The 2000s gave rise to numerous motivations and initiatives for increasing food assistance beneficiaries’ access to healthy food options, including key interventions at farmers markets. Work was done to facilitate the use of Supplemental Nutrition Assistance Program benefits (SNAP, formerly known as food stamps) at farmers markets and projects emerged incentivizing the purchase of fruits and vegetables at markets through one-to-one coupons matching SNAP benefits. These early programs, including the Michigan-based Double Up Food Bucks, served as the inspiration for the Food Insecurity Nutrition Incentives (FINI) Program authorized in the 2014 Farm Bill.

In addition to their impacts on consumers, these interventions stand to benefit farmers, farmers markets, and the rural and urban communities that conduct local food commerce. A recent study conducted by Michigan State University, in partnership with the USDA Agricultural Marketing Service and Fair Food Network, breaks new ground in measuring the estimated potential economic influences of SNAP incentives on farmers and markets. The study is the first to use USDA Census of Agriculture county-level direct to consumer sales data (DTC) as a proxy for market sales to isolate the effects of SNAP authorization and the presence of SNAP incentive programs on farmer sales.

WHAT WERE THE STUDY OBJECTIVES?
The study dug into several broad questions:

- How have farmers market incentive programs impacted local food market activity?
- How do results vary based on community, farmer and/or consumer characteristics?
- What conclusions can we draw from the project to improve local food economic literacy and support organizations in their capacity to track indicators of market activity?

HOW WAS THE STUDY CONDUCTED?
The research team had access to data collected by Fair Food Network on SNAP and Double Up transactions occurring at participating farmers markets between 2010 and 2015. In the absence of data on total sales at the individual farmer or market level, we used data from the most recent (2012) Census of Agriculture on direct to consumer sales at the county level to model effects of the two programs. We also used information collected from Fair Food Network’s annual surveys of vendors and consumers and additional data provided by the USDA Food and Nutrition Service.

WHAT DID THE STUDY FIND?
Double Up and SNAP provide distinct, positive influences on direct sales. When modeling the effects of Double Up + SNAP and SNAP alone in a county, versus counties where no farmers markets accepted SNAP in 2012, we find that each program positively influences direct sales. These impacts imply that Double Up provides an additional benefit, or increase in sales, and does not merely substitute for SNAP spending that would have otherwise occurred.

Farmers market incentives like Double Up appear to increase market sales by more than their dollar value alone. One possible explanation is that Double Up shoppers are spending additional SNAP or other currency beyond their matched benefits at farmers markets.

Food assistance beneficiaries—SNAP shoppers—represent a new customer base for farmers markets and impact participating farmers’ bottom line. With the recovery from the Great Recession, SNAP enrollment and spending in Michigan has declined but the percent of MI SNAP dollars spent at farmers markets has increased. Between 2011 and 2015, Michigan farmers
markets that accepted both SNAP and Double Up increased their respective share of SNAP redemptions by 64.4%. According to Fair Food Network transaction data, this translated to an approximately $240,000 increase in farmers market sales through SNAP and Double Up redemptions at farmers markets statewide, from $1.11 million in 2011 to $1.35 million in 2015.

**Farmers market vendors perceive economic benefits from Double Up participation.** While our study principally focused on objective indications of economic activity, a majority of participating farmers attributed the program to increased income, a new customer base, and increased fruit and vegetable sales. Others thought they were likely to hire more staff and/or put more land into production as a result of participation.

**Double Up is impacting small and beginning farm businesses.** The vast majority of farms participating in Double Up are small; about two-thirds reported less than $50,000 in total annual sales and of those, just over half reported annual sales of less than $25,000. And beginning farmers, who report generating the vast majority of sales from farmers markets, tended to have higher perceptions that Double Up had increased their ability to make more money.

**HOW DO FINDINGS INFORM NEXT STEPS?**
This research is an initial step in evaluating the impacts of these programs on farmers and markets, and our findings point to important considerations and future research opportunities.

**It is imperative for economists and practitioners to communicate early in the design of research and evaluation strategies for incentive programs.** While precise data on farmer or market sales may still prove difficult to capture, the use of more narrow sales ranges as response options or other changes to question formats could yield data enabling more rigorous economic analysis of interventions. At the same time, thought should also be given to the use of consistent metrics wherever possible to elucidate time series data.

**Replicating this approach with 2017 Census of Agriculture data should yield additional conclusions.** In 2012, 27 Michigan counties contained a farmers market accepting Double Up, but by 2016, that number—and, thus, the sample size—nearly doubled. Accounting for significant changes in SNAP funding since 2013 will also be possible.

**Evidence indicates farmers markets would be negatively impacted if SNAP incentives ceased to exist, but additional research is needed to evaluate farmers market shopping patterns of SNAP/incentive recipients.** Now that SNAP customers have begun patronizing farmers markets, how does their shopping behavior change if the incentives go away?

**SNAP incentives may be particularly important to beginning farmers.** Prior research by the USDA Economic Research Service found that beginning farmers with DTC sales were more likely to continue farming over time. Targeted outreach to beginning farmers about the potential economic implications of accepting SNAP incentives may prove to be a win-win for connecting these new producers and new markets.

**STUDY AUTHORS**
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To access materials from a webinar on this study, visit: [http://foodsystems.msu.edu/resources/economics-of-healthy-food-incentives-at-michigan-farmers-markets-webinar](http://foodsystems.msu.edu/resources/economics-of-healthy-food-incentives-at-michigan-farmers-markets-webinar).