AZ HEALTH ZONE

FY21 Evaluation Report

Weaving Community into the Fabric of SNAP-Ed

THE UNIVERSITY OF ARIZONA
COLLEGE OF AGRICULTURE & LIFE SCIENCES
Nutritional Sciences & Wellness

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List of Acronyms

AAT	Activity & Assessment Tool
ADE	Arizona Department of Education
ADHS	Arizona Department of Health Services
APS	Arizona Public Service
ATT	Around the Table
AZHZ	AZ Health Zone
CDC	Centers for Disease Control & Prevention
COVID	Coronavirus Disease
DE	Direct Education
EBT	Electronic Benefit Transfer
ECE	Early Care & Education
FY	Fiscal Year (Oct 1st – Sept 30th)
IRC	International Rescue Committee
LEA	Local Education Agency
LIA	Local Implementing Agency
LWP	Local Wellness Policy
MAG	Maricopa Association of Governments
MALC	Mohave Accelerated Learning Center
PA	Physical Activity
PARA	Physical Activity Resource Assessment
PSE	Policy, Systems & Environmental
SARN	Semi-Annual Report Narrative
SEEDS	SNAP-Ed Electronic Data System
SET	AZ Health Zone State Evaluation Team
SFSP	Summer Food Service Program
SIT	AZ Health Zone State Implementation Team
SNAP	Supplemental Nutrition Assistance Program
SNAP-Ed	Supplemental Nutrition Assistance Program-Education
SSPNA	Sí Se Puede Neighborhood Association
STORE	Stocking Opportunities in the Retail Environment
TIA	Trauma-informed Approaches
UA	University of Arizona
USDA	United States Department of Agriculture
WIC	Women, Infant & Children Program
YSCA	Yuma Southwest Contractors Association

"We all should know that diversity makes for a rich tapestry, and we must understand that all the threads of the tapestry are equal in value no matter what their color."

-Maya Angelou

Executive Summary

The AZ Health Zone, Arizona's SNAP-Ed program, coordinates statewide activities with Local Implementing Agencies (LIAs). A primary program goal is to increase healthful nutrition and physical activity behaviors among SNAP participants and eligibles through policy, systems, and environmental (PSE) approaches and direct education. This report describes results from Fiscal Year 2021 (FY21)—the first year of a five-year implementation cycle.

Active Living. Twenty-eight parks and four large trails were assessed using the Physical Activity Resource Assessment (PARA) in FY21. There were no statistically significant changes in section or total scores from FY17-21 for the longitudinal sample (n=11). There were also no significant changes in mean scores from FY19-21 (n=19).

Childhood: School Systems. In FY21, six LIAs in 13 counties submitted rich narratives of *Community Coordination* efforts with three or more organizations in pursuit of school-centered PSE goals. Most *Community Engagement* narratives emphasized *consulting* with community members on school-based initiatives or planning for future engagement. COVID barriers were widely reported to interfere with LIA plans for *Community Engagement* and, to a lesser degree, *Community Coordination*. The Arizona Department of Education's Activity & Assessment Tool (AAT) was also piloted to measure school districts' Local Wellness Policy implementation; only two LIAs were able to support AAT completion amid COVID.

Childhood: Early Care & Education (ECE) Systems. Mean total Go NAPSACC scores increased from pre to post across the six topics assessed. These increases were statistically significant for all modules except *Farm to ECE* and *Outdoor Play & Learning*. Across all modules, Policy scored relatively low and saw less improvement than other sections.

Food Systems. Four small stores in one county were assessed biennially using the STORE tool, with mixed outcomes in *Food Retail* supports over two years. Among the small stores assessed (n=5) in FY21, Fresh Produce and Food Programs (i.e., SNAP/WIC supports) scored highest at 64% of the maximum score, while Canned Goods scored lowest at 13%.

Direct Education. Twenty-eight adults completed the evaluated *Around the Table* lesson series. Thirty-seven percent reported increased day-before whole grain consumption, and 25% reported drinking fewer sugary drinks per week. Reported fruit and vegetable consumption did not change, however numerous precursors to behavior change improved.

Trauma-Informed Approaches (TIA). Sixty-seven LIA staff who completed a TIA survey reported positive beliefs and strong commitment to TIA, but scores for confidence utilizing TIA were lower. Educators who were interviewed (n=15) most often described practicing four principles from the CDC's TIA model, emphasizing language, context, and choice.

The results suggest that many LIAs struggled to make progress during a program year entirely implemented during COVID and its multifactorial challenges. Even so, programs grew in certain areas and continued to adapt. Program monitoring will persist for evidence of the strongest intervention areas, as well as potential new program directions.

Introduction

The US Department of Agriculture's Supplemental Nutrition Assistance Program Education (SNAP-Ed) supports community-based interventions, including nutrition education, to increase the likelihood that SNAP-eligible families will choose healthful dietary and physical activity behaviors, and in so doing, reduce related health disparities.

Arizona SNAP-Ed operates as the AZ Health Zone to coordinate implementation of the program's goals with state partners and local implementing agencies (LIAs) in each of Arizona's 15 counties.

Statistics Note

While p-values can tell us whether a difference is statistically significant, effect sizes tell us the *magnitude* of those differences. We therefore include both p-values and effect sizes in this report. For reference, the standard interpretation of the Cohen's d effect size measure is: **0.20**=small effect, **0.50**=medium effect, and **0.80**=large effect.

The AZ Health Zone program design is centered upon an evidence-based, equity-focused model that integrates direct educational outreach (DE) with the implementation of policy, systems, and environmental (PSE) initiatives, including community engagement and trauma-informed approaches. Social marketing is the third intervention strategy reaching SNAP-Ed eligible communities with targeted media campaigns and materials.

Evaluation of the AZ Health Zone program is carried out externally by the University of Arizona School of Nutritional Sciences and Wellness. This FY21 evaluation report describes findings from the first year of the AZ Health Zone's five-year program cycle, in alignment with the USDA's national SNAP-Ed Evaluation Framework. Relevant outcome indicators from the SNAP-Ed Evaluation Framework are highlighted throughout the report in gray and bracketed (e.g., [MT1]).

The AZ Health Zone State Evaluation Team uses 5 **EVALUATION STANDARDS** to inform each phase of the SNAP-Ed evaluation:

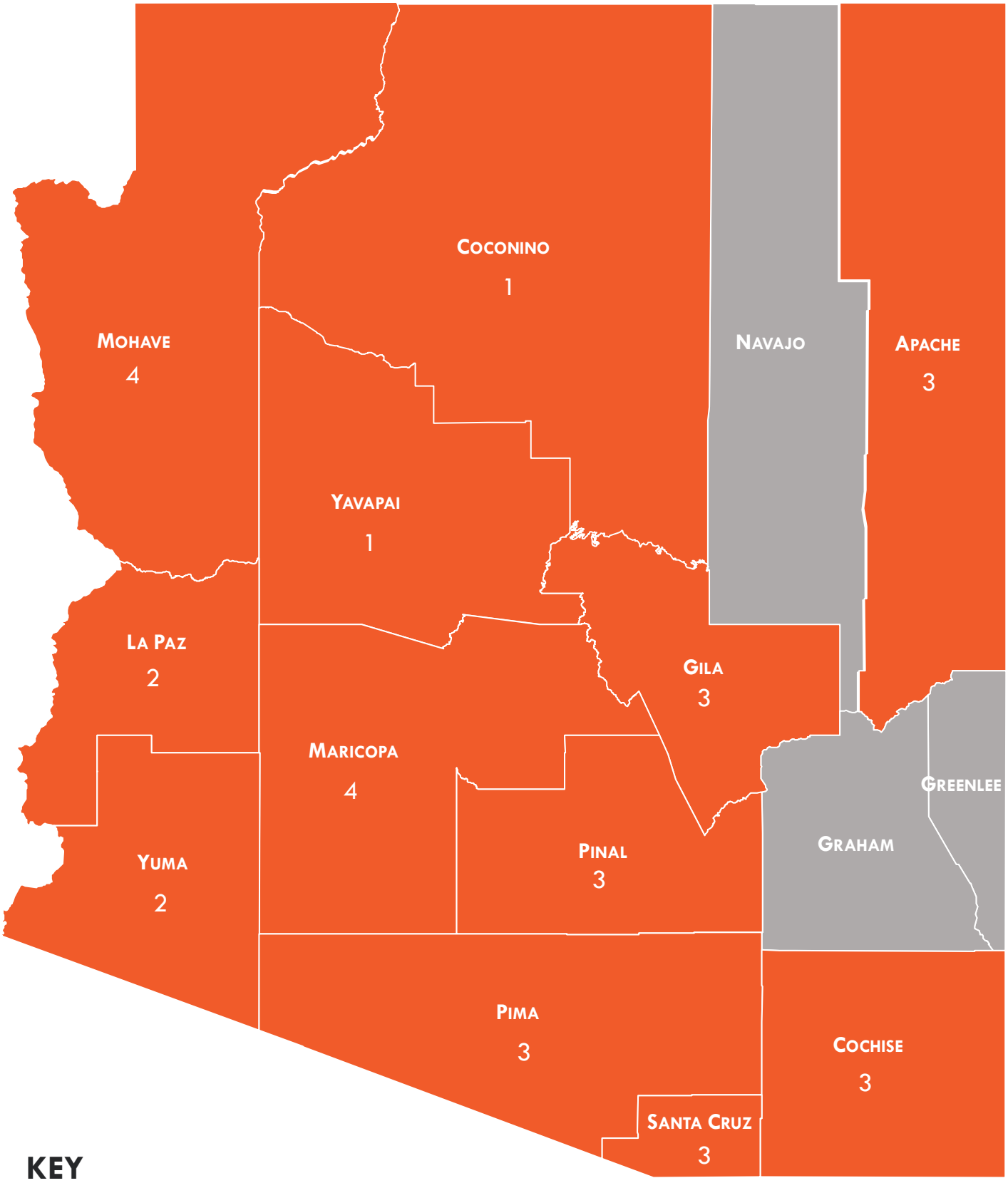
Utility. Be responsive to stakeholders' needs & provide meaningful products.

Feasibility. Design practical, realistic, & contextually appropriate evaluations.

Equity. Incorporate equity & trauma-informed principles into evaluation, engaging stakeholders at multiple levels whenever possible.

Accuracy. Use methods, designs, & analyses that are valid, reliable, & trustworthy.

Consistency. Perform repeated measurements of SNAP-Ed indicators across time.



KEY

= # of PA resources assessed with the FY21 PARA

= Did not work in Active Living in FY21

Active Living

Rio Rico West Frontage Road Trail
UA Cooperative Extension, Santa Cruz

AZ Health Zone Active Living Strategies

Increase usability and access to physical activity resources and community programming

Support development of the built environment to increase access and use of community infrastructure(s)

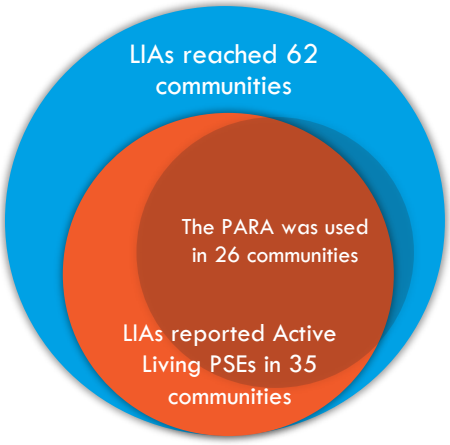
Evaluating Active Living

In FY21, the AZ Health Zone assessed the usability of and access to physical activity (PA) resources in lower-income census tracts with the Physical Activity Resources Assessment (PARA) [ST5, MT6, MT10]. The State Evaluation Team (SET) also used Local Implementing Agency (LIA)'s Semi-Annual Report Narratives (SARNs) and Arizona's SNAP-Ed Electronic Data System (SEEDS) to evaluate Active Living progress.

Community Reach

Of the 62 communities where LIAs reported *any* FY21 work, 39 (63%) were reached with active living support. Of the 39 communities, LIAs engaged 35 (90%) in policy, systems, and environment (PSE) activities (meetings, events, and/or trainings); LIAs provided the other four communities with non-PSE support in the form of direct education, social media engagement, and/or materials distribution. Among the 26 communities where the PARA was used, 23 (88%) were also supported with PSE activities (**Figure 1**).

1. In FY21, more than half of all communities reached received Active Living PSE support.



Physical Activity Resources

The PARA. This year, seven LIAs in 12 counties used the PARA to assess 32 PA resources. Most of the resources (28) were parks, including three large parks with trails. Four were standalone trails. Thirteen resources were newly evaluated, while 19 were repeat assessments from FY19. Eleven of these repeats were assessed longitudinally from FY17 to FY19 to FY21.

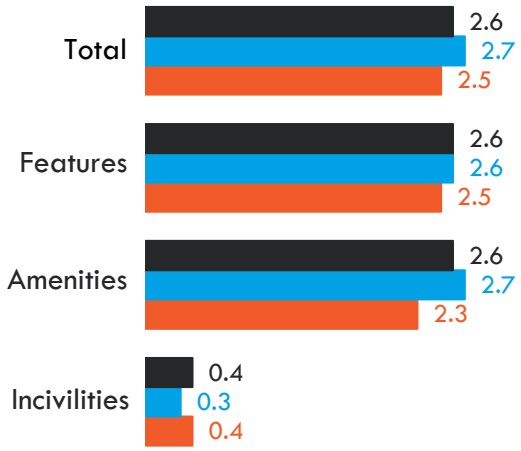
THE PARA evaluates the condition of a PA resource by measuring its Features, Amenities, and Incivilities. To compare scores across resources, the reported mean scores account for the number of items assessed at each resource:

FEATURES are equipment.
Features score/# features = Mean Features
Score Example: 8.0/3 = 2.7

AMENITIES are "nice to have" comforts.
Amenities score/# amenities = Mean *Amenities*
Score Example: 12.5/5 = 2.5

INCIVILITIES are things to minimize or eliminate.
Incivilities score/# incivilities = Mean *Incivilities*
Score Example: 1.5/3 = 0.5

2. From FY17 to FY19 to FY21, PARA means declined, except for *Incivilities*. (n=11)



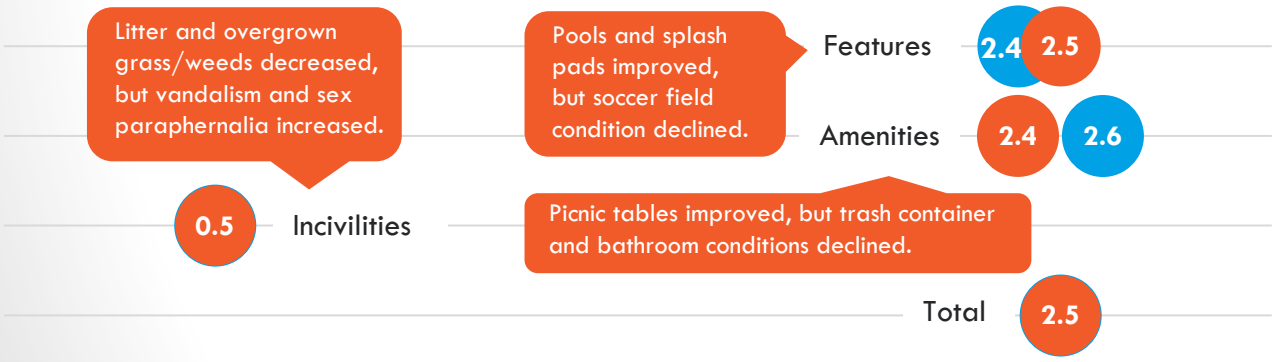
Did PARA scores change over time? There were no statistically significant changes in section or total scores across the three time points for the longitudinal sample (**Figure 2**). There were also no significant changes in mean scores from FY19 to FY21 (**Figure 3**), however some means for items within a section did rise or fall. Ongoing COVID mitigation may have contributed to the FY19-21 drop in Amenities, due to some amenity closures.

Although the section and total PARA scores were unchanged, the AZ Health Zone's support for PA resources has nevertheless progressed. By FY21, improvements were reported at 15 of the 19 previously assessed PA resources [MT6] (*Success Story*, next page).

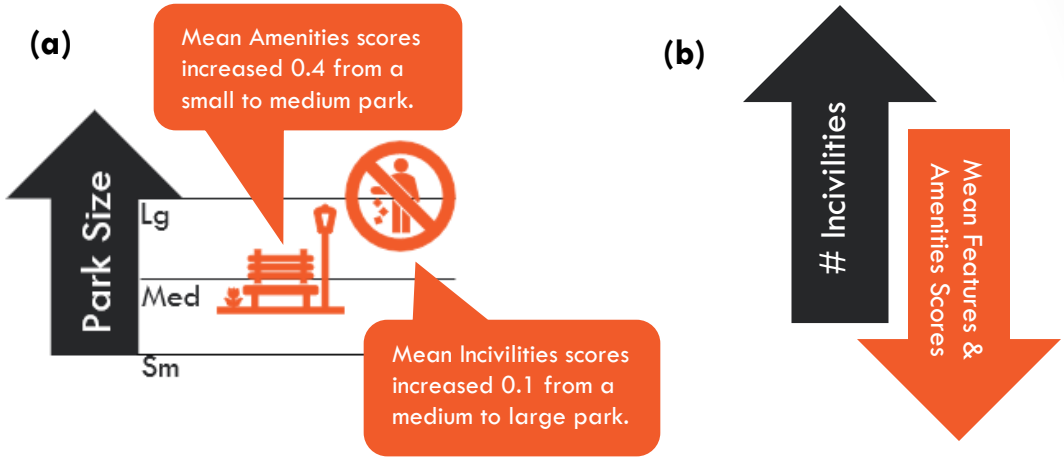
All LIAs reported partnerships around PA resources in FY21, compared with 74% of LIAs in FY19 [ST7]. In addition, 42% of LIAs partnered with local parks and recreation departments this year, versus 26% in FY19.

All FY21 PARAs. For the 32 PA resources assessed in FY21, two relationships help to highlight potential areas for improvement [ST5]. First, mean scores for Amenities and Incivilities—but not Features—increased as park size increased. Second, there was a significant *inverse* relationship between the number of incivilities at a resource and its mean scores for Features and Amenities; as the number of incivilities rose, feature and amenity condition declined (**Figure 4**).

3. Mean PARA scores changed only slightly from FY19 to FY21. (n=19)
Scores ranged from 1 to 3 for Features & Amenities and 0 to3 for Incivilities.



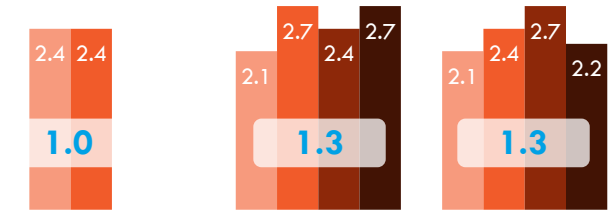
4. PARA scores varied by park size (a) and the number of incivilities (b).



Exploring Rural-Urban Equity Gaps. In FY21, we calculated *equity gap scores* to better understand potential urban-rural differences. We used data from the 2021 County Health Rankings & Roadmaps (www.countyhealthrankings.org) to assign each Arizona county a rurality quartile of urban, somewhat urban, somewhat rural, or rural. We then divided the highest mean outcome by the lowest across quartiles.

We examined the total mean PARA scores for the 28 parks assessed by size. The most urban medium and large parks had a lower mean score (2.1) than the most rural medium and somewhat rural large parks (2.7) (**Figure 5**).

5. Equity Gap Scores showed that medium and large parks in the most urban quartile scored lower than parks in more rural (darker bars) quartiles.



How to Interpret Equity Gap Scores

The ideal score is 1.0, denoting no difference. A value greater than 1.0 indicates a potential equity gap.

Success Story

"Many improvements to the trail have been made since FY19. Trees have been planted. Additional artwork and landscaping have been done. Benches have been added, and more may be added. Concrete slabs were observed, and all benches around the trail are installed on top of these slabs."

-UA Cooperative Extension, Mohave

Updates to the Lake Havasu Island Trail, Lake Havasu City, Mohave

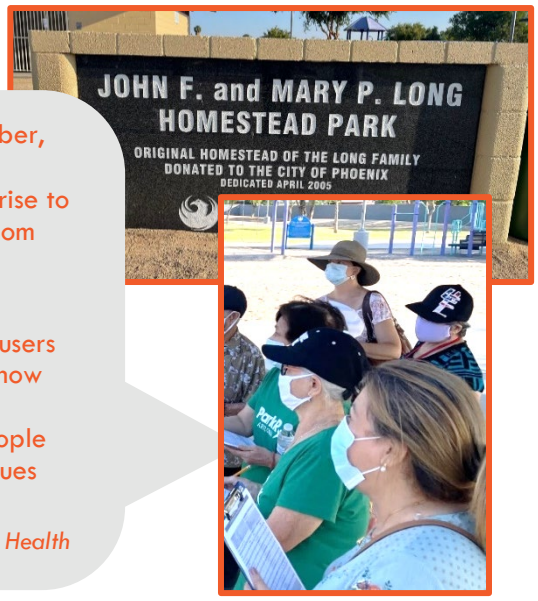
Community Engagement during the PARA. Conducting a community-engaged PARA was optional in FY21 because LIAs demonstrated various stages of readiness: The level of relationship building with communities differed across LIAs, and COVID continued to influence SNAP-Ed program activities. Nonetheless, 8 of the 32 (25%) assessments included some element of *Community Engagement* [ST5]. This ranged from casual conversations with residents/park users to a more formal process wherein residents completed the PARA alongside the AZ Health Zone staff (see *Success Story* below).

Success Story

"[At Homestead Park], 13 residents, one AZ Health Zone staff member, and two other Maricopa County Department of Public Health staff members conducted the PARA in September. It was a pleasant surprise to have the participation of nine [senior housing] residents, eight of whom spoke Vietnamese. One bilingual resident provided interpretation services to enable the participation of these residents.

"The PARA is a snapshot of park condition—the voices of the daily users keep important concerns in the forefront. The community residents know what the park looks like at night, and at different times of the day, week, and year. Their feedback is insightful in so many ways. If people participate in assessing a park they personally care about, it continues momentum toward desired improvements."

-Maricopa County Department of Public Health



Community Programming

Shared Use and Social Support Networks. In FY21, LIAs supported access to community programming. While site-based shared use agreements were still rare, a few successful partnerships indicated broad-scale potential. In Maricopa County, the Iglesia Episcopal San Pablo (San Pablo Episcopal Church)'s shared-use leadership team, Salud en Balance (Health in Balance), developed strong ties to the neighborhood park. Many local residents were already connected with the church, neighborhood association, and ParkRx—an active lifestyle program in which local doctors prescribe PA in nearby parks to patients. Not only did these residents become involved in the park *activities*, but they also engaged in the ongoing process of *advocacy for park improvements*.

Residents participate in a yoga class through ParkRx in the neighborhood's Perry Park.

"Salud en Balance [staff's] trusting relationships within a neighborhood mobile home community have resulted in significant levels of participation by residents of all ages in a variety of programs hosted by Salud en Balance in Perry Park, and in those offered by ParkRx."

-Maricopa County Department of Public Health

As COVID cases began to decline in FY21, social support networks, often known as "PA clubs," grew. LIAs reported offering a mix of events and ongoing clubs to encourage physical activity (**Figure 6**). Walking clubs were the most popular, often aimed at older adults. Other classes like yoga , general senior fitness, and a walking club for adults with young children (see *Success Story* below), were also started [MT6].

Success Story

Two LIAs in Yavapai County collaborated to expand social support networks with parents of preschoolers.

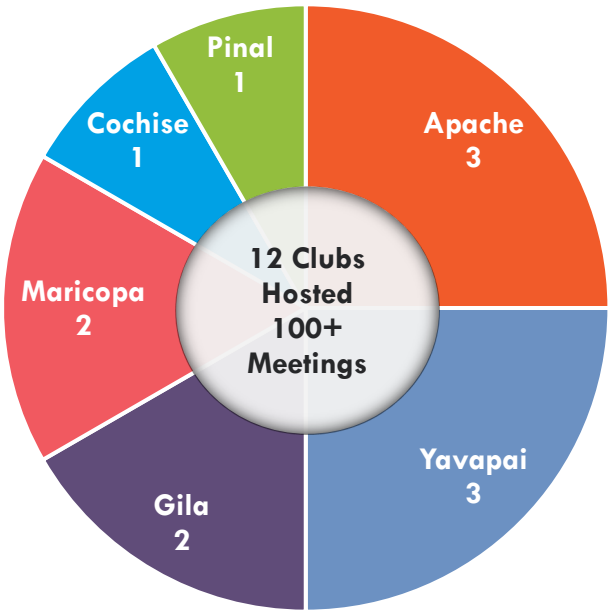
"Prescott, AZ, is known for its outdoor recreational activities, but there is very little outreach for families with young children. The Nature Niños collaborative represents a coming together of community organizations working to ensure that all families have access to supportive opportunities to engage in nature through healthy outdoor recreation, exploration, and play. The goal is to identify [and promote] trails in our community with family-friendly amenities. We took a community asset-driven approach…through many meetings and trail visits, the collaborative chose 12 local trails with amenities like bathrooms and drinking water, places to rest, and no/low parking fees.

"Knowing that many families with young children rely on their phones, we chose to promote Nature Niños on multiple social media platforms. A huge win was the new Nature Niños page on the City of Prescott website (in English and Spanish), which allows us to reach parents as well as future partners.

"The Nature Niños family events encourage outdoor physical activity and support a culture of play and connection to nature. Our kickoff took place on September 4th, 2021, with 105 parents, caregivers, and children that came through the two hour event."

-UA Cooperative Extension, Yavapai & Yavapai County Community Health Services

6. In FY21, LIAs supported 12 walking clubs, participating in over 100 club meetings across six Arizona counties.



Built Environment Supports

Historically, the AZ Health Zone's support for the built environment has required strong partnerships to progress, due to restrictions on how SNAP-Ed funds are used. Accordingly, LIAs have developed strong relationships with community partner organizations over the past five years [ST5]. With the increased emphasis on community engagement in FY21, Built Environment activities moved toward:

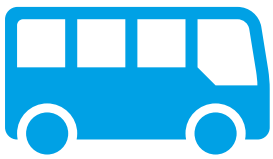
- A more balanced collaboration between LIAs and organizational partners (versus partner-directed with less LIA influence).
- Increased efforts to engage urban and rural community members in visioning and planning.

"It is hard to overstate the benefit of having a community partner in Chispa Arizona (a Latinx climate justice organization). They hosted a meeting for the Maricopa Association of Governments (MAG), offering information and taking community comments on the goals of the regional transportation plan update known as MAG Momentum. This plan determines regional transportation funding allocations and priorities for 20+ years. Attendees included community members such as leaders of the Si Se Puede Neighborhood Association (SSPNA). Prior to the meeting, our SNAP-Ed staff provided SSPNA leaders with a MAG orientation and how it tied into the SSPNA's community transportation goals. With this preparation, the SSPNA could confidently navigate the MAG meeting topics and their goals."

-Maricopa County Department of Public Health

Active Living Policy. Despite pressures of the COVID pandemic, new Active Living policies and planned updates moved forward. These included regional transportation plans in Maricopa and Mohave Counties; a city parks, paths, and trails master plan in Yuma County; and a study related to smart city design, specifically focused on housing and the amenities that surround housing, in Pima County [MT7]. LIA staff participated in this policy work by drawing on their organizational and community relationships to bring expertise to the table, including the lived experience of community members by facilitating community engagement.

Systems & Environment Changes for Walking, Biking, & Transit. LIAs continued to facilitate changes to walking, biking, and transit systems and environments by connecting relevant stakeholders. Projects with LIA involvement included [MT6]:



Bus Advocacy. The AZ Health Zone in Maricopa County supported residents as they advocated for a circulator bus in the Phoenix Estrella Tolleson community. This led to residents' relationships with a city council member and the transit system director, and a possible transit route extension by April 2022.

Bike Advocacy. In Maricopa and Yavapai Counties, LIAs supported the installation of: (1) bike racks at four food distribution sites in central Phoenix, (2) a bike repair station at the Cottonwood Recreation Center, and (3) five bike racks near the City of Cottonwood's center and park locations.

Bike & Bus Advocacy. A collaboration between the City of Cottonwood's Public Transportation Director and AZ Health Zone staff in Yavapai County led to: (1) adding "Bikes Welcome" stickers to the bus fleet, and (2) ensuring that all new buses have bike racks.

Pima County's Slow Streets Project. This Tucson-based project was initiated during the pandemic and formalized into a quarterly demonstration project that prioritized low-income areas. Sites were chosen by metrics such as traffic data, crash reports, and vehicle ownership.

"The Slow Streets program temporarily closes certain streets to all but local traffic, giving Tucsonans more space to safely walk, bike, and run. The project consists of:

1. A mobile bike repair event, prior to starting
2. Pre-installation traffic counts of the street
3. Slow Street Installations (traffic cones, barricades, signs)
4. During- and post-installation traffic counts
5. Community engagement re: Slow Street perceptions
6. Review of community feedback and other data
7. Decisions on permanent traffic calming solutions $\leq$$20K
8. Installation of permanent traffic calming solutions."

-UA Cooperative Extension & Nutritional Sciences, Pima

The Kingman Downtown Infrastructure Project. In Mohave County, this infrastructure project was designed to convert a section of downtown Kingman into an equitable and accessible route for all users in vehicles, on bikes, on foot, and those with mobility challenges. At the close of FY21, AZ Health Zone local staff were supporting the completion of the design phase and anticipating construction.

Development of Parks, Trails and Other Resources. In FY21, the development of PA resources often occurred in smaller Arizona towns. This was largely due to LIA relationships with community organizations and individuals (*Success Story* and **Figure 7**).

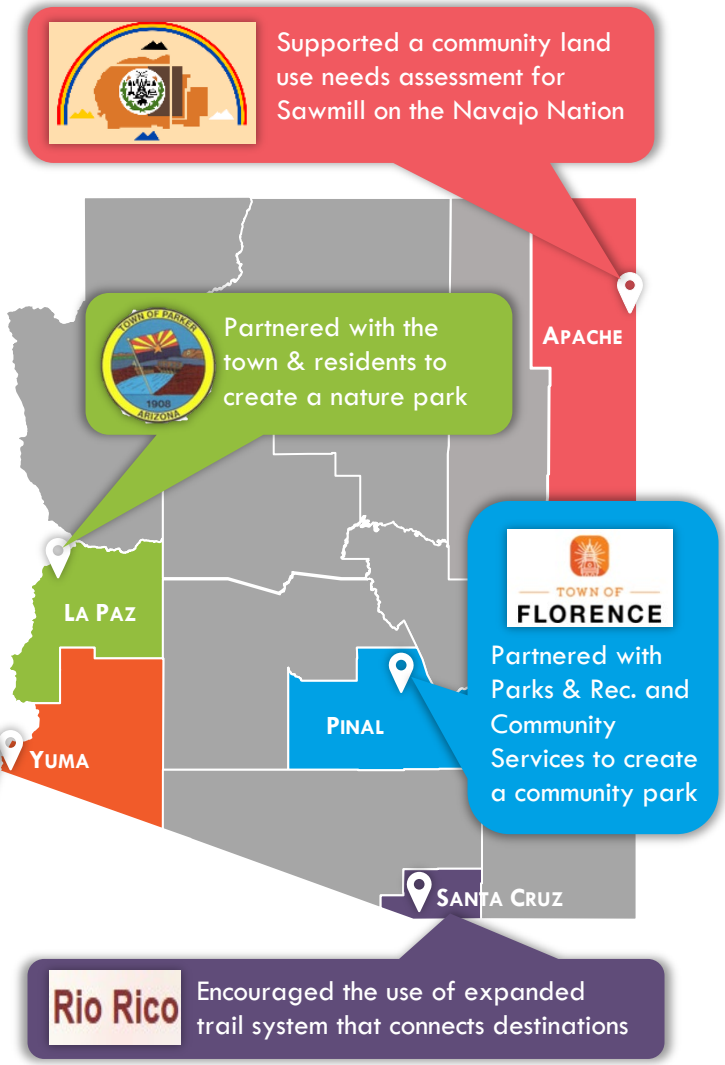
Success Story

"In 2013, the First Baptist Church took on revitalizing the Arizona City Park playground to provide a better playground for the [small town] community…the AZ Health Zone continued to partner with the church, and Supervisor Jeff McClure [helped to] finish out the last part of the planned project.…In the Spring of 2021, we collaborated with the church to install signs and reflectors in a new walking path. During the installation, church representatives, AZ Health Zone staff, and Supervisor McClure discussed adding a drinking fountain to the park. Supervisor McClure provided the church with grant opportunities for funding, and earlier this month the drinking fountain was installed."

-UA Cooperative Extension, Pinal

7. LIAs collaborated with community organizations [ST7] and individuals [ST6] to develop new PA resources in several towns.

"We advocated [with the Parks, Paths, and Trails Master Plan consultant] for plans that integrate health and equitable resource distribution. We shared some observations of San Luis: how many low-income neighborhoods have no or low-quality parks/retention basins, and the need for safe access to the parks. The Joe Orduño Park hosts numerous special events and offers a variety of services, and thousands of children visit by travelling on foot or bicycle, navigating busy arterial streets and roadways that lack infrastructure like sidewalks, crosswalks, and traffic calmers. We also talked about improving connectivity to other destinations to encourage active transportation, and features that would add appeal and support health such as water features, exercise equipment, walking paths/trails, open green spaces, shade trees, and community gardens."



Active Living Facilitators

- *Active Living Partnerships* were critical for creating more livable Arizona communities. Partners often represented diverse interests and were united by goals involving transit accessibility, green space, community safety, walk- and bike-ability, and opportunities for community members.
- *Connecting Residents and AZ Health Zone Organizational Partners.* Transportation, Parks and Recreation, and other city departments were often interested in learning more about current conditions, community needs, and resident preferences. Residents saw built environment advocacy as a worthwhile cause. Part of LIAs' Active Living success this year involved listening closely to residents and connecting these residents to organizational partners who were interested in community voices.

"In early April, the Step Up with Douglas committee began to focus on building the committee membership. Our efforts led to attendance by the City of Douglas Police Department, community members, and partner programs like Building Healthy Communities and The Healthy Food Forum."

-UA Cooperative Extension, Cochise

Active Living Barriers

- *COVID* conditions continued to inhibit LIA efforts to engage communities and plan events. They also interfered with general attendance and complicated LIAs' endeavors to stay in touch with partners.
- *Organizational Partner Staff Turnover* required a substantial time investment. When turnover occurred, LIAs had to rebuild relationships and get new partner staff up to speed on previous progress.

Recommendations

Continue to build on community engaged progress in Active Living. This will enable LIAs to center community knowledge and experience as they support PA resource usability and access, shared use, social support networks, and PSE improvements to the built environment.

Encourage LIA staff to celebrate small wins and look for opportunities for change. When big changes seem elusive, having a focused conversation with an Active Living decision-maker or gaining the trust of a community member are important small wins that may open a window of opportunity with partners or community residents later.

Consider how to expand social support networks and shared use. What barriers exist for offering PA clubs to audiences under 65, including families with children? How might local facilities be made more open to the public (formally or informally) to maximize use?

Provide LIA staff training to strengthen their capacity to engage in Active Living Policy work. Possible directions include focusing on Active Living advocacy actions (e.g., assembling a team, foregrounding community concerns, talking to decision-makers) or navigating the process of policy development and implementation, including: 1) brainstorming, 2) conducting research, 3) exploring paths to passage, 4) understanding implementation challenges, and 5) predicting intended and unintended policy effects.

The AZ Health Zone's Community Engagement:

Consulting Residents as Decisionmakers

The AZ Health Zone seeks to deepen engagement with community residents to prioritize their needs, strengths, and desires during decision-making. The *Spectrum of Public Participation* model guides this work, with an emphasis on the **Consult**, **Involve**, and **Collaborate** levels. These levels align with Local Implementing Agencies' (LIAs) varying stages of readiness to engage community members. While COVID impacted LIAs' community engagement efforts in FY21, several programs reported accomplishments.

The Spectrum of Public Participation

Source: https://www.iap2canada.ca/foundations

"They trust what we have to share."

-UA Cooperative Extension, Maricopa

Just east of downtown Phoenix, the Wilson area has more than 20,000 residents. For over 10 years, the UA Cooperative Extension, Maricopa, has deepened relationships with community members, creating a strong foundation for community engagement in FY21. One key to the LIA's progress? Building upon rapport with Gaby, the Wilson Community Center's Coordinator for Community Relations. Gaby was raised in Wilson, "has a pulse on the community," and serves as a resource to the UA Maricopa for connecting with community partners and residents.

In FY22, the UA Maricopa team is planning a community forum at the local school to hear parents' preferences for program priorities. The team is also seeking to develop a new green space in Wilson, which has only one small park geared toward young children.

Lessons learned from this work include the importance of participating in as many community events and activities as possible, and getting a feel for the community by being a genuinely curious listener. "If you talk to the residents," said longtime UA Maricopa lead Dotty Spears, "they will tell you the community's secrets."

"It's working for us to listen."

– UA Cooperative Extension, Cochise

The Be Healthy! Sierra Vista Health Advisory Committee formed in 2013 to advance the city's sustainable health initiatives. Many sectors are represented, including city government; healthcare; the UA Extension's AZ Health Zone; and other programs, businesses, and non-profit organizations.

The advent of COVID provided a pause to re-envision the work. Members planned a town hall where residents could guide a conversation around the committee's future goals. Community experts and partners—which included a city council member, the director of the local chamber of commerce, a physician, and a county health department representative—were invited to receive this information as active listeners.

The event was widely marketed, including via paid advertising in lower income census tracts. Twenty people attended, and many stayed for over three hours. As a result of this and two additional, well-attended forums, the committee plans to: 1) promote parks and trails that are accessible for families, 2) support the availability of farm stands, and 3) support holistic wellness through a *Feel Good! Sierra Vista* initiative.

The UA Cochise team will continue to support the committee's efforts to gather ongoing resident input, with additional emphasis on possible participation barriers. "Once you see this work with a new lens," said program lead Rhegan Derfus, "you can't see it in another way."

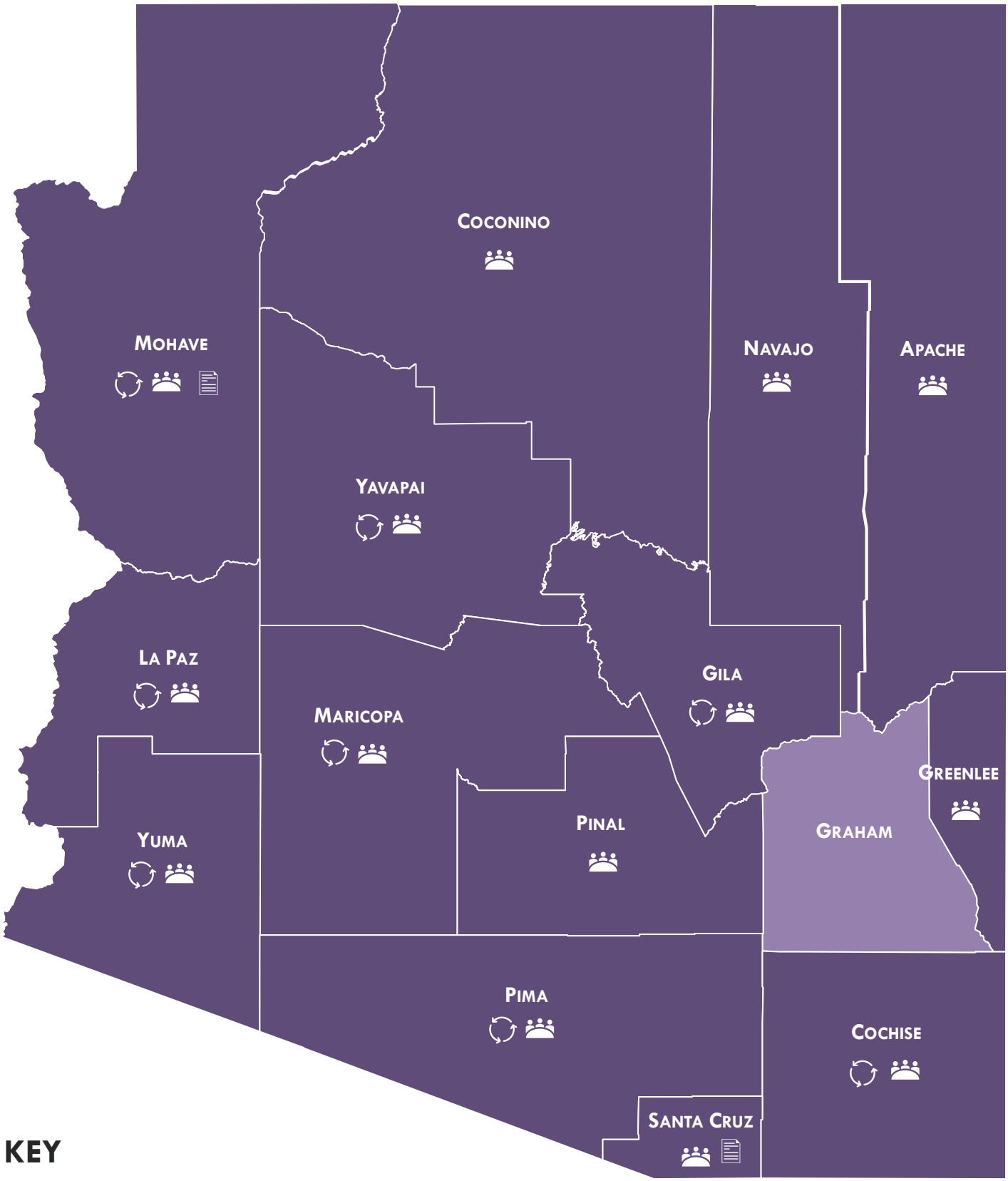
"They want to create the community they deserve, and they have a sense of agency."

- Maricopa County Department of Public Health

The Maricopa County Department of Public Health's AZ Health Zone program began partnering with the Phoenix Camelback East area in 2019. Through shared use grants for sites such as churches and schools, the partnership offers healthy food and/or physical activity programming. In response, the primarily Latino-serving San Pablo Episcopal Church formed a resident-led health team called Salud en Balance (Health in Balance). The team is dominated by immigrant women and facilitated by Teresa Sosa, a highly dedicated community health worker.

Since 2019, Salud en Balance has mobilized diverse resident health initiatives. These include: 1) the creation of a community center on church property, 2) the formation of the Perry Park Neighborhood Association, whose work has increased Salud en Balance's visibility and voice with parks and other city officials on crime and safety issues, and 3) extreme heat prevention data collection, program design, and outreach.

Salud en Balance members have experienced their real power to support mental, physical, and social wellbeing in their community. This power is due in no small part to their roles as trusted resources, built from a strong foundation of shared language and culture. "It is a labor of love," says Gail LaGrander from the Maricopa Public Health team, who works in close partnership with Salud en Balance. "A love for the neighborhood, for the park, for their families, and for the community."



KEY

= Supported an Activity & Assessment Tool (AAT) collected in FY21

= Reported school- or other youth-based *Community Coordination* in FY21

= Reported school- or other youth-based *Community Engagement* in FY21

= Worked in other School Health activities in FY21

Childhood

School Garden, UA Cooperative Extension Greenlee

AZ Health Zone Childhood Strategies

Support the development, implementation, and evaluation of policies that promote nutrition and physical activity in **School & Other Youth-Based Systems**

Support the development, implementation, and evaluation of policies that promote nutrition and physical activity in **Early Care & Education (ECE)-Based Systems**

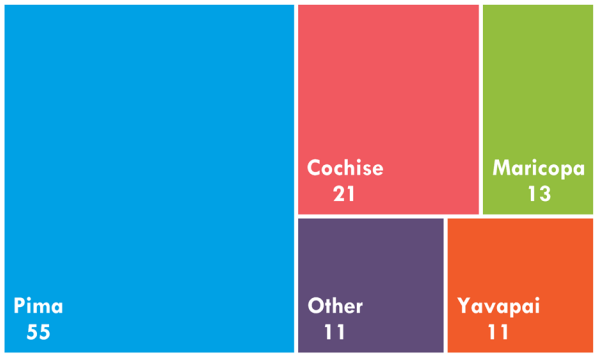
Evaluating School & Other Youth-Based Systems

All seven AZ Health Zone Local Implementing Agencies (LIAs) worked in School & Other Youth-Based Systems in FY21. The State Evaluation Team (SET) assessed *Community Coordination* and *Community Engagement* [ST6-8] for this strategy using quantitative data from the SNAP-Ed Electronic Data System (SEEDS) and qualitative data from Semi-Annual Report Narratives (SARNs). We also explored LIA support for the Arizona Department of Education (ADE)'s Activity & Assessment Tool (AAT) for assessing the implementation of school health policies, systems, and environments (PSEs) [ST5].

Community Coordination

LIAs reported 111 unduplicated PSE actions in School Systems *Community Coordination* during FY21 (**Figure 8**), 88% of which were meetings.

8. Most (90%) *Community Coordination* activities reported were concentrated in 4 counties.



Community Coordination is defined by the AZ Health Zone as "coordinating with community partners such as schools, organizations, and service providers to support shared PSE goals." Most LIAs who used the optional SEEDS Notes to detail their *Community Coordination* activities adhered to the spirit of this definition—they convened partners around common PSE goals. For example, one LIA described meeting with a school nutrition director and local coalition members to support food access during the spring break [ST7]. Occasionally, LIAs described activities better reported elsewhere, such as delivering school garden supplies and planning for DE with a school leader.

What Do LIA Stories Tell Us? *Community Coordination*, one of eight School Systems activities, was new to the AZ Health Zone in FY21. We explored SARN descriptions of *Community Coordination* to (1) illuminate LIAs' understanding of this activity, and (2) evaluate their progress in supporting it.

Narrative reports included rich descriptions of *Community Coordination*, however some LIAs struggled with the conceptual overlap between it and other School Systems activities (**Figure 9,** blue). Nearly all LIA "misclassifications" of this activity involved one-on-one partnerships that did not require coordination across community organizations toward a common goal beyond the direct partnership. This is understandable, given that the current *Community Coordination* definition does not specify number of partners or distinguish between school versus other agency types. Another area for clarification is whether community events that include, invite, and/or engage multiple organizations (e.g., Walk to School Day) reflect the spirit of *Community Coordination* around a shared PSE goal.

Most of the more nebulous narratives around this activity (**Figure 9,** green) described LIA efforts to convene or network with multiple community organizations, but without a shared goal beyond general wellness. Some reports centered solely on disseminating information via social media. Many also addressed the earliest stages of *Community Coordination,* which makes sense during this first year for the activity. For example, one LIA described this nascent effort [ST7b]: "[O]ur team attended a Strategic Visioning Meeting held at the local Community Center. This meeting was led by the Community Relations Coordinator at the school district and attended by school staff, parents, and community members. The goal was to discuss a five-year community plan and brainstorm a vision and mission for the coalition. Attendees also established a regular meeting date and time for future meetings."

9. In FY21, most *Community Coordination* School Systems narratives met the AZ Health Zone's definition. However, there was room for improvement in reporting.

The most compelling narrative descriptions of *Community Coordination* spanned 26 Arizona communities in 13 counties (**Figure 9,** purple). Most of the shared goals were related to school nutrition; students' food security; gardening and farm to school; and physical activity—many of which can also fall under other school activities, e.g., *School-Based Agriculture.* In terms of the partners involved, LIAs connected schools with local champions [ST6] and other community organizations (e.g., libraries, coalitions) [ST7-8] to problem solve, share resources, and accomplish shared goals.

Success Stories

"We used community meetings and strong partnerships to connect the Palominas School District with Echoing Hope Ranch to establish the first Farm to School initiative in the community. The AZ Health Zone facilitated meetings of Palominas nutrition services staff and AmeriCorps at Echoing Hope, and we assisted in developing a Farm to School project in which the district would purchase locally grown, fresh produce from Echoing Hope to integrate into school meals. With the assistance of the Building Healthy Communities program and Arizona Department of Education, we provided Palominas and Echoing Hope with contract models, regulations, and guidelines for purchasing and serving local foods. Palominas nutrition services now has an established contract with the Echoing Hope Ranch and serves youth fresh, local produce every Friday – they call it 'Farm Fresh Fridays'."

-UA Cooperative Extension, Cochise

"The AZ Health Zone Food Systems/ Childhood Team has discussed the Fresh Fruit & Vegetable Program cross-promotion with staff at one Alhambra elementary school and the two Healthy Starts Here corner stores closest to it. We are in the beginning stages of the planning: Staff at Cordova Elementary School and both ABC Mart and Best Farmers Market are interested… Suggestions include labeling products in the store with the school mascot and setting up a separate display to highlight what is being served at the school, grouping together items needed to prepare a specific healthy recipe, and promoting the SNAP match program at nearby schools so that families know they can maximize their benefits when shopping there."

-Maricopa County Department of Public Health

"Last year we partnered with Arizona Public Service (APS) on a very successful Arbor Day event that provided trees for barren playgrounds. Late last reporting period, the principals of two elementary schools, Pecan Grove and Carver, reached out to us to see if they might get trees for their playgrounds. Both schools are SNAP-Ed partners located in underserved areas. We connected with our APS partner, and he was immediately on board. We brought together an initial team of school leadership and grounds maintenance, APS and the AZ Health Zone-Yuma, and coordinated planning meetings. With our APS partner, we brought in additional team members from a local church, a local business owner, a City of Yuma arborist, and two other community members. The schools coordinated the participation of their staff and students and created flyers and media. We and APS engaged volunteers from the community and put out the call for donations. Yuma Southwest Contractors Association (YSCA) offered to accept and hold the monetary donations for us. Twenty-two donors—organizations and individuals—donated either trees or funding. On April 21, 2021, 35 trees were planted at Pecan Grove and 27 at Carver."

-Yuma County Public Health Services District

Barriers. LIAs across five communities in four counties described challenges to *Community Coordination*, all COVID-related. In particular, rural and urban school food pantry progress was stymied as schools responded to restrictions and changes in school meal operations:

Rural Area

"The impact of COVID-19 in schools has made it difficult to get a response from the food service manager. We contacted the AZ Food Bank, but during this time they are not visiting sites or opening new in-school food pantries. Both the school and food bank are waiting..."

-UA Cooperative Extension, Graham

Urban Area

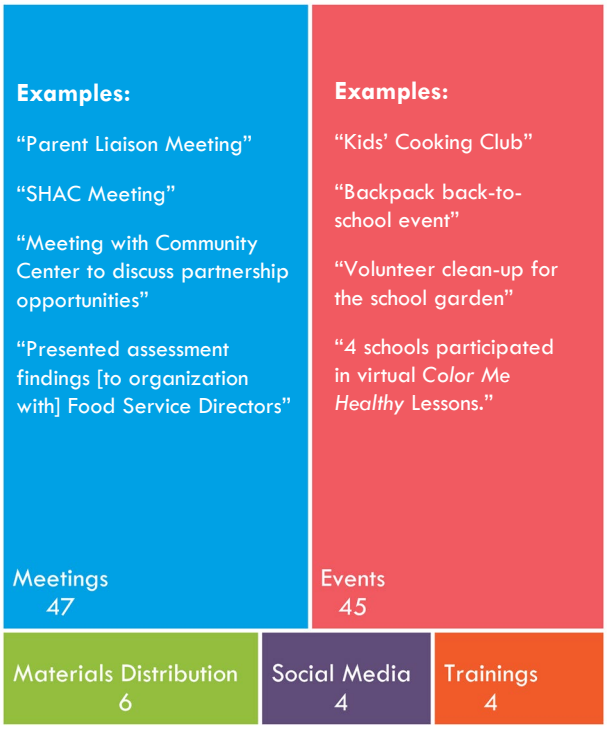
"There have been some challenges with moving the school pantry project forward. The delays from COVID-19 have obviously impacted school operations, limiting social interactions and student and staff presence on campus. As a response to COVID-19 and the increase in federal funding, the school's food service team has stepped up to grow school meal service to the community. This has decreased the need for other food resources at the school, and so it has also delayed the implementation of the project."

-Maricopa County Department of Public Health

Community Engagement

In FY21, LIAs reported 106 unduplicated PSE and PSE-supporting actions in School Systems *Community Engagement* across all counties. Most of these activities were in the form of meetings, followed closely by events (**Figure 10**).

10. Most *Community Engagement* activities were reported as meetings or events.



The 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." This definition is based upon the IAP2 Spectrum of Public Participation and is intended to encourage programs to move past informing communities toward deeper, more meaningful engagement.

Figure 10 includes examples of LIA activities reported in SEEDS under meetings and events: Meeting descriptions were more likely than events to embody the AZ Health Zone definition for *Community Engagement*, especially when families were directly involved in the meeting. However, many meetings were also reported with organizational partners such as school leaders to plan for future community events or engagement opportunities. Events were often described as lessons, LIAs sharing information with community members, and/or resident participation in a wellness activity, versus deeper engagement.

Semi-Annual Report Narratives. In FY21, LIAs described 72 school-related accounts of *Community Engagement*. Some descriptions (18%) did not meet the AZ Health Zone's definition, either because they stayed at the *inform* level, or because they were centered around LIA-to-partner interactions.

"The major community engagement accomplishment related to Childhood was the completion of the WellSAT 3.0 assessment that we shared with the Wellness Committee to support their efforts to update and revise."

Figure 11 illustrates the levels at which LIAs described their *Community Engagement* work. In FY21, many were still **planning** for how to engage community members. For those that described active *Community Engagement,* this was most often by **consulting**. There were only two reports of **involving** communities, and no instances of **collaborating**. However, LIAs provided three rich descriptions of support for youth **empowerment** (see one in the *Success Story* below).

11. In FY21, most LIAs were consulting community members or planning for *Community Engagement*.

PLAN	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
7 descriptions	5 descriptions	15 descriptions	1 description	0 descriptions	3 descriptions
"[We] proposed the creation of a School Health Advisory Council to increase community engagement."	"Active community engagement has been limited to social media posts and outreach."	"The project goal was to engage parents…in the development process of promotional materials [for the Summer Food Service Program]."	An LIA sparked interest in involving the community in decision-making but could not help leader efforts after the partner opted for a potluck lacking food safety & COVID precautions.		"With TA and guidance from our educator, [the youth group is] creating garden guidelines and working together to recruit new members."

Success Story

SNAP-Ed gave administrative support and technical assistance for this community-led wellness mural.

"Led by residents of the Sí Se Puede Neighborhood Association, this project engaged youth [and] identified Sunridge Elementary school as the site for a mural to celebrate health, nutrition, and wellness. Working with school staff, the residents interviewed artists…The artist worked with the community to create a mural with significance to them. During one idea session [photo], residents discussed holistic health and requested certain symbols, like a sun and trees, to symbolize community growth and unity.

"The mural is now at the entrance of the school cafeteria, in a very visible location in the school courtyard. It overlooks the future garden beds that the community residents would like to revitalize with SNAP-Ed support in the upcoming year."

– Maricopa County Department of Public Health

Challenges. Of the 59 descriptions that met the AZ Health Zone criteria for *Community Engagement*, more than half (35) were barriers (**Figure 12**). Various factors, most often those related to COVID, interacted to create or intensify challenges for LIAs who sought to engage community members.

12. Most of the barriers to *Community Engagement* in School Systems were directly or indirectly tied to COVID. LIAs often described multiple factors that worked synergistically to influence their ability to reach communities.

"A constant challenge is that we can offer guidance and support, but it is our childhood partners who ultimately decide how our programming is implemented…we will continue to advocate for increased involvement by students, families, and community members in the development of VH Lassen's Signature Academy, and in health initiatives throughout South Phoenix."

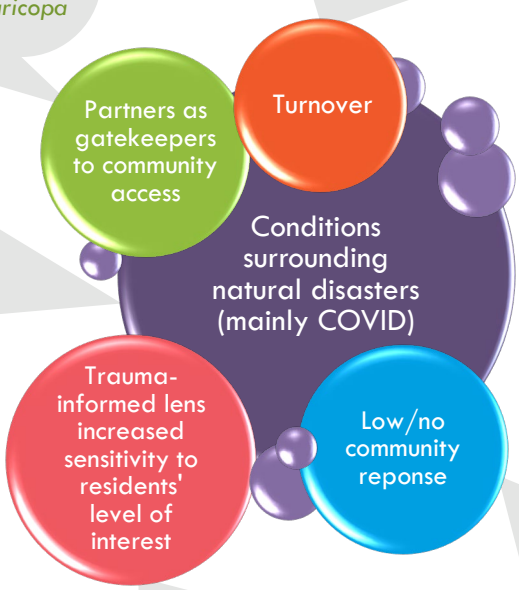
– UA Cooperative Extension, Maricopa

"All community engagement efforts have been a challenge this year. COVID has affected the way schools have been operating for most of the year. Normal activities with parents that involve outside entities have been limited. The schools hold the connection to the parents…The wellness committee could provide a better connection to the parents in the future. Until the wellness committee is up and running again, we will continue to reach the parents through parent/family nights at the school when invited by school administration…scheduling has been a slow process since the retirement of the food service director."

– UA Cooperative Extension, Mohave

"There have been no opportunities to engage our community due to the fires and flooding."

– Gila County Public Health Services



"Challenges experienced during our work with the Arizona School Health & Wellness Coalition this reporting period were marketing and low participation in engagement activities. Virtual community meetings averaged 20-25 registrants and about 10-15 live participants, while the Parent Huddles had 15-20 registrants and at least 5-10 live participants.

"Despite efforts such as sending personal invitations directly to our community member contacts in Pima County, none of the parent participants were from the communities we support."

– UA Cooperative Extension, Pima

"Reservation schools were shocked with moving to a completely online system. Teachers and administrators have no time to think about community engagement projects under the stress of learning how to track hundreds of students online and through packet learning…Having parents and children struggle to find ways to stay in school without the infrastructure to provide internet services was stressful for the entire population. It was better to step back and wait rather than causing more stress."

– UA Cooperative Extension, Apache

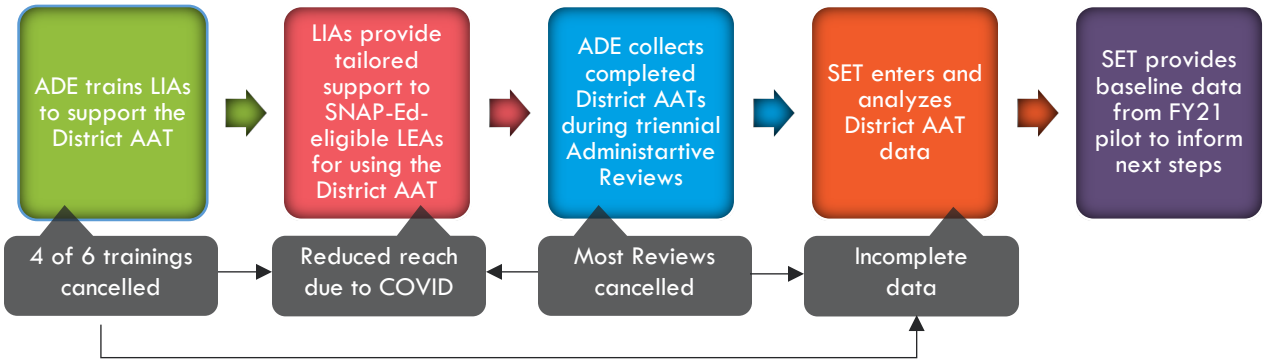
Piloting the District AAT

In FY21, the AZ Health Zone sought to expand collaboration with the ADE by supporting Local Education Agencies' (LEAs) use of the ADE's Activity and Assessment Tool (AAT) for measuring LEAs' Local Wellness Policy (LWP) implementation.

COVID conditions had a profound impact on these plans (**Figure 13**). The ADE initiated a six-workshop training series for LIAs on the District AAT, however pandemic-related circumstances led to the delay and then cancellation of the series after just two trainings. With LIAs less trained, and with schools and districts less open to outside agency support, the AZ Health Zone only assisted two LEAs with the District AAT this year (see *District AAT Results*).

Meanwhile, the ADE grappled with systemic changes to its Administrative Review process, a process tied to the USDA's National School Lunch Program (itself in a state of COVID-related flux from nationwide changes in school meal program operations). As more and more Arizona LEAs transitioned from the National School Lunch Program to the Summer Food Service Program (to provide free meals to students), the ADE's Administrative Reviews were cancelled. Because of the many cancellations, only five AATs were collected during Reviews conducted in FY21. One of those five was supported by the AZ Health Zone. Another LIA submitted one additional AZ Health Zone-supported AAT directly to the SET when their partner LEA's Administrative Review was postponed.

13. The state-level interagency partnership between the AZ Health Zone and the ADE involved resource sharing, with the common goal of encouraging LEAs' use of the District AAT. Each stage was negatively impacted by COVID-related conditions (callouts).



AAT Challenges. There are two versions of the AAT, District and School: The District AAT covers key district/LEA-level items that, according to federal guidelines, must be assessed triennially by LEAs. The School AAT was developed to help districts collect data from individual schools and does not include district-level items. Of the six AATs received in FY21, five were from charters and one was from a private school. No regular public school districts completed the tool. Because public charters and private LEAs are often just one school, they may have viewed the School AAT as more appropriate: three of the six AATs received by the SET were School AATs (i.e., the non-assessed version). Thus, numerous items—and entire subsections—of the District AAT were not evaluated for half of the sample.

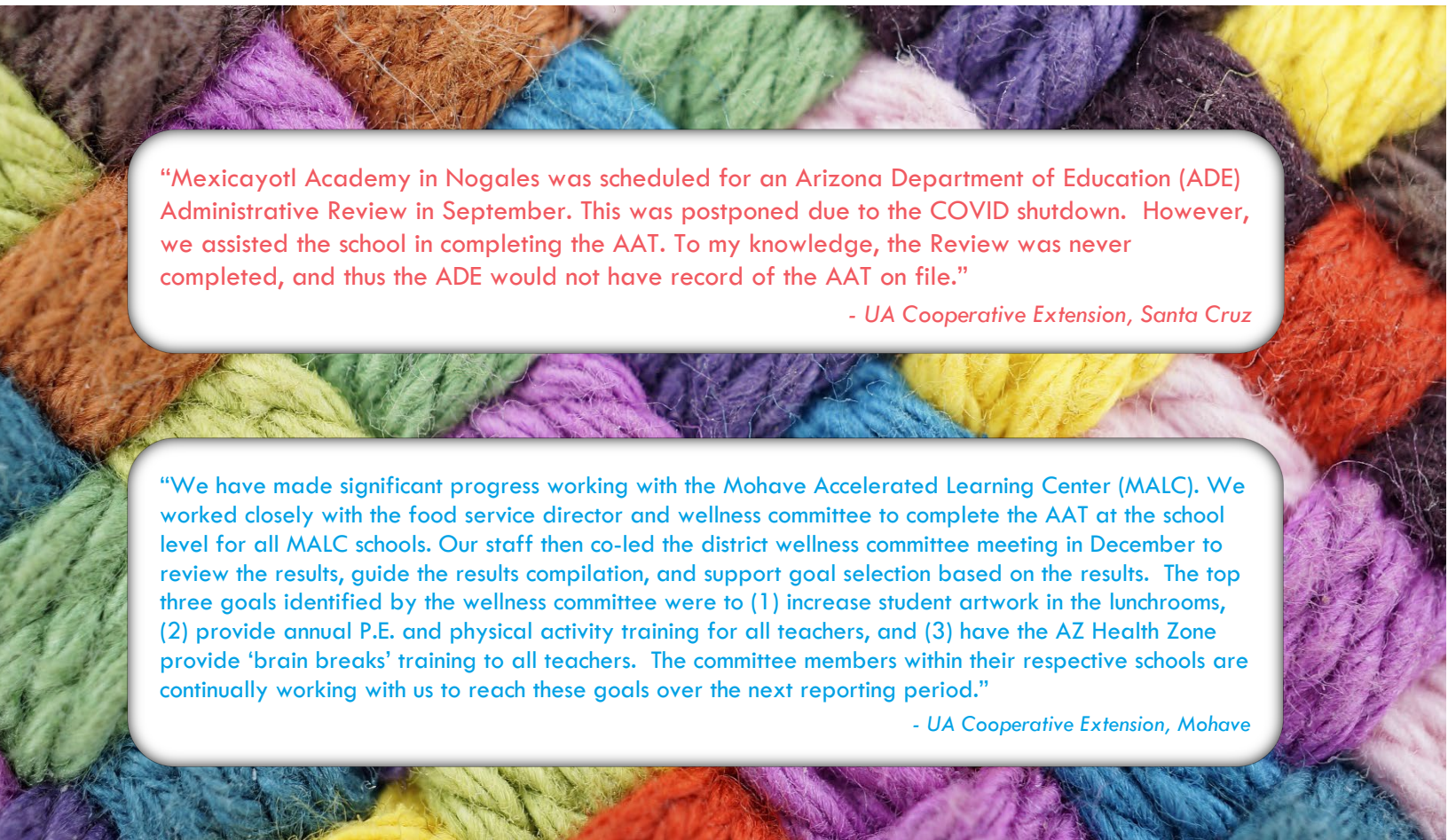
The SET could not complete a planned analysis of the AATs received (e.g., comparing scores for AZ Health Zone-supported LEAs against

LEAs not supported by the AZ Health Zone). This was due, in part, to the very low sample size and use of School AATs. It was also due to variation in how LEAs completed AAT items: Some LEAs deleted items that were not applicable to them, while others retained the items but did not mark an answer. It was, therefore, unclear whether the item was "not applicable" or "not in place." Consequently, section and total scores were not calculated, nor would calculations be possible with a larger data set that suffers the same variability. While there is the potential to only calculate scores for the District AAT's *required* items, the submission of School AATs also prohibits that analysis, as most required items appear on the district version.

> "The school administrators were able to complete the AAT, however they felt that the process was stressful, mostly due to managing many other priorities during the pandemic. Some activities tracked by the AAT were taking place regularly prior to but not since the pandemic, which caused confusion about how to respond. Despite the simplicity of the check-box format, the AAT required a large amount of information to be compiled across many schools, and thus the assessment was a daunting administrative task."
>
> *- UA Cooperative Extension, Pima*

AAT Results. Both of the LIAs who supported the AAT reported their work in SEEDS, but each described a different experience after AAT completion: One LEA had an ADE Review and then progressed through the assess-plan-act cycle. The other had the Review postponed, with the AAT not (yet) collected.

Next Steps. Given the ongoing changes to Arizona's school health system (e.g., the ADE's recent restructure) and the findings reported here, there are critical evaluation design challenges to consider before continuing to evaluate LWP implementation with the District AAT.



"Mexicayotl Academy in Nogales was scheduled for an Arizona Department of Education (ADE) Administrative Review in September. This was postponed due to the COVID shutdown. However, we assisted the school in completing the AAT. To my knowledge, the Review was never completed, and thus the ADE would not have record of the AAT on file."

- UA Cooperative Extension, Santa Cruz

"We have made significant progress working with the Mohave Accelerated Learning Center (MALC). We worked closely with the food service director and wellness committee to complete the AAT at the school level for all MALC schools. Our staff then co-led the district wellness committee meeting in December to review the results, guide the results compilation, and support goal selection based on the results. The top three goals identified by the wellness committee were to (1) increase student artwork in the lunchrooms, (2) provide annual P.E. and physical activity training for all teachers, and (3) have the AZ Health Zone provide 'brain breaks' training to all teachers. The committee members within their respective schools are continually working with us to reach these goals over the next reporting period."

- UA Cooperative Extension, Mohave

Recommendations

Consider ways to strengthen Community Coordination:

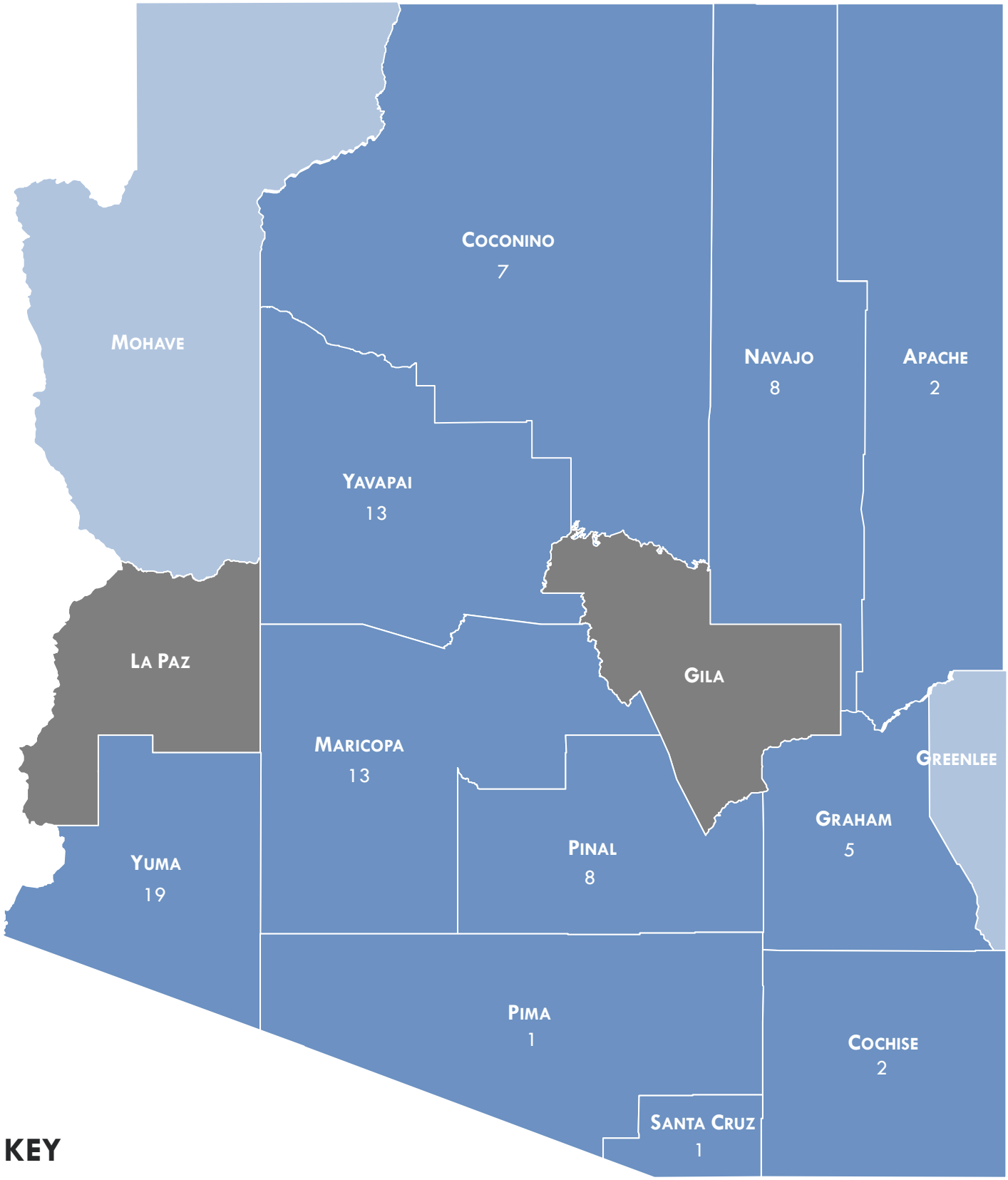
- LIAs may benefit from a revised definition and scope that includes (1) more information regarding the number and/or types of partner agencies, and (2) reporting guidelines for actions that span *Community Coordination* and other School Systems activities.
- How might LIAs adjust their programming with additional training around identifying shared PSE goals for *Community Coordination*?
- What role(s) can/should LIAs play in *Community Coordination*? Potential roles include leader, convener, or contributor.

Continue to provide professional development for LIA staff to promote their understanding of and ability to implement Community Engagement. Key considerations include:

- The "gatekeeper" role of partner schools and districts in providing access to their communities. To what extent can/should LIAs access residents directly versus working within the school system?
- Residents often play two or more community roles as family members, teachers, students, food service, administrators, local business owners, etc. LIAs may need additional reporting guidance when they draw from residents' multiple identities and experiences.

Revisit the use of the District AAT to assess school health-related PSE implementation. Important next steps include:

- Ongoing monitoring of the national and state landscape related to the National School Lunch Program and its associated LWP requirements.
- Connecting with the restructured ADE regarding the findings reported here and ADE plans.
- Consideration of alternate assessments or revisions to the AAT.



KEY

- # = # ECEs assessed with the FY21 Go NAPSACC
- = Worked in Early Childhood in FY21, no assessments
- = Did not work in Early Childhood in FY21

Evaluating Early Care & Education-Based Systems

In FY21, five LIAs worked in ECE-Based Systems across 13 of Arizona's 15 counties. The SET assessed ECE policies, systems, and environments (PSEs) [ST5, MT5, MT6] using the online version of the University of North Carolina at Chapel Hill's Nutrition and Physical Activity Self-Assessment for Child Care tool, referred to as the Go NAPSACC.

Go NAPSACC Uptake

LIA staff were trained as technical assistance Consultants to support partner ECEs through the five-step Go NAPSACC improvement process (**right**). A recent Nemours Foundation "Better Together" grant covered the cost of the online Go NAPSACC for all Arizona ECEs and introduced two opportunities into the state ECE system: (1) the statewide Go NAPSACC, open to *any* ECE and (2) the Learning Collaborative, open to ECEs in select counties. Both opportunities included, but were not limited to, AZ Health Zone-supported sites.

About the Tool. The Go NAPSACC includes seven self-assessment modules (**right**, inner circle) that provide feedback on PSE strengths and areas for improvement. Scores range from 1 (weakest practice) to 4 (best practice). In FY21, the AZ Health Zone adopted six of the modules: *Child Nutrition, Infant & Child Physical Activity*, *Outdoor Play & Learning*, *Breastfeeding & Infant Feeding, Screen Time, and Farm to ECE.* AZ Health Zone-supported ECEs participating in the statewide Go NAPSACC could select any of these six module(s). Those enrolled in a Learning Collaborative were assigned four sequential modules as they progressed through the training series: *Child Nutrition, Infant & Child Physical Activity*, *Breastfeeding & Infant Feeding,* and *Screen Time*.

Module Selection. Despite widespread COVID-related challenges to ECE programs, the AZ Health Zone's adoption of the online Go NAPSACC was a success; LIAs supported 276 assessments across all six modules in FY21. The most-completed modules were associated

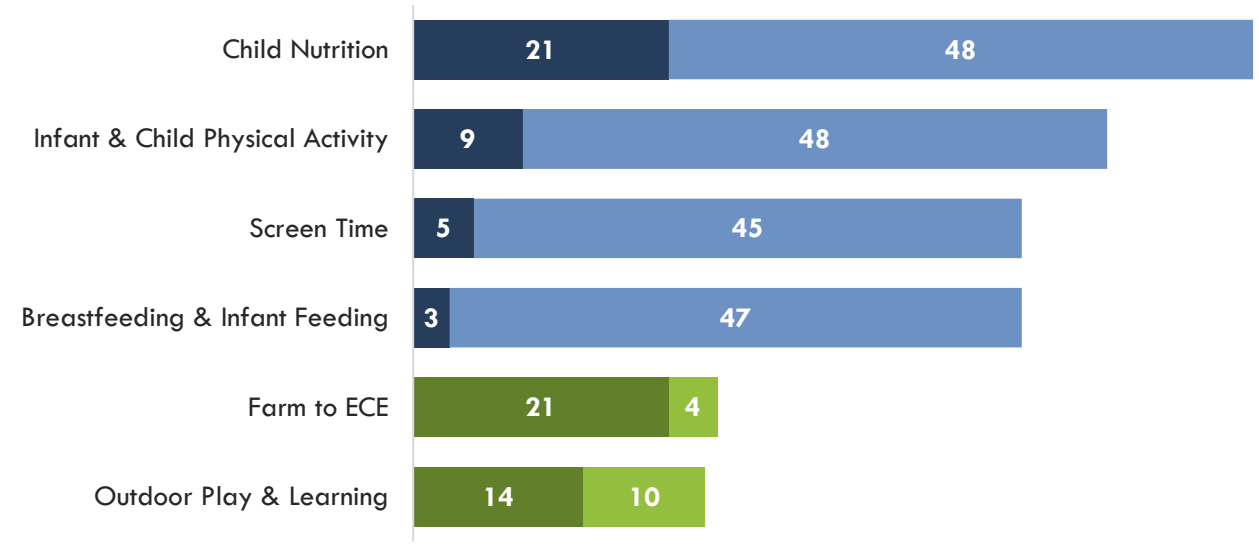
with the Learning Collaboratives, especially for the pre-post assessments (**Figure 14**). This suggests that the Learning Collaboratives played a key role encouraging LIA-supported ECEs to move through the entire five-step improvement cycle, at least more quickly than the ECEs who were not engaged in Learning Collaboratives.

"All three Winslow Head Start centers participated in the Nemours Better Together Learning Collaborative. This helped center staff and directors engage in collaborative efforts to increase their understanding and use of written policies. Nemours engaged all Northern Arizona Council of Governments Head Start locations in Apache, Navajo, Coconino, and Yavapai counties."

- UA Cooperative Extension, Navajo

14. ECEs completed more Go NAPSACC modules addressed by Learning Collaboratives than modules outside of Learning Collaboratives.

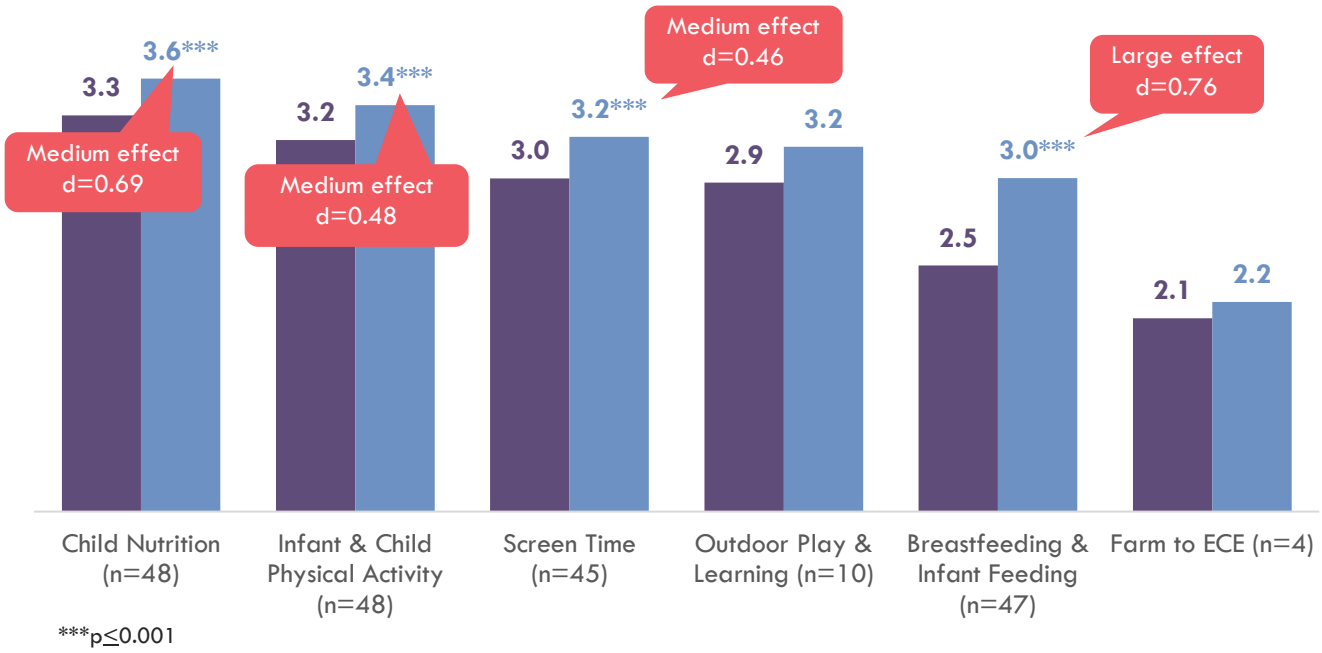
Pre-post assessments were more likely to be completed than pre-only assessments for the four modules addressed by Learning Collaboratives.



Number of assessments completed (darker = pre only, lighter = pre-post)

15. In FY21, mean total Go NAPSACC scores increased from PRE to POST across the six topics assessed.

Scores ranged from 1 (weakest practice) to 4 (best practice).



***p≤0.001

How Did Scores Change?

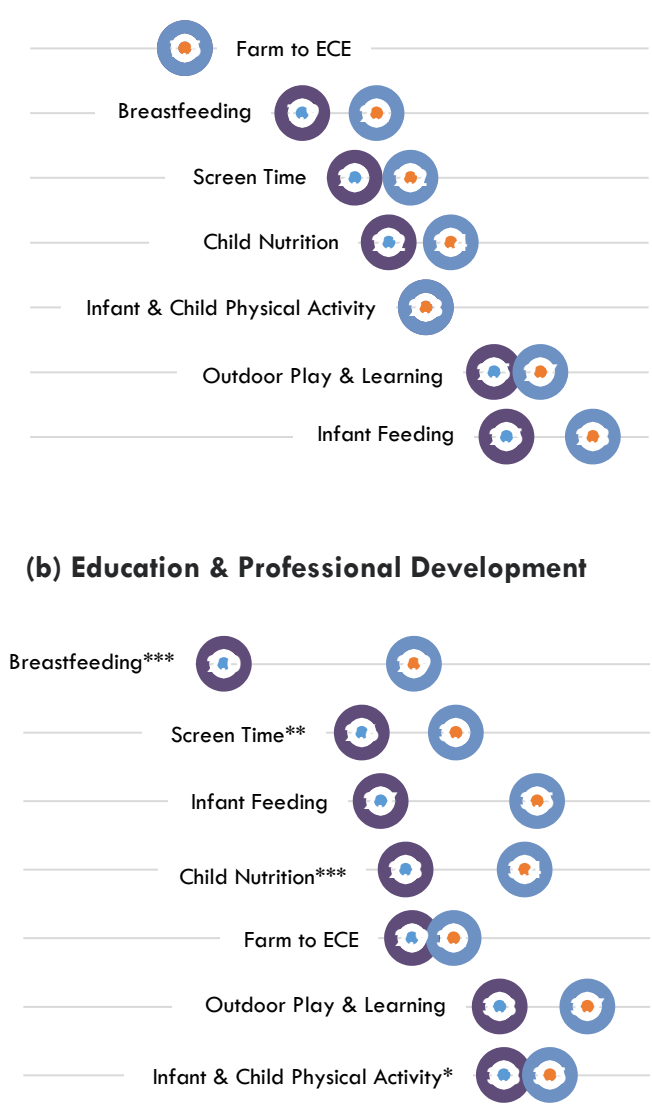
Figure 15 shows that mean scores increased from pre to post across all six Go NAPSACC topics [MT5$_{a-d}$, MT6$_{a-d}$]. These increases were statistically significant for all modules except *Farm to ECE* and *Outdoor Play & Learning*, neither of which were addressed in Learning Collaboratives.

A Deeper Look. Each Go NAPSACC module included sections for Policy and Education & Professional Development as well as some variation of the ECE's physical Environment and Practices related to the module's topic. Mean Policy scores were consistently low, regardless of the topic assessed, and there were no significant increases in Policy scores (Figure 16$_a$). Conversely, select modules experienced significant score increases for Education & Professional Development (Figure 16$_b$) and numerous other sections unique to the module. This suggests that ECEs may struggle with making improvements to written policy across all topics, a pattern that has persisted for over five years.

Exploring Rural-Urban Equity Gaps. The SET also asked, were there any differences in ECE scores by rurality? We compared mean Go NAPSACC scores for ECEs located in four quartiles: very rural, somewhat rural, somewhat urban, and very urban. This involved calculating an *equity gap score* by dividing the highest mean of the outcome by the lowest across the quartiles. A value greater than 1.0 could indicate a potential equity gap. The ideal score is 1.0, denoting no difference.

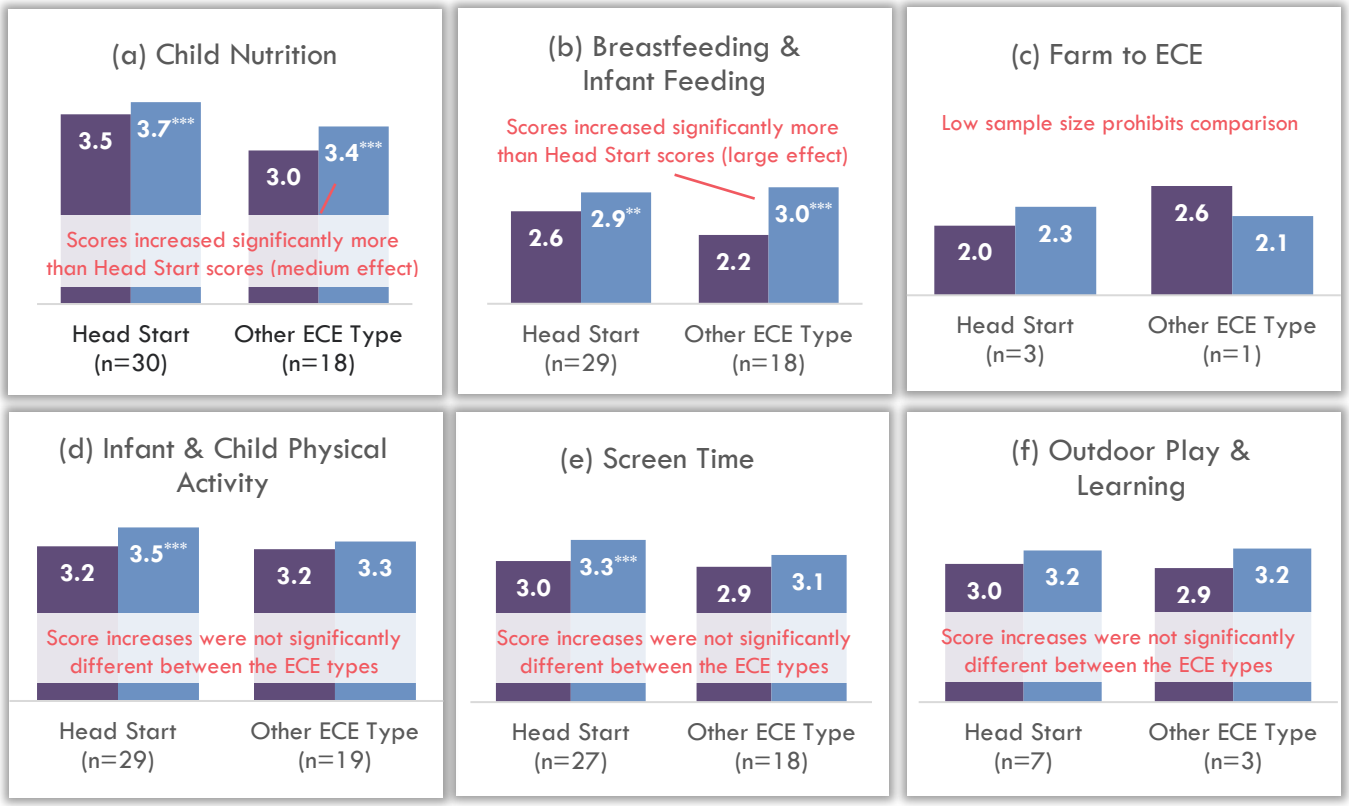
All but one Go NAPSACC module had pre and post equity gap scores close to 1.0. For the *Farm to ECE* module, the most urban ECEs had higher mean scores than the most rural at both pre (equity gap score=1.34) and post (equity gap score=1.54).

16. The Go NAPSACC Policy section saw less PRE to POST improvement than Education & Professional Development.
Scores ranged from 1 (weakest practice) to 4 (best practice).



*p≤0.05, **p≤0.01, ***p≤0.001

17. Non-Head Start ECEs saw a significantly greater increase than Head Starts in total mean PRE-POST Go NAPSACC scores for *Child Nutrition* and *Breastfeeding & Infant Feeding*.



Head Starts vs. Other ECEs. Arizona's Head Start ECE programs are designed to promote school readiness and provide wellness-related services to underserved communities. In FY21, many LIAs partnered with Head Start and non-Head Start providers to support PSE improvements.

Because Head Starts have a distinct function in the state ECE system, we compared pre-to-post changes in the total mean Go NAPSACC scores for Head Starts versus other ECEs (**Figure 17**). For five of six topics, Head Starts had higher mean *pre*-intervention scores than other types of ECEs; the most pronounced differences were in nutrition-related modules. However, at post, the total mean scores for *non*-Head Starts grew significantly more than Head Start scores for *Child Nutrition* and *Breastfeeding & Infant Feeding* (**Figure 17$_{a,b}$**) [MT5$_{a-d}$]. In other words, for these modules, the gaps between Head Starts and other types of ECEs narrowed after the intervention.

For the physical activity topics, Head Starts also had higher *pre*-intervention scores than other ECE types. Unlike the nutrition topics, there were no significant differences between these ECE types in how much they changed from pre to post. Indeed, **Figures 17d** and **e** show that, for *Infant & Child Physical Activity* and *Screen Time*, the gaps between Head Start and non-Head Start scores widened slightly over time.

The results suggest that, *in the absence of tailored interventions*:

- Head Starts may be more likely than other ECEs to prioritize nutrition and physical activity PSEs.
- Head Starts may have greater access to health-related resources and supports than other ECEs, especially for physical activity.

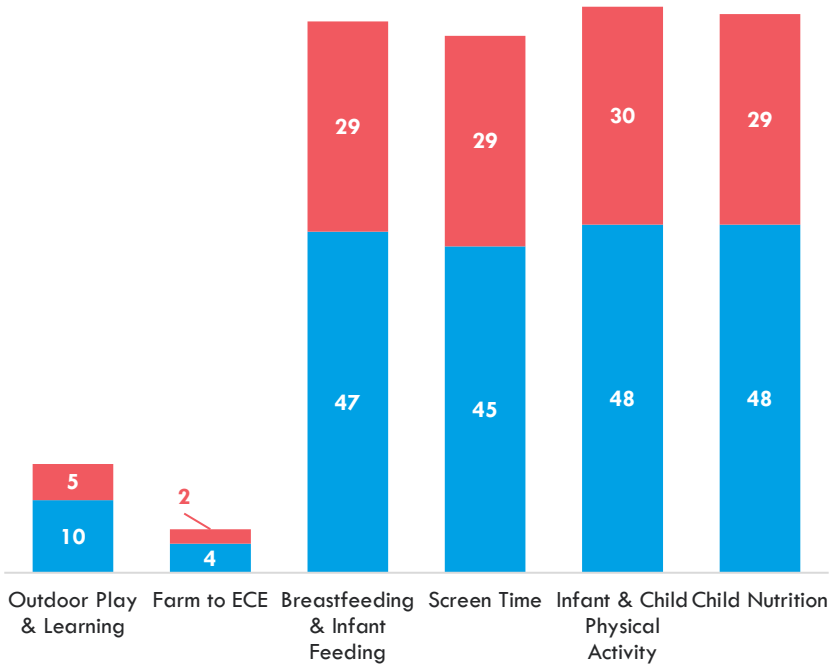
This information can be leveraged to develop nuanced technical assistance for different ECE types, for example a general emphasis on physical activity supports for non-Head Starts.

AZ Health Zone versus Other or No ECE Support

In FY21, the AZ Health Zone was the most frequent Consultant support agency for ECEs who completed the Go NAPSACC assessments (**Figure 18**). The Nemours grant enabled the SET to access assessment data for ECEs that were *not* supported by LIAs (non-AZ Health Zone).

We compared the pre-post changes in total mean Go NAPSACC scores for ECEs supported and not supported by the AZ Health Zone. There were no statistically significant differences between the two groups. LIAs did partner with ECEs that scored lower at pre in *Breastfeeding & Infant Feeding* and *Outdoor Play & Learning*, and the former saw a very highly significant score increase at post [MT5$_{a-d}$]. More work is needed to understand how LIAs made decisions to provide technical assistance to their partner ECEs, including the roles of assessed or perceived need.

18. In FY21, most Go NAPSACC Consultants supporting ECEs that completed pre-post assessments were from the AZ Health Zone, versus other (or no) agencies.



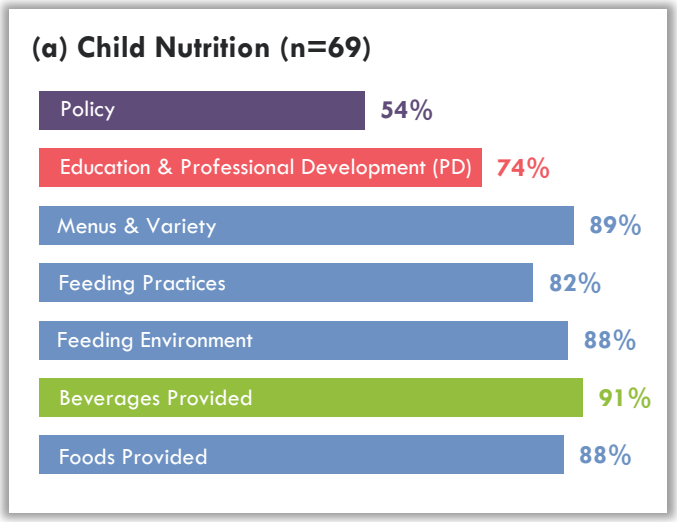
All FY21 Assessments

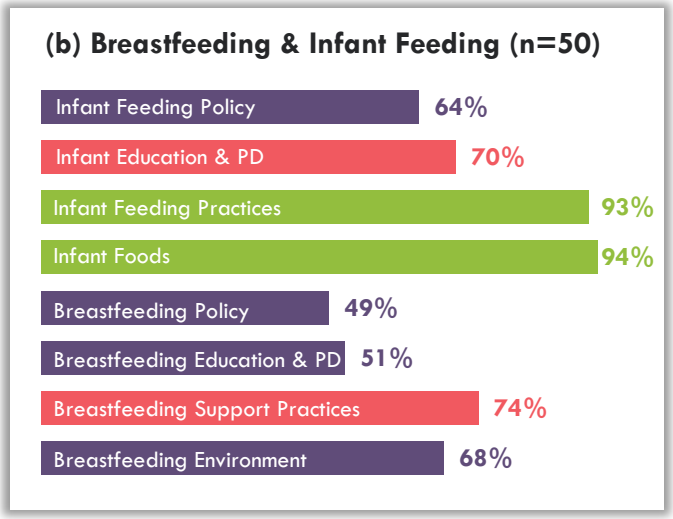
In FY21, LIAs in 11 counties completed 276 pre-intervention Go NAPSACCs across the six topics. In FY20 (during the last plan cycle), LIAs in only six counties completed the required hardcopy NAPSACCs across three topics. Thus, from FY20 to FY21, there was a 690% increase in the number of completed assessments. Narrative reports suggest that the increase was largely due to ECE participation in the Nemours Learning Collaboratives as well as another statewide Learning Collaborative focused on Farm to ECE. The greater accessibility of the online platform, the more intense communication of Go NAPSACC with its Consultant network, the reopening of some ECEs, and the availability of new topical modules are other likely contributors to the expansion.

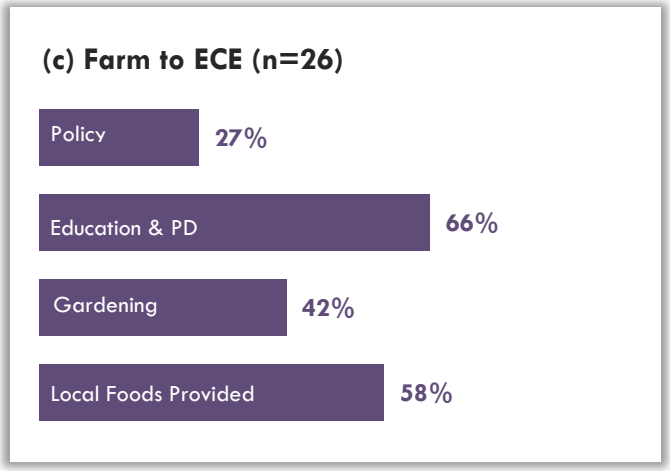
Variation by Section. Figure 19 shows the mean *pre*-intervention scores for all modules in FY21 [ST5$_{b,c}$]. Teacher Practices, including Infant Feeding Practices, scored high, as did the foods and drinks served to children. As in prior years, the Policy section scored low across all topics, usually followed by Education (of ECE families) & Professional Development (of ECE staff). Time Provided to children for indoor and outdoor physical activity also scored relatively low.

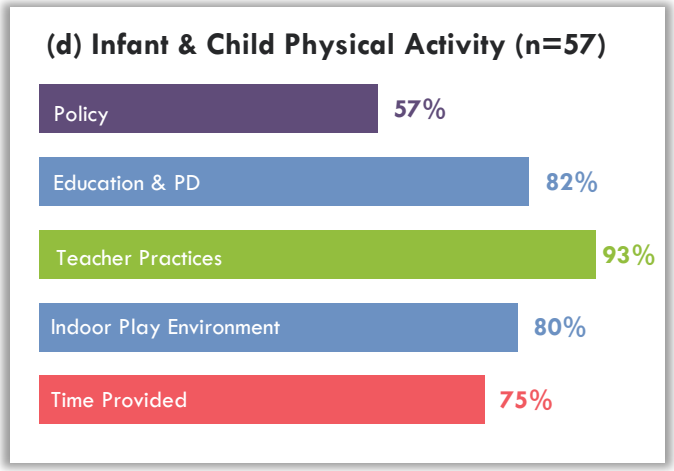
> "The AZ Health Zone-Yuma participated in both the Nemours Better Together and [statewide] Farm to ECE Learning Collaboratives…In our role as Go NAPSACC Consultants, we provided support to 27 ECE sites, assisting them in completing their self-assessments, setting goals, and creating their action plans. Our ECE partner, Chicanos Por La Causa, participated in both collaboratives."
>
> *- Yuma County Public Health Services District*

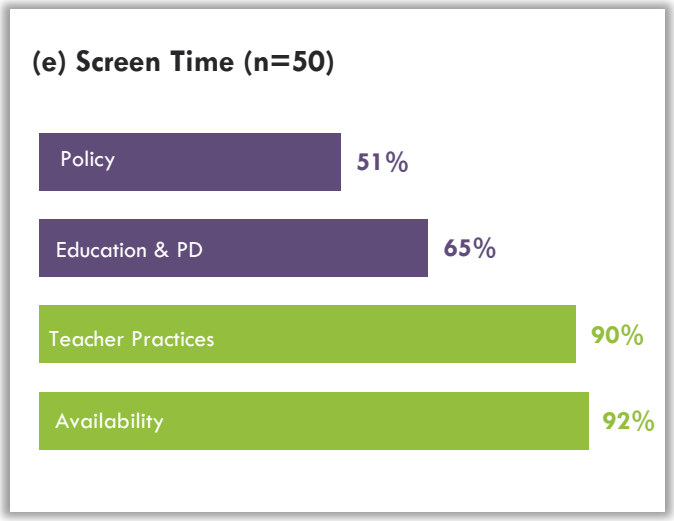
19. For the FY21 Go NAPSACC, mean PRE-Intervention scores were highest for *Child Nutrition* and lowest for *Farm to ECE*. Scores were calculated as the percent of the maximum possible score and color coded: <70%, 70-79%, 80-89%, ≥90%

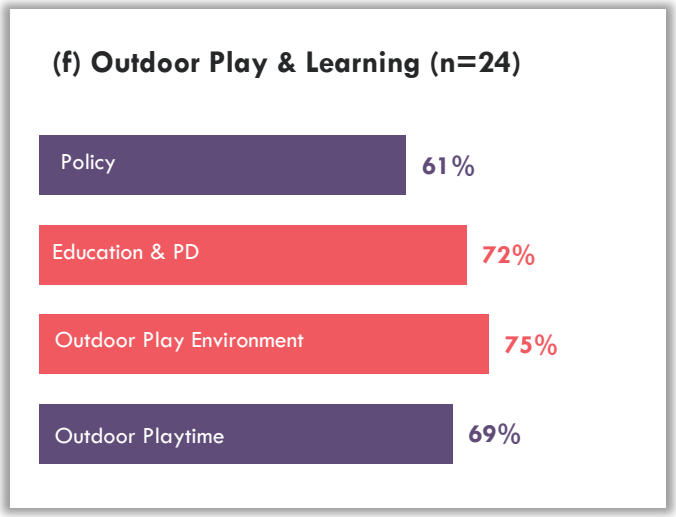












Variation by Topic. Overall, the two modules considered foundational to the Go NAPSACC—*Child Nutrition* and *Infant & Child Physical Activity*—received the highest scores before intervention activities (**Figure 19**$_{a,d}$) [ST5$_{b,c}$]. The AZ Health Zone has used both modules to evaluate ECE policies and practices since FY16, longer than any other module.

Breastfeeding & Infant Feeding was new to the AZ Health Zone in FY21. Covering both the breastfeeding environment and infant care, it has more sections than other Go NAPSACC topics. The breastfeeding sections scored lower than infant feeding (**Figure 19**$_{b}$), suggesting room for improvement [ST5$_{b,c}$].

Also new to the AZ Health Zone, *Farm to ECE* covers gardening *and* procurement. All section scores were notably low (**Figure 19**$_{c}$) [ST5$_{b,c}$]. LIAs have already begun to work on this outside of Nemours' Learning Collaboratives, including participation in a separate Arizona Farm to ECE Learning Collaborative.

The Learning Collaboratives address *Screen Time* but not *Outdoor Play & Learning*. Both topics showed room for improvement (**Figure 19**$_{e,f}$). While *Screen Time* was new to the AZ Health Zone in FY21, *Outdoor Play & Learning* was adopted last year: the mean total pre-intervention score for the FY21 cohort (72%) was lower than for FY20 (83%) [ST5$_{b,c}$].

Success Story

"We worked with Kids Can Doodle [a Learning Collaborative ECE], on supporting and updating the garden. After the director rebuilt the garden beds, SNAP-Ed supplied the center with seeds and soil to fill them, and garden curriculum to support classroom education. The project helped complete two of the ECE's Go NAPSACC Child Nutrition goals: (1) provide regular nutrition and garden education and (2) offer informal opportunities to talk with the children about the garden crops."

- Maricopa County Department of Public Health

Recommendations

Initiate sustainability planning beyond the Nemours Foundation grant. The free Go NAPSACC program and Better Together Learning Collaboratives have played pivotal roles in advancing PSE improvements for LIA-supported ECEs. As the grant period draws to a close in June 2022, it will be important for the State Teams and LIAs to develop and communicate (1) how the AZ Health Zone will continue the Go NAPSACC, and (2) how ECEs' progress will be sustained.

Emphasize the Go NAPSACC program as a five-step improvement process. This helps to connect the data from Step 1 with Steps 2 (Plan) and 3 (Take Action), highlights the availability of Go NAPSACC resources in Step 4 (Learn More), and prepares ECEs for the Step 5 post-assessment.

Consider how data-informed guidelines from the AZ Health Zone can enhance local programs:

- Go NAPSACC suggests that Consultants meet with ECE partners at least one hour per month to develop and implement plans. How does this align with the AZ Health Zone's guidance?
- How can LIAs develop skills to address the low scoring Go NAPSACC topics: written policy, family education, time provided for physical activity, Farm to ECE, and breastfeeding?
- What recommendations for tailored activities could help to close the PSE gaps reported here for Head Starts and other ECE types (e.g., enhanced physical activity programming)?

The AZ Health Zone's Trauma-Informed Approaches:

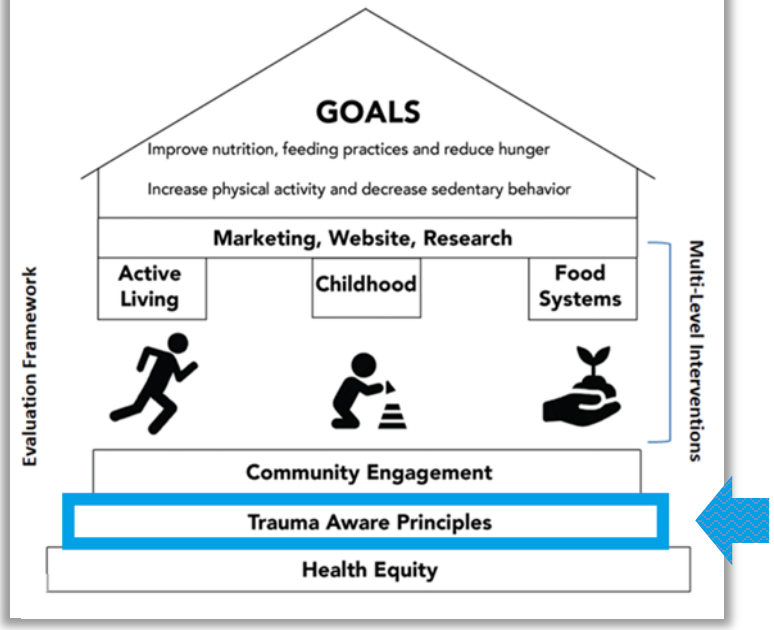
LIA Staff Support New Direction

The AZ Health Zone's guiding principles foster building resilient communities using a health equity lens. This includes weaving *trauma-informed approaches (TIAs)* into each level of the FY21-25 statewide program. TIAs are intended to ensure that interventions meet participants where they are, and avoid harm.

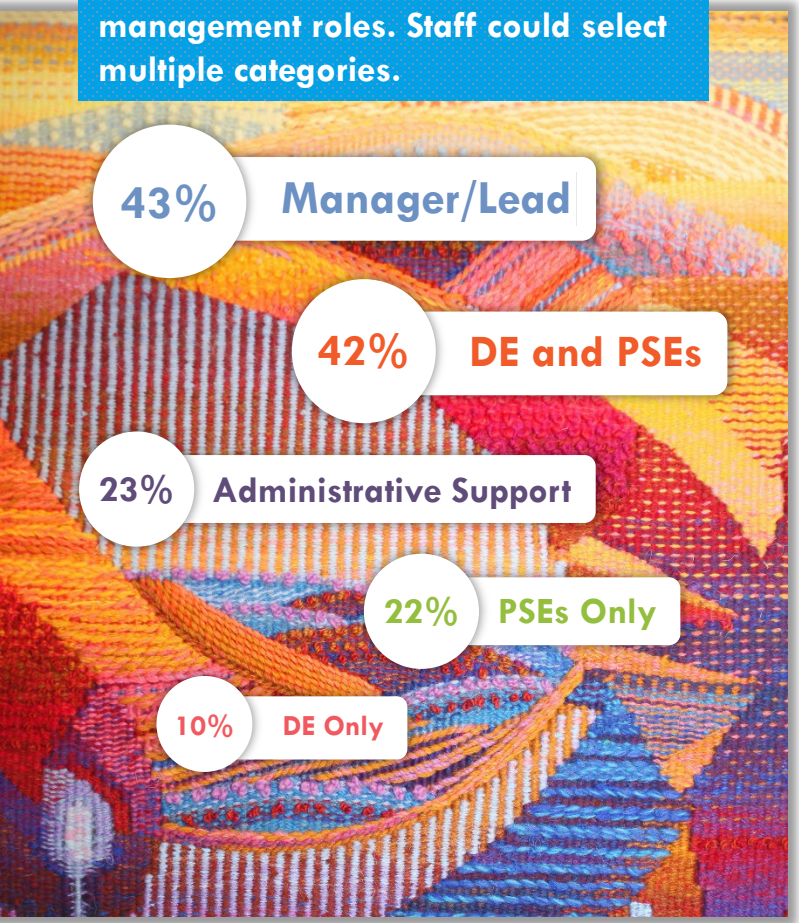
How was the AZ Health Zone's TIA evaluated this year? The State Evaluation Team:

1) Surveyed Local Implementing Agency (LIA) staff about their TIA knowledge, beliefs, principal support, and commitment *before* implementation, and
2) Explored LIA uptake of TIA via interviews with direct educators (see page 45).

AZ Health Zone Program Model and Principles



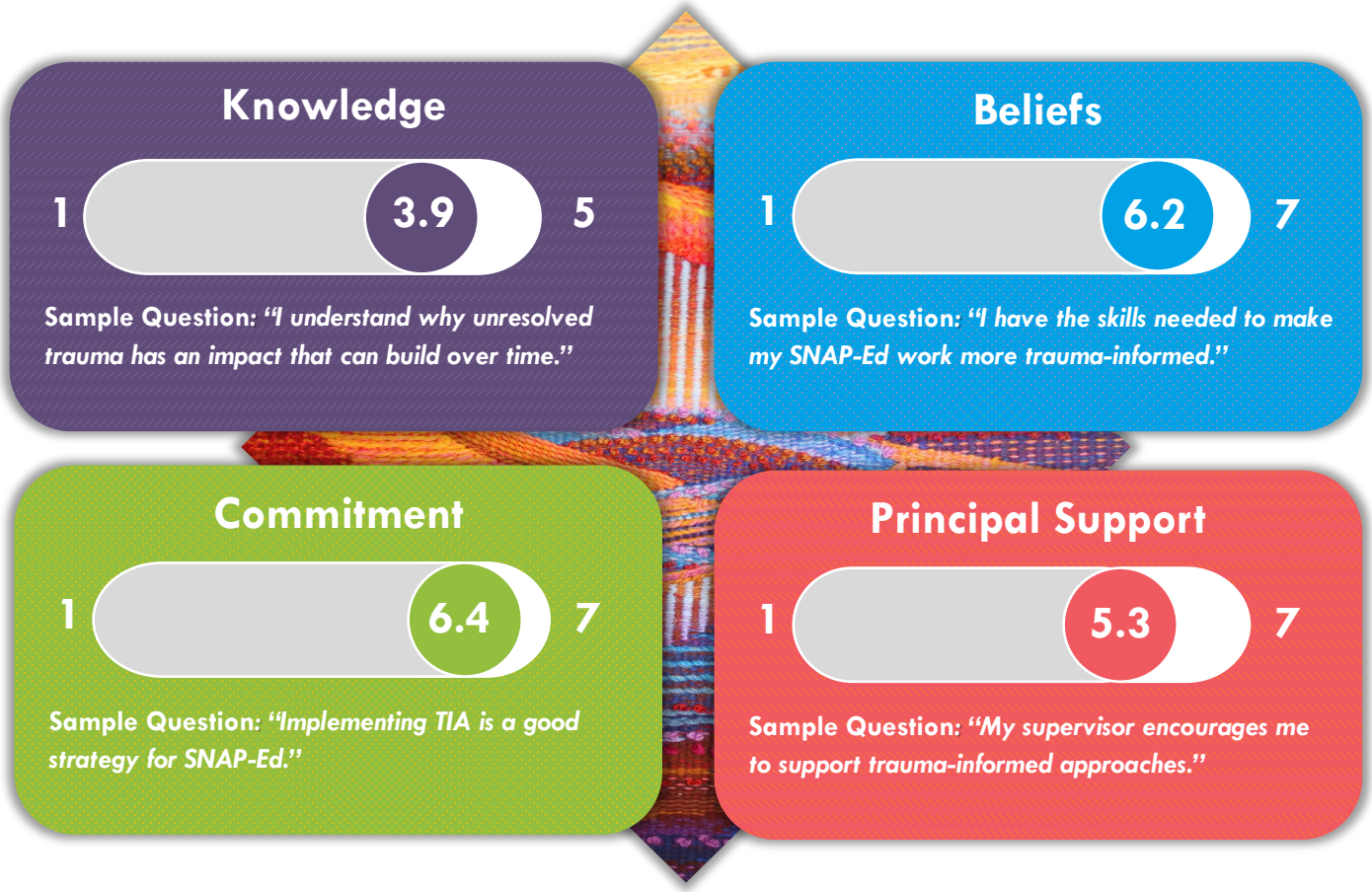
Most respondents had PSE, DE, and management roles. Staff could select multiple categories.



The TIA Survey. This 35-item survey measured the key domains of TIA commitment, knowledge, beliefs, and principal support. Most questions used a 5- or 7-point Likert scale for respondents' level of agreement with the TIA-related statements in each domain. The survey was online, anonymous, and available in English or Spanish.

Respondents. Of the 67 LIA staff who completed the TIA survey, 97% were female. The largest age group was 30-39 (28%). The largest groups for length of SNAP-Ed experience were respondents with 1-2 years and 10 or more years (21% each).

Prior Training. Nearly a third (31%) of LIA staff had five or more TIA training hours via webinars and books/materials, while in-person exposure was the least common (15%). Only four respondents indicated no prior TIA training or exposure.



Results. Respondents' domain mean scores (above) indicated positive beliefs related to TIA, and strong commitment. Principal support—perceived TIA support from one's team and organization—was moderate. While still robust, items that addressed confidence in utilizing a TIA received some of the lowest scores in the survey. These included *"I have the skills needed to make my work more trauma-informed"* (4.6/7) and *"I feel confident that I can implement this approach"* (4.9/7).

Next Steps. While respondents largely valued the role of TIA's core tenets in their work, they were less clear regarding how to incorporate these approaches. Similarly, LIA staff reported a lack of confidence to move forward.

After the survey, LIAs could join a yearlong live, online TIA professional development series, as well as other online TIA trainings. This survey's distribution again in FY22 will assess any changes over time in LIAs' uptake of TIA.

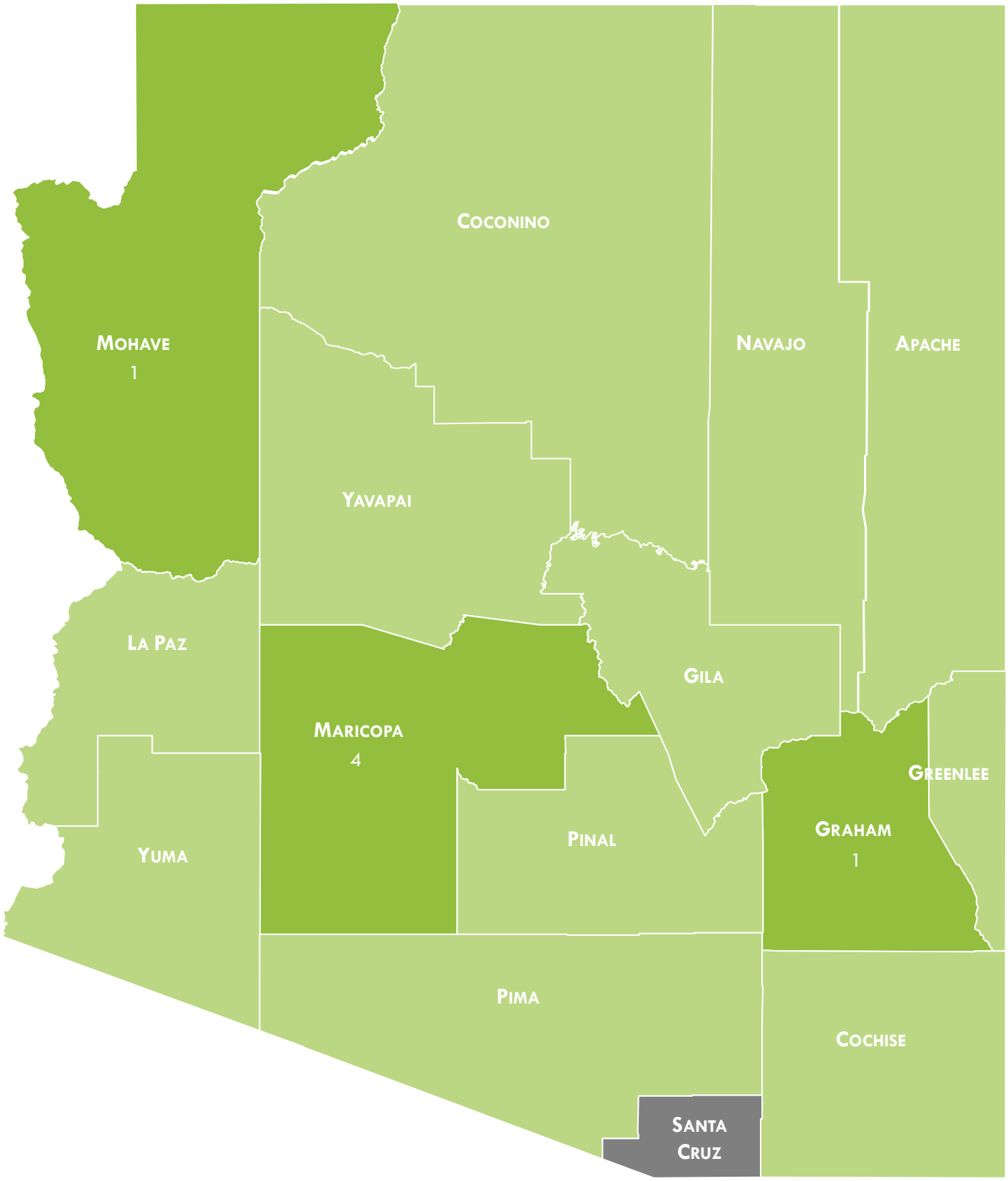
21% (14) of respondents shared primarily **positive or uncertain** comments about TIAs

"Very excited to incorporate trauma-informed strategies into our work. It makes me feel more connected to the community we serve, especially for those currently experiencing crisis."

"Many people feel that they don't fully understand what is expected of them when adopting trauma-informed approaches."

"I believe this topic belongs with behavioral agencies."

"I think it is an extremely interesting topic, especially in this time of the pandemic, where families have experienced a lot of stress in a different way." *(translated from Spanish)*



KEY

- # = # stores assessed with the FY21 STORE
- = Worked in Food Systems in FY21
- = Did not work in Food Systems in FY21

Food Systems

UA Cooperative Extension, Pima

AZ Health Zone Food Systems Strategy

Support the production, distribution, and availability of food to increase access and consumption of healthy foods.

Evaluating Food Systems

The AZ Health Zone State Evaluation Team (SET) evaluated Food Systems programming using Arizona's SNAP-Ed Electronic Data System (SEEDS), Local Implementing Agency (LIA) Semi-Annual Report Narratives (SARNs), and the Stocking Opportunities in the Retail Environment (STORE) tool to measure baseline [ST5], two-year [MT5], and longitudinal [LT10,12] *Nutrition Supports*.

Continued Impacts of COVID

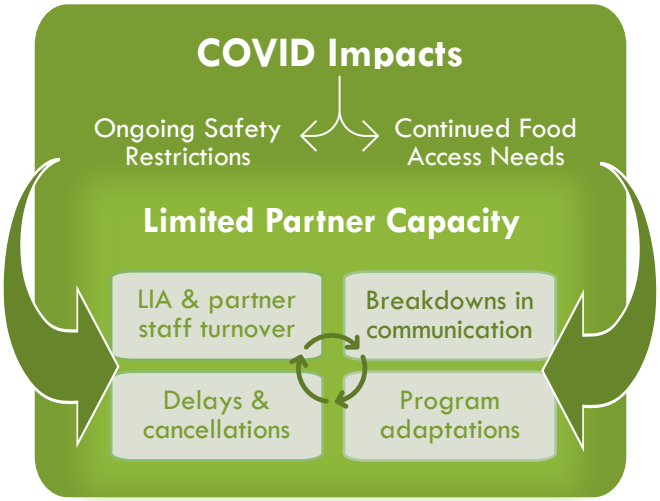
During COVID, LIAs faced a multitude of challenges working in their communities. LIA staff reported persistent barriers to reaching the SNAP-Ed audience (**Figure 20**), even after adapting their activities to pandemic conditions. When programming was possible, some LIAs reported slow and/or limited progress.

Success Story

"ABC Mart continues to participate in the International Rescue Committee (IRC) Fresh Fund program (SNAP match) and has maintained a pre-pandemic level of business. The work that our staff did with the store and with the IRC to support healthy retail initiatives and SNAP match has had a long-lasting impact that will continue to increase with SNAP-Ed support."

-Maricopa County Department of Public Health

20. In FY21, LIAs reported persistent and interrelated challenges associated with COVID.

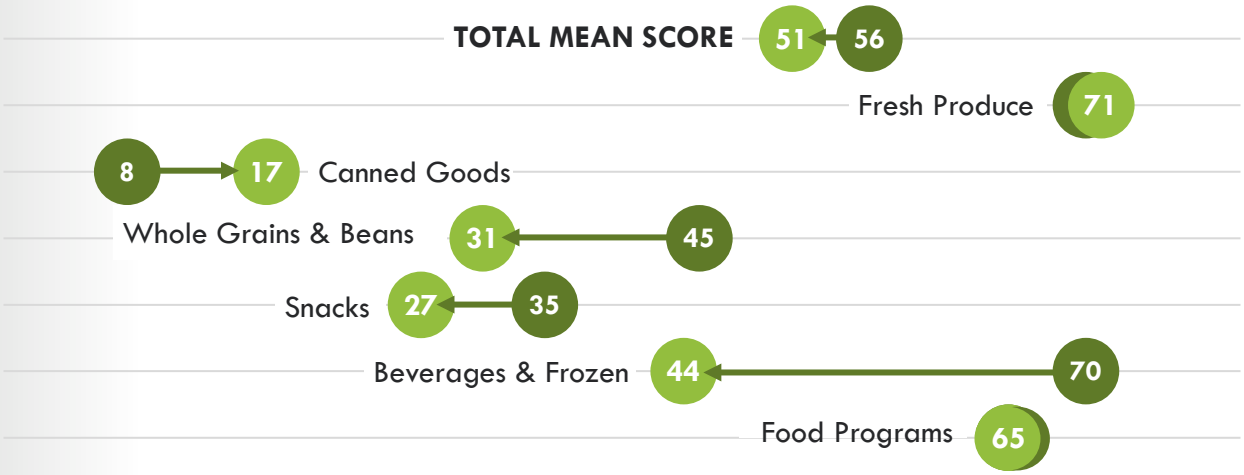


Food Retail

Three LIAs in three counties continued to advance their *Food Retail* partnerships in the first year of this program cycle. Trained LIA staff used the STORE tool to evaluate their progress.

What is the STORE? The STORE measures the *Availability*, *Appeal*, and *Promotion* of healthy foods

21. From FY19 to FY21, most mean STORE scores for small Maricopa County retailers decreased, as did the total mean score. Scores for Total ranged from 0 (weakest) to 100 (strongest). Scores represent the percentage of maximum points possible for each section. (n=4)



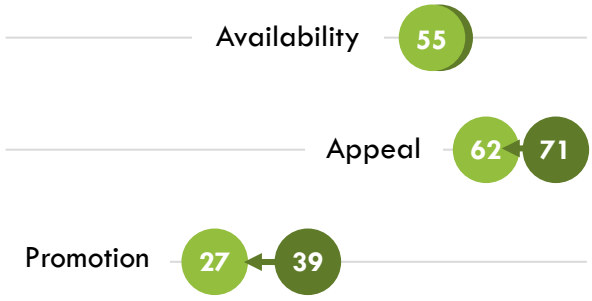
in the retail setting. These three constructs are assessed across six sections: Fresh Produce, Canned Goods, Snacks, Beverages & Frozen, and Food Programs (i.e., the presence of WIC and SNAP electronic benefits transfer, or EBT).

Did STORE Scores Change Over Time? Four small stores from one LIA in Maricopa County, the Maricopa County Department of Public Health, completed the STORE in both FY19 and FY21. Changes in their section scores are shown in **Figure 21**. While most of the section scores dropped over time, Fresh Produce and Food Programs scores saw little change, and Canned Goods scores increased. The latter could reflect a change in the shopping habits of customers and/or changes in the store owners' inventory during the pandemic, although the low sample size precludes statistical significance making it difficult to interpret the results.

Similarly, mean scores for *Availability, Appeal,* and *Promotion* (**Figure 22**) dropped over time. The *Availability* of healthy foods saw relatively little change compared to the *Appeal* and *Promotion* scores. Maintaining inventory may have been prioritized over the promotion or appeal of the healthy food items during COVID, although again the small sample size makes it difficult to draw conclusions.

The same Maricopa LIA program also collected longitudinal data (FY17-19-21) from 3 stores (not shown). Most section scores grew from FY17 to FY19, only to see gains reversed by FY21 [LT10,12].

22. Mean STORE scores for three measured constructs decreased from FY19 to FY21. (n=4). Scores represent the percentage of maximum points possible for each construct.



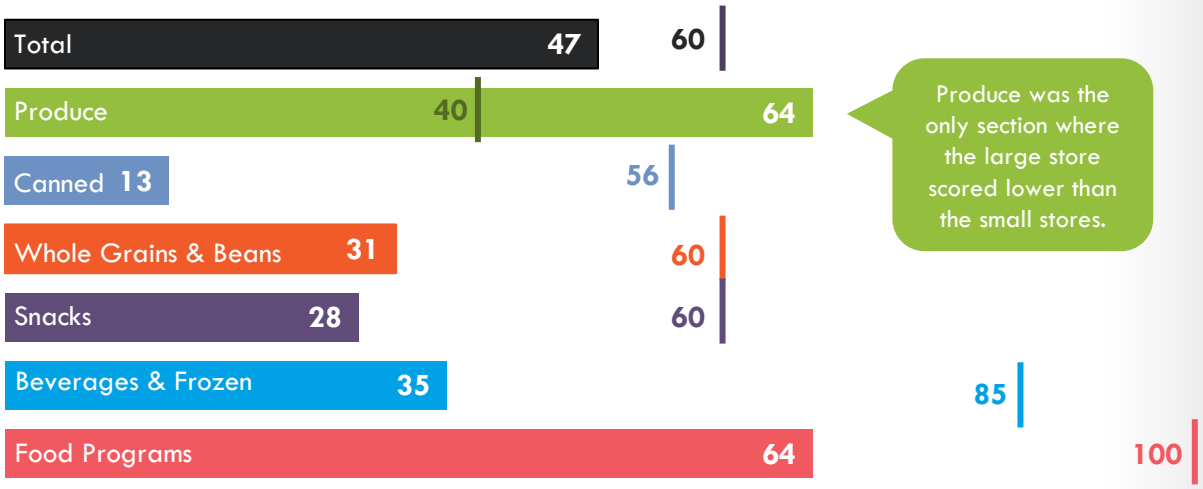
Maricopa's LIA staff reported in their SARNs that progress was significantly hampered by the ongoing pandemic's unprecedented demands on their retail partners' operations.

FY21 STORE Results. In FY21, LIAs assessed six food retailers across three counties. Compared to prior years, the number of large and small stores that were evaluated dropped (**Figure 23**). In the SARNs, LIAs reported great difficulty in re-connecting with store managers or owners due to COVID.

23. LIAs' use of the STORE peaked in FY19 and decreased substantially in FY21.

Scores for the five small retailers and one large retailer varied by section (**Figure 24**) [ST5]. Some LIAs working with small stores noted in their report narratives that conversations with store owners enhanced their understanding of the stores' fresh produce sourcing, leading to potential future work in procurement. These LIAs experienced greater communication with smaller store partners, while the large store that was assessed was overwhelmed with other priorities during COVID.

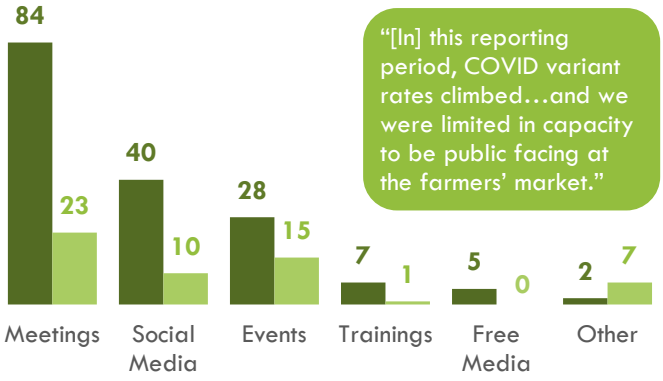
24. In FY21, mean STORE scores for small retailers (n=5) varied by section and were generally lower than scores for the one large store assessed (thin bars).



Farmers' Market Support. Six LIAs in six counties supported farmers' markets with policy, systems, and environment (PSE) plus direct education (DE) work to encourage the use of SNAP benefits at markets [MT8]. In SEEDS, LIAs reported support for the Double Up Food Bucks and Farmers' Market Food Navigator Programs, as well as providing materials to promote the programs, community outreach around local markets, and virtual and in-person food demonstrations using items available at the market.

Barriers. In FY21, there was a 66% reduction in SEEDS actions related to farmers' markets, with meetings, trainings, and media activities declining substantially (Figure 25). LIA narrative reports reflected several contributing factors related to the pandemic, including lengthy closures of many markets, challenges in providing public-facing support, and limited partner capacity.

25. The number of farmers' market actions reported in SEEDS dropped from FY20 (n=166) to FY21 (n=56).



Success Story

A Return of the Farmers' Market Ambassador Program

"We supported the return of the Heirloom Farmers' Market's in-person Market Ambassador program by working with a summer Extension intern. The intern served as the Ambassador and assisted SNAP/Farmers' Market Nutrition Program customers [during market hours]…Additionally, we supported the market by assisting with writing a grant, which awarded $12,500 to fund the Market Ambassador program in 2021-2022."

- UA Cooperative Extension, Pima

EBT dollars are spent using coins at the market.

Gardens

In FY21, 11 LIAs in 10 counties supported gardens. After *Food Access*, *Gardens* was the second-most reported activity in SEEDS (n=1,587). Although LIAs faced barriers in garden implementation, 84% (n=1,335) of all actions reported in this activity were related to sustaining established gardens [LT5]. By intervention setting, individual homes or public housing sites (66%), as well as community/school/childcare gardens (18%) were most reported in FY21. Gardening supports most often reported in the SARNs included providing gardening tips (e.g., recipes, ideas for growing), technical assistance, planning meetings, events to bring the community to the garden, materials distribution, and trainings. For example, a local school health advisory committee in South Phoenix learned that while students were remote learning, they had missed

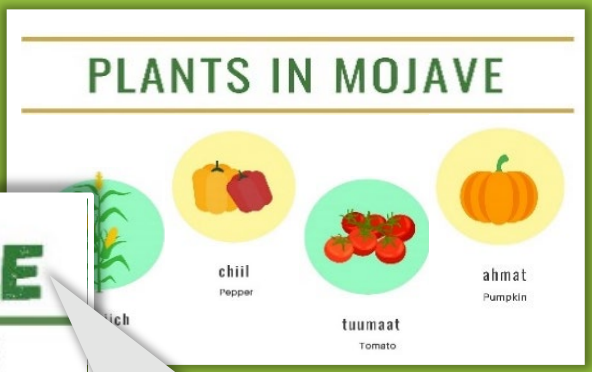
participating in the school garden. In response, the UA Cooperative Extension, Maricopa, developed and distributed home garden kits to grow salad greens, which they paired with remote lessons for students on how to use the kits.

Barriers. With the ongoing COVID-related challenges, LIAs reported difficulty in working with all intervention site types due to safety protocols limiting on-site visitors. Other commonly reported barriers to providing *Gardens* support included:

- Lack of consistency in volunteer or site champion support to maintain or progress gardens.
- Partners' competing demands on time and resources.
- Community members' persistent concerns about in-person participation.

Culturally Relevant Approaches Support Garden Lessons

LIAs in Mohave, Pima, and Maricopa Counties adopted culturally relevant approaches to gardening, such as utilizing materials aligned with the unique needs of communities.



"Throughout April, we worked closely with the Fort Mojave Indian Health Center to put together the *Garden to Table* series for home gardeners. Participants received home garden kits to use during the virtual lessons.…The kits were created and distributed along with printed information that the [site] coordinator had translated into Mojave, the native language of the community."

-UA Cooperative Extension, Mohave

Food Access

In FY21, 14 LIAs in 12 counties supported *Food Access* [MT5], which represented 48% (n=3,186) of all Food Systems programming (N=6,614). **Figure 26** provides an overview of SEEDS actions under this activity.

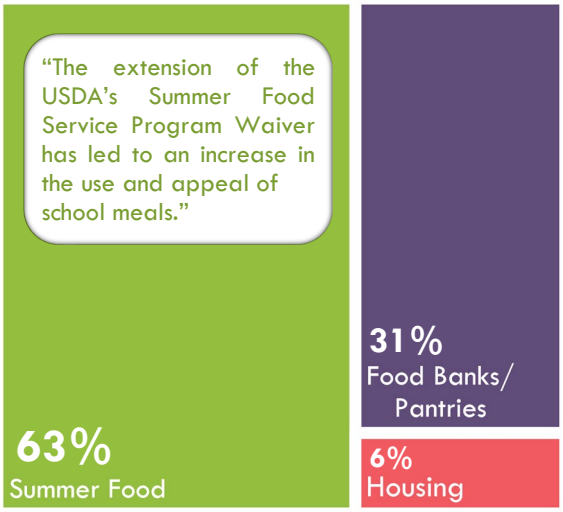
Food Banks & Pantries. This year, 11 LIAs in 10 counties reported work with food banks and pantries. Most activities supported school and housing site pantries, in addition to convening community partners to address food access issues in the community. Several successes included:

- The Maricopa Country Department of Public Health coordinated with the Phoenix Elementary School District and local food banks to support additional food distribution sites for families.
- Coconino County Health & Human Services engaged multiple stakeholders to support logistics for countywide food distribution during COVID.

"This year, we were able to get Armenian cucumbers from De'Nede Farms in Camp Verde and do a taste test at Cottonwood Community School during the summer lunch program…We also helped advertise the SFSP, helped with their food drop program, and aided with curbside pick-up, where families can sign up once a week to receive fresh vegetables, milk, and other foods."

-Yavapai County Community Health Services

26. The Summer Food Service Program was the most common type of *Food Access* activity reported in FY21. (n=830)



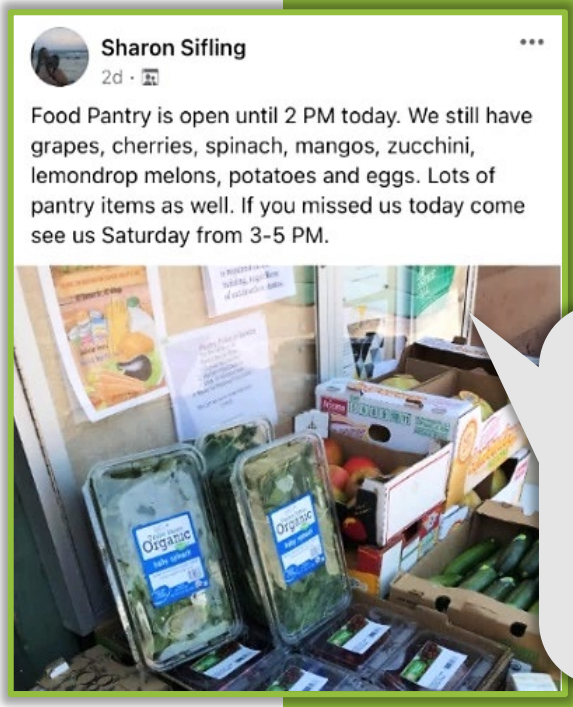
Summer Food Service Program. Eight LIAs in seven counties reported programming to support the Summer Food Service Program (SFSP). Meetings made up 95% of all SFSP actions in SEEDS, which supported SFSP promotion, logistics, and pandemic-related operational changes. For example, one LIA assisted the Summer Food Parent Advisory Committee, launched from the State Nutrition Action Committee, to gather families' input.

Although COVID safety protocols limited LIAs' ability to offer programming at SFSP sites, they were able to provide educational materials to pair with summer foods, as well as promote the meal program through social media platforms, email, and flyers.

Barriers. Two LIAs that supported the SFSP in past years reported that COVID safety restrictions prevented them from continuing this work in FY21.

Success Story

Going the Extra Mile to Increase Fresh Food Access



Coconino County Health & Human Services' staff partnered with the Grand Canyon Food Pantry to help transport fresh foods 95 miles from the neighboring St. Mary's Food Bank in Flagstaff. The Grand Canyon Food Pantry typically receives fresh foods less than once per month, so LIA staff planned and coordinated the delivery of fruits, vegetables, eggs, and milk when they were already traveling to the area for AZ Health Zone work.

"We used Facebook to promote the pantry and fresh foods. Community members reported seeing the post and shared they had passed the info on to friends and colleagues. The food pantry board president shared that 'the work that Coconino County Health & Human Services has been doing over the summer has made folks aware of the value of fresh produce. I get asked about fresh food now, and it is usually taken quite quickly when we have it in stock."

- Coconino County Health & Human Services

Farmers and Growers

In FY21, seven LIAs in six counties reported *Farmers and Growers* activities in SEEDS (n=291). One additional LIA described this work in their SARN but not SEEDS. Ninety-five percent of related actions were logged as meetings, and of those meetings, 53% were attended as a part of coalition work [ST8].

Strengths. In their SARNs, LIAs described learning alternative ways to grow produce (e.g., using hydroponics), which they shared with local growers. They also explored new ways to support the sale of local produce at farmers' markets:

In partnership with other local organizations, the UA Cooperative Extension, Cochise, worked toward equitable access to fresh produce at the Sierra Vista Farmers' Market. LIA staff gathered community input using informal conversations: "For example, at an Eat Local tabling event, we had a conversation with a local senior about challenges to taking home fresh produce, and he shared that they often do not have gas for the stove in his apartment building." This information will help to shape future support.

The UA Cooperative Extension, Pima, supported Double Up Food Bucks at the Heirloom Farmers' Market to increase SNAP and Farmers' Market Nutrition Program sales.

The UA Cooperative Extension, Yavapai, co-facilitated a training with the Prescott Farmers' Market to bolster vendor business practices; LIA staff taught vendors how to better price items to encourage the redemption of Double Up Food Bucks benefits.

Success Story

"We were able to clearly define our role as SNAP-Ed in the Urban Agriculture/Beginner Farmer collaboration. Our team will provide support for working specifically with farmers who serve SNAP populations, and support for farmers who participate in SNAP benefits themselves…Our team has also been working hard to co-create a seminar for the collaboration in October."

- UA Cooperative Extension, Maricopa

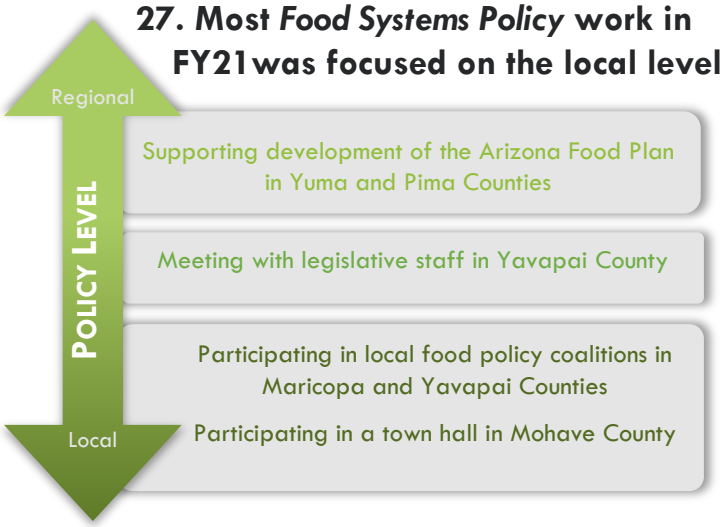
Food Systems Policy

In FY21, six LIAs in five primarily urban counties reported *Food Systems Policy* [MT7] work in SEEDS (**Figure 27**). Of these actions (n=187), meetings (75%) and events (21%) to support policy progress were most often reported. Three LIAs reported the majority (n=138) of all *Policy* actions.

Two LIAs explored *Policy* work that intentionally engaged communities:

1) The Yuma County Public Health Services District sought policy-related input from community members via focus groups.
2) The UA Cooperative Extension, Pima, assisted in recruiting farmers, growers, and frontline food access workers for focus groups to provide input on policy priorities for a statewide food plan.

27. Most *Food Systems Policy* work in FY21was focused on the local level.



Challenges. Two LIAs reported barriers in FY21, including internal staffing challenges, as well as COVID's impact on coalition partners' ability to engage and advance shared policy goals.

Success Story

"We supported the AZ Food Systems Network and Pinnacle Prevention by conducting community conversations around food access. From June to July, we held 69 interviews with people of different demographics and in different areas of Yuma County—parents of young children, teenagers, agricultural producers and laborers, schoolteachers and principals, senior citizens—to listen and learn about their experiences in accessing food, especially during COVID. These conversations were done in person, via Zoom, and by telephone; in Spanish and English; and one-on-one and in small groups, depending on what worked best for the individual(s)."

-Yuma County Public Health Services District

Recommendations

Use of the STORE peaked in FY19 with 26 assessments and declined to six in FY21. Further investigation could *explore whether this change was related to COVID challenges, less LIA emphasis on healthy retail as an AZHZ intervention, or other reasons* and influence the direction of future programming and evaluation with food stores.

LIAs were successful in continuing to promote and expand *Food Access*, especially the Summer Food Service Program. *Trainings for LIAs led by state-level organizations* (e.g., the AZ Food Bank Network) could continue to support LIAs by providing systems-level perspectives on issues and policies that may impact LIAs' community-level *Food Access* work.

Additional training may be helpful to reinforce the need for SEEDS documentation of program activities. As in FY21, several LIAs reported Food Systems work in SARNs that was not reported in SEEDS. Moreover, some SEEDS actions were inconsistently logged, or reported under the incorrect activity.

As the AZ Health Zone continues to implement a trauma-informed approach, LIAs and SNAP-Ed eligible tribal communities may benefit from additional culturally relevant materials and curricula. *Training LIAs on ways to incorporate communities in developing culturally relevant materials could contribute to community relationship building and engagement.*

LIAs in rural counties did not report any Food Systems policy activities in FY21, although work was planned. While COVID was a persistent barrier, both rural and urban LIAs may benefit from *trainings on how to begin efforts to establish and implement local and state/regional policies,* including how this work may differ by degree of rurality.

The AZ Health Zone's Trauma-Informed Approaches:
Educators Expand & Adapt Practices

In FY21, the AZ Health Zone encouraged the use of trauma-informed approaches (TIAs) through a year-long training series for Local Implementing Agencies (LIAs) and the adoption of the *Around the Table* trauma-informed curriculum (see the **Adult Direct Education** chapter).

The State Evaluation Team (SET) explored TIA uptake via 15 one-on-one interviews with direct educators who were: 1) participating in the training series, and 2) implementing, or planning to implement, *Around the Table*. Qualitative data from these interviews provided a unique tapestry of emerging themes related to TIA:

Pinnacle Prevention and Leah's Pantry facilitated the year-long training.

> "When I heard that we were going with the trauma approaches, I was like 'Wow, that's amazing!' because there are people who have different lived experiences and different traumas that we don't know about, and that's their primary thing that they're dealing with. They're trying to survive, whatever it is they have going on… [Then] we're like: 'Nutrition, nutrition! It's important. Physical activity!' and not taking into account other things that they might be dealing with."
>
> *– Rural Educator*

Training

A majority of the interviewees (11) emphasized two broad training concepts as the most useful:

- Deeper consideration of participants' contexts and experiences
- Adopting or adapting language to be more inclusive and enhance participant choice

Nine staff who offered negative perspectives on the trainings questioned whether certain TIA tenets were right for their participants, particularly in rural areas. Several interviewees contested concepts around racial and cultural issues, as well as how these concepts were presented.

Practices

Educators most often described practicing four principles (blue) from the CDC's TIA model:

Source: https://www.cdc.gov/cpr/infographics/6_principles_trauma_info.htm

Supporting **Voice & Choice**

Offering opportunities for participants to share their choices was a way to "give that voice" and build on what they were already comfortable with in their own lives, versus "going in and saying, 'You should do this.'"

Creating **Safer** Learning Spaces

Educators reflected on past lessons that they "never even realized could be traumatizing." They expressed a desire to "be more conscious of how I word things" and "create a safe space" for learning.

Responding to **Cultural & Historical** Contexts

Access to the conditions that support healthy choices for participants was recognized, as well as acknowledging "different [cultural] dynamics." Adapting recipes as well as concepts like resilience, even after translation, was also described by educators as relevant to their roles.

Developing **Trust & Transparency**

Connecting with participants to build trust was important, to "really focus on listening" and let participants know that what they may choose to share "doesn't go past here."

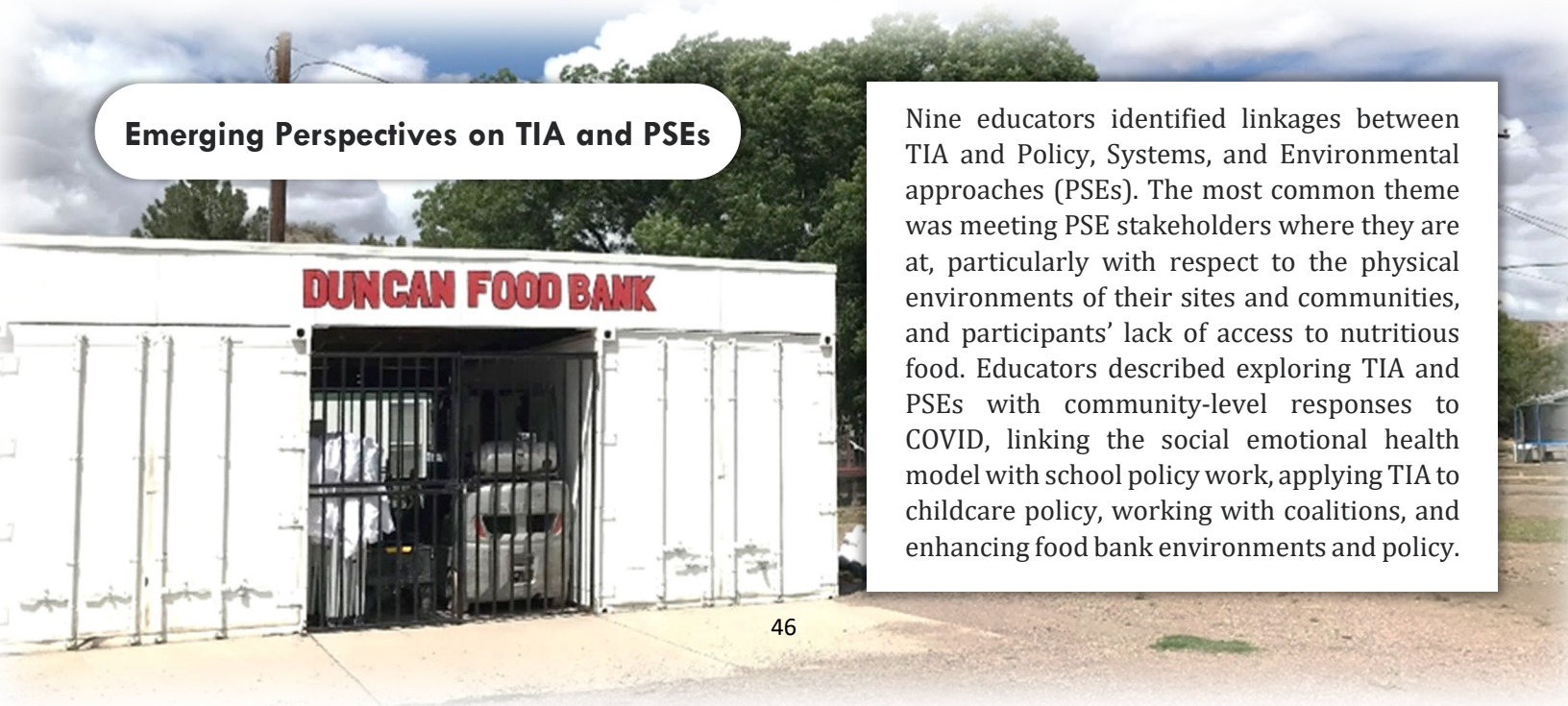
Challenges

One overarching theme from educators centered on discomfort for themselves or participants. Five interviewees shared uncertainty about what to do if they inadvertently "dig up" participants' trauma, or "create something bigger than we know how to help [with]." Educators also worried about balancing educational content with a sense that "you can't modify everything," and that it is impossible to know every concept or word that might cause discomfort or bring up past trauma in a participant's life.

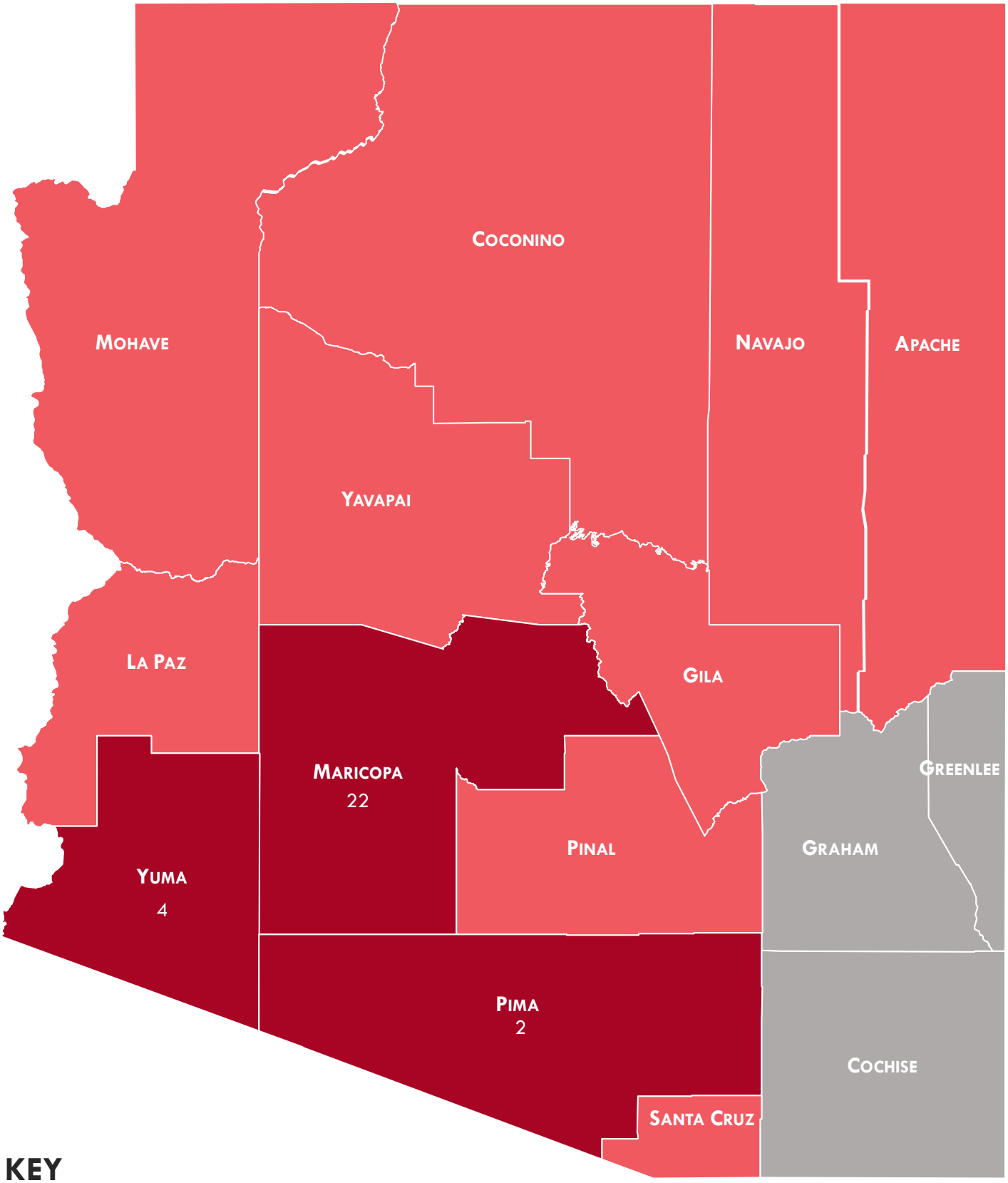
Recommendations from Educators

- **Be open minded.** "Sit back, listen" and do "uncomfortable" reflective work to be able to "connect better" with participants.
- **Cultivate connection.** Learn about and ask questions so "we know each other a bit," and "think about the differences between people."
- **Meet people where they are at.** Have an "awareness of what they're doing, what they're bringing, and how I can enhance that."

Emerging Perspectives on TIA and PSEs



Nine educators identified linkages between TIA and Policy, Systems, and Environmental approaches (PSEs). The most common theme was meeting PSE stakeholders where they are at, particularly with respect to the physical environments of their sites and communities, and participants' lack of access to nutritious food. Educators described exploring TIA and PSEs with community-level responses to COVID, linking the social emotional health model with school policy work, applying TIA to childcare policy, working with coalitions, and enhancing food bank environments and policy.



KEY

= # of matched assessments from the FY21 Adult DE *Around the Table* evaluation

= Offered Adult DE class series in FY21, no assessments

= Did not offer Adult DE class series in FY21

Adult Direct Education

An Eat Smart Live Strong class in Gila County

Adult Direct Education describes AZ Health Zone activities when adult participants are actively engaged in the learning process with an evidence-based intervention/curriculum, usually in group settings.

Evaluating Adult Direct Education (DE)

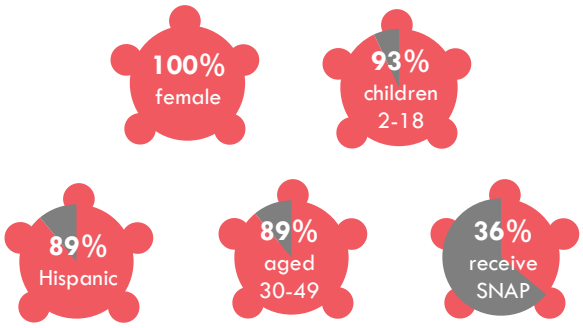
The AZ Health Zone assessed *Healthy Eating* [MT1] and *Food Resource Management* [MT2] behaviors using the *Around the Table (ATT) Nourishing Families* survey. The *ATT* is a six-workshop, trauma-informed curriculum developed by Leah's Pantry in California. It prioritizes trauma-informed principles such as safety; trustworthiness and transparency; peer support; and empowerment, voice, and choice. The *ATT* survey captures individual-level adult behavior change around nutrition, food habits, and food skills, as well as feelings, thoughts, and perceptions of food and nourishment.

Adult DE Demographics

In FY21, three SNAP-Ed Local Implementing Agencies (LIAs) in three counties taught the *ATT* workshop series paired with surveys. They collected 28 matched pre-post surveys (**Figure 28**). Over a third of respondents received SNAP benefits, an increase from FY20, when only 28% of adult DE survey participants reported SNAP participation. Twenty-four respondents (86%) chose to complete a Spanish survey.

Residents from a Phoenix housing community participated in the Seed to Supper gardening series.

28. Almost all *Around the Table* survey respondents were women of Hispanic ethnicity, aged 30-49, with children at home (n=28).



The *ATT* was the only curriculum evaluated in FY21, however SNAP-Ed staff in nine additional counties (representing two LIAs) taught full class series of approved curricula, including *Eat Smart Live Strong*, *MyPlate for My Family*, and *Seed to Supper* (see **map**, left).

29. From PRE to POST, reported means of daily fruit [MT1$_i$] and vegetable [MT1$_m$] intake was unchanged for *Around the Table* participants. Responses coded as rarely=0, <1=0.5, 1=1, 2=2, 3 =3, ≥4=4. No participants selected "4 or more" times per day.

Healthy Eating

Whole Grains [MT1$_j$]. *ATT* survey respondents were asked about consumption "yesterday," i.e., the day before the survey administration. Whole grain intake improved from pre to post. Over a third (37%) of participants ate more whole grain breads and tortillas after attending the *ATT* series. In addition, whole grain quinoa, oatmeal, rice, and pasta intake improved for 27% of participants.

Healthy Beverages. Participants' beverage choices improved after the series. From pre to post, 25% of respondents increased their "yesterday" water intake [MT1$_g$], and 25% drank fewer sugary drinks per week [MT1$_h$].

Fruits and Vegetables. Reported means of fruit and vegetable consumption did not change (**Figure 29**). After completing the classes, 32% of participants reported an increased fruit intake, but 29% reported eating less fruit. For vegetable intake, 25% percent of respondents improved, while 21% worsened.

Food Resource Management

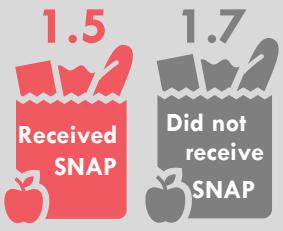
ATT participants' food skills grew over time [MT2]. **Figure 30** highlights the two items that improved most: food label reading and use of nutrition advice for preparing balanced meals. *Food Resource Management* behaviors that changed little were commonly practiced before participants completed the classes (e.g., at pre, 50% rated themselves "good" at shopping with a grocery list [MT2$_j$], and 70% reported no change at post).

30. From pre to post, the % of respondents who improved these key food-related skills rose:

SNAP beneficiaries' equity gap for fruit and vegetable intake was minimal at post.

Mean times ate fruits/ vegetables yesterday

Equity Gap Score = 1.1



In FY21, we began examining data equity by calculating ***equity gap scores*** for fruit and vegetable intake among SNAP recipients and non-recipients. This involved dividing the highest outcome mean for the fruit and vegetable section by the lowest for respondents with and without SNAP benefits. A value greater than 1.0 indicates a potential equity gap. The ideal score is 1.0, denoting no difference.

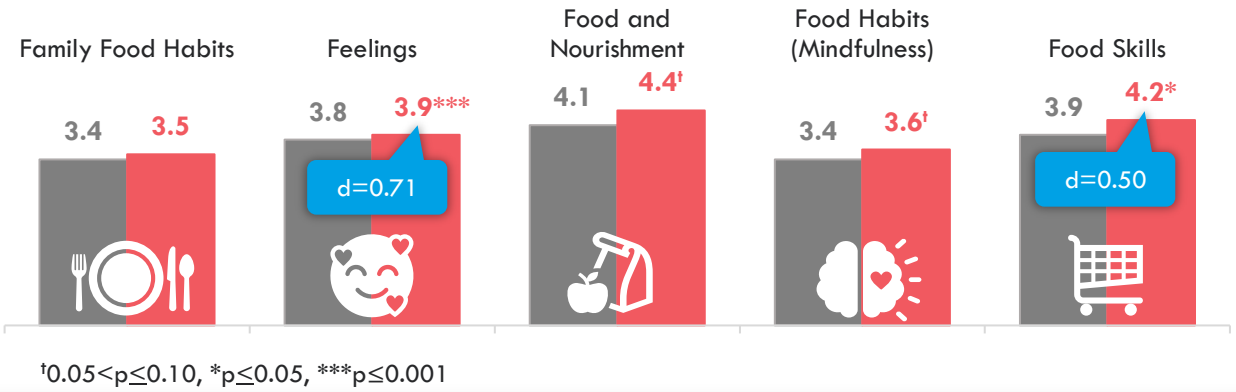
31. The *ATT* survey (with sample questions) measured trauma-informed elements related to eating.

Other Outcomes Measured by *ATT*

Research has shown that addressing food meaning,[1] feeling personally invested in behavior change,[2] and eating mindfully[3] may support heathier food behaviors. The *ATT* curriculum included these trauma-informed elements, and the associated survey measured them (**Figure 31**).

All mean section scores for these elements increased from pre to post (**Figure 32**). After the series, participants reported dealing with problems well, feeling better about themselves, feeling more relaxed, feeling closer to other people, and feeling more confident. These results suggest that LIA staff offered the curriculum in a manner consistent with its trauma-informed design. Such improvements in participants' holistic view of their own well-being may ultimately support sustainable food-related behavior change.

32. All section scores grew from PRE to POST. Feelings and Food Skills increased significantly. Food and Nourishment and Food Habits had gains that trended to significance.



†0.05<p≤0.10, *p≤0.05, ***p≤0.001

[1] Arbit N, Ruby M, Rozin P. Development and validation of the meaning of food in life questionnaire (MFLQ): Evidence for a new construct to explain eating behavior. *Food Qual Prefer.* 2017;59:35-45. doi:10.1016/j.foodqual.2017.02.002

[2] Wellman NS, Kamp B, Kirk-Sanchez NJ, Johnson PM. Eat better & move more: a community-based program designed to improve diets and increase physical activity among older Americans. *Am J Public Health.* 2007;97(4):710-717. doi:10.2105/AJPH.2006.090522

[3] Warren JM, Smith N, Ashwell M. A structured literature review on the role of mindfulness, mindful eating and intuitive eating in changing eating behaviours: effectiveness and associated potential mechanisms. *Nutr Res Rev.* 2017;30(2):272-283. doi:10.1017/S0954422417000154

Success Story

Moving While Learning was Part of the Plan

While *ATT* focused on nutrition and related skills (e.g., cooking), other curricula taught by LIA staff in FY21 also emphasized physical activity. One such curriculum was *Eat Smart Live Strong*. In Apache County, the UA Cooperative Extension paired this curriculum with a walking group.

"The walking group [at Vernon Park] gave immediate focus to our curriculum and deepened our relationships with one another. The curriculum asks the instructor to hand out activity logs and encourage participants to fill them out. In previous classes, no one did. But suggesting to participants that they exercise for 30 minutes a day—and saying you will meet them here Monday to kick it off—elicited quite a different outcome. Participants agreed the walking group's benefit was that it created accountability to one another."

- UA Cooperative Extension, Apache

Recommendations

Continue to *promote the evidence-based benefits of trauma-informed DE*, and *consider weaving trauma-informed elements into other approved curricula.* The results suggest that this can create welcoming environments for participants in support of learning. Gains across these trauma-informed elements in the shorter term may lay the groundwork for future, sustained improvements in participants' food perceptions and behaviors.

Explore, as the State Implementation and Evaluation Teams, why some key SNAP-Ed outcomes (e.g., vegetable consumption) did not change as much as they have in past years. Prior years' evaluations have been paired with other curricula and surveys, which did not assess the many trauma-informed elements described here. Why might these newly measured sections have shown improvements to the likely *precursors* of behavior change but not improvements to the key behaviors themselves?

Investigate links between social support networks and improved physical activity behavior. Positive findings from FY21 (see *Success Story*) and prior years suggest that building relationships through these networks may lead to: (1) improved individual health behaviors, and (2) stronger support for community wellness initiatives. It may be worthwhile to implement and/or evaluate the pairing of DE and social support networks more intentionally.

"We don't accomplish anything in this world alone... and whatever happens is the result of the whole tapestry of one's life and all the weavings of individual threads from one to another that creates something."

– Sandra Day O'Connor

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