

### WHAT A DIME CAN DO: An Evaluation of the 10 Cents a Meal Pilot

**10 Cents a Meal** for School Kids & Farms (10 Cents), administered by the Michigan Department of Education, matches what participating schools spend on Michigan-grown fruits, vegetables, and legumes with grants of up to 10 cents per meal. This brief is part of What a Dime Can Do, an evaluation report on two years of the pilot program (2017-18 and 2018-19).

# Technical Notes

The following notes provide additional details on the processes used to collect and analyze the data reported in *What a Dime Can Do: An Evaluation of the 10 Cents a Meal Pilot.* The notes are grouped according to the title of the summaries that they apply to.

### Nearly 200 Farms and Food Businesses Involved in the 10 Cents Supply Chain and 10 Cents on the Menu: Fruits, Vegetables, and Legumes Served Through the Year

The purchasing data methodology overlaps and applies to both summaries about foods used at 10 Cents school districts and farm to food businesses that participated in the 10 Cents supply chain.

School food service directors (FSDs) who participated in the 10 Cents pilot were required to track their eligible Michigan-grown purchases through an online system developed and managed by an external contractor. FSDs provided detailed purchasing information including product type, farm of origin, distributor (if applicable), invoicing date, unit, quantity and price per unit, and total cost.

Submissions were reviewed by MDE. For analysis, data were cleaned, and food products were standardized into product types to allow for comparison of purchases from different vendors across districts. Product varieties were not consistently reported enough to allow tabulation.

New variables were added to the data to allow for further analysis including the following:

- **Product Type:** products were standardized into product types (e.g., Gala apples were categorized as apples)
- **Product Type Category:** products were assigned into the category of either fruits, vegetables, or legumes
- **Supplier Type:** food suppliers were categorized as broadline, processor, food hub, specialty, farmer cooperative, grocery, farm, or ineligible if supplier did not source product from Michigan growers
- **Invoicing Month:** a month was assigned based on the invoicing period. 'Multiple' was assigned for instances when the invoicing period extended beyond one month, and 'unknown' if this information was not available

For this analysis, we developed a vendor guide to categorize suppliers as individual farms, broadline distributors, specialty distributors, processors, food hubs, farmer cooperatives, or grocery stores. To make these determinations, we used internet research, vendor websites, personal knowledge, and a guide developed previously by another 10 Cents partner, Groundwork Center for Resilient Communities.

Reported purchases were excluded if the product types were unallowable, if purchases were from processors or distributors that did not source from Michigan growers, or if the product origin was unknown due to incomplete information. A total of \$7,214 was excluded in 2017-18 and \$16,813 was excluded in 2018-19.



## Technical Notes (cont.)

### School Food Service Directors Use 10 Cents Differently: Insights from Interviews

Through a series of interviews, we sought to learn about FSDs with a range of experiences in their use of 10 Cents grant funds and some of the factors that affect their decision-making. Eighteen grantees were invited by email to participate in a short (30-minute) phone interview with one member of the evaluation team from the Michigan State University Center for Regional Food Systems (CRFS).

It was determined that four of the districts in the group of 18 grantees had a different FSD in place by the time the interview requests were made in October 2020. These grantees were excluded from the list since the new FSDs would not necessarily have the historical knowledge necessary to answer the interview questions about SY2018-19. One FSD declined an interview due to being too busy with ongoing adjustments in response to the coronavirus pandemic. Another who had initially responded positively to the invitation later had to decline due to family responsibilities as a result of the pandemic. A number of FSDs did not reply to up to three email invitations, and the evaluation team did not press FSDs to participate given the extraordinary circumstances under which they continued to work at that time.

Phone interviews were scheduled and conducted in November 2020 with six FSDs. With permission of the FSDs, interviews were audio recorded in Zoom for future reference. A short interview script was used to ask FSDs about factors that affected their decision-making for purchasing local foods, with some customized questions based on whether the FSD over- or under-spent their initial 10 Cents grant award. Interview responses were grouped for reporting purposes.

For participating, interviewees received a customized snapshot summary of their local food purchasing for SY2018-19 that included the total number of Michigan-grown fruit, vegetable and legume types they purchased, a breakdown of those food types and dollar amounts spent by month, and the percent of those purchases by market channel.

## Farm to School Experience Matters: Insights from an Analysis of Food Service Director Behavior

While some of the analyses in this section include the 2017-2018 program year, many of them focus on the 2018-19 program year, which included 56 grantees, the largest number of the three pilot years included in our evaluation. (A total of 57 districts participated in the 2018-2019 pilot, but one was excluded from these analyses because application data was not available.)

#### Changes in Fruit, Vegetable, and Legume (FVL) Types Purchased

The calculation of changes in fruit, vegetable, and legume (FVL) types comes from two different sources of data: 1) what food service directors indicated purchasing in their applications to the 10 Cents pilot and 2) what was reported to Farm Logix to document their 10 Cents purchases.

We cannot assume that either of these data sources are perfectly accurate representations of all Michigan-grown FVL purchased. The former is limited by food service directors' memories. It is also potentially overinflated given that food service directors (FSDs) were submitting the applications with the hope of being selected to participate in 10 Cents.

The latter is limited by what food service directors were able to document and report through the pilot program. The comparison is also imperfect because it uses two different types of measures.

Furthermore, we were not able to consistently identify types or varieties of legumes purchased. Therefore, all legume varieties purchased are recorded as a single type in the FVL types measure.

Despite these limitations, the calculation provides an indication of the magnitude and direction of changes in FVL types purchased. The six food service directors interviewed also verified that this calculation was an accurate representation of their behavior.

## Technical Notes (cont.)

### **Defining Farm to School Experience**

To measure experience in farm to school, we calculated two different numbers using internal records at the Center for Regional Food Systems and data from the Michigan Department of Education.

First, to measure the length of participation in farm to school programs, we tallied the number of years between 2011-2012 and 2018-2019 that districts participated in one or more of the following programs: 10 Cents, USDA Unprocessed Fruit and Vegetable Pilot, MI Farm to School Grant Program, and USDA Farm to School Grant program. This measure then ranged from one to eight. Note, however, that the years of participation in one or more farm to school programs were not necessarily consecutive.

Second, to measure the total number of farm to school programs, we tallied all of the aforementioned programs that districts participated in during this time. In other words, if a food service director participated in two different programs in a single year, those would both be counted in this measure. This measure ranged from one to nine.

We also broke grantees into two categories, based on those that had participated in five or more programs and those that had participated in four or fewer programs.

#### Length of Farm to School Experience and Fruit, Vegetable, and Legume (FVL) Types

This brief states that as the number of years in which a district participated in one or more farm to school programs increased, the average types of FVL purchased also showed a general upward trend. The data is shown in the table below.

The average number of FVL types increases linearly among the grantees with one to four years of farm to school experience. Although the average number of FVL types purchased by the group of grantees with five years of experience does not follow this pattern, (see chart below) the data overall indicate a general upward trend.

### Local Food Purchasing in a Pandemic: A Summary of 2019-2020 Grantee Survey Results

Years of Farm to School Participation	Number of Grantees	Average of Total FVL Types 2018-19
1 year	15	14.9
2 years	19	17.5
3 years	8	19.6
4 years	6	24.3
5 years	9	17.6

Delays in funding 10 Cents through the legislature for the 2019-2020 grant year pushed grant awards back so that they were reimbursement grants for previous purchases and did not require an application to participate. These delays required adjustments for evaluation surveys, which had been administered monthly in the 10 Cents pilot years (2016-2019).

One survey of 2019-2020 grantees was conducted in October 2020 about the previous school year. A survey tool was developed in Qualtrics with questions that would typically be found on 10 Cents evaluation surveys and in applications, including questions about sources, forms, preparation methods, and equipment used for local foods. The survey also included questions about local food and produce purchasing during the pandemic as well as FSDs' needs related to local food purchasing and farm to school, both in the next year and in future years.

The survey link was shared by MDE with all grantees, and MDE staff followed up with grantees to ensure 100% participation; 41 of 41 grantees submitted a survey although not all responded to each question. We did not report on responses to every question in this summary, and open-ended responses were grouped by topics for reporting.

## Technical Notes (cont.)

#### **Recommendations for Future Evaluation**

Food Service Behavior Composite Variable

As a way to measure behavior in food service programs prior to their participation in 10 Cents, we created a new composite variable using data from three questions in the grant application: types of Michigan-grown FVL purchased, types of equipment used to prepare Michigan-grown FVL, and types of source-identified vendors.

Specifically, we calculated quartiles for both the types of FVL and the types of equipment and scored each district from one to four based on which quartile they fell into. For example, a district would be scored with a four for equipment types if the number of different types of equipment they were using was in the highest 25% compared to all the other districts that year. The number of vendor types was a direct count from zero to four based on food service directors' reports of sourcing from the following channels: farm direct, food hub, farmer cooperative, and farmers' market.

In the 2018-2019 data, we tried calculating food service behavior with quartiles from three additional data points included in the application data from that year: the number of preparation methods, the number of dish types, and the number of marketing types used for Michigan-grown foods. We found no meaningful differences between the two ways of measuring food service behavior and would therefore recommend using the simpler measure.



Photo Credit: Khalid Ibrahim Courtesy of MSU Center for Regional Food Systems

foodsystems.msu.edu/what-a-dime-can-do

The Michigan State University Center for Regional Food Systems (CRFS) leads evaluation of 10 Cents. The work presented here is part of What a Dime Can Do: An Evaluation of the 10 Cents a Meal Pilot by Colleen Matts, CRFS; Kathryn Colasanti, School of Social Work, University of Michigan (formerly CRFS); and Elissa Trumbull, consultant, and was funded by the Michigan Health Endowment Fund. To learn more, visit tencentsmichigan.org and canr.msu.edu/10-cents-a-meal.



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