Cochise Building Healthy Communities

Summative Evaluation Report

2018-2021

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Key Report Findings

Goal 1: Increase Community Capacity for Healthy Change

Healthy Community Committees (HCCs)

- A key strategy of the Building Healthy Communities (BHC) initiative was to support existing HCCs and to establish new committees to support local policy, systems, and environment change in alignment with the County Health Improvement Plan (CHIP). In addition to the seven HCCs existing at the start of the initiative, five new HCCs were formed with support from BHC staff: Bowie SHAC/HCC, Elfrida Healthy Community, Healthy Huachuca City, Saint David HCC, and Hereford/ Palominas (currently in development). One HCC disbanded.

- All 11 HCCs identified local Policy, Systems, and Environment (PSE) foci, including increasing affordable housing, food access, opportunities for physical activity, and access to health services.

- Ten HCCs created vision and mission statements for their HCC, and five have held strategic planning sessions.

- Three HCCs have established 501(c)3 status, and two others have agreements with a supporting agency to partner through that organization's 501(c)3 status.

- Across the three years, eight of 11 HCCs applied for external funding through regional or federal funding agencies, and six received that funding, bringing more than $1,000,000 to communities across Cochise County.

- Collaboration survey results suggest that the existing HCCs are working more effectively as collaboratives over time: four out of six HCCs surveyed at least twice had increases in the percent of collaborative factors that were seen as strengths, and all but one HCC had fewer factors rated as "concerns in need of being addressed."

Cochise Leadership Academy (CLA)

- There were 75 participants who enrolled in the CLA across 4 cohorts, with 60 completing the course (an 80% completion rate).

- CLA participants represented 12 communities across Cochise County and most often identified as White (n=34) or Hispanic or Latino/Latina/Latinx (n=14).

- A minority of participants across cohorts had been involved in leadership training previously, though most were already collaborating with organizations or leaders addressing health concerns prior to starting their CLA.

- Across various measures of satisfaction, participants who completed a post-survey rated their experiences in the CLA extremely positively. Respondents stated they were extremely or somewhat likely to get involved in a community project or initiative as a result of the CLA.

- After a decline in satisfaction with the mentorship experience (in Cohort 2), the BHC Team and CRED disseminated a survey to better understand the experiences of mentors and mentees in this cohort. The program was then adapted, including adding more training and structure for the mentorship experience. Despite the impacts of COVID-19 on the program format, participants rated the mentoring components more highly after these changes were implemented.

- Participants increased various aspects of their leadership knowledge and skills pre- to post-survey, including increases in their knowledge of how to change things in their communities. Almost all (92%) CLA graduates

surveyed agreed or strongly agreed that they were a better leader today because of their experience in the CLA; that the CLA has helped them advance their career or community advocacy work; and that the number of collaborative relationships they have in their community has increased since participating in the CLA.

Goal 2: Cultivate a Healthy Food System

- The total amount of food; the amount of food deemed healthy according to Feeding America's "Foods to Encourage" list; and the amount of fresh fruits and vegetables all increased by more than 50% over the first three years of the initiative, with the largest increases occurring in year two of the grant. This far surpassed the targeted 10% annual increase.

- Some communities had initial increases in food distribution followed by a decline due to COVID-19. Regions with new distribution sites, often due in large part to the BHC initiative, saw increases in distribution across every grant year. At least half of all new sites that opened were located in food deserts or zip codes where half or more residents had incomes below 185 percent of the federal poverty guidelines.

- By January 2020, the number of Produce on Wheels Without Waste (P.O.W.W.O.W.) sites in Cochise County had more than tripled, with sites in seven of the 13 BHC regions. Pounds of produce distributed through P.O.W.W.O.W. increased every year of the initiative, totaling over 1.2 million pounds of produce and serving an estimated 17,400 individuals. The majority of new P.O.W.W.O.W. sites that opened were located in food deserts or zip codes where half or more residents had incomes below 185 percent of the federal poverty guidelines.

Goal 3: Expand School Health Initiatives

- Nearly 500 5th and 6th grade students in eight BHC communities participated in a Cochise youth survey aiming to understand Cochise student attitudes and behaviors around fresh fruit, vegetable, water and sugary drink consumption as well as physical activity and screen time.

- Despite largely positive attitudes towards fruits and vegetables, only about one-third of youth reported eating them five or more times a day. Over a third of students reported that they didn't regularly consume sugary drinks, while another third reported drinking multiple sugary drinks per day.

- Forty-two percent of students said they exercised 4-6 times a week, and 4% reported not exercising during a normal week. Most youth surveyed reported at least 2 hours of screen time on school days.

- The BHC program supported an increase in school gardens from 4 in 2018 to 9 active gardens and 12 additional sites of interest in 2020. In addition to traditional gardens, BHC has also focused efforts on introducing garden towers in community locations. In 2020-21, BHC delivered 22 garden towers to school and community sites.

- Given the suspension of garden activities during COVID-19, BHC and other community partners packaged and distributed seed-to-garden resource kits, which were distributed to 300 students and their families through summer food service programming at Palominas Elementary School, Valley View Pre School, and Coronado Elementary School.

- Through the HEAL's effort to install hydration stations in schools, students and school employees were able to fill their own water bottles instead of using the vending machine. Six sites with electronic counters are all in use. Despite pandemic-related closures, the equivalent of 44,155 bottles (20oz) were filled since installation across the county.

- The BHC school wellness champion facilitated a collaborative school health team with SNAP-Ed, EFNEP, the Cochise County Health Department, and Cochise County School Superintendents Office (CCSSO). Data-coordination efforts produced a Cochise County School Health Advisory Committee data and demographics spreadsheet; a database of school learning modalities during COVID-19 (e.g., hybrid, in-person, fully remote); the Cochise County Farmer Rancher List; and school food service programs.

- During pandemic-related closures, BHC and the CCSSO also served as a clearinghouse for information on school meal programs. The BHC team also flexed to support additional activities that promote school wellness, including a county-wide stock inhaler project, procuring masks for ECE providers, and implementing weekly county-wide school health briefings during the pandemic.

Evaluating Collective Impact Design and Implementation

Ripple Effects Mapping (REM)

- Community partners participating in REM conveyed the BHC team's strengths in mobilizing resources, building community engagement, and supporting aligned activities.

- Participants also highlighted BHC staff's role in relationship and trust building, fostering connections between people, leadership identification and development, and creating a culture of learning.

- The BHC team has an opportunity to identify ways to guide vision and strategy and advance policy, which were acknowledged to a lesser extent in sessions.

Social Network Analysis (SNA)

- Network analysis showed that, across the Legacy grant period, there was an increase in both the number and strength of cross-sector partnerships in all BHC strategy areas.

- Across all strategies, analyses showed that partnerships increased in strength from 2018 to 2021, shifting from being non-existent or at the networking level to levels reflecting more extensive cooperation and coordination.

- From 2018 to 2021, the initiative helped spur 570 new relationships. The number of collaborative partnerships nearly tripled from 106 to 303, which is just over one quarter of the total relationships documented in 2021. The BHC initiative has also successfully included diverse sectors in all of its strategies.

Collective Impact Core Components

- The BHC initiative is successfully rooted in key constructs of collective impact and especially excels at leadership.

- After three years of funding, survey participants from various agencies indicate that existing community funding and resources are aligned with the BHC initiative's goals of nutrition and physical activity (substantially= 82%), and there is increased media coverage and public awareness of these goals (64%). There are also more community champions (62%), public involvement (58%), and diversity of involvement (58%) in supporting nutrition and physical activity. More support may be needed to increase overall public funding for these goals in the county.

Introduction

In 2018, the Legacy Foundation of Southeast Arizona awarded Strategic Grant funding to a community collaborative of the University of Arizona Cooperative Extension, Cochise County Health and Social Services, Cochise County Superintendent of Schools, and the Community Food Bank of Southern Arizona to expand and support county-wide health efforts with a focus on healthy foods access, nutrition, and active living. The resulting 3-year Building Healthy Communities (BHC) initiative has had three major goals:

- Increase the community capacity for healthy change through leadership and collaboration

- Increase the capacity of and access to the food system to reduce disparities in food security and nutrition in the county

- Support the health and wellness of community youth through expanded school health initiatives

These goals were approached from within a collective impact framework, which is a structured and formalized method of collaborating that includes core conditions of[1]:

1. **A common agenda**, *shaped by collectively defining the problem and creating a shared vision to solve it;*
2. **Shared measurement,** *based on an agreement among all participants to track and share progress in the same way, which allows for continuous learning, improvement, and accountability;*
3. **Mutually reinforcing activities,** *integrating the participants' many different activities to maximize the end result;*
4. **Continuous communication,** *which helps to build trust and forge new relationships; and*
5. **A "backbone" team,** *dedicated to aligning and coordinating the work of the group.*

Additional principles of collective impact include the importance of growing leadership, engaging community members, and centering equity[2]. The University of Arizona Cooperative Extension served as the "backbone" team, tasked with coordinating the work of the initiative.

This document summarizes the evaluation efforts that took place during the first three years of the BHC Initiative, including assessing the initiative's progress in meeting the core conditions for collective impacts. It includes information about developmental and formative evaluation efforts from July 2018 through December 2021, as well as summative evaluation efforts to capture early impacts of the initiative. All data were collected, analyzed, and reported by the Community, Research, Evaluation and Development (CRED) team at the University of Arizona's Norton School of Family and Consumer Sciences.

Each report section begins with the original logic model for the relevant BHC strategy. The sections also include call-out boxes with results from several Ripple Effects Mapping (REM) sessions that were held in May 2021. Ripple effects mapping (REM) is a structured focus group methodology that engages community members and stakeholders in a participatory process of mapping both intended and unintended consequences, or ripple effects, of an initiative.[3] This methodology and the results are summarized in full in the Evaluating Collective Impact Design and Implementation section.

Finally, it is important to consider these results in the context of the challenges wrought by the global pandemic experienced by all stakeholders involved, and the reality that the pandemic continues to impact this community.

Contextual and Baseline Data

An important first evaluation step is understanding the social, political, and economic contexts of the initiative. Because Cochise County is large and includes diverse regions, both programming and evaluation needed to be tailored to local contexts.

Health Indicator Curves

Publicly available data were used to determine trends of key health indicators, which allow for display of baseline conditions as well as community-level changes in outcomes over time. As shown in the figure, both diabetes and obesity have been trending upward in Cochise County in recent years, with 9.1% of adults living with diabetes and nearly one-third (32.3%) living with obesity in 2019. Physical activity remained relatively constant over time, with three-quarters (76.8%) of adults reporting being physically active in 2019. Though food insecurity continues to be an issue for the county, rates reported by Feeding America have declined over time in the overall population and children. In 2019, more than one in five children (21.4%) experienced food insecurity in the county. **It is important to note that the most recent data available is from before the launch of the BHC initiative.** The BHC and CRED teams are currently collaborating on identifying county-level data on these metrics to develop a shared measurement system that can provide more up-to-date data from hospitals, health departments, schools, and other partners to track changes over time, discussed further in the **Recommendations & Next Steps**.

TRENDS IN HEALTHY EATING & ACTIVE LIVING HEALTH INDICATORS IN COCHISE COUNTY

Diabetes[1]

Adult Cases

7343 → 10927

2004   2009   2014   2019

Adult Rate (age-adjusted %)

7.3% → 9.1%

2004   2009   2014   2019

Obesity[1-2]

Adult Cases

20814 → 30401

2004   2009   2014   2019

Adult Rate (age-adjusted %)

23.6% → 32.2%

2004   2009   2014   2019
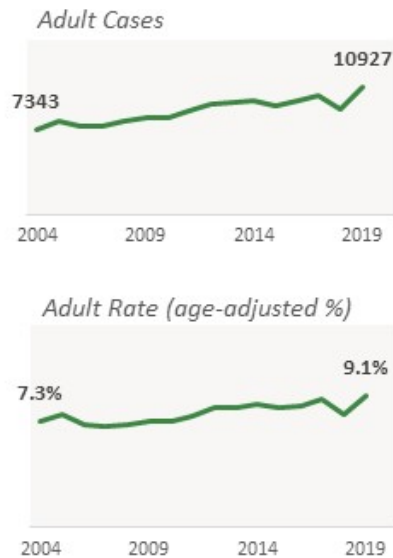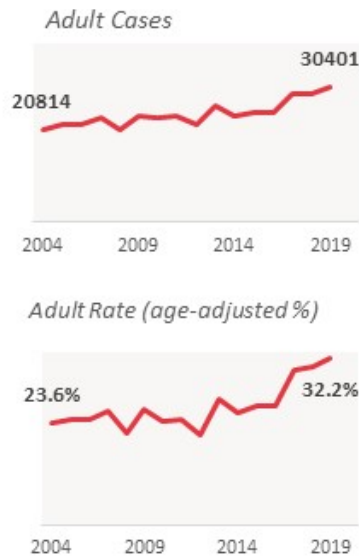
Pre-pregnancy Rate
(% of WIC Mothers)

50% → 53%

2012   2015   2018
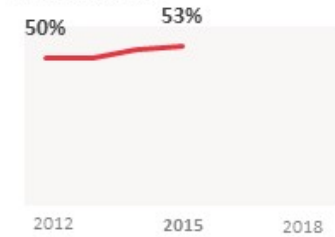
Young Child Rate
(% of WIC 2- to 5-year-olds)

16.9% → 25.7%

2012   2016   2018

Physical Activity[1]

Physically Active Adults (leisure-time)

69,153 → 76,545

2004   2013   2018

Physical Activity Rate (age-adjusted %)

77.5% → 76.8%

2004   2009   2014   2019

Food Insecurity[3]

Overall Rate (%)

16.1% → 14.2%

2011   2013   2015   2017   2019

Child Rate (%)

26.4% → 21.4%

2011   2013   2015   2017   2019
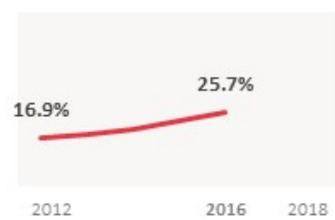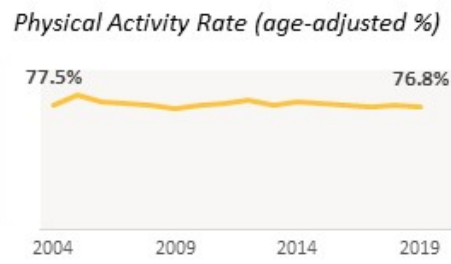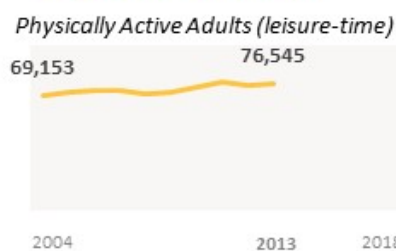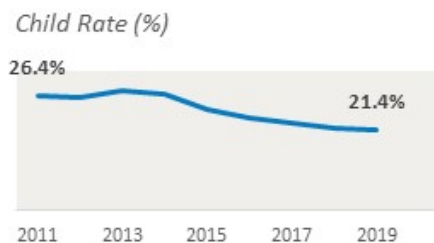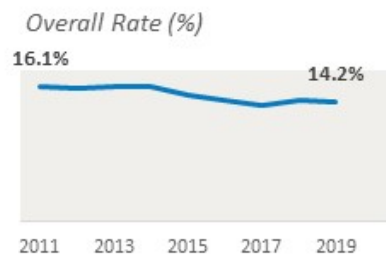
Notes:

Data from the Diabetes Atlas are available from the years of 2004-2019

Data from WIC were available from the years of 2012-2016

Data from Feeding America are available from the years of 2011-2019

Sources:
1. Centers for Disease Control (2021). Diabetes Atlas. Retrieved from https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html#

2. Arizona Department of Health Services (2017). WIC Obesity Data. Unpublished data received by request.

3. Feeding America (2021). Map the Meal Gap. Retrieved from https://www.feedingamerica.org/research/map-the-meal-gap

Interactive Maps

Although county level change is important to track, targeting programming and more specific evaluation tracking requires a more fine-grained examination of variability across the county. The CRED team previously worked with Cochise County Supplemental Nutrition Assistance Program- Education (SNAP-Ed) to create community profiles based on zip code community definitions. These communities were adapted based on BHC team feedback and used to map the distribution of baseline conditions across the county. Ultimately, 13 distinct regions were identified in Cochise County: Benson, Bisbee, Cochise, Douglas, Hereford/Palominas, Huachuca City, Portal, San Simon/Bowie, Sierra Vista, St. David, Sunizona/Elfrida/McNeal, Tombstone, and Willcox.
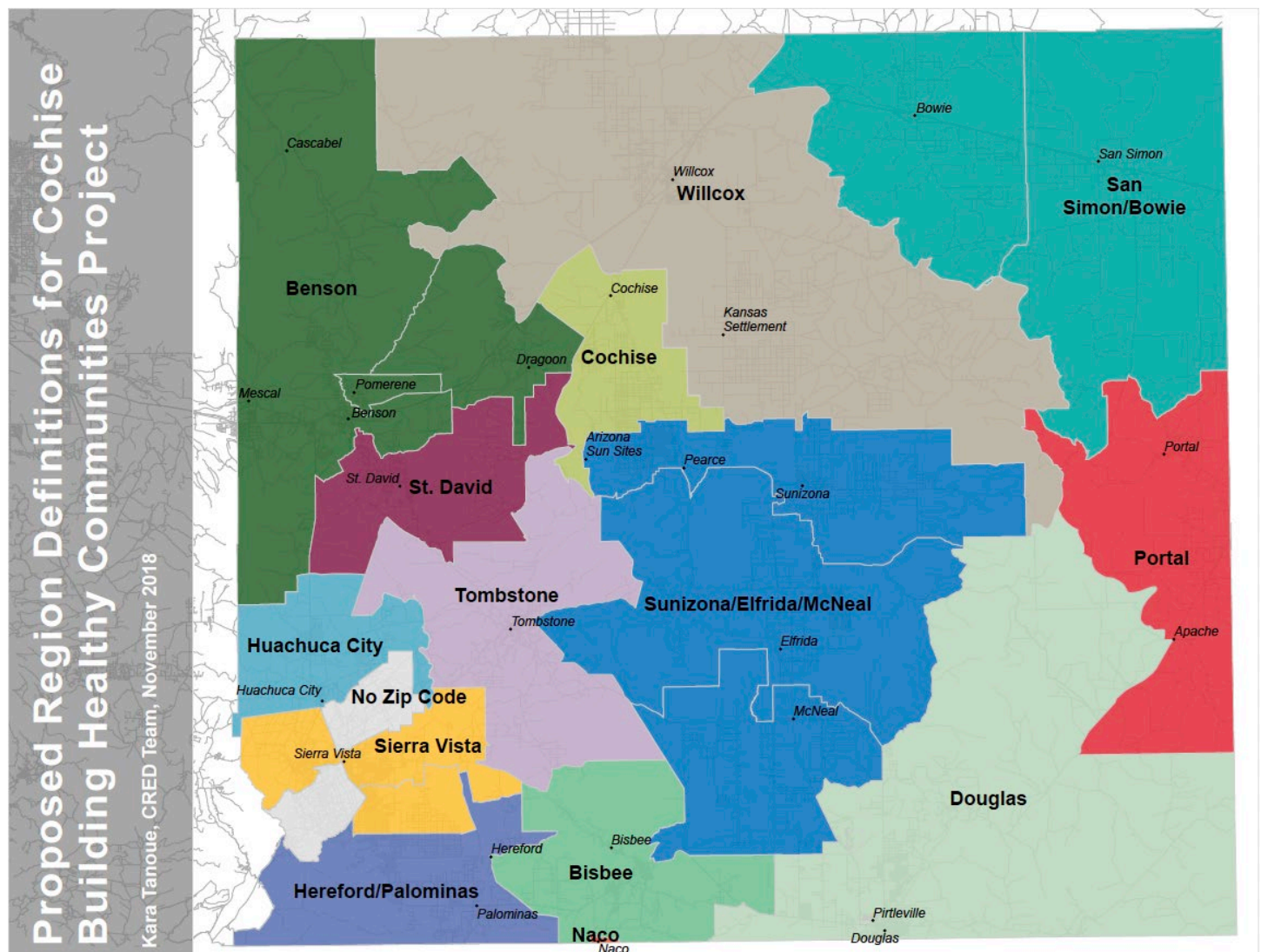
The BHC regions were added to interactive, online maps that CRED had produced, which include visualized data on social determinants of health from the 2017 American Community Survey (ACS) and other federal and state agencies (such as US Department of Agriculture (USDA), US Health Resources and Service Administration (HRSA), Arizona Department of Education (ADE), Arizona Department of Health Services (ADHS), First Things First (FTF), etc.). The interactive maps show differences in community infrastructure (i.e., parks and recreation areas, multifamily housing, public libraries, community food bank (CFB) locations, SNAP and WIC retailers) as well as socio-economic status (SES) indicators across

the county. By understanding these disparities, Cochise BHC can better target its strategies to meet community needs. The following table is an example of the kinds of regional food access and SES information that can be garnered from the maps.

BHC Region	Includes designated food desert tracts	# WIC retailers	Households with no vehicle access (%)	Households under 185% poverty (%)	Families with kids under 185% poverty (%)
Benson	Yes	2	5%	33%	30%
Bisbee	Yes	1	7%	41%	63%
Cochise	Yes	0	3%	31%	55%
Douglas	Yes	0	9%	57%	70%
Hereford/ Palominas	No	0	1%	16%	23%
Huachuca City	No	0	5%	27%	53%
Portal	No	0	1%	21%	46%
San Simon/Bowie	Yes	0	4%	37%	41%
Sierra Vista	Yes	6	5%	24%	39%
St David	Yes	0	7%	15%	17%
Sunizona/ Elfrida/ McNeal	Yes	0	5%	28%	48%
Tombstone	Yes	0	7%	32%	51%
Willcox	Yes	1	9%	34%	50%

Source: University of Arizona CRED Team (2019). [Cochise County UA SNAP-Ed Map 2.0.](#)

The table is color-coded to show the most positive (darker green) to most negative (darker orange) regional characteristics. Regions with more orange indicators, such as Douglas and Tombstone, may need follow-up to better understand local conditions and how BHC can direct its resources. Activities related to the BHC initiative have been included on these maps, including existing and new HCCs, CFB locations and pounds of food distributed, and garden towers. These maps are presented throughout this report and can help show how well BHC activities align with need in the county.

Healthy Cochise Community Survey

In addition to collecting secondary data on local conditions, we gathered data directly from residents. The Healthy Cochise Community Survey was developed in the spring of 2019 with the intention of providing baseline data on Cochise County residents' perceptions of healthy eating and active living in their communities, as well as baseline data on key health behaviors including daily physical activity, fruit and vegetable consumption, and food acquisition behavior. The survey was developed and refined by the CRED team in partnership with BHC staff, including pilot testing of both the English and Spanish versions of the survey. The survey was distributed in May 2019 both as an online Qualtrics survey distributed on countywide email listservs and as a paper survey distributed at community sites including libraries, food banks, and medical offices, as well as at community events such as health fairs.

Goal 1: Increase community capacity for healthy change

Strategy 2: Support CHIP Healthy Eating Active Living (HEAL) Working Group

According to the 2019 Cochise Community Survey...

Activity: Determining the Baseline

27% usually eat vegetables 3 or more times a day

Rarely 3% | <1 13% | 1 25% | 2 33% | 3 16% | 4+ 11%

38% exercise 2 or fewer days per week

97% agree that getting people to be more physically active is important

92% are in favor of changing local policies to support and increase opportunities for healthy eating and physical activity

51% think local leaders, organizations and communities work well together to address issues affecting health

24% consider their community to be healthy or very healthy

Activity: Rethink Your Drink, Water Wins Campaign

85% drink water three or more times per day

1 in 4 people who identify as Hispanic or Latino drink sweetened drinks 3 or more times per day

The survey was completed by 574 community members across each of the 13 BHC regions, with about two-thirds (67%) identifying as White, one-fourth (25%) identifying as Hispanic or Latino, and 8% as other races or multi-racial. Compared to the ethnic breakdown in the county, there was slight over-representation of White respondents and under-representation of Hispanic, Black, and Asian respondents. Although there was participation across education levels, overall, survey respondents had higher education attainment than typically seen in the county, with particularly high representation of individuals with postgraduate and 4-year college degrees, suggesting that the results likely somewhat underestimate the views and behaviors of those in the county with lower socio-economic status (since education tends to be correlated with income). (See **Appendix 2: Cochise BHC Community Survey, 2019** for complete demographics).

Goal 2: Cultivate a healthy food system

Strategy 5: Support Local Food System & Hunger Relief

According to the 2019 Cochise Community Survey...

Activity: Strengthen food distribution networks

Activity: Provide community-based nutrition education

99% agree with the statement "What I eat makes a difference in my health."

Hispanic and Latino individuals report consuming fruit more frequently each day than white individuals.

	Hispanic/Latino	White
Rarely	5%	6%
<1	15%	21%
1	24%	31%
2	32%	25%
3	14%	10%
4+	9%	6%

Hispanic and Latino individuals report higher levels of worrying that food at home would run out before their family got money to buy more.

	A lot	Sometimes	Never
Hispanic or Latino	16%	41%	43%
White	10%	17%	73%
Other Race/Ethnicity	12%	25%	63%

51% never got food from a farmer's market, CSA, or local farm or garden in the last 12 months* *English survey only

Hispanic and Latino individuals also reported more frequently getting food from a food bank or food pantry.

	Weekly	Monthly	A few times a year	Never
Hispanic or Latino	7%	12%	17%	64%
White	4%	8%	9%	79%
Other Race/Ethnicity	6%	6%	17%	71%

Major findings of the community survey are conveyed in the displayed strategy-level data placemats. Nearly all respondents (99%) agreed that what they eat affects their health, but only about one in four (27%) met the recommended guidelines of eating 3 or more vegetables a day; about one in three people (38%) felt it was not easy to get fruits and vegetables in their community (not shown on data placemat). Nearly all respondents (97%) also agreed that getting people to be more physically active is important, though over a third (38%) reported exercising fewer than 3 times per week. Notably, at baseline, over one third of residents of Cochise County expressed some level of 'food anxiety'—fear that food at home would run out before their family had money to buy more. The majority of Hispanic or Latino respondents (58%) reported some level of food anxiety, including 16 percent who reported worrying "a lot" that food would run out. For White respondents, 27 percent reported some level of food anxiety including 10 percent worrying "a lot." Only 24% of residents surveyed felt that their community was healthy or very healthy, and 92% were in favor of changing local policies to support and increase opportunities for healthy eating and physical activity. At the time of the baseline survey, just over half felt local leaders work well together to address issues affecting health. A complete write-up of the survey methods and results, including community level breakdowns, is included in Appendix 2: Cochise BHC Community Survey, 2019 of this report. This baseline survey serves as a tool to help the BHC initiative team assess needs across the county. It can also serve as a comparison point for a second survey deployed in the future to assess changes in resident perceptions and health behaviors after the implementation of Building Healthy Communities activities.

Youth Schools Survey

A youth survey was also designed and launched in 2019, disseminated through schools to help provide a baseline picture of the attitudes and behaviors of Cochise students around topics central to the BHC goals: fresh fruit, vegetable, water, and sugary drink consumption as well as physical activity and screen time. Results of this survey are presented in the **Goal 3: Expand School Health Initiatives** section.

Goal 1: Increase Community Capacity for Healthy Change

Goal 1 Logic Model

Goal 1: Increase community capacity for healthy change		
Strategy 1: Healthy Community Committees	Strategy 2: CHIP Healthy Eating Active Living Working Group	Strategy 3: Leadership Academy

Short-Term	Medium-Term	Long-Term
-Increased community awareness of local HCC PSE initiatives -Increased community awareness of available healthy living activities -Leadership Academy graduates will improve their civic engagement knowledge and skills -Some Leadership Academy graduates will engage with CFB to become local health promoters *(promotoras)* to identify and deliver culturally-relevant, diet-related health trainings	-HCC committees begin to secure external funding for PSE initiatives -More individuals involved in Healthy Community Committees -Increased collaboration with partner agencies to promote PSE initiatives -Leadership Academy graduates will increase their civic engagement activities -Cochise County residents engage in more, healthy living activities -Increased access to opportunities for physical activity for all residents of Cochise County -Increased water consumption for healthy hydration throughout Cochise County	-Policies are in place in Cochise County to promote healthy eating and active living and to prevent the onset of obesity and diabetes -Community and school systems have incorporated health into their daily operations -The environment in Cochise County is more supportive of healthy eating and active living through increased community buy-in and infrastructure changes -The Healthy Community Committees become self-sustaining, able to maintain consistent action through ongoing recruitment of volunteers and ability to seek out and acquire funding -Graduates of the Leadership Academy attain leadership positions at the local, county, or state level to sustain the PSE changes in Cochise County -Cochise County residents have greater access to opportunities for physical activity -Cochise County residents eat healthier and are more physically active -Cochise County residents have reduced rates of obesity and type II diabetes

Healthy Community Committees

A key BHC strategy for increasing the community capacity for healthy change involves supporting local Healthy Community Committees (HCCs), community-based, volunteer-led, multi-sectoral committees that determine the needs of their local community and promote efforts to make positive changes in local policies, systems, and environments (PSE) to support health in their communities. Prior to the funding of the BHC initiative by the Legacy Foundation in July 2018, seven community coalitions existed, either framed as HCC's or as community advocacy groups (e.g., the Winchester Heights Health Advisory Committee). BHC staff supported these existing groups in strategic planning, offering administrative and logistical support, and responding to requests for resources and assistance. Since July 2018, four additional HCCs were formed with support from BHC staff (Bowie SHAC/HCC, Elfrida Healthy Community, Healthy Huachuca City, and Saint David HCC), and an additional HCC is in development (Hereford/Palominas). One HCC that was in existence prior to July 2018, the Bisbee HCC, disbanded in 2021 after having not met for a year and having members involved in other community work primarily focused on increasing affordable housing options.

| 7 established before start	4 new communities	1 in development	1 disbanded

The focus of each HCC is to identify and address health concerns specific to their communities, and BHC supported the HCCs with dedicated staff to promote progress on this work. All 11 HCCs identified local PSE foci, including increasing affordable housing, food access, opportunities for physical activity and access to health services. Ten have created vision and mission statements for their HCC, and five have held strategic planning sessions.

Funding support has increased during the Legacy grant period. Three HCCs have 501(c)3 status, and two others have agreements with a supporting agency to partner thru that organizations 501(c)3 status to allow them to pursue funding. Across the three years, eight of 11 HCCs applied for external funding through regional or federal funding agencies, and six received that funding, bringing more than one million dollars to communities around Cochise County.

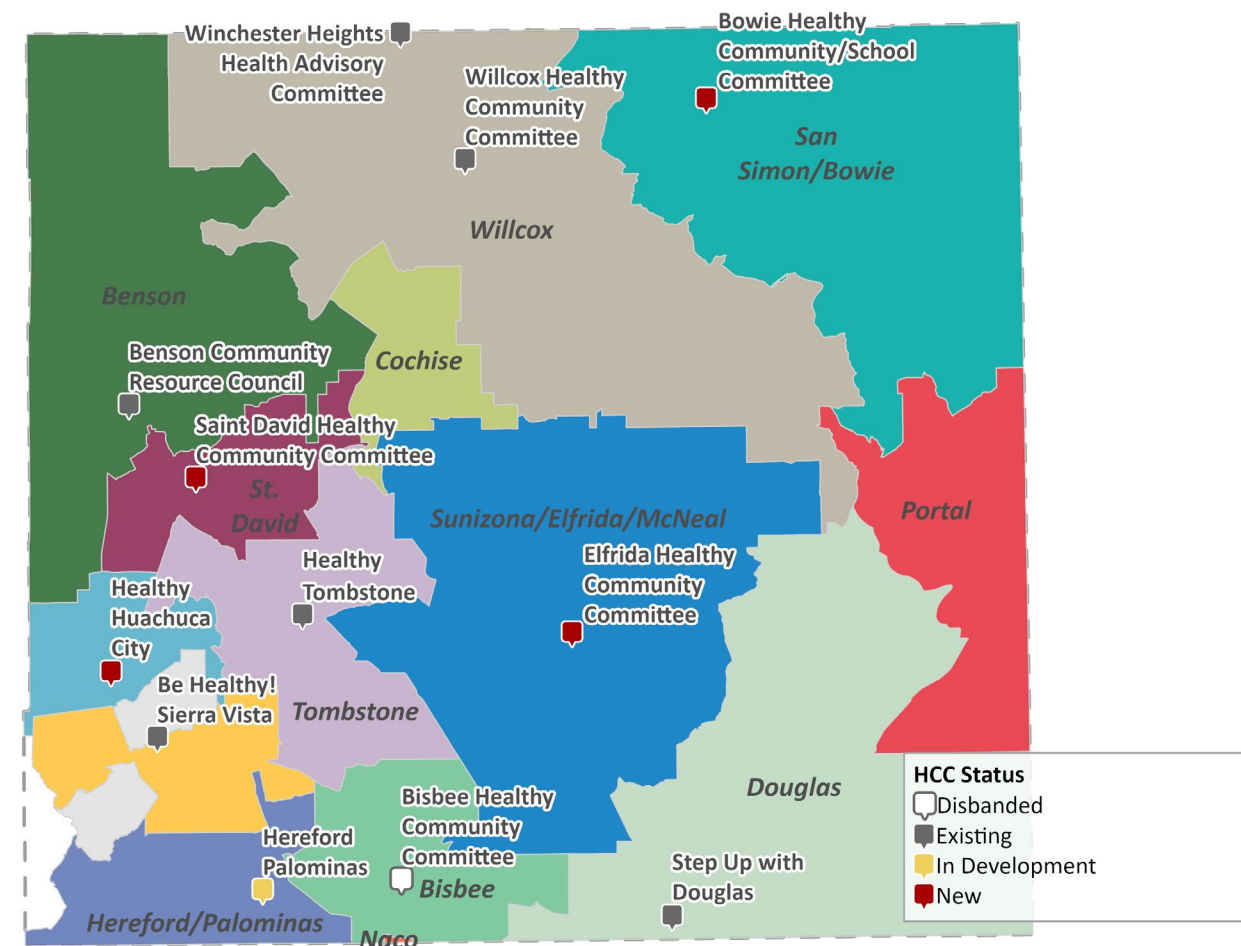**11 HCCs identified PSEs including increasing access to:**

- **Affordable Housing**
- **Food access**
- **Physical activity**
- **Health services**

8 Applied for external funding	**6** Received external funding	Totalling **$1,019,969**
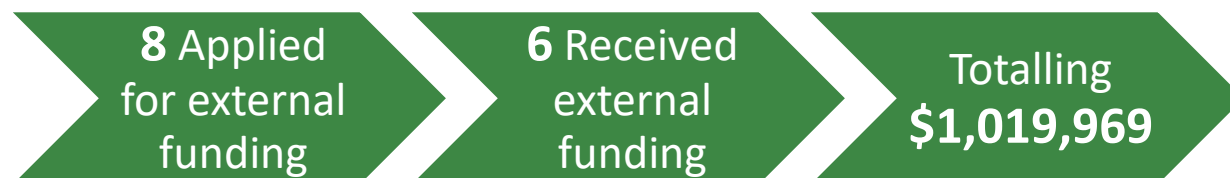
The number of Healthy Community Committees active in Cochise County grew by more than 40 percent over the grant period.

Map by the UA CRED Team

HCC Collaborative Assessment

HCC committee members were surveyed about how well they perceived their committee to be functioning. The Wilder Collaborative Factors Inventory is a tool used to assess collaboration on 22 research-tested success factors. Survey responses are summarized across three areas: strengths, borderline factors, and concerns. The Wilder survey was distributed to HCCs in the fall of 2018, and again in the fall of 2019. Insufficient responses were gathered in the fall of 2020 and spring of 2021 due to COVID-19 pandemic-related factors including irregular or paused HCC meetings and so were not included in the analysis. Six HCCs (Benson, Bisbee, Douglas, Sierra Vista, Tombstone, and Willcox) were surveyed in both 2018 and 2019, and three additional HCCs were surveyed beginning in 2019 (Bowie, Elfrida, and Huachuca City).
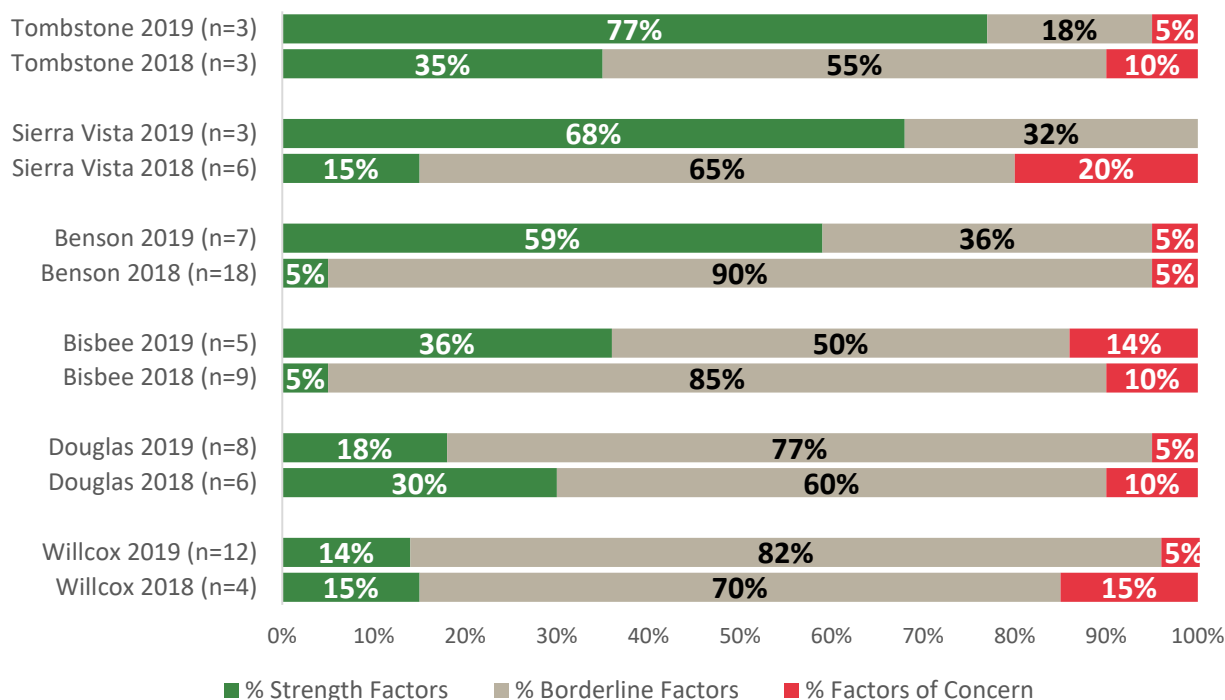
Wilder Collaborative Factors Inventory results suggest that the existing HCCs are working more effectively as collaboratives: four out of six HCCs had increases in the percent of factors that were perceived as strengths, and all but one HCC had fewer factors rated as "concerns in need of being addressed." Factor summaries follow:

Strength Factors: In 2019 all the six HCCs surveyed twice, and Bowie's baseline survey had 1) *Mutual respect, understanding and trust* and 2) *Ability to compromise* as strength factors. Additional strength factors among five or more of the HCCs in 2019 were 1) *Favorable political and social climate*, 2) *Members see collaboration as in their self-interest*, 3) *Flexibility*, and 4) *Skilled leadership*.
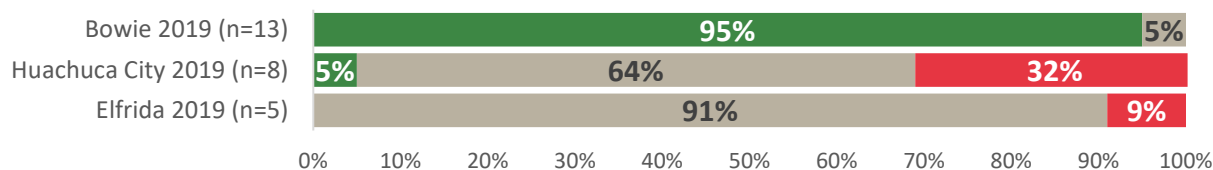
Borderline Factors, deserving discussion: All but one HCC surveyed in 2019 (n=8) had *History of collaboration or cooperation in the community* as a borderline factor. Other Borderline factors among five or more HCCs in 2019 include 1) *Collaborative group seen as a legitimate leader in the community*, 2) *Appropriate cross section of members*, 3) *Multiple layers of participation*, 4) *Appropriate pace of development*, 5) *Evaluation and continuous learning*, 6) *Open and frequent communication*, 7) *Established informal relationships and communications links*, 8) *Concrete, attainable goals and projects*, 9) *Shared Vision*, and 10) *Engaged stakeholders*.

Factors of Concern: *Sufficient funds, staff, materials and time* was also rated as a factor of concern for Huachuca City in addition to five of six HCCs surveyed twice.

Wilder Survey Comparison: 2018 (20 factors) to 2019 (22 factors)

	% Strength Factors	% Borderline Factors	% Factors of Concern
Tombstone 2019 (n=3)	77%	18%	5%
Tombstone 2018 (n=3)	35%	55%	10%
Sierra Vista 2019 (n=3)	68%	32%	
Sierra Vista 2018 (n=6)	15%	65%	20%
Benson 2019 (n=7)	59%	36%	5%
Benson 2018 (n=18)	5%	90%	5%
Bisbee 2019 (n=5)	36%	50%	14%
Bisbee 2018 (n=9)	5%	85%	10%
Douglas 2019 (n=8)	18%	77%	5%
Douglas 2018 (n=6)	30%	60%	10%
Willcox 2019 (n=12)	14%	82%	5%
Willcox 2018 (n=4)	15%	70%	15%

■ % Strength Factors   ■ % Borderline Factors   ■ % Factors of Concern

Wilder Collaboration Survey 2019 Baseline Results for New HCCs

	% Strength Factors	% Borderline Factors	% Factors of Concern
Bowie 2019 (n=13)	95%	5%	
Huachuca City 2019 (n=8)	5%	64%	32%
Elfrida 2019 (n=5)		91%	9%

In addition to renewing efforts to gather additional rounds of Wilder Survey data now that more HCCs have resumed regular meetings either in person or virtually, it is recommended that results be reviewed with HCCs to guide targeted conversations to improve functioning and effectiveness.

HCC Summit Evaluation

A day-long Healthy Community Committees Summit was held on February 12, 2020 in Tombstone. The purpose of the Summit was to enable HCC and community members to learn more about the priorities and goals in the Cochise Community Health Improvement Plan (CHIP) and to begin to more strategically align their organizational action plans with the CHIP.

Thirty-three of 68 attendees (49%) of the Summit completed an evaluation of the day. Most (73%) were HCC members and had not attended a Summit previously (82%). The vast majority agreed with positive statements on the Summit, including 85 percent who somewhat or strongly agreed to the following statements: *"Was worth my time to attend," "Provided information that will improve the work of my community group," "Expanded my thinking on how I do my work,"* and *"Gave me an opportunity to interact with people I hope to work with."*

Level of Agreement with Statements about the Summit
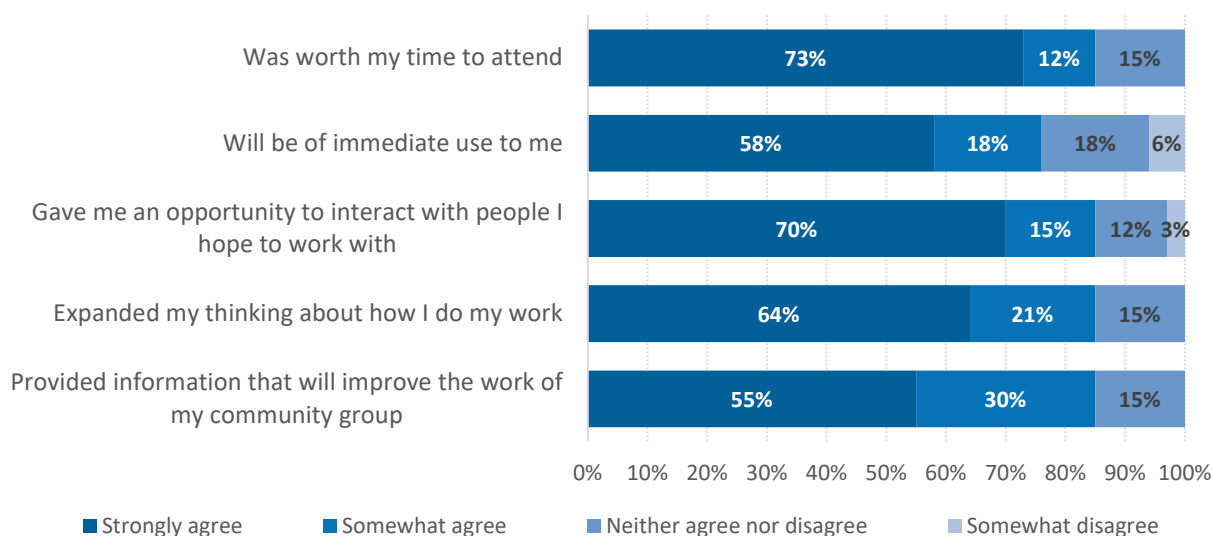
While the Summit was highly rated, participants also provided recommendations for improvement. Respondents suggested that more time be allocated for presentations by and/or discussions with HCC members to learn about activities, strategies, and recommendations across the county. In addition, it was recommended that more time be allotted to interacting with other attendees and presenters, either in large networking sessions or in topic-based groups.

HCC Strategic Planning

A strategic planning session with BHC staff identified that an HCC toolkit outlining key elements for success would help increase their capacity moving forward. This will involve collating the perspectives of HCC members with findings from relevant literature. An initial review of literature on successful community committees identified several components already promoted and tracked by BHC staff, including establishing a clearly defined purpose and meaning through identifying goals and expectations for the team, and creating a set of bylaws to clarify the roles and responsibilities members.[4,5]

Intentional and targeted recruitment is another important aspect of a successful committee. This can be done by using social media, word of mouth, flyers, and recommendations from staff. Staff should ensure that the members represent diverse education, income, and literacy levels as well as ages, races/ethnicities, ability, and gender identities to ensure members are reflective of the community they represent.[6,7] Creating a small written application can be helpful to identify members' skills, qualifications, and interests as they relate to the purpose and goals of the committee. Once the members have been recruited, it is important that the team assigns roles and responsibilities. As a collective, members should come up with expectations and structure for each meeting.[8]

Once the group is established, it is important that members' time and expertise be recognized and valued. Compensation in the form of hourly wages, stipends ($40-$75 per meeting), gift cards, or cash should be considered. Food and free parking should be made available to committee members to ensure they are not spending any of their own money to be a part of the committee.[9,10] Barriers to participation should be addressed to the best of the staff's ability. Barriers may include access to transportation, childcare, location, and meeting times. Working with members to identify any other barriers is encouraged so that accommodations can be arranged. Lastly, providing regular updates on partner accomplishments can help with building and nurturing a relationship of trust and confidence with the community and community partners. [11]

Ripple Effects: Healthy Community Committees (HCCs)

In May 2021, the CRED team led a series of ripple effects mapping (REM) sessions to gather data on both the intended and unintended consequences, or ripple effects, of the BHC Initiative. Under each BHC strategy, we've included examples of ripple effects conveyed by key stakeholders involved. A more detailed description of the REM process can be found later in this report.

Step Up with Douglas provides an example of how BHC staff supported the work of HCCs by fostering connections between cross-sector partners to achieve community changes, in this case partnerships between the University of Arizona, the Health Department, Douglas Police Department, and the Douglas Parks and Recreation Department. BHC's work prior to the pandemic to establish a common agenda around healthy eating and active living ensured that, in addition to shifting to pandemic response work, HCCs continued to keep healthy eating and active living work as a priority. Despite the barriers created by COVID-19, the BHC team encouraged Step Up with Douglas to form as an HCC, providing an example of how to pivot and successfully meet to address community needs virtually.

Step Up with Douglas Community Coalition

Through the HCC initiative, BHC brought everyone together an hour a month to collaborate and share resources

- Worked with the City of Douglas Parks and Rec to get lights turned on at Airport Park in evening to allow people to use the walking path and exercise machines
  - Impacts of COVID - For a while a lot of parks were closed, but because they left lights on a timer people were still accessing and using the walking area and playing soccer
- Developed timelines, built a sense of accountability, helped with progressing initiatives forward
- Developed partnerships between UA, Health Department, Douglas Police Department (Chief Fullen), Douglas Parks and Rec
- Infrastructure in existence pre-COVID allowed participation and engagement to continue through the pandemic
  - Many community leaders had to shift their efforts towards addressing emergent and immediate issues. BHC continued to meet and kept the community focused on nutrition and exercise, among emergency needs; a big reason why smaller and more localized efforts have "toughed it out" during the pandemic.
  - BHC has provided resources and support to reduce technological barriers and ensure attendance (e.g. ensuring access to a computer)
  - BHC encouraged Step Up with Douglas to form even during COVID, provided a successful example of meeting virtually

Cochise Leadership Academy

The Cochise Leadership Academy (CLA) seeks out leaders from within the community who are not typically labeled as leaders and builds on their strengths to advocate for community change. Four cohorts of the CLA were held over the course of the three-year BHC Legacy funding. While the first two cohorts were held fully in-person, the third cohort transitioned to virtual format due to the pandemic and the fourth cohort was held fully virtually. Additional differences exist between the cohort's formats (see the graphic below). First, cohort 1 comprised 10 sessions over a 3.5-month period, while cohort 2 was six sessions in length over a period of just less than two months. In addition, during cohort 1, BHC personnel served as mentors to participants, whereas in cohort 2, cohort 1 participants served as the mentors. While cohort 3 and 4 retained this previous participant mentor model, they reverted back to the longer 10 session length.

Cohort 1	10 sessions over 3.5 months	Mentors: BHC staff	In-person
Cohort 2	6 sessions over 2 months	Mentors: previous participants (mandatory)	In-person
Cohort 3	10 sessions over 3.5 months	Mentors: previous participants (optional + additional training)	Transitioned to virtual
Cohort 4	10 sessions over 3.5 months	Mentors: previous participants (optional + additional training)	Virtual

Participants in each CLA were asked to complete pre- and post-surveys to assess gains in knowledge and satisfaction with the program. Results on satisfaction for all four cohorts are summarized in the following section. However, to describe knowledge gains, only the first three cohorts had sufficient surveys that were able to be matched pre-to-post to analyze. The table below shows CLA participation by cohort, pre- and post-survey completion, and the number of matched surveys available for analysis.

	Cohort 1 2/23/19-6/7/19	Cohort 2 9/21/19-11/16/19	Cohort 3 2/20/20-5/7/21	Cohort 4 2/18/21-5/6/21
Started the CLA	18	21	21	15
Finished the CLA	18	19	17	6
Completed Pre-survey	17	16	13	5
Completed Post-survey	15	18	15	5
Matched Pre-to-post Surveys	12	12	12	1

CLA Participants

Across all four cohorts, pre-survey participants included 44 women (86%) and seven men (14%). Participants most often identified as White (n=34, 67%) or Hispanic or Latina/Latino/Lantinx (n=15, 29%), with the ethnic breakdown reflecting the demographics of the county as a whole. Participants had a range of educational backgrounds, with a higher representation of those with 4-year degrees and post-graduate studies (57%) than seen in the county as a whole based

on Census Bureau estimates (24%); pre-survey respondents reported being 4-year college graduate (n=15), some postgraduate or postgraduate degree (n=13), some college (n=8), 2-year college graduate (n=7), high school graduate or GED (n=4) or trade/technical/vocational training (n=2).

CLA participant demographics reflect Cochise County's population

Fifty-one participants completed a pre-survey and reported their residence. Respondents represented 12 communities across Cochise County but were most often from Sierra Vista (27%, n=14), Bisbee (22%, n=11), Douglas (12%, n=6), or Hereford/Palominas (8%, n=4). A minority of participants across cohorts had been involved in leadership training previously, though most were already collaborating with organizations or leaders addressing health concerns prior to starting their CLA.
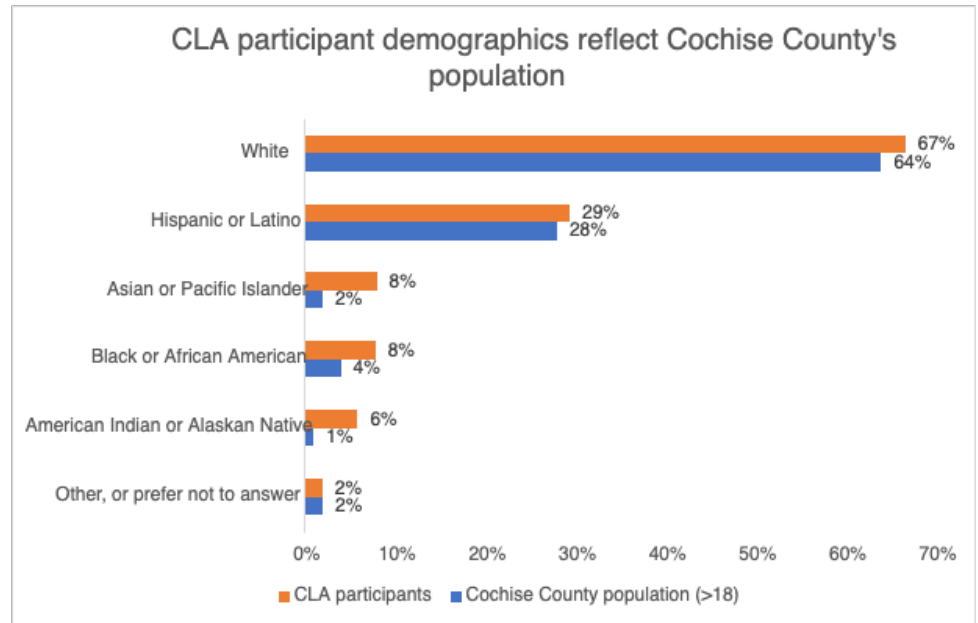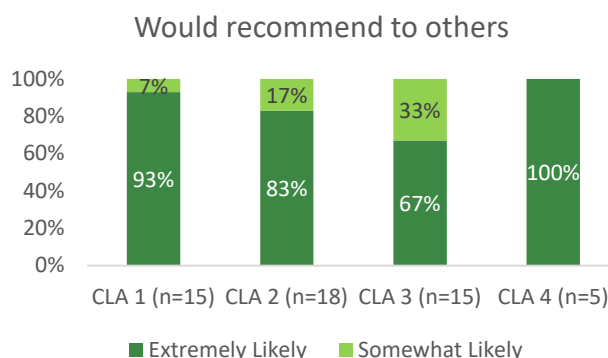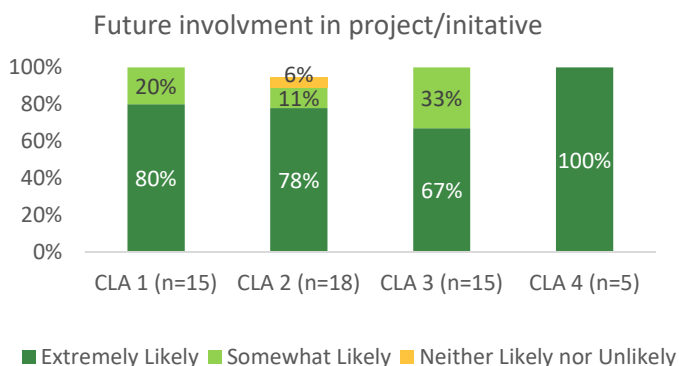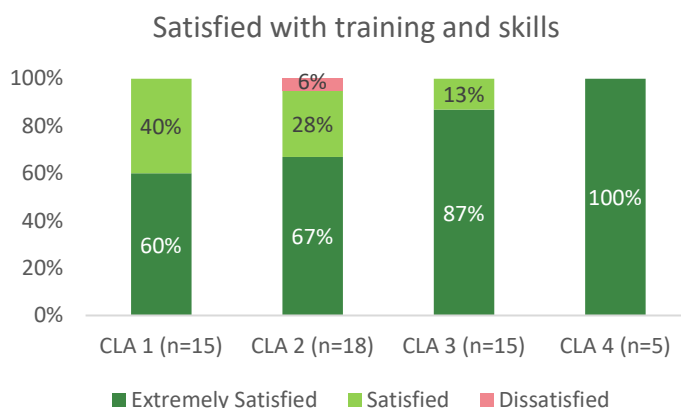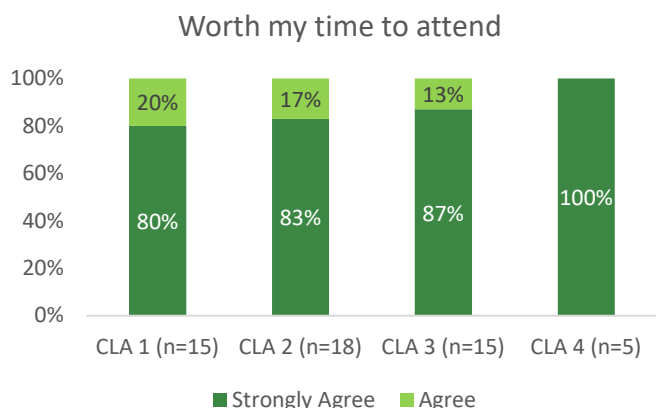
Map of residences of Cochise Leadership Academy participants (n=51)
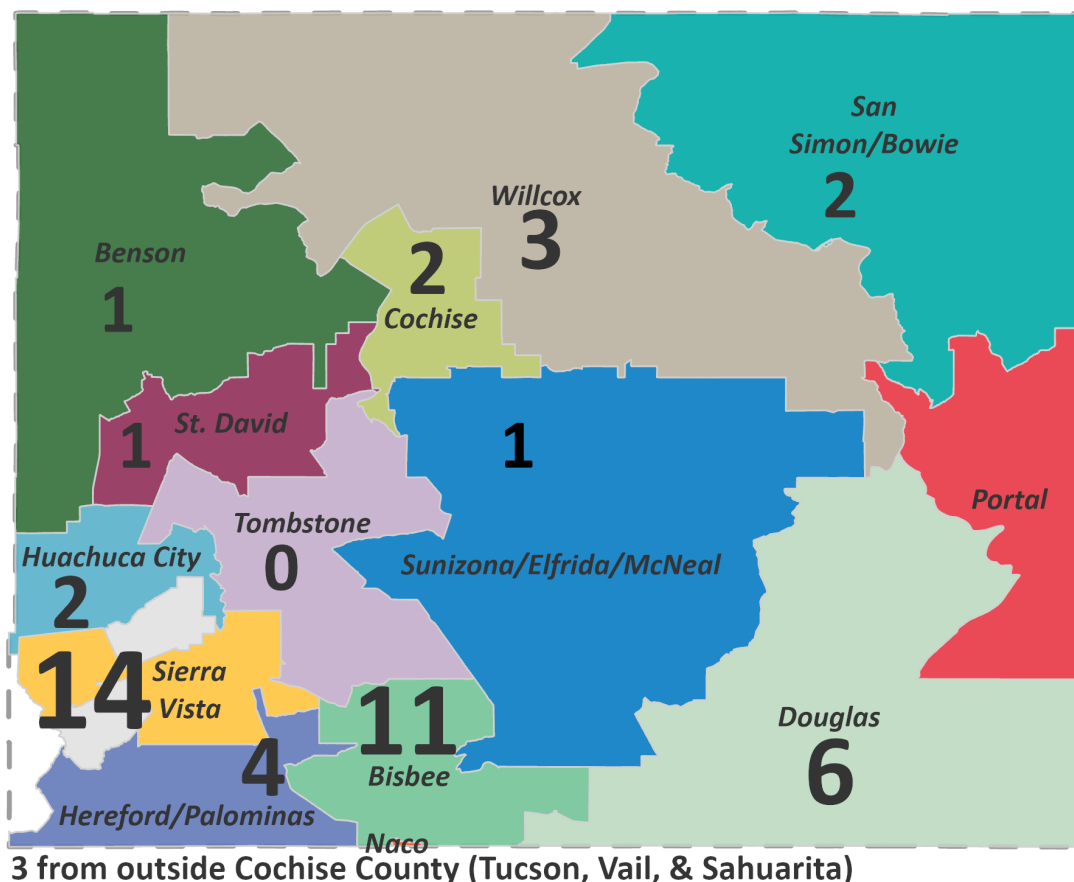
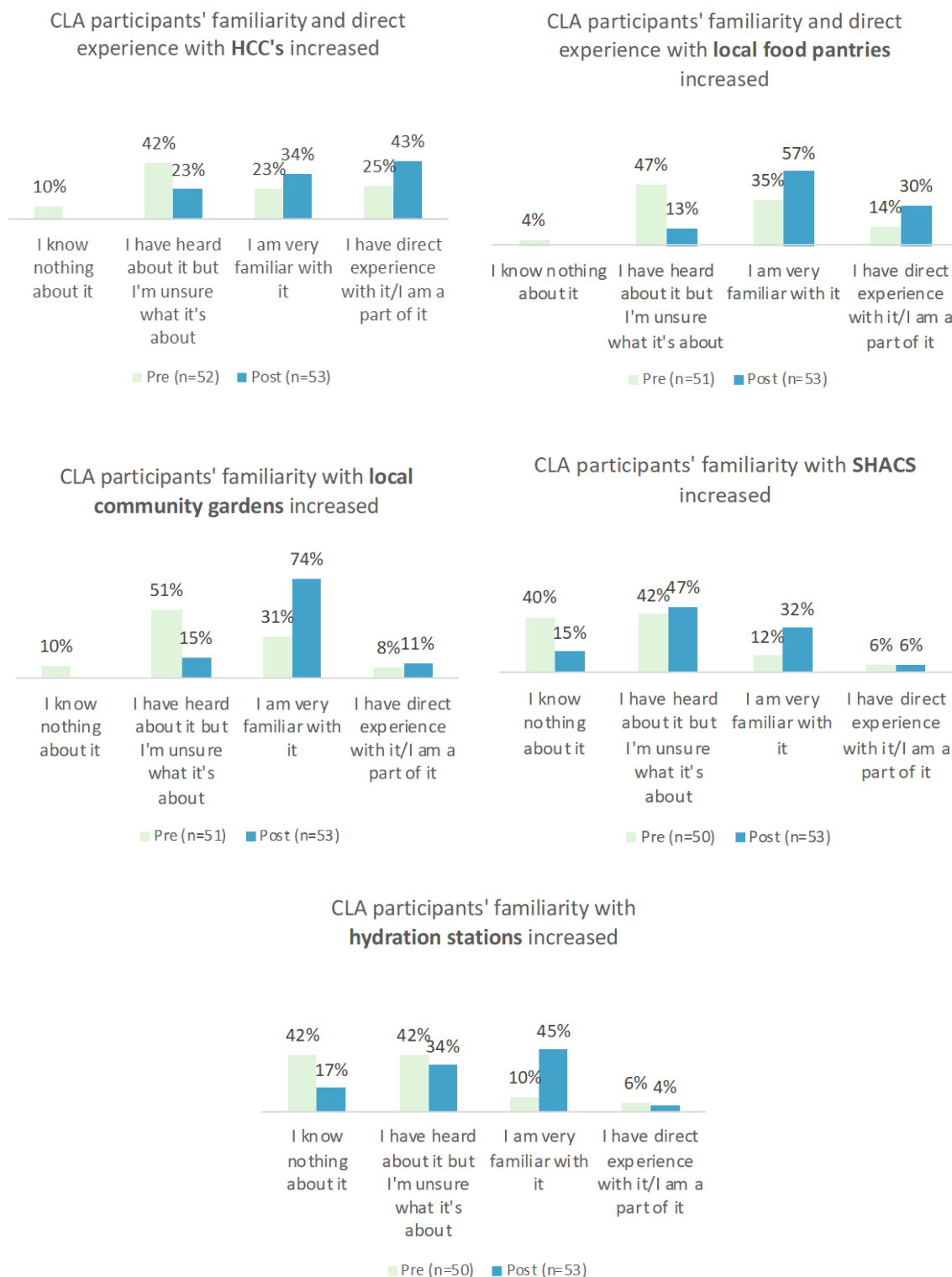**3 from outside Cochise County (Tucson, Vail, & Sahuarita)**

Across various measures of satisfaction, participants who completed a post-survey rated their experiences in the CLA extremely positively. Across all four cohorts, all respondents agreed or strongly agreed that the CLA was worth their time to attend. Almost all were also satisfied or extremely satisfied with the training and skills they acquired at the CLA.

When asked their likelihood of recommending the CLA to others in the community, post-survey respondents across all cohorts were extremely or somewhat likely to do so. CLA participants were also asked how likely they would be to get involved in a community project or initiative as a result of the Cochise Leadership Academy. With a single exception across cohorts, all respondents were extremely or somewhat likely to do so.

Worth my time to attend

CLA	Strongly Agree	Agree
CLA 1 (n=15)	80%	20%
CLA 2 (n=18)	83%	17%
CLA 3 (n=15)	87%	13%
CLA 4 (n=5)	100%	

Satisfied with training and skills

CLA	Extremely Satisfied	Satisfied	Dissatisfied
CLA 1 (n=15)	60%	40%	
CLA 2 (n=18)	67%	28%	6%
CLA 3 (n=15)	87%	13%	
CLA 4 (n=5)	100%		

Future involvment in project/initative

CLA	Extremely Likely	Somewhat Likely	Neither Likely nor Unlikely
CLA 1 (n=15)	80%	20%	
CLA 2 (n=18)	78%	11%	6%
CLA 3 (n=15)	67%	33%	
CLA 4 (n=5)	100%		

Would recommend to others

| CLA	Extremely Likely	Somewhat Likely
CLA 1 (n=15)	93%	7%
CLA 2 (n=18)	83%	17%
CLA 3 (n=15)	67%	33%
CLA 4 (n=5)	100%	

CLA participants were also asked about their familiarity of and direct engagement with key BHC initiatives. The figures below show that across all initiatives, CLA participants showed an increase in familiarity over the course of their CLA experience. Participants also showed a notable increase in direct engagement with both HCCs and local food pantries over the course of CLA.

CLA participants' familiarity and direct experience with **HCC's** increased

	I know nothing about it	I have heard about it but I'm unsure what it's about	I am very familiar with it	I have direct experience with it/I am a part of it
Pre (n=52)	10%	42%	23%	25%
Post (n=53)		23%	34%	43%

CLA participants' familiarity and direct experience with **local food pantries** increased

	I know nothing about it	I have heard about it but I'm unsure what it's about	I am very familiar with it	I have direct experience with it/I am a part of it
Pre (n=51)	4%	47%	35%	14%
Post (n=53)		13%	57%	30%

CLA participants' familiarity with **local community gardens** increased

	I know nothing about it	I have heard about it but I'm unsure what it's about	I am very familiar with it	I have direct experience with it/I am a part of it
Pre (n=51)	10%	51%	31%	8%
Post (n=53)		15%	74%	11%

CLA participants' familiarity with **SHACS** increased

	I know nothing about it	I have heard about it but I'm unsure what it's about	I am very familiar with it	I have direct experience with it/I am a part of it
Pre (n=50)	40%	42%	12%	6%
Post (n=53)	15%	47%	32%	6%

CLA participants' familiarity with **hydration stations** increased

	I know nothing about it	I have heard about it but I'm unsure what it's about	I am very familiar with it	I have direct experience with it/I am a part of it
Pre (n=50)	42%	42%	10%	6%
Post (n=53)	17%	34%	45%	4%

23

In addition to leadership instruction, mentoring is a key component of the CLA. Respondents to the post-survey were asked to rate a number of items related to their mentorship experience. The figure below shows that, except for Cohort 2, all or almost all respondents "Strongly Agree" with positive aspects of the mentor experience. Following Cohort 1 where BHC staff served as mentors, Cohort 2 was the first iteration where previous CLA participants served as mentors. After this cohort, CLA graduates volunteered to be mentors rather than being assigned the role and received additional training and guidance for their role, which resulted in more positive experiences for the mentees. Further discussion of the mentoring survey data that was gathered and informed these changes is described in the

CLA Mentor Survey section below.

Legend: CLA 1 (n=15), CLA 2 (n=18), CLA 3 (n=15), CLA 4 (n=5)
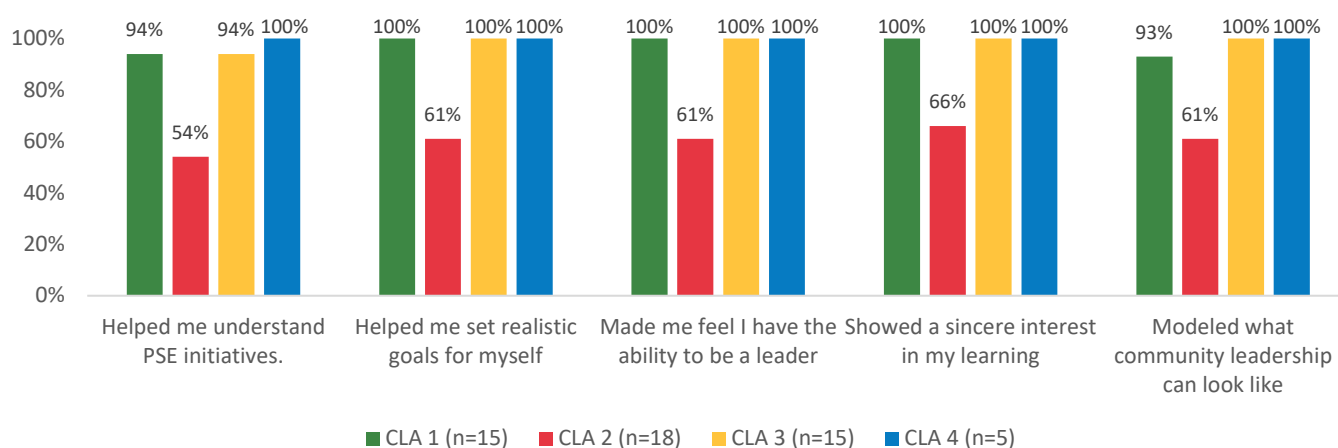
CLA Mentor Survey

From Cohort 1 to Cohort 2, when the change in mentoring from facilitators to alumni took place, there was a noticeable decline in satisfaction with mentoring. Before launching Cohort 3, the BHC team and CRED created a survey to better understand the experiences of both mentors and mentees in Cohort 2, to inform changes that could be made to improve this component of the program. The survey was distributed via email to all Cohort 2 participants and mentors, and a total of eight participants and eight mentors completed the survey.

Common themes that emerged from the survey responses included the need for: additional training for mentors, more clarity and guidance about the role of the mentors in the program, a greater emphasis on the benefits of participating as a mentor, dedicated time for mentoring work, and greater consideration for matching participants to mentors. Of mentors who responded (n=7), nearly half did not feel they had enough training nor understood the expectations of their role as a mentor.

I received enough training to participate as a mentor.

	43%		57%	

I understood the expectations of my role as a mentor.

	43%		57%	

CLA staff communicated effectively with me about my role as a mentor.

14%	71%	14%
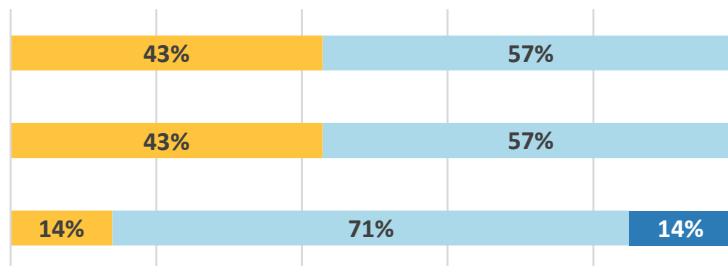
■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly agree

After reviewing the results of the survey, program staff adapted the mentoring program to have more structure, including providing training for the mentors and a toolkit outlining topics to discuss during each mentoring meeting. Despite the impacts of COVID-19 on the format of the mentoring components, participant responses to the Cohort 3 and Cohort 4 CLA post-survey showed notably greater satisfaction with CLA mentoring in comparison to Cohort 2, with comparable rates of satisfaction to participants in Cohort 1 when BHC staff oversaw mentoring CLA participants.

Compared to the sample of Cohort 2 surveyed through the CLA Mentor Survey, Cohort 3 and Cohort 4 post-survey respondents showed higher levels of overall satisfaction with their mentoring relationship.
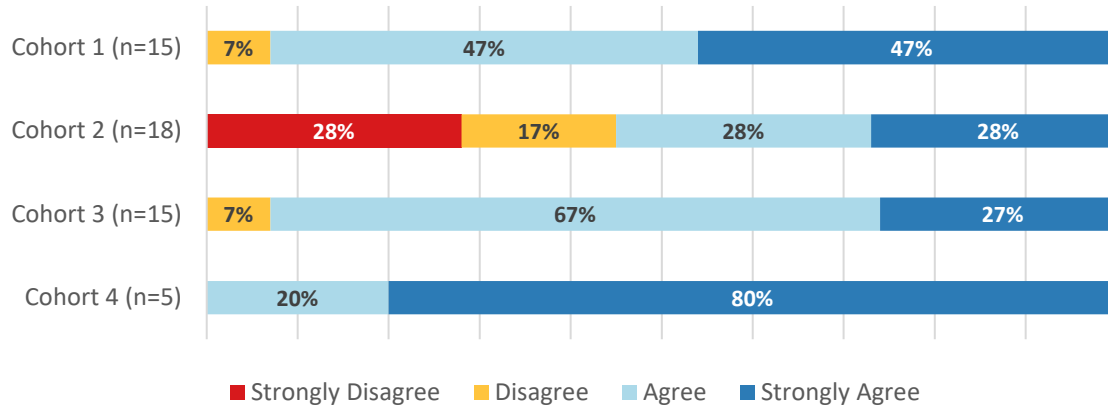
How would you rate the mentoring relationship you had with your mentor overall?
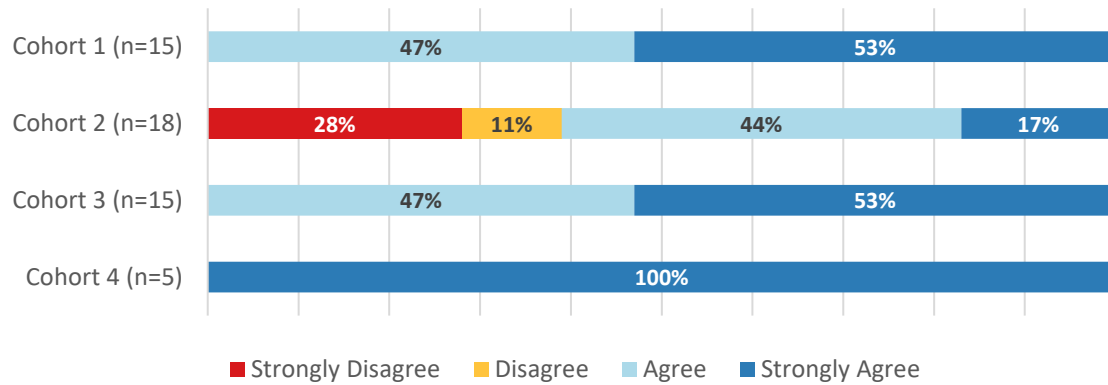
Cohort 2 (n=18)

29%	43%	29%

Cohort 3 (n=15)

7%	13%	13%	67%

Cohort 4 (n=5)

20%	80%
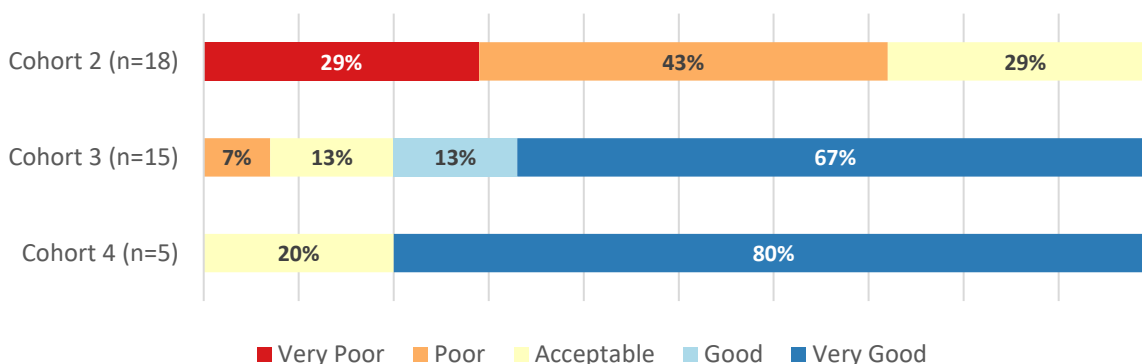
■ Very Poor ■ Poor ■ Acceptable ■ Good ■ Very Good

Cohort 3 and Cohort 4 post-survey respondents were largely satisfied with their mentoring experience across multiple facets and showed levels of satisfaction that were higher than Cohort 2 and comparable to Cohort 1, when BHC staff served as mentors for CLA participants.
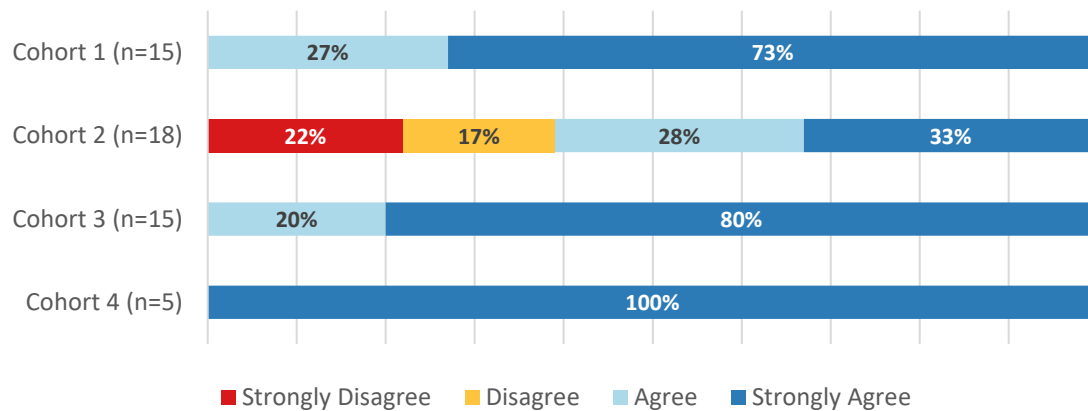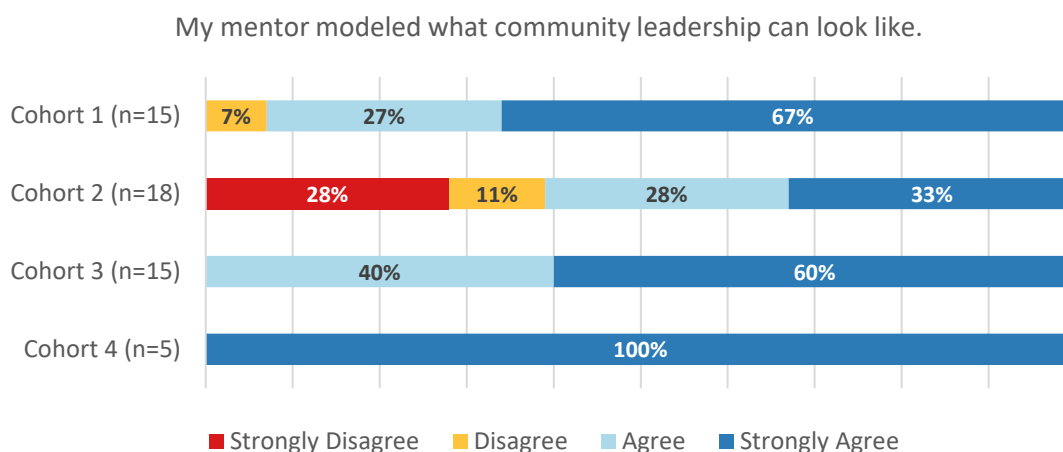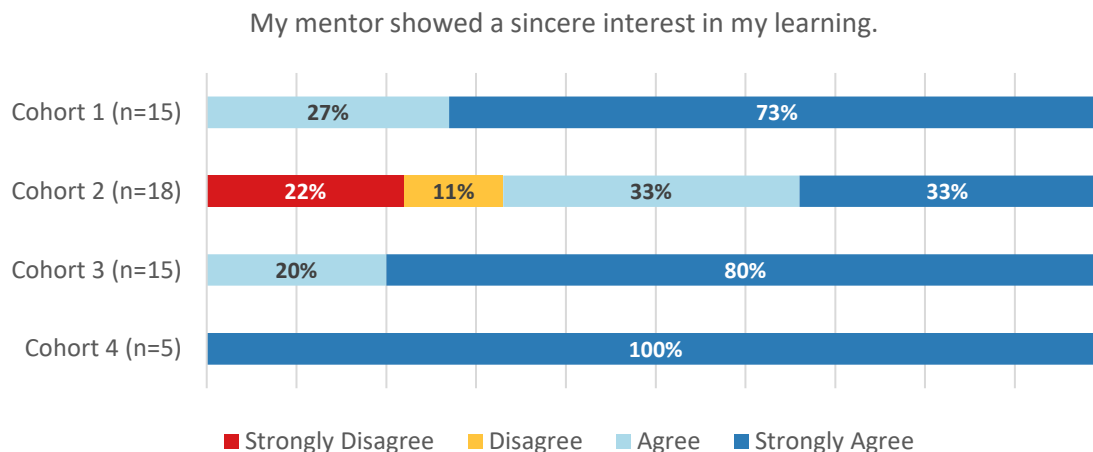
My mentor helped me understand PSE initiatives.

Cohort	Strongly Disagree	Disagree	Agree	Strongly Agree
Cohort 1 (n=15)		7%	47%	47%
Cohort 2 (n=18)	28%	17%	28%	28%
Cohort 3 (n=15)		7%	67%	27%
Cohort 4 (n=5)			20%	80%

■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

My mentor helped me set realistic goals for myself.

Cohort	Strongly Disagree	Disagree	Agree	Strongly Agree
Cohort 1 (n=15)			47%	53%
Cohort 2 (n=18)	28%	11%	44%	17%
Cohort 3 (n=15)			47%	53%
Cohort 4 (n=5)				100%

■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

My mentor made me feel I have the ability to be a leader.

Cohort	Strongly Disagree	Disagree	Agree	Strongly Agree
Cohort 1 (n=15)			27%	73%
Cohort 2 (n=18)	22%	17%	28%	33%
Cohort 3 (n=15)			20%	80%
Cohort 4 (n=5)				100%

■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

My mentor showed a sincere interest in my learning.

Cohort	Strongly Disagree	Disagree	Agree	Strongly Agree
Cohort 1 (n=15)			27%	73%
Cohort 2 (n=18)	22%	11%	33%	33%
Cohort 3 (n=15)			20%	80%
Cohort 4 (n=5)				100%

■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

My mentor modeled what community leadership can look like.

Cohort	Strongly Disagree	Disagree	Agree	Strongly Agree
Cohort 1 (n=15)		7%	27%	67%
Cohort 2 (n=18)	28%	11%	28%	33%
Cohort 3 (n=15)			40%	60%
Cohort 4 (n=5)				100%

■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

Based on feedback from BHC staff, additional questions were asked in the CLA Mentor Survey (Cohort 2 only) and subsequent CLA post-surveys about the three primary responsibilities of the mentors in the program: assisting participants in understanding the CLA program, supporting their community project, and assisting with networking and building connections in the community. Cohort 3 and Cohort 4 respondents showed higher levels of agreement that their mentor met the expectations of their role in the program.

My mentor assisted me with understanding the CLA program.

Cohort	Strongly Disagree	Disagree	Agree	Strongly Agree
Cohort 2 (n=18)	29%	57%		14%
Cohort 3 (n=15)			40%	60%
Cohort 4 (n=5)			20%	80%

■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree
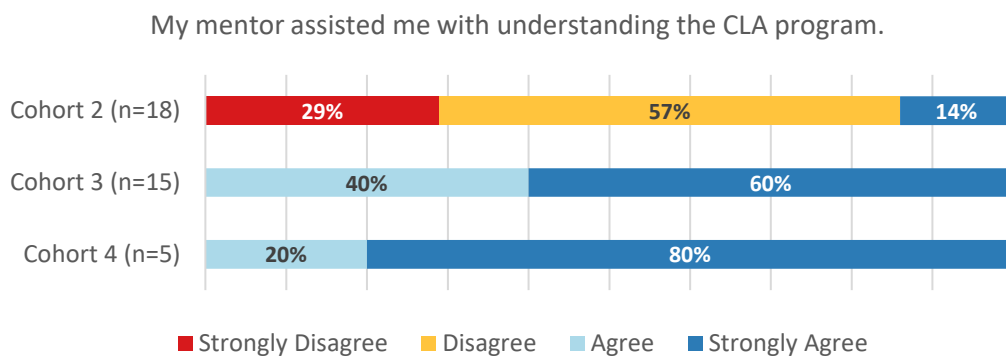
My mentor provided support for my community project.

Cohort	Strongly Disagree	Disagree	Agree	Strongly Agree
Cohort 2 (n=18)	29%	43%	14%	14%
Cohort 3 (n=15)		7%	33%	60%
Cohort 4 (n=5)				100%

■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree
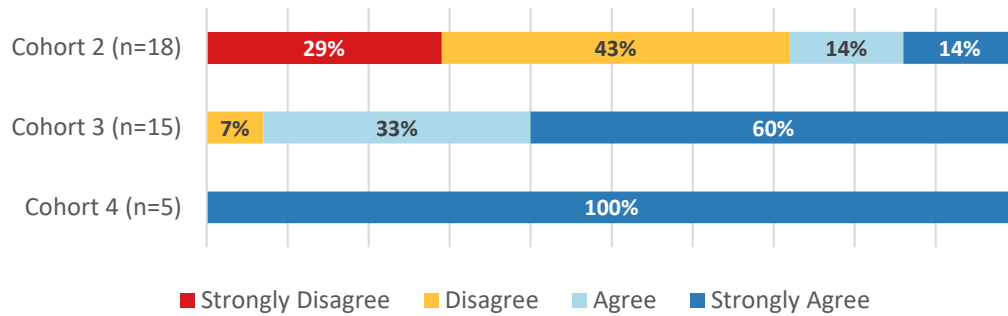
My mentor assisted me with building connections and networking in the community.

Cohort	Strongly Disagree	Disagree	Agree	Strongly Agree
Cohort 2 (n=18)	33%	33%	17%	17%
Cohort 3 (n=15)		7%	47%	47%
Cohort 4 (n=5)				100%

■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree
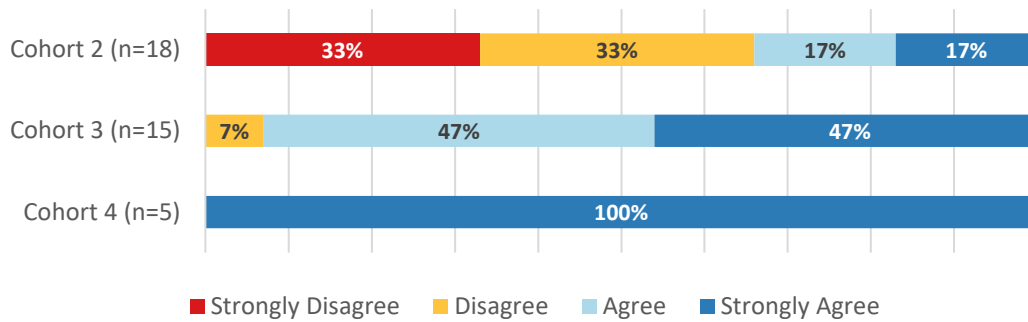
Matched Pre-Post Survey Results

Surveys were used to assess baseline knowledge of community health initiatives and leadership skills, and change in these after the CLA. Pre and post surveys for each cohort were matched on the 4-digit cell number respondents provided on their pre and post surveys. Only cohorts 1, 2 and 3 had sufficient matched pairs for comparison (n=12 for each). The following results are based on these matched pairs of surveys.

I know how to change things in my community

CLA 1: Pre 2.55 → Post 3.5
CLA 2: Pre 2.36 → Post 2.92
CLA 3: Pre 2.55 → Post 3

— CLA 1   — CLA 2   — CLA 3
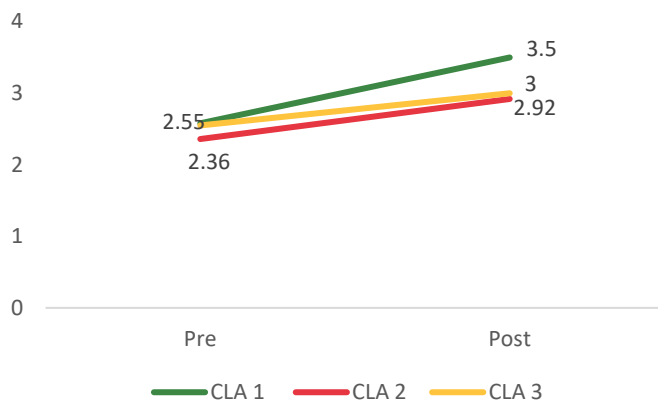
CLA participants were also asked to rate themselves across a variety of leadership concepts and abilities before and after participation in the CLA. Statements regarding leadership knowledge and abilities were scored from 1=" Strongly Disagree" to 4-"Strongly Agree." Respondents showed reliable increases in leadership concepts and abilities following participation in the CLA; averaging across all 13 leadership items and all cohorts, matched respondents shifted from an initial average rating of 3.06 (s.d.=.36) to a post-program average of 3.22 (s.d.=.28).

Looking at each of the skills and cohorts individually allows us to examine the patterns of responses more closely. We u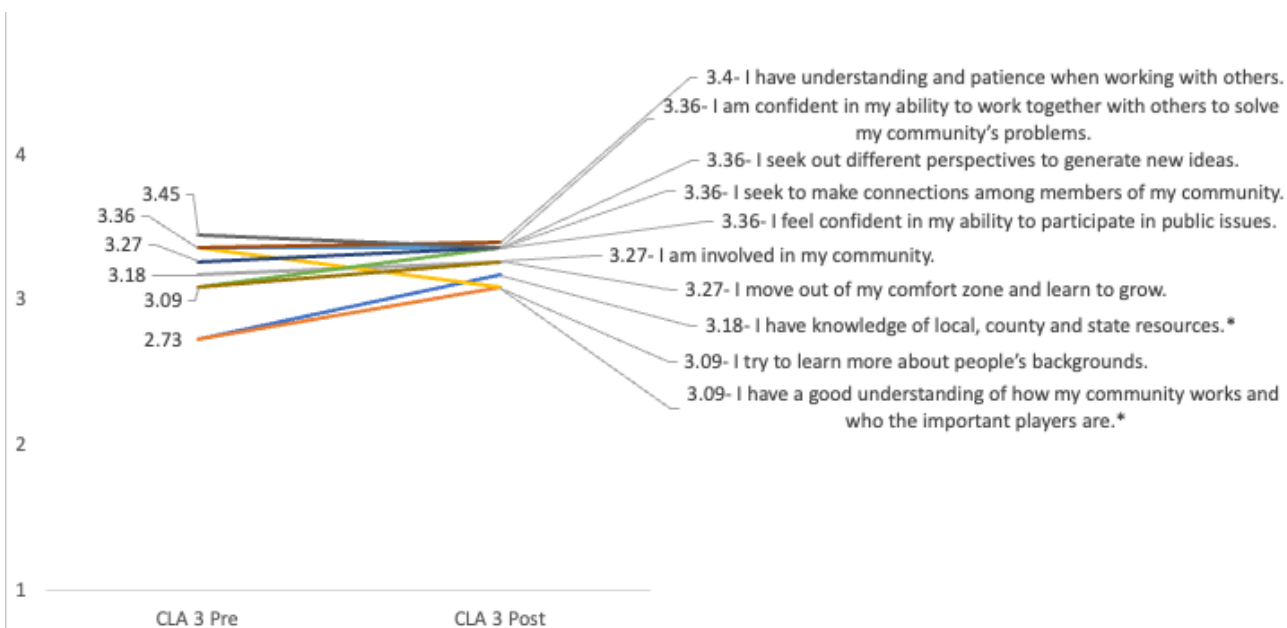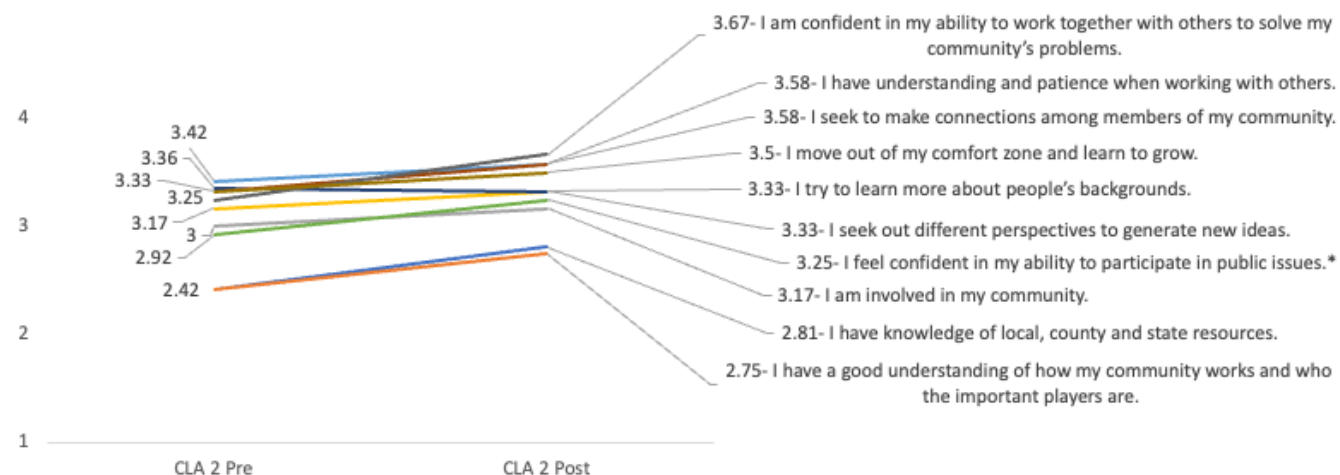sed Wilcoxon paired signed-rank test at p<.10 level to assess reliability of findings through statistical significance testing. The small numbers in each cohort mean that the

individual findings need to be interpreted somewhat cautiously, and more weight given to the general pattern. Matched survey respondents from both cohort 1 and 2 reported statistically significant increases in their knowledge of how to change things in their communities, and their understanding of the important public issues facing their community. Matched respondents for cohort 1 and 3 reported statistically significant increases in their sense of the different groups of people in their community and their diverse needs.

I have a good understanding of the important public issues facing my community.

	Pre	Post
CLA 1		3.5
	2.83	3.08
	2.73	3.09
	2.67	

CLA 1   CLA 2   CLA 3

I have a sense about the different groups of people in my community and their diverse needs

	Pre	Post
		3.42
	2.82	3.09
		2.92
	2.58	

CLA 1   CLA 2   CLA 3
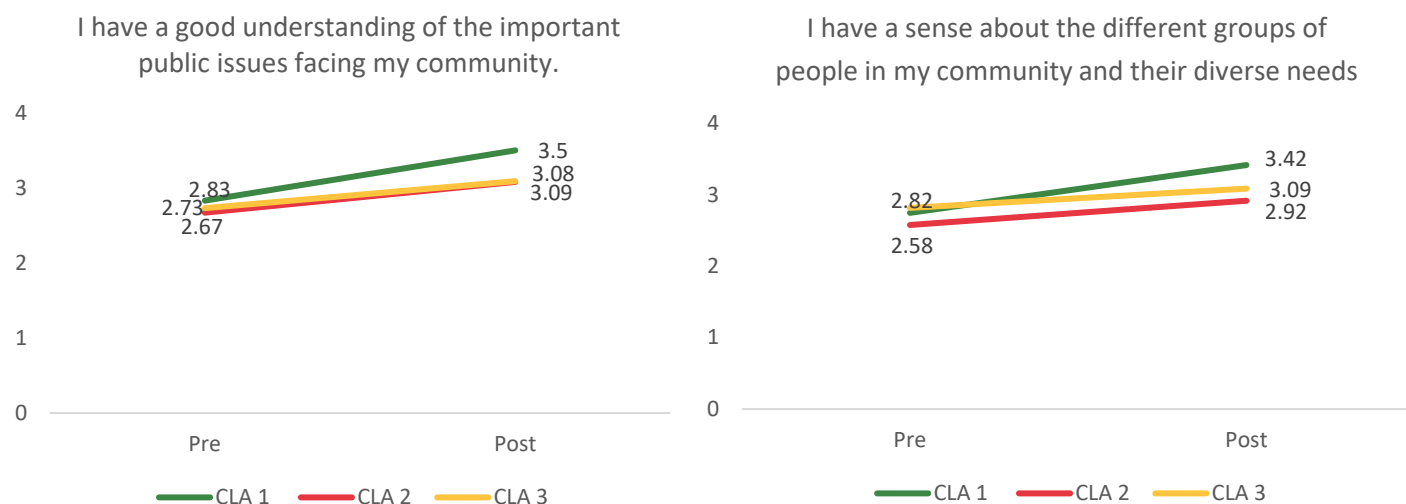
Cohort 1 participants also reported statistically significant increases in five additional leadership knowledge and skill statements from pre to post survey, cohort 2 had significant increases in one additional statement, and cohort 3 also had significant increase in two additional statements. Statistically significant increases (based on Wilcoxon paired signed-rank test at p<.10 level of significance) are represented with an asterisk (*).

3.58
3.5
3.42
3.33
3.08
2.67
2.58

CLA 1 Pre   CLA 1 Post

3.83- I feel confident in my ability to participate in public issues.*
3.83- I seek out different perspectives to generate new ideas.*
3.75- I am confident in my ability to work together with others to solve my community's problems
3.75- I seek to make connections among members of my community.
3.58- I move out of my comfort zone and learn to grow.
3.58- I try to learn more about people's backgrounds.
3.5- I have understanding and patience when working with others.
3.5- I am involved in my community.*
3.33- I have knowledge of local, county and state resources.*
3.33- I have a good understanding of how my community works and who the important players are.*

Chart 1 (CLA 2 Pre / CLA 2 Post):

- 3.42
- 3.36
- 3.33
- 3.25
- 3.17
- 3
- 2.92
- 2.42

Post values:
- 3.67- I am confident in my ability to work together with others to solve my community's problems.
- 3.58- I have understanding and patience when working with others.
- 3.58- I seek to make connections among members of my community.
- 3.5- I move out of my comfort zone and learn to grow.
- 3.33- I try to learn more about people's backgrounds.
- 3.33- I seek out different perspectives to generate new ideas.
- 3.25- I feel confident in my ability to participate in public issues.*
- 3.17- I am involved in my community.
- 2.81- I have knowledge of local, county and state resources.
- 2.75- I have a good understanding of how my community works and who the important players are.

Chart 2 (CLA 3 Pre / CLA 3 Post):

- 3.45
- 3.36
- 3.27
- 3.18
- 3.09
- 2.73

Post values:
- 3.4- I have understanding and patience when working with others.
- 3.36- I am confident in my ability to work together with others to solve my community's problems.
- 3.36- I seek out different perspectives to generate new ideas.
- 3.36- I seek to make connections among members of my community.
- 3.36- I feel confident in my ability to participate in public issues.
- 3.27- I am involved in my community.
- 3.27- I move out of my comfort zone and learn to grow.
- 3.18- I have knowledge of local, county and state resources.*
- 3.09- I try to learn more about people's backgrounds.
- 3.09- I have a good understanding of how my community works and who the important players are.*

Changes to CLA length and format may be a reason behind a less consistent impact on leadership knowledge and skills in cohorts 2 and 3. Cohort 2 differed from Cohort 1 in length (reduced from 10 to 6 sessions) and mentorship model, and Cohort 3 changed format mid-program due to the pandemic. As subsequent cohorts revert to the longer session, single format model, these more consistent positive impacts may return.

CLA Graduate Survey

In May 2020, graduates of cohort 1 and 2 of the CLA were invited to complete a survey to see how they had applied what they had learned in the CLA and to gather recommendations for future cohorts. Thirteen out of 37 graduates (35%) responded to the survey, seven from cohort 1 and six from cohort 2.

> 92% of respondents agreed or strongly agreed that they were a better leader today because of their experience in the CLA.

100%

Have recommended the CLA to someone else

All respondents agreed or strongly agreed that they've applied the concepts they learned in the CLA to their professional work and that the concepts they learned through their community project have been useful in their continuing professional or community advocacy work. Almost all (92%) agreed or strongly agreed that they were a better leader today because of their experience in the CLA, that the CLA has helped them advance their career or community advocacy work, and that the number of collaborative relationships they have in their community has increased since participation in the CLA. All respondents also indicated that they had recommended the CLA to someone else.

Eighty-five percent of respondents have continued communicating or collaborating with CLA personnel, participants, or their mentors since their CLA participation. Almost two-thirds (62%) reported they had taken on a new leadership role or leadership responsibilities since participating in the CLA, and almost one-quarter (23%) indicated that they had started a community initiative, program or group since participating in the CLA. Sixty-two percent of respondents reported that COVID-19 impacted how they applied what they learned in the CLA; most commented on the difficulty in continuing community work after transitioning to on-line meetings and teleconferencing.

Ripple Effects: Cochise Leadership Academy

The Cochise Leadership Academy was identified as a key opportunity for community members to not only develop important leadership skills, but to foster connections within their community, increase their awareness of the assets and needs of their community, and increase their confidence in their ability to address community-level issues themselves. BHC staff directly asked community members to tackle the issues they identified and to develop new and innovative problem-solving approaches to do so. This approach of BHC staff as 'cheerleaders' for CLA participants helped to challenge a culture of disempowerment felt by some in the county, promoting a new culture of building capacity and 'paying it forward' that helps to create a 'sense of place' in Cochise County. Through the individual community projects, CLA created opportunities for personal and professional growth that were noted as an important factor in keeping young talent in Cochise County. While CoNest, for example, existed prior to Catie Armstrong's participation in CLA, her involvement in the program allowed her to turn CoNest from idea to action, connecting with others in the community and officially launching it as an organization. CLA also helped her connect with Robin Dumas and start the Healthy Food Forum, a group that meets biweekly to promote diversity and inclusion in the food system. This group has since expanded from being focused in Cochise County to including partners across the state of Arizona, fostering further connections and increasing awareness of the BHC initiative in Arizona.
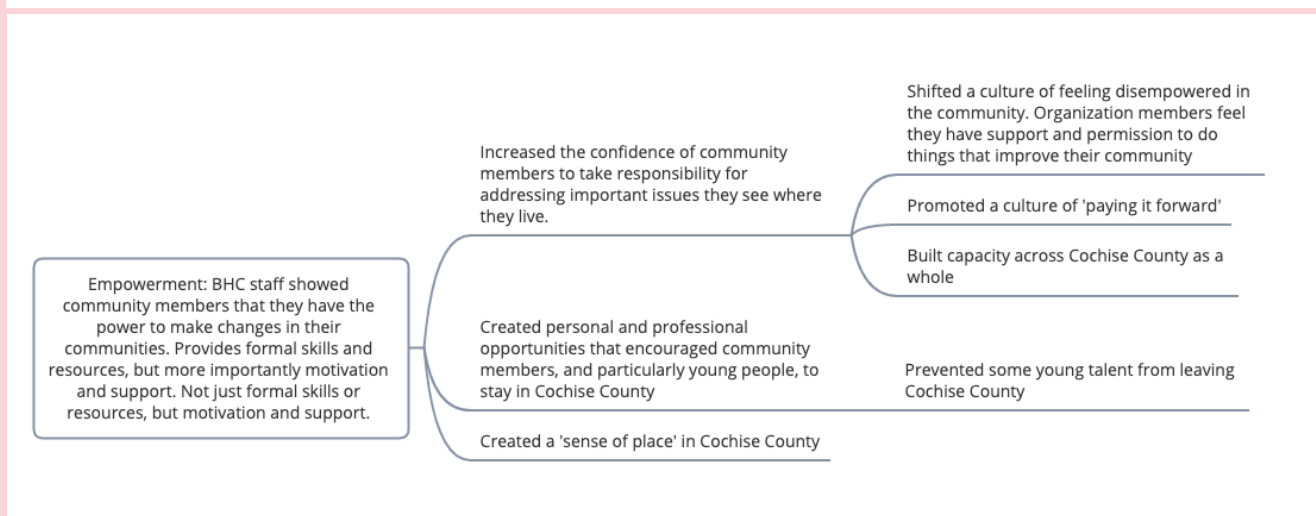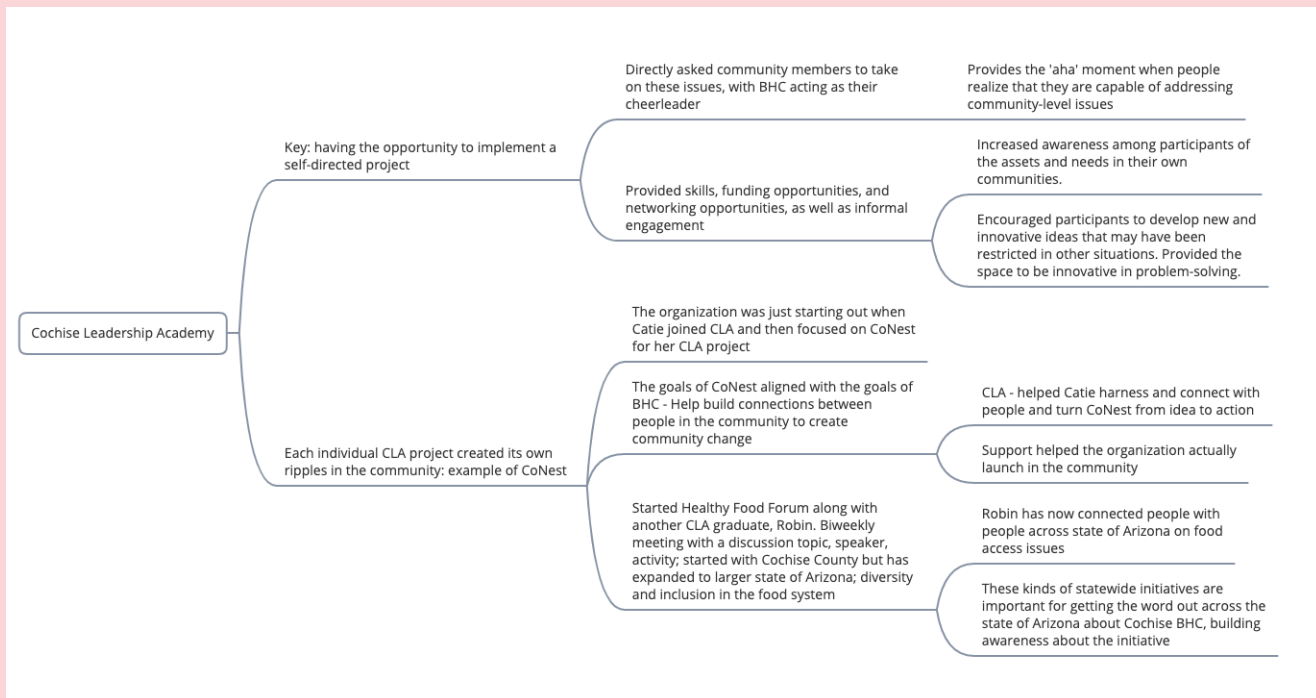
Goal 2: Cultivate a Healthy Food System

Goal 2 Logic Model

Goal 2: Cultivate healthy food system		
Strategy 5: Local Food System and Hunger Relief	**Strategy 6: Continuing Nutrition Education**	
Short-Term	**Medium-Term**	**Long-Term**
-Workshop participants understand that food affects their health -Expanded grants and loans available for local farmers -Increase the number of Meals Per Person in Need utilizing the USDA metrics for measurement by at least 10% annually	-Increase the number of school and community gardens -Increase in amount local produce purchased locally -Increase the sales of locally grown food -Increase the pounds of local food delivered -Increase the scale of local cooperative ownership brokerage sales managed by CFB -Increased SNAP participation -Cochise County residents will increase their consumption of fruits and vegetables	-Increase the pounds of local food produced -Creation of local and countywide policies for -staining healthy food systems -Broad community understanding and acceptance of food as medicine -Children and families in need have increased and sustained access to fresh produce and healthy foods across Cochise County -Cochise County residents eat healthier -Cochise County residents have reduced rates of obesity and type II diabetes

One of the key goals of the Cochise Building Healthy Communities (BHC) initiative was to cultivate a healthier food system throughout the county through increasing access to affordable, nutritious food, strengthening the local food economy, and nutrition education to help residents understand how food impact their health.

Access to affordable and nutritious food

At the beginning of the BHC project, food access and food security were clear challenges in Cochise County. Nearly one in three Cochise County residents (32%) lived in a food desert in 2015 (UA CRED Team, 2019). Rates of food insecurity regularly exceeded those seen in the state by two to four percentage points, with about one in five children and one in seven overall residents facing food insecurity in 2018.

At the beginning of the BHC grant, about 1 in 5 children and 1 in 7 residents of any age in Cochise County were food insecure. Since then, food insecurity rates declined slightly but are projected to have increased during the pandemic due to the economic hardships faced by many families.

Chart data points:

Child Food Insecurity: 26.4% (2011), 26.1% (2012), 27.2% (2013), 26.5% (2014), 24.3% (2015), 23.3% (2016), 22.5% (2017), 21.6% (2018), 21.4% (2019), 24.0% (2020 proj.), 22.7% (2021 proj.)

Overall Food Insecurity: 16.1% (2011), 15.8% (2012), 16.1% (2013), 16.1% (2014), 15.0% (2015), 14.5% (2016), 13.9% (2017), 14.4% (2018), 14.2% (2019), 15.7% (2020 proj.), 15.1% (2021 proj.)

BHC Grant

March 14, 2020

2011   2012   2013   2014   2015   2016   2017   2018   2019   2020 (proj.)   2021 (proj.)

Overall Food Insecurity   —   Child Food Insecurity

Feeding America (2021). Map the Meal Gap data.

Note: Actual food insecurity rates for 2020 will be released in 2022, and examining these rates compared to the projections may be able to show whether the efforts of BHC and other organizations to support food security may have dampened the projected increase in food insecurity, especially compared to other similar counties.

Food security and food access have also been linked to higher rates of obesity and poorer diet quality.[12, 13, 14] Thus, increasing access to food and improving food security among Cochise County residents were clearly linked to the BHC initiative's goals to support healthy eating and active living. However, food access challenges were not evenly distributed across the county. Residents of central Cochise County faced greater barriers to access fresh fruits and vegetables, as demonstrated by both USDA food desert classifications and findings from the 2019 Cochise Community Survey. Thus, efforts to increase access in parts of the county classified as food deserts were particularly needed.

2019 Food Environment Map for Cochise County

Combining food retail, food desert, and 2019 Cochise Community Survey data shows that central Cochise County residents face particular challenges accessing healthy foods in 2019. There were few or no supermarkets or farmers markets, and a large portion of survey respondents from these communities reported that it was hard to get fruits and vegetables in their community.
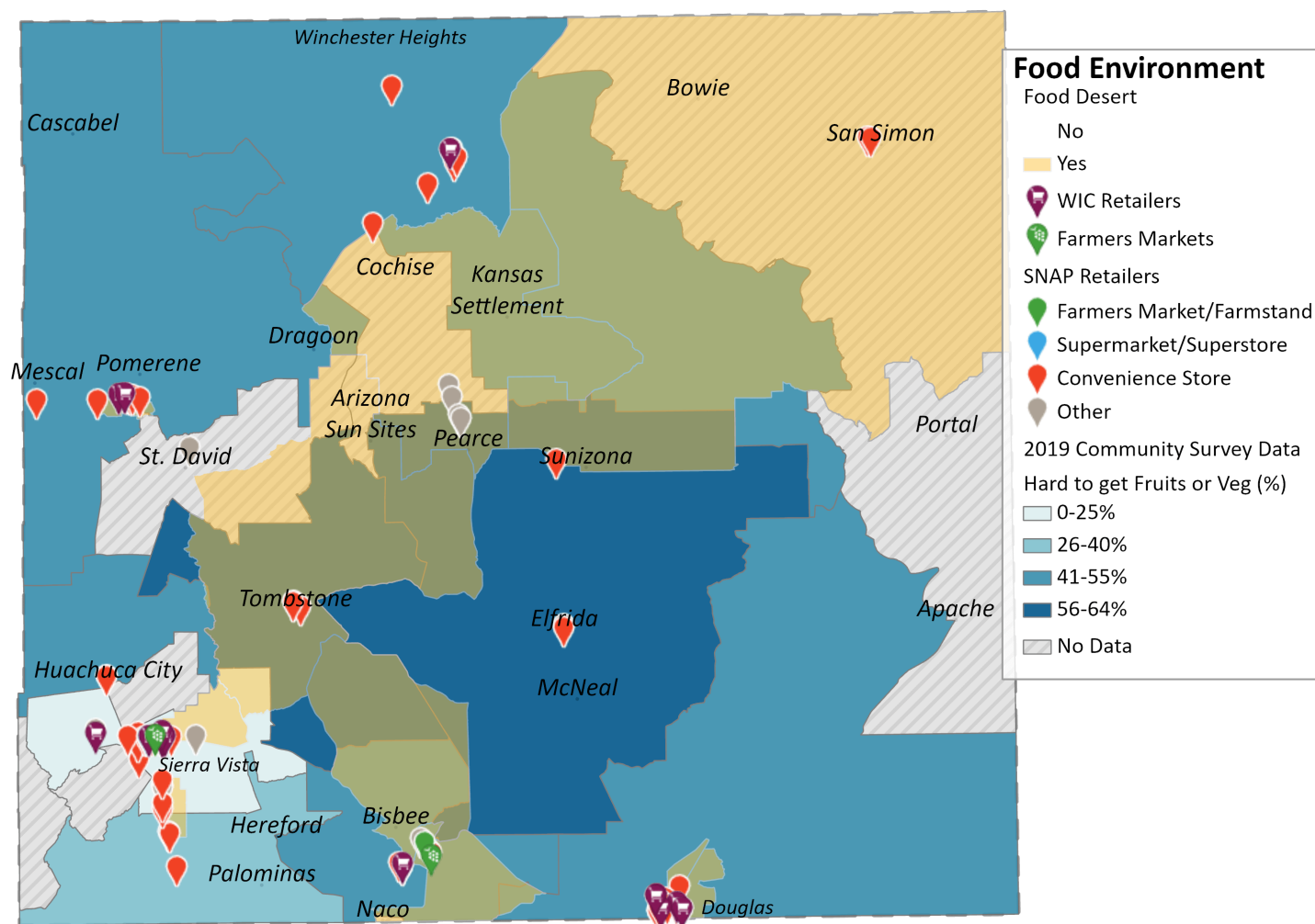
Source: University of Arizona CRED Team (2019). Cochise County UA SNAP-Ed Map 2.0.

The Cochise BHC project sought to increase access to nutritious food through three primary mechanisms:

(1) Increasing the amount of free food distributed in Cochise County through food banking and other emergency food provision channels and access to food provision sites,

(2) Expanding access to low-cost fresh produce through expansion of the Produce on Wheels Without Waste (P.O.W.W.O.W.) program operated by Borderlands Produce Rescue, and

(3) Supporting gardening projects that empower community members to grow their own food.

Food distribution through the Community Food Bank of Southern Arizona

The Community Food Bank of Southern Arizona (CFB), as one of the original BHC partner organizations, played a key role in both the direct distribution of food as well as providing technical support, funding, and training for garden, pantry, and local food system development. Thus, much of the performance data for emergency food distribution was obtained through CFB's data system.

During the first six months of BHC initiative, staff and leaders from the partner organizations met to develop performance metrics that would guide staff through the project's implementation. One of these goals was to increase the amount of food distributed in Cochise County by ten percent annually over the life-cycle of the project. The partners also hoped to see a similar increase in the amount of healthy food distributed and the amount of fresh fruits and vegetables distributed.

Pounds of food distributed by the Community Food Bank of Southern Arizona.

Increases in the amount of food distributed throughout Cochise County greatly exceeded the target of a 10% annual increase. The amount of food distributed by CFB increased by more than 50% over the three years of the grant.

Total food distributed (lbs.)

6,455,915
6,238,988
4,122,817

Year 1   Year 2   Year 3
—— Cochise County Total
- - - 10% Increase

Healthy food (lbs.)

4,886,278
4,316,127
3,179,571

Year 1   Year 2   Year 3
—— Cochise County Total
- - - 10% Increase
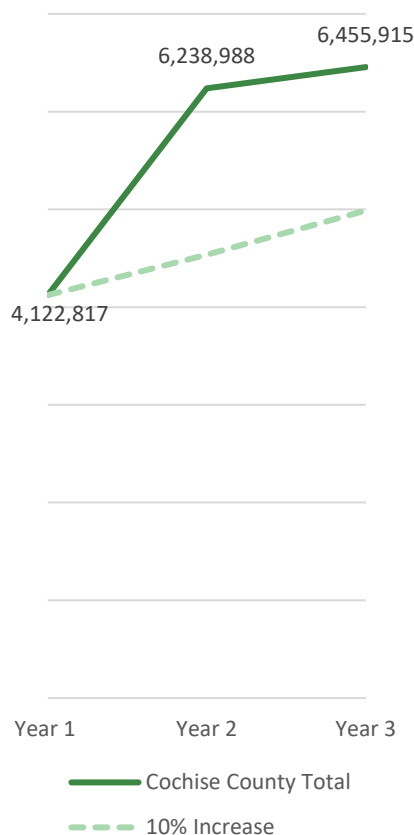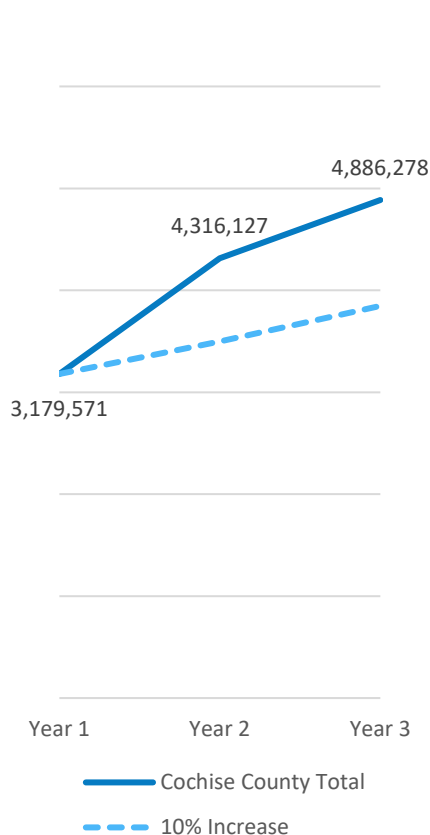
Fresh fruits & vegetables (lbs.)

3,803,381
3,346,461
2,511,419

Year 1   Year 2   Year 3
—— Cochise County Total
- - - 10% Increase
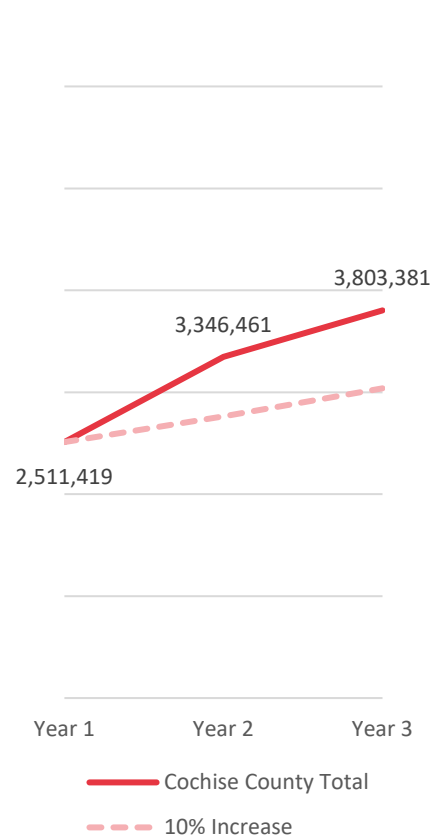
Source: Community Food Bank of Southern Arizona (2021). [Monthly Distribution data].

Note: Healthy food was operationalized using Feeding America's 'Foods to Encourage' list.

As can be seen in the graphs above, the annual increase in the pounds of food distributed in Cochise County increased substantially over the course of the BHC initiative. The total amount of food, the amount of food deemed healthy according to Feeding America's "Foods to Encourage" list, and the amount of fresh fruits and vegetables all increased by more than 50 percent over the three years, with the largest increases occurring in year two of the grant.

Pounds of food distributed by the Community Food Bank of Southern Arizona by month, July 2018 to June 2021
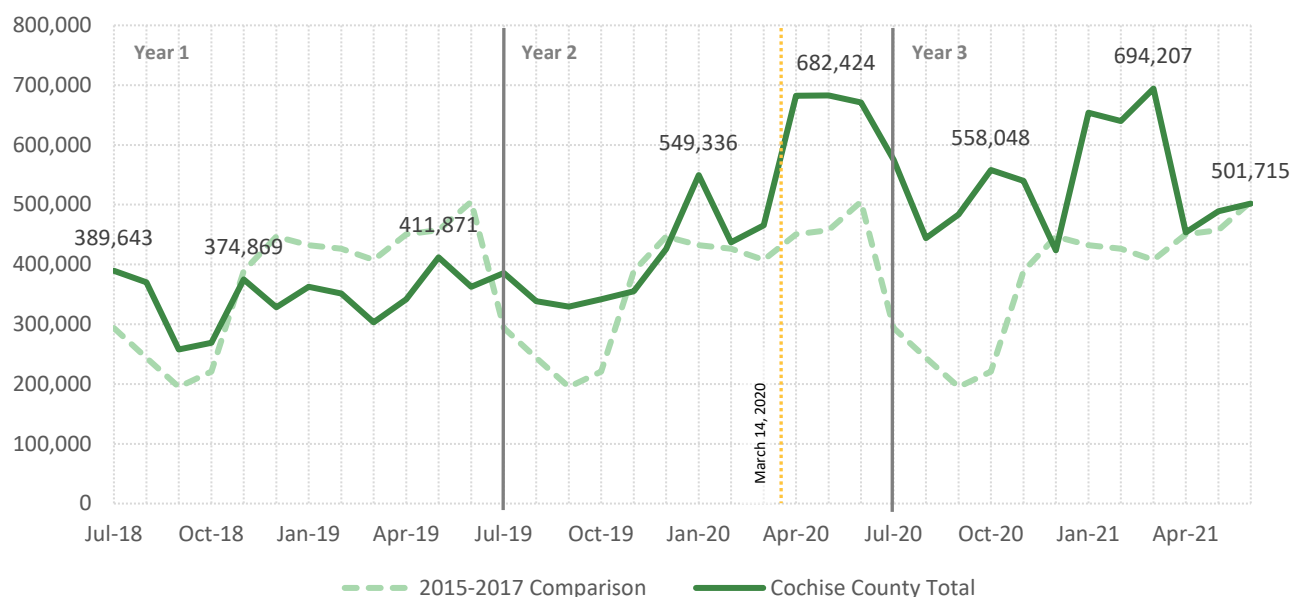
Source: Community Food Bank of Southern Arizona (2021). [Monthly Distribution data].

Note: Average monthly distribution numbers for 2015 to 2017 are used a baseline comparison in this chart.

Examining monthly distribution data helps demonstrate some of the effects of the pandemic on the amount of food distributed in the county. The amount of food distributed in the county was increasing even before the pandemic—most of year 2 of the grant (July 2019 to March 2020) saw distribution that exceeded the baseline numbers even before the pandemic hit in mid-March. The pandemic brought new opportunities and substantial challenges for emergency food distribution. Labor shortages meant that CFB had to rely on the Arizona National Guard for help distributing food during the pandemic, and they were not able to take direct food donations, instead directing those to local food pantries. At the same time, there was increased funding and food available through both traditional federal distribution mechanisms, and through new programs, such as the Farmers to Families food box program, which connected produce from local farmers to food banks and non-profits. Overall, the amount of food distributed in the county during the pandemic was higher than that distributed in nearly any month in prior years.

While distribution across the county increased across the 3-year grant period and jumped during the pandemic, the increased distribution of food was concentrated in specific regions of the county. Willcox, Benson, Tombstone, Huachuca City, and Sunizona/Elfrida/McNeal saw increases in distribution across each year of the grant, whereas Sierra Vista, Douglas, Bisbee, Cochise, Hereford/Palominas, and San Simon/Bowie saw increases from year one to year two, but decreases in food distributed once the pandemic hit.

Pounds of food distributed by the Community Food Bank of Southern Arizona by community

While some communities had substantial increases in food distribution over the course of the grant, others saw an initial upward trajectory followed by a decline once the pandemic struck.
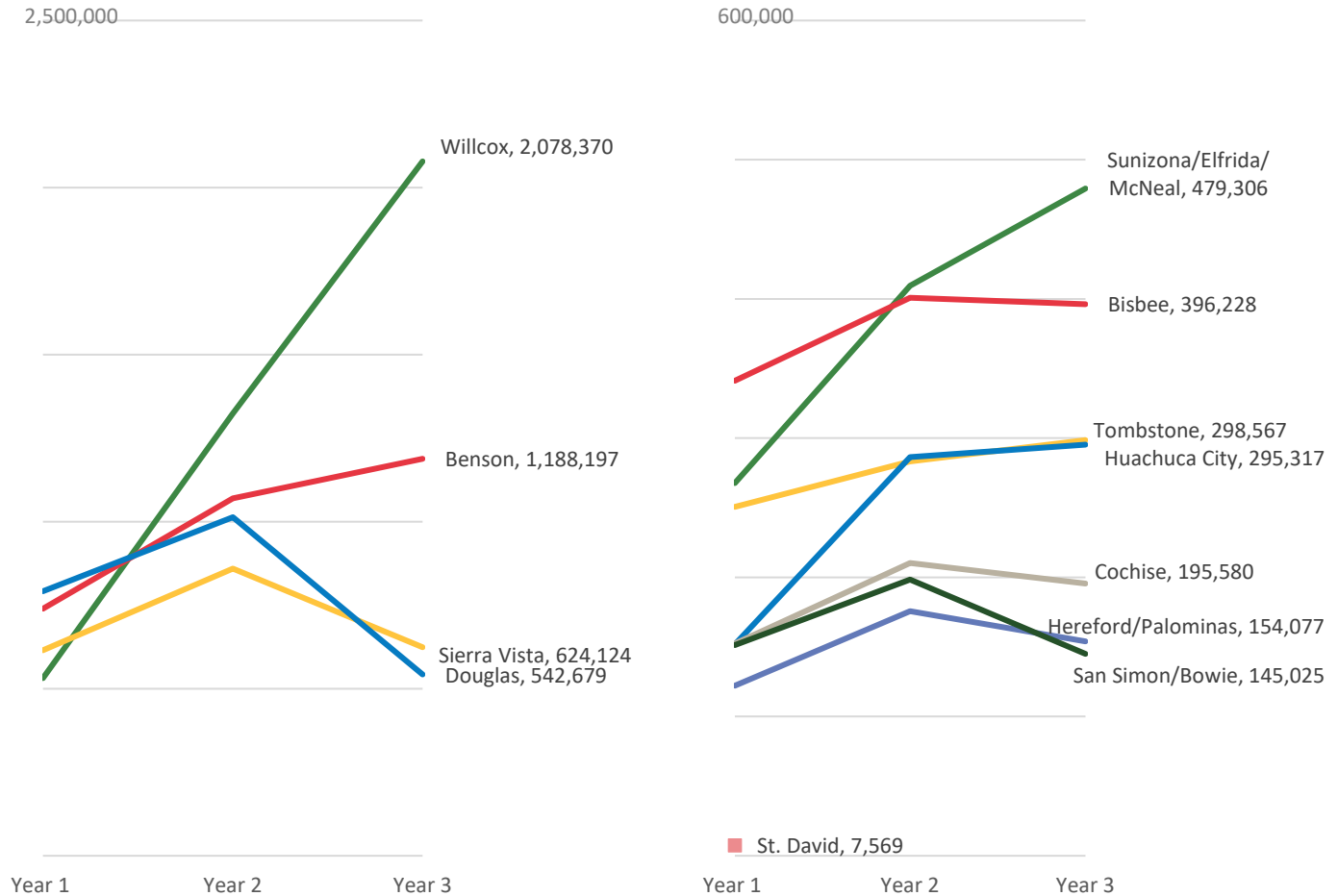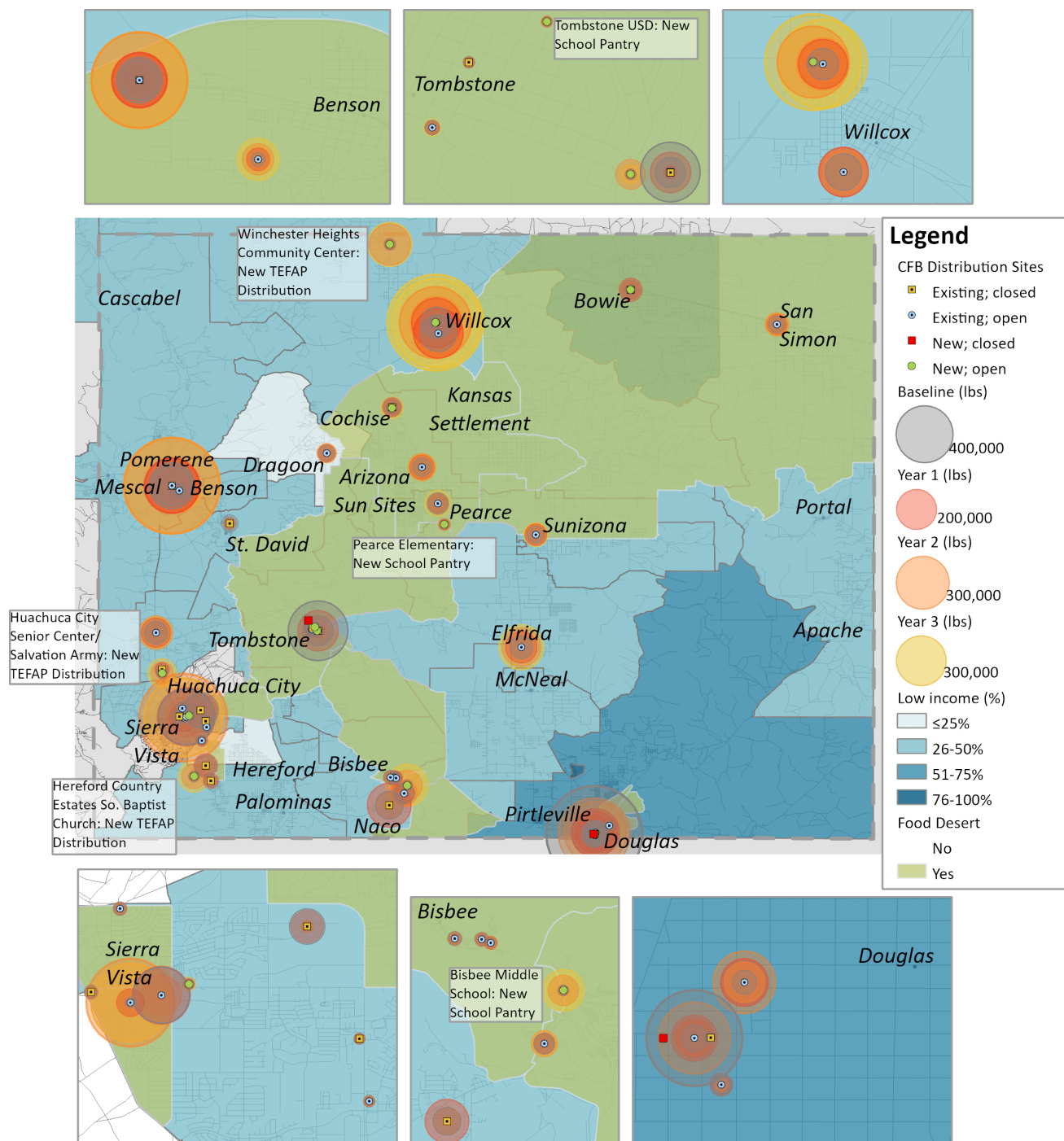

Source: Community Food Bank of Southern Arizona (2021). [Monthly Distribution data].

Those regions that saw increases in distribution across every year of the grant were the same communities where the most new distribution sites opened, often due in large part to the BHC initiative. In Tombstone, a school pantry opened at Tombstone High School (later managed by the district food services in the transition to mobile distribution during the pandemic). In Sunizona/Elfrida/McNeal, a school pantry opened at Pearce Elementary. Huachuca City opened a new pantry in the old senior center as a subsidiary of Tombstone Food Bank. Willcox had new distributions at the Winchester Heights Community Center, and, as the home of the main hub for CFB operations in Cochise County, the community also saw the largest increases in distribution during the pandemic. Conversely, in Sierra Vista and Douglas, most distributions happen through local partners, many of whom had decreased food distributions during the pandemic due to staffing and capacity challenges.

Map of Community Food Bank of Southern Arizona distribution sites and pounds of food distributed

At least half of all new sites that opened were located in food deserts or zip codes where half or more residents had incomes below 185 percent of the federal poverty guidelines.

Legend

CFB Distribution Sites
- ▣ Existing; closed
- ◉ Existing; open
- ■ New; closed
- ● New; open

Baseline (lbs)
400,000

Year 1 (lbs)
200,000

Year 2 (lbs)
300,000

Year 3 (lbs)
300,000

Low income (%)
- ≤25%
- 26-50%
- 51-75%
- 76-100%

Food Desert
- No
- Yes

Source: Community Food Bank of Southern Arizona (2021). [Monthly Distribution data].Mapped by the UA Cred Team.

Note: Food deserts are defined according to the USDA definition of a tract classified as both low-income and low-access (nearest grocery store is more than 1 mile away in urban areas or 10 miles away in rural areas). Low income is defined as living in a household with an income below 185 percent of the federal poverty guidelines. On this map, the circles correspond to the amount of food distributed. Sites with larger circles in yellow or orange saw growth during the grant period, while those with larger grey circles saw decreases compared to baseline.

While distribution increased throughout the grant in the county, the average number of households served per month and the number of distribution sites decreased during the pandemic. The number of households served increased by 13 percent between years one and two but fell back to year one levels during year three. Some of this decline may be due to changes in the way local food banks and pantries capture data as they changed their practices during the pandemic to protect clients and volunteers from disease transmission. The loss of some distribution sites in year three may also have impacted access to emergency food distributions and made it more difficult for some households to access these sites. The map above shows that the largest number of closed sites were located in Sierra Vista.

Households served by CFB and the number of distribution sites

Both the average monthly number of households served and the number of distribution sites were on an upward trajectory from year one to year two of the grant, but declined once the pandemic hit.

Left chart data points:
Year 1 (2018-19): 1,929
Year 2 (2019-20): 2,189
Year 3 (2020-21): 1,933

— Average households served per month

Right chart data points:
Dec-18: 41
Jun-19: 42
Dec-19: 46
Jun-20: 40
Dec-20: 35
Jun-21: 35

— Distribution Sites
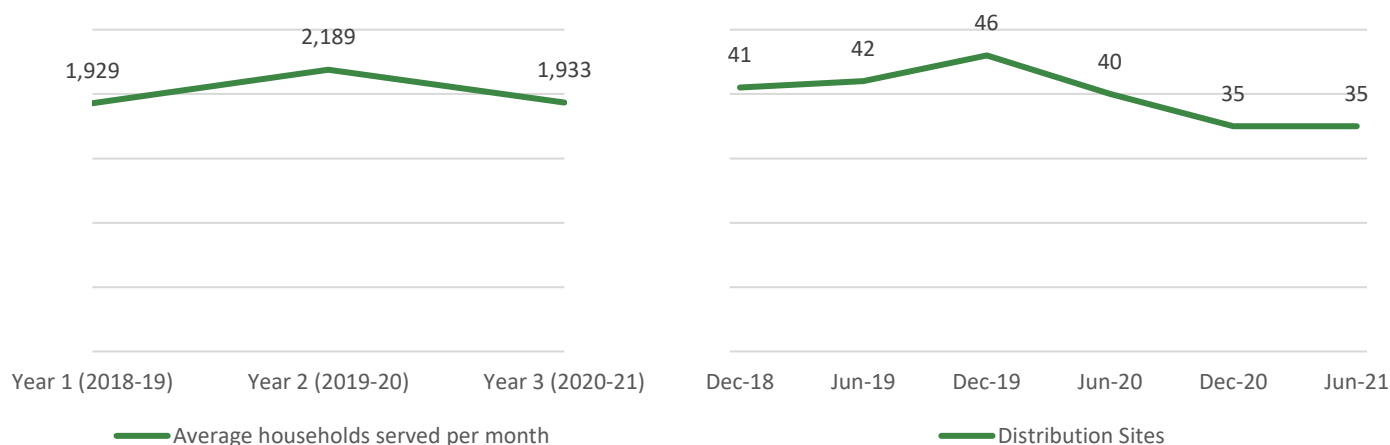
Monthly service data shows a sharp decline in households served from February 2020 to June 2020, followed by a plateau in 2020-2021.

Data points: 1,967; 2,108; 2,081; 2,379; 2,372; 1,902; 1,862; 1,816

- - 2015-2017 Comparison
— Cochise County Total

March 14, 2020

Year 1   Year 2   Year 3
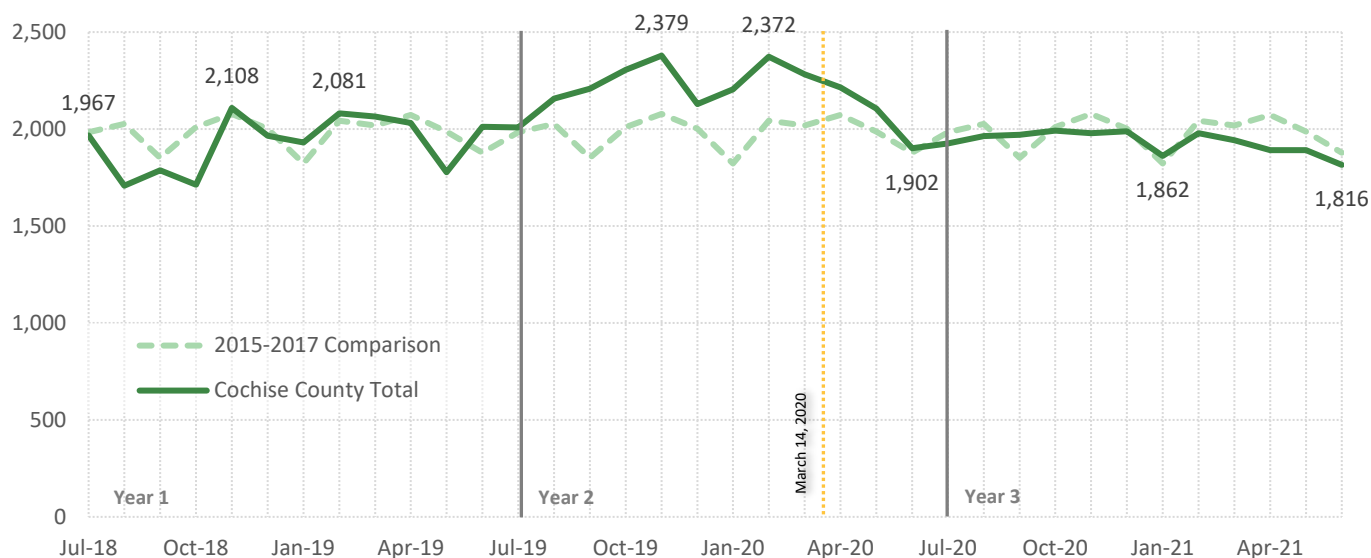
Source: Community Food Bank of Southern Arizona (2021). [Monthly Distribution data].

Borderlands Produce Rescue

Borderlands Produce Rescue is a non-profit organization based in Nogales, Arizona that diverts landfill-bound produce grown in Mexico to provide to communities in Arizona at a low cost through Produce on Wheels without Waste (P.O.W.W.O.W.) events. At P.O.W.W.O.W. events, individuals pay a flat fee of $12 to receive up to 70 pounds of fresh produce. Prior to the start of the BHC initiative, there were two monthly P.O.W.W.O.W. distribution sites in Cochise County in Sierra Vista and Huachuca City, but the Huachuca City site closed within the first year of the BHC initiative because the site sponsor could no longer host the distribution.

BHC staff met with the CEO of Borderland Produce Rescue during the first year of the BHC initiative to learn more about the process of sponsoring P.O.W.W.O.W. sites. Cochise Leadership Academy graduates and local Healthy Community Committees, supported by BHC staff, subsequently began to work with local community organizations and businesses to open new sites. By January 2020, the number of P.O.W.W.O.W. sites in Cochise County had more than tripled, with sites in seven of the 13 BHC regions. The pandemic unfortunately led to the closure of several sites that had been sponsored by local hospitals, due the strain the pandemic placed on healthcare resources and staff. However, despite the closure of sites in year three, the pounds of produce distributed increased every year of the initiative. Overall, over 1.2 million pounds of produce were distributed in the three years of the grant, which translates to an estimated 17,400 individuals served (assuming 70 pounds of produce per person).

Produce distribution through P.O.W.W.O.W. events

From 2018 to 2021, the pounds of food distributed through P.O.W.W.O.W. events in Cochise County increased by +40%.
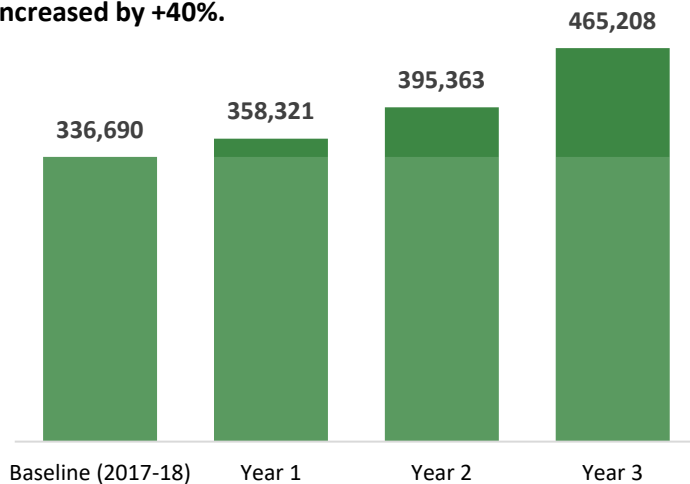
The number of P.O.W.W.O.W. sites was rapidly growing until the pandemic shuttered many hospital-based sites.
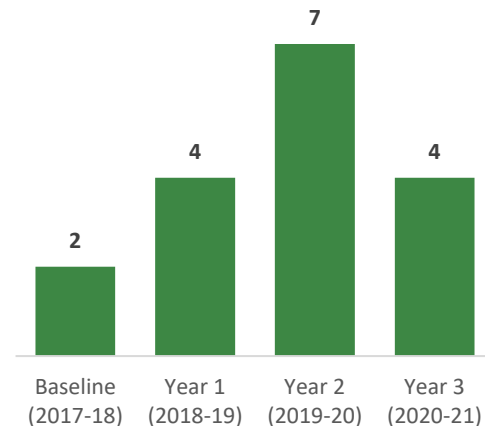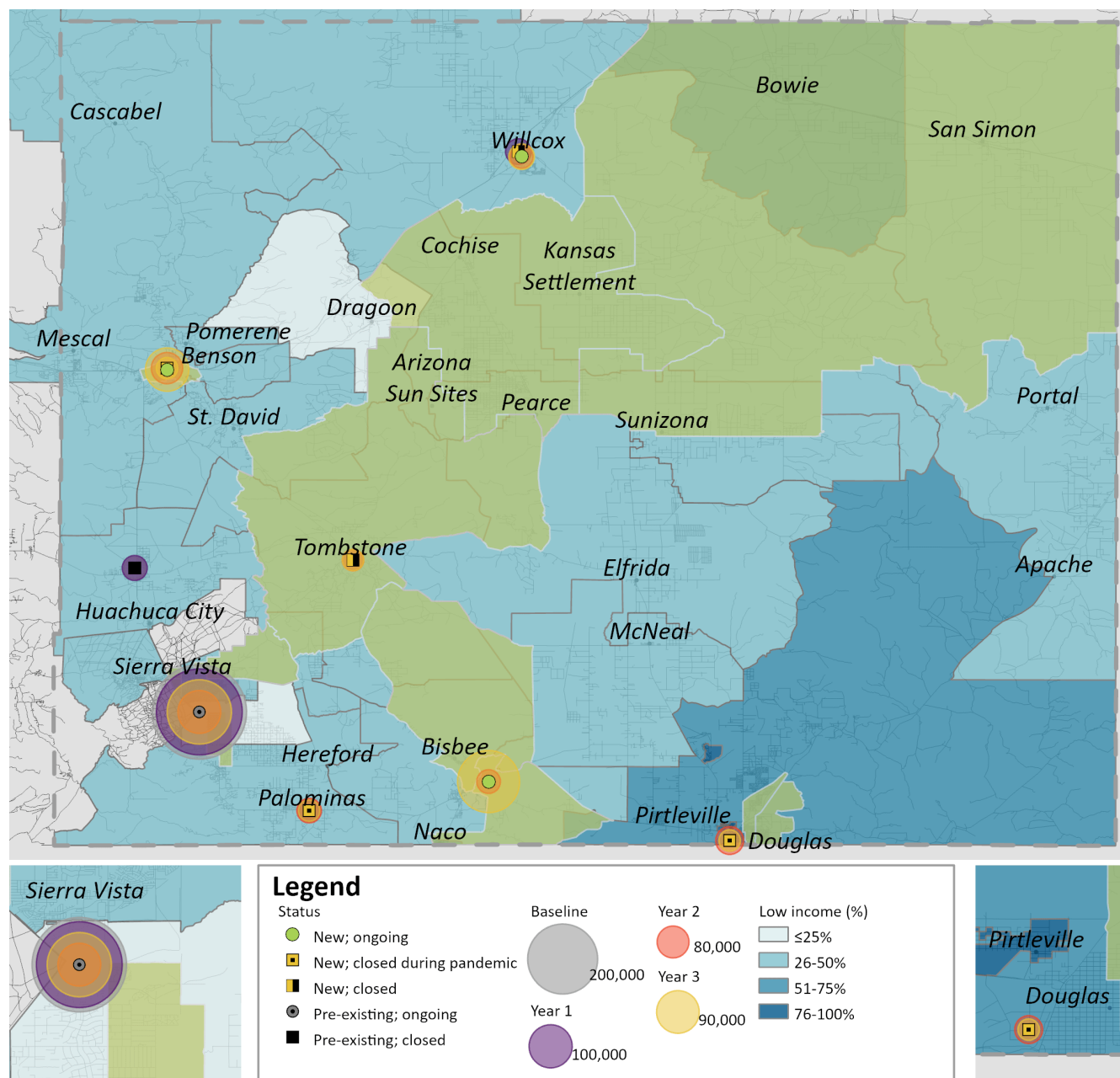

Borderlands Produce Rescue (2021). [Operations data]. Received through personal correspondence

Significantly, much of the growth of P.O.W.W.O.W. sites was concentrated in low income areas and food deserts. Of the eight new sites that opened during the course of the grant, five were located in food deserts or zip codes where more than half of residents had incomes below 185 percent of the federal poverty guidelines. Of the four currently operating P.O.W.W.O.W. sites, two (in Bisbee and Benson) are located in food deserts.

The majority of new P.O.W.W.O.W. sites that opened were located in food deserts or zip codes where half or more residents had incomes below 185 percent of the federal poverty guidelines. Over the course of the grant, the amount of produce distributed shifted from being concentrated in Sierra Vista to dispersed across the county.

*Borderlands Produce Rescue (2021). [Operations data]. Received through personal correspondence. Mapped by the UA CRED Team.*

Note: Food deserts are defined according to the USDA definition of a tract classified as both low-income and low-access (nearest grocery store is more than 1 mile away in urban areas or 10 miles away in rural areas). Low income is defined as living in a household with an income below 185 percent of the federal poverty guidelines. On this map, the circles correspond to the amount of food distributed. Sites with larger circles in yellow or orange saw growth during the grant period, while those with larger grey or purple circles saw decreases compared to baseline.

Gardening Initiatives

Beyond the distribution of free food through food banks and low-cost produce through P.O.W.W.O.W., the BHC team also supported the development of school and community gardens as both a source of locally grown and nutritious fresh produce and a teaching tool to help engage county residents in the food system and connect what they eat to their health. Much of the project's gardening efforts have focused on school-based gardens and the garden towers initiative, both of which are discussed in more detail in the **School Gardens** section below. However, the team has also supported the development and growth of several community gardens, including the Huachuca City Community Garden, where the effects of BHC staff support had wide ripples through the community.

Ripple Effects: Cultivate a Healthy Food System

Efforts in Huachuca City provide a meaningful example of how the BHC team provided technical assistance and fostered community partnerships to promote food access. With support from the BHC team, Huachuca City build a community garden next to the library. Once the garden was in place, BHC staff provided ongoing support and guidance, assisting with planning the garden, visiting biweekly during the growing season, and building connections in the community. These connections led to the distribution of 3,500 pounds of fresh vegetables from the garden in the summer of 2020. In response to COVID-19, distribution was targeted to the four federally-subsidized housing units in Huachuca City, with residents receiving fresh produce within two hours of being picked from the garden, along with recipes and cooking classes to learn ways to prepare the produce they received. The Huachuca City Community Garden developed several important partnerships through their collaboration with BHC staff, including with soldiers from Fort Huachuca, who assisted with building garden beds and rainwater harvesting systems, Benson Hospital, who developed signage on healthy eating to assist children in learning about the connection between gardening and healthy eating, and RAIN (Rural Activation and Innovation Network), who provided funding for a weather station utilized in youth education programs.
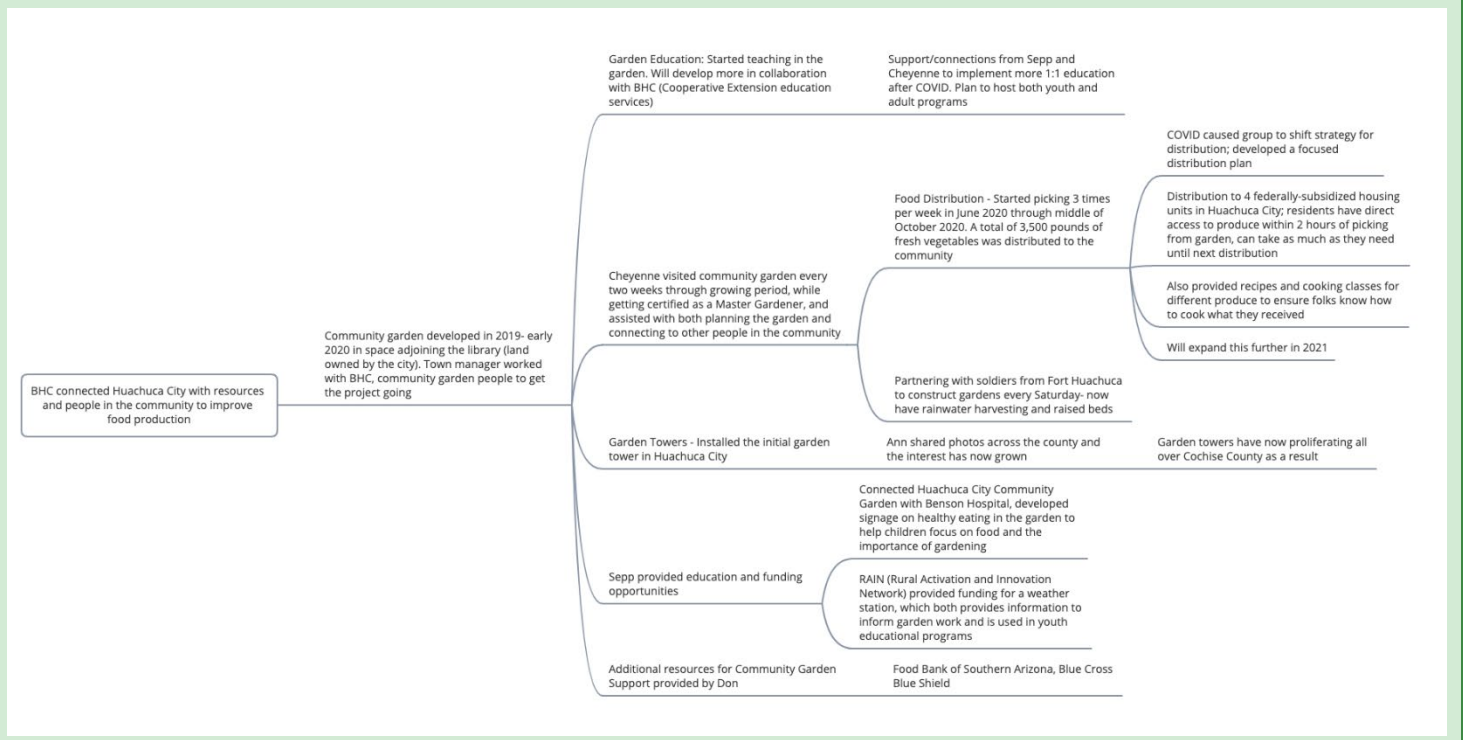
Strengthening the local food system

Over the course of the BHC initiative, staff have worked to compile a list of food producers in the county and build a network of relationships between producers and local community organizations. While the first iteration of the Cochise County Farmer Rancher list was compiled in year one of the grant, the impact of the networking work became clearer during the pandemic. The Cochise County Farmer Rancher List was used to help connect local producers to the USDA Farmers to Families Food Boxes program, which operated from June 2020 to May 2021.[15] A graduate of the Cochise Leadership Academy started an online networking group that led to the development of the Healthy Food Forum Network, a biweekly meeting of individuals interested in strengthening the local food system. Much of the work up to this point has focused on building networks and laying the foundation for future efforts, such as applying for Farm to School grants through the USDA. In the coming year and beyond, these networks will hopefully translate into new partnerships and funding opportunities for local producers.

BHC staff organized a Cochise County Food Bank/Pantry Appreciation Breakfast held on July 27, 2021 at the Discovery Garden on the University of Arizona Sierra Vista campus. Twenty-four guests, representing the Salvation Army, Community Food Pantry of Benson, Willcox Food Pantry, Bisbee Coalition for the Homeless, Bread Basket of Sunsites, Cochise College, Arizona Complete Health, Walmart of Benson, and Legacy Foundation attended. An assets and needs discussion was held that revealed a great need for forklifts, pallet lifts, refrigerated trucks, drivers, and HR management. Assets included a refrigerated truck, garden supplies from Walmart, and large refrigeration unit at the Tombstone Food Bank. The general manager of the Benson Walmart, who attended, will be supporting the memorial/meditation garden at Pomerene Elementary School by providing supplies identified in a wish list by BHC staff (e.g., benches, planters, plants, paint). Building on that event, a feasibility planning meeting to start a Cochise County Food Distribution Site comparable to the Community Food Bank of Southern Arizona is scheduled for March 4, 2022. This meeting is being organized by BHC staff, and will include representatives from county food pantries and community developers.

Nutrition Education

Targeted nutrition education programs provide education and professional development to support youth and adults who are at risk of food insecurity (e.g., in schools with a high proportion of children eligible for free and reduced lunch, or in low-income families). While nutrition education work is largely conducted via activities led by UA Cooperative Extension-Supplemental Nutrition Assistance Program Education (SNAP-Ed) and Extension Food and Nutrition Education Program (EFNEP) staff, the BHC team played a critical role in connecting SNAP-Ed and EFNEP staff with new community partners and opportunities to expand their nutrition education efforts across the county. BHC staff specifically assisted in developing new nutrition education sites at Pomerene Schools, Benson Unified School District, St. David Unified School District, San Simon, and Apache Highlands (CCHD school).

Recognizing the shifting focus of SNAP-Ed from an emphasis on direct nutrition education to also working on more systems-level changes (policy, systems, and environment or PSE work), it is also important to note the ways that BHC staff supported SNAP-Ed's systems-change efforts. One specific example of this work is the growing support SNAP-Ed staff provide for HCCs. By partnering with the Building Healthy Communities team to identify opportunities for more targeted support of healthy community committees, SNAP-Ed staff were able to work with two committees that were specifically focused on physical activity-related action plans – Step Up with Doulas and Healthy Willcox. SNAP-Ed provided comprehensive support to these local coalitions to make more sustainable changes, including through supporting meeting facilitation and planning, providing resources and connections to vital partners, and maintaining action momentum by continuing to reach out to and engage with members of the coalition. Step Up with Douglas physical activity focus moved from increasing the time lights are on at the public parks to adding promotional signage

around the parks to encourage people to do exercises and track their mileage in laps. Additional systems-change collaborations between BHC staff and SNAP-Ed staff in schools are noted in the following section.

Goal 3: Expand School Health Initiatives

Goal 3 Logic Model

Goal 3: Expand School Health Initiatives		
Strategy 4: School Health Liaison		

Short-Term	Medium-Term	Long-Term
-Children in county schools will understand where food comes from -Children will be more excited about eating fruits and vegetables -Increased percentage of schools with SHACs -Increased percentage of schools with SHIPs -Increased percentage of schools with Joint Use Policies to allow community use of school grounds	-School systems will use school garden food in their school breakfast/lunch menus, school food pantries and weekend school food backpack programs -School systems will serve more food prepared on site as a part of school breakfast/lunch menus -School systems will increase amount of time students are physically active during the school day -Increased number of facilities that offer summer meals through the summer food service program -Community members will be more physically active by using school grounds through use of Joint-Use agreements -Children will increase their consumption of fruits and vegetables	-School systems will identify root causes and make policy, systems and/or environmental changes to improve overall health in Cochise County Schools -Children and families in need have increased and sustained access to fresh produce and healthy foods across Cochise County

Community-wide efforts to transform health and wellness cannot exclude a focus on youth. Given that youth spend a preponderance of time in school settings, the Building Healthy Communities project chose to concentrate youth-focused efforts on school settings. In working to expand school health initiatives, Cochise BHC set out to increase both youth's understanding of where their food comes from and their excitement about eating fresh fruits and vegetables. This would be accomplished through school gardens and more locally-grown and prepared food making their way into school lunchrooms. The goal was that these efforts would ultimately lead to children eating more fresh produce in their daily diets. School health would also be enhanced through the proliferation of schools with School Health Advisory Committees (SHACs), which can unite staff, teachers, students, and parents together around school health policy and practices. These activities would all help support the long-term goal of making policy, systems, and/or environmental changes in Cochise County schools to improve health.

Youth Survey

A youth survey was designed in 2019 to be disseminated through schools to help provide a baseline picture of the attitudes and behaviors of Cochise students around topics central to the BHC goals: fresh fruits and vegetables, water and sugary drink consumption, physical activity, and screen time. This was intended to be the first phase of a longitudinal, county-wide survey of school children. Although the COVID-19 pandemic and resultant school shut down made the planned follow-up survey impossible, the 2019 survey was still an achievement in terms of providing a baseline picture of Cochise youth.
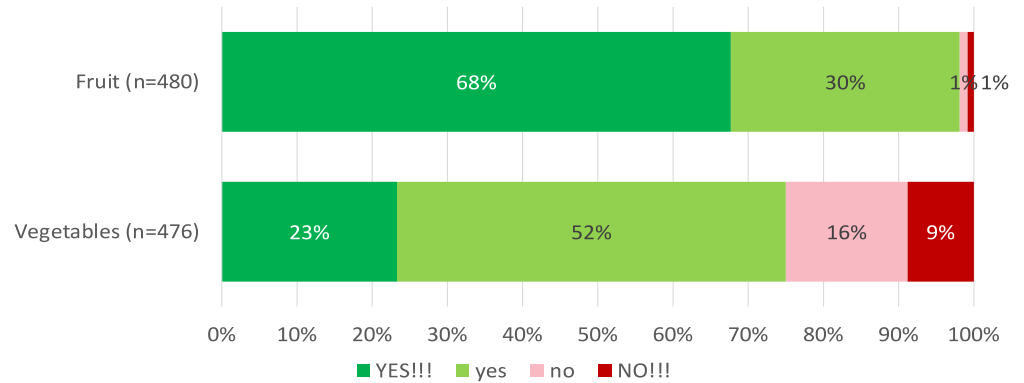
Nearly 500 (482) elementary and middle school students in eight communities (Benson, Bowie, Douglas, Hereford/Palominas, McNeal, Naco, St. David, Willcox) participated. The youth survey was disseminated to 5th and 6th grade students from Nov 2019 - Jan 2020. These grades were selected in an effort to reach students who were the most likely to be reached by school-based activities implemented by BHC staff and partner organizations. Results for all participating students are outlined below. Results disaggregated by community are presented in **Appendix 3**: School Survey Results.
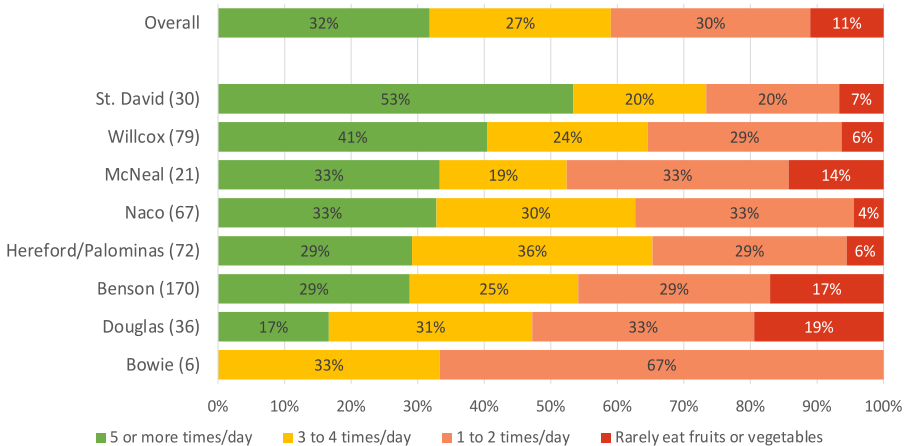
Survey results

Nearly all (98%) of students reported liking to eat fruit. Three-quarters (75%) reported liking to eat vegetables, although only about one-quarter (23%) reported an enthusiastic "yes!!" when asked if they enjoyed vegetables.

While most youth in Cochise report that they like eating fruits and vegetables...

Responses to "I like eating _____"

Category	YES!!!	yes	no	NO!!!
Fruit (n=480)	68%	30%	1%	1%
Vegetables (n=476)	23%	52%	16%	9%

Legend: ■ YES!!! ■ yes ■ no ■ NO!!!

... only about one-third of youth report eating fruits and/or vegetables five or more times a day.

Community	5 or more times/day	3 to 4 times/day	1 to 2 times/day	Rarely eat fruits or vegetables
Overall	32%	27%	30%	11%
St. David (30)	53%	20%	20%	7%
Willcox (79)	41%	24%	29%	6%
McNeal (21)	33%	19%	33%	14%
Naco (67)	33%	30%	33%	4%
Hereford/Palominas (72)	29%	36%	29%	6%
Benson (170)	29%	25%	29%	17%
Douglas (36)	17%	31%	33%	19%
Bowie (6)		33%	67%	

Legend: ■ 5 or more times/day ■ 3 to 4 times/day ■ 1 to 2 times/day ■ Rarely eat fruits or vegetables
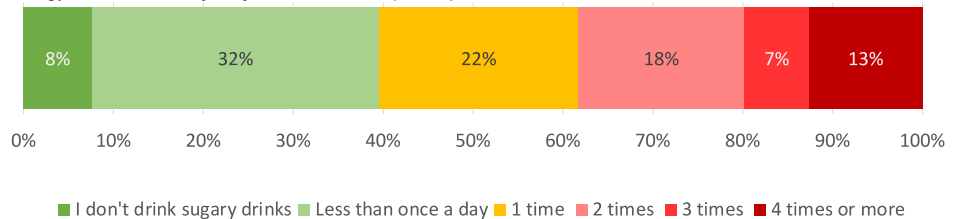
Number in parentheses shows the number of youth from that community who answered these questions

Despite these prevailing endorsements of fruits and vegetables, youth reported falling quite short on the goal of actually eating fruits and/or vegetables five or more times a day. Overall, that goal was met by about 1/3 of responding students (32%), but it varied by community. St. David had the highest rate, with over half (53%) reporting 5 times-a-day consumption, compared to only 17% in Douglas, and none among the 6 students surveyed in Bowie.
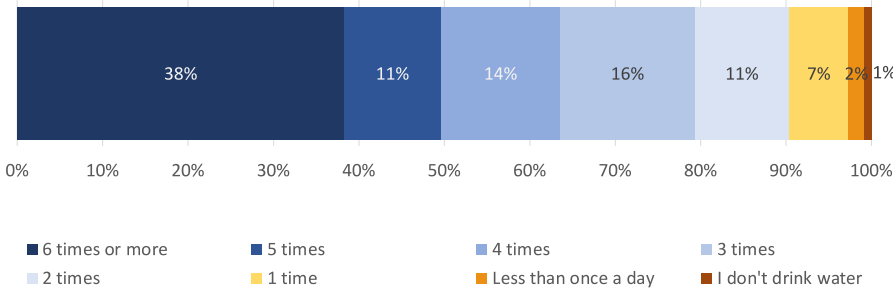
In terms of beverage consumption, over a third of students (40%) reported that they didn't regularly consume sugary drinks; however, a similar proportion of students (38%) reported drinking multiple sugary drinks per day.

Over a third of students (40%) reported that they didn't regularly consume sugary drinks; however, a similar proportion of students (38%) reported drinking multiple sugary drinks per day

Responses to "How many times a day do you usually drink regular (not diet) soda, sweetened iced tea, sports drinks, energy drinks, or other fruit-flavored drinks?" (n=476)

I don't drink sugary drinks	Less than once a day	1 time	2 times	3 times	4 times or more
8%	32%	22%	18%	7%	13%

Legend: ■ I don't drink sugary drinks ■ Less than once a day ■ 1 time ■ 2 times ■ 3 times ■ 4 times or more

Nearly two-thirds of students are drinking water at least 4 times a day.

| 38% | 11% | 14% | 16% | 11% | 7% | 2% | 1% |
0%   10%   20%   30%   40%   50%   60%   70%   80%   90%   100%

■ 6 times or more ■ 5 times ■ 4 times ■ 3 times
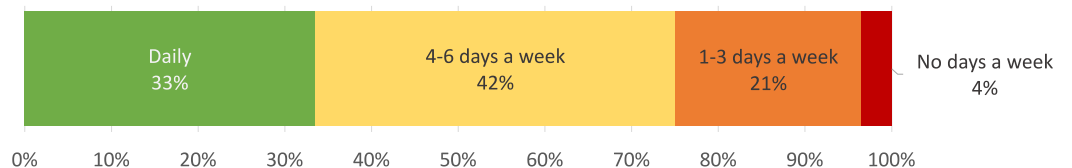■ 2 times ■ 1 time ■ Less than once a day ■ I don't drink water

Only 3% of students reported not consuming water regularly, and nearly two-thirds (63%) of students are drinking water at least 4 times a day. The BHC team helped implement the installation of hydration stations in schools and community areas. These stations have helped ensure that water is available for students in school and recreational areas (e.g., Douglas Aquatic Center).

With regard to physical activity, only 33% reported exercising daily. The largest group of students (42%) said they exercised 4-6 times a week, and 4% reported not exercising during a normal week.

Only one-third of youth report exercising daily.

Responses to "In a normal week, how many days do you exercise (including running, walking, biking, or skateboarding, sports team practice or game, dance class, other athletic event)?"

| Daily 33% | 4-6 days a week 42% | 1-3 days a week 21% | No days a week 4% |
0%   10%   20%   30%   40%   50%   60%   70%   80%   90%   100%

Most 5th and 6th grade youth in Cochise report at least 2 hours of screen time on school days

Most 5th and 6th grade youth in Cochise report at least 2 hours of screen time on school days

Responses to, "On a school day, about how many hours do you usually watch TV, play video or computer games, or use a computer or phone for something that is not school work? Your best guess is fine. (Count time spent playing games, watching videos, texting, using social media on your smartphone, computer, Xbox, PlayStation, iPad, or other tablet.)"

Usually no screentime on school days 10%

4+ hours 28%

An hour or less 27%

2-3 hours 35%
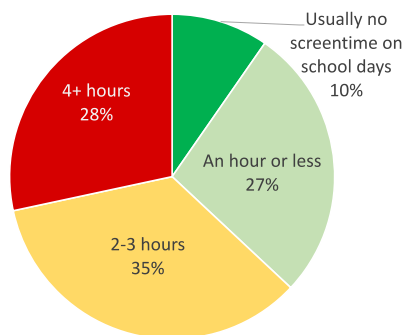
Screen time may take the place of exercise for some youth. Over a quarter of youth (28%) reported spending 4 or more hours engaged in recreational screen time activities per day. On the other hand, 10% of youth reported that the don't typically have any screen time on school days.

When asked what they thought would help make the school or broader community a healthier place, students voiced suggestions around:

- Better school food (generally)
- More variety/more fresh produce (in school and in community locations, e.g., grocers)
- Cleaner environment/more trash cans
- More recess time
- Other opportunities for physical activity
- Providing water/ more water sources
- PE classes (i.e., any, more frequently, longer duration)
- More kindness, less bullying, more security guards
- More playground equipment
- Longer lunch time
- Salad bar
- Gardens (school & community) and more plants/trees generally
- Improvements to physical activity infrastructure (e.g., improved playgrounds, new parks)

School Gardens

The BHC program supported an increase in active school gardens from 4 in 2018 at the start of the project to 9 active gardens in place and 12 additional sites interested in 2020. At that time, the school garden work was largely suspended due to staff, children, and volunteers not being able to tend to them during the time of COVID-19. Working with this challenge, BHC continued its ongoing work of partnering with schools to help

Over 2x as many school gardens in 2020, compared to 2018

distribute seeds to families. With seeds received from Community Food Bank of Southern Arizona, BHC and other community partners (including School Lunch Director and the Palominas Elementary SHAC members) packaged and distributed seed-to-garden resource kits and worked through summer food service programming to distribute the kits to 300 students and their families at Palominas Elementary School, Valley View Pre School, and Coronado Elementary School.
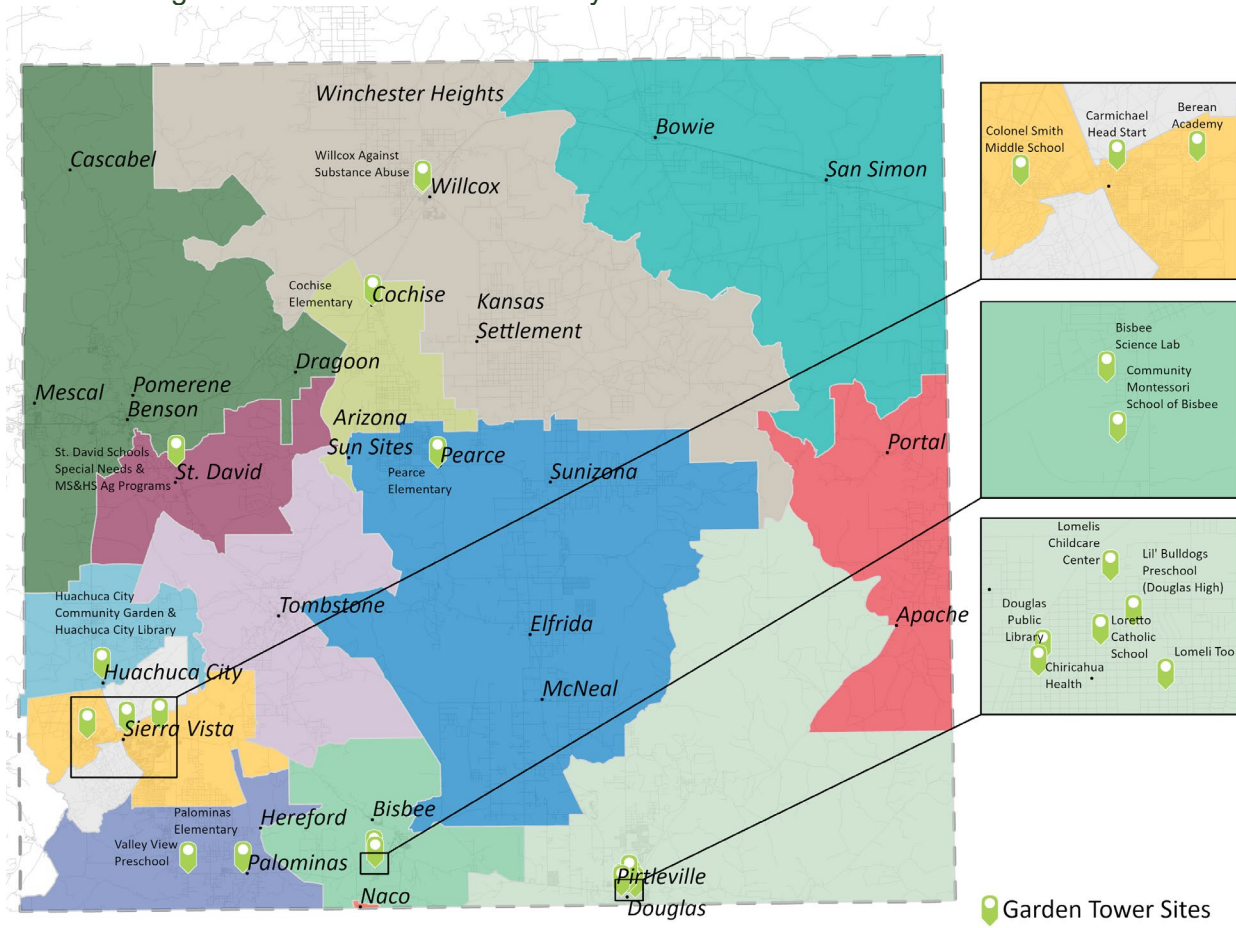

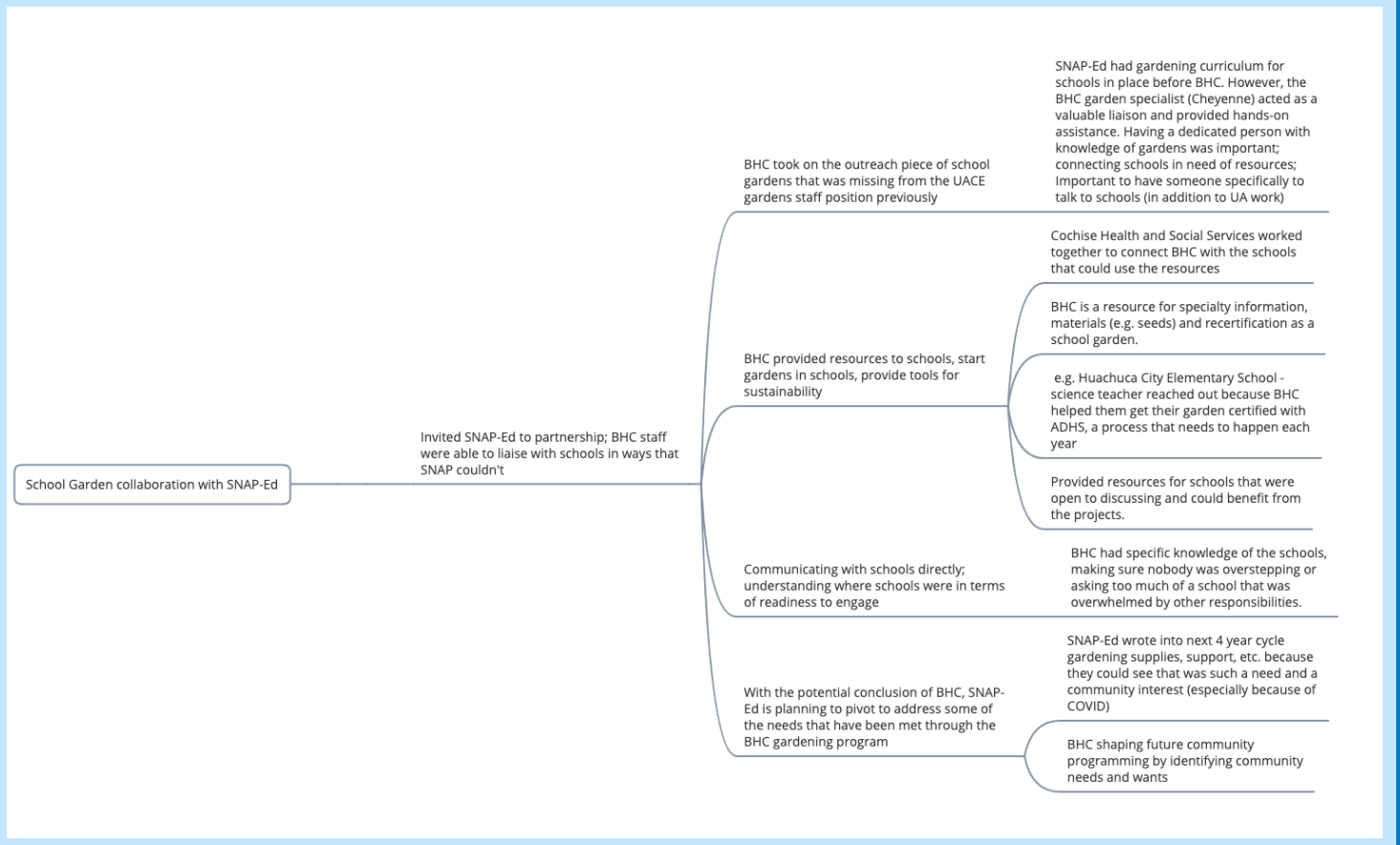22 new garden towers distributed, along with growing materials

In addition to traditional gardens, BHC has also focused efforts on introducing garden towers in community locations. Recipient schools and community locations were awarded a tower, along with seeds, potting soil, gardening information, and lesson plans. Between 2020 and 2021, BHC delivered 22 garden towers to school and community sites.

# Locations of new garden towers in Cochise County

Map of Cochise County showing garden tower site locations:

Main map labels (regions and towns):
- Cascabel
- Winchester Heights
- Bowie
- San Simon
- Willcox Against Substance Abuse
- Willcox
- Cochise Elementary
- Cochise
- Kansas Settlement
- Dragoon
- Mescal
- Pomerene
- Benson
- Arizona Sun Sites
- Portal
- St. David Schools Special Needs & MS&HS Ag Programs
- St. David
- Pearce
- Pearce Elementary
- Sunizona
- Huachuca City Community Garden & Huachuca City Library
- Tombstone
- Elfrida
- Apache
- Huachuca City
- Sierra Vista
- McNeal
- Palominas Elementary
- Hereford
- Bisbee
- Valley View Preschool
- Palominas
- Naco
- Pirtleville
- Douglas

Inset (yellow — Sierra Vista):
- Colonel Smith Middle School
- Carmichael Head Start
- Berean Academy

Inset (green — Bisbee):
- Bisbee Science Lab
- Community Montessori School of Bisbee

Inset (Douglas):
- Lomelis Childcare Center
- Lil' Bulldogs Preschool (Douglas High)
- Douglas Public Library
- Loretto Catholic School
- Lomeli Too
- Chiricahua Health

Garden Tower Sites

Ripple Effects: School Gardens

BHC's role as the backbone organization allowed them to expand upon work SNAP-Ed was doing in schools and increase outreach and engagement efforts related to school gardens in the county. While SNAP-Ed had existing garden curriculum for schools in place, BHC staff were able to build upon this curriculum and act as a liaison with schools, providing technical assistance and resources which promoted the sustainability of the gardens. Specifically, BHC staff assisted schools with the school garden certification process through Arizona Department of Health Services (ADHS), a process that happens each year. Given BHC staff's strong knowledge of different schools in the county, they were able to identify and engage new school garden sites, as well as provide targeted assistance based on schools' unique needs. BHC staff's efforts related to school gardens in the county have informed SNAP-Ed staffs' understanding of community needs and interests related to future community programming, and influenced their requests for future funding to support sustained school garden efforts.

School Garden collaboration with SNAP-Ed

Invited SNAP-Ed to partnership; BHC staff were able to liaise with schools in ways that SNAP couldn't

BHC took on the outreach piece of school gardens that was missing from the UACE gardens staff position previously

SNAP-Ed had gardening curriculum for schools in place before BHC. However, the BHC garden specialist (Cheyenne) acted as a valuable liaison and provided hands-on assistance. Having a dedicated person with knowledge of gardens was important; connecting schools in need of resources; Important to have someone specifically to talk to schools (in addition to UA work)

Cochise Health and Social Services worked together to connect BHC with the schools that could use the resources

BHC provided resources to schools, start gardens in schools, provide tools for sustainability

BHC is a resource for specialty information, materials (e.g. seeds) and recertification as a school garden.

e.g. Huachuca City Elementary School - science teacher reached out because BHC helped them get their garden certified with ADHS, a process that needs to happen each year

Provided resources for schools that were open to discussing and could benefit from the projects.

Communicating with schools directly; understanding where schools were in terms of readiness to engage

BHC had specific knowledge of the schools, making sure nobody was overstepping or asking too much of a school that was overwhelmed by other responsibilities.

With the potential conclusion of BHC, SNAP-Ed is planning to pivot to address some of the needs that have been met through the BHC gardening program

SNAP-Ed wrote into next 4 year cycle gardening supplies, support, etc. because they could see that was such a need and a community interest (especially because of COVID)

BHC shaping future community programming by identifying community needs and wants

School Health Advisory Councils (SHACS)

BHC worked alongside other Cooperative Extension partners in the support of School Health Advisory Councils (SHACs). Support includes a toolkit as well as financial support from the broader school health team. Beginning in the 2019-20 school year, stipends were given to SHACs as an entity rather than just a single individual Wellness Coordinator, to be used as funding support for their action plan goals. SHACs used these funds to purchase materials that supported their work, such as: bags for food pantry distribution, food from the POWWOW distribution to send home with students, gardening timers and supplies, health curriculum, and other small project needs. Prior to the pandemic, SHACs were active in most areas of the County (see map below). Some schools participate in a multi-school, district-wide SHAC while other schools run their own individual SHACs. A small number reportedly do both. At least 4 of these SHACs continued their work virtually during the pandemic (Palominas, Ash Creek, Huachuca City, and Sierra Vista). BHC staff noted that while SHACs put their previous SHAC work on hold during the pandemic, members continued working around the emergent health issues arising as a result of the COVID-19 pandemic, working on issues such as COVID mitigation and food delivery.

Schools with school-level or district level SHACs as of 2020
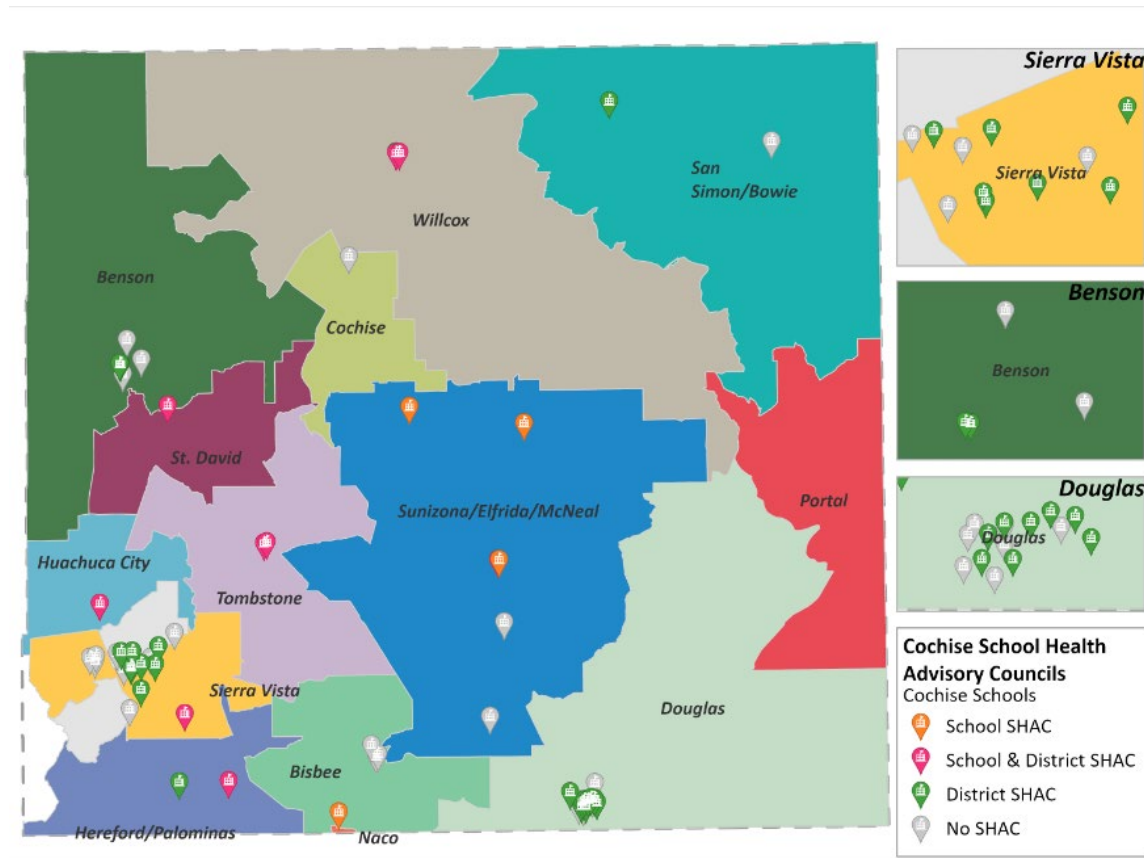
One early initiative of the BHC team was to create a Cochise County School Health and Wellness Award to recognize the work of exemplary SHACs. This program made two awards, one to Bowie and one to Palominas, before being sidelined by the pandemic. The hope is to revive this recognition program post-pandemic.

Joint-use agreements

While work on joint-use agreements, i.e., policies that enable school facilities to be opened for broader community use, was paused during the pandemic, pre-pandemic, the BHC had assisted Huachuca City in establishing a shared use agreement to allow community use of Huachuca City School's track.

School food pantries

To reduce food insecurity, BHC worked with communities and schools to establish new food pantries. Eight school food pantries were opened over three years: Pearce Elementary School, three Tombstone District Schools (Walter J. Meyer Elementary School, Tombstone High School, and Huachuca City School), two Cochise College locations (Douglas campus and Sierra Vista campus), the Winchester Heights Community Center, and the Bisbee Boys and Girls Club. Additional pantries are planned for Valley Union High School in Elfrida and Sarah Marley Elementary School in Douglas.

Hydration Stations in Schools

Through the HEAL's effort to put hydration stations in schools, students and school employees were able to fill their own water bottles, giving a healthy alternative to vending machine options. The 6 sites with electronic counters are all in use. The pandemic and related closures meant that these stations were not accessible for many months, but there were still the equivalent of 44,155 bottles (20z) filled since installation across the county. The most used station was at the Boys and Girls Club of Bisbee, with 14,208 bottles filled since installation. Note that there are two stations in Elfrida Elementary School.
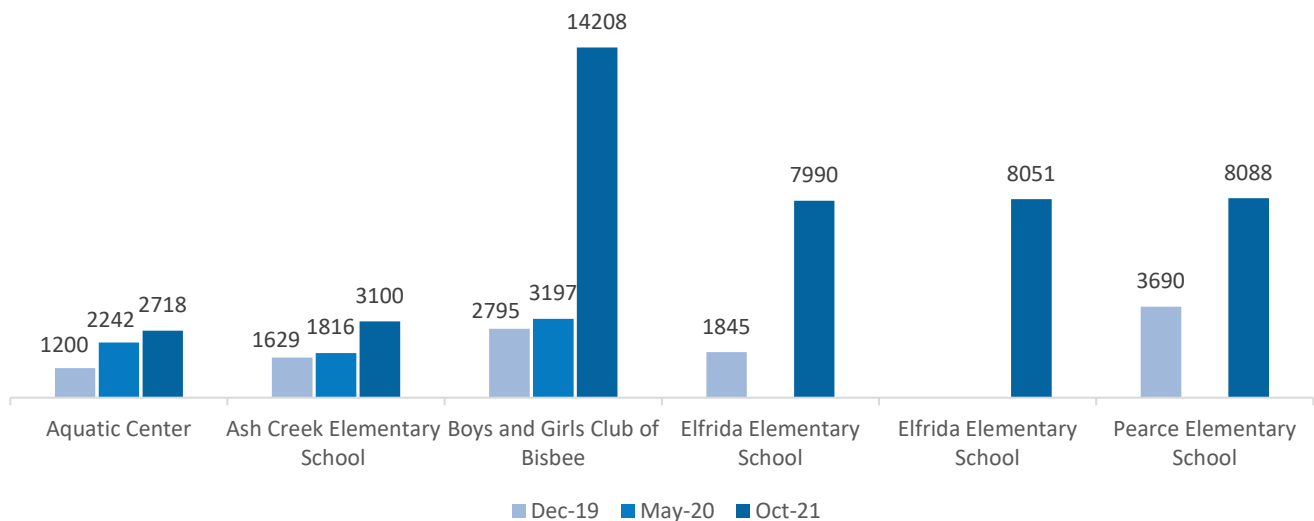
Ripple Effects: Hydration Stations

The hydration stations were an example of how the BHC as a backbone organization was able to expand a countywide initiative by leveraging their connections and community knowledge. BHC staff not only promoted hydration stations and oversaw the application process, they also expanded the program and assisted with identifying particular communities in Cochise County most in need who would benefit from hydration stations, promoting an equitable approach to mobilizing resources. This included in Sunizona, Elfrida, and Pearce, where schools did not have drinkable water prior to installing hydration stations. The hydration stations helped expand access to safe, clean drinking water in these communities and others. SNAP-Ed then built upon the work of BHC and others, providing education opportunities and training for schools that received hydration stations to promote their use. In Douglas, hydration stations have been an important resource in parks, building upon work that was done to keep the lights on at night to promote more usage of the park, the hydration stations are a critical resource for soccer leagues and other park users.
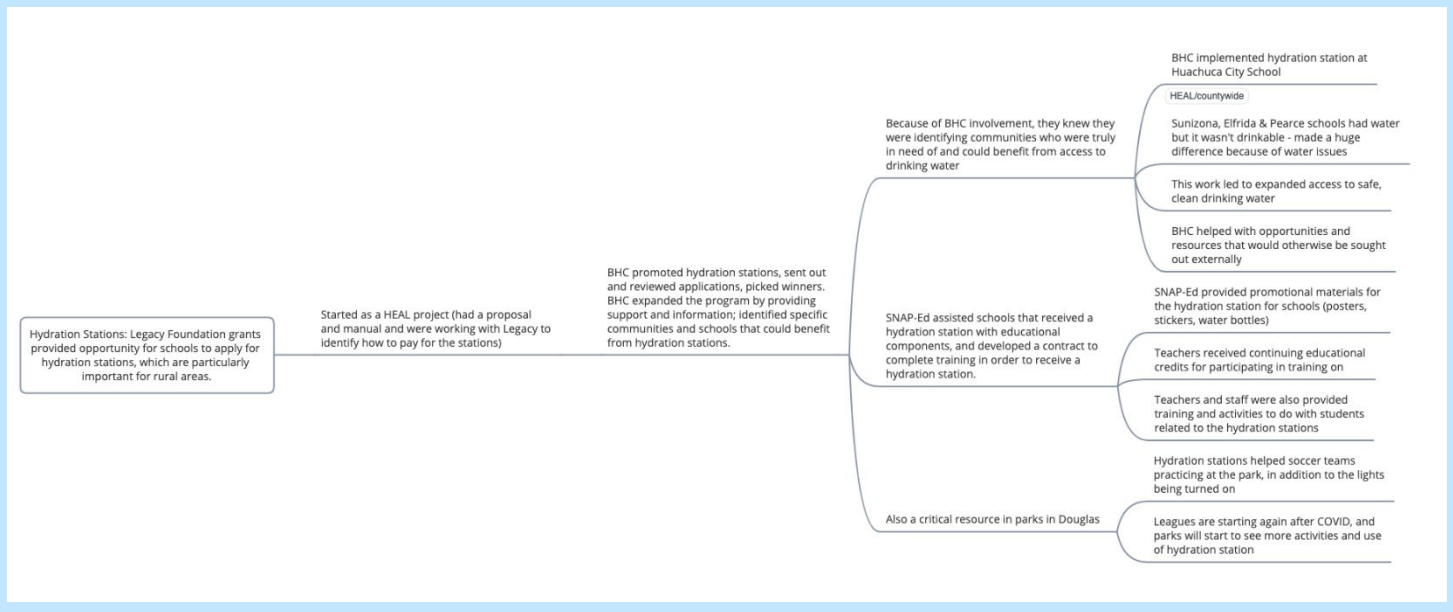
Coordination, Collaboration, and Communication

By being embedded in the Cochise County School Superintendent's Office (CCSSO), the BHC school wellness champion has been able to make and grow numerous relationships that support the goal of improving the health of students. Throughout the grant period, BHC has worked closely with SNAP-Ed, EFNEP, the Cochise County Health Department, and Cochise County School Superintendents Office as a collaborative school health team. One product of this partnership is their Mesquite Pod newsletter, distributed to subscribers across the county bimonthly (for archived newsletters, please see: https://us19.campaign-archive.com/home/?u=678422620fb2bab4525112264&id=46aef4258d). The newsletter highlights local activities and physical fitness resources, recipes, grant and learning opportunities for schools, and more.

The school health team also developed a Cochise County School Health Advisory Committee data and demographics spreadsheet to address an identified gaps in information. This centralized information source can now be used to develop strategies for county-wide school health improvement, to understand area coverage and school needs, and to guide formal and informal partners in strategic plan development. This tool became especially relevant during the pandemic, enabling the school health team to plan and implement a new countywide SHAC guide and conduct online outreach to schools (e.g., Brain Breaks, the county-wide School Newsletter, the county-wide ECE face mask project, and the live School Health Workshop Series). Similar data-coordination efforts were enacted around a database of school learning modalities during COVID (e.g., hybrid, in-person, fully remote), the Cochise County Farmer Rancher List, and school food service programs.

Another example of vital coordination efforts came from a similar information gathering and sharing effort during the pandemic. BHC and the CCSSO served as a clearinghouse for information on school meal programs when schools were working remotely. A central spreadsheet was created and shared that tracked which districts were participating in what ways (e.g., drive through options, drop off options). This information was disseminated publicly through channels such as the Cochise County Cooperative Extension Facebook site, the CCSSO site, the Legacy Foundation, and the Emergency Operations Center.

In addition to these central, regular points of coordination and collaboration, the BHC school health team excelled at reaching out to potential stakeholders and collaborators and making connections with approximately 50 community, state, and national organizations and agencies. These relationships help BHC access data, increase their knowledge base, bring resources to schools, and fortify strategies to expand active living and healthy eating.

A final highlight of collaborative work enhancing school health initiatives is in the integration of multiple health-focused sessions in the annual Cochise County School Superintendent's Innovation in Education Conference. For 3 years, BHC and other school health team members have presented to educators from across Cochise County on key health topics. BHC has also been instrumental in helping or organize and execute these interdisciplinary conferences.
The conference, which had 176 (virtual) attendees representing every district in Cochise in 2021, included courses offered by BHC, and Cooperative extension programs on:

Year	Title	Presenters
2021	The Benefits of Yoga in the Classroom	Dr. Donna Jagileski
2021	The Impact of Food Insecurity in the Classroom	Rhegan Derfus, Daniella Reidmiller, Sepp Sprietsma
2021	Become a School Health Champion [SHAC promotion]	Daniella Reidmiller, Rheagan Derfus, Sepp Sprietsma
2020	Be a School Health Champion [SHAC promotion]	Daniella Riedmiller, Rheagan Derfus
2020	Let's Eat! Nudging Students to Make Healthier Choices	Andrea Bernal, Joseph Sprietsma
2020	Sustainable School Gardens	Cheyenne MacMasters, Elizabeth Tyndall,
2020	Traumatic Brain Injury: Identifying students and helping them succeed.	Charlotte Taylor, Deanna Bellinger, Bryce Taylor

In addition to the presentations, the conference also offered an opportunity for BHC to disseminate Ag in the Classroom materials in 2018.

Early Care & Education (ECE)

Health promotion activities in early care and education facilities have been spearheaded by UA Cooperative Extension colleagues in SNAP-Ed and EFNEP and supported by BHC staff and resources. Accomplishments include:

- Pre-pandemic, there were four active ECE gardens (Huachuca City Elementary School, Community Montessori School of Bisbee, Sarah Marley (preschool), Douglas HS (ECE program)), with three additional ECE sites planning gardens.

- 18 ECE sites have been recognized as "breastfeeding friendly" by the Cochise County Breastfeeding Task Force.

- A multi-agency group formed the *ECE Collaboration* and continued to meet regularly online during the pandemic to help address the needs of Early Childhood Providers and encourage healthy eating and active living at all ages. The ECE Collaboration offers Professional Development in the form of *Talk-o Tuesdays* via Zoom. Talk-o Tuesdays run for 2 hours and offer providers from around the county 1 hour of free, online professional development. The second hour focuses on collaboration between the ECE providers as they socialize and share information.

- After prior unsuccessful efforts to organize an ECE SHAC, one positive change during the COVID-19 pandemic is the formation of the of Early Childhood Education Health Advisory Committee. This group functions similarly to a multi-site SHAC. In the past, providers were unenthusiastic about this idea as it felt like an additional requirement on top of a long list. Due to the issues from COVID-19 and the connections from engaging in Talk-o Tuesdays, providers now see it more as an opportunity to engage, brainstorm, share, and problem-solve together.

- Also during the pandemic, 18 ECE sites were supplied with laminated safety posters, thermometers, PPE and sanitizing supplies, and assistance developing new COVID-19 protocols for Family Style Meals.

Efforts to Support Comprehensive Wellness

The BHC team has also flexed to include additional activities that promote school wellness that were not on the radar screen at the time of the initial proposal. One key example of this was the county-wide stock inhaler project, an effort to have schools keep inhalers on hand that can be used in the event of a medical emergency. BHC partnered with Benson Hospital, Copper Queen Hospital, and Chiricahua Community Health to purchase the medication and obtain a medical signature for all schools. As the organizing force, the BHC school health team created school kits and managed the process.

A related emergent need was around masks at the onset of the pandemic. The school health team was instrumental in helping to ensure the safety of early care and education (ECE) providers by working with Benson Hospital to purchase

nearly 3,500 clear face masks and distributing them to ECE providers across Cochise County. Clear masks are especially beneficial in ECE environments, where children with developing language skills benefit from being able to see the lip movements when their caregivers are speaking.

Also born of need during the pandemic was the implementation of a weekly county-wide school briefing involving the CCSSO, Health Department, EOC, and Chiricahua Community Health. BHC shared the weekly briefings conducted by the University of Arizona with the CCSSO and hospital staff (from Benson Hospital, Copper Queen, Northern Cochise Community Hospital, and Chiricahua Community Healthy) which helped create a framework for the Cochise briefings; this was particularly helpful given that the county health director and other key health department personnel had recently left their positions. These weekly briefings helped lead schools to policy changes around COVID-19, transportation, school lunch mobile distribution, communication with health department officials, communication with communities, access to PPE, access to rapid COVID-19 tests, and development of the school staff vaccine roll out.

Ripple Effects: School Health Initiatives

BHC's role in mobilizing resources and fostering community connections to support school health initiatives is seen in their collaboration with Benson Hospital. Prior to working with BHC staff, Benson Hospital had minimal interaction with Benson schools. BHC staff initially connected Benson Hospital staff with the Benson Youth Movement's backpack program, focused on addressing youth hunger, which led to Benson Hospital providing funding for the initiative. That program led to the idea to start food pantries in the schools, which Benson Hospital assisted in implementing. The hospital also donated inhalers to support the Rescue Inhaler Program in the schools. In response to the pandemic, Benson Hospital provided staff to conduct COVID-19 testing of teachers and other staff in schools. This helped reduce the impact of testing on classroom engagement, mitigating the amount of time and travel required to get tested and the need for substitute teachers while tests were being processed. Through collaborations developed with BHC staff and HCCs, Benson Hospital staff also set up special vaccination times for schools to ensure staff had access to vaccines. Benson Hospital, BHC, and the Legacy Foundation also collaborated to provide 9,000 clear face shields for every early childhood education organization in the county. Staff from Benson Hospital and Benson Schools now talk several times per week and the superintendent of Benson Unified School District now sits on the Benson Hospital board, promoting the opportunity for ongoing collaborations.
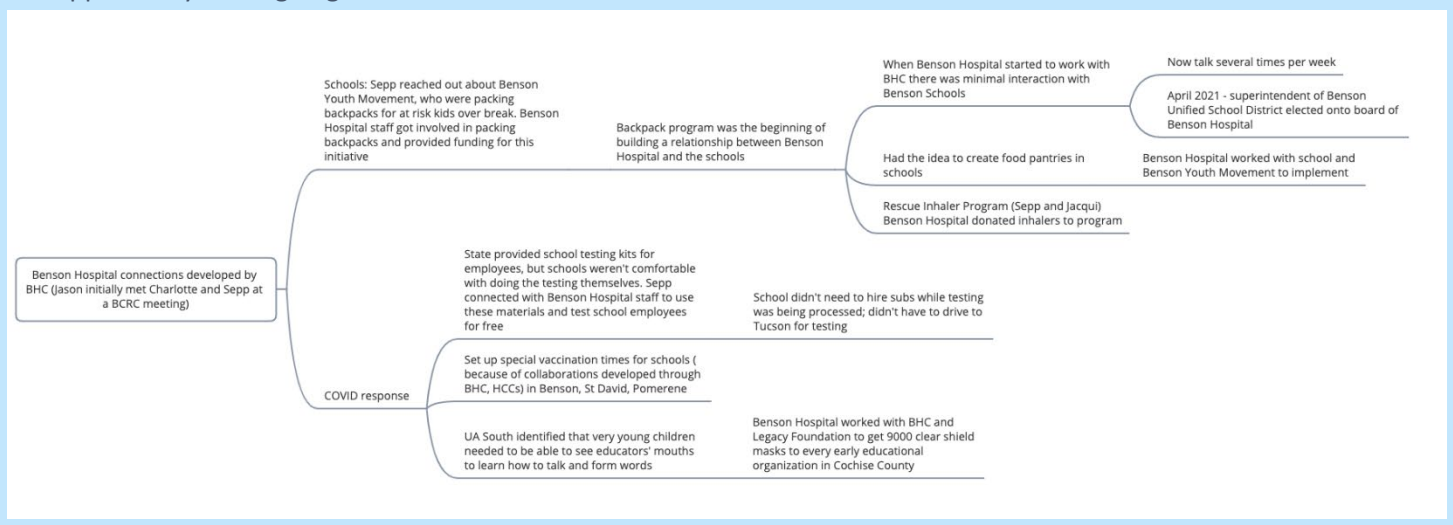
Evaluating Collective Impact Design and Implementation

The BHC initiative relies on strong collaboration between the University of Arizona Cooperative Extension (UACE) as the "backbone" coordinating organization, the other original initiative partners (Cochise County Health and Social Services, Cochise County Superintendent of Schools, and the Community Food Bank of Southern Arizona) and numerous, cross-sector community partners. A primary goal for the early years of the initiative was to strengthen existing relationships and develop new collaborations across the county in order to focus collectively on improving the social determinants of health. This aligns with the beginning of most collective impact initiatives when energy is focused on raising public awareness and investment in the issue, increasing capacity through partnerships and funding, and formalizing the collective impact infrastructure.[16]

Evaluating progress towards these early collective impact design and implementation goals is primarily developmental in nature. Developmental evaluation focuses on collecting data and reporting it in real-time to inform conversations and decision-making around program design and implementation.[17] To that end, CRED met regularly with the BHC partners to provide data for program planning and adjustment as it became available over the course of the initiative (see **CLA Mentor Survey**, above, as an example of how the BHC team used data to adapt their efforts). The following sections will describe the CRED team's more formalized developmental evaluation efforts to measure how the collective impact infrastructure was designed and implemented in the first three years of the initiative, number two in the graphic below.
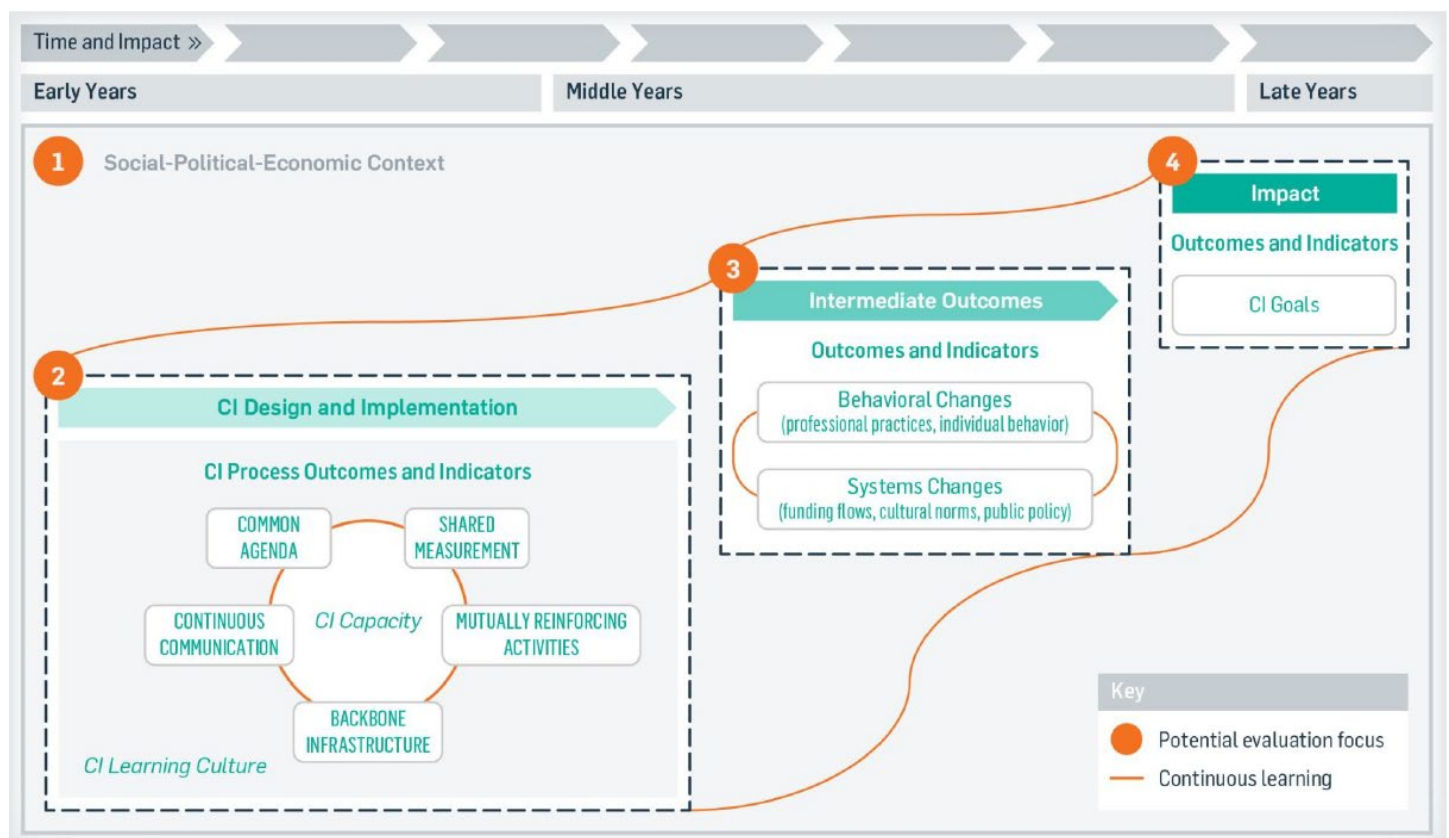
Source: Preskill, H., Parkhurst, M., & Spansky Juster, J. (2014). Guide to Evaluating Collective Impact. Collective Impact Forum. FSG: Washington, DC

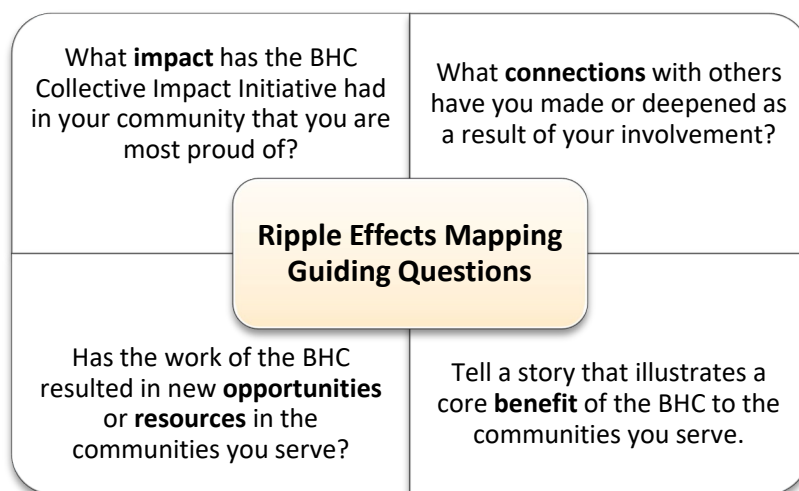The following evaluation questions guided these efforts:

- What is developing or emerging as the BHC initiative takes shape?

- What about the BHC process merits more attention or changes?

- How should the BHC initiative adapt in response to changing circumstances?

- What seems to be working well and where is there early progress?

- How are the relationships developing among BHC partners?

- How are partners and the Cochise community responding to the BHC initiative?

Answering these questions requires creative qualitative and quantitative methodology. The CRED team employed two evaluation methods in the third year of the initiative focusing on the collective impact capacity and process: ripple effects mapping (REM) and modified social network analysis (SNA). CRED compiled a comprehensive list of community partners who were mentioned in previous Legacy reports. The list was then reviewed with BHC staff to inform the modified social network analysis (SNA) as well as to create a list of participants for REM and SNA.

Ripple Effects Mapping (REM)

Ripple effects mapping (REM) is a structured focus group methodology that engages community members and stakeholders in a participatory process of mapping both intended and unintended consequences, or ripple effects, of an initiative.[18] Ripple effects mapping has been noted as a useful strategy specifically for evaluating collective impact initiatives because it documents social capital, an essential component needed to successfully launch and maintain a collective impact initiative.[19]

CRED facilitated a brainstorming session with the BHC team to create groupings of community partners based on location and strategy that could optimally generate back-and-forth dialogue during the mapping sessions. Three, two-hour-long REM sessions were held in May 2021 including a group involved in county-wide health initiatives (n=8); a group working in Wilcox, Benson, and Winchester Heights (n=5); and a group working in Douglas, Elfrida, and Pearce (n=3). For COVID-19 safety and to encourage participation across geographic locations, the sessions were held remotely via Zoom. Participants were provided with guiding questions for the ripple effects mapping sessions, as well as an overview of the BHC initiative, including BHC projects and staff, to ensure a common understanding of BHC for the REM discussions.

What **impact** has the BHC Collective Impact Initiative had in your community that you are most proud of?

What **connections** with others have you made or deepened as a result of your involvement?

Ripple Effects Mapping Guiding Questions

Has the work of the BHC resulted in new **opportunities** or **resources** in the communities you serve?

Tell a story that illustrates a core **benefit** of the BHC to the communities you serve.

At the beginning of each REM session, participants paired off for "appreciative inquiry" in which they interviewed each other using the guiding questions. Returning to the larger group, the pairs each shared a story from their interviews, and other participants were encouraged to add detail or offer supporting comments. As the participants shared their stories, the facilitators diagramed the chains of effects shared using a mind mapping software called XMind.[20] Facilitators also

asked probing questions to encourage participants to think further about the intended and unintended consequences of the efforts discussed. The process in its entirety allowed participants to reflect on the extent of the BHC work that has been accomplished and envision what is possible for the future of their work.[21]

A unique ripple effects map was developed for each of the three sessions. Session participants had an opportunity to review and provide feedback on the maps before they were finalized to ensure their thoughts were captured. Copies of the final maps were also made available to session participants to utilize in their own program planning and funding processes. After finalizing each session map, a larger combined map was developed to represent common themes and impacts across communities and strategies. An example of a session map is provided below. Images of each of the maps can be found in **Appendix 4**: Ripple Effects Maps, along with links to online versions of the maps for easier viewing and navigation.
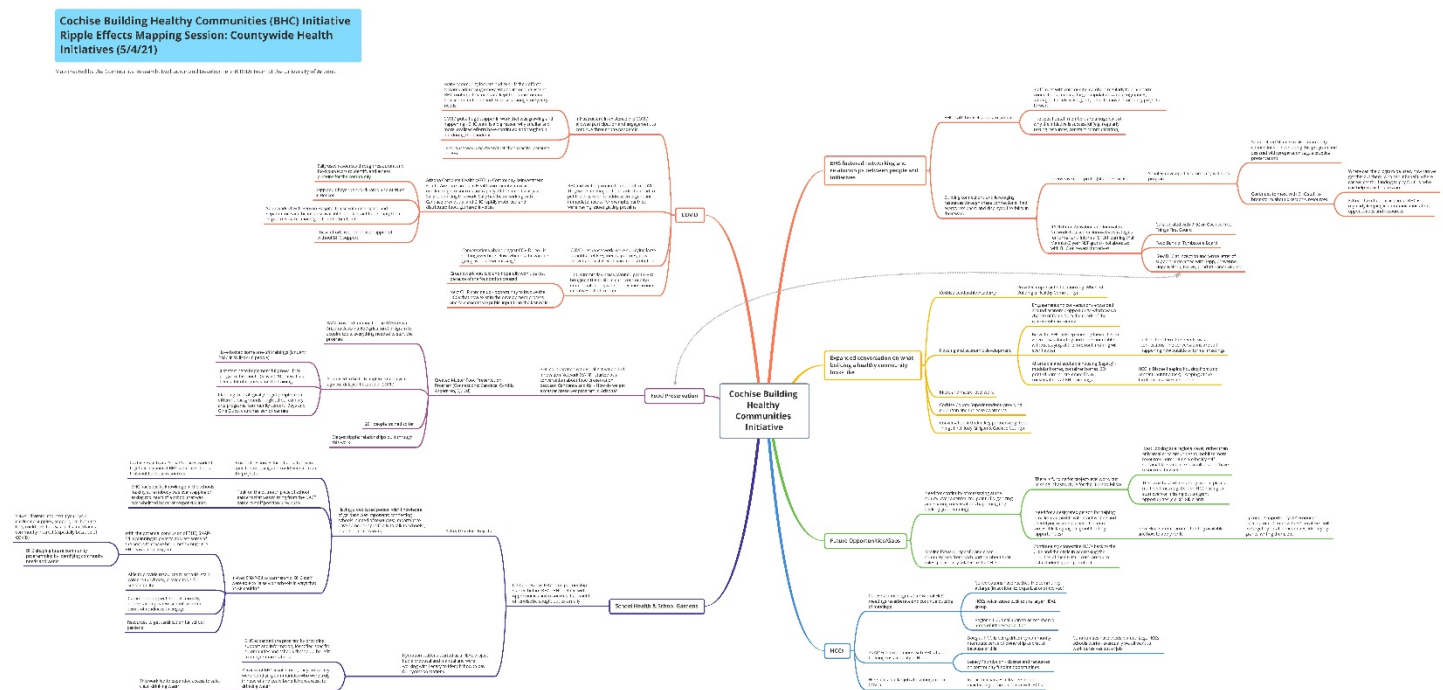
Post-Session Evaluation: Eleven of the 16 REM participants completed a post-session evaluation survey. Participants found the session to be worth their time (mean = 3.5 on a scale from 1-4) and said they would recommend participating in a similar session to friends and colleagues (mean = 3.5 on a scale from 1-4). Participants thought that the maps could be useful for planning future programming, especially addressing needs that are currently being met by BHC; planning for the upcoming Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP); sharing with leadership and committee members to stimulate excitement and ideas; and showcasing how rural communities come together to meet place-based needs.

Results: After merging the maps into a combined map, results were coded based on BHC activities. Ripple effects related to different BHC activities have been highlighted in callout boxes throughout this report - **Ripple Effects: Healthy Community** Committees (HCCs),

Ripple Effects: Cochise Leadership Academy, **Ripple Effects: Cultivate a** Healthy Food System, **Ripple Effects**: Hydration Stations, **Ripple Effects**: School Gardens, **and Ripple Effects:** School Health Initiatives**.**

To capture the explicit role of BHC staff in the intended and unintended outcomes conveyed by participants, results were also coded based on the six common activities of backbone organizations in collective impact initiatives: guide vision and strategy, advance policy, mobilize resources, build community engagement, support aligned activities, and established shared measurement practices.[22] Key themes are highlighted below. Though the ripple effects maps were not intended to capture all efforts of the BHC Initiative, they provide a snapshot of the areas of strength and opportunities for growth for the BHC team moving forward. Overall, results conveyed the BHC team's strengths in mobilizing resources, building community engagement, and supporting aligned activities. Efforts to guide vision and strategy and advance policy were acknowledged to a lesser extent. Though shared measurement system efforts were not noted in the maps, members of the BHC team are currently working with CRED on creating a set of recommendations for the development of a shared measurement system in Cochise County, which is discussed further in the **Recommendations & Next Steps**.

In coding the data, additional emergent themes were identified related to the 'essential intangible elements for success' in collective impact, developed by the Collective Impact Forum. Participants spoke to all four elements when discussing the BHC initiative, highlighting BHC staff's role in relationship and trust building, fostering connections between people, leadership identification and development, and creating a culture of learning.[23]

Ripple Effects Mapping Findings Coded by the Six Common Activities of Backbone Organizations

Guide vision and strategy	BHC staff expanded conversations about what building a healthy community looks like in Cochise County. This included their work advocating for the importance of social determinants of health, and particularly economic opportunity and affordable housing, as critical issues to address. In pivoting to respond to COVID-19, the team both supported pandemic response efforts and ensured that healthy eating and active living remained as part of the common agenda for the county.
Advance policy	In addition to efforts related to healthy eating and active living, participants spoke specifically about BHC's role in advancing policy related to transportation, health care access, and affordable and equitable housing.
Mobilize resources	Across the sessions, the importance of BHC staff in identifying and mobilizing resources was clear. This included assisting community members with finding grant funding to support their healthy eating active living initiatives, facilitating connections between community partners in need of resources and others that could provide them, and ensuring that resources were targeted towards communities with the greatest need.
Build community engagement	Efforts related to the Healthy Community Committees and Cochise Leadership Academy highlighted the team's role in engaging community members in promoting healthy eating and active living. In addition to providing technical training and resources, the team empowered individuals in Cochise County to feel they have the ability to create change in their communities.
Support aligned activities	Participants referred to BHC's role in 'bridging capital' – facilitating new collaborations across the county. For multiple initiatives, the team played a critical role in creating connections, recruiting and convening key community stakeholders to align their efforts, and fostering cross-sector partnerships aligned in the same goals.

Social Network Analysis (SNA)

Social network analysis (SNA) is a process of analyzing patterns in relationships between members of a social system. A modified SNA was chosen to show how BHC has influenced cross-sectoral partnerships, which are essential to moving the needle on complex, community problems. They also help create a more sustainable initiative by diversifying funding streams, perspectives, and opportunities for action. The BHC team identified key partners active in each of the six main strategies to participate in an online survey rating their relationships with the other organizations in that strategy. The following partnership strength scale, adapted from collaboration theory,[24] was used in the survey. Note that collaboration includes essential elements of collective impact including a common agenda, continuous communication, and shared decision-making.

1 - Networking: You are aware or the organization but have minimal direct communication and no joint projects.

2 - Cooperation: You communicate with this organization, but information is shared spontaneously/informally rather than during regular meetings or official processes. You may have joint projects and work towards similar goals, but decisions are made independently.

3 - Coordination: You communicate with this organization often to share information and resources. You have similar goals and joint projects where roles are clearly defined and there is some level of shared decision-making.

4 - Collaboration: Your organizations have shared goals/agendas. Communication between organizations is frequent and both formal and informal. Decisions on joint projects involve voices of members from both organizations or seek consensus across organizations.

The survey also included a section assessing how well the initiative achieved key aspects of collective impact in its first three years. Each construct was measured with four to seven survey questions adapted from FSG's Guide to Evaluating Collective Impact and the following scale: *Thinking across the BHC strategies you have been involved in, to what extent do you think the following goals have been achieved? (4- Substantially, 3- Moderately, 2- Slightly, 1- Not at all, 0- I don't know).*

The survey was distributed to 34 key partners representing 30 local organizations; four BHC staff and 15 partner organizations responded to the survey in July and August 2021. Twelve of the 15 participants represented organizations that had been involved in healthy eating, active living, and/or food access initiatives in Cochise County since before 2018; 12 of the 15 participants had also been personally involved in these initiatives since before 2018, while three became involved in 2019.

Results: Below are three SNA maps for Strategy 3: Cochise Leadership Academy (CLA). Using line size, opacity, and color, the maps describe relationships between organizations in 2018, in 2021, and the changes in strength between 2018 and 2021. Partner organizations are also coded by sector (node colors) to show how inter- and intra-sectoral relationships developed during the Legacy Foundation grant period. Appendix 5: Social Network Analysis Maps[OBJ].

2018 Partners Working in Strategy 3: Cochise Leadership Academy (CLA)

## 2021 Partners Working in Strategy 3: Cochise Leadership Academy (CLA)
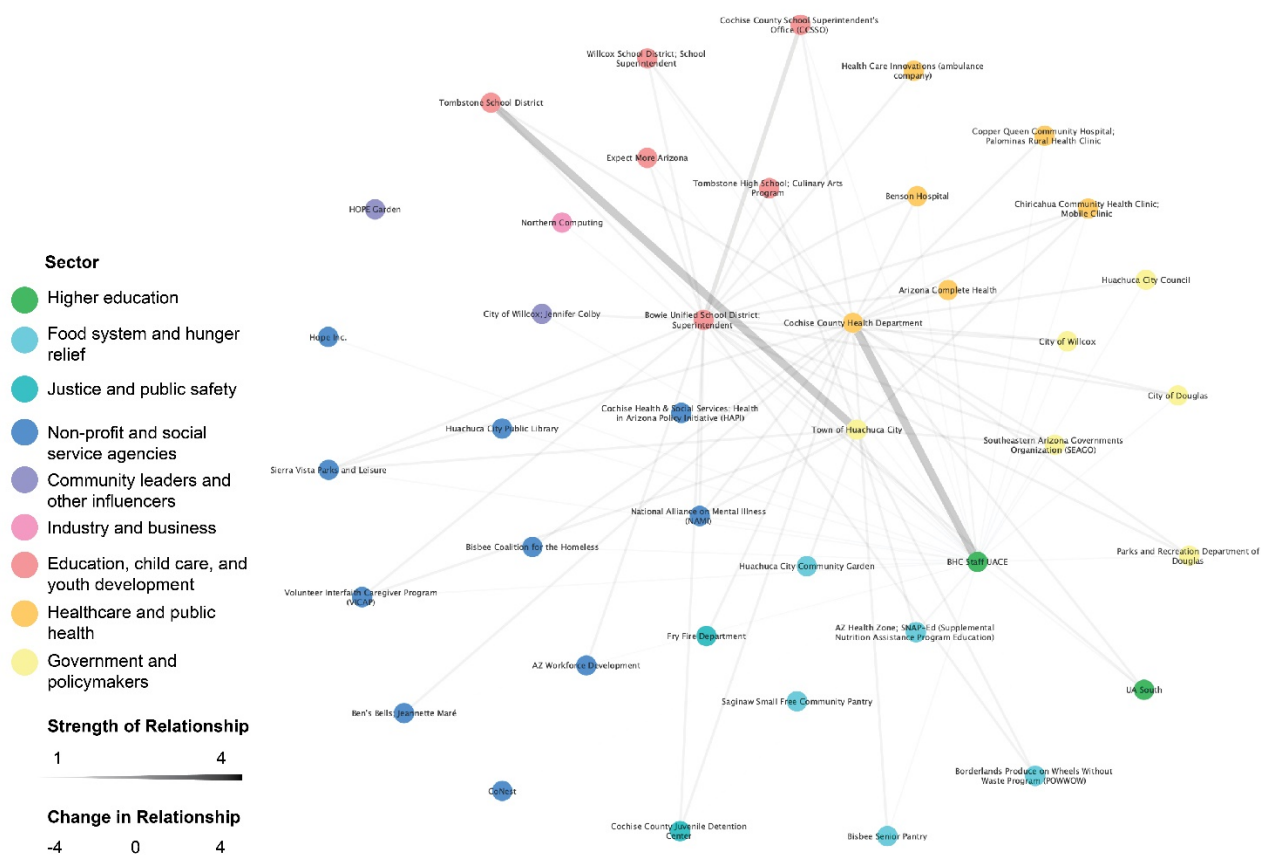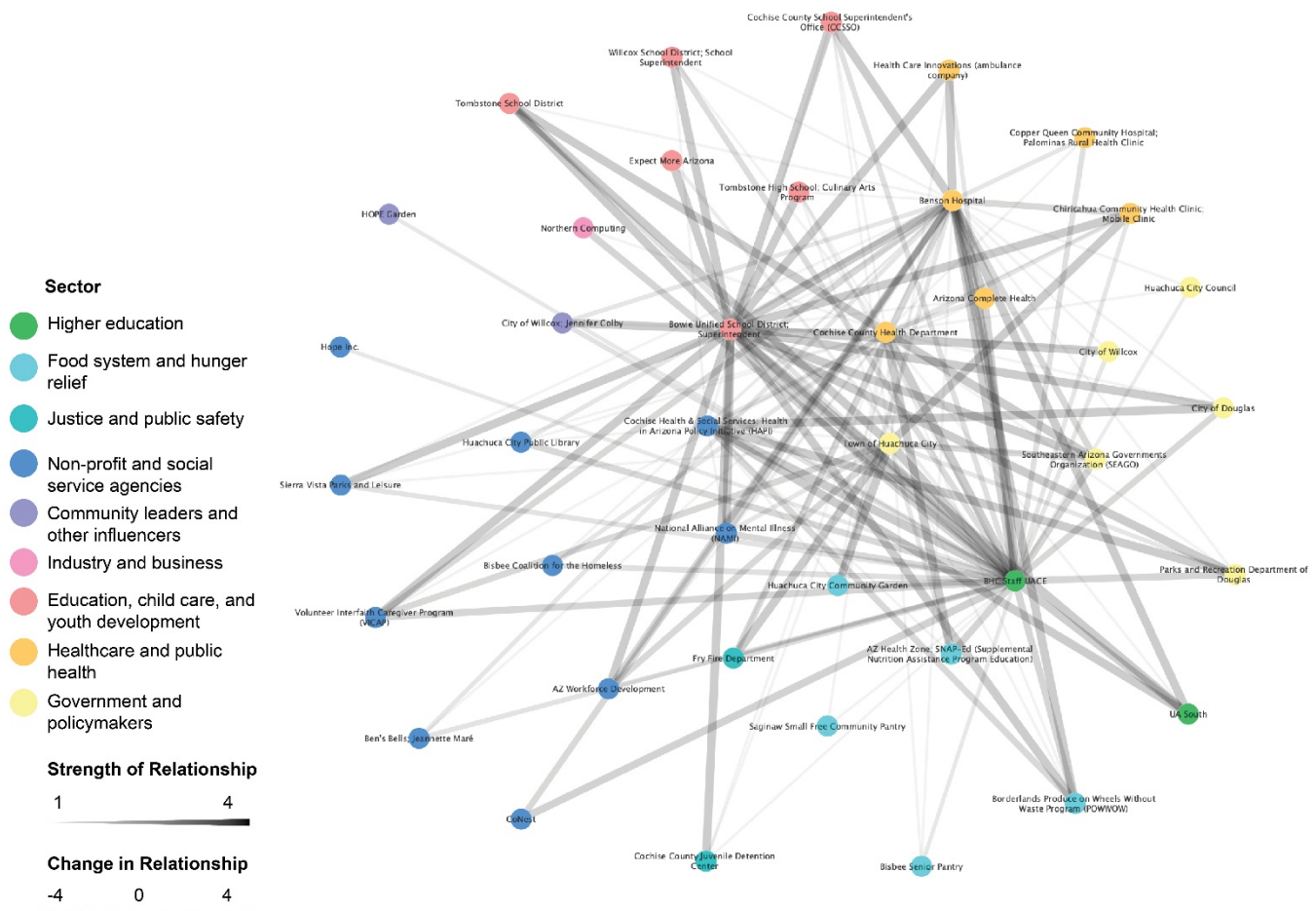
From the first map to the second, there are 64 new and 66 darker connecting lines, indicating more and stronger partnerships in 2021. As CLAs were a product of the BHC initiative, relationships identified in 2018 represent the baseline of community partnerships that were already working towards leadership, nutrition, and physical education goals in the county. The 2021 map illustrates how working on CLA affiliated activities helped create and strengthen relationships considerably.

In the 2018 map, there are three organizations with no connections. For example, CoNest (located at the bottom left of the map in dark blue) is actually a non-profit organization created by a CLA graduate during the grant period. In the 2021 map, 118 lines connect nodes of different colors, indicating numerous cross-sectoral partnerships. In this strategy alone, 41 relationships are rated as "collaborative."

2018- 2021 Change in Partnerships Working in Strategy 1: Healthy Community Committees (HCCs)
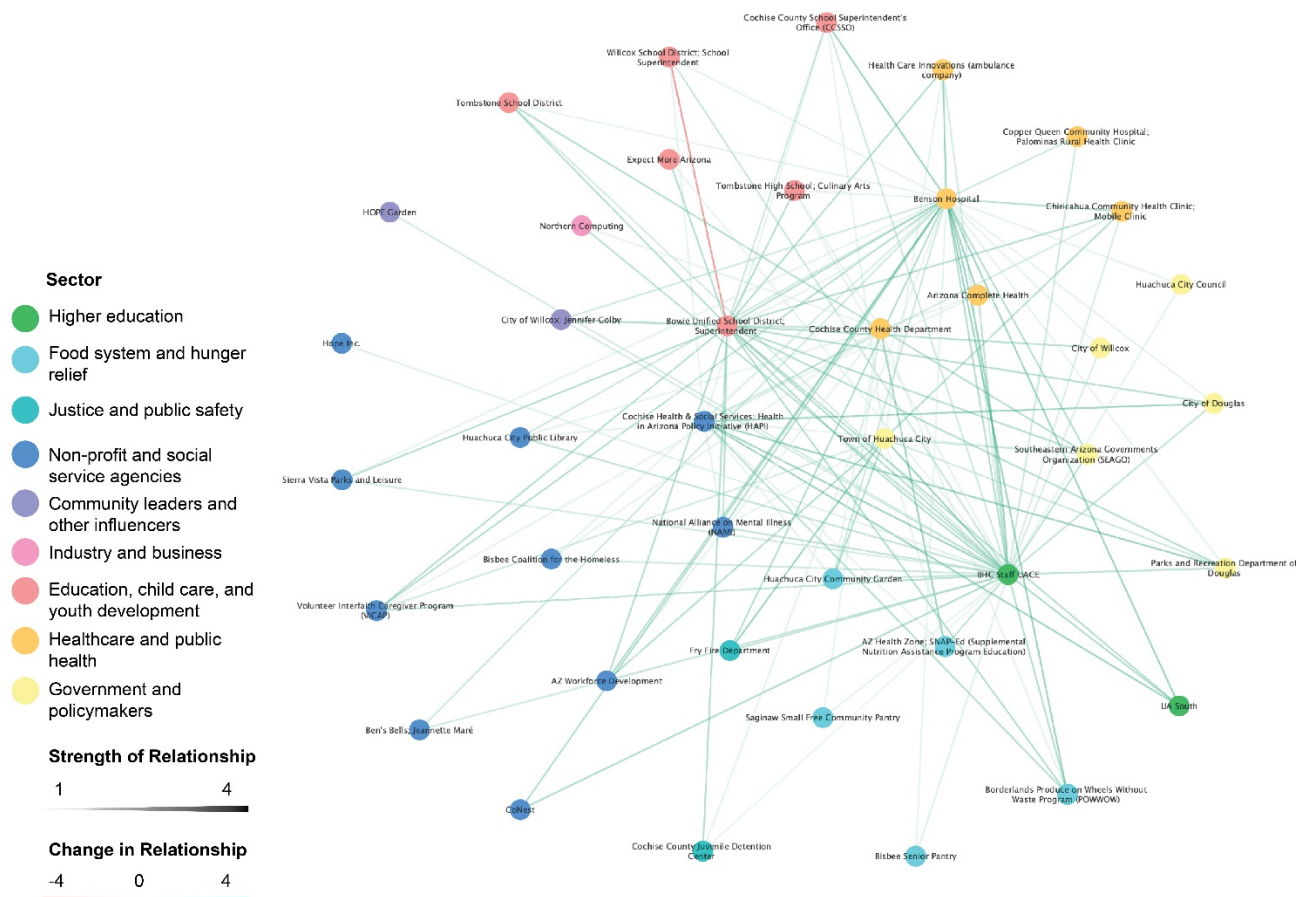

Based on the colors of the lines, this map shows that many relationships substantially increased in strength (green) from 2018 to 2021, while some relationships changed minimally (gray) and one decreased substantially (red, between Bowie Unified School District and Willcox School District). Looking at the survey ratings across all strategies, partnership strengths increased by an average of 1.3 (strategy averages ranged from +0.9 to +1.8) from 2018 to 2021. Average strength of partnerships in 2018 was 0.9, indicating many N/A and networking relationships. Average strength of partnerships in 2021 was 2.3, or between cooperation and coordination. Average partnership strengths were similar across all six strategies, ranging from 2.1 to 2.5.

Strength of Relationships at the Strategy Level, 2018 to 2021
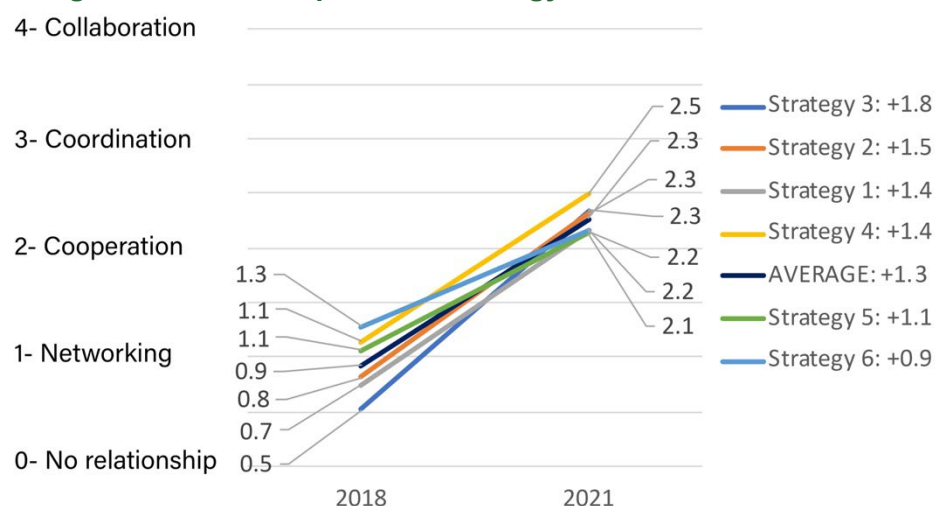
However, looking only at averages tells an incomplete story. From 2018 to 2021, the initiative helped spur 570 new relationships (rated as N/A in 2018). The number of collaborative partnerships nearly tripled from 106 to 303, which is just over one quarter of the total relationships documented in 2021.

## Number of Relationships by Strength Rating, 2018 to 2021
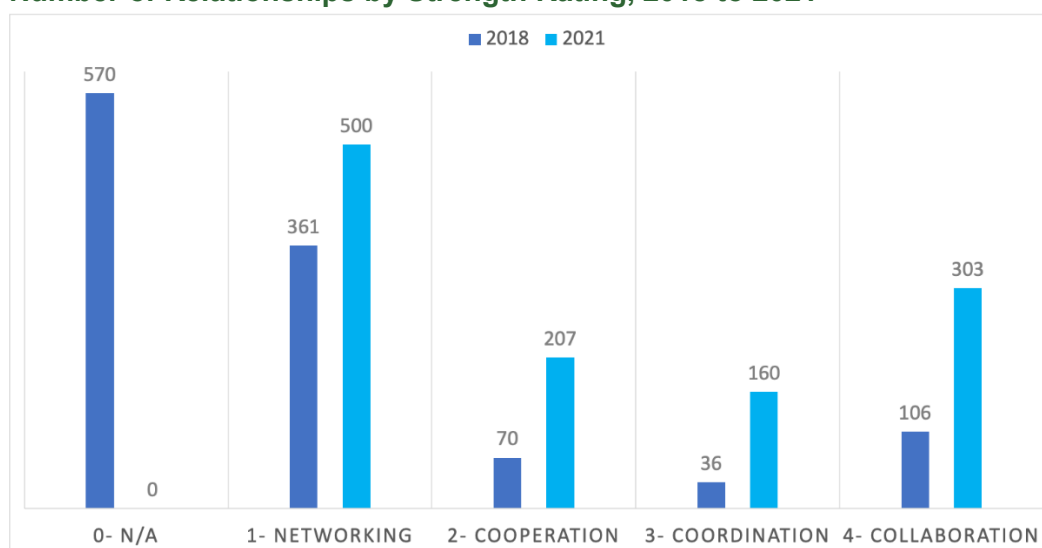
An important use of this network data was to understand the involvement of different sectors in each strategy. Part of the goal of collective impact is to expand beyond traditional partnerships that may historically be engaged through conventional single-sector programming. Using the Collective Impact Forum's actor mapping resources[25] as a starting point, the comprehensive partners list was iteratively coded into sectoral and topical categories. The following table shows the number of partners by sector involved in BHC work. Non-profit and social service agencies are most strongly represented (33), followed by organizations involved in food systems and hunger relief (29), which aligns with BHC's focus on nutrition and food access. The relatively strong involvement of government and policymakers (n= 18), especially when combined with community leaders and other influencers (n=6, combined total of 24), indicates the promising potential for policy and systems changes to be implemented. For additional impact, it could be strategic to intentionally involve more community leaders.

Sectors Involved

Sector	Organizations (n)
Non-profit and social services agencies:	33
Food systems and hunger relief:	29
Education child care and youth development:	20
Government and policymakers:	18
Healthcare and public health:	15
Industry and business:	14
Higher education:	8
Justice and public safety:	8
Community leaders and other influencers:	6

The graph below shows sectoral representation across each of BHC's strategies. Partners are counted under each strategy in which they are involved, so the number of partners is not summative across strategies. Based on the graph, the BHC initiative has successfully included diverse sectors in most of its strategies. Three strategies involve partners from nine sectors (Strategy 1: HCCs, Strategy 3: CLA, Strategy 5: Food Systems); two involve partners from eight sectors (Strategy 2: HEAL, Strategy 4: School Health); and one involves partners from five sectors (Strategy 6: Nutrition Education).

Sectors Involved by Strategy
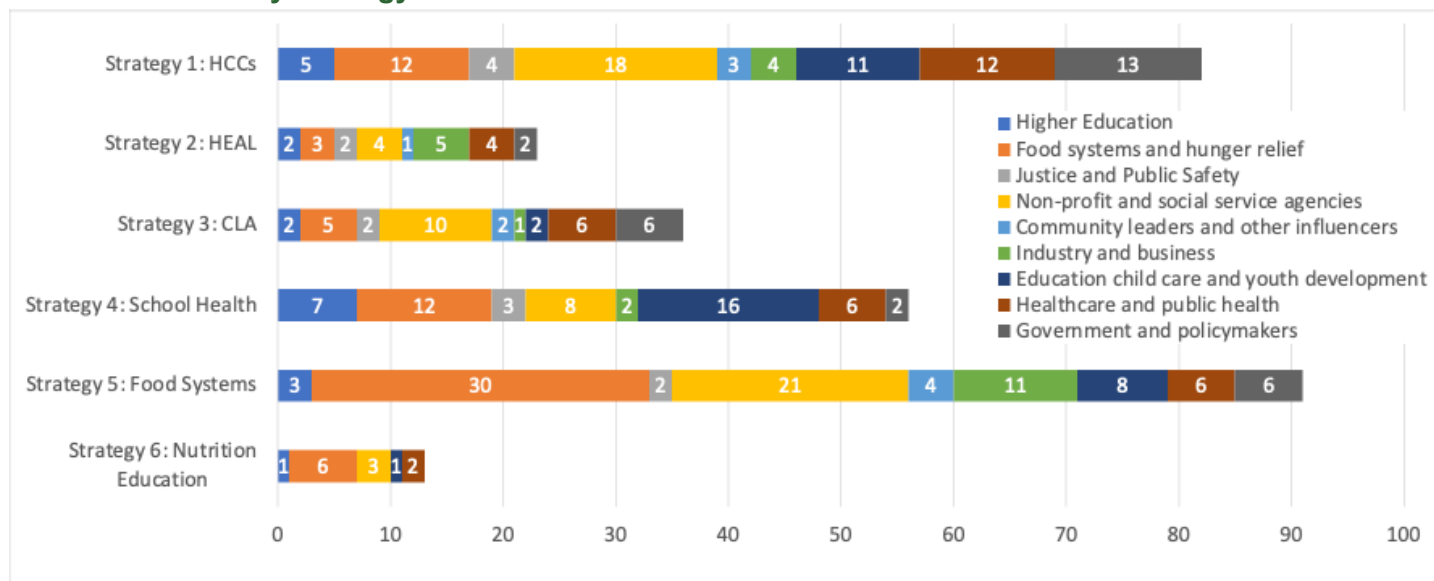
Looking at Strategy 5: Food Systems as an example, it makes sense that organizations involved in food systems and hunger relief (orange bar, n=30) are most heavily involved. However, 61 additional partners from eight other sectors are also involved in this strategy, which can help to diversify funding, bring different organizational strengths to the work, and open new avenues for activities.

Collective Impact Results: Participants' perspectives of how well the BHC initiative is meeting key elements of collective impact were assessed. With all '0- I don't know' scores removed, the average score was 3.39 (std= 0.8), or

between 3- moderately and 4- substantially met. Across constructs, leadership scored the highest (m= 3.7, std= 0.6), followed by common agenda (m= 3.4, std= 0.7), intermediate outcomes (m= 3.3, std= 1.0), continuous communication (m= 3.3, std= 0.9), and mutually reinforcing activities (m= 3.2, std= 0.9). These average scores indicate that the BHC initiative is successfully rooted in key constructs of collective impact and especially excels at leadership.

Key Elements of Collective Impact, Construct-level Scores

To what extent do you think the following goals have been achieved:
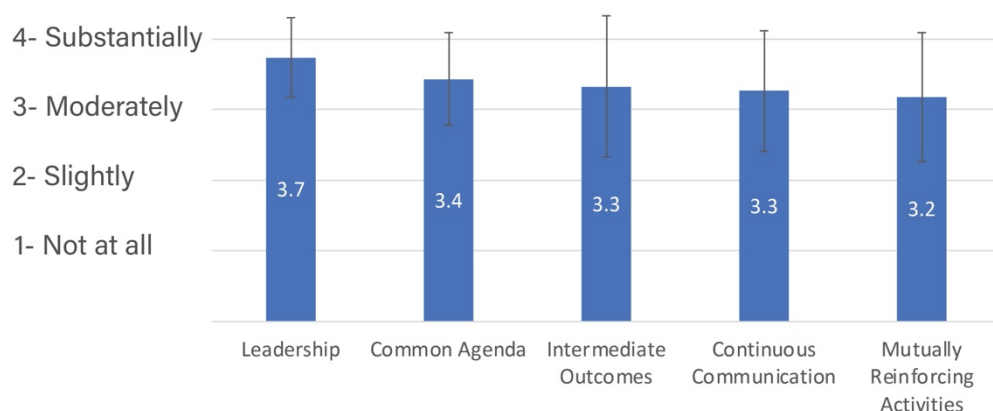
All elements within the leadership construct received high scores, with an average of 78% indicating goals were "substantially" met. Participants scored the initiative the highest on promoting equity and inclusion (substantially= 85%), followed by promoting integrity and accountability (78%), being strengths-based (77%), fostering a collaborative culture (77%), and encouraging continuous learning (69%). Leadership development has been a strong focus of the BHC initiative, as evidenced by the leadership academies and use of the Arizona Community Training (ACT) curriculum.
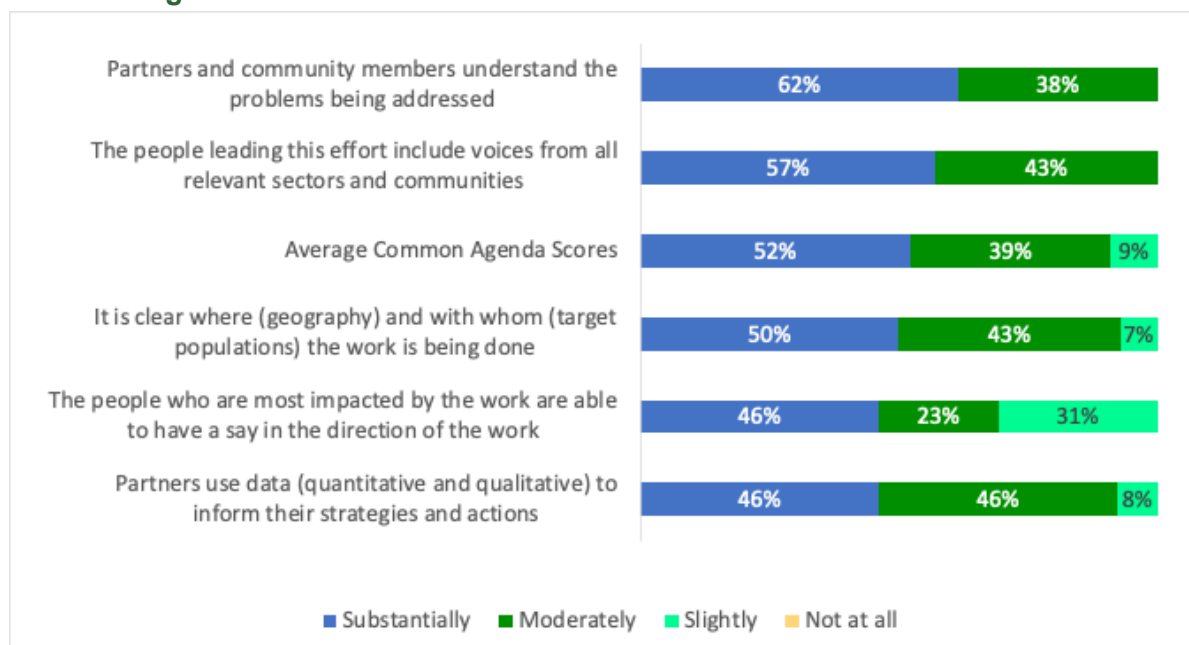
Leadership Construct Scores

Within the common agenda construct, individual elements received a lower percent of "substantially" scores but a greater percent of "moderately" and no "not at all" scores. Participants indicated that partners and community
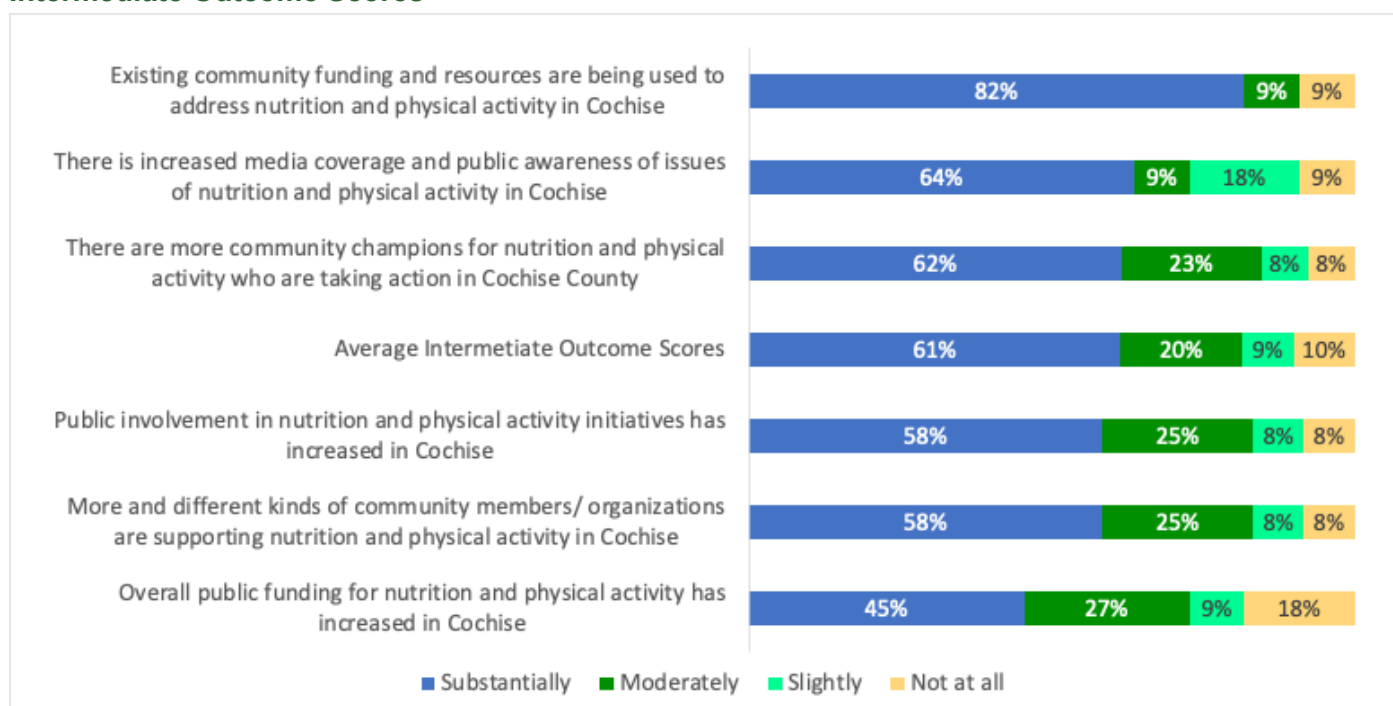
members understand the problems being addressed (substantially= 62%); initiative leadership comes from all relevant sectors and communities (52%); and the target geographies and populations are clear (50%). The initiative could focus on empowering its target populations to have more influence over goals and activities, and being better about basing strategies in qualitative and quantitative data. This finding is mirrored by the small number of community leaders and other influencers counted in the "Sectors Involved" table above.

Common Agenda Construct Scores

Construct	Substantially	Moderately	Slightly
Partners and community members understand the problems being addressed	62%	38%	
The people leading this effort include voices from all relevant sectors and communities	57%	43%	
Average Common Agenda Scores	52%	39%	9%
It is clear where (geography) and with whom (target populations) the work is being done	50%	43%	7%
The people who are most impacted by the work are able to have a say in the direction of the work	46%	23%	31%
Partners use data (quantitative and qualitative) to inform their strategies and actions	46%	46%	8%

■ Substantially ■ Moderately ■ Slightly ■ Not at all

Intermediate outcomes are the kinds of results a collective impact initiative might begin achieving three-to-five years after establishment. After three years of funding, survey participants indicate that existing community funding and resources are aligned with the BHC initiative's goals of nutrition and physical activity (substantially= 82%), and there is increased media coverage and public awareness of these goals (64%). There are also more community champions (62%), public involvement (58%), and diversity of involvement (58%) in supporting nutrition and physical activity. More support may be needed to increase overall public funding for these goals in the county.

Intermediate Outcome Scores

Existing community funding and resources are being used to address nutrition and physical activity in Cochise — Substantially 82%, Moderately 9%, Not at all 9%

There is increased media coverage and public awareness of issues of nutrition and physical activity in Cochise — Substantially 64%, Moderately 9%, Slightly 18%, Not at all 9%

There are more community champions for nutrition and physical activity who are taking action in Cochise County — Substantially 62%, Moderately 23%, Slightly 8%, Not at all 8%

Average Intermetiate Outcome Scores — Substantially 61%, Moderately 20%, Slightly 9%, Not at all 10%

Public involvement in nutrition and physical activity initiatives has increased in Cochise — Substantially 58%, Moderately 25%, Slightly 8%, Not at all 8%

More and different kinds of community members/ organizations are supporting nutrition and physical activity in Cochise — Substantially 58%, Moderately 25%, Slightly 8%, Not at all 8%

Overall public funding for nutrition and physical activity has increased in Cochise — Substantially 45%, Moderately 27%, Slightly 9%, Not at all 18%

Legend: ■ Substantially ■ Moderately ■ Slightly ■ Not at all

Continuous communication is essential to maintaining strong partnerships and alignment on common goals and activities. Participants indicated that BHC staff successfully engage external stakeholders in regular meetings and integrate feedback into the overall strategy (substantially= 73%). While 50% indicated that working groups or committees have regular meetings, 30% said this goal was only "slightly" met, and 10% said it was "not at all" met. To improve communication, BHC partners should look into meeting frequency and accessibility as well as ways to encourage regular and active participation among key partners.

Continuous Communication Construct Scores

BHC staff engage external stakeholders/community members in regular meetings and integrate their feedback into the overall strategy and goals — Substantially 73%, Moderately 18%, Slightly 9%

Average Continuous Communication Scores — Substantially 51%, Moderately 28%, Slightly 19%, Not at all 2%

Working groups or committees have regular meetings — Substantially 50%, Moderately 10%, Slightly 30%, Not at all 10%

Partners communicate and coordinate efforts regularly with BHC staff — Substantially 42%, Moderately 50%, Slightly 8%

Members of the working groups/committees attend and participate actively in the meetings — Substantially 40%, Moderately 30%, Slightly 30%

Legend: ■ Substantially ■ Moderately ■ Slightly ■ Not at all

Within and across organizations, mutually reinforcing activities are those that work together to achieve common goals. While BHC scored lowest on this construct, an average of 48% of participants still thought these goals were "substantially" met. Most participants believed that partners understand the role of working groups (substantially= 58%); partners have changed their activities to better align with BHC goals (58%); and working groups are used to

70

coordinate activities among partners (54%). The initiative should focus on clarifying the role of each partner within working groups and creating clear plans for each partner to follow.

Mutually Reinforcing Activities Construct Scores

	Substantially	Moderately	Slightly	Not at all
Partners understand the role of the working groups in addressing shared community goals	58%	25%	8%	8%
Partners have changed their activities to better align with shared community goals	58%	17%	25%	
Working groups or committees are used to coordinate activities among partners	54%	15%	31%	
Average Mutually-Reinforcing Activities Scores	48%	24%	24%	3%
There is a clear plan shared by partners about the activities each partner will take on	42%	33%	17%	8%
The role of each partner within working groups/committees is clear	31%	31%	38%	

■ Substantially ■ Moderately ■ Slightly ■ Not at all

Strategic Planning

In December 2020, the CRED Team held a grants strategic planning day with the Cochise BHC backbone team with the goal of increasing the sustainability of BHC's activities through and beyond the last year of Legacy Foundation funding. The five-hour session included completing personal reflections; a modified theory of change (ToC) activity; strength of partnerships analysis; a strengths, weaknesses, opportunities & threats (SWOT) analysis; and grants planning exercises. These exercises, briefly summarized below, aimed to assist the team in clarifying their priorities for initiatives moving forward along with identifying inter-team strengths and external opportunities to leverage in this funding transition period.

The team acknowledged the value and importance of stopping to reflect and discuss the work they have done thus far and the importance of ensuring they have more opportunities for reflection moving forward. The documents created through this process are intended to act as living tools which can continue to be used and built upon in strategic planning efforts. The following is a summary of the activities accomplished throughout the day. The Cochise BHC backbone team was also provided with a more detailed summary, as well as a set of next steps to use the knowledge accumulated in the next phase of their work.

Theory of Change (ToC): A basic ToC model was created based on the logic model developed by the team in 2017. The exercise involved reflecting on Cochise BHC's proposed grant strategies and how the activities undertaken have furthered BHC's goals and larger vision statement. The reflection process also involved listing Cochise BHC's specific role and the many community partners involved in each strategy.

Thinking about BHC's role made clear which strategies will require BHC staffing and funding to be able to continue and which may be lower-priority for grant-seeking. Listing the partners involved in each strategy demonstrated who to collaborate with when pursuing funding opportunities, strategic planning, and other related activities.

After completing other strategic planning activities, the team returned to the ToC model to mark current strategies that will be prioritized for funding (**) and to add in new strategies the team had identified. The team collectively recognized the following opportunities, especially in the context of the COVID-19 pandemic:

- The importance of using an equity lens in all strategies and addressing the social determinants of health (SDOH)

- Significant opportunities for a new mental/behavioral health focus, which aligns with the County Health Improvement Plan (CHIP) goals of addressing mental health and alcohol/substance abuse

- The ability of Cochise BHC to fill gaps in current programming, identify and form relationships with key partners across various sectors in Cochise County, and mobilize other team strengths (e.g., increased flexibility compared with federal programs, motivation, creativity & innovation, systems change mindset, local connections and knowledge of the culture)

- The continued and increasing need to address food insecurity and build local leadership capacity

Vision statement: Producing measurable, sustainable population health changes through widespread policy, systems, and environmental changes and a network of advocates who identify, adopt, and implement those policies and activities to support health across Cochise county.

Goal 1: Increase community capacity for healthy change

**Strategy 1.1: Healthy Community Committees
➤ Potential grant:
➤ Partners to engage:

Strategy 1.2: CHIP Healthy Eating Active Living Working Group
➤ Potential grant:
➤ Partners to engage:

**Strategy 1.3: Leadership Academy
➤ Potential grant:
➤ Partners to engage:

Goal 2: Cultivate healthy food system

Strategy 2.1: Local Food System and Hunger Relief
➤ Potential grant:
➤ Partners to engage:

Strategy 2.2: Continuing Nutrition Education
➤ Potential grant:
➤ Partners to engage:

Goal 3: Expand school health initiatives

**Strategy 3.1: School Health Liaison
➤ Potential grant:
➤ Partners to engage:

Goal 4: Mental/Beh. health

Strategy 4.1: Opioid Use Disorder (CHIP)
➤ Potential grant:
➤ Partners to engage:

Strategy 4.2: Horticulture therapy for suicide prevention
➤ Potential grant:
➤ Partners to engage:

Strategy 4.3: Youth leadership for non-traditional students, with focus on mental/bx health
➤ Potential grant:
➤ Partners to engage:

Goal 5: County-wide health and COVID relief

Strategy 5.1: County-wide community health survey
➤ Potential grant:
➤ Partners to engage:

Strategy 5.2: Public Health Policy and COVID relief work
➤ Potential grant:
➤ Partners to engage:

Community Partnerships: The CRED team created a comprehensive spreadsheet of community partners that have worked with Cochise BHC over the duration of the Legacy grant. This was done by reviewing each report to Legacy and noting all partners referenced. This partners spreadsheet was intended to serve multiple purposes: to assist BHC staff with identifying partners for future grant opportunities, to develop actor maps for each of the BHC strategies, and to conduct a social network analysis. Columns in the spreadsheet allow the BHC team to identify the strategy in which the partner is involved, the partner's sector, the strength of the partnership based on an interest and involvement ranking, and whether or not Cochise BHC had a previous working relationship with that partner. CRED used this partners spreadsheet to develop social network maps intended to help Cochise BHC (and grant funders) understand the diverse landscape of partners involved in the strategies, as well as who else might need to be engaged to truly affect systems change. The social network analysis process and results are described in detail in the **Social Network Analysis (SNA)** section.

SWOT Analysis: Prior to the planning day, Cochise BHC backbone staff were asked to reflect individually about both the strengths of their team and their own unique, individual strengths. On the planning day, the team collectively completed a SWOT analysis. First, each person provided responses to each of the SWOT quadrants using digital post-it notes, then the team reflected together on the overarching themes that were identified. Below is a summary of the themes for each of the quadrants of the SWOT analysis. The team ultimately emphasized the strengths and opportunities created by their supportive and flexible team culture, as well as the numerous, diverse community partnerships they developed. While concerns about future funding were shared across the team, the realities of their many partnerships and accomplishments were emphasized as opportunities to leverage to move forward and identify sustained funding.

Strengths	Weaknesses
1. Supportive and respectful team culture 2. Collaboration and networking in the community 3. Creative, flexible, and proactive approach to work	1. Limited time and resources 2. Additional constraints of COVID and working from home 3. Establishing a clearly defined and sustainable work plan
Opportunities	**Threats**
1. Building upon the numerous partnerships that the group has already established 2. Leveraging team strengths, areas of expertise, data collected, and lessons learned 3. Excitement and interest in exploring new areas of work 4. Various funding opportunities to pursue	1. Constraints of COVID 2. Uncertainty about future funding 3. Concerns about individual job security and the potential of the team splitting up 4. Need for clarifying the focus of the work moving forward

Grants Planning: The BHC team identified an initial list of potential grant funding opportunities to pursue, which the CRED team turned into a tracking spreadsheet to assist with aligning funding opportunities with strategic priorities and developing timelines for writing based on grant deadlines. The CRED team also provided a grant writing planning worksheet that can be used as a starting point for any grant writing process. This includes tracking important internal and external deadlines, determining key partners to engage in the grant, outlining the activities intended, and mapping out key evaluation metrics.

Recommendations & Next Steps

Recommendations

Goal 1: Increase Community Capacity for Healthy Change

Healthy Community Committees

- In addition to renewing efforts to gather additional rounds of Wilder Survey data now that more HCCs have resumed regular meetings either in person or virtually, we recommend that results be reviewed with HCCs to guide targeted conversations to improve functioning and effectiveness.

- Although the HCC Summit was highly rated overall, participants also provided recommendations for improvement. Respondents suggested that more time be allocated for presentations by and/or discussions with HCC members to learn about activities, strategies, and recommendations across the county. In addition, it was recommended that more time be allotted to interacting with other attendees and presenters, either in large networking sessions or in topic-based groups.

- A strategic planning session with BHC staff identified that an HCCs toolkit outlining key elements for success would help increase their capacity moving forward. This will involve collating the perspectives of HCC members with findings from relevant literature.

Cochise Leadership Academy

- Changes to CLA length and format may be a reason behind less consistent impact on leadership knowledge and skills in cohort 2 and 3. Cohort 2 differed from cohort 1 in length (reduced from 10 to 6 sessions) and mentorship model, and Cohort 3 changed format mid-program due to the pandemic. As subsequent cohorts revert to the longer session, single format model, these positive impacts may return.

- Given the need for sufficient survey completion to describe knowledge gains over time, it will be critical for BHC staff to prioritize encouraging survey completion and the value of participating in evaluation during CLA programming in future cohorts to allow for data that can assist with understanding the impact of program participation on targeted learning outcomes.

Goal 2: Cultivate a Healthy Food System

- Continued partnership and communication between BHC staff and CFB will be critical for ensuring that, even as emergency food distribution programs authorized under pandemic relief packages change and end, local food banks and pantries are able to access sufficient food to meet the needs of households in their areas.

- There may be a need for further investigation into declines in food distribution in Sierra Vista and Douglas to ensure that families in need of food are able to access emergency food programs.

- Support of school pantry and backpack programs through training and grant-writing support will be important for ensuring their sustainability.

- Support is needed for HCCs and community partners to re-open closed P.O.W.W.O.W. sites, particularly in Palominas and Douglas, as those are areas with low food access at traditional retailers.

- Relationships and networks built with Cochise County producers can be leveraged to promote partnerships between local growers and community institutions, such as schools and hospitals, and obtain funding for farm-to-school and farm-to-institution programs.

Goal 3: Expand School Health Initiatives

Schools are still working in a transformed landscape and with an altered set of priorities because of the COVID-19 pandemic. While being sensitive to this shift in priorities, BHC staff can continue to strive for positive change around shifting policy, systems, and environments (PSEs) to create healthier school settings.

- There remains room for expansion of promising programs that have been done in some schools during the BHC grant period, like advocacy and implementation assistance for Smarter Lunchrooms, school gardens and/or garden towers, and supporting schools in running an active and engaged SHAC.

- There is also potential in the county for further development of school-based PSE changes that benefit the community at large, including school food pantries and/or weekend food backpacks and joint-use agreements (which allow school facilities to be used as community recreational and physical activity resources outside of school hours).

- The close collaboration between BHC staff, the CCSSO, and other UA Extension personnel working in schools is a major asset to this work and should be continued. Strategic collaborative data systems that help track progress without creating excessive additional burdens for partners will be key to future evaluation efforts.

- The results of the initial school survey may no longer be as good a point of comparison for follow-up surveys as originally intended (due to the massive changes in all areas of both BHC work and child and family health and wellness during the pandemic), but BHC staff can still use the initial reports to form a basis of engaging schools around the health and well-being of their students. Similar future data collection efforts should be considered strategically.

Centering Equity in Collective Impact

- National collective impact leaders recently published an article titled 'Centering Equity in Collective Impact'.[26] In the article, they argue that a failure to center equity in the work is the "single greatest reason why collective impact efforts fall short." They also provide a revised definition of collective impact that centers equity –

  "Collective Impact is a network of community members, organizations, and institutions that advance equity by learning together, aligning, and integrating their actions to achieve population and systems-level change."

- The authors maintain that initiatives need to explicitly articulate the work they are doing to center equity. The table below includes the authors' five recommended strategies aligned with examples of current BHC activities and recommendations for additional activities. While it is apparent that BHC is working to center equity in their efforts, there are opportunities to further advance these efforts, utilizing their role as the backbone organization to engage community members and partners across the county.

Strategies for Centering Equity in Collective Impact

Strategy	BHC Activities	Additional Recommendations
Ground the work in data and context, and target solutions.	Survey and secondary data collected and reported at the BHC region-level to understand community-level context. Survey data disaggregated by race/ethnicity and other key characteristics where possible. Inclusion and centering of individual lived experience in programmatic (e.g., CLA) and evaluation efforts (e.g., ripple effects mapping). Targeting of resources to communities with the highest level of need (e.g., new P.O.W.W.O.W. sites, hydration stations, garden towers).	With partners, establish shared language about race and equity. Identify additional opportunities to disaggregate data by race/ethnicity and other characteristics, where possible, including in programmatic data collection (e.g., HCCs) and future shared measurement system.
Focus on systems change, in addition to programs and services.	Utilization of programmatic efforts (notably CLA) to inform and engage more community members in structural, systems, and policy change work. Relational change – fostering cross-sector relationships and connections to address BHC goals (social network analysis).	Structural change – more explicitly conveying to stakeholders the policies, practices and resources flows that have changed as a result of this initiative. Transformative change – identifying opportunities to shift cultural narratives and mental models related to equity in the community.
Shift power within the collaborative.	HCCs and SHACs as formal structures for community members to make decisions about their own HEAL priorities and activities. CLA mentoring provided by fellow community members.	Use actor mapping and secondary data of community characteristics to understand who is and is not currently informing the direction of BHC initiatives, including staff, HCC members, CLA participants, and others.
Listen to and act with community.	Recognition and elevation of community assets and efforts led by local community organizations and leaders (e.g., HCCs, SHACs, CLA).	Identify further opportunities to engage individuals with lived experience in county-level leadership committees, such as the HEAL working group.
Build equity leadership and accountability.	Promotion of the importance of equity and social determinants of health in discussion of HEAL within the county. Engaging in discussions of race and diversity as central to leadership (e.g., CLA, HCC Summit).	Use role as backbone organization to engage partner organizations in discussions of racial equity.

Next Steps for Evaluation

Data interpretation with BHC backbone staff and key partners – Facilitate data interpretation sessions on key data findings related to ripple effects mapping, social network analysis, geovisualization, and other primary data collected to assist BHC staff with program improvements and strategic planning.

Continued instrument design and primary data collection - Design instruments and protocols (e.g., surveys, focus group guides) to gather primary data from participants engaged either in direct programming (Leadership Academies, Summits, horticulture therapy program, trainings, workshops, and others) or as collaborators in collective impact aspects of BHCs work. These data will be used to support further program development, and to assess progress on the various initiatives.

Shared Measurement - A key condition of collective impact initiatives is the development of a shared measurement system, a common set of measures used by the multiple organizations involved to track progress towards meeting their larger goals.[27] Members of the BHC team and CRED team are currently working together to create a set of recommendations for Cochise County to develop a shared system of measurement for tracking more up-to-date data on obesity, diabetes, and other key indicators by collecting data from hospitals, health departments, schools, and other partners. This process will involve researching best practices from other successful collective impact initiatives, identifying and interviewing key community partners about their existing data systems, and ultimately creating a set of recommendations for implementing a future shared measurement system.

Geovisualization of food systems and community resources - Using geovisualization, develop additional layers on the interactive map designed to help staff plan initiatives to support healthy eating and active living in the county, as well as additional areas aligned with Cochise County health needs (e.g., behavioral health, COVID, and others). Develop training resources for using these maps and other resources for community engagement and program planning.

Data interpretation and strategic planning with HCCs - Host data interpretation and strategic planning sessions for a select group of HCCs, focused on using geovisualization tools and other data sources and tools to inform community needs assessments, strategic planning, and grant writing. These skill building sessions will support community leadership and help sustain and expand HCC efforts to improve their communities.

CLA graduate follow-up survey- Develop and conduct follow-up survey for CLA graduates focused on the impact of CLA participation on community development and collective impact efforts.

Strategic planning and grant writing - Provide ongoing support for strategic planning and grant writing through facilitated sessions with BHC staff, developing toolkits and resources for identifying and applying for relevant grants, and assistance with grant writing, including providing background data as needed (e.g., details about community demographics, needs and assets), evaluation narrative writing, and serving as evaluation service collaborators. This will help support sustainability of BHC efforts going forward.

Dissemination of findings through journal publications and presentations at national conferences - Disseminate key findings of BHC efforts (e.g., CLA, collective impact model, ripple effects, geovisualization) in relevant journals and conferences to contribute to literature on best practices in collective impact initiatives. To date, our team has presented on key findings from the BHC Initiative at the Arizona Health Equity Conference, American Evaluation Association annual conference, and the National Association of Extension Program & Staff Development Professionals conference. Members of the CRED team and the BHC team are also currently collaborating on writing a journal article focused on the Cochise Leadership Academy intended for publication in the Journal of Human Sciences and Extension.

Appendix 1: Full Logic Model

Goal 1: Increase community capacity for healthy change

Strategy 1: Healthy Community Committees	Strategy 2: CHIP Healthy Eating Active Living Working Group	Strategy 3: Leadership Academy

Short-Term	Medium-Term	Long-Term
-Increased community awareness of local HCC PSE initiatives -Increased community awareness of available healthy living activities -Leadership Academy graduates will improve their civic engagement knowledge and skills -Some Leadership Academy graduates will engage with CFB to become local health promoters *(promotoras)* to identify and deliver culturally-relevant, diet-related health trainings	-HCC committees begin to secure external funding for PSE initiatives -More individuals involved in Healthy Community Committees -Increased collaboration with partner agencies to promote PSE initiatives -Leadership Academy graduates will increase their civic engagement activities -Cochise County residents engage in more, healthy living activities -Increased access to opportunities for physical activity for all residents of Cochise County -Increased water consumption for healthy hydration throughout Cochise County	-Policies are in place in Cochise County to promote healthy eating and active living and to prevent the onset of obesity and diabetes -Community and school systems have incorporated health into their daily operations -The environment in Cochise County is more supportive of healthy eating and active living through increased community buy-in and infrastructure changes -The Healthy Community Committees become self-sustaining, able to maintain consistent action through ongoing recruitment of volunteers and ability to seek out and acquire funding -Graduates of the Leadership Academy attain leadership positions at the local, county, or state level to sustain the PSE changes in Cochise County -Cochise County residents have greater access to opportunities for physical activity -Cochise County residents eat healthier and are more physically active -Cochise County residents have reduced rates of obesity and type II diabetes

Goal 2: Cultivate healthy food system

Strategy 5: Local Food System and Hunger Relief	Strategy 6: Continuing Nutrition Education

Short-Term	Medium-Term	Long-Term
-Workshop participants understand that food affects their health -Expanded grants and loans available for local farmers -Increase the number of Meals Per Person in Need utilizing the USDA metrics for measurement by at least 10% annually	-Increase the number of school and community gardens -Increase in amount local produce purchased locally -Increase the sales of locally grown food -Increase the pounds of local food delivered -Increase the scale of local cooperative ownership brokerage sales managed by CFB -Increased SNAP participation -Cochise County residents will increase their consumption of fruits and vegetables	-Increase the pounds of local food produced -Creation of local and countywide policies for -staining healthy food systems -Broad community understanding and acceptance of food as medicine -Children and families in need have increased and sustained access to fresh produce and healthy foods across Cochise County -Cochise County residents eat healthier -Cochise County residents have reduced rates of obesity and type II diabetes

Goal 3: Expand School Health Initiatives

Strategy 4: School Health Liaison

| Short-Term	Medium-Term	Long-Term
-Children in county schools will understand where food comes from -Children will be more excited about eating fruits and vegetables -Increased percentage of schools with SHACs -Increased percentage of schools with SHIPs -Increased percentage of schools with Joint Use Policies to allow community use of school grounds	-School systems will use school garden food in their school breakfast/lunch menus, school food pantries and weekend school food backpack programs -School systems will serve more food prepared on site as a part of school breakfast/lunch menus -School systems will increase amount of time students are physically active during the school day -Increased number of facilities that offer summer meals through the summer food service program -Community members will be more physically active by using school grounds through use of Joint-Use agreements -Children will increase their consumption of fruits and vegetables	-School systems will identify root causes and make policy, systems and/or environmental changes to improve overall health in Cochise County Schools -Children and families in need have increased and sustained access to fresh produce and healthy foods across Cochise County

Appendix 2: Cochise BHC Community Survey, 2019

Demographics

The 2019 Cochise Community Survey was completed by a total of 574 people. The survey was provided in both English (92%) and Spanish (8%), and in paper (34%) and online (66%) formats.

The ages of respondents ranged from 15 to 88, with an average age of 52 years old. On average, respondents had lived in Cochise County for 21 years. Most respondents lived in the Sierra Vista (30%), Willcox (15%), Douglas (14%), and Hereford/Palominas (10%) Regions. Generally, the geographic distribution of respondents reflected population distribution in the county, with some over-representation in the Willcox, Tombstone, and Sunizona/Elfrida/McNeal areas and some under-representation in Sierra Vista and Douglas.

Survey respondents (%) compared to population by Cochise County Region
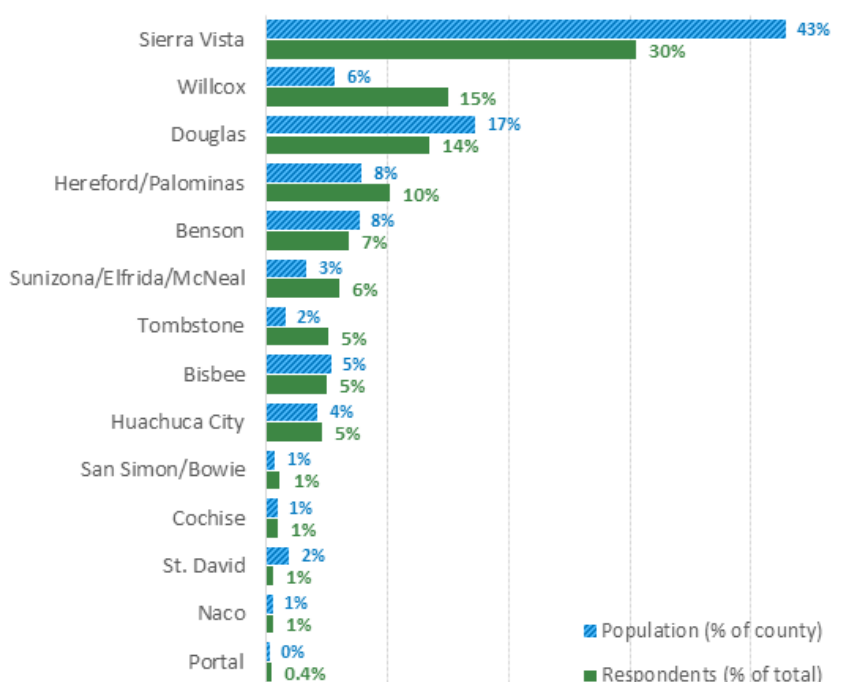
Note: Where the share of respondents (green bar) exceeds the share of the population (blue bar), the survey overrepresented a community; where the opposite is true, the community is under-represented. Data on population distribution obtained from U.S. Census Bureau (2018). 2017 American Community Survey 5-Year Estimates, Table B01001. Retrieved from https://factfinder.census.gov

The majority of respondents identified as female (71%), with 25 percent identifying as male, about 2 percent identifying as transgender or gender queer, and 3 percent preferring not to answer.
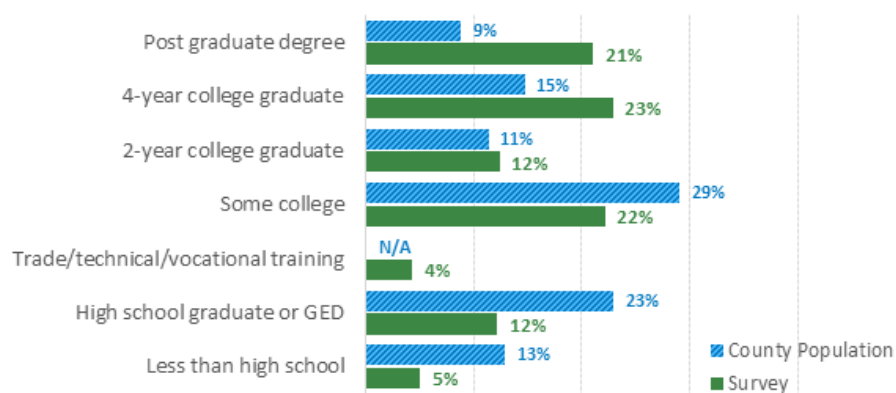
About two-thirds (67%) of respondents identified as white, one-fourth (25%) identified as Hispanic or Latino, and three percent identified as American Indian or Alaska Native. These responses were recoded to meet U.S. Census Bureau race/ethnicity identifiers to allow comparison to population data, as shown below. Overall, there was slight over-representation of White respondents and under-representation of Hispanic, Black, or Asian respondents.

Comparison of race/ethnicity of survey respondents to county population

In terms of education, most respondents (76%) reported having at least some college education. Seventeen percent reported a high school diploma or less. In general, survey respondents had higher education attainment than typically seen in the county, with particularly high representation of individuals with postgraduate and 4-year college degrees.
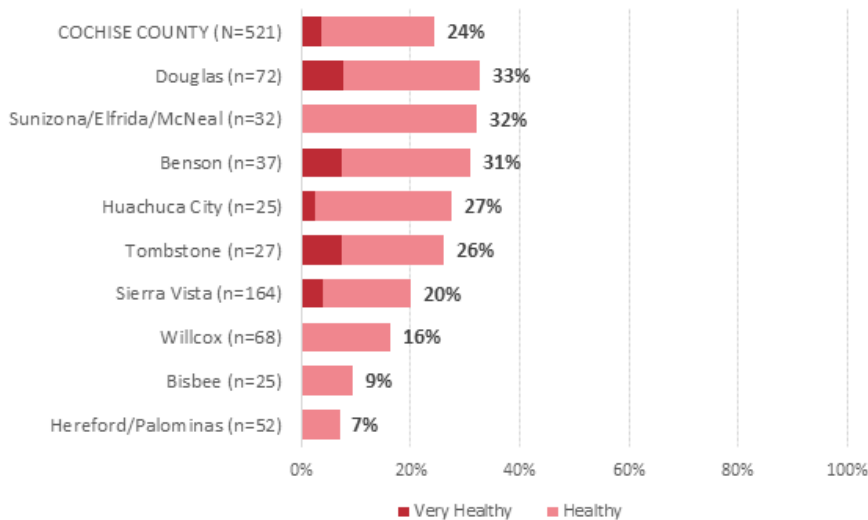
Perceptions of Community Health

Only about a quarter (24%) of respondents considered their community to be healthy or very healthy. Respondents in Douglas, Sunizona/Elfrida/McNeal, and Benson most frequently rated their community as healthy, while less than 10 percent of respondents in Bisbee and Hereford/Palominas rated their community as 'healthy.'

How do you rate the overall health of the community where you live?

Most survey respondents would not rate their community as 'healthy' or 'very healthy'

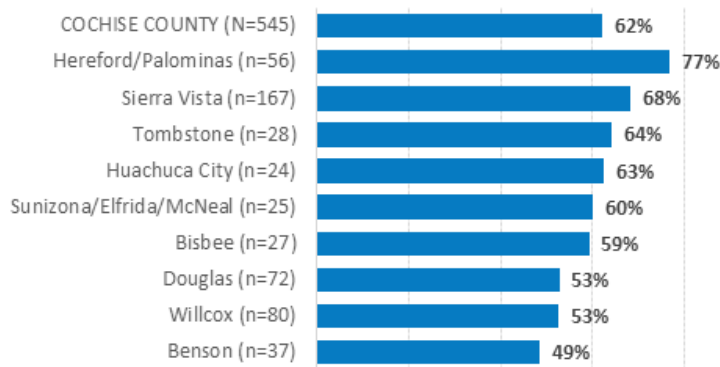| Community	Percentage
COCHISE COUNTY (N=521)	24%
Douglas (n=72)	33%
Sunizona/Elfrida/McNeal (n=32)	32%
Benson (n=37)	31%
Huachuca City (n=25)	27%
Tombstone (n=27)	26%
Sierra Vista (n=164)	20%
Willcox (n=68)	16%
Bisbee (n=25)	9%
Hereford/Palominas (n=52)	7%

■ Very Healthy ■ Healthy

Physical Activity

Nearly all respondents (97%) agreed that getting people to be more physically active is important, though only 62 percent of people reported exercising 3 or more times per week. Respondents in Hereford/Palominas and Sierra Vista were the most likely to report being active 3 or more days per week.

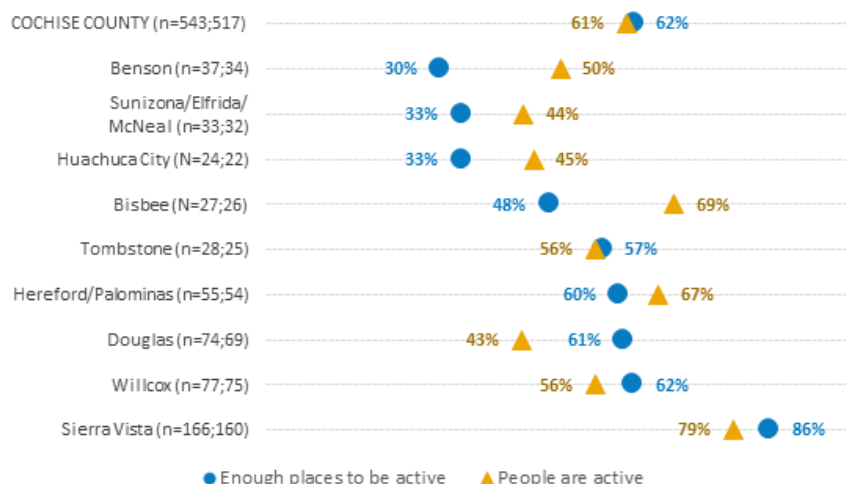*How many days per week do you do physical activity or exercise?*

Respondents in Hereford/Palominas & Sierra Vista more frequently reported being active 3 or more days per week than respondents in Douglas, Willcox, or Benson.

Community	Percentage
COCHISE COUNTY (N=545)	62%
Hereford/Palominas (n=56)	77%
Sierra Vista (n=167)	68%
Tombstone (n=28)	64%
Huachuca City (n=24)	63%
Sunizona/Elfrida/McNeal (n=25)	60%
Bisbee (n=27)	59%
Douglas (n=72)	53%
Willcox (n=80)	53%
Benson (n=37)	49%

Over one-third (38%) of people didn't feel there are enough public spaces to be physically active. In some communities, such as Benson, Sunizona/Elfrida/McNeal, Huachuca City, and Bisbee, respondents were more likely to agree that people were active than to agree that there were enough public places to be active. In other communities, such as Douglas and Willcox, respondents were more likely to agree that there were enough public places to be active than that people were active in their community.

Thinking about the place where you live, please let us know how much you agree or disagree with the following: In my community people are physically active doing things; there are enough public places to be physically active.

Only in Sierra Vista, Hereford/Palominas, Tombstone, and Willcox did the majority of respondents feel that **people** in their community were active and that there were enough **places** for people to be active.

COCHISE COUNTY (n=543;517)	61% ▲● 62%
Benson (n=37;34)	30% ● ▲ 50%
Sunizona/Elfrida/ McNeal (n=33;32)	33% ● ▲ 44%
Huachuca City (N=24;22)	33% ● ▲ 45%
Bisbee (N=27;26)	48% ● ▲ 69%
Tombstone (n=28;25)	56% ▲● 57%
Hereford/Palominas (n=55;54)	60% ● ▲ 67%
Douglas (n=74;69)	43% ▲ 61% ●
Willcox (n=77;75)	56% ▲ ● 62%
Sierra Vista (n=166;160)	79% ▲ ● 86%

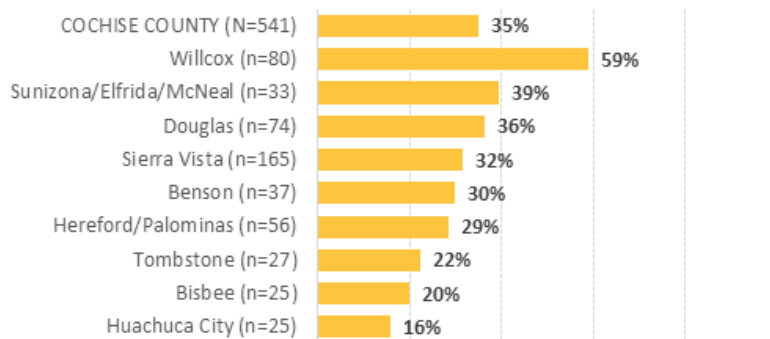● Enough places to be active   ▲ People are active

Nutrition

A large majority (85%) of respondents reported drinking water three or more times per day. About one in four people who identified as Hispanic or Latino reported drinking sweetened drinks 3 or more times per day. Across the county, respondents in Willcox, Sunizona/Elfrida/McNeal, and Douglas most frequently reported drinking sweetened drinks one or more times per day.

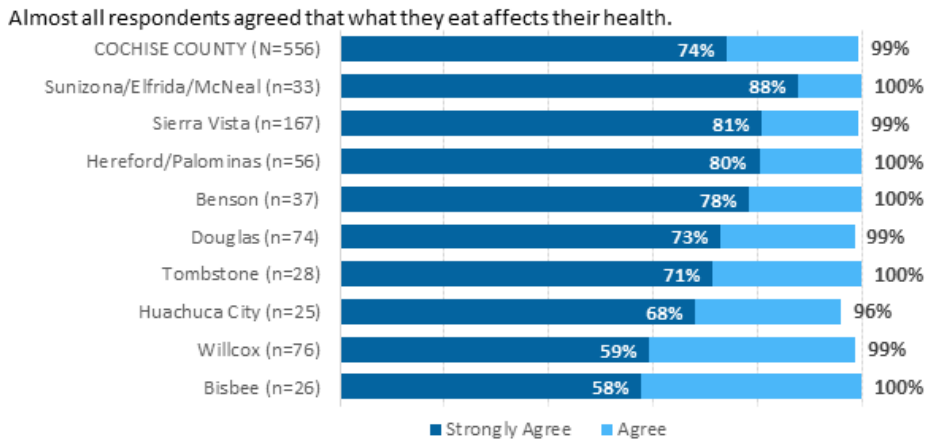*How many times a day do you drink sweetened drinks?*

Residents of Willcox most frequently reported drinking sweetened drinks one or more times per day.

COCHISE COUNTY (N=541)	35%
Willcox (n=80)	59%
Sunizona/Elfrida/McNeal (n=33)	39%
Douglas (n=74)	36%
Sierra Vista (n=165)	32%
Benson (n=37)	30%
Hereford/Palominas (n=56)	29%
Tombstone (n=27)	22%
Bisbee (n=25)	20%
Huachuca City (n=25)	16%

Note: Sweetened drinks include regular sodas, fruit drinks, sports drinks, sweet tea, or sweet coffee drink

Nearly all respondents (99%) agreed that what they eat makes a difference in their health. Respondents in Sunizona/Elfrida/McNeal, Sierra Vista, and Hereford/Palominas were the most likely to strongly agree with this statement. This question was initially proposed as a potential key indicator of progress over the life-cycle of the grant. However, given the already high level of knowledge captured in the baseline survey, further increases are unlikely. Change may be more effectively captured through use of the nutrition behavior questions.
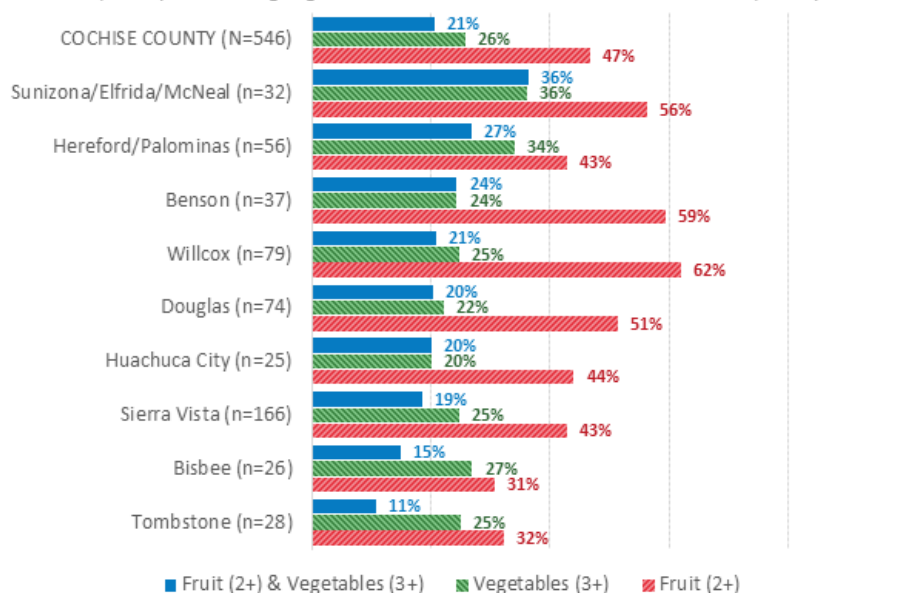
Please let us know how much you agree or disagree with the following: What I eat makes a difference to my health.

Almost all respondents agreed that what they eat affects their health.

Location	Strongly Agree	Total
COCHISE COUNTY (N=556)	74%	99%
Sunizona/Elfrida/McNeal (n=33)	88%	100%
Sierra Vista (n=167)	81%	99%
Hereford/Palominas (n=56)	80%	100%
Benson (n=37)	78%	100%
Douglas (n=74)	73%	99%
Tombstone (n=28)	71%	100%
Huachuca City (n=25)	68%	96%
Willcox (n=76)	59%	99%
Bisbee (n=26)	58%	100%

■ Strongly Agree ■ Agree

The USDA's MyPlate guidelines indicate that adults should consume 1.5-2 cups of fruit and 2-3 cups of vegetables per day.[1] In national surveys such as the Behavioral Risk Factor Surveillance System (BRFSS), this recommendation is operationalized to eating fruit 2 or more times per day and vegetables 3 or more times per day.[2,3] One in five people (21%) reported eating vegetables at least 3 times per day and fruit at least 2 times per day. Respondents in Sunizona/Elfrida/McNeal, Hereford/Palominas, and Benson most frequently reported eating vegetables at least 3 times per day and fruit at least 2 times per day. Across the county, respondents were more likely to report meeting the fruit recommendation than the vegetable recommendation. A little more than a quarter (27%) of people ate vegetables 3 or more times a day, with the highest rates of reported consumption in Sunizona/Elfrida/McNeal, Hereford/Palominas, and Bisbee. Nearly half of countywide respondents reported meeting the fruit recommendation of two times per day. Hispanic and Latino individuals reported consuming fruit more frequently each day than White individuals, with the majority of Hispanic/Latino respondents (55%) reporting eating fruit 2 or more times per day. Respondents from Willcox, Benson, Sunizona/Elfrida/McNeal, and Douglas reported the highest rates of fruit consumption.

How many times a day do you eat fruit? How many times a day do you eat vegetables?

Across the county, respondents were more likely to report eating fruit the recommended two or more times per day than eating vegetables the recommended three or more times per day.
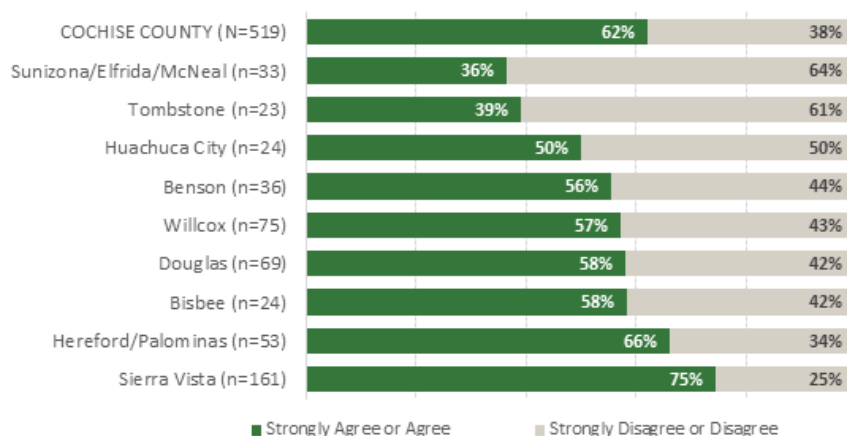
Region	Fruit (2+) & Vegetables (3+)	Vegetables (3+)	Fruit (2+)
COCHISE COUNTY (N=546)	21%	26%	47%
Sunizona/Elfrida/McNeal (n=32)	36%	36%	56%
Hereford/Palominas (n=56)	27%	34%	43%
Benson (n=37)	24%	24%	59%
Willcox (n=79)	21%	25%	62%
Douglas (n=74)	20%	22%	51%
Huachuca City (n=25)	20%	20%	44%
Sierra Vista (n=166)	19%	25%	43%
Bisbee (n=26)	15%	27%	31%
Tombstone (n=28)	11%	25%	32%

■ Fruit (2+) & Vegetables (3+) ▨ Vegetables (3+) ▨ Fruit (2+)

Note: Fruit included fresh, frozen, dried, or canned fruit, but not juice. Vegetable included fresh, canned, or frozen vegetables, but not French fries, potato chips, or rice.

Food Access

While nearly all respondents (98%) agreed that it was important that all community members have access to healthy food, only 62 percent agreed that it was easy for people to get fruits and vegetables in their communities. Residents of Sunizona/Elfrida/McNeal and Tombstone most frequently indicated that it was not easy to get fruits & vegetables in their community. There are no grocery stores in either of these regions.

Thinking about the place where you live, please let us know how much you agree or disagree with the following: In my community it is easy for people to get fruits and vegetables.

In most regions in Cochise County, more than 1 in 3 respondents felt it was not easy to get fruits & vegetables in their community.

Region	Strongly Agree or Agree	Strongly Disagree or Disagree
COCHISE COUNTY (N=519)	62%	38%
Sunizona/Elfrida/McNeal (n=33)	36%	64%
Tombstone (n=23)	39%	61%
Huachuca City (n=24)	50%	50%
Benson (n=36)	56%	44%
Willcox (n=75)	57%	43%
Douglas (n=69)	58%	42%
Bisbee (n=24)	58%	42%
Hereford/Palominas (n=53)	66%	34%
Sierra Vista (n=161)	75%	25%

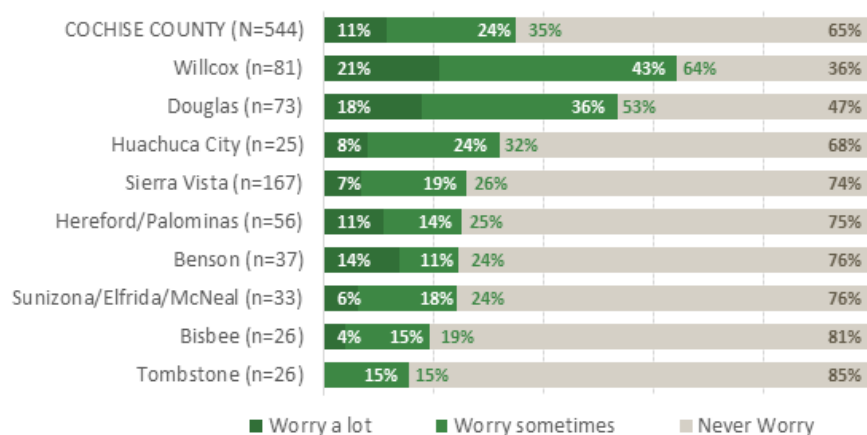■ Strongly Agree or Agree ▨ Strongly Disagree or Disagree

Note: The smaller the green bar, the more respondents disagreed that accessing fruits & vegetables was easy (or, to say it another way, the more they thought it was hard)

Over one third of residents of Cochise County expressed some level of 'food anxiety'—fear that food at home would run out before their family had money to buy more. The majority of Hispanic or Latino respondents (58%) reported some level of food anxiety, including 16 percent who reported worrying "a lot" that food would run out. For White respondents, 27 percent reported some level of food anxiety including 10 percent worrying "a lot." Rates of food anxiety were highest in Willcox & Douglas, where more than half of respondents reported worrying about food running out at least sometimes. According to the 2018 Current Population Survey Food Security supplement, 14.6 percent of households nationally worried that they would run out of food before they had money to buy more.[4] This indicates that food security may be a more severe problem in Cochise County than elsewhere in the nation.

In the last 12 months, did you worry that food at home would run out before your family got money to buy more?

In Cochise County, more than 1 in 3 respondents expressed 'food anxiety'-- fear that food at home would run out before their family had money to buy more.

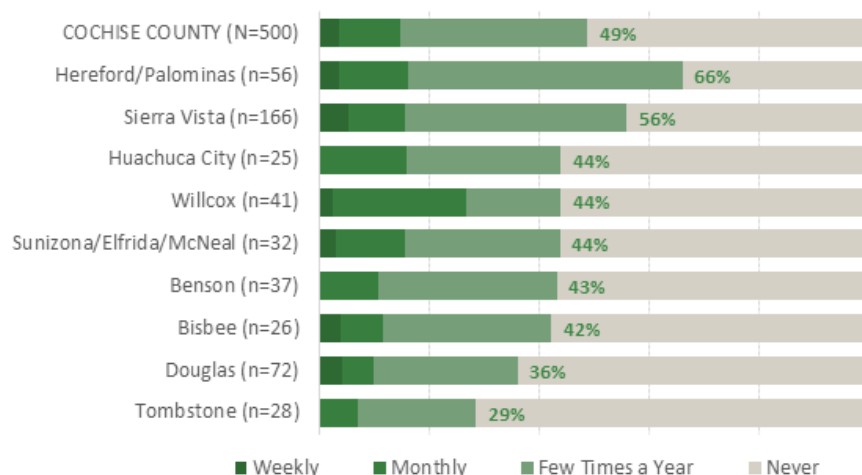|	Worry a lot	Worry sometimes	Never Worry
COCHISE COUNTY (N=544)	11%	24% (35%)	65%
Willcox (n=81)	21%	43% (64%)	36%
Douglas (n=73)	18%	36% (53%)	47%
Huachuca City (n=25)	8%	24% (32%)	68%
Sierra Vista (n=167)	7%	19% (26%)	74%
Hereford/Palominas (n=56)	11%	14% (25%)	75%
Benson (n=37)	14%	11% (24%)	76%
Sunizona/Elfrida/McNeal (n=33)	6%	18% (24%)	76%
Bisbee (n=26)	4%	15% (19%)	81%
Tombstone (n=26)	15%	15%	85%

Note: Worrying about food running out places a household in the "marginally food secure" category. Due to the brevity of the survey, we do not have further data on the severity of food insecurity amongst these households.

Across Cochise County, 1 in 4 respondents reported using a food bank or pantry at least a few times per year, and 13 percent of respondents reported using a food bank at least once per month. Respondents in Willcox, Tombstone, and Sunizona/Elfrida/McNeal were the most likely to report using a food bank. Only respondents to the English-language survey were asked about their usage of farmer's markets, CSAs, local farms, or gardens. About half of respondents reported that they never got food from a farmer's market, CSA, or local farm or garden in the last 12 months.

In the last 12 months, how often did you get food from a farmer's market, CSA (farm shares or boxes like Bountiful Baskets), or local farm or garden?

Respondents in Hereford/Palomina & Sierra Vista were the most likley to report getting food from a farmer's market, CSA, local farm, or garden at least a few times per year.
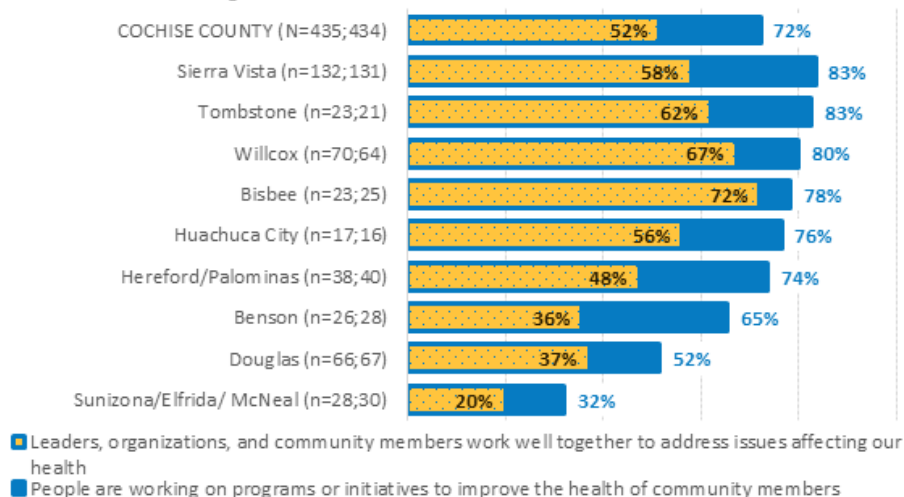

COCHISE COUNTY (N=500) — 49%
Hereford/Palominas (n=56) — 66%
Sierra Vista (n=166) — 56%
Huachuca City (n=25) — 44%
Willcox (n=41) — 44%
Sunizona/Elfrida/McNeal (n=32) — 44%
Benson (n=37) — 43%
Bisbee (n=26) — 42%
Douglas (n=72) — 36%
Tombstone (n=28) — 29%

■ Weekly ■ Monthly ■ Few Times a Year ▪ Never

Note: This question only appeared on the English language survey.

Policy and Systems Solutions

Nearly all survey respondents (92%) were in favor of policy-level changes to support and increase opportunities for healthy eating and active living, and 72 percent of respondents felt that people were working on programs or initiatives to improve the health of community members. Across all communities, respondents were more likely to agree that people were working on health initiatives than they were to agree that leaders, organizations, and community members were working well together; only about half of people (51%) thought local leaders, organizations and communities worked well together to address issues affecting health. Respondents in Bisbee, Willcox, and Tombstone were the most likely to agree that leaders, organizations, and community members were working well together, while respondents in Sierra Vista, Tombstone, and Willcox were the most likely to agree that people were working on health programs or initiatives.

What do you know about the following programs/initiatives: Healthy Cochise: The Cochise Healthy Communities Initiative; School Health Advisory Councils (SHACS)?

Across all communities, respondents were more likely to agree that people were working to improve community health than they were to agree that leaders, organizations and community members worked well together.
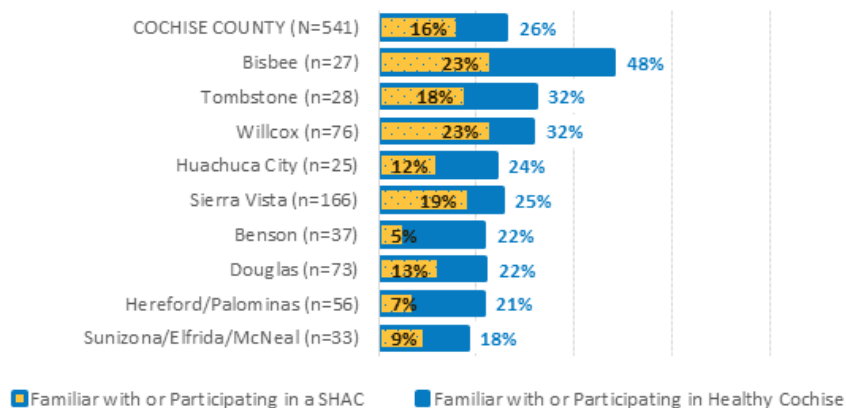
Community	Leaders, organizations, and community members work well together	People are working on programs or initiatives
COCHISE COUNTY (N=435;434)	52%	72%
Sierra Vista (n=132;131)	58%	83%
Tombstone (n=23;21)	62%	83%
Willcox (n=70;64)	67%	80%
Bisbee (n=23;25)	72%	78%
Huachuca City (n=17;16)	56%	76%
Hereford/Palominas (n=38;40)	48%	74%
Benson (n=26;28)	36%	65%
Douglas (n=66;67)	37%	52%
Sunizona/Elfrida/ McNeal (n=28;30)	20%	32%

☐ Leaders, organizations, and community members work well together to address issues affecting our health
☐ People are working on programs or initiatives to improve the health of community members

Note: Responses of 'agree' or 'strongly agree' are combined.

Half of respondents (50%) had heard of Healthy Cochise: The Cochise Healthy Communities Initiative, though 25 percent of respondents (half of those who had heard of the initiative) reported that they had heard of it but were unsure as to what it was about. One-third of respondents (33%) had heard of School Health Advisory Councils (SHACs), with 17% (about half of those who had heard of SHACs) reporting that they were unsure what they were. Respondents in Bisbee were the most likely to report that they were familiar with or participating in the Healthy Cochise Initiative, and respondents in Bisbee and Willcox were the most likely to report they were familiar with or participating in a SHAC.

What do you know about the following programs/initiatives: Healthy Cochise: The Cochise Healthy Communities Initiative; School Health Advisory Councils (SHACS)?

Respondents in Bisbee most frequently reported familiarity or participation with the Healthy Cochise initiative, while respondents in both Bisbee and Willcox most frequently reported familiarity or participation with SHACs

Community	Familiar with or Participating in a SHAC	Familiar with or Participating in Healthy Cochise
COCHISE COUNTY (N=541)	16%	26%
Bisbee (n=27)	23%	48%
Tombstone (n=28)	18%	32%
Willcox (n=76)	23%	32%
Huachuca City (n=25)	12%	24%
Sierra Vista (n=166)	19%	25%
Benson (n=37)	5%	22%
Douglas (n=73)	13%	22%
Hereford/Palominas (n=56)	7%	21%
Sunizona/Elfrida/McNeal (n=33)	9%	18%

☐ Familiar with or Participating in a SHAC   ☐ Familiar with or Participating in Healthy Cochise

Note: Responses of 'agree' or 'strongly agree' are combined.

Community Survey Results

Table 1: Survey totals, by format and language

Total Number of Surveys	574	
English	527	92%
Spanish	47	8%
Online	378	66%
Online – English	376	99%
Online - Spanish	2	1%
Paper	196	34%
Paper - English	151	77%
Paper - Spanish	45	23%

Table 2: Survey respondent age

How old are you? - Years (Q16_1)	Low	High	Average	Median	Mode
All	15	88	52	53	57

Table 3: Years lived in Cochise County

How many years (total) have you lived in Cochise County? - Years (Q14_1)	Low	High	Average	Median	Mode
All	0	85	21	17	10

Table 4: Cochise County Region, based on self-reported town of residence

Cochise County Regions	n	%
Benson	37	7%
Bisbee	27	5%
Cochise	5	1%
Douglas	74	14%
Hereford/Palominas	56	10%
Huachuca City	25	5%
Naco	3	1%
Portal	2	0%
San Simon/Bowie	6	1%
Sierra Vista	167	30%
St. David	3	1%
Sunizona/Elfrida/McNeal	33	6%
Tombstone	28	5%
Willcox	82	15%
Total	548	

Table 5: Survey respondent gender identity

Which of the following best describes your gender identity? - (Q19)	n	%
Female	397	71%
Male	141	25%
Transgender man/Trans man	5	1%
Transgender woman/Trans woman	1	0.2%
Gender queer	4	1%
Not listed	0	0%
Prefer not to answer	19	3%

Table 6: Survey respondent race/ethnicity

Which of the following best describes your race or ethnicity? Select all that apply to you - (Q17)	n	%
American Indian or Alaskan Native	18	3%
Asian	4	1%
Black or African American	9	2%
Native Hawaiian or other Pacific Islander	6	1%
White	377	67%
Hispanic or Latino	141	25%
Prefer not to answer	38	7%

Table 7: Survey respondent education level

What is the highest level of education you have completed? Select one (18)	n	%
Less than high school (1)	27	5%
High school graduate or GED (2)	66	12%
Trade/technical/vocational training (3)	23	4%
Some college (4)	120	22%
2-year college graduate (5)	67	12%
4-year college graduate (6)	124	22%
Post graduate degree (7)	114	20%
Prefer not to answer (8)	16	3%
Total	557	100%

Table 8: Rating of overall health of the community, by survey language

How do you rate the overall health of the community where you live? Please select one. (Q2)	Very Healthy (1)	Healthy (2)	Somewhat Healthy (3)	Unhealthy (4)	Very Unhealthy (5)	Total
All	19	110	279	114	11	533
English	16	97	263	107	11	494
Spanish	3	13	16	7	0	39

Table 9: Rating of overall health of the community (%), by survey language

How do you rate the overall health of the community where you live? Please select one. (Q2) (%)	Very Healthy	Healthy	Somewhat Healthy	Unhealthy	Very Unhealthy	Healthy / Very Healthy	Unhealthy/ Very Unhealthy
All	4%	21%	52%	21%	2%	24%	23%
English	3%	20%	53%	22%	2%	23%	24%
Spanish	8%	33%	0%	18%	0%	41%	18%

Table 10: Perceptions of community health knowledge and behaviors

Thinking about the place where you live, please let us know how much you agree or disagree with the following: In my community… (Q3)	Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)	Don't Know (5)	Total
There are enough public places to be physically active (for example, parks, walking trails, bike paths, rec centers, etc.). (3_1)	96	250	138	72	0	556
People are physically active doing things (for example, walking, jogging, hiking, cycling, gardening, playing sports etc.). (3_2)	53	272	150	54	0	529
Getting people to be more physically active is important. (3_3)	345	188	16	0	0	549
It is important that all community members have access to healthy foods. (3_4)	400	143	4	7	0	554
It is easy for people to get fruits and vegetables. (3_5)	81	245	158	47	0	531
People are working on programs or initiatives to improve the health of community members. (3_6)	74	242	99	30	0	445
Leaders, organizations, and community members work well together to address issues affecting our health. (3_7)	49	179	162	55	0	445

Table 11: Perceptions of community health knowledge and behaviors (%)

Thinking about the place where you live, please let us know how much you agree or disagree with the following: In my community… (%)	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Strongly Agree/ Agree	Strongly Disagree/Disagree
There are enough public places to be physically active (for example, parks, walking trails, bike paths, rec centers, etc.).	17%	45%	25%	13%	0%	62%	38%
People are physically active doing things (for example, walking, jogging, hiking, cycling, gardening, playing sports etc.). (3_2)	10%	51%	28%	10%	0%	61%	39%
Getting people to be more physically active is important. (3_3)	63%	34%	3%	0%	0%	97%	3%
It is important that all community members have access to healthy foods. (3_4)	72%	26%	1%	1%	0%	98%	2%
It is easy for people to get fruits and vegetables. (3_5)	15%	46%	30%	9%	0%	61%	39%
People are working on programs or initiatives to improve the health of community members. (3_6)	17%	54%	22%	7%	0%	71%	29%
Leaders, organizations, and community members work well together to address issues affecting our health. (3_7)	11%	40%	36%	12%	0%	51%	49%

Table 12: Personal health knowledge and beliefs

Please let us know how much you agree or disagree with the following: - (Q4)	Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)	Don't Know (5)	Total
What I eat makes a difference to my health. (4_1)	412	140	3	1	0	556
I am in favor of changing local policies to support and increase opportunities for healthy eating and physical activity. (4_2)	309	168	23	17	0	517

Table 13: Personal health knowledge and beliefs (%)

Please let us know how much you agree or disagree with the following: - (Q4)	Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)	Don't Know (5)	Strongly Agree/Agree	Strongly Disagree/Disagree
What I eat makes a difference to my health. (4_1)	74%	25%	1%	0.2%	0%	99%	1%
I am in favor of changing local policies to support and increase opportunities for healthy eating and physical activity. (4_2)	60%	32%	4%	3.3%	0%	92%	8%

Table 14: Personal physical activity behaviors

Please mark the response that best describes how many days per week you usually do these things. - (Q6)	6 or more days (1)	3-5 days (2)	1-2 days (3)	None (4)	Total
How many days per week do you do physical activity or exercise? (6_1)	104	245	161	47	557
How many days per week do you make small changes on purpose to be more active (for example, taking stairs instead of an elevator)? (6_2)	110	188	161	93	552

Table 15: Personal physical activity behaviors (%)

Please mark the response that best describes how many days per week you usually do these things. - (Q6)	6 or more days (1)	3-5 days (2)	1-2 days (3)	None (4)	Total
How many days per week do you do physical activity or exercise? (6_1)	19%	43%	30%	8%	100%
How many days per week do you make small changes on purpose to be more active (for example, taking stairs instead of an elevator)?	20%	34%	29%	17%	100%

Table 16: Personal nutrition behaviors

Please mark the response that best describes how many times a day you usually do these things. - (Q7)	4 or more times a day (1)	3 times a day (2)	2 times a day (3)	1 time a day(4)	Less than once a day (a couple times a week) (5)	I rarely do this (6)	Total
How many times a day do you eat fruit? Include fresh, frozen, dried, or canned fruit. Do not include juice. (7_1)	46	65	154	158	107	29	559
How many times a day do you eat vegetables? Include fresh, canned and frozen vegetables. Do not count french fries, potato chips or rice. (7_2)	61	87	184	142	72	15	561
How many times a day do you drink sweetened drinks (e.g., regular sodas, fruit drinks, sports drinks, sweet tea, or sweet coffee drinks)? (7_3)	34	36	47	76	110	251	554
How many times a day do you drink water? (7_4)	369	100	43	22	7	12	553

Table 17: Personal nutrition behaviors (%)

Please mark the response that best describes how many times a day you usually do these things. - (Q7)	4 or more times a day (1)	3 times a day (2)	2 times a day (3)	1 time a day(4)	Less than once a day (a couple times a week) (5)	I rarely do this (6)	Total	1 time a day or fewer
How many times a day do you eat fruit? Include fresh, frozen, dried, or canned fruit. Do not include juice. (7_1)	8%	12%	28%	28%	19%	5%	100%	53%
How many times a day do you eat vegetables? Include fresh, canned and frozen vegetables. Do not count french fries, potato chips or rice. (7_2)	11%	16%	33%	25%	13%	3%	100%	41%
How many times a day do you drink sweetened drinks (e.g., regular sodas, fruit drinks, sports drinks, sweet tea, or sweet coffee drinks)? (7_3)	6%	6%	8%	14%	20%	45%	100%	79%
How many times a day do you drink water? (7_4)	67%	18%	8%	4%	1%	2%	100%	7%

Table 18: Personal food insecurity

In the last 12 months, did you worry that food at home would run out before your family got money to buy more? Select one. (Q8)	A lot (1)	Sometimes (2)	Never (3)	Total
All	62	131	364	557

Table 19: Personal food insecurity (%)

In the last 12 months, did you worry that food at home would run out before your family got money to buy more? Select one. (Q8)	A lot (1)	Sometimes (2)	Never (3)	Total
All	11%	24%	65%	100%

Table 20: Personal food bank/pantry use

In the last 12 months, how often did you get food from a food bank or food pantry? Select one. (Q9)	Weekly (1)	Monthly (2)	A few times a year (3)	Never (4)	Total
All	24	49	66	414	553

Table 21: Personal food bank/pantry use (%)

In the last 12 months, how often did you get food from a food bank or food pantry? Select one. (Q9)	Weekly (1)	Monthly (2)	A few times a year (3)	Never (4)	Total
All	4%	9%	12%	75%	100%

Table 22: Personal farmer's market, CSA, or garden use

In the last 12 months, how often did you get food from a farmer's market, CSA (farm shares or boxes like Bountiful Baskets), or local farm or garden? Select one. (Q10) *English survey data only*	Weekly (1)	Monthly (2)	A few times a year (3)	Never (4)	Total
All	18	56	176	263	513

Table 23: Personal farmer's market, CSA, or garden use (%)

In the last 12 months, how often did you get food from a farmer's market, CSA (farm shares or boxes like Bountiful Baskets), or local farm or garden? Select one. (Q10) *English survey data only*	Weekly (1)	Monthly (2)	A few times a year (3)	Never (4)	Total
All	4%	11%	34%	51%	100%

Table 24: Knowledge of Cochise initiatives

What do you know about the following programs/initiatives: - (Q5)	I know nothing about it (1)	I have heard about it but I'm unsure of what it's about (2)	I am familiar with it (3)	I have direct experience with it/I am a part of it (4)	Total
Healthy Cochise: The Cochise Healthy Communities Initiative	276	136	97	45	554
School Health Advisory Councils (SHACS)	366	94	64	24	548

Table 25: Knowledge of Cochise initiatives (%)

What do you know about the following programs/initiatives: - (Q5)	I know nothing about it (1)	I have heard about it but I'm unsure of what it's about (2)	I am familiar with it (3)	I have direct experience with it/I am a part of it (4)	Total	Heard of
Healthy Cochise: The Cochise Healthy Communities Initiative	50%	25%	18%	8%	100%	50%
School Health Advisory Councils (SHACS)	67%	17%	12%	4%	100%	33%

Appendix 3: School Survey Results

Benson

Building Healthy Communities: *Benson*

5TH AND 6TH GRADE STUDENT SURVEY RESULTS

170 Students Participated

96% like fruit

30% eat fruit at least 3x day
n=170
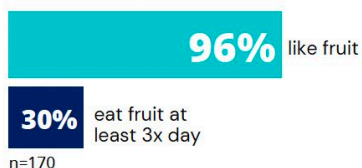
Although 96% of students report liking fruit, only 30% report eating fruit 3+ times per day.

72% like veggies

21% eat veggies at least 3x day
n=169
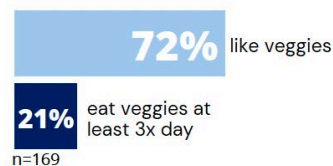
Similarly, 72% of students report liking vegetables, though only 21% report eating vegetables 3+ times per day.

40% drink water at least 6x day

10% drink water 1x or less per day
n=167
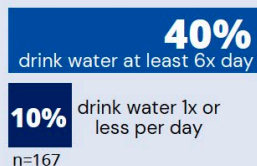
While 40% of students drink water at least 6 times per day, 10% of students drink water only 1 time per day or not at all.

41% rarely drink sugary drinks

59% consume sugary drinks at least 1x day
n=167

41% of students report that they don't regularly consume soda or other sugary drinks, however, 59% report drinking one or more sugary drinks per day.

Half of students who eat school food find it satisfactory

Don't eat at school, 18%

82% of students eat at school

Very good 9%

OK, 40%

Not very good 21%
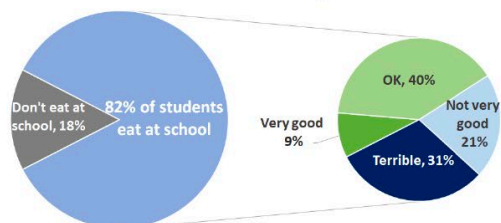
Terrible, 31%

While 9% of students who eat school food find school meals very good, 31% find meals to be terrible.

Nearly 2/3 of students watch 2+ hours of TV per day

4+ hours, 29%

An hour or less 27%

Usually no screentime on school days, 9%

2-3 hours, 35%
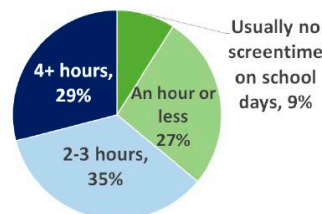
37% of students report an hour or less of screen time (TV, video or computer games) on school days, while 29% report 4+ hours.

80% of students exercise at least 4 days per week

3% | 17% | 40% | 40%

■ No days a week ■ 1-3 days a week ■ 4-6 days a week ■ Daily

40% of students report exercising daily, yet 20% report exercising 3 days or less per week.
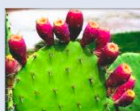
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HEALTHY COCHISE
The Cochise Healthy Communities Initiative

Building Healthy Communities: *Douglas*

5TH AND 6TH GRADE STUDENT SURVEY RESULTS

36 Students Participated

100% like fruit

14% eat fruit at least 3x day
n=36

Although 100% of students report liking fruit, only 14% report eating fruit 3+ times per day.

67% like veggies

14% eat veggies at least 3x day
n=36
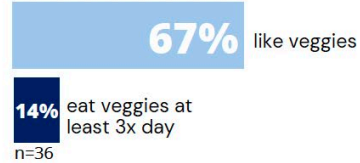
Similarly, 67% of students report liking vegetables, though only 14% report eating vegetables 3+ times per day.

36% drink water at least 6x day

17% drink water 1x or less per day
n=36
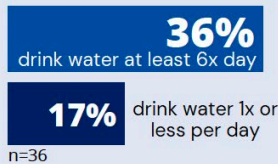
While 36% of students drink water at least 6 times per day, 17% of students drink water only 1 time per day or not at all.

44% rarely drink sugary drinks

28% consume sugary drinks at least 2x day
n=36
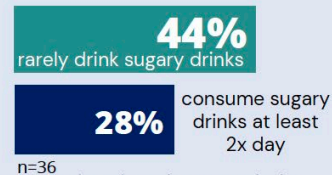
44% of students report that they don't regularly consume soda or other sugary drinks, however, 28% of students report drinking sugary drinks at least 2 times per day.

Most students who eat school food find it satisfactory

Don't eat at school, 3%

97% of students eat at school

OK, 49%
Very good, 11%
Terrible, 6%
Not very good, 34%
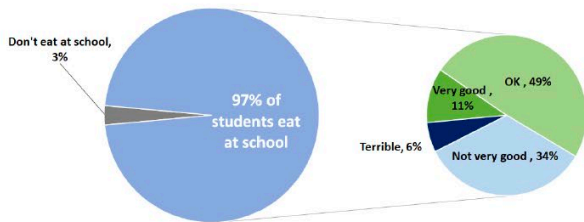
While 11% of students who eat school food find school meals very good, 6% of students find meals to be terrible.

Over 2/3 of students watch 2+ hours of TV per day

Usually no screentime on school days, 8%

An hour or less, 14%

4+ hours, 47%

2-3 hours, 31%
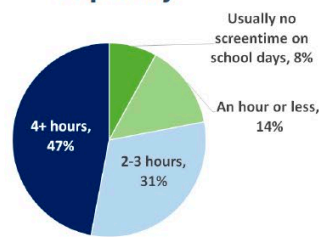
22% of students report an hour or less of screen time (TV, video or computer games) on school days, while 47% of students report 4+ hours.

75% of students exercise at least 4 days per week

| 3% | 22% | 58% | 17% |

■ No days a week ■ 1-3 days a week ■ 4-6 days a week ■ Daily
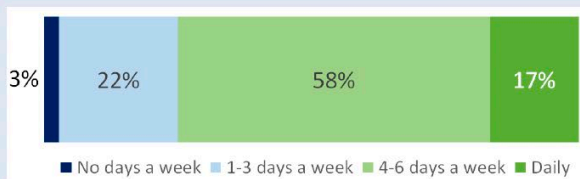
17% of students report exercising daily, yet 25% report exercising 3 days or less per week.

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HEALTHY COCHISE
**The Cochise Healthy Communities Initiative**

Created by the Community Research, Evaluation, & Development (CRED) Team, University of Arizona

101

Building Healthy Communities:
Hereford/Palominas

5TH AND 6TH GRADE STUDENT SURVEY RESULTS
72 Students Participated

100% like fruit

32% eat fruit at least 3x day

n=72

Although 100% of students report liking fruit, only 32% report eating fruit at least 3x per day.

84% like veggies

19% eat veggies at least 3x day

n=72

Similarly, 84% of students report liking vegetables, though only 19% report eating vegetables at least 3x per day.

35% drink water at least 6x day

13% drink water 1x or less per day

n=72

While 35% of students drink water at least 6 times per day, 13% of students drink water 1 time per day or less.

48% rarely drink sugary drinks

35% consume sugary drinks at least 2x day

n=72

Over one-third of students report that they regularly consume 2 or more sodas or other sugary drinks, however, 48% report drinking less than 1 sugary drink per day.

Most students who eat school food find it satisfactory

Don't eat at school, 16%

84% of students eat at school

Very good 14%

OK , 46%

Not very good , 36%
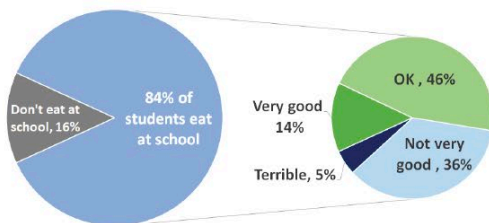
Terrible, 5%

Out of the 84% of students who eat school meals, 60% of students find school meals to be satisfactory, while 5% of students find school meals to be terrible.

Most students watch 2+ hours of TV on school days

Usually no screentime on school days, 11%

4+ hours, 23%

An hour or less, 27%

2-3 hours, 39%
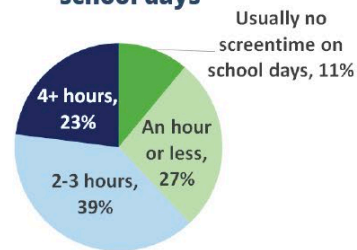
Although 38% of students report an hour or less of screen time (TV, video or computer games) on school days, 23% report 4+ hours.

69% of students exercise at least 4 days per week

4%	26%	40%	29%

■ No days a week ■ 1-3 days a week ■ 4-6 days a week ■ Daily
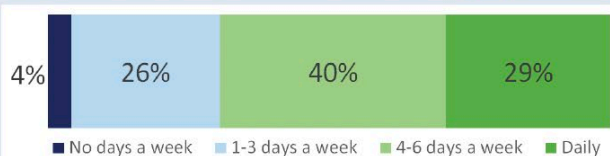
Approximately 69% of students report exercising at least 4 days per week, yet 30% report exercising 3 days or less per week.

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Cooperative Extension

HEALTHY COCHISE
The Cochise Healthy Communities Initiative

Created by the Community Research, Evaluation, & Development (CRED) Team, University of Arizona

Building Healthy Communities: McNeal

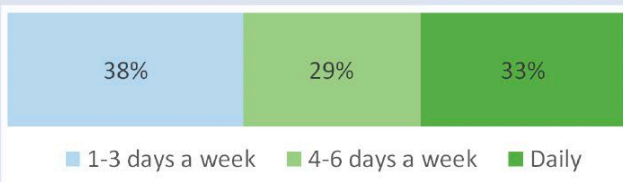## 5TH AND 6TH GRADE STUDENT SURVEY RESULTS

21 Students Participated

90% like fruit

15% eat fruit at least 3x day

n=21
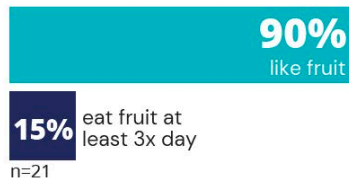
Although 90% of surveyed students report liking fruit, only 15% report eating fruit at least 3x per day.

67% like veggies

24% eat veggies at least 3x day

n=21

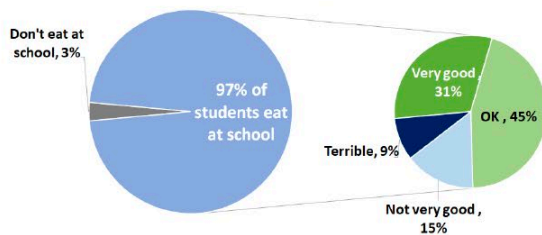Similarly, 67% of students report liking vegetables, though only 24% report eating vegetables at least 3x per day.

57% drink water at least 4x day

19% drink water 1x or less per day

n=21
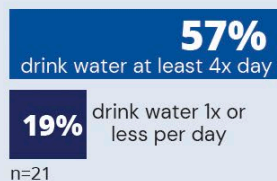
While 57% of students drink water at least 4 times per day, 19% of students drink water 1 time per day or not at all.

57% rarely drink sugary drinks

**33%** consume sugary drinks at least 2x day

n=21
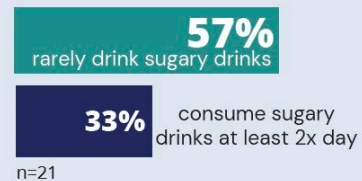
Approximately 33% of students report that they regularly consume 2 or more sodas or other sugary drinks, however, 57% report drinking less than 1 sugary drink per day.

### Most students who eat school food find it satisfactory

Don't eat at school, 48%

62% of students eat school food

Very good, 45%

OK, 45%
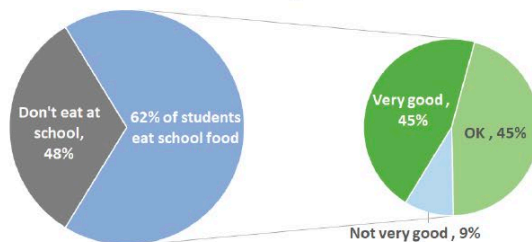
Not very good, 9%

Of the 62% of students who eat school meals, 90% of students find school meals to be satisfactory, while 9% of students find school meals to be not very good.

Most students watch 2+ hours of TV on school days

Usually no screentime on school days, 5%

An hour or less, 24%

4+ hours, 38%

2-3 hours, 33%
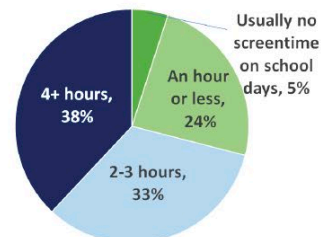
Although 29% of students report an hour or less of screen time (TV, video or computer games) on school days, 38% report 4+ hours.

62% of students exercise at least 4 days per week

38%	29%	33%

■ 1-3 days a week ■ 4-6 days a week ■ Daily

62% of students report exercising at least 4 days per week, yet 38% report exercising 3 days or less per week.

THE UNIVERSITY OF ARIZONA
Cooperative Extension

HEALTHY COCHISE
The Cochise Healthy Communities Initiative

Created by the Community Research, Evaluation, & Development (CRED) Team, University of Arizona

103

Naco

Building Healthy Communities: *Naco*

5TH AND 6TH GRADE STUDENT SURVEY RESULTS

67 Students Participated

99% like fruit

32% eat fruit at least 3x day

n=67

Although 99% of students report liking fruit, only 32% report eating fruit at least 3x per day.

84% like veggies

27% eat veggies at least 3x day

n=67
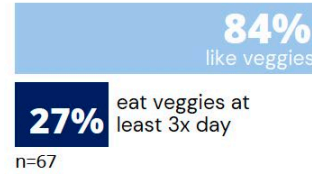
Similarly, 84% of students report liking vegetables, though only 27% report eating vegetables at least 3x per day.
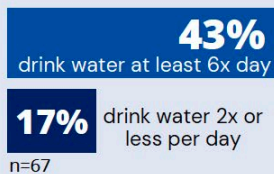
43% drink water at least 6x day

17% drink water 2x or less per day

n=67

While 43% of students drink water at least 6 times per day, 17% of students drink water 2 times per day or less.

20% rarely drink sugary drinks

61% consume sugary drinks at least 2x day

n=67

Approximately 61% of students report that they regularly consume 2 or more sodas or other sugary drinks, however, 20% report drinking less than 1 sugary drink per day.

Most students who eat school food find it satisfactory

Don't eat at school, 3%

97% of students eat at school

Very good, 31%

OK, 45%

Terrible, 9%

Not very good, 15%

Of the 97% of students who eat school meals, 76% of students find school meals to be satisfactory, while 9% of students find school meals to be terrible.

Most students watch 2+ hours of TV on school days

Usually no screentime on school days, 12%

4+ hours, 21%

1 hour or less, 31%

2-3 hours, 36%
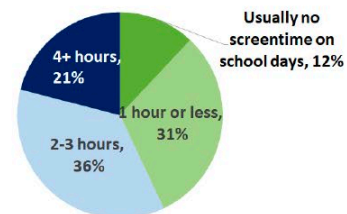
Although 43% of students report an hour or less of screen time (TV, video or computer games) on school days, 21% report 4+ hours.

91% of students exercise at least 4 days per week

1%	7%	48%	43%

■ No days a week ■ 1-3 days a week ■ 4-6 days a week ■ Daily
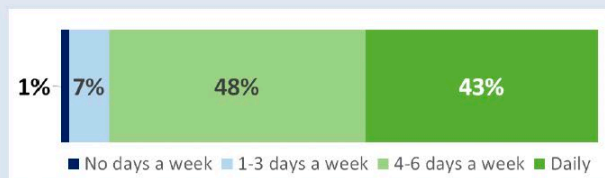
Approximately 91% of students report exercising at least 4 days per week, yet 8% report exercising 3 days or less per week.

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Cooperative Extension

HEALTHY COCHISE
The Cochise Healthy Communities Initiative

Created by the Community Research, Evaluation, & Development (CRED) Team, University of Arizona

Building Healthy Communities: *Willcox*
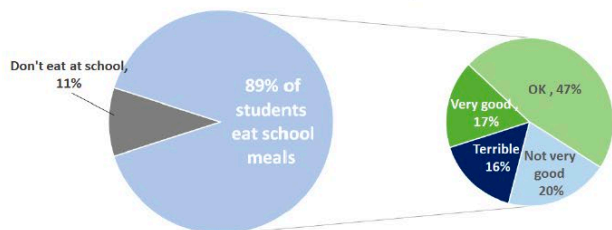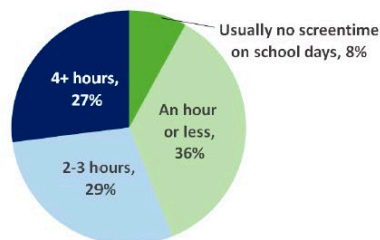
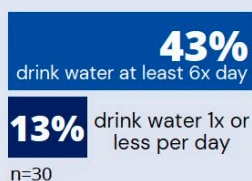## 5TH AND 6TH GRADE STUDENT SURVEY RESULTS

79 Students Participated

100% like fruit

43% eat fruit at least 3x day

n=79

Although 100% of students report liking fruit, only 43% report eating fruit at least 3x per day.

71% like veggies

23% eat veggies at least 3x day

n=79
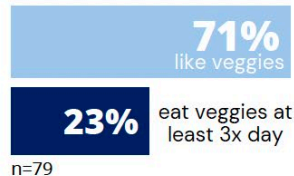
Similarly, 71% of students report liking vegetables, though only 23% report eating vegetables at least 3x per day.

35% drink water at least 6x day

15% drink water 2x or less per day

n=79
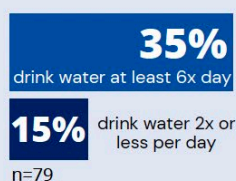
While 35% of students drink water at least 6 times per day, 15% of students drink water 2 times per day or less.

36% rarely drink sugary drinks

45% consume sugary drinks at least 2x day

n=77

45% of students report that they regularly consume 2 or more sodas or other sugary drinks per day, however, 36% report drinking less than 1 sugary drink per day.

The majority of students who eat school food find it satisfactory

Don't eat at school, 11%

89% of students eat school meals

OK , 47%
Very good 17%
Terrible 16%
Not very good 20%

Out of the 89% of students who eat school meals, 64% of students find school meals to be satisfactory, while 16% of students find school meals to be terrible.

Most students watch 2+ hours of TV on school days

4+ hours, 27%
Usually no screentime on school days, 8%
An hour or less, 36%
2-3 hours, 29%

Although 44% of students report an hour or less of screen time (TV, video or computer games) on school days, 27% report 4+ hours.

Two-thirds of students exercise at least 4 days per week

5%	29%	39%	27%

■ No days a week ■ 1-3 days a week ■ 4-6 days a week ■ Daily

66% of students report exercising at least 4 days per week, yet 34% report exercising 3 days or less per week.

THE UNIVERSITY OF ARIZONA
Cooperative Extension

HEALTHY COCHISE
The Cochise Healthy Communities Initiative

Created by the Community Research, Evaluation, & Development (CRED) Team, University of Arizona

St. David

Building Healthy Communities: *St. David*

## 5TH AND 6TH GRADE STUDENT SURVEY RESULTS

30 Students Participated

100% like fruit

60% eat fruit at least 3x day

n=30
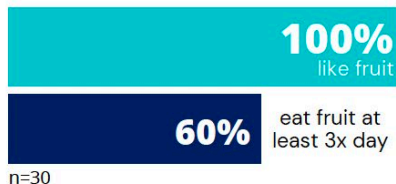
Although 100% of students report liking fruit, only 60% report eating fruit at least 3x per day.
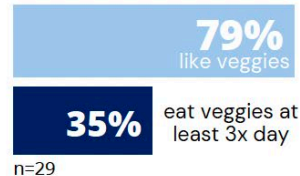
79% like veggies

35% eat veggies at least 3x day

n=29

Similarly, 84% of students report liking vegetables, though only 19% report eating vegetables at least 3x per day.

43% drink water at least 6x day

13% drink water 1x or less per day

n=30

While 43% of students drink water at least 6 times per day, 13% of students drink water 1 time per day or less.

53% rarely drink sugary drinks

**17%** consume sugary drinks at least 2x day

n=30
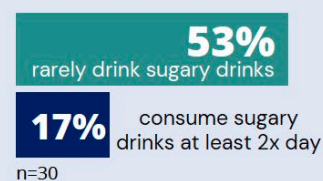
17% of students report that they regularly consume 2 or more sodas or other sugary drinks, however, 53% report drinking less than 1 sugary drink per day.

Many students who eat school food find it satisfactory

Don't eat at school, 24%

76% of students eat school food

OK , 27%

Very good, 14%

Not very good, 45%
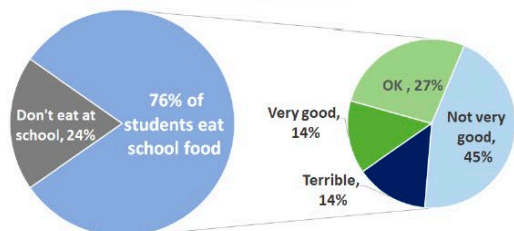
Terrible, 14%

Out of the 76% of students who eat school meals, 41% of students find school meals to be satisfactory, while 14% of students find school meals to be terrible.

Most students watch 2+ hours of TV on school days

4+ hours, 27%

Usually no screentime on schooldays, 13%

An hour or less 23%

2-3 hours, 37%
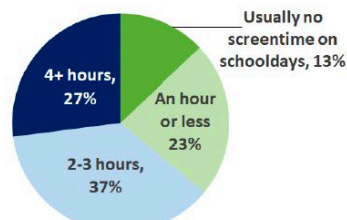
Although 36% of students report an hour or less of screen time (TV, video or computer games) on school days, 27% report 4+ hours.

Almost two-thirds of students exercise at least 4 days per week

10%	27%	30%	33%

■ No days a week ■ 1-3 days a week ■ 4-6 days a week ■ Daily
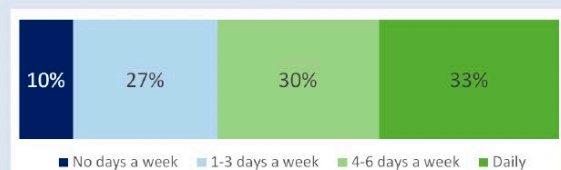
63% of students report exercising at least 4 days per week, yet 37% report exercising 3 days or less per week.

THE UNIVERSITY OF ARIZONA
Cooperative Extension

HEALTHY COCHISE
The Cochise Healthy Communities Initiative

Created by the Community Research, Evaluation, & Development (CRED) Team, University of Arizona
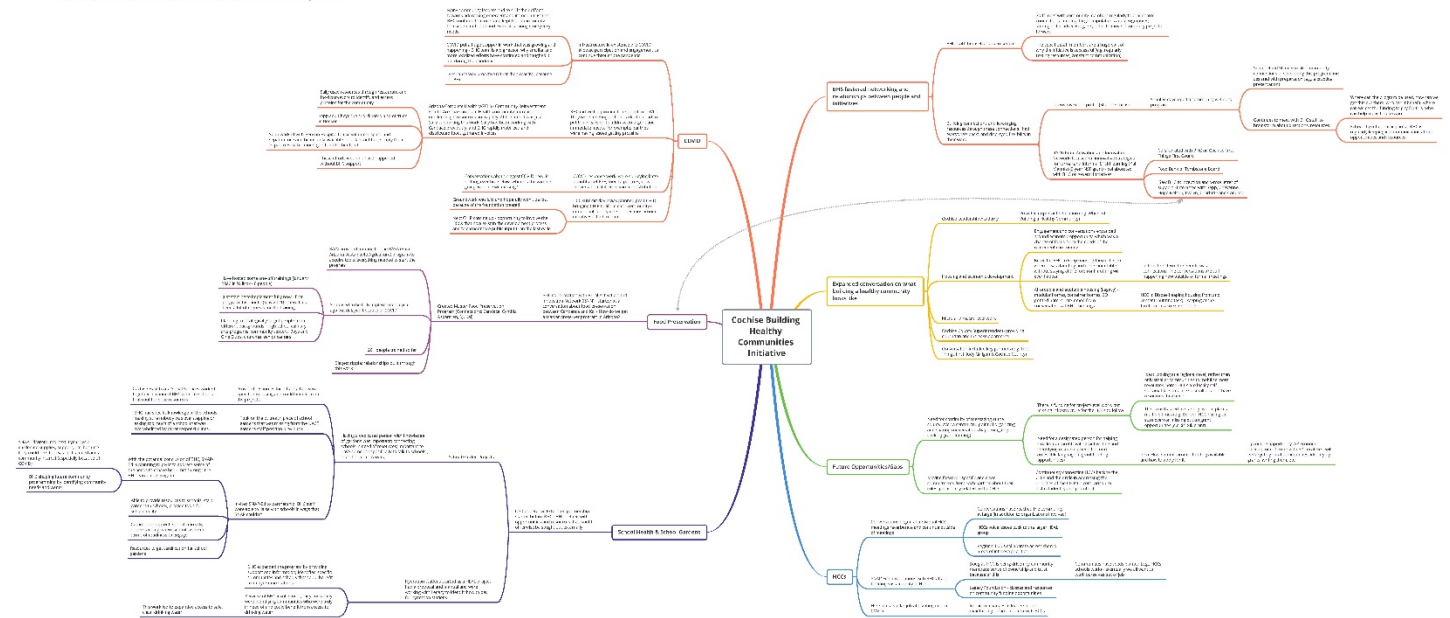
Appendix 4: Ripple Effects Maps

Ripple Effects Map: Countywide Health Initiatives

Link to online versions of map: https://arizona.box.com/s/zjfftkikjflbxm46xqzxl8l84872p3ii

Ripple Effects Map: Douglas, Elfrida, Pearce

Link to online versions of map: https://arizona.box.com/s/rzmf260v3jx30mcce9u3wezmwh3xlw54

Ripple Effects Map: Willcox, Benson, and surrounding areas

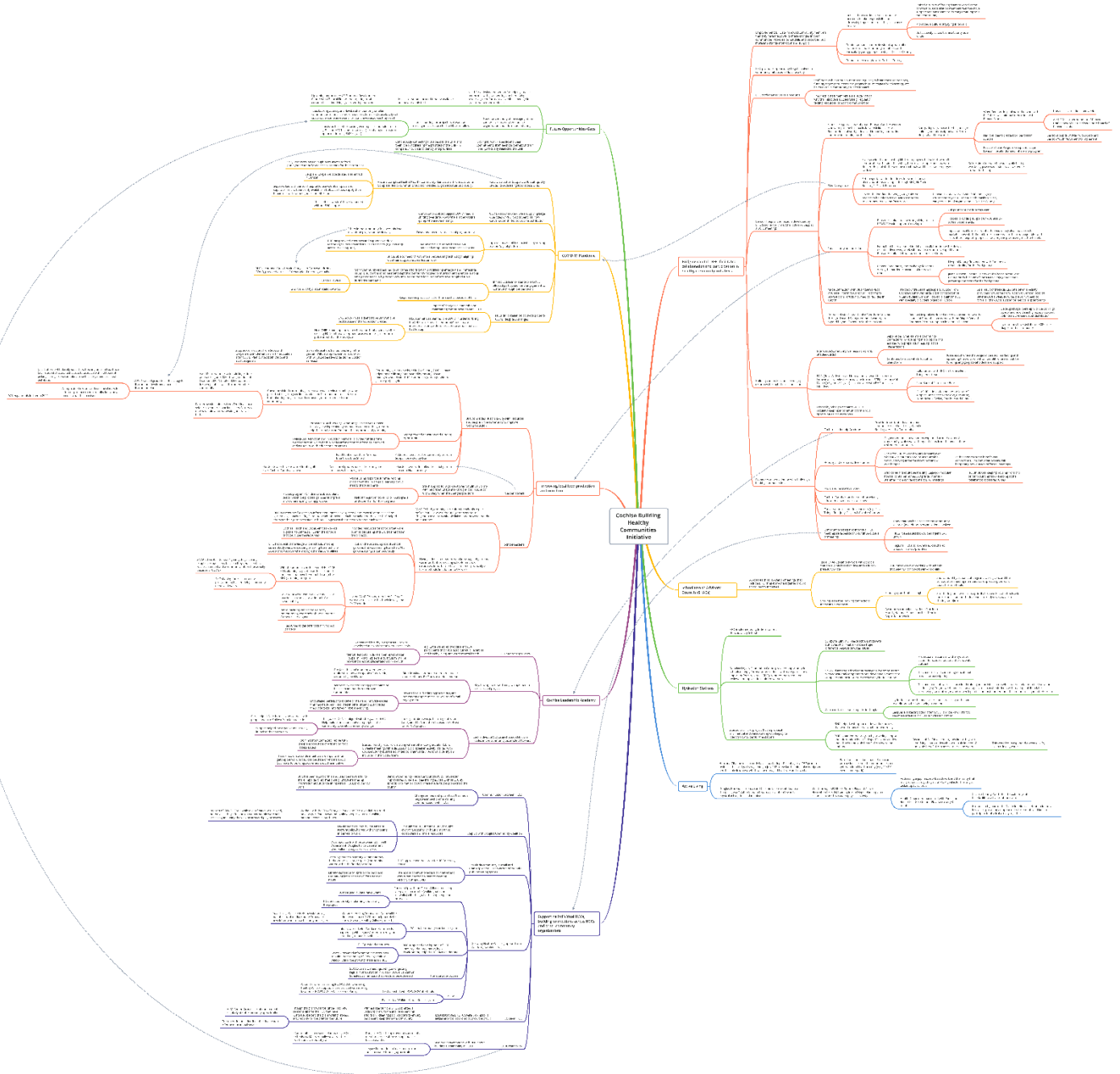Link to online versions of map: https://arizona.box.com/s/uu7hvco72nyvh5prmxwznc0krihtxovk

Cochise Building Healthy Communities (BHC) Initiative
Ripple Effects Mapping Session: Willcox, Benson, and surrounding areas (5/10/21)
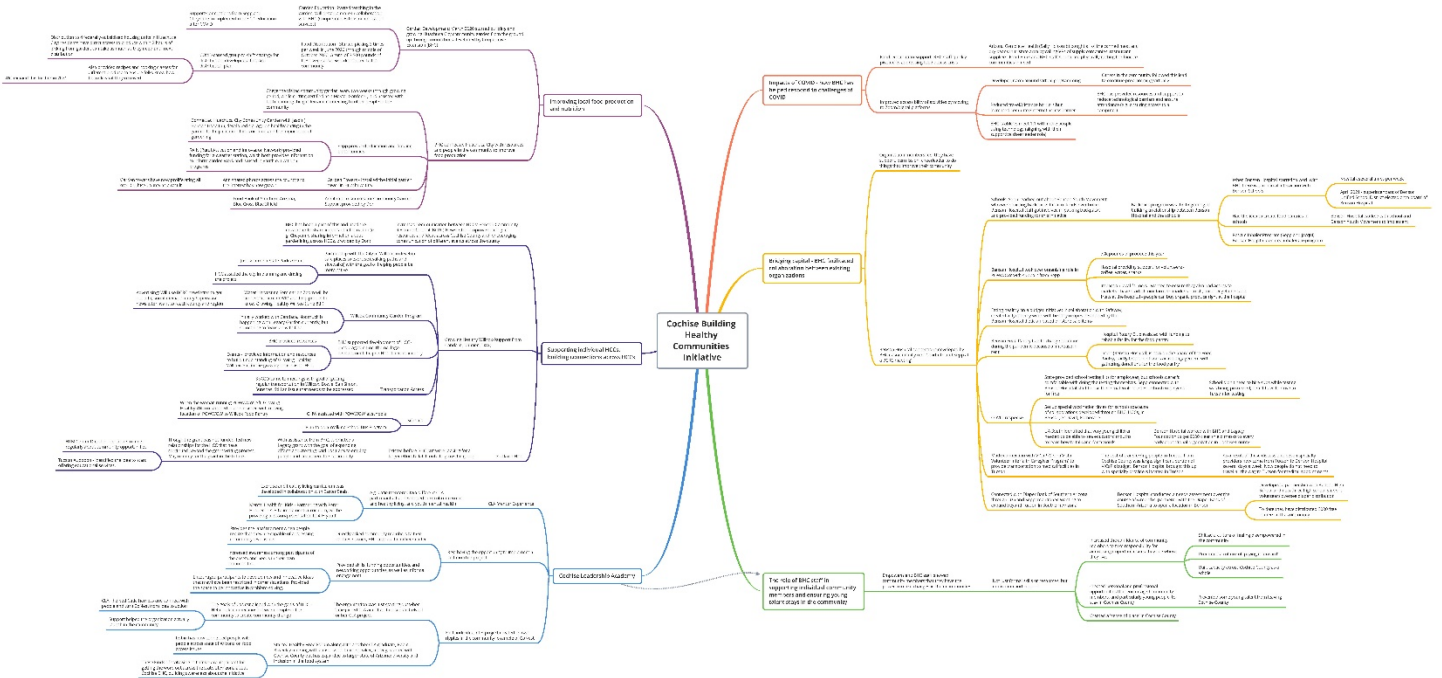
Ripple Effects Map: Merged Map

Link to online versions of map: https://arizona.box.com/s/3p409r1yngk27y1jnc1npmt17hpuruvm

Appendix 5: Social Network Analysis Maps

2018 Partners Working in Strategy 1: Healthy Community Committees (HCCs)

Sector
- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
- Government and policymakers

Strength of Relationship
1 — 4

Change in Relationship
-4 — 0 — 4

2021 Partners Working in Strategy 1: Healthy Community Committees (HCCs)

Sector
- 🟢 Higher education
- 🔵 Food system and hunger relief
- 🔵 Justice and public safety
- 🔵 Non-profit and social service agencies
- 🟣 Community leaders and other influencers
- 🩷 Industry and business
- 🔴 Education, child care, and youth development
- 🟠 Healthcare and public health
- 🟡 Government and policymakers

Strength of Relationship
1 ——— 4

Change in Relationship
-4 — 0 — 4

2018- 2021 Change in Partnerships Working in Strategy 1: Healthy Community Committees (HCCs)

2018 Partners Working in Strategy 2: Countywide Health Initiatives, HEAL

2021 Partners Working in Strategy 2: Countywide Health Initiatives, HEAL

2018- 2021 Change in Partnerships Working in Strategy 2: Countywide Health Initiatives, HEAL
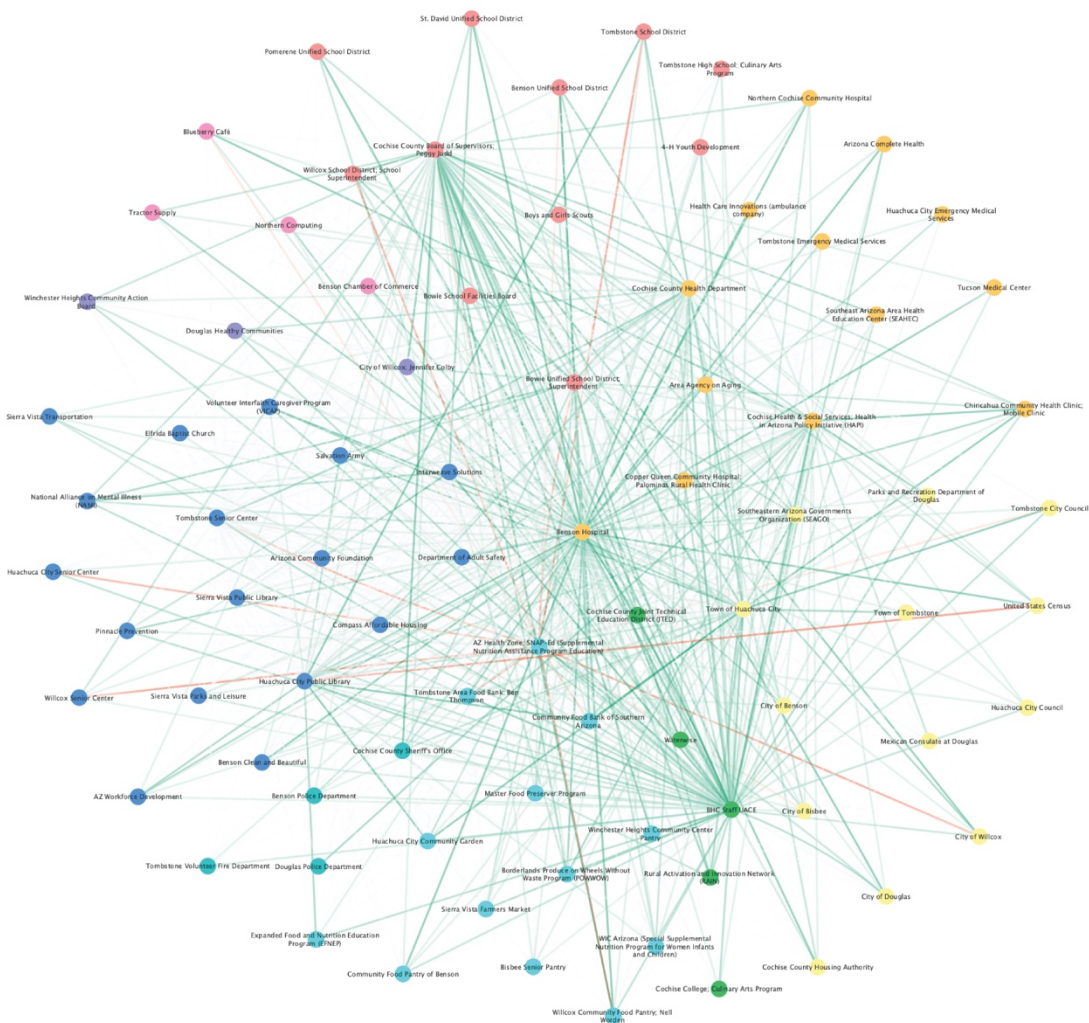

Sector
- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
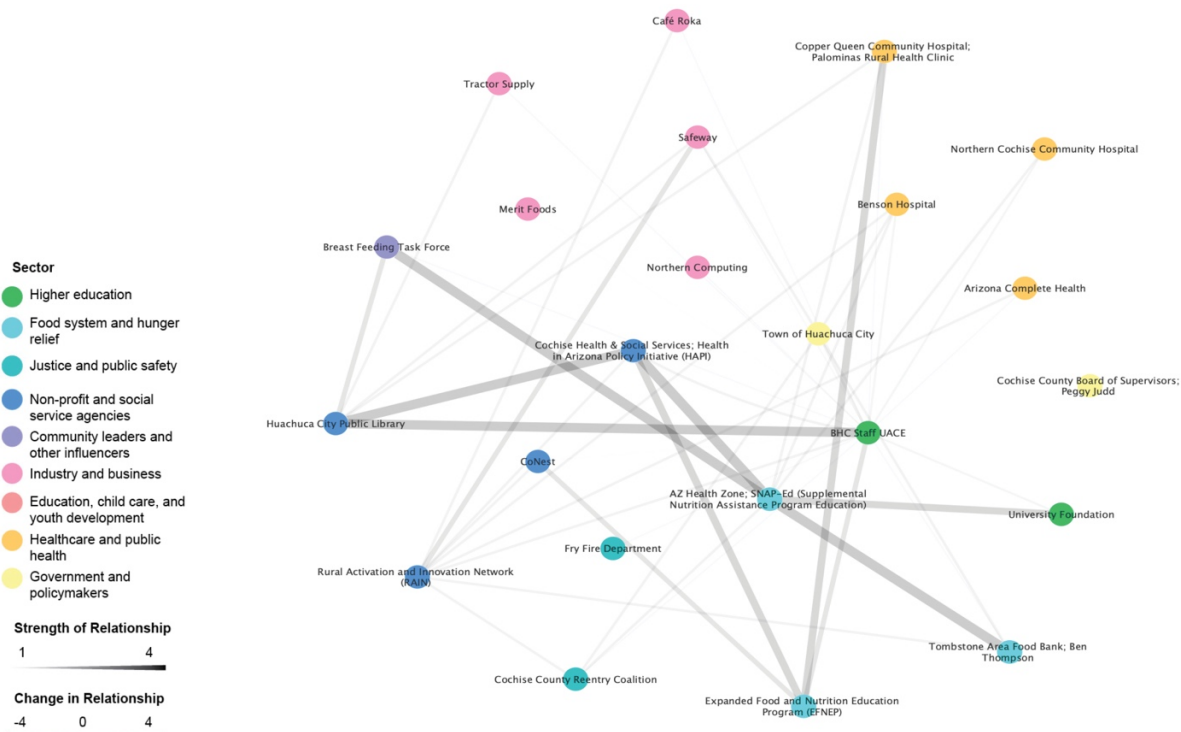- Government and policymakers

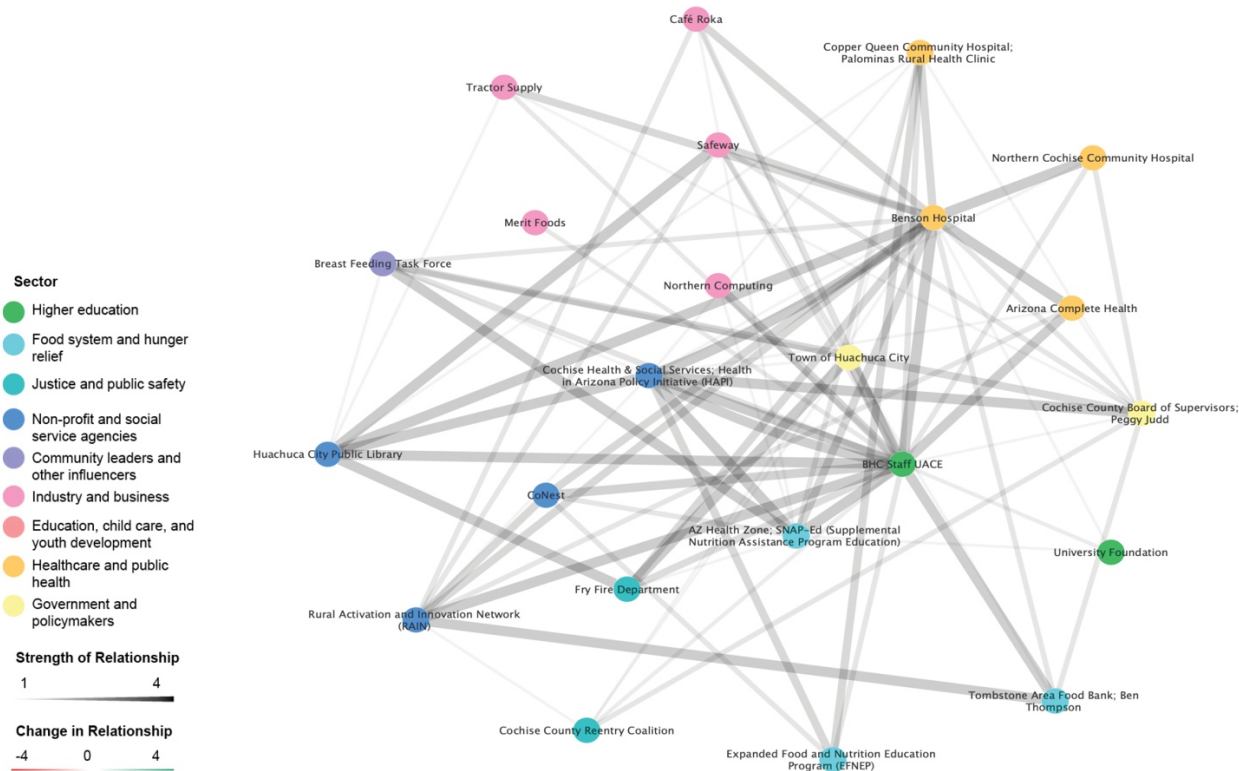**Strength of Relationship**
1   4

Change in Relationship
-4   0   4

2018 Partners Working in Strategy 3: Cochise Leadership Academy (CLA)

Cochise County School Superintendent's Office (CCSSO)

Willcox School District; School Superintendent

Health Care Innovations (ambulance company)

Tombstone School District

Copper Queen Community Hospital; Palominas Rural Health Clinic

Expect More Arizona

Benson Hospital

HOPE Garden

Tombstone High School; Culinary Arts Program

Chiricahua Community Health Clinic; Mobile Clinic

Northern Computing

Huachuca City Council

Arizona Complete Health

City of Willcox; Jennifer Colby

Bowie Unified School District; Superintendent

Cochise County Health Department

City of Willcox

Hope Inc.

City of Douglas

Cochise Health & Social Services; Health in Arizona Policy Initiative (HAPI)

Huachuca City Public Library

Town of Huachuca City

Southeastern Arizona Governments Organization (SEAGO)

Sierra Vista Parks and Leisure

National Alliance on Mental Illness (NAMI)

Bisbee Coalition for the Homeless

Huachuca City Community Garden

BHC Staff UACE

Parks and Recreation Department of Douglas

Volunteer Interfaith Caregiver Program (VICAP)

Fry Fire Department

AZ Health Zone; SNAP-Ed (Supplemental Nutrition Assistance Program Education)

AZ Workforce Development

UA South

Bells; Jeannette Maré

Saginaw Small Free Community Pantry

CoNest

Borderlands Produce on Wheels Without Waste Program (POWWOW)

Cochise County Juvenile Detention Center

Bisbee Senior Pantry

Sector

- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
- Government and policymakers

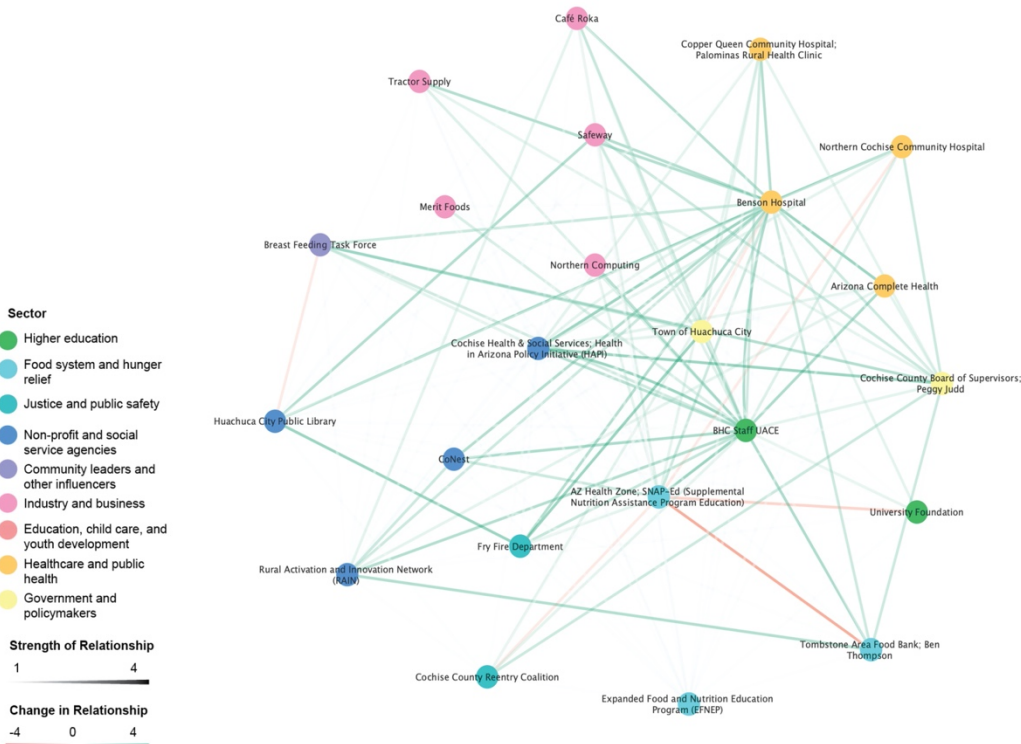**Strength of Relationship**

1   4

Change in Relationship

-4   0   4

2021 Partners Working in Strategy 3: Cochise Leadership Academy (CLA)

Sector
- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
- Government and policymakers

Strength of Relationship
1 — 4

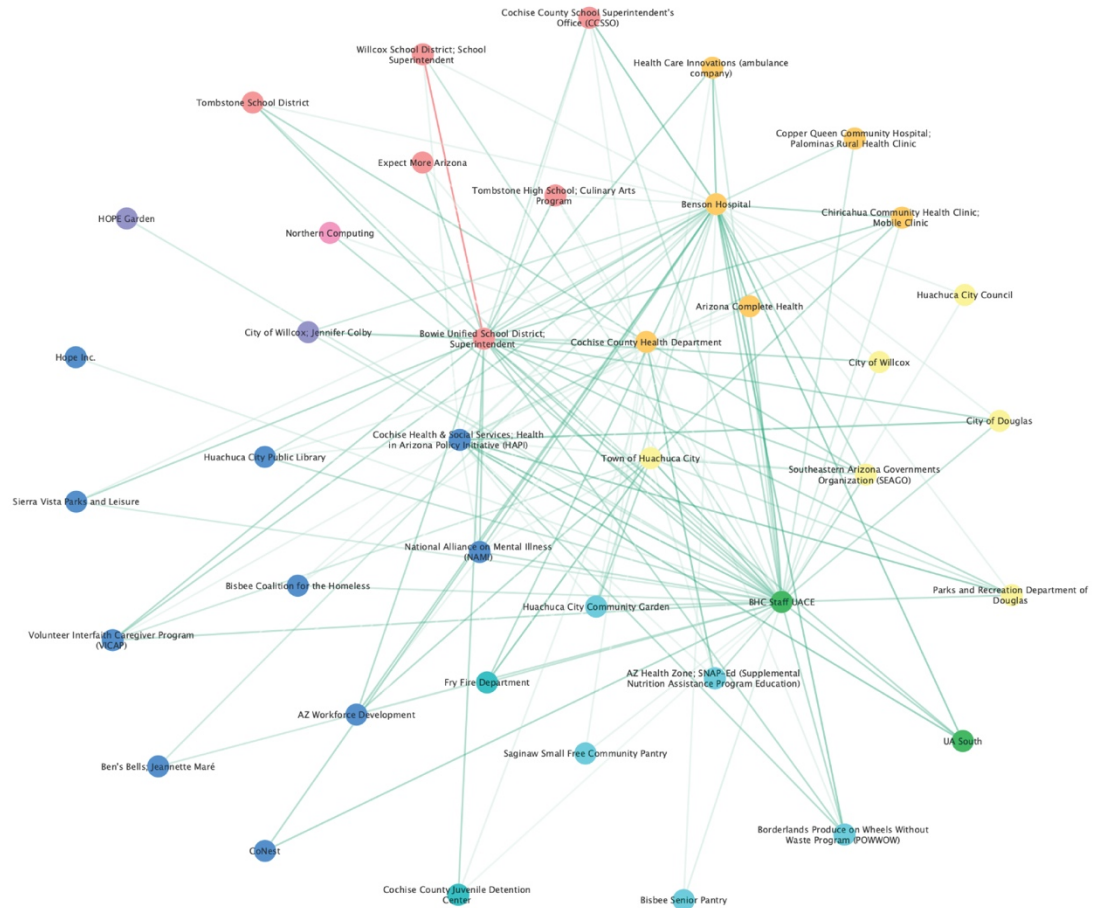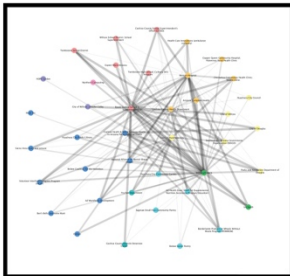**Change in Relationship**
-4   0   4

2018- 2021 Change in Partnerships Working in Strategy 3: Cochise Leadership Academy (CLA)

2018

2021

Sector

- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
- Government and policymakers

Strength of Relationship
1   4

Change in Relationship
-4   0   4

Sector
- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
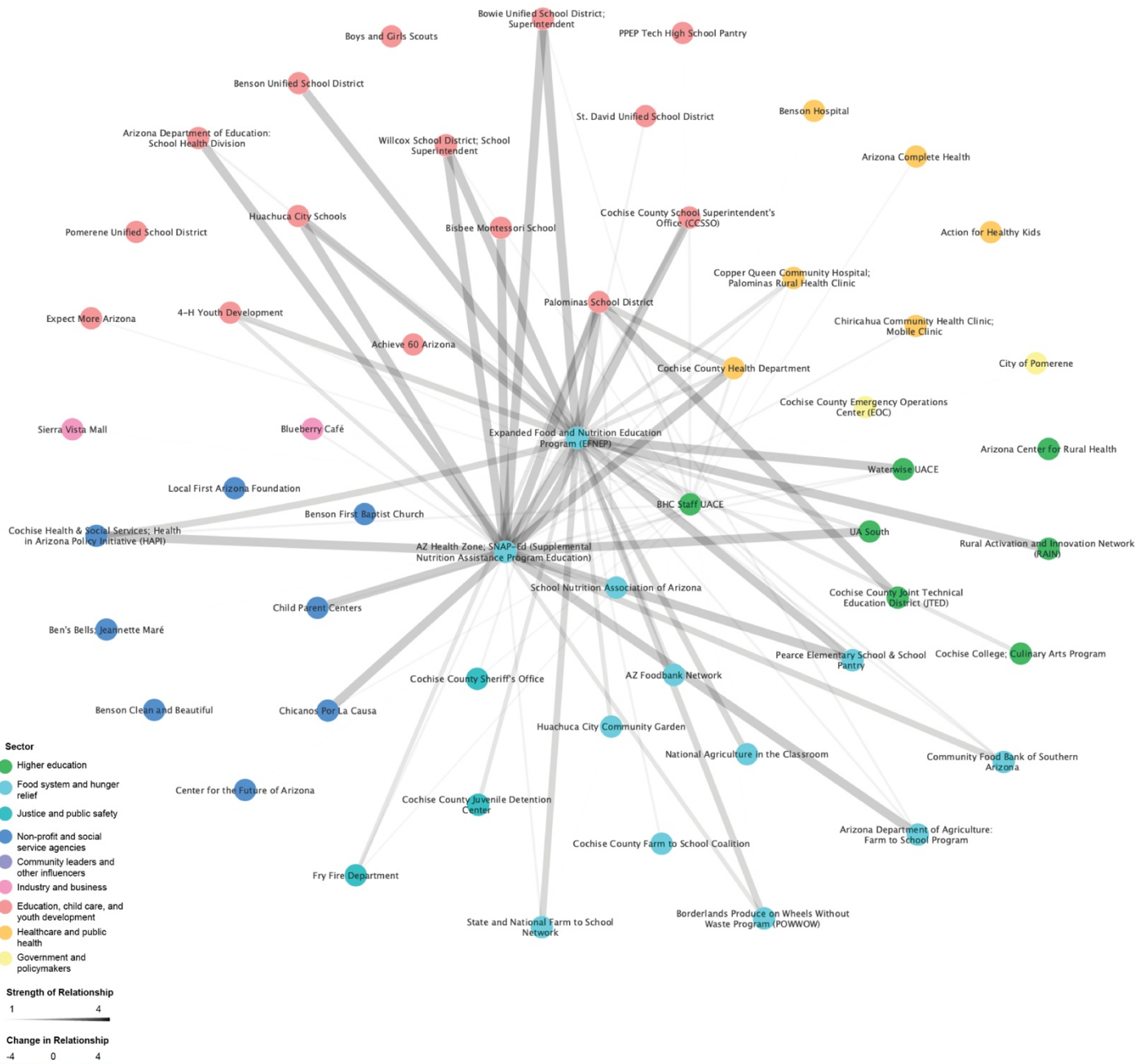- Government and policymakers

Strength of Relationship
1 — 4
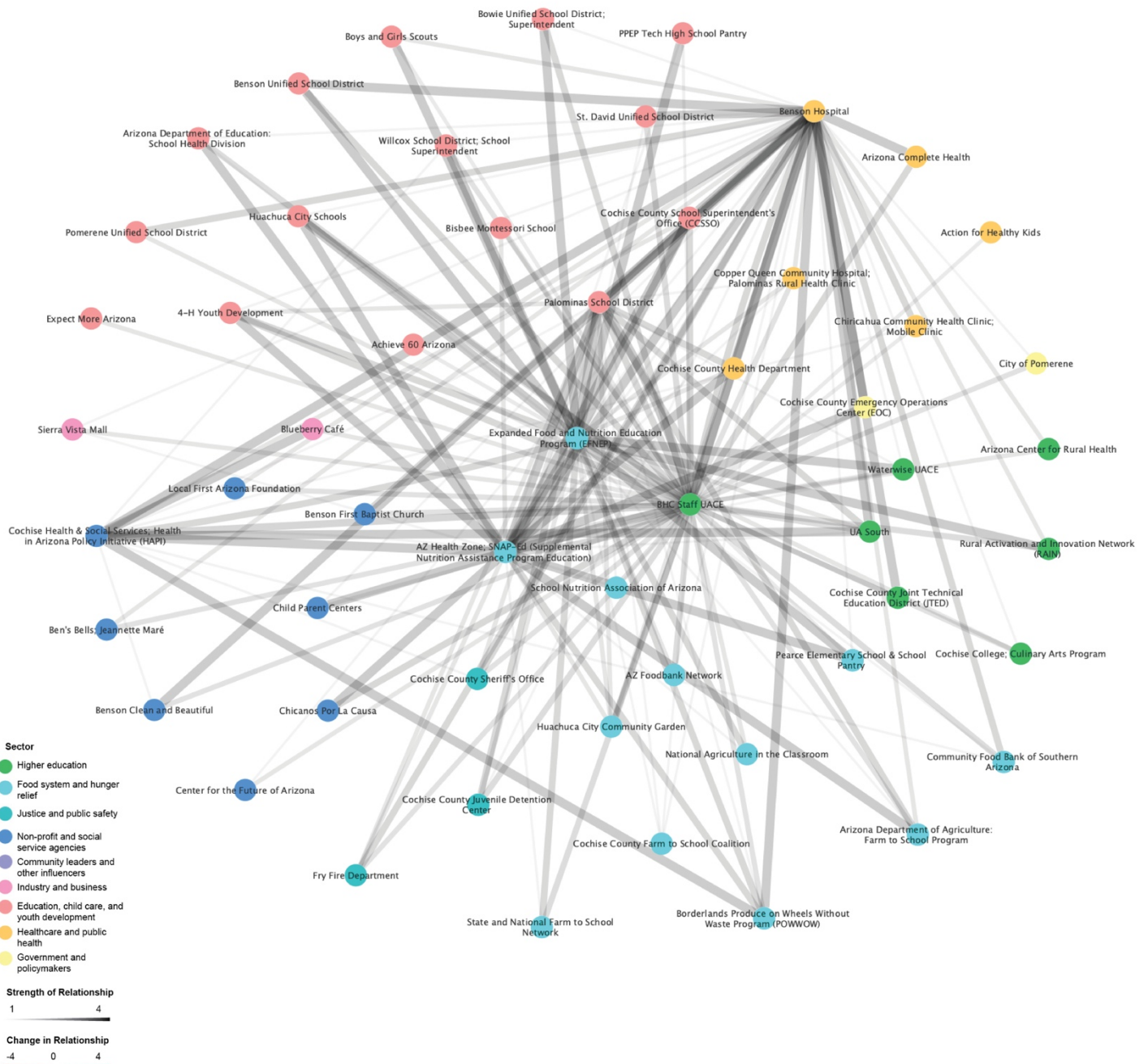
Change in Relationship
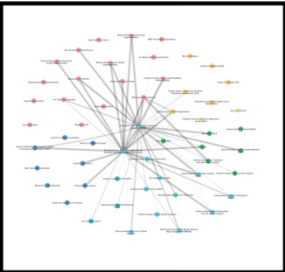-4   0   4

2021 Partners Working in Strategy 4: School Health

Sector

- 🟢 Higher education
- 🔵 Food system and hunger relief
- 🟦 Justice and public safety
- 🔵 Non-profit and social service agencies
- 🟣 Community leaders and other influencers
- 🩷 Industry and business
- 🔴 Education, child care, and youth development
- 🟠 Healthcare and public health
- 🟡 Government and policymakers

Strength of Relationship

1 —— 4

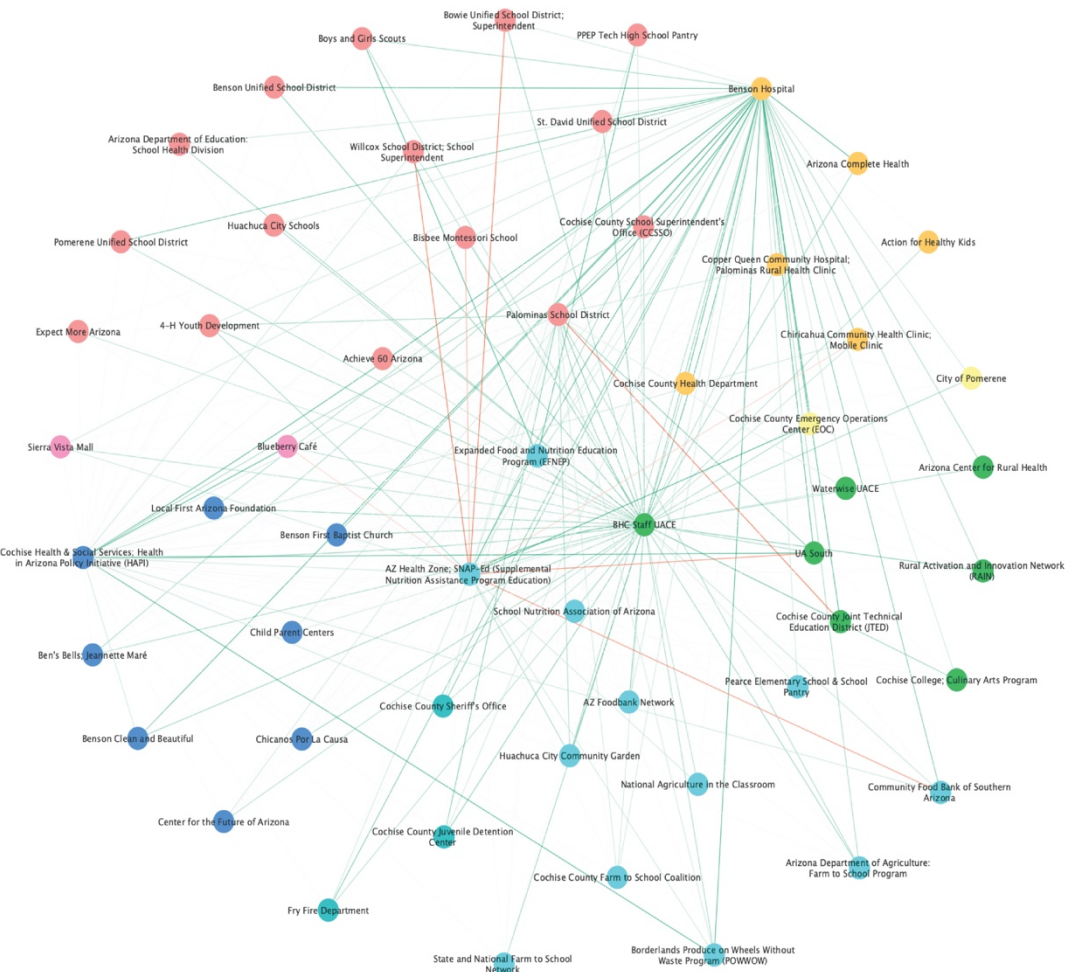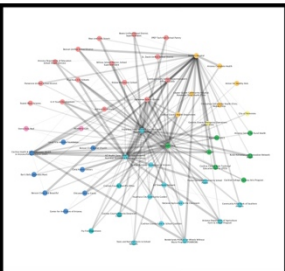**Change in Relationship**

-4   0   4

2018- 2021 Change in Partnerships Working in Strategy 4: School Health
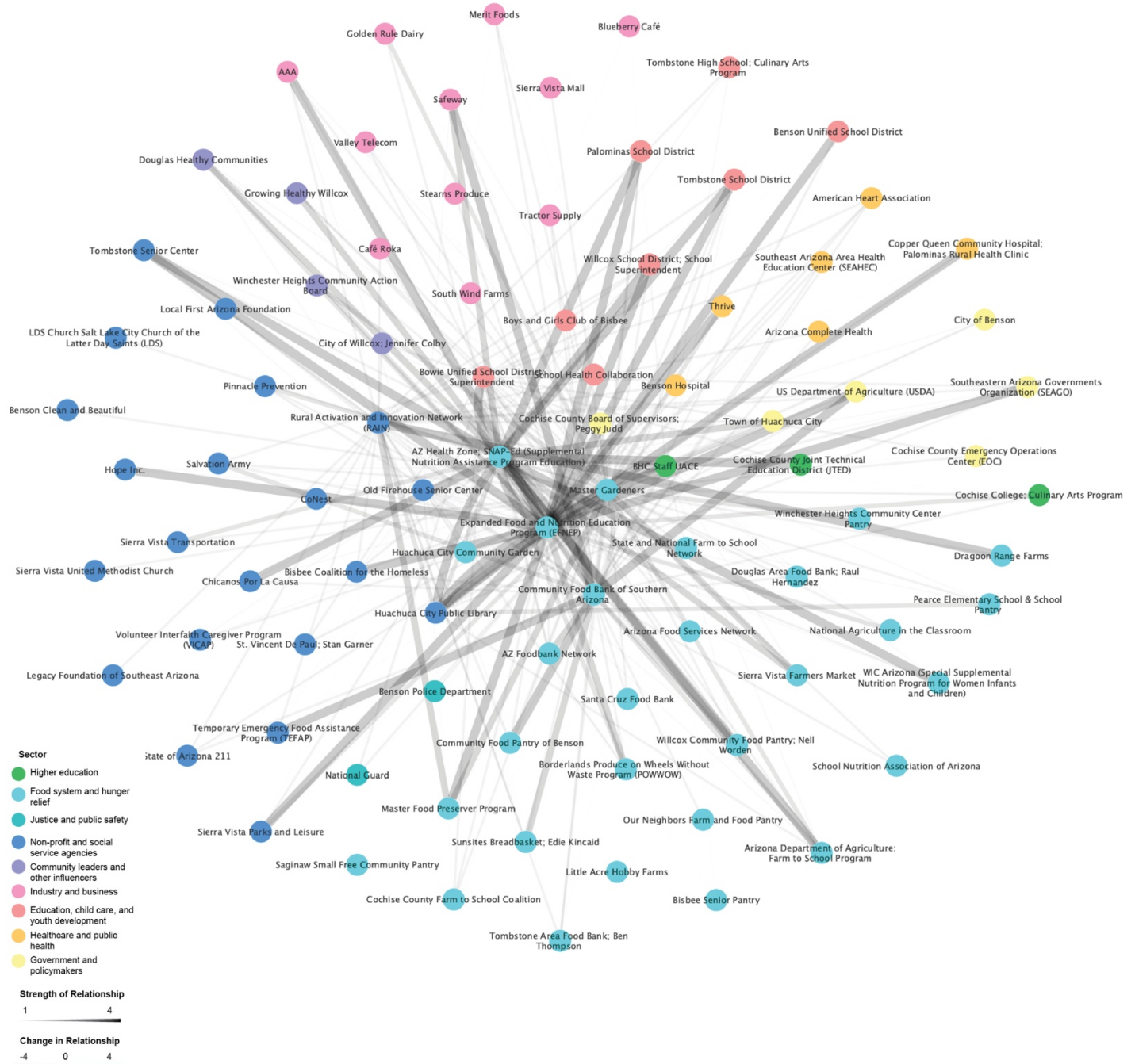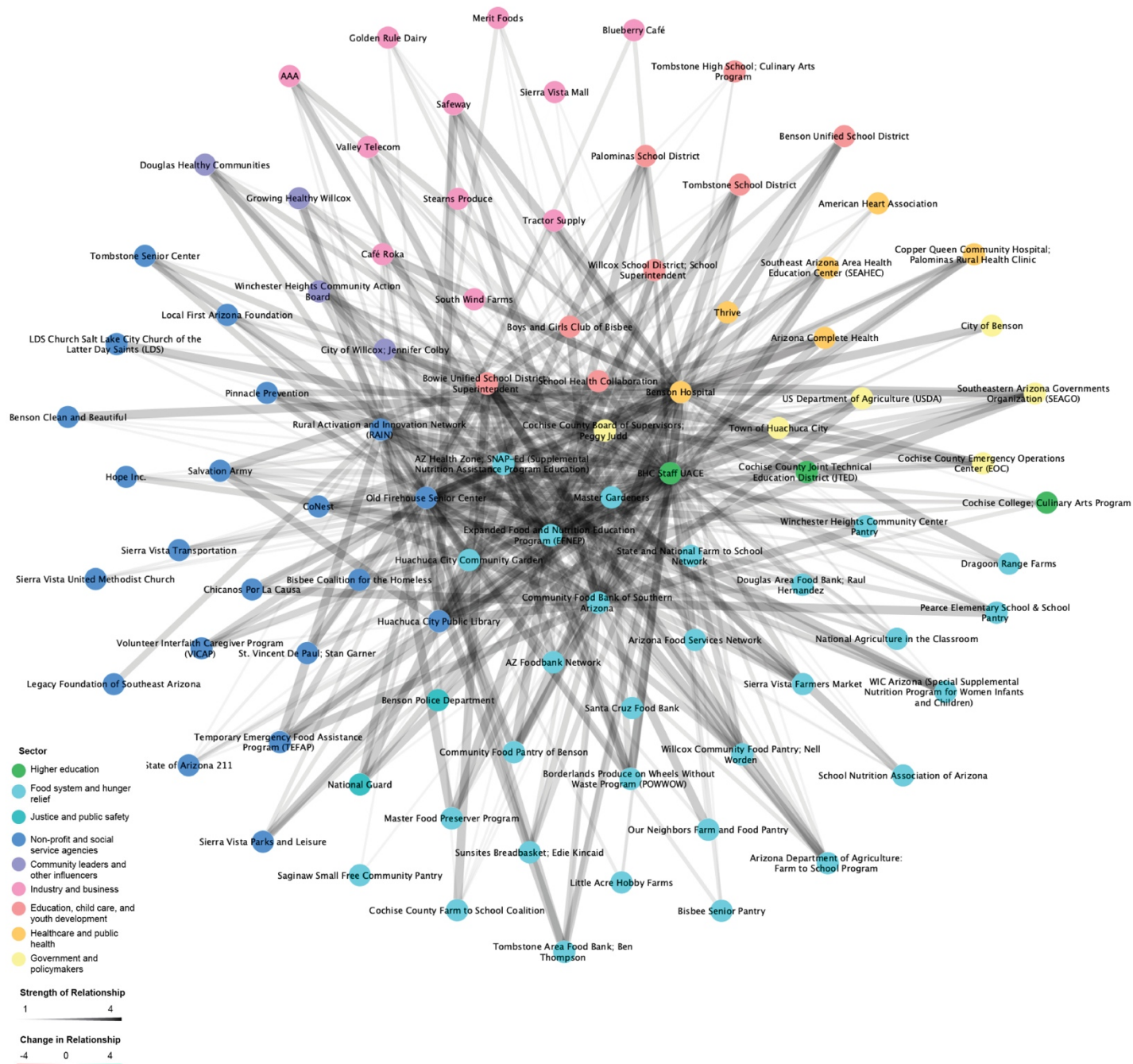
2018

2021

Sector
- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
- Government and policymakers

Strength of Relationship
1 — 4

Change in Relationship
-4 — 0 — 4

Boys and Girls Scouts

Bowie Unified School District; Superintendent

PPEP Tech High School Pantry

Benson Unified School District

St. David Unified School District

Benson Hospital

Arizona Department of Education: School Health Division

Willcox School District; School Superintendent

Arizona Complete Health

Cochise County School Superintendent's Office (CCSSO)

Huachuca City Schools

Bisbee Montessori School

Action for Healthy Kids

Pomerene Unified School District

Copper Queen Community Hospital; Palominas Rural Health Clinic

Expect More Arizona

4-H Youth Development

Palominas School District

Chiricahua Community Health Clinic; Mobile Clinic

City of Pomerene

Achieve 60 Arizona

Cochise County Health Department

Cochise County Emergency Operations Center (EOC)

Sierra Vista Mall

Blueberry Café

Expanded Food and Nutrition Education Program (EFNEP)

Arizona Center for Rural Health

Waterwise UACE

Local First Arizona Foundation

BHC Staff UACE

Cochise Health & Social Services: Health in Arizona Policy Initiative (HAPI)

Benson First Baptist Church

AZ Health Zone; SNAP-Ed (Supplemental Nutrition Assistance Program Education)

UA South

Rural Activation and Innovation Network (RAIN)

Ben's Bells; Jeannette Maré

School Nutrition Association of Arizona

Cochise County Joint Technical Education District (JTED)

Child Parent Centers

Pearce Elementary School & School Pantry

Cochise College; Culinary Arts Program

Benson Clean and Beautiful

Cochise County Sheriff's Office

AZ Foodbank Network

Chicanos Por La Causa

National Agriculture in the Classroom

Community Food Bank of Southern Arizona

Center for the Future of Arizona

Huachuca City Community Garden

Cochise County Juvenile Detention Center

Arizona Department of Agriculture: Farm to School Program

Cochise County Farm to School Coalition

Fry Fire Department

State and National Farm to School Network

Borderlands Produce on Wheels Without Waste Program (POWWOW)

2021 Partners Working in Strategy 5: Food Systems

Sector
- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
- Government and policymakers

Strength of Relationship
1   4

Change in Relationship
-4   0   4
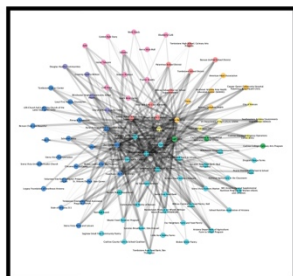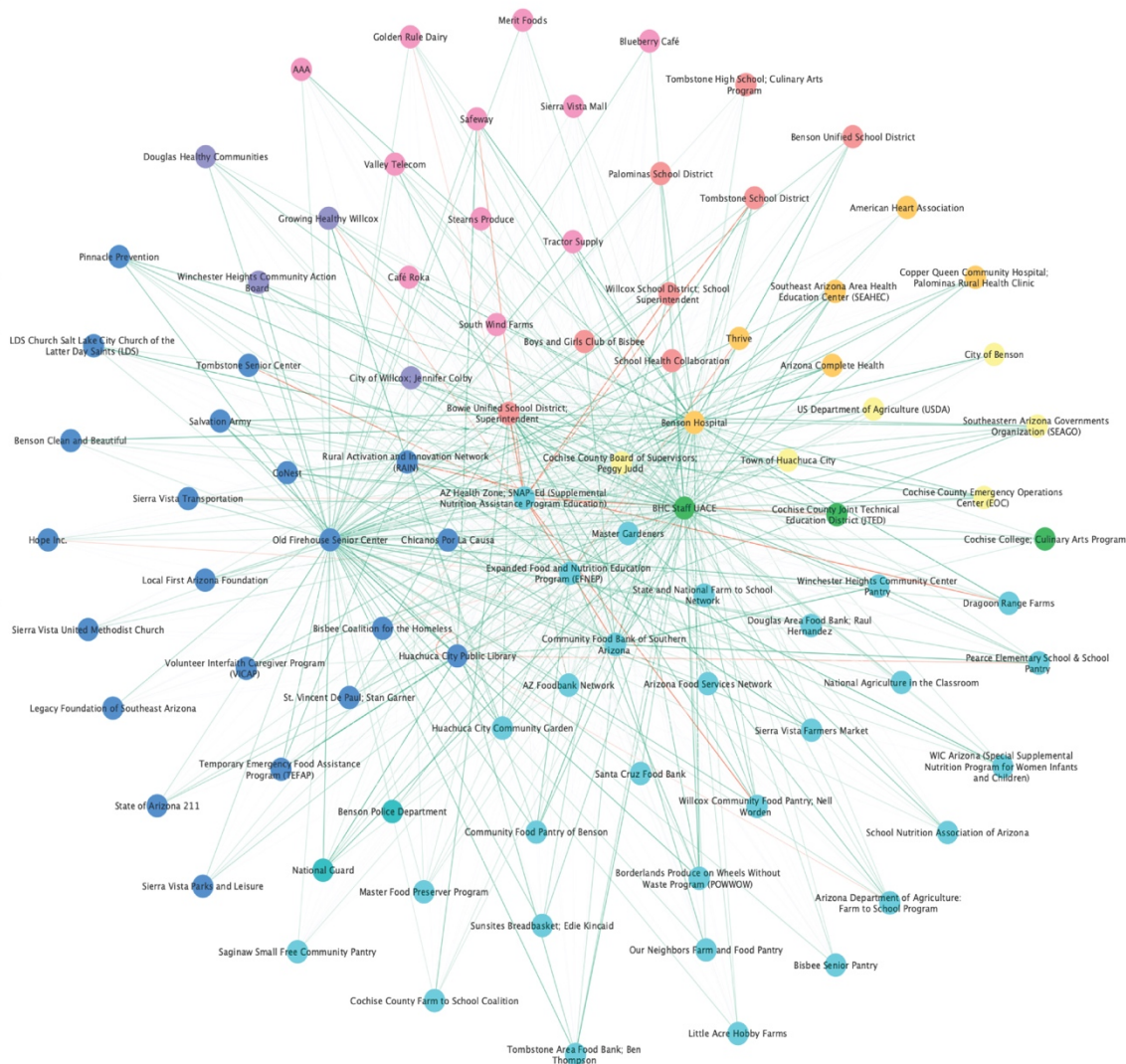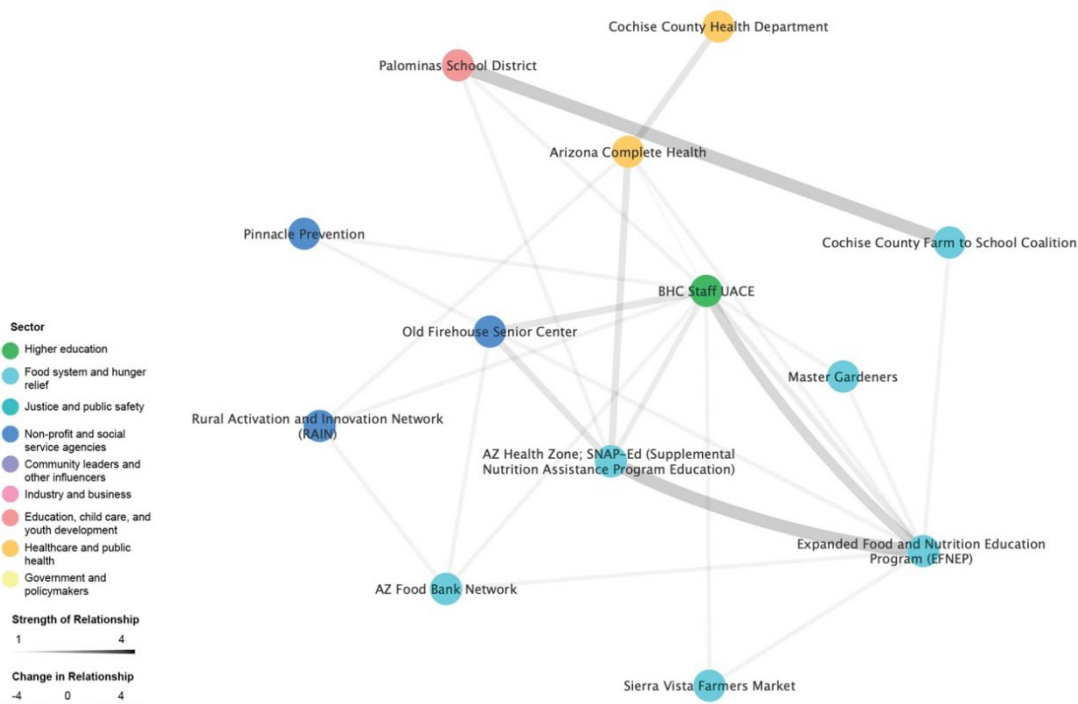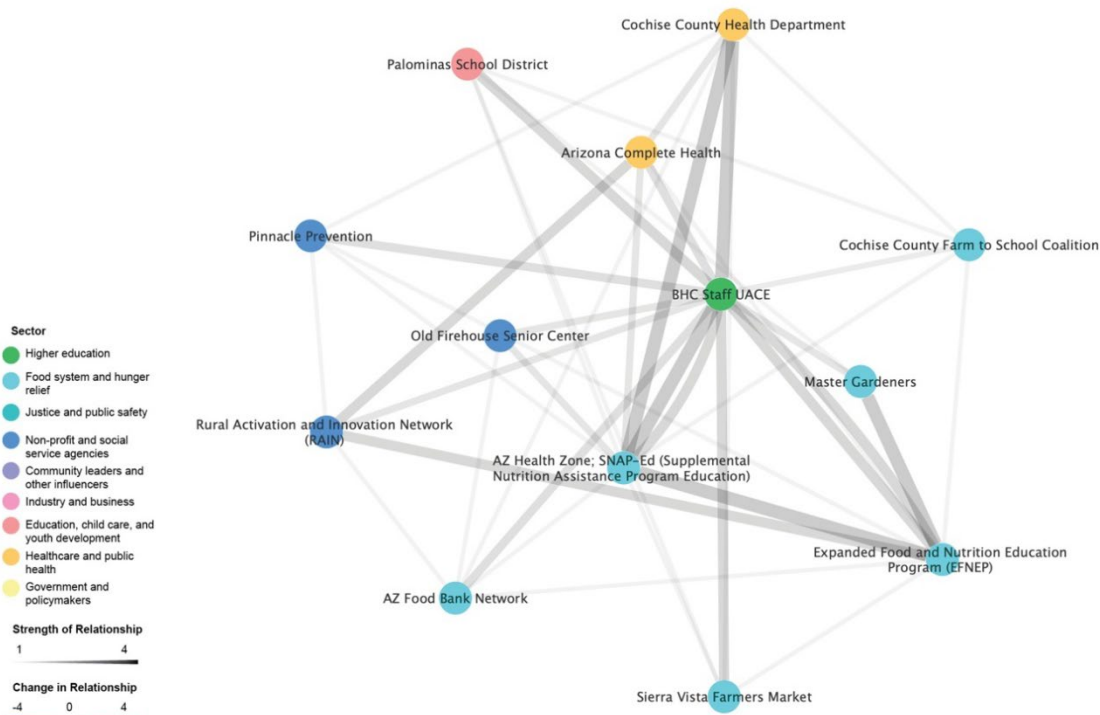
2018- 2021 Change in Partnerships Working in Strategy 5: Food Systems

2018

2021

Sector
- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
- Government and policymakers

Strength of Relationship
1   4

Change in Relationship
-4   0   4

2018 Partners Working in Strategy 6: Nutrition Education

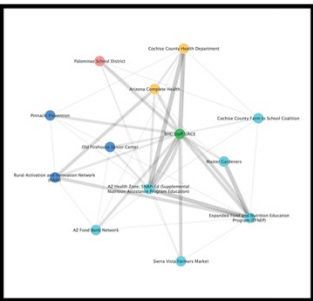## 2021 Partners Working in Strategy 6: Nutrition Education

2018- 2021 Change in Partnerships Working in Strategy 6: Nutrition Education

Sector
- Higher education
- Food system and hunger relief
- Justice and public safety
- Non-profit and social service agencies
- Community leaders and other influencers
- Industry and business
- Education, child care, and youth development
- Healthcare and public health
- Government and policymakers

Strength of Relationship
1 — 4

Change in Relationship
-4   0   4
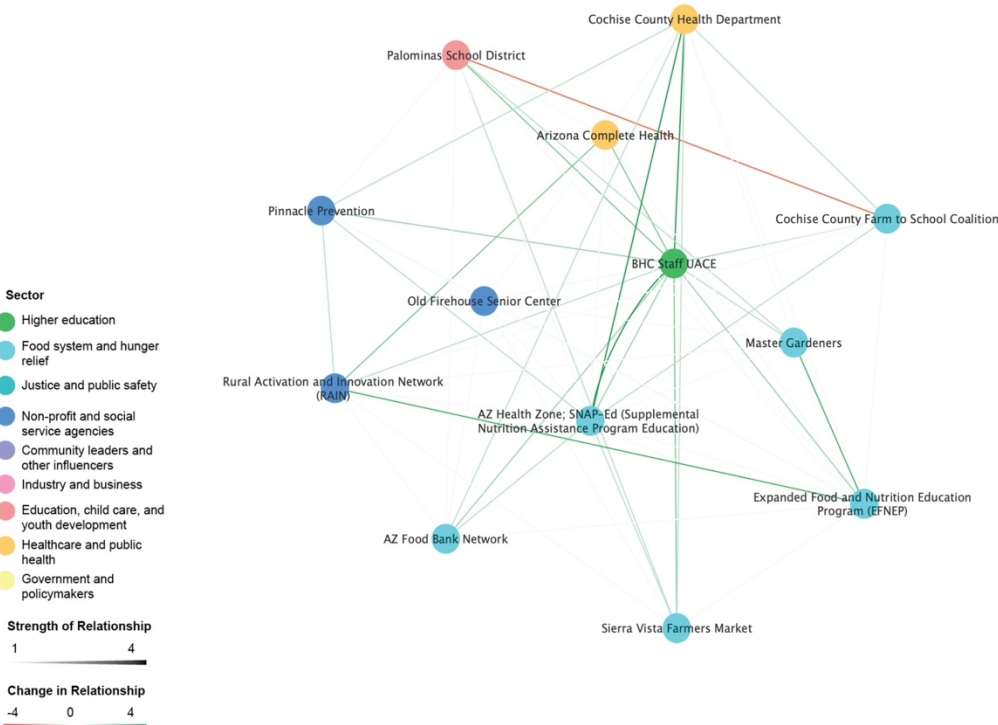
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[1] Kania, J., & Kramer, M. (2011). Collective Impact. *Stanford Social Innovation Review*, *9*(1), 36–41. https://doi.org/10.48558/5900-KN19

[2] Kania, J., Williams, J., Schmitz, P., Brady, S., Kramer, M., & Splansky Juster, J. (2022). Centering Equity in Collective Impact. *Stanford Social Innovation Review*, *Winter 2022 Feature*, 38–45. Retrieved from https://ssir.org/articles/entry/centering_equity_in_collective_impact?utm_source=newsletter&utm_medium=email&utm_content=Read%20the%20Article&utm_campaign=CIF20211112SSIRCenteringEquity#

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