning (n=10)	2.9	3.2		
Farm to ECE (n=4)	2.1	2.2		

Policy score changes

	Pre	Post	Significance
Farm to ECE	1.5	1.5	
Breastfeeding	1.9	2.1	
Screen time	2.1	2.2	
Child nutrition	2.2	2.4	
Infant and child physical activity	2.3	2.3	
Outdoor play and learning	2.5	2.7	
Infant feeding	2.5	2.8	

Education and professional development score changes

	Pre	Post	Significance
Breastfeeding	2	2.9	p<.0001
Screen time	2.6	3.1	p<.01
Infant feeding	2.7	3.5	
Child nutrition	2.8	3.4	p<.0001
Farm to ECE	2.9	3.1	
Outdoor play and learning	3.3	3.7	
Infant and child physical activity	3.3	3.5	p<.05

Source: AZ Health Zone FY22 Evaluation Report

Table 169. Percent of facilities reporting having written policies by Empower standard, 2019-2020

Activity	%
Staff training	93%
Sun safety	90%
Physical activity	90%
Smoke-free campus	89%
Family-style meals	85%
Limiting fruit juice	82%
Oral health	78%
ASHLine	75%
Breastfeeding friendly	74%
Child & Adult Care Food Program (CACFP)	73%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 170. Empower Implementation Report: Physical Activity Standards

Standard 1: Physical Activity
1. Provide at least 60 minutes per day for children one year and older.
2. Include adult-led activities.
3. Include free play opportunities.
4. Include outdoor and indoor physical activity.
5. Include moderate physical activity (for example: dancing, bouncing a ball).
6. Include vigorous physical activity (for example: running, skipping).
7. Limit sedentary or non-moving activity no more than 60 minutes at a time, except when sleeping.
8. Limit screen time to three hours or less per week and no screen time for children under age 2.
9. Do not withhold or use physical activity as punishment.
10. Provide information on physical activity and screen time to families at least annually.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 171. Empower Implementation Report: Physical Activity Standards Implementation in Licensed Child Care Facilities by Indicator

1. Provides >= 60 mins physical activity/day	Full	Partial	None	Don't know
Year 1	88.7%	10.1%	0.3%	0.9%
Year 2	91.2%	7.8%	0.3%	0.7%
Year 3	91.7%	7.7%	0.2%	0.4%
Year 4	94.4%	5.3%	0.0%	0.2%
Year 5	95.5%	4.7%	0.1%	0.1%
Year 6	95.1%	4.3%	0.0%	0.5%
Year 7	95.1%	3.5%	0.1%	1.3%
2. Includes adult-led activities	**Full**	**Partial**	**None**	**Don't know**
Year 1	86.4%	12.5%	0.5%	0.7%
Year 2	89.4%	9.6%	0.2%	0.8%
Year 3	89.5%	9.8%	0.2%	0.5%
Year 4	90.0%	9.7%	0.1%	0.3%
Year 5	89.3%	10.2%	0.1%	0.4%
Year 6	91.6%	7.4%	0.4%	0.6%
Year 7	91.3%	7.0%	0.5%	1.3%
3. Includes free play opportunities	**Full**	**Partial**	**None**	**Don't know**
Year 1	92.3%	7.2%	0.1%	0.5%
Year 2	95.0%	4.2%	0.1%	0.6%
Year 3	94.6%	5.1%	0.1%	0.3%
Year 4	95.9%	3.8%	0.1%	0.2%
Year 5	96.1%	3.8%	0.0%	0.0%
Year 6	96.4%	3.1%	0.0%	0.5%
Year 7	95.8%	3.1%	0.0%	1.1%
4. Includes indoor/outdoor physical activity	**Full**	**Partial**	**None**	**Don't know**
Year 1	90.8%	7.9%	0.9%	0.3%
Year 2	93.6%	4.8%	0.9%	0.7%
Year 3	93.1%	6.1%	0.4%	0.4%
Year 4	95.6%	4.1%	0.1%	0.2%
Year 5	96.4%	3.4%	0.1%	0.0%
Year 6	96.9%	2.5%	0.0%	0.5%

Year 7	96.7%	2.1%	0.1%	1.1%
5. Includes moderate physical activity	Full	Partial	None	Don't know
Year 1	87.1%	11.9%	0.3%	0.7%
Year 2	90.5%	8.2%	0.3%	1.0%
Year 3	91.3%	7.9%	0.1%	0.7%
Year 4	95.3%	4.5%	0.0%	0.2%
Year 5	96.5%	3.4%	0.1%	0.0%
Year 6	96.5%	2.9%	0.0%	0.5%
Year 7	95.6%	3.3%	0.0%	1.1%
6. Includes vigorous physical activity	Full	Partial	None	Don't know
Year 1	66.6%	27.3%	4.5%	1.6%
Year 2	73.0%	22.1%	2.9%	2.0%
Year 3	75.4%	20.3%	3.0%	1.3%
Year 4	90.4%	8.4%	0.8%	0.3%
Year 5	93.0%	6.5%	0.4%	0.1%
Year 6	93.3%	5.9%	0.3%	0.5%
Year 7	93.6%	5.3%	0.0%	1.1%
7. Limits sedentary activity to <= 60 mins	Full	Partial	None	Don't know
Year 1	89.7%	6.1%	2.3%	2.0%
Year 2	90.5%	6.0%	2.1%	1.4%
Year 3	90.6%	6.4%	2.2%	0.8%
Year 4	93.6%	5.0%	1.0%	0.4%
Year 5	94.3%	3.8%	1.3%	0.4%
Year 6	94.7%	3.8%	0.8%	0.7%
Year 7	94.0%	3.1%	1.3%	1.6%
8. Limits screen time to <=3 hours/week and 0 for children <2	Full	Partial	None	Don't know
Year 1	88.3%	4.1%	6.5%	1.0%
Year 2	90.2%	3.8%	4.5%	1.5%
Year 3	87.8%	4.9%	4.4%	2.9%
Year 4	92.5%	3.0%	3.9%	0.6%
Year 5	92.9%	2.3%	4.3%	0.5%
Year 6	93.1%	2.1%	4.0%	0.8%
Year 7	91.2%	2.3%	5.0%	1.5%
9. Does not use/withhold physical activity as punishment	Full	Partial	None	Don't know
Year 1	89.7%	1.5%	8.2%	0.6%
Year 2	91.3%	1.2%	6.7%	0.9%
Year 3	92.7%	2.2%	4.6%	0.5%
Year 4	95.2%	1.6%	2.9%	0.3%
Year 5	95.2%	1.1%	3.3%	0.3%
Year 6	95.7%	1.2%	2.6%	0.5%
Year 7	94.6%	0.9%	3.1%	1.5%
10. Provides information on screen time to families	Full	Partial	None	Don't know
Year 1	65.9%	16.2%	14.5%	3.3%
Year 2	71.5%	15.2%	10.2%	3.1%
Year 3	73.8%	14.2%	9.9%	2.2%
Year 4	84.4%	10.8%	3.3%	1.6%

Year 5	87.0%	9.8%	2.0%	1.2%
Year 6	87.8%	8.0%	2.5%	1.7%
Year 7	87.8%	8.0%	1.7%	2.5%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 172. Empower Implementation Report: Sun Safety Standards

Standard 2: Sun Safety
1. Follow the age-specific sun recommendations to limit sun exposure.
2. Monitor the intensity of the sun's rays and use the UV index when planning outdoor activities.
3. Limit sun exposure during peak UV hours from 10 a.m. to 4 p.m.
4. Protect skin from sun exposure during outdoor activities (for example: hat, sunglasses, protective clothing).
5. Obtain permission from the child's parent(s) before applying sunscreen.
6. Encourage the child's parent(s) to apply sunscreen to children before they arrive at the facility.
7. Provide sun safety information to families at least annually.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 173. Empower Implementation Report: Sun Safety Standards Implementation in Licensed Child Care Facilities by Indicator

1. Limits sun exposure to age-specific recommendations	Full	Partial	None	Don't know
Year 1	89.8%	6.2%	1.7%	2.4%
Year 2	92.8%	5.1%	0.5%	1.5%
Year 3	93.9%	4.5%	0.5%	1.0%
Year 4	95.2%	3.6%	0.5%	0.7%
Year 5	95.7%	3.4%	0.4%	0.5%
Year 6	96.1%	2.9%	0.2%	0.8%
Year 7	95.4%	2.8%	0.2%	1.6%
2. Monitors UV index in planning outdoor activity	Full	Partial	None	Don't know
Year 1	70.0%	15.5%	10.5%	4.0%
Year 2	78.4%	11.9%	6.5%	3.2%
Year 3	80.0%	13.3%	4.4%	2.3%
Year 4	89.5%	7.8%	1.6%	1.1%
Year 5	91.8%	6.0%	1.5%	0.7%
Year 6	93.8%	4.6%	0.6%	1.1%
Year 7	92.8%	4.2%	1.1%	1.8%
3. Limits sun exposure during peak hours (10am to 4pm)	Full	Partial	None	Don't know
Year 1	87.7%	10.4%	1.4%	0.5%
Year 2	89.5%	8.5%	1.0%	1.0%
Year 3	90.0%	9.0%	0.5%	0.5%
Year 4	92.4%	6.6%	0.5%	0.4%
Year 5	92.8%	6.6%	0.3%	0.2%
Year 6	93.2%	5.7%	0.5%	0.7%
Year 7	92.9%	5.4%	0.4%	1.4%
4. Protects skin from sun exposure when outdoors	Full	Partial	None	Don't know

Year 1	80.6%	14.1%	3.6%	1.8%
Year 2	83.1%	12.9%	2.7%	1.3%
Year 3	84.9%	11.5%	2.5%	1.1%
Year 4	83.9%	13.2%	2.1%	0.7%
Year 5	85.4%	12.8%	1.1%	0.7%
Year 6	85.6%	12.0%	1.3%	1.0%
Year 7	85.2%	11.7%	1.5%	1.6%
5. Obtains permission before applying sunscreen				
	Full	Partial	None	Don't know
Year 1	80.7%	3.7%	14.0%	1.6%
Year 2	85.4%	2.5%	10.4%	1.7%
Year 3	85.4%	3.2%	10.2%	1.2%
Year 4	88.3%	2.2%	8.4%	1.0%
Year 5	89.9%	2.0%	7.3%	0.8%
Year 6	90.2%	1.8%	6.9%	1.0%
Year 7	89.0%	1.8%	7.1%	2.1%
6. Encourages parents to apply sunscreen to child				
	Full	Partial	None	Don't know
Year 1	86.2%	7.1%	5.4%	1.2%
Year 2	89.5%	5.4%	3.5%	1.5%
Year 3	88.8%	6.8%	3.6%	0.8%
Year 4	91.1%	4.6%	3.2%	1.1%
Year 5	93.3%	4.2%	1.7%	0.8%
Year 6	94.0%	3.7%	1.3%	1.0%
Year 7	91.8%	4.5%	1.9%	1.8%
7. Provides sun safety information to families annually				
	Full	Partial	None	Don't know
Year 4	83.9%	8.7%	3.7%	3.6%
Year 5	88.4%	7.5%	2.6%	1.5%
Year 6	89.2%	7.2%	1.8%	1.9%
Year 7	88.4%	7.0%	2.0%	2.6%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 174. Empower Implementation Report: Breastfeeding Standards

Standard 3: Breastfeeding
1. Breastfeeding mothers, including employees, shall be provided a private and sanitary place to breastfeed their babies or express milk. A bathroom is not acceptable.
2. Provide a refrigerator or designated space in a refrigerator and/or freezer for breastmilk storage.
3. Display breastfeeding promotion information such as posters.
4. Provide information on breastfeeding to families at least annually.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 175. Table 130. Empower Implementation Report: Breastfeeding Standards Implementation in Licensed Child Care Facilities by Indicator

1. Provides a place to breastfeed or express milk	Full	Partial	None	Don't know
Year 1	61.5%	5.1%	28.7%	4.6%
Year 2	68.8%	4.5%	20.4%	6.3%
Year 3	71.3%	4.2%	20.7%	3.8%
Year 4	72.1%	6.1%	19.4%	2.4%
Year 5	74.3%	5.1%	18.6%	2.0%
Year 6	76.1%	4.0%	16.9%	3.0%
Year 7	77.1%	5.6%	13.8%	3.5%
2. Provides place in refrigerator for milk storage	**Full**	**Partial**	**None**	**Don't know**
Year 1	70.6%	1.6%	24.3%	3.5%
Year 2	73.8%	2.3%	18.6%	5.4%
Year 3	75.7%	2.0%	19.3%	3.0%
Year 4	70.1%	4.6%	22.6%	2.7%
Year 5	69.4%	5.7%	22.6%	2.3%
Year 6	73.3%	3.7%	19.9%	3.1%
Year 7	73.9%	4.7%	17.7%	3.7%
3. Displays breastfeeding promotion information	**Full**	**Partial**	**None**	**Don't know**
Year 1	46.8%	7.9%	39.2%	6.1%
Year 2	52.4%	8.5%	31.7%	7.4%
Year 3	54.9%	9.0%	31.4%	4.7%
Year 4	55.2%	9.0%	31.6%	4.2%
Year 5	56.2%	10.0%	30.8%	3.0%
Year 6	60.5%	8.5%	27.3%	3.8%
Year 7	60.5%	9.7%	25.6%	4.2%
4. Provides breastfeeding information to families annually	**Full**	**Partial**	**None**	**Don't know**
Year 1	45.1%	9.9%	38.8%	6.2%
Year 2	50.6%	11.4%	30.7%	7.3%
Year 3	54.5%	10.1%	30.8%	4.7%
Year 4	56.2%	9.8%	29.1%	4.9%
Year 5	57.6%	10.1%	28.9%	3.4%
Year 6	61.4%	9.5%	24.7%	4.3%
Year 7	63.2%	9.9%	22.1%	4.7%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 176. Empower Implementation Report: Fruit Juice Standards

Standard 5: Fruit Juice
1. Provide water throughout the day both inside and outside.
2. Provide water as the first choice for thirst.
3. Do not serve fruit juice more than two times per week to children one year or older.
4. Limit serving more than a half-cup (or four ounces) of fruit juice at one time for children one year to less than six years of age.
5. Serve only 100 percent fruit juice with no added sugar or never serve juice.
6. Serve fruit juice only during meal or snack time.
7. Provide information about limiting fruit juice to families at least annually.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 177. Empower Implementation Report: Fruit Juice Standards Implementation in Licensed Child Care Facilities by Indicator

1. Provides water throughout the day	Full	Partial	None	Don't know
Year 1	98.6%	0.7%	0.3%	0.4%
Year 2	98.9%	0.2%	0.3%	0.6%
Year 3	98.0%	1.6%	0.0%	0.4%
Year 4	98.6%	1.0%	0.1%	0.2%
Year 5	99.0%	0.5%	0.3%	0.2%
Year 6	98.4%	0.3%	0.4%	0.8%
Year 7	98.0%	0.5%	0.2%	1.3%
2. Offers water as the first choice for thirst	Full	Partial	None	Don't know
Year 1	98.0%	1.1%	0.5%	0.4%
Year 2	98.0%	1.1%	0.3%	0.6%
Year 3	97.4%	2.2%	0.1%	0.4%
Year 4	98.6%	0.9%	0.2%	0.2%
Year 5	98.9%	0.7%	0.2%	0.2%
Year 6	98.5%	0.3%	0.4%	0.8%
Year 7	98.0%	0.5%	0.2%	1.3%
3. Does not serve fruit juice more than twice/week	Full	Partial	None	Don't know
Year 1	84.7%	8.3%	5.9%	1.1%
Year 2	88.4%	5.9%	4.5%	1.3%
Year 3	88.4%	7.3%	3.3%	1.0%
Year 4	91.0%	4.1%	4.4%	0.5%
Year 5	91.0%	4.1%	4.3%	0.6%
Year 6	90.2%	2.6%	6.1%	1.0%
Year 7	89.1%	2.5%	6.7%	1.8%
4. Does not serve more than 4-6 oz. Of fruit juice at a time	Full	Partial	None	Don't know
Year 1	88.6%	5.8%	4.1%	1.6%
Year 2	91.0%	3.9%	3.4%	1.7%
Year 3	91.5%	4.7%	3.0%	0.8%
Year 4	92.6%	2.5%	4.4%	0.4%
Year 5	93.0%	2.0%	4.4%	0.6%
Year 6	91.6%	1.5%	6.0%	1.0%
Year 7	89.4%	1.2%	7.6%	1.8%

5. Serves 100% fruit juice (or never serves juice)				
	Full	Partial	None	Don't know
Year 1	90.8%	3.2%	4.7%	1.2%
Year 2	93.1%	2.4%	2.8%	1.7%
Year 3	91.5%	3.6%	4.1%	0.8%
Year 4	91.5%	2.1%	6.0%	0.5%
Year 5	91.8%	1.7%	5.6%	0.8%
Year 6	89.6%	1.8%	7.3%	1.4%
Year 7	86.7%	1.7%	9.6%	2.1%
6. Serves fruit juice only at meals/snacks				
	Full	Partial	None	Don't know
Year 1	88.5%	4.9%	5.6%	1.0%
Year 2	90.8%	3.6%	4.1%	1.4%
Year 3	90.6%	4.5%	4.4%	0.5%
Year 4	90.4%	2.6%	6.7%	0.3%
Year 5	90.9%	2.0%	6.4%	0.7%
Year 6	88.4%	1.7%	8.7%	1.2%
Year 7	84.9%	2.2%	11.1%	1.8%
7. Provides information on fruit juice to families				
	Full	Partial	None	Don't know
Year 1	58.4%	16.4%	21.2%	4.0%
Year 2	68.3%	13.4%	13.7%	4.6%
Year 3	68.9%	14.8%	13.3%	3.0%
Year 4	79.7%	8.7%	8.7%	2.9%
Year 5	82.5%	8.2%	6.7%	2.7%
Year 6	81.8%	7.1%	7.7%	3.5%
Year 7	80.6%	7.3%	7.9%	4.3%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 178. Empower Implementation Report: Child and Adult Care Food Program Standards

Standard 4: Child and Adult Care Food Program
1. Written policy on determining eligibility status for CACFP
2. Level of implementation of determining eligibility status for CACFP (beginning August 2016)

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 179. Determines eligibility status for CACFP annually

	Full	Partial	None	Don't know
Year 4	61.8%	2.5%	25.9%	9.9%
Year 5	62.5%	2.5%	26.8%	8.2%
Year 6	62.5%	2.0%	27.8%	7.7%
Year 7	62.3%	2.4%	27.4%	8.0%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 180. Empower Implementation Report: Family-Style Meals Standards

Standard 6: Family-Style Meals
1. Serve meals family style whenever possible.
2. Use child-sized serving utensils and containers.
3. Require staff to sit, participate, and interact with children during mealtime.
4. Allow children to serve themselves so they may choose what to put on their plates and how much to eat.
5. Do not use food as a reward or punishment.
6. Provide information on healthy eating to families at least annually.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 181. Empower Implementation Report: Family-style meals Standards Implementation in Licensed Child Care Facilities by Indicator

1. Serves meals family style	Full	Partial	None	Don't know
Year 1	79.2%	12.8%	7.1%	0.9%
Year 2	80.0%	12.6%	5.4%	2.0%
Year 3	82.4%	11.1%	5.6%	0.9%
Year 4	81.7%	11.2%	6.6%	0.6%
Year 5	81.2%	11.4%	6.9%	0.4%
Year 6	82.0%	10.9%	5.6%	1.5%
Year 7	79.6%	11.5%	6.3%	2.5%
2. Uses child-sized serving utensils	Full	Partial	None	Don't know
Year 1	85.7%	7.5%	5.9%	0.9%
Year 2	87.9%	6.7%	3.7%	1.7%
Year 3	89.2%	6.2%	3.8%	0.8%
Year 4	86.9%	7.1%	5.5%	0.5%
Year 5	86.4%	7.2%	5.8%	0.6%
Year 6	86.7%	8.0%	4.0%	1.2%
Year 7	85.3%	7.7%	4.4%	2.5%
3. Requires staff participate in meals w/ children	Full	Partial	None	Don't know
Year 1	91.6%	5.6%	2.1%	0.7%
Year 2	90.8%	5.7%	2.1%	1.4%
Year 3	91.5%	5.6%	2.3%	0.7%
Year 4	93.0%	5.1%	1.7%	0.2%
Year 5	92.1%	5.7%	2.0%	0.1%
Year 6	92.3%	5.2%	1.5%	1.0%
Year 7	92.3%	4.2%	1.7%	1.8%
4. Allows children to choose what, how much to eat	Full	Partial	None	Don't know
Year 1	82.8%	13.2%	3.5%	0.5%
Year 2	85.8%	10.6%	2.0%	1.6%
Year 3	86.4%	10.3%	2.6%	0.8%
Year 4	88.5%	8.3%	2.9%	0.3%
Year 5	89.6%	7.6%	2.5%	0.2%
Year 6	89.1%	7.2%	2.6%	1.1%
Year 7	90.7%	5.8%	1.6%	1.8%
5. Does not use food as punishment or reward				

	Full	Partial	None	Don't know
Year 1	93.5%	0.7%	4.8%	1.0%
Year 2	93.2%	1.0%	4.2%	1.5%
Year 3	93.8%	1.9%	3.7%	0.7%
Year 4	95.5%	1.4%	2.8%	0.3%
Year 5	95.7%	1.0%	3.0%	0.3%
Year 6	95.1%	1.4%	2.6%	0.9%
Year 7	94.0%	1.0%	3.2%	1.8%
6. Provides information on healthy eating to families				
	Full	Partial	None	Don't know
Year 1	78.2%	13.8%	6.4%	1.6%
Year 2	81.4%	12.9%	3.4%	2.3%
Year 3	82.8%	11.2%	4.4%	1.6%
Year 4	88.1%	6.9%	3.6%	1.4%
Year 5	88.9%	6.6%	3.1%	1.4%
Year 6	88.3%	6.8%	3.2%	1.8%
Year 7	89.4%	5.3%	2.5%	2.8%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 182. Empower Implementation Report: Oral Health Standards

Standard 7: Oral Health
1. Provide monthly oral health education and/or implement a daily tooth brushing program.
2. Do not allow children to carry a bottle or sippy cup during the day unless it is water.
3. Educate parents on the importance of a dental visit by their child's first birthday.
4. Do not put children to sleep with a bottle.
5. Limit serving of meals and snacks to scheduled times.
6. Educate parents about cleaning teeth and oral hygiene at home.
7. Provide information on tooth decay to families at least annually.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 183. Empower Implementation Report: Oral Health Standards Implementation in Licensed Child Care Facilities by Indicator

1. Provides monthly oral health education				
	Full	Partial	None	Don't know
Year 1	48.7%	30.5%	17.7%	3.1%
Year 2	54.2%	29.8%	12.6%	3.4%
Year 3	56.3%	28.6%	12.8%	2.3%
And/or implements a daily tooth brushing program	Full	Partial	None	Don't know
Year 4	59.3%	24.4%	13.8%	2.6%
Year 5	63.6%	21.8%	12.8%	1.8%
Year 6	65.6%	21.0%	10.4%	3.0%
Year 7	63.3%	22.9%	9.8%	4.1%
2. Does not allow child to carry bottle or sippy cup unless it is water				
	Full	Partial	None	Don't know
Year 4	71.8%	13.6%	9.9%	4.7%
Year 5	77.9%	11.7%	8.3%	2.1%
Year 6	78.0%	11.7%	7.6%	2.8%

Year 7	76.2%	13.2%	6.8%	3.7%
3. Educates parent(s) on importance of dental visit by first birthday				
	Full	Partial	None	Don't know
Year 4	70.2%	16.3%	9.3%	4.1%
Year 5	75.3%	15.0%	7.8%	1.9%
Year 6	77.2%	13.7%	6.7%	2.4%
Year 7	75.2%	14.9%	6.3%	3.6%
4. Does not put children to sleep with a bottle				
	Full	Partial	None	Don't know
Year 1	69.5%	2.4%	24.8%	3.3%
Year 2	74.5%	2.3%	20.1%	3.2%
Year 3	74.8%	2.6%	21.0%	1.7%
Year 4	87.5%	2.8%	8.8%	0.9%
Year 5	89.4%	2.4%	7.2%	1.0%
Year 6	91.0%	1.9%	5.8%	1.4%
Year 7	90.1%	2.1%	5.5%	2.4%
5. Limits serving of snacks to scheduled times				
	Full	Partial	None	Don't know
Year 1	88.3%	5.8%	4.8%	1.1%
Year 2	89.3%	6.4%	2.8%	1.5%
Year 3	90.3%	5.7%	3.2%	0.8%
Year 4	71.2%	11.9%	13.8%	3.2%
Year 5	73.5%	12.4%	11.6%	2.4%
Year 6	75.1%	11.8%	10.2%	2.9%
Year 7	72.9%	13.2%	10.4%	3.5%
6. Educates parents about cleaning teeth at home				
	Full	Partial	None	Don't know
Year 1	56.4%	22.6%	18.2%	2.8%
Year 2	63.7%	21.2%	12.5%	2.6%
Year 3	66.3%	18.8%	12.5%	2.3%
Year 4	79.1%	3.4%	16.4%	1.1%
Year 5	82.7%	1.5%	14.3%	1.5%
Year 6	83.9%	1.2%	13.1%	1.9%
Year 7	83.2%	1.5%	13.0%	2.4%
7. Provides information on tooth decay to families at least annually				
	Full	Partial	None	Don't know
Year 1	52.9%	22.3%	21.3%	3.4%
Year 2	60.4%	21.1%	15.7%	2.8%
Year 3	62.8%	19.4%	14.6%	3.2%
Year 4	89.6%	5.5%	4.2%	0.7%
Year 5	92.9%	3.5%	2.9%	0.6%
Year 6	92.7%	3.2%	2.8%	1.3%
Year 7	91.5%	3.7%	2.4%	2.4%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 184. Empower Implementation Report: Staff Training Standards

Standard 8: Staff Training
1. Staff required to receive three hours of training on Empower topics annually.
2. Program directors required to provide training opportunities to staff members.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 185. Empower Implementation Report: Staff Training Standards Implementation in Licensed Child Care Facilities by Indicator

1. Requires staff to receive 3 hours of training	Full	Partial	None	Don't know
Year 1	70.8%	16.0%	6.2%	6.9%
Year 2	82.1%	9.6%	3.5%	4.8%
Year 3	82.6%	10.0%	3.2%	4.2%
Year 4	85.9%	9.0%	1.7%	3.4%
Year 5	87.2%	8.9%	1.3%	2.5%
Year 6	88.1%	7.8%	1.4%	2.7%
Year 7	86.2%	8.5%	1.1%	4.2%
2. Requires program directors to provide training opportunities	**Full**	**Partial**	**None**	**Don't know**
Year 4	88.9%	5.8%	1.4%	3.9%
Year 5	92.3%	5.0%	1.0%	1.6%
Year 6	92.4%	4.2%	1.0%	2.4%
Year 7	90.6%	5.1%	1.1%	3.1%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 186. Empower Implementation Report: ASHLine Standards

Standard 9: ASHLine
1. Provide information on the dangers of second- and third-hand smoke to families.
2. Provide ASHLine education materials to families at least annually.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 187. Empower Implementation Report: ASHLine Standards Implementation in Licensed Child Care Facilities by Indicator

1. Has policy on providing ASHLine materials on dangers of second- and third-hand smoke				
	Full	Partial	None	Don't know
Year 4	73.4%	12.5%	9.5%	4.6%
Year 5	77.3%	11.1%	8.0%	3.6%
Year 6	76.0%	11.1%	8.4%	4.5%
Year 7	74.2%	12.8%	7.1%	5.9%
2. Provides ASHLine education materials to families at least annually				
	Full	Partial	None	Don't know
Year 4	69.2%	11.9%	11.5%	7.4%
Year 5	75.3%	10.3%	9.3%	5.1%
Year 6	74.2%	10.3%	10.0%	5.5%
Year 7	73.4%	10.8%	9.3%	6.5%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 188. Empower Implementation Report: Smoke-Free Campus Standards

Standard 10: Smoke-Free Campus
1. Create and display a smoke-free policy for the facility.
2. Provide written guidelines about the smoke-free policy to families.
3. Provide written guidelines about the smoke-free policy to staff members.
4. Post the provided Smoke-Free Arizona Act (A.R.S. §36-601.01) sign at the entrance of the facility.

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 189. Empower Implementation Report: Smoke-free campus Standards Implementation in Licensed Child Care Facilities by Indicator

1. Displays smoke-free policy	Full	Partial	None	Don't know
Year 1	90.3%	2.5%	5.4%	1.8%
Year 2	92.7%	2.6%	3.1%	1.6%
Year 3	93.1%	2.6%	2.5%	1.7%
Year 4	93.1%	2.6%	2.5%	1.8%
Year 5	93.5%	2.2%	2.7%	1.5%
Year 6	92.3%	2.2%	3.0%	2.4%
Year 7	92.0%	1.5%	3.4%	3.1%
2. Provides written guidelines about smoke-free policy to families	Full	Partial	None	Don't know
Year 1	75.8%	10.4%	10.0%	3.8%
Year 2	80.2%	9.8%	7.4%	2.6%
Year 3	79.8%	9.5%	7.8%	2.9%
Year 4	82.0%	8.7%	6.3%	3.0%
Year 5	83.5%	8.0%	6.0%	2.6%
Year 6	83.3%	7.6%	5.8%	3.4%
Year 7	81.6%	8.5%	5.5%	4.4%
3. Provides written guidelines about smoke-free policy to staff	Full	Partial	None	Don't know
Year 1	80.4%	7.9%	8.4%	3.3%
Year 2	83.5%	7.7%	5.9%	3.0%
Year 3	84.2%	7.1%	6.0%	2.7%
Year 4	85.3%	6.6%	5.2%	2.9%
Year 5	87.5%	5.5%	4.8%	2.2%
Year 6	86.8%	5.1%	5.2%	2.8%
Year 7	86.6%	5.2%	4.5%	3.7%
4. Posts smoke-free Arizona act sign at entrance of facility	Full	Partial	None	Don't know
Year 1	85.9%	2.7%	7.7%	3.7%
Year 2	88.2%	2.8%	5.2%	3.8%
Year 3	90.0%	3.2%	4.2%	2.6%
Year 4	88.9%	3.4%	5.1%	2.7%
Year 5	90.7%	2.7%	4.3%	2.3%
Year 6	89.4%	2.7%	4.7%	3.2%
Year 7	88.1%	2.6%	4.7%	4.6%

Source: Arizona Department of Health Services. (July 14, 2021). Empower Implementation Report: Years 4 through 7. Division of Public Health Prevention, Bureau of Nutrition and Physical Activity, Office of Research and Development. Available at: https://www.azdhs.gov/documents/prevention/reports/stakeholders/az-yr4-yr7-empower-implementation-report.pdf

Table 190. Nutrition-Related Health Policies and Practices in Arizona Schools, 2010-16

Policies and Practices	2010	2012	2014	2016
Did not sell less nutritious food and beverages (salty snacks, candy, soda (pop), fruit drinks, and sports drinks) from vending machines or at school store, canteen, or snack bar.	56.2%	57.3%	56.3%	65.8%
Offered fruits or non-fried vegetables in vending machines, school stores, canteens or snack bars, and during celebrations when food and beverages are offered.*	10.1%	6.9%	31.3%*	41.4%
Prohibited all forms of advertising and promotion of candy, fast food restaurants, or soft drinks in all locations.	63.0%	55.7%	57.6%	59.2%
Used the School Health Index or a similar self-assessment tool to assess their policies, activities, and programs in nutrition.	24.9%	31.9%	36.1%	36.8%
Required students to take two or more health education courses.	18.5%	16.8%	15.3%	13.8%
Teachers tried to increase student knowledge on nutrition and dietary behaviors.	83.2%	70.3%	77.6%	75.6%

Source: Arizona's School Health Profiles 2010-2016
*Only includes fruits or non-fried vegetables at school celebrations.

Table 191. School Policies and Practices on Physical Activity, 2010-16

Policies and Practices	2008	2010	2012	2014	2016
Offered opportunities for all students to participate in intramural activities or physical activity clubs	71.20%	72.10%	64.10%	65.80%	71.10%
Physical education teachers or specialists received professional development on physical education or physical activity during the past year	NA	NA	NA	58.40%	66.90%
Used the School Health Index or a similar self-assessment tool to assess their policies, activities, and programs in physical activity	24.60%	25.80%	31.10%	32.40%	35.50%

Source: Arizona's School Health Profiles 2010-2016

Table 192. Schools Requiring Physical Education by Grade Level, 2010-16

Level	2008	2010	2012	2014	2016
Grade 6	98.20%	96.50%	97.60%	81.50%	84.80%
Grade 7	94.70%	93.00%	91.70%	75.00%	80.40%
Grade 8	90.10%	89.10%	91.00%	73.80%	78.20%
Grade 9	89.70%	90.60%	88.50%	71.50%	64.00%
Grade 10	48.70%	57.00%	45.20%	27.40%	37.40%
Grade 11	42.30%	52.50%	41.00%	19.80%	34.90%
Grade 12	40.20%	51.30%	42.80%	20.30%	35.20%

Source: Arizona's School Health Profiles 2010-2016

Table 193. Schools Providing Materials to Those Teaching Physical Education, 2010-16

Percentage of schools that have…	2008	2010	2012	2014	2016
Goals, objectives, and expected outcomes for physical education	80.90%	87.30%	77.50%	81.80%	86.30%
A chart describing the annual scope and sequence of instruction for physical education	59.40%	64.50%	62.80%	64.20%	71.20%
Plans for how to assess student performance in physical education	66.40%	69.50%	66.60%	70.30%	75.50%
A written physical education curriculum	63.00%	69.20%	66.50%	68.10%	68.60%
Resources for fitness testing	NA	NA	NA	72.50%	78.50%
Physical activity monitoring devices, such as pedometers or heart rate monitors, for physical education	NA	NA	NA	45.90%	47.60%
Students participating in physical activity breaks in classrooms during the school day outside of physical education	NA	NA	53.80%	59.10%	57.30%
Opportunities for all students to participate in intramural sports programs or physical activity clubs	71.20%	72.10%	64.10%	65.80%	71.10%
Interscholastic sports available to students	NA	NA	74.80%	77.50%	78.40%
Opportunities for students to participate in physical activity before the school day through organized physical activities or access to facilities or equipment for physical activity	NA	NA	NA	51.80%	50.30%
A joint use agreement for shared use of school or community physical activity facilities	NA	NA	60.60%	56.10%	54.60%
Established, implemented, or evaluated Comprehensive School Physical Activity Program (CSPAP)	NA	NA	NA	3.50%	2.30%

Source: Arizona's School Health Profiles 2010-2016

Table 194. Students' consumption of MyPlate foods (*times per day yesterday)

Fruit	1.7
Veggies	1.4
Dairy	1.3
Protein	0.7
Whole grains	0.5

*Times per day is not aligned with servings

Source: AZ Health Zone FY22 Evaluation Report

Table 195. Students' consumption of beverages

	Times per day yesterday
Sugary drinks	1
Water	4 to 5
Dairy milk (all)	1.3

Type of milk consumed	Percent of students
Whole milk	24%
1% or fat free	23%
No milk or dairy alternative	15%
Other	38%

Source: AZ Health Zone FY22 Evaluation Report

Trauma-informed approaches

Table 196. Personal Nutrition Habits of ATT Participants

	Percent of ATT participants
Ate more fruits	47%
Ate fewer fruits	6%
Ate more vegetables	27%
Ate fewer vegetables	18%
Ate more whole grain breads and tortillas	37%
Ate more whole grain quinoa, oatmeal, rice, and pasta	24%
Drank fewer sugary drinks	49%
Increased "yesterday" water intake	36%

Source: AZ Health Zone FY21 Evaluation Report

Table 197. TIA survey, FY21

LIA staff surveyed, FY21	67
Female	97%
Largest age group: 30-39	28%
Length of SNAP-Ed experience: 1-2 years	21%
Length of SNAP-Ed experience: 10 or more years	21%
Five or more TIA training hours via webinars and books/materials (most common)	31%
In-person TIA training exposure (least common)	15%
No prior TIA training or exposure	6%

Source: AZ Health Zone FY21 Evaluation Report

References

[1] National Institute of Food and Agriculture. Supplemental Nutrition Education Program - Education (SNAP-Ed). (2023) Retrieved from https://www.nifa.usda.gov/grants/programs/capacity-grants/efnep/snap/supplemental-nutrition-education-program-education-snap-ed

[2] Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: coming of age. *Annual review of public health*, *32*, 381-398.

[3] Maggi, S., Irwin, L. J., Siddiqi, A., & Hertzman, C. (2010). The social determinants of early child development: an overview. *Journal of paediatrics and child health*, *46*(11), 627-635.

[4] Hertzman, C. (1999). The biological embedding of early experience and its effects on health in adulthood. *Annals of the New York Academy of Sciences*, *896*(1), 85-95.

[5] Karoly, L. A., Kilburn, M. R., & Cannon, J. S. (2006). *Early childhood interventions: Proven results, future promise*. Rand Corporation.

[6] World Health Organization. (2010). A conceptual framework for action on the social determinants of health. https://www.who.int/publications/i/item/9789241500852

[7] U.S. Department of Health and Human Services Office for the Assistant Secretary for Planning and Evaluation. (2020). Poverty guidelines, all states (except Alaska and Hawaii) – 2020 annual. Retrieved from https://aspe.hhs.gov/sites/default/files/migrated_legacy_files//194391/2020-percentage-poverty-tool.pdf

[8] Arizona Department of Economic Security. (2023). How to apply for nutrition assistance – Eligibility. Retrieved from https://des.az.gov/how-to-apply-snap

[9] U.S. Department of Commerce & U.S. Census Bureau. (2020). Population density of the 50 states, the District of Columbia, and Puerto Rico: 1910 to 2020. Retrieved May 15, 2023 from https://www2.census.gov/programs-surveys/decennial/2020/data/apportionment/population-density-data-table.pdf

[10] AHCCCS. (2023). AHCCCS eligibility requirements February 1, 2023. Retrieved from https://www.azahcccs.gov/Members/Downloads/EligibilityRequirements.pdf

[11] State of Arizona. (2020). Executive Order 2020-36: Stay Healthy, Return Smarter, Return Stronger. Retrieved from https://azgovernor.gov/sites/default/files/executive_order_2020-36_return_stronger.pdf

[12] Arizona Commerce Authority. (2023). County profile for Apache County. Retrieved from https://www.azcommerce.com/a/profiles/ViewProfile/2/Apache+County/#:~:text=The%20Apache%20and%20Navajo%20Indian,14%20percent%20is%20privately%20owned.

[13] Arizona Commerce Authority. (2023). County profile for Navajo County. Retrieved from https://www.azcommerce.com/a/profiles/ViewProfile/11/Navajo+County/

[14] National Alliance to End Homelessness. (2023). Chronically homeless. Retrieved from https://endhomelessness.org/homelessness-in-america/who-experiences-homelessness/chronically-homeless/

[15] Arizona Department of Economic Security. (2022, December 31). State of Homelessness: Homelessness in Arizona Annual Report 2022. Retrieved from https://des.az.gov/file/30260/download

[16] Herbert, C., Hermann, A. and McCue, D. (2018). Measuring Housing Affordability: Assessing the 30 Percent of Income Standard. Cambridge, MA: Joint Center for Housing Studies of Harvard University. Retrieved September 14, 2021 from https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Herbert_Hermann_McCue_measuring_housing_affordability.pdf

[17] Pew Research Center. (2021). Internet/Broadband Fact Sheet. Retrieved from https://www.pewresearch.org/internet/fact-sheet/internet-broadband/

[18] Wang, H. L. (2018). Native Americans On Tribal Land Are 'The Least Connected' To High-Speed Internet. NPR. Retrieved from https://www.npr.org/2018/12/06/673364305/native-americans-on-tribal-land-are-the-least-connected-to-high-speed-internet

[19] U.S. Census Bureau. (2022). Health insurance coverage status and type by geography: 2019 and 2021. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2022/acs/acsbr-013.pdf

[20] U.S. Census Bureau. (2020). American Community Survey and Puerto Rico Community Survey 2019 subject definitions. Retrieved from https://www2.census.gov/programssurveys/acs/tech_docs/subject_definitions/2019_ACSSubjectDefinitions.pdf

[21] Caspi, C. E., Pelletier, J. E., Harnack, L. J., Erickson, D. J., & Laska, M. N. (2017). Differences in Healthy Food Supply and Racial/Ethnic Disparities in the Nutritional Quality of Households' Food Purchases. International Journal of Environmental Research and Public Health, 14(8), 918.

[22] Keith, M. G., & Leibtag, E. S. (2019). Examining the Impact of Dollar Stores on Food Insecurity in the United States. Applied Economic Perspectives and Policy, 41(4), 589–613.

[23] Moynihan PJ, Kelly SAM. (2014). Effect on Caries of Restricting Sugars Intake: Systematic Review to Inform WHO Guidelines. J Dent Res; 93(1):8-18.

[24] Drewnowski A, Rehm CD. (2014). Consumption of added sugars among US children and adults by food purchase location and food source. Am J Clin Nutr., 100(3):901-907.

[25] USDA. (n.d.). Food and Nutrition Security. Retrieved from https://www.usda.gov/nutrition-security
[26] USDA Economic Research Service. (2021, September). Household food security in the United States in 2020. Retrieved from https://www.ers.usda.gov/webdocs/publications/102076/err-298.pdf?v=6167.1
[27] Arizona Department of Health Services. (2022). Value of WIC Food Benefits. Retrieved from https://www.azdhs.gov/documents/prevention/nutrition-physical-activity/value-of-wic-food-benefits.pdf
[28] Faw, E. (n.d.). Federal emergency food responses to COVID-19. Retrieved from https://nutr.uw.edu/wp-content/uploads/2022/01/Faw-Beth-Capstone-AUT-2021.pdf
[29] USDA. (n.d.). Food Distribution Program on Indian Reservations. Retrieved from https://www.fns.usda.gov/fdpir/food-distribution-program-indian-reservations
[30] Arizona Food Systems Network. (2022). Arizona Statewide Food Action Plan 2022-2024. Retrieved from https://www.azfsn.org/food-action-plan.html
[31] U.S. Department of the Interior Indian Affairs. (n.d.). Why food sovereignty matters. Retrieved from https://www.bia.gov/service/indigenous-tourism/why-food-sovereignty-matters
[32] AZ Health Zone. (2022). FY21 Evaluation Report: Weaving community into the fabric of SNAP-Ed. Retrieved from https://nutritioneval.arizona.edu/results
[33] BEAT Institute. (n.d.). Physical Activity Resource Assessment (PARA) Materials. Retrieved from https://www.med.upenn.edu/beat/para-materials.html
[34] U.S. Census Bureau. (2021). 2020 National Survey of Children's Health – Methodology Report. Retrieved from https://www2.census.gov/programs-surveys/nsch/technical-documentation/methodology/2020-NSCH-Methodology-Report.pdf
[35] CDC. (2016). Screen time vs. lean time: age group 15-18. Retrieved from https://stacks.cdc.gov/view/cdc/47582
[36] County Health Rankings & Roadmaps. (2023). Health behaviors. Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model/health-factors/health-behaviors
[37] Arizona Department of Health Services. (2019). Differences in the health status among racial/ethnic groups. Arizona, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/dhsag/dhsag19/ethnic19.pdf
[38] Shah NS, Wang MC, Freaney PM, et al. Trends in Gestational Diabetes at First Live Birth by Race and Ethnicity in the US, 2011-2019. *JAMA*. 2021;326(7):660–669. doi:10.1001/jama.2021.7217
[39] Cedergren, M. I. (2007). Optimal gestational weight gain for body mass index categories. Obstetrics & Gynecology, 110(4), 759-764.
[40] Ohio Department of Health. (n.d.). Pregnancy Risk Assessment Monitoring System. Retrieved from https://odh.ohio.gov/know-our-programs/pregnancy-risk-assessment-survey-prams#:~:text=The%20Pregnancy%20Risk%20Assessment%20Monitoring,early%20infancy%20of%20her%20child.
[41] CDC. (2022). Pregnancy and oral health. Retrieved from https://www.cdc.gov/oralhealth/publications/features/pregnancy-and-oral-health.html
[42] CDC. (2023). Pregnancy complications. Retrieved from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-complications.html
[43] Section on Breastfeeding, Eidelman, A. I., Schanler, R. J., Johnston, M., Landers, S., Noble, L., ... & Viehmann, L. (2012). Breastfeeding and the use of human milk. Pediatrics, 129(3), e827-e841.
[44] Raju, T.N.K. (2023). Achieving healthy people 2030 breastfeeding targets in the United States: challenges and opportunities. *J Perinatol* 43, 74–80 https://doi.org/10.1038/s41372-022-01535-x
[45] CDC. (2022). Breastfeeding Report Card. Retrieved from https://www.cdc.gov/breastfeeding/data/reportcard.htm
[46] CDC. (2021). Scoring: Maternity Care Practices. Retrieved from https://www.cdc.gov/breastfeeding/data/mpinc/scoring.htm
[47] Go NAPSACC. (n.d.). Our purpose. Retrieved from https://gonapsacc.org/our-purpose
[48] ADHS. (n.d.). Empower frequently asked questions (FAQs). Retrieved from https://www.azdhs.gov/prevention/nutrition-physical-activity/empower/index.php#faqs
[49] USDA. (n.d.). Local school wellness policies. Retrieved from https://www.fns.usda.gov/tn/local-school-wellness-policy
[50] WellSAT:3.0. (n.d.). Welcome to the WellSAT 3.0. Retrieved from https://www.wellsat.org/
[51] WellSAT:3.0. (n.d.). About the WellSAT. Retrieved from https://www.wellsat.org/about_the_WellSAT.aspx
[52] USDA. (2017). Smarter Lunchrooms Movement. Retrieved from https://snaped.fns.usda.gov/library/success-stories/smarter-lunchrooms-movement
[53] AZ Health Zone. (2019). AZ Health Zone Policies and Procedures. Retrieved from https://www.azhealthzone.org/wp-content/uploads/2021/10/ffy19_azhz_pp-manual_final_rev04-10-19.pdf
[54] State of Arizona Department Of Health Services. (2020). Request for Grant Application (RFGA) – AZ Health Zone (SNAP-Ed).
[55] State of Arizona Department Of Health Services. (2020). Request for Grant Application (RFGA) – AZ Health Zone (SNAP-Ed).
[56] HRSA. (2020). NSCH Data Brief: Adverse childhood experiences. Retrieved from https://mchb.hrsa.gov/sites/default/files/mchb/data-research/nsch-ace-databrief.pdf