



MASSACHUSETTS
FARM TO SCHOOL

THE BENEFITS OF FARM TO SCHOOL

ECONOMIC, HEALTH, AND EDUCATIONAL IMPACTS IN THREE MASSACHUSETTS SCHOOL DISTRICTS

COMPILED BY MASSACHUSETTS FARM TO SCHOOL

With Special Thanks To:

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Photo courtesy of Kelly Zimmerhanel,
Chicopee Public Schools

CASE STUDY: CHICOPEE PUBLIC SCHOOLS

District Overview

Location: Chicopee, MA

Number of Schools: 15

Enrollment: 7,544

Students Receiving Free & Reduced Meals: 86%

Food Services At-A-Glance

- Self-operated food service program
- Annual Food & Beverage Budget: \$2.38M
- Serving Breakfast, Lunch, & Supper to Students
- Serving Summer Meals
- Serving Lunch to Senior Citizens
- Kitchen & Administrative Staff: 113
- Average Lunches per Day: 6,000
- Average Breakfasts per Day: 3,800

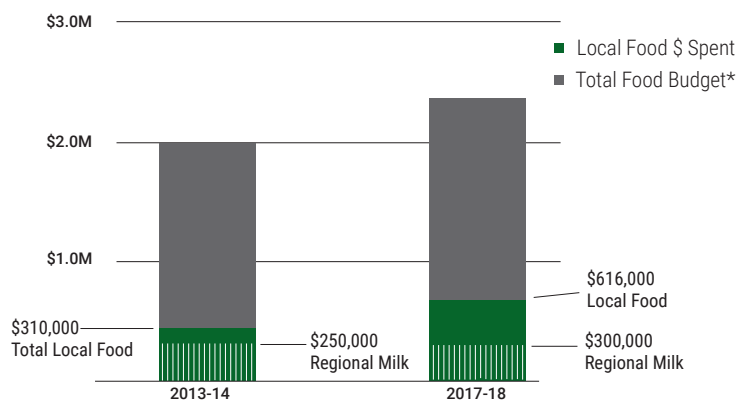


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FINANCIAL IMPACT

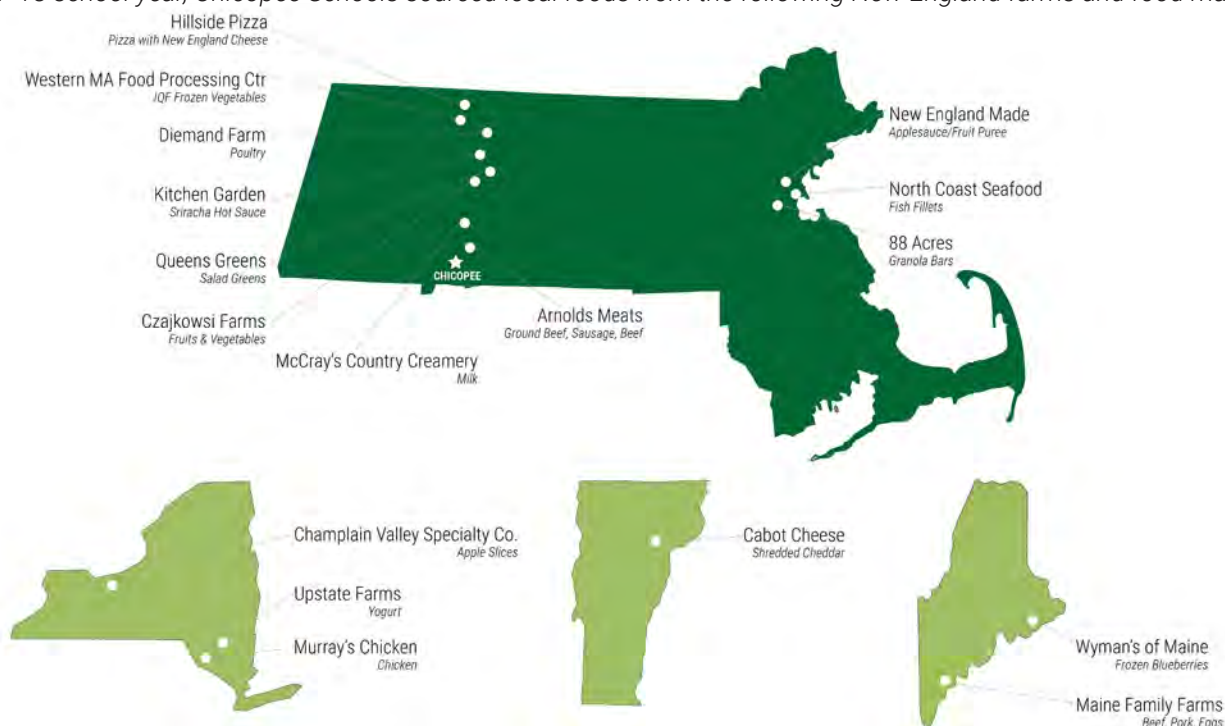
Between 2014-18, Chicopee staff placed significant focus on strengthening and expanding their local food procurement program. This work was supported with grant funds. They redesigned school menus to maximize locally-sourced, fresh produce when in season and order more local meats and other lightly processed products year round. They used grant funds to purchase equipment to support more scratch cooking, pay for professional development and trainings, maintain school gardens, and establish new relationships with local growers. The effort had a major impact on Chicopee's farm to school program.

Increase in Local Food Procurement



LOCAL & REGIONAL FOOD SOURCES

During the 2017-18 school year, Chicopee Schools sourced local foods from the following New England farms and food manufacturers :

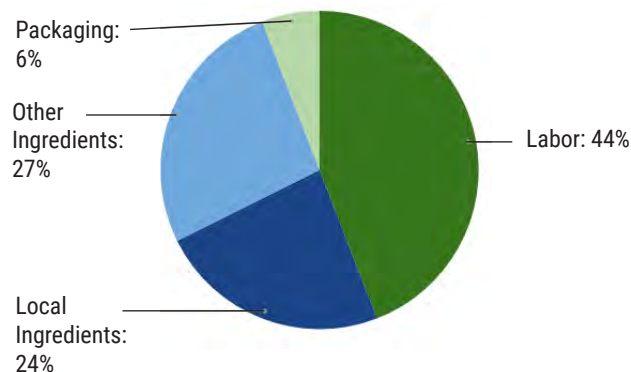


FARM TO SCHOOL HIGHLIGHT: CHICOPEE FARM TO BREAKFAST PILOT PROJECT

Chicopee wanted their breakfast offerings to match the high quality food they created for their lunch menus, but breakfast posed many challenges. A lower per-meal federal reimbursement means less money to spend on ingredients or labor and lower student participation further limits program funds. Chicopee was increasing breakfast participation by switching to a “breakfast after the bell” model -- Breakfast in the Classroom -- but this posed logistical challenges as breakfast options must be easily transported and consumed in the classroom. Available pre-packaged breakfast items are often highly processed and high in sugar, even though they meet USDA nutrition standards. To overcome these obstacles, Chicopee devised a pilot breakfast program that would create “homemade” options for breakfast after the bell and give them greater control over the ingredients.

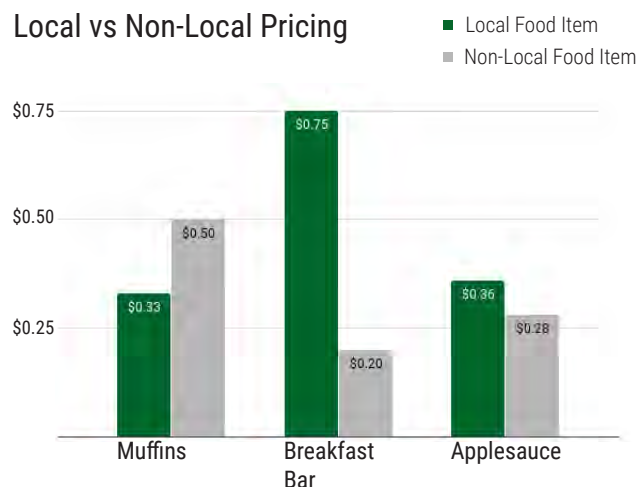
In 2017, with grant support from the Henry P. Kendall Foundation, Chicopee Schools contracted with the UMass Amherst Executive Pastry Chef to design an, in-house baking program. They piloted a breakfast muffin-baking program at one elementary school. The muffins featured local ingredients like berries, carrots, zucchini, and sweet potato. Now they’ve expanded the program to all four elementary schools serving breakfast in the classroom as of the 2018-19 school year. Staff bake 1,800 muffins weekly at Chicopee High School, package and distribute them to the four schools. They’ve found that baking muffins from scratch is cost competitive with premade baked goods, even when factoring in local ingredients, additional labor, and packaging material costs.

From Scratch Muffin Cost Breakdown (\$0.33/muffin)



Baking muffins from scratch retains food dollars in the local economy by paying school employees and supporting local farmers.

Local vs Non-Local Pricing



MAKING INVESTMENTS IN FARM TO SCHOOL

Grant funds were critical to launch the baking program, providing start-up materials, tools, training, and staff support:

- **Technical assistance:** Contracted with Chef for recipe development and culinary trainings.
- **Program staff support:** Hired a temporary Farm to School Specialist to support local supply chain logistics; Host two FoodCorps Members to support student engagement such as taste tests, classroom lessons, and school gardens.
- **Equipment:** Purchased kitchen scales, sieves, scrapers and packaging machines. Kitchens already had essential baking equipment such as commercial-scale mixers and convection ovens.
- **Food Costs:** Grant funds served as a cushion, allowing Chicopee schools to experiment with the baking process and purchase ingredients for test batches.

PROGRAM SUSTAINABILITY

The grant closed in Spring 2018 but the systems are in place to continue the in-house baking program indefinitely. Chicopee School Food Services created and funds a part-time position to oversee the baking program. The Chicopee School Committee voted to create a new, full-time Farm to School Program Coordinator position to support with local food procurement and classroom curriculum connections.

CASE STUDY: SOMERVILLE PUBLIC SCHOOLS

District Overview

Location: Somerville, MA

Number of Schools: 11

Enrollment: 4,998

Free & Reduced: 65%
(Including 4 CEP schools)

Food Services At-A-Glance

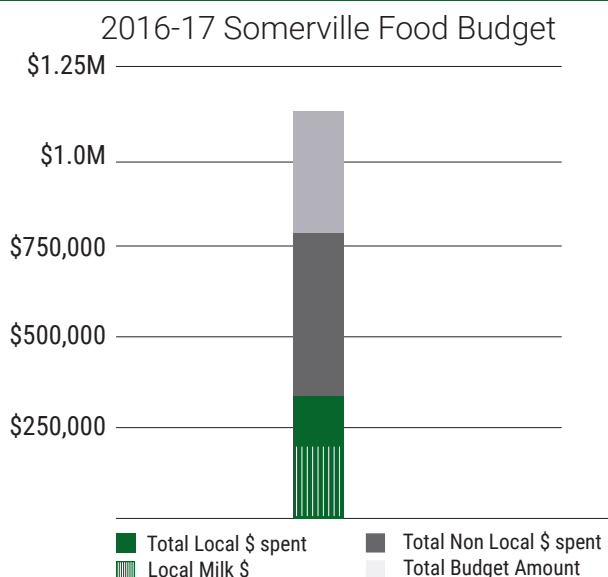
- Self-operated food service program
- Annual Food & Beverage Budget: \$1.2

- Kitchen & Administrative Staff: 60
- Number of Lunches per Day: 3,119
- Number of Breakfasts per Day: 1,514

FINANCIAL IMPACT

During the 2016-17 school year, of their \$1,128,817.77 annual food and beverage budget* Somerville School Food Services spent \$138,570.59 on Massachusetts- and New England-grown foods. Somerville Schools also supported New England dairy farmers, spending an additional \$198,091.41 on regionally-sourced milk and other dairy products over the year. Taken together, local and regionally-sourced ingredients accounted for 30% of Somerville Schools' total food and beverage budget (\$337,684.14 altogether).

**Figure excludes USDA foods/entitlement dollars.*



SCHOOL SUPPORTED AGRICULTURE

Somerville's local purchasing program is rooted in a unique, direct relationship with Drumlin Farm, a 200-acre diversified farm located in Lincoln, just 15 miles from Somerville. The school system and farm formed a partnership in 2016 to pilot adapting the Community Supported Agriculture (CSA) model to become School Supported Agriculture. Each week, the farmers deliver a mystery box of fresh produce to Somerville schools. The produce is used in salad bars at 10 schools across the city serving students from Pre-Kindergarten to 12th grade. The school identified a long list of vegetables that they knew they could use in the salad bars, but they leave it to the farm to determine which items to harvest and deliver each week based on availability. The farm has provided a wide variety including spinach, arugula, radishes, spring turnips, and lettuce. It's a win-win: the farm has guaranteed sales and minimal marketing costs and the school receives the freshest, organic produce. The first year of the partnership Somerville allocated \$5,000 to Drumlin produce and in the second year doubled purchases to \$10,000. The farm staff have trained cafeteria staff on handling and preparation of the different vegetables and the school anticipates the partnership will continue expanding.



FARM TO SCHOOL HIGHLIGHT: SCHOOL GARDENS



©Groundwork Somerville

Since 2012, Somerville Schools have grown school gardens with the help of Groundwork Somerville, a nonprofit community partner. Together volunteers, teachers, parents, and students assist with maintenance of the gardens and participate in programming. As a result of this partnership, in both in-school and after-school programs, children learned to plan, plant, tend, and harvest from their own school gardens, and even cook with food they have grown. Somerville Schools have also hosted taste tests, engaged parents and community members, and hosted professional development days for teachers and staff. The Somerville school gardens were also recognized by First Lady Michelle Obama and the “Let’s Move!” Initiative who in 2013 and 2014 invited students from Somerville Schools to plant and harvest vegetables in the White House garden.

This partnership was incredibly successful yet dependent on an outside organization. USDA Farm to School Grant funds helped take the Somerville Schools garden initiative to the next level, enabling the district to strategically ramp up the alignment, implementation and expansion of local food and school garden programs efforts.

MAKING INVESTMENTS IN FARM TO SCHOOL

Grant funds helped expand and institutionalize farm to school programming. Funds supported:

- *Project Staff:* A part time Farm to School Project Director coordinated between community partners and school leaders to implement school-specific garden plans, transitioning a portion of garden activities to Somerville School staff, and training educators to expand the gardens and educational offerings.
- *Mini-grants:* Enabled individual schools to request funds for garden or classroom materials.
- *Professional Development:* Worked with Groundwork Somerville to provide professional development around school garden curricular connections. Developed Farm to School Curriculum Kits that could be adopted by Somerville teachers and that reinforced food and nutrition-based learning throughout the school environment.

PROGRAM SUSTAINABILITY

To sustain these efforts beyond the scope of the USDA grant funds, they drafted a “how-to guide” that outlined best practices/lessons learned as a reference tool for school and community leaders. They developed maintenance and planning schedules for school gardens, established monthly meetings with School Garden Committees, and worked with teachers to create and support seedling farms to provide the plants for the school gardens.



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CASE STUDY: WEBSTER PUBLIC SCHOOLS

District Overview

Location: Webster, MA
Number of Schools: 3
Enrollment: 1,855
Free & Reduced: 83%

Food Services At-A-Glance

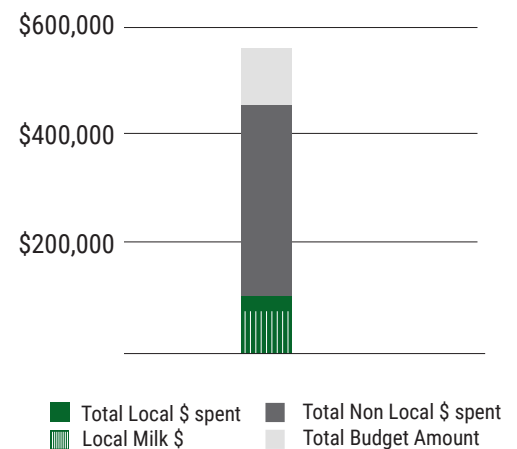
- Self-operated food service program
- Annual Food & Beverage Budget: \$563,632
- Serving Breakfast, Lunch, After School Snack, & Summer Meals
- Prepare lunches for two private schools & Head Start
- Kitchen & Administrative Staff: 27
- Average Lunches per Day: 1,500
- Average Breakfasts per Day: 1,150

FINANCIAL IMPACT

During the 2017-18 school year, of their \$556,221.71 annual food and beverage budget* Webster School Food Services spent \$27,789.38 on Massachusetts- and New England-grown foods. Webster Schools also supported New England dairy farmers, spending an additional \$78,720.03 on regionally-sourced milk and other dairy products over the year. Taken together, local and regional-sourced ingredients accounted for 19% of Webster Schools' total food and beverage budget (more than \$106,000 total).

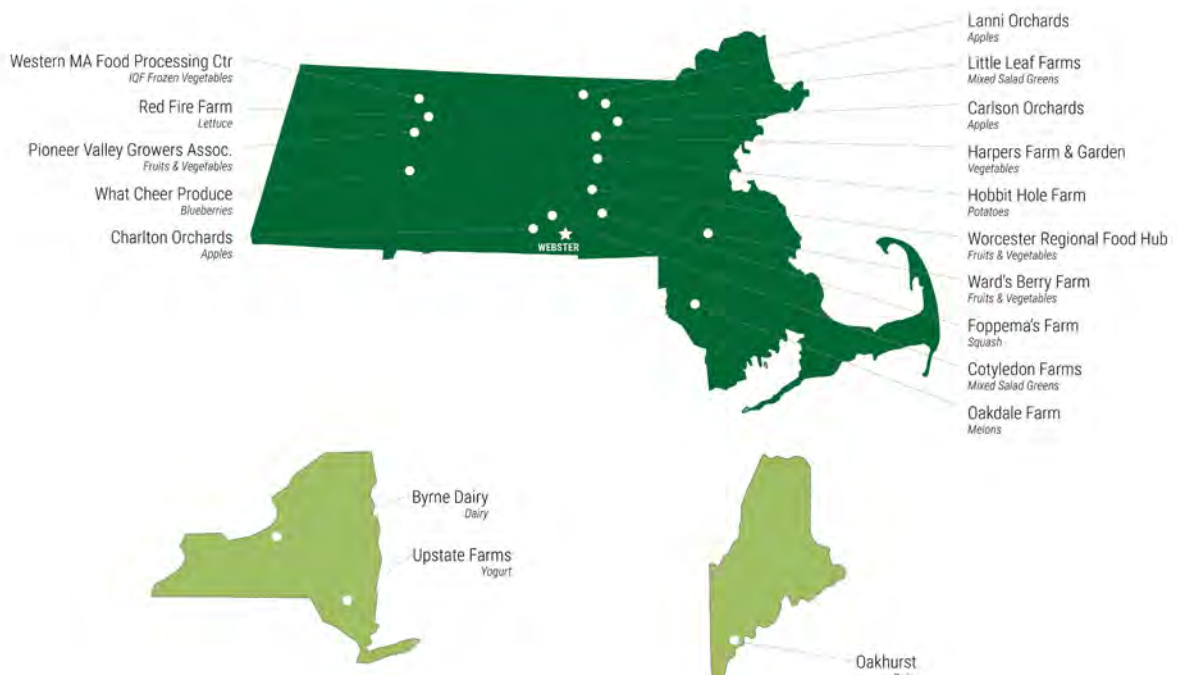
In 2017, Webster Public Schools participated in the Mass. Farm to School Institute, a unique year-long professional learning opportunity, designed to broaden and enhance schools' farm to school programs. Their participation led to a thriving new partnership with Worcester Regional Food Hub (WRFH), a local food aggregator and supply chain manager. As a result, in the past year Webster added a variety of fresh, local fruits and veggies from WRFH to the menu (\$6,880.75 in FY18 alone) and plans to increase this number annually. In the past year, Webster schools successfully transitioned to sourcing 90% of their apples locally, a move that will supply more than \$11,000 in sales to Massachusetts apple growers per year. **Figure excludes USDA Foods/entitlement Dollars.*

2017-18 Webster Food Budget



LOCAL FOOD SOURCES

During the 2017-18 school year, Webster Schools sourced local foods from the following New England farms and food manufacturers :



FARM TO SCHOOL HIGHLIGHT: CLASSROOM CONNECTION

When students receive classroom education around nutrition and food systems, they understand the “why” behind choosing fresh, local foods on the serving line and are more willing to try them. One particularly successful highlight is a collaboration between the Webster Public Schools Food Service Department and a Bartlett High School (BHS) Marketing teacher, along with assistance from the Worcester Regional Food Hub. Together, they administer a program for peer to peer marketing of Harvest of the Month materials featuring seasonal, local ingredients at BHS.

Student leaders in the marketing class design educational posters (see *images below*) and prepare and serve samples of locally-sourced recipes such as roasted butternut squash and baked potatoes during lunchtime – both of which were recently added as regular offerings in the cafeteria due to the positive response. The baked potato bar samples included a range of toppings their peers could choose for themselves. They were surprised to discover that many chose healthier options such as broccoli over cheese or bacon bits for toppings. They learned that “when students have choices they tend to take healthier foods,” says Maryann Hoenig (Marketing Teacher, BHS) who oversees the peer marketing class. Hoenig noted that locally-sourced samples offered by students is simply more fun (student leaders sometimes wear costumes or bring in balloons), so they don’t want to miss out on the samples. “They look forward to it!” she says. The program demonstrates the power of engaging students with farm to school and the positive dividends that can be associated with offering nutrition and culinary education throughout the curriculum.



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A SUSTAINABLE, WHOLE-SCHOOL APPROACH

When Ellen Nylen was hired as the Webster Schools Food Service Director in 2016, she made an effort to increase their local food procurement and recruit a team of advocates to help take farm to school beyond the cafeteria. The team enrolled in the 2017-18 MA Farm to School Institute, a year-long professional learning opportunity, hosted by Mass. Farm to School, designed to broaden and enhance schools’ farm to school programs. During the Institute, the Webster school team developed a farm to school values statement, completed a 1-year farm to school action plan, and identified longer term goals and new community partnerships to ensure that the program would be sustainable.