

## JAFSCD SHAREHOLDER COMMENTARY

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# Cultivating a network of citizen-scientists to track change in the Sonora-Arizona foodshed

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Over the past couple of years, the University of Arizona has launched both a new undergraduate degree program in Food Studies and a Center for Regional Food Studies (CRFS). The mission of the CRFS is “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.”

The CRFS’s annual *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 foodshed by collecting and synthesizing the most recent data available to underscore successes, problems, and barriers. The intended use of the report is to help inform policy at various scales and within both informal and formal policy settings.

We organized our 2018 report (Carney &

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Krause, 2019) around a particular framework, *Whole Measures for Community Food Systems* (Community Food Security Whole Measures Working Group, 2009)—a comprehensive, values-based toolkit that has been used by municipalities across North America for community development and planning purposes. The toolkit offered one means for documenting change in the Sonora-Arizona borderlands foodshed by assembling data around a set of variables and through a process that can be revised and replicated over time.

However, we found some formidable limitations in this method for documenting change in the regional foodshed. We had to rely rather heavily on secondary data from government agencies. We also found that institutions were often apprehensive about sharing data they had gathered for internal purposes, and which would have been very helpful for understanding the economics of our food system. For various reasons, we were unable to meaningfully engage stakeholders in a process of evaluating the data we collected. Arguably, it could have been mutually beneficial to integrate their perspectives in analyzing our findings. And finally, we wrestled with finding audiences that could take the findings and recommendations of the report into the realm of policy and praxis.

As a result, we are taking the report in a new direction for next year. From conversations with individuals and organizations located outside of the university, it has increasingly been made clear to those of us involved with the production of the

report that we need to change the data collection and analysis processes to realize its potential for transforming policy and to promote community development. In other words, the production of the report—from data collection to analysis and dissemination—presents an opportunity to collaborate with diverse populations and to cultivate a network across our foodshed. More specifically, our new approach will be to take a community development role in advancing a citizen-science framework. Collaborators will receive training in social science methods and a modest stipend to help answer questions about their locally specific experiences with, for instance, food insecurity, food economies, farming, environmental pressures or crises, and networks of mutual aid or assistance. We will still be using the Whole Measures framework to help serve as a guide for beginning conversations in the network. The participation of these citizen-scientists will allow outsiders, including policymakers, to view issues from locals' perspectives. This in turn will help participants to understand how they can be a part of shaping policy and have a voice in the resource management of our foodshed.

We propose a call to action for similar organizations or groups interested in measuring food systems change. We welcome input by these parties and we would be very interested in exchanging best practices. You can contact us at [mcarney@email.arizona.edu](mailto:mcarney@email.arizona.edu) and [kckrause@email.arizona.edu](mailto:kckrause@email.arizona.edu). 

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