



How Numbers Help Tell the Story

FINE Metrics Project Goals

Farm to Institution New England's (FINE) Shared Metrics Project was initiated in 2015 with two distinct goals aimed at understanding the role of the farm to institution (FTI) movement in building a sustainable New England food system.

GOAL ONE: Develop a baseline for institutional procurement of local and regional food.

Development of a baseline for institutional purchasing sets the stage for benchmarking trends and changes in the coming years. This will help the FTI movement understand if it is being successful in reaching targets, such as allocation of 20% (1) of institutional food budgets to local regionally produced foods.

GOAL TWO: Assess the impact of that procurement on the regional food system.

Beyond assessing what is currently happening with the FTI movement this project has the goal of determining what type and level of impact the FTI strategy is having on the development of a sustainable regional food system. The project is intended to answer questions such as whether FTI is supporting the financial viability of regional farms or improving access to healthy food.

Why Does Data Matter?

The data collected through this project plays an important role in understanding the current scope of institutional engagement with the regional food system and the potential role that institutions can play in transforming the regional food system. It also serves as a baseline against which progress can be measured.

This data can be used as a foundation for developing a regional strategy to leverage the institutional sector in support of a sustainable regional food system. This is useful for private foundations, non-profit organizations, government agencies and other stakeholders across the region that are deeply engaged in this work. It also is critical for helping FINE understand high leverage points around which it can coordinate its network of partners.

About the Farm to Institution Data



Colleges & Universities

FINE developed and implemented a new survey to collect data regarding farm to college activities from colleges and universities in New England.

Methodology: FINE staff developed a list of 209 colleges and universities from across the six New England states. These were believed to represent all of the colleges in New England with onsite foodservice. The survey was self-administered online through SurveyMonkey.com in mid-2015. Respondents were asked to provide purchasing data from their last budget year.

Potential respondents received two email invitations to participate. After a few weeks, follow-up calls were made by FINE staff and partner organizations to encourage participation in the survey. As an incentive, all respondents were entered into a drawing for one of two gift cards worth \$50.

Response rate: 105 out of 209 (50%) colleges and universities responded to the FINE farm to college survey.

Extrapolation and bias: The survey was distributed to all colleges and universities in the region with on-site food service. Ninety-five percent of respondents reported purchasing local foods for its food service. It is unknown if this rate of purchasing local foods is reflective of the sector more broadly, or if the respondents are different from non-respondents. For this reason, data can not be extrapolated to determine the portion of colleges that purchase local food. However, given the large number of responses for those reporting local food procurement, we feel that the data does represent well those colleges and universities who may not have responded to the survey but purchase local foods.

Recommendation: In order to extrapolate to the full sector in New England, a subsection of non-respondent colleges and universities would need to complete an abridged survey. This would allow us to assess the percentage of the 104 non-responding colleges that purchase local food and whether their practices differ from the respondent group.



Health Care

FINE used data from the Health Care Without Harm's annual Healthy Food in Health Care (HFHC) survey for this sector.

Methodology: An electronic survey, administered on SurveyMonkey, was distributed to the regional network of 150 hospitals participating in the HFHC program. The survey was put in the field in May 2016 and kept open for four weeks. It was sent to food service directors for completion. The survey requested data from the 2015 calendar year.

The survey was announced to the network through the regional HFHC New England newsletter. Within a week a second email was distributed to the full network; this email focused exclusively on the survey. Two weeks after the initial survey announcement individual emails were sent to hospital foodservice directors. These emails went to a subset of the network with a focus on facilities that completed the survey in 2015 and have been active in the network. In week three individual phone calls were made to the same subset of facilities targeted in the emails. Finally, in week four a last email was circulated to the full network.

Response rate: 84 out of 150 (56%) facilities responded to the New England HFHC survey.

Extrapolation and bias: The universe for this survey consisted of HFHC program participants. This group of facilities is different from the full universe of hospitals in New England and more likely to be engaged in FTI activities. For this reason, data from this survey cannot be applied to all hospitals in the region and is limited to the HFHC network. However, because of the high response rate, data from the survey can be extrapolated to the full HFHC network.

For example, since the average amount of local food spending among survey respondents was \$203,494, we can extrapolate from there and say that the HFHC network of 150 hospitals spent approximately \$30,524,142 on local foods in 2015. However, we cannot make a statement about the amount all hospitals in the region spend on local foods, because we do not know how hospitals in the HFHC network differ from those who do not participate in the network.

Recommendation: In order to determine the full extent of healthcare engagement in FTI activities an effort would need to be made to survey non-HFHC program participations. A subset of this group could be surveyed to determine if they are significantly different from program participants and if so, how these differences impact their procurement patterns.



K-12 Schools

FINE used publicly available data provided by the [US Department of Agriculture](#) Food and Nutrition Service, Farm to School Census to understand farm to school activity taking place in the region.

Methodology: USDA undertook a farm to school census in March 2015. They issued an online survey to public, private and charter schools in all 50 states; sending the survey to a total of 18,104 individual schools. Data

was collected at the district level, not from individual schools. Respondents were asked to provide data from the 2013-2014 school year.

A link to an online survey was sent to school foodservice directors by the agency responsible for Child Nutrition Programs in that state. Respondents received three emails and one follow up phone call. In fall 2015, a census questionnaire was sent to foodservice directors who did not complete the original survey. These individuals received another three emails and one follow up phone call.

Response Rate: 12,585 out of 18,104 (70%) schools and districts completed the survey. 11,041 responded to the survey in its initial phase from March to August 2015 and an additional 1,544 responded in the second phase follow up.

Extrapolation and Bias: USDA randomly surveyed 151 non-respondents by phone. Based on this process, they found that non-respondents were **not** significantly different from respondents in terms of their participation in FTI activities. Therefore, data from this survey can be applied to the sector more broadly and statements can be made about school engagement in FTI.

What impact do institutional markets have on the economy?

Institutional buyers, FTI advocates, and other FINE stakeholders often want to know if their procurement of regionally grown and raised food products is improving the regional economy and/or stimulating job growth. Economic multipliers are typically used to determine the extent to which FTI is impacting the economy. The US Department of Agriculture defines an economic multiplier as a single number that captures the economy-wide circulation of activity from an initial financial transaction (2). A study recently released by the University of Vermont, looked at the economic impact of the University of Vermont Medical Center local purchasing program and found that it had a multiplier effect of 1.38 (3). This means that every dollar spent generated \$1.38 in local economic activity. Other studies have found local food programs to have multipliers ranging from 1.4 to 2.6 (3). Note that most studies have found multipliers under 2 and multipliers over 2 are typically only found in models that take into account new spending as opposed to substitution of purchases for local alternatives.

These previously generated multipliers can be used to provide an generalized understanding of the extent to which current FTI efforts in New England are impacting the economy. Data collected through this project demonstrate that the K-12, college and healthcare sectors spent an estimated \$131.4 Million (4) on regional food. Utilizing the conservative multiplier of 1.38 this represents a total of \$181.3 Million generated in the regional economy.

While we can use previously determined multipliers from the region to make an estimate of the economic impact, an assessment utilizing the validated IMPLAN program would enable more

reliable data. It would also enable researchers to determine job creation as an outgrowth of FTI in New England.

What's Next?

The Metrics Project Advisory Team is in the process of developing a strategic plan to identify high impact opportunities for future data collection, analysis, and communication of findings over the next two years (March 2017- February 2019). In terms of data collection and analysis, this may include the aforementioned sampling of non-respondents for both healthcare and college sectors to provide a more clear picture of the ways in which these sectors are engaged in FTI. This work would allow the Shared Metrics Project to extrapolate findings from sample respondents to full populations, thus allowing for broader statements about the role of institutional procurement such as: (1) total purchasing power of institutions; (2) amount being spent on local foods; and (3) economic impact of institutional procurement on the region. The Shared Metrics Project Work Team and Advisory Team will also determine when to re-administer the farm to college survey to track change over time; and if the producer and distributor surveys should be reimplemented. Finally, the Metrics Team will determine whether there are additional questions that the project is suited to explore either directly within FINE or in conjunction with research-based network partners.

Endnotes:

(1) Real Food Challenge and Health Care Without Harm have both set a goal of 20% local food procurement for their work with the college and healthcare sectors respectively.

(2) Dawn Thilmany McFadden, David Conner, Steven Deller, David Hughes, Ken Meter, Alfonso Morales, Todd Schmit, David Swenson, Allie Bauman, Megan Phillips Goldenberg, Rebecca Hill, Becca B.R. Jablonski, and Debra Tropp. *The Economics of Local Food Systems: A Toolkit to Guide Community Discussions, Assessments, and Choices*. U.S. Department of Agriculture, Agricultural Marketing Service, March 2016. Web.

(3) Becot, Florence; Conner, David; Imrie, Diane; and Ettman, Katie. (2016). Assessing the impacts of local hospital food procurement: results from Vermont. *Journal of Foodservice Management and Education*. 10 (1): 1-7.

(4) USDA reported that K-12 schools spent \$43.9 Million. Farm to College survey respondents reported spending \$57 Million on regional foods. Based on data from the HCWH survey we can estimate that the HFHC network of 150 hospitals spent approximately \$30.5 Million on regional foods.