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GUEST EDITORIAL
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Evaluation and the local foods data void

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Local and regional food system professionals are obliged to rely on imperfect, incomplete, and evolving measures to track economic changes in the local food industry. These data are critical for informing decisions on how to invest limited resources to create optimal impacts. U.S. Department of Agriculture (USDA) Census of Agriculture figures indicate that direct food sales in the U.S. appeared to have increased from US$1.2 billion in 2007 to US$1.3 billion in 2012 — but when adjusted for inflation, sales actually remained steady. These figures, however, do not account for local food sales to institutions, restaurants, and retailers. The 2008 Agricultural Resource Management Survey (ARMS) partially addressed this gap by tracking local food sales from farmers to both individuals and "intermediated" markets such as restaurants and grocery stores. But the ARMS data did not include local food sales to institutions such as schools or hospitals, thus leaving another gap in the data.

Data derived from various national sources indicate that local food systems may be growing, but the data collection methods are inconsistent and the results piecemeal (Hunt & Matteson, 2012). Moreover, the information is presented at a scale that often is irrelevant to local professionals serving constituents within a specific geographic region. The absence of locally relevant pre-existing data on local foods means that entities like local governments, community foundations, school administrators, and others are creating policies, programs, and investments that affect the local food sector without having basic information about its scope.

In the 2013 summer issue of JAFSCD, O'Hara and Pirog called for more local food studies to (1) be conducted on a larger geographic scale and (2) measure more diverse economic impacts (i.e., more than just jobs). We would add to O'Hara and Pirog's first recommendation that in order to be useful for local food professionals, a national dataset should be reducible to smaller units for more detailed and relevant analysis.

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The second recommendation, for tracking economic indicators beyond jobs, is important because other economic factors related to local and regional food systems are affecting communities and families. These include, among others, changes in wages; net household income for farmers, farm businesses, and farm service providers; dollars leveraged by communities; and local institutional food purchases.

O'Hara and Pirog (2013) also described three categories of economic studies that have been done on local foods, two of which rely on economic models and associated assumptions. These two include estimates of the regional impacts of specific local food markets and farm-level impacts derived from a specified level of local produce consumption (say, five servings a day). They identified a third category of economic impact studies that examine local food sales at a multistate or national level. To this, we would add a fourth category: economic evaluations of local food system efforts.

To address all of the data gaps we encountered at the national level and to get a better handle on the economics of the local foodscape in Iowa, in 2012 we began coordinating data collection with the help of a network of local food coordinators. This was not a *study* per se, but an evaluation of impacts from a decade of work with the Iowa Regional Food Systems Working Group (RFSWG). We set out to discover and document outcomes — or what changed — as a result of, or in association with, particular actions. In our 2013 (Bregendahl & Enderton, 2013) and forthcoming 2014 reports we collected and analyzed data on four economic measures:

1. Local food sales reported by farmers in our network;
2. Local food purchases reported by institutional and intermediated buyers in our network (grocery stores, restaurants, schools, etc.);
3. Jobs created in connection with local food production and procurement reported by local food farmers and buyers in our network; and
4. Financial leverage (grants, donations, fundraisers, county Extension funds, etc.) secured by our local food coordinators to support regional food system development.

We began the process by convening an advisory group of local food coordinators drawn from the RFSWG who had experience in tracking and documenting outcomes of their work. Together, we developed a draft evaluation plan that borrowed heavily from their pre-existing work. After much dialogue and revision, a final evaluation plan emerged that relied on the entire network of 15 local food coordinators to recruit local food farmers and local food buyers from their respective regions to complete one of two surveys (a farmer survey and a buyer survey). All the local food coordinators were encouraged to participate through a series of presentations, discussions, and conference calls delivered at or between each quarterly RFSWG meeting. All coordinators who participated received a small stipend for their cooperation and were promised not only inclusion by name in the statewide report but also a customized report with their region's results. Each local food coordinator was encouraged to use this professionally designed, color, two-page report to share their progress with local partners and stakeholders, including farmers and buyers of local food who had completed the surveys. Follow-up with these two latter groups after the work was done gave local food coordinators the opportunity to (1) show respondents how their data was used and reported, (2) improve transparency, (3) strength the relationship, and (4) provide additional support.

We published a guidebook (Bregendahl, Kleiman, & Wiemerslage, 2013) to ensure the data were collected in a systematic and consistent way, with some room for flexibility. For example, some local food coordinators distributed hard copies of the surveys in person to their partnering farmers and local food buyers. Other food coordinators simply sent their partners a link to the electronic surveys and asked them to complete it. In the guide we also described why we developed a shared measurement system, what tools we were using, how this process was expected to benefit the work of each regional group, and anticipated challenges.

For instance, sales data are notoriously difficult to collect from farmers. That is why we asked local food coordinators to request the data since they, not the evaluators, had a trusted personal relationship with

farmers in their region and were most likely to elicit a response. Having local food coordinators involved in the process also provided some accountability in terms of vetting the information that farmers provided since most local food coordinators had access to and reviewed the data prior to submission to us. Farmers were instructed to consult their IRS Schedule F for local food sales figures from the previous calendar year. However, they were also allowed to estimate their sales and indicate if they provided actual figures or estimates.

In the guidebook we provided local food coordinators tips and strategies for maximizing participation. Among them were:

- Build quality relationships with partners early on by hosting meet-and-greets or calling local food farmers and buyers;
- Consider providing something in exchange for survey participation, such as farm labor or recruiting volunteers to help on the farm;
- Initiate multiple and gentle modes of contact with potential respondents, all of whom are busy;
- Ask farmers how they prefer to respond (electronically, hard copy, or through a personal conversation); and
- Time distribution of the surveys to coincide with tax deadlines and prior to the next growing season.

Once the data were collected, we generated a list of respondent identification numbers and sent them to local food coordinators, if they did not already have that information, so they could determine who had not responded so they could make follow-up calls. We also reviewed each completed survey for skewed or missing data and followed up as warranted. To address concerns that self-reported data may not be reliable, readers should note that the U.S. Census of Agriculture relies on self-reported data. Furthermore, no data collection process is without bias or error. In addition, it would have been unrealistic to expect farmers to hand over their tax returns or business financial records, nor did we have the resources to protect those documents and analyze them given we received no funding to conduct the evaluation. As a team we agreed that unrealistic standards of perfection would not prevent us from gathering heretofore uncollected information on local food system change in Iowa.

In November of this year, we completed our second year of data collection. Sample data from the forthcoming 2014 report are shown in Table 1.

Table 1. Selected Data from Evaluation of the Iowa Regional Food Systems Working Group (all in US$)

	2012	2013	% change
Total local food sales by farmers	$10,549,296	$13,035,445	+23%
Total local food purchases by institutions and intermediated markets	$8,934,126	$13,129,702	+47%
Total funds leveraged by regional food groups for use in the calendar year	$766,020	$882,842	+15%
Total number of new jobs created by local food producers and local food buyers	53	118	+123%
Total number of new full-time jobs	24	39	+63%
Public cost of creating 1 new full-time job	$17,874	$14,300	–20%

Program evaluators rarely claim causality, but do determine *association.* Association is a more realistic statistical achievement because there often are many confounding variables in messy, uncontrolled human systems that we can neither perfectly comprehend nor perfectly measure. Further, evaluators typically do not construct or test hypotheses, as we are not trying to *predict* behavior but measure behavior ex post facto.

As a result, evaluation is often dismissed as having little to contribute to scientific discourse on what constitutes valid and reliable data, specifically related to local foods or otherwise. This is in error. While the results of our economic impact evaluation are specific to Iowa and our networks, they are *actual* results generated from a process of systematic and scientific inquiry. They are not estimates based on assumptions, but rather measured impacts that help us understand what difference coordinated local/regional food systems efforts have made in Iowa.

Like any organized system of inquiry with rules and conventions, evaluation also has its limitations. The primary limitation is its ability to measure complete impacts. Given that outcomes-based evaluation efforts typically only receive between 0 and 10 percent of total project budgets, evaluations typically lack ample resources to include feedback from those who were not directly involved in a given program, but probably were affected by it. Thus, outcomes-based evaluations are likely to be more *conservative* than what has actually occurred. Evaluation and the scientific method are both tools we have at our disposal to better understand the world we live in. However, we underutilize the former for a variety of reasons.

First, we underutilize evaluation because it lacks institutional scientific credibility, given that evaluators do not test hypotheses. For academia this is a perceived weakness, but it is not for practitioners, who work outside "ideal" conditions. Second, evaluation results (particularly long-term ones) are often difficult to track because they typically appear long after a project is no longer funded. Third, if an evaluation is conducted, results are rarely circulated to the public. Fourth, evaluation reports fall into the genre of technical writing and are typically both visually and substantively unappealing to the casual observer and even those directly involved in project management. We need these things to change. The following are some recommendations based on our experience for conducting project evaluations:

- Bring project leaders and partners on board to appreciate the value and potential of evaluation to inform local/regional food work and to ensure that resources are secured to fund evaluation. We often are heavily engaged in activities but fail to reflect on what outcomes the activities achieved once the work is completed. Evaluation aims to find out what changed as a result of those activities, who or which groups changed and why, which groups benefited, and why it matters. Evaluation can be especially critical for positioning work to receive new sources of support when the work expands.

- Implement evaluation using common metrics across different places, people, and projects or efforts to track the collective impact (Kania & Kramer, 2011) of cross-sectoral work. Although this sounds easy, in practice it becomes a major effort to bring people together around common measures and ways of measuring change. The key is to start small with a focus on a few indicators, especially if you have many partners. In our case, developing a shared measurement system to track and report the four economic indicators cited above took over a year and half for the RFSWG, which represented 15 geographic areas. However, the coordinated process we used has become the foundation for tracking impacts of other regions' work in local and regional food systems, namely the Michigan Food Charter (R. Pirog, personal communication, Oct. 21, 2014).

- Be deliberate about actively communicating evaluation results in a way that is accessible. In communicating impacts, consider the various audiences, prepare different reports for each, and make results easy to consume (keep reports brief, visually appealing, and include both stories and numbers; also publicize results using a variety of media, including websites, Facebook, Twitter, etc.). For the RFSWG evaluation we created a two-page brief of the evaluation results, a customized report for each local food region that participated, and a professionally formatted report of the most important results. We also issued a press release. In turn, nearly 30 media outlets in and outside Iowa carried the results, which made it into several legislative briefs.

In the absence of national census or research data, as acknowledged by O'Hara and Pirog (2013), evaluation can be a locally achievable solution for addressing the data gap. Local food leaders, practitioners, politicians, business owners, and the public are thirsty for new, relevant, credible, and accessible sources of information on changes to their local food systems. In Iowa, these groups are using the data to make funding decisions on how to support regional food systems development, assess public health needs, and grow rural businesses. Local food evaluators, particularly those focusing on regional collective impact, can inform that work by systematically measuring a few key indicators and telling the story of change to help the movement overcome the void in local food data.

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