STATE OF THE TUCSON FOOD SYSTEM
A FOCUS ON SOUTHERN ARIZONA
2019-2020

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INTRODUCTION
The biennial State of the Tucson Food System (STFS) report seeks to support the efforts of diverse social actors and institutions working across various sectors of the Sonora-Arizona borderlands food system to underscore successes, problems, and barriers. To create a document that reflects diverse voices of engaged community members in southern Arizona, beginning in 2019 the Center for Regional Food Studies reimagined the STFS report to include the participation of community-based collaborators in Nogales, Cochise, and Ajo. This interim report highlights the process of forming a regional network of community-based collaborators and offers some preliminary results which will be incorporated into the 2020-2021 STFS report.

VALUES-BASED WHOLE MEASURES
The Whole Measures for Community Food Systems (WMCFS) toolkit offers one means to documenting change in the Sonora-Arizona borderlands food system through a process that can be revised and replicated over time by assembling data around six values-based fields. TABLE 1 - Illustrates how six overarching fields of practices are broken-down into four values-based practices that help communities measure and communicate their views about the overall health of their food system (WMFCS 2009).

### TABLE 1 - WHOLE MEASURES FOR COMMUNITY FOOD SYSTEMS

<table>
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<tr>
<th>FIELDS</th>
<th>VALUES-BASED PRACTICES</th>
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| VIBRANT FARMS          | • Supports local, sustainable family farms to thrive and be economically viable  
                        | • Protects and cares for farmers and farm-workers  
                        | • Honors stories of food and farm legacy through community voices  
                        | • Respects farm animals                                                                                                                                |
| HEALTHY PEOPLE         | • Provides healthy food for all  
                        | • Ensures the health and well-being of all people, inclusive of race and class  
                        | • Connects people and the food system, from field to fork  
                        | • Connects people and land to promote health and wellness                                                                                           |
| JUSTICE AND FAIRNESS   | • Provides food for all  
                        | • Reveals, challenges, and dismantles injustice in the food system  
                        | • Creates just food system structures and cares for food system workers  
                        | • Ensures that public institutions and local businesses support a just community food system                                                          |
| THRIVING LOCAL ECONOMIES| • Creates local jobs and builds long-term economic vitality within the food system  
                        | • Builds local wealth  
                        | • Promotes sustainable development while strengthening local food systems  
                        | • Includes infrastructure that supports community and environmental health                                                                       |
| SUSTAINABLE ECOSYSTEMS | • Sustains and grows a healthy environment  
                        | • Promotes an ecological ethic  
                        | • Enhances biodiversity  
                        | • Promotes agricultural and food distribution practices that mitigate climate change                                                               |
| STRONG COMMUNITIES     | • Improves equity and responds to community food needs  
                        | • Contributes to healthy neighborhoods  
                        | • Builds diverse and collaborative relationships, trust, and reciprocity  
                        | • Supports civic participation, political empowerment, and local leadership                                                                        |

Adapted from the Whole Measures for Community Food Systems Values-Based Planning and Evaluation Manual (2009)
COMMUNITY ENGAGED METHODOLOGY
Between April and November 2019, UA faculty and students made three outreach trips to visit and recruit community members from local schools, health clinics, and community centers in Nogales, Cochise, and Ajo, Arizona. Subsequently, six community-based collaborators were hired, two from each town. Community-based collaborators were trained over three Zoom Video Conferencing sessions using an adapted Community Partner Research Ethics Training approved by the University of Arizona.

COMMUNITY DIALOGUES
Using the WMCFS framework, a preliminary community dialogue guide was designed. After a pilot phase with the community-based collaborators, the survey guide was subsequently adapted to consist of 10 questions prompting discussion about the food system. Community-based collaborators worked in pairs to organize and host dialogues at local community health centers and schools in their respective communities. Participating community members were consented and briefed on the project. Each community dialogue consisted of one collaborator leading the discussion, and one collaborator taking detailed notes about the discussion.

RESULTS
A total of 56 community members participated in the six community dialogues, 20% identified as male, and 80% as female. The ages ranged from 22 to 79 years of age, with a median age of 40. Among the participants were teachers, farmers, students, healthcare professionals, parents of school-aged children, retirees, and city workers.

Vibrant Farms
Local agriculture was described as commercialized providing only low-wage seasonal employment in all of the communities. Government agricultural subsidies and the belief that local farmers are funded to refrain from planting certain crops were also common concerns. In Cochise, residents discussed the surrounding export-oriented big agriculture that is characterized by poor regulation as a critical barrier to vibrant farms. However, Ajo residents cited some local organizations that promote and support local farms, such as the Ajo Center for Sustainable Agriculture.

Healthy People
Access to affordable, fresh, and nutritious food was discussed as a pressing issue in all of the communities. Organic food is difficult to find, and irregular shipments of fresh produce leads to substandard quality food and an overabundance of frozen produce. In Cochise, physical isolation from well-stocked supermarkets act as a barrier to access. Cochise school-aged children may have the best access to diverse and nutritious food, however it is not delicious and may go to waste. Older residents in Cochise have the worst access to diverse and affordable nutrition due to transportation barriers. In Nogales and Ajo, farmers markets and the ability to use “double up bucks” and food aid is popular, however, there is a significant reliance on food banks as well. Ajo residents worried about the health of youth, citing a lack of behavioral health support and limited access to recreational facilities. Nogales residents cited diabetes, obesity, and heart disease as top health concerns overall, and dementia in older populations.

Justice and Fairness
Concern for the health and safety of local agricultural and industry workers was voiced in all of the communities, citing unregulated work environments characterized by limited access to proper protective gear, long and strenuous work hours in sometimes severe weather, poor job security, low wages and no employment-related benefits. Community members in Nogales also voiced concerns of poorly enforced age restrictions being compounded by potential OSHA violations.
Thriving Local Economies
Locally-owned businesses were discussed as integral to the local economies of each community, however, businesses operated by large corporations were also unanimously cited as a constant threat to local economies. In Nogales, where produce is the main industry, community members reported access to sparse low-wage and seasonal work and noted that industry proprietors do not reside locally, and rarely reinvest resources back into the community. Nogales residents also cited relying on Mexico’s economy for affordable goods. While Ajo is the most geographically isolated of the three communities, some residents also viewed this as a strength, promoting economic autonomy and resilience.

Sustainable Ecosystem
Pollution, commercialized pesticide use, and declining pollinator populations were all common concerns. Ajo residents expressed worry about the impending effects of climate change. Improved recycling programs was also a popular theme discussed in each community. In Nogales, residents alluded to pollution and contamination they perceived to be coming from Mexico, while overfilled dumps and the mismanagement of landfills were mentioned to be affecting the US-side.

Strong Communities
While all of the communities voiced concerns about the loss of tradition and cultural food knowledge, there are local businesses and nonprofits who are helping to preserve regional food knowledge. Ajo community members in particular discussed the importance of diverse local food practices, like home-based culinary endeavors, and the strength that is derived from the sociality and cultural exchange that is connected to food events like farmer’s markets and festivals.

CONCLUSION
Southern Arizona is made up of diverse communities with diverse concerns about their food system. It is the Center for Regional Food Studies’ goal to support this newly formed network of collaborators by sharing the results with the participating communities and eliciting their reflection and discussion while formulating the 2020-2021 State of the Tucson Food System report. Subsequently, the Center will support the goals of this network of collaborators, including aiding in decisions to pursue next steps and sharing resources and strategies for changes in practices, programs, and policies at various scales.

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THE MISSION OF THE CENTER FOR REGIONAL FOOD STUDIES

To integrate social, behavioral, and life sciences into interdisciplinary studies and community dialogue regarding change in regional food systems. We involve students and faculty in the design, implementation, and evaluation of pilot interventions and participatory community-based research in the Arizona-Sonora borderlands foodshed surrounding Tucson, a UNESCO-designated City of Gastronomy, in a manner that can be replicated, scaled up, and applied to other regions globally.