

CAMPUS DINING 201:

TRENDS, CHALLENGES, AND OPPORTUNITIES FOR FARM TO COLLEGE IN NEW ENGLAND



ACKNOWLEDGEMENTS

ABOUT THE NEW ENGLAND FARM TO INSTITUTION METRICS PROJECT

Farm to Institution New England (FINE) is a sixstate network of nonprofit, public, and private entities working collaboratively to achieve a mission to mobilize the power of New England institutions to transform our food system. Since its inception, FINE has focused on developing cross sector connections between K-12 schools, colleges and universities, hospitals, and other institutions. Today, FINE serves those at the forefront of the farm to institution movement in the region, providing a forum to connect and share ideas, models, resources, and support. FINE leads projects related to key issues identified by farm to institution leaders and acts as the backbone organization for farm to institution work in the region: we build the network, convene stakeholders, develop and disseminate tools and resources, and communicate with key external audiences.

METRICS PROJECT ADVISORS

Andy Cox, Smith College Holly Fowler, Northbound Ventures Simca Horwitz, Mass Farm to School Michael Leviton, Region FoodWorks

METRICS PROJECT TEAM

Hannah Leighton, Research and Evaluation Manager Lydia Oberholtzer, Research Consultant Peter Allison, Executive Director Tania Taranovski, Director of Programs Kaitlin Haskins, Communications Manager Laura Gallagher, Research and Metrics Intern

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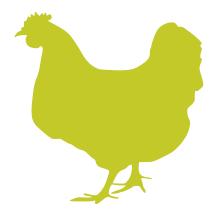
TO LEARN MORE ABOUT THE NEW ENGLAND FARM TO INSTITUTION METRICS PROJECT AND EXPLORE HIGHLIGHTS OF OUR RESEARCH, VISIT: DASHBOARD.FARMTOINSTITUTION.ORG

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EXECUTIVE SUMMARY

New England colleges and universities have the potential to greatly impact our regional food system. Their buying power, menu flexibility, infrastructure, and levels of student engagement have allowed many campuses to become regional leaders in local food procurement. Because of this potential to create positive change for regional communities and economies, Farm to institution New England (FINE) has worked closely with the campus sector throughout the organization's history.

Farm to campus (FTC) programs, as they are generally known, typically involve the procurement of locally grown and processed foods by college dining services. FTC programs might also include food production on campus farms and gardens, education initiatives, food waste reduction efforts, community engagement, and more. Colleges and universities develop FTC programs with the intent of fulfilling any number of goals, such as promoting local economic development, serving fresh and healthy meals, responding to customer demand, and meeting sustainability goals.

In order to better understand the FTC landscape, FINE developed a survey of dining services for colleges, universities, and community colleges across the six New England states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont in 2015. The resulting report (http://dashboard.farmtoinstitution.org/research-reports) was the first of its kind in the region, and created a baseline of information on FTC programs in New England.

As a follow-up to the initial 2015 survey, FINE implemented a survey to colleges in New England in 2018, gathering similar data to examine trends and explore new areas. The

2018 campus dining survey captured data from 55% (110 out of 200) of the college campuses contacted in the region. The participating colleges accounted for 70% (or 534,130 undergraduates) of the undergraduate enrollment among the 200 colleges with dining services.

As in 2015, the results show that an overwhelming percentage of the responding colleges are buying local food, and most plan to buy more in the future. During 2017-18, the responding New England colleges purchased \$67.7 million in local food. Based on these results, FINE estimates that all New England colleges spent between \$100-115 million on local food over a year's time during 2017-18. The results from the 2018 survey confirm many of the trends found in the first survey, and examine new areas of interest in greater depth.



KEY FINDINGS

DEFINING AND TRACKING LOCAL AND REGIONAL FOODS BY NEW ENGLAND COLLEGES

- Almost half of responding colleges define "local" as food grown, harvested, or raised within 250 miles (28.6%) or 150 miles (20.4%) of the college. Many also define it as within the six New England states (15.3%), within the state (11.2%), or within 100 miles (11.2%).
- Colleges with self-operated dining facilities were more likely to use the definition of 250 miles for "local," whereas colleges that are managed by food service management companies (FSMCs) were more likely to define "local" as within 150 miles.
- Twenty-nine percent of colleges reported that they require a certain percentage of ingredients be local when purchasing products from local processors or manufacturers.
- To track local food, 35.3% of colleges use either distributor reports and/or in-house customized spreadsheets/tools, and 26.5% use a tracking tool provided by their food service management company. About a fifth (20.6%) do not use a tracking tool to track their local purchases.
- The top two challenges colleges reported in tracking local products were that colleges use a different definition of local than what is available in the reporting (almost all found this either somewhat or very challenging) and that colleges are having difficulty getting information about local food from their suppliers/vendors, with almost 90% reporting this somewhat or very challenging.

THE EXTENT OF LOCAL FOOD PURCHASED BY NEW ENGLAND COLLEGES

- Overall, responding colleges served 87.2 million meals over the last fiscal year.
- Ninety-three percent of responding colleges reported that they purchased local food for their dining services program.
- On average, responding colleges spent more than one fifth (21.5%) of their annual food budgets on local food, spending \$67.7 million on local food.
- FINE estimates that all New England colleges spent between \$100-115 million on local food during a year's time in 2017-18.





HOW NEW ENGLAND COLLEGES SOURCE LOCAL FOOD

- On average, colleges reported procuring local food directly from 6.8 producers and approximately two producer cooperatives, representing multiple producers.
- Representatives from the responding colleges reported an average of 55.5% of the dairy and milk, 29.1% of seafood, 25.0% of vegetables, and 23.3% of eggs they purchased were sourced locally.
- Forty-five percent of the participating colleges reported that their campus had an onsite garden or farm. Of these, 63% utilized at least some amount of product from the garden or farm in their dining services.
- About one-third of responding colleges reported they had a campus food pantry. In half of these (17% of all responding colleges), dining services provided food for the pantry.

LOCAL FOOD PROCUREMENT CHALLENGES

- Meat and meat products (whether poultry, pork or beef) were at the top of the list of products ranked as the most difficult to purchase by responding colleges.
- As in the survey conducted in 2015, cost, availability, and adequate volume were

mentioned by numerous respondents as challenges to procuring local food. A number of respondents also listed consistency and quality of product as factors

LOOKING AHEAD

- When asked to look ahead three years, most college representatives predicted that their college's procurement of local food would increase up to 10% (57% of respondents) or more than 10% (21%).
- When asked about local procurement goals, 52.5% of the respondents reported that their college had a goal. Most of the goals reported were quantified in some way, with many respondents reporting that their goal was "20% local food by 2020."
- When asked about technical assistance needs, respondents reported that the most useful assistance would be access to additional local food—that is, increased distribution and processing of local food (65% said this would be very useful) or access to larger cooperatives/farms (64%). Over half also found that marketing materials to promote local food on campus (52.9%) and help with local food sourcing (i.e., matchmaking between the source and the colleges) (52%) would be very useful.

INTRODUCTION

FINE AND THE FARM & SEA TO CAMPUS NETWORK

Farm to Institution New England (FINE) is a sixstate network of non-profit, public, and private entities working together to transform the food system by increasing the amount of good, local food served in our region's schools, hospitals, colleges, and other institutions. The FINE network consists of non-profit organizations, government agencies, institutions, foundations, farms, food distributors, processors, food service operators, and others.

Since its inception in 2011, FINE has been working in the college sector. Recognizing the importance of this sector and the need to connect a growing number of farm to campus stakeholders across the region, FINE established its Farm & Sea to Campus Program in 2013 and then launched the New England Farm & Sea to Campus Network (FSCN) in 2015. The FSCN is a community of higher education and food systems stakeholders who connect, share, and collaborate to develop robust and transparent regional supply chains and educate campus communities about regional food systems. The FSCN stakeholders include dining directors, food service workers, faculty, administrators, farmers and fishers, non-profit partners, elected officials, and students. A collection of resources and tools that have been developed by and for the campus sector (and beyond) can be found on the New England Farm & Sea to Campus Network pages of FINE's website: www.farmtoinst.org/campus.

FINE METRICS PROJECT

In an effort to better understand the farm to institution landscape, FINE has prioritized collecting and analyzing data from across the supply chain. FINE's Metrics Project collects

data from secondary sources like the USDA Farm to School Census and Health Care Without Harm's Healthy Food in Health Care survey, and has done primary research where a gap has been identified.

Recognizing the need for more information about farm to campus (FTC) programs, FINE developed a survey of dining services for colleges, universities, and community colleges in 2015. The survey was created to explore the nature of colleges' demand for local products and identify challenges and opportunities faced in sourcing, buying, and serving local food. The resulting report (http://dashboard.farmtoinstitution.org/research-reports) was the first of its kind in the region and established a baseline for New England college procurement of local food in 2014-15.

Following this survey, a non-respondent survey was completed in 2017 to examine whether non-respondents from the 2015 survey differed significantly from those that responded to the first survey. FINE found that the non-respondent colleges were very similar to respondents in terms of how their dining services operated and the amount of food they served. They were also just as likely to purchase local food for their food service as respondents. However, some statistical differences were found in the extent of purchasing of local food.

FINE implemented a new survey to colleges in New England in 2018 in order to study the progress of colleges in purchasing local food. FINE designed the 2018 survey as a follow-up to the initial 2015 FTC survey, asking many of the same questions. In addition, the 2018 survey explored new areas including additional information on tracking local food, regional food definitions, training and technical assistance needs, and the relationship between dining services and campus food pantry programs. To learn more about FINE's metrics project and explore highlights of our research, visit dashboard.farmtoinstitution.org.

SURVEY METHODS & RESPONDENTS

FINE staff and a research consultant revised the initial 2015 survey with the help of a survey advisory committee. The 2018 survey's 27 questions were designed to collect data regarding characteristics of dining services, local foods used in dining services, tracking of local and regional food purchases, technical assistance needs, and whether the campus had a farm/garden and/or food pantry.

The sample of 200 colleges was developed over several years by FINE staff. The colleges included only those in the six New England states that project staff determined had some type of dining services after researching publicly available information. The vast majority of survey recipients were directors of dining operations at the participating institutions.

The survey was pre-tested with three institutions and its final version was conducted online through SurveyMonkey and was self-administered by the respondents. The survey was open from early June through early October. Potential respondents received at least three email invitations. Follow-up calls were made by FINE staff and partner organizations between July and October. As an incentive, all respondents were offered the opportunity to be entered into a drawing for one of five gift cards worth \$50.

The survey captured over half (55%) of the campuses known to have some type of dining services in the region. Of 200 colleges, 110 responded to the survey (Table 1). A total of 81 colleges that responded to the 2018 survey also responded to the 2015 survey. As in the 2015 survey, Vermont had the highest response rate, followed by Maine. While Massachusetts colleges made up almost 50% of the colleges contacted, as in the first survey, it had the lowest response rate. The participating colleges accounted for 70% (or 534,130 undergraduates) of the undergraduate enrollment among the 200 colleges (763,198 undergraduates). Thus, the schools answering the survey are likely larger than those that did not respond, meaning that the survey captured food service to over two-thirds of the undergraduates in the overall population.

All but seven of the responding colleges reported that they purchased local food for their dining services program. Of the seven colleges that did not purchase local food, only one respondent reported that their college was not interested in doing so in the future, and six said they hoped to purchase local food in the future. This report will detail characteristics of all 110 colleges in the section describing college dining services, but will focus on the 103 that purchase local food in the local food purchasing sections.



TABLE 1: FARM TO CAMPUS SURVEY RESPONSES AND REPRESENTED UNDERGRADUATE ENROLLMENT BY STATE. 2017-2018

STATE	NUMBER Contacted	NUMBER Responded	PERCENT RESPONDED	RESPONDENT Undergraduate Enrollment 2016-17	RESPONDENT PERCENT OF Total undergraduate Enrollment
Connecticut	32	15	46.9%	82,385	56.9%
Maine	24	17	70.8%	46,103	78.3%
Massachusetts	92	44	47.8%	223,885	64.2%
New Hampshire	21	11	52.4%	90,314	89.0%
Rhode Island	11	7	63.6%	56,233	78.0%
Vermont	20	16	80.0%	35,211	94.3%
Total	200	110	55.0%	534,130	70.0%

Data requested from colleges was for the last fiscal year, which can vary from college to college. As it was sent during the summer of 2018, the survey most likely covers the period of the 2017-18 school year for most colleges. As a result, the data will be referred to as 2017-18 data throughout the report.

Regarding survey limitations, respondents were self-selected and, therefore, may have been

more likely to be interested in FTC and local foods than the group of respondents who did not respond to the survey. While the results may not be representative of all the colleges in the region, they likely characterize the FTC efforts in those colleges that run FTC programs. Given analysis completed with non-respondents to the 2015 survey, it is likely that non-respondents purchase slightly lower levels of local foods than those that responded to the survey.



NEW ENGLAND COLLEGE DINING SERVICES CHARACTERISTICS

Colleges may decide to operate their own dining services or hire a food service management company (FSMC) to operate it for them. In the self-operation model, food procurement policies and menu design are managed internally by the college, whereas in the outsourced model, decision-making is shared with a FSMC. FSMCs have the ability to develop programs that they can apply, with client support, to multiple accounts across a state or region, allowing for the potential of a large impact.

Institutional food service operations order the majority of their food through national and regional distributors. Food service distributors are able to provide consistent, year-round

access to multiple food products, because they purchase food from geographically diverse sources. They also serve as a single point of contact for various procurement needs and carry insurances institutions require of their food supply chain.

In addition to local foods available through distribution partners, colleges may also purchase directly from local farms. College dining services working with a contracted vendor can request a certain percentage of food purchased be local. Vending and campuswide beverage contracts, which are usually financially beneficial for colleges, often come with restrictions on what beverages can be offered, which could limit local items.



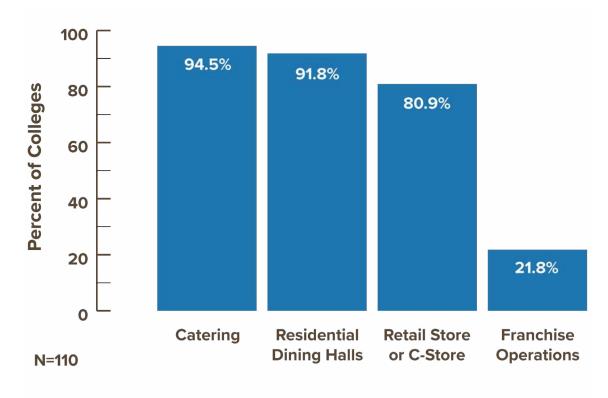
University and college dining operations may include one or more of the following:

- Residential dining halls are typically allyou-can-eat facilities that are open to all students who participate in a meal plan, as well as to staff and faculty purchasing food through other payment methods. Dining hall offerings vary from campus to campus, but many include salad bars, buffet lines, and made-to-order selections.
- Catering services provide food for special meetings and events of various sizes to the campus community. Typically, these services are paid for by the administration, a department, or a student group. The food is usually ordered from a set menu, but may also be customized.
- Retail stores or c-stores often serve a limited a la carte menu, including beverages, and convenience items (pre-packaged foods, snacks, etc.). They may accept

- student meal plan "dollars," and take other forms of payment, making them accessible to employees and visitors. These facilities may include custom recipes developed by the institution or the FSMC.
- Franchise operations or national or regional brand concepts can also be a part of college food service offerings. These can be fast food or other themed items that have high brand recognition amongst students. While the food service staff manages the operations and prepares and serves the food, there is typically a commission or fee associated with the use of the brand or concept that must be paid by the institution.

Of the 110 universities and colleges that responded to the survey, most had catering services (94.5%) and residential dining halls (91.8%), and 80.9% had at least one retail store (Figure 1). Only about a fifth (21.8%) had franchise operations.

FIGURE 1: FOOD SERVICE OPTIONS AT PARTICIPATING NEW ENGLAND COLLEGES, 2017-2018



Responding schools prepared a total of **83.2** million meals during the academic year and **4** million meals during the summer period. An average of 71.0% of students at the participating colleges purchased food through a meal plan.

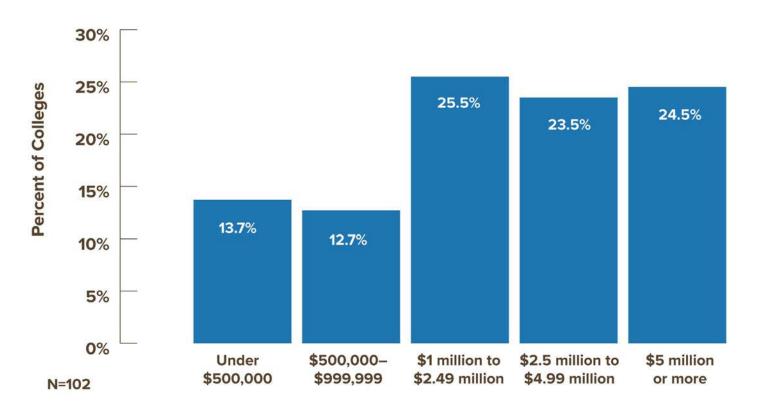
Of the respondents who reported their college's total food budget over the last fiscal year, the average food budget was \$3.9 million, with a range from \$35,000 to \$30 million.

Most of the responding colleges had food budgets exceeding \$1 million (Figure 2), with respondents responsible for a total of almost \$398 million over the 2017-18 fiscal year.

Looking at aggregate food budgets across states of the participating colleges (Table 2), Massachusetts colleges represented the largest total food budget, primarily because it had the largest number of respondents.



FIGURE 2: PARTICIPATING NEW ENGLAND COLLEGES BY FOOD BUDGET CATEGORY, 2017-2018



Size of Food Budget

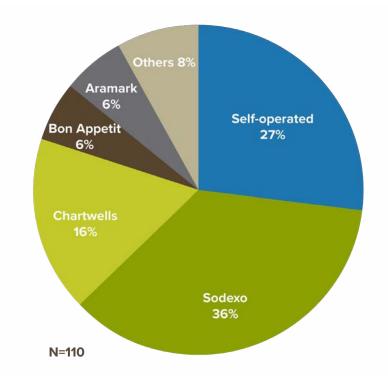
TABLE 2: AGGREGATE FISCAL YEAR FOOD BUDGETS OF PARTICIPATING NEW ENGLAND COLLEGES, 2017-2018

STATE	N	AGGREGATE FOOD BUDGET
Connecticut	14	\$94,623,447
Maine	16	\$22,525,001
Massachusetts	41	\$168,820,296
New Hampshire	11	\$33,980,000
Rhode Island	7	\$49,780,000
Vermont	13	\$27,992,642
All	102	\$397,721,386



When asked about the primary operating structure of their college dining services (Figure 3), **27**% **reported that they were self-operated. The remaining 73% said they were operated by a FSMC**, with 36% of all colleges using Sodexo, 16% using Chartwells, 6% each using Aramark and Bon Appetit, and 8% using other FSMCs. It should be noted that Chartwells and Bon Appetit are owned by the same parent company, Compass Group.

FIGURE 3: PRIMARY OPERATING STRUCTURES OF DINING SERVICES, PARTICIPATING NEW ENGLAND COLLEGES, 2017-2018





College dining services rely on distributors to procure food for their business. Colleges procure from various types of distributors, from broadline to specialty distributors. Participating colleges were asked about the top three distributors they use for all of their procurement, whether or not they purchased local food from them (Table 3). Sysco, PFG, Black River Produce, and Sid Wainer topped the list of distributors used.

TABLE 3: PRIMARY DISTRIBUTORS USED BY PARTICIPATING NEW ENGLAND COLLEGES, 2017-2018 (COLLEGES LISTED TOP THREE)

DISTRIBUTOR	TIMES MENTIONED
All Sysco	70
Sysco	30
Sysco Albany	8
Sysco Boston	18
Sysco CT	13
Sysco Northern New England	1
All PFG	31
PFG	10
PFG AFI New York	1
PFG NorthCenter	16
PFG Springfield	4
Black River Produce	21
Sid Wainer	21
Baldor	13
All FreshPoint	13
FreshPoint	10
FreshPoint CT	3
Costa Fruit & Produce	10
Native Maine Produce	10
Sardilli Produce	10
Pepsi Co	8
Hood	7
J. Polep Distribution Services	7
All US Foods	7
US Foods	1
US Foods Albany	2
US Foods Boston	1
US Foods Norwich	3
Oakhurst Dairy	6
Dole & Bailey	5
Fantini Bakery	5

DISTRIBUTOR	TIMES MENTIONED
Garelick Farms	5
Coca Cola New England	4
Guida's Dairy	3
All Reinhart	5
Reinhart	3
Reinhart Boston	1
Reinhart Burlington	1
All Star Dairy	2
Calise Bakery	2
Circle B Farms	2
Dennis Paper	2
Ginsberg's Foods Hudson NY	2
Gordon Food Service/Taunton	2
Katsiroubas Produce	2
Maine Shellfish	2
Paul Marks	2



DEFINING AND TRACKING "LOCAL" AND "REGIONAL" FOOD BY NEW ENGLAND COLLEGES

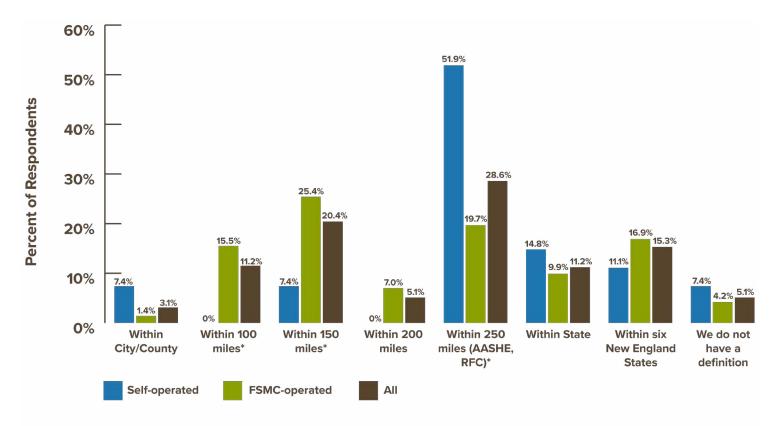
Respondents were asked how they define "local" when purchasing food. Although some campuses create their own definition, many colleges choose to align with existing sustainability metrics such as the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment & Rating System (STARS) (www.stars.aashe.org) or the Real Food Challenge Calculator (www.realfoodchallenge.org/real-food-calculator) criteria. Both of these tools use a 250-mile radius for foods grown, caught, and/or processed as part of their definition of local.



HOW NEW ENGLAND COLLEGES DEFINE "LOCAL" FOOD

The most prominent definition of "local" reported by responding colleges is food that has been raised, grown, or harvested within 250 miles (28.6%) (Figure 4). However, colleges with self-operated dining services (51.9%) were more likely to use this definition than those run by FSMCs (19.7%). A definition of "local" as within 150 miles is also used by 20.4% of all colleges, but colleges with dining services operated by FSMCs were more likely to use this definition than self-operated colleges. Other definitions of "local" include within the six New England states (15.3% of all responding colleges), within the state (11.2%), or within 100 miles (11.2%). Only 5.1% of colleges reporting procurement of local products did not have a definition of "local" food.

FIGURE 4: RESPONDING NEW ENGLAND COLLEGES' DEFINITION OF "LOCAL" FOOD GROWN, HARVESTED, OR RAISED, 2017-2018



N=98; 27 for self-operated and 71 for FSMC-operated.

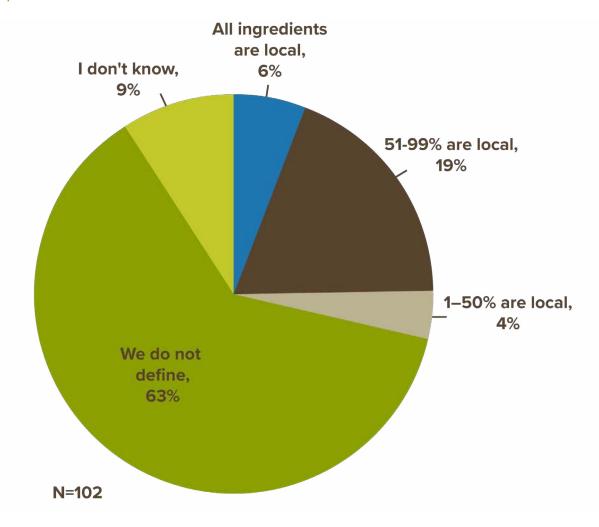
*Denotes statistical significance (a difference between self-operated and FSMC-run dining services) at P < 0.05 using a chi-square test of independence.

DEFINING "LOCAL" FOOD WITH PROCESSED PRODUCTS

When asked how their college defined "local" when purchasing products from local manufacturing or processing facilities, almost two-thirds (63%) of respondents reported that they did not define the percentage of ingredients that must be local (Figure 5). Therefore, these colleges defined local processed food products only by the fact they were processed locally, even if the ingredients originated in locations outside of their own geographic definition of local. Nineteen percent reported that between 51-99% of the ingredients needed to be local; 6% said they must all be local; and 4% said between 1-50% needed to be local.



FIGURE 5: RESPONDING NEW ENGLAND COLLEGES' DEFINITION OF "LOCAL" FOOD FROM LOCAL PROCESSORS, 2017-2018



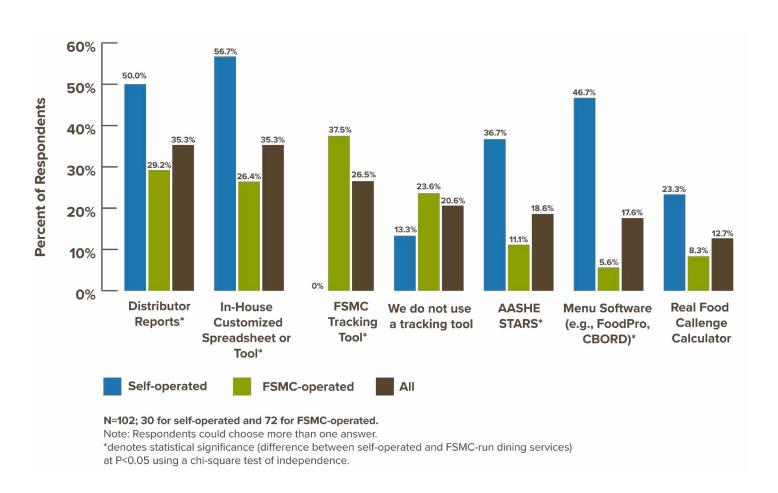
THE ROLE OF CONTRACTS IN SETTING LOCAL FOOD PURCHASING TARGETS

Colleges were also asked whether the contracts that govern their institution's food service contained language that held preferences for local food. A third (33.1%) of respondents reported that the language for local preference was in their distributor contract, 27.1% in their FSMC contract, while 43.5% reported it was not in any contract. Another 14.3% reported that they did not know if there was any local or regional preference language in their contracts.

HOW NEW ENGLAND COLLEGES TRACK LOCAL PURCHASES

Responding colleges use a variety of tools to track their local food purchases (Figure 6), but many differences occur between self-operated facilities and those run by FSMCs. A little over a third (35.3%) use either distributor reports or in-house customized spreadsheets/tools to track local products, but self-operated facilities are more likely to use them than FSMC-operated facilities. Self-operated facilities are also more likely to use the AASHE STARS system, menu software, and the Real Food Challenge calculator. Only a fifth (20.6%) of all the surveyed colleges reported that they do not use a tracking tool to track their local purchases, substantially down from the last time the survey was done, when 35.0% of respondents reported not using a tool to track local purchases.

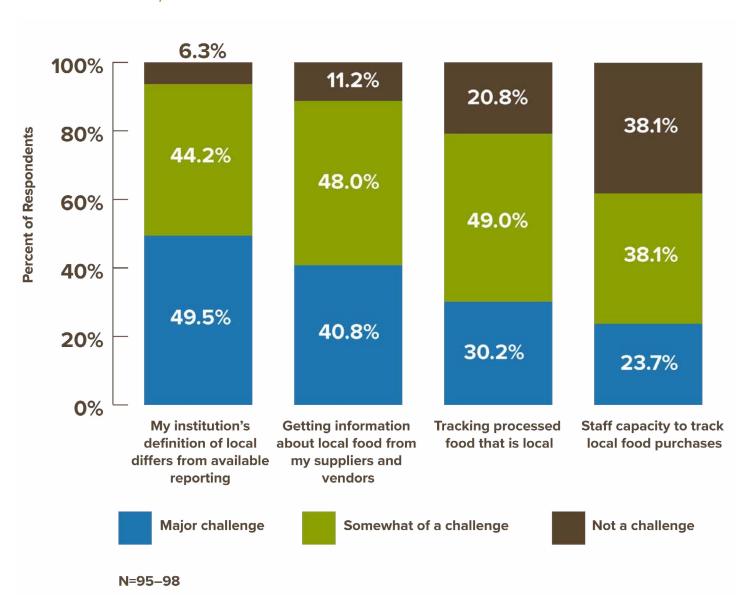
FIGURE 6: TOOLS USED TO TRACK LOCAL PURCHASES BY NEW ENGLAND COLLEGES, 2017-2018



College representatives were also asked about the challenges they face when trying to track local products (Figure 7). Most found that their institution's differing definition of local from available reporting was challenging (49.5% reported it as a major challenge and 44.2% as somewhat of a challenge), although this question did not ask respondents to specify

the type of available reporting they were referencing. Most also found that getting information about local food from their suppliers/ vendors was challenging (40.8% major challenge and 48.0% somewhat of a challenge). Fewer respondents reported challenges with tracking processed food that is local (30.2% stated it was a major challenge) or by staff capacity to track local food (23.7%).

FIGURE 7: CHALLENGES WITH TRACKING LOCAL PRODUCTS REPORTED BY PARTICIPATING NEW ENGLAND COLLEGES, 2017-2018



DEFINING AND TRACKING "REGIONAL" FOOD

Respondents were asked about whether, in addition to their definition of "local," their college has a separate definition for "regional" food. Of the 99 respondents that answered this question, 20 responded that they did have a definition for "regional" food. When asked how it is defined, some of the answers were ambiguous. For instance, some reported that "regional" was within the definition of "local" or used interchangeably. Six responded that their definition of "regional" was "New England," although none specified which states represented New England. One respondent stated that "regional" included New England plus Pennsylvania and New York. Three responded that the definition was within 250 miles and two said within the state.

Regardless of whether the college defined "regional" foods, respondents were asked about whether they could track food procured in New England (defined as the six states of Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, and Vermont). Of the more than 100 respondents, 64% said they are able to track food grown, raised, or harvested in New England. Over half (52%) also reported that they could track the purchases of food processed in New England. They were then asked to estimate the percentage of their food procurement from New England over the last year. Only 36 responded to this question, and the average percent reported was 22.5%, with a range from 2-99 percent. Given the number that responded to this question, compared to the number that reported on procurement of local foods, some caution should be taken in extrapolating this number beyond these specific respondents.



THE EXTENT OF LOCAL FOOD PURCHASED BY NEW ENGLAND COLLEGES

All but seven of the colleges surveyed in 2018 reported that they purchased local food for their food service operations. Of those procuring local food, 90 reported the percent of total food procurement that was sourced locally in the most recent fiscal year. These colleges reported a total of \$67.7 million spent on local food over the last fiscal year, with colleges averaging 21.5% of their total food budget spent on local food. Local food purchases ranged from \$5,600 to \$5.8 million, and from 1% to 90% of the total food budget.

To look at whether colleges increased or decreased the amount of local food purchased from 2015 to 2018, a paired t-test was used to study the difference in the percent and amount of local purchases for 63 colleges that reported in both years. No statistical difference was found.

SELF-OPERATED VS. FSMC-RUN FOOD SERVICES

In the 2015 survey, a statistical difference in the percent of the total food budget spent on local food by colleges with self-operated dining services versus those run by food service management companies (FSMC) was found, with self-operated facilities purchasing a much higher average percent of local food than FSMC run facilities. In the 2018 survey, no statistical difference was found between the percentage of total food budget spent on local

food by self-operated (25.2%) and FSMC run facilitates (19.8%) (Figure 8). However, there was a resulting practical difference in the amount of money spent on local food by the two groups: 28 self-operated colleges represented 58% of the local purchases (or \$39.5 million) made by all the schools, whereas 62 FSMC-run colleges accounted for 41% of the local purchases (or \$28.3 million) (Figure 9).

FINE ESTIMATES ALL NEW ENGLAND COLLEGES SPENT BETWEEN \$100 AND \$115 MILLION ON LOCAL FOOD DURING A YEAR'S TIME IN 2017–2018

This estimate is based on data collected in this current survey and the non-respondent survey undertaken on the last survey, and represents a conservative estimate of local food purchases by colleges.

FIGURE 8: PERCENTAGE OF FOOD BUDGET SPENT ON LOCAL FOOD BY TYPE OF OPERATION, 2017-2018

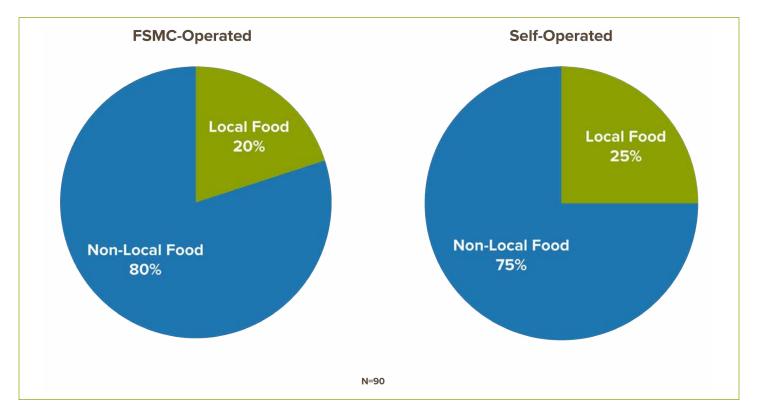


FIGURE 9: TYPE OF DINING OPERATIONS AND PERCENTAGE OF LOCAL FOOD PURCHASES BY PARTICIPATING NEW ENGLAND COLLEGES, LAST FISCAL YEAR

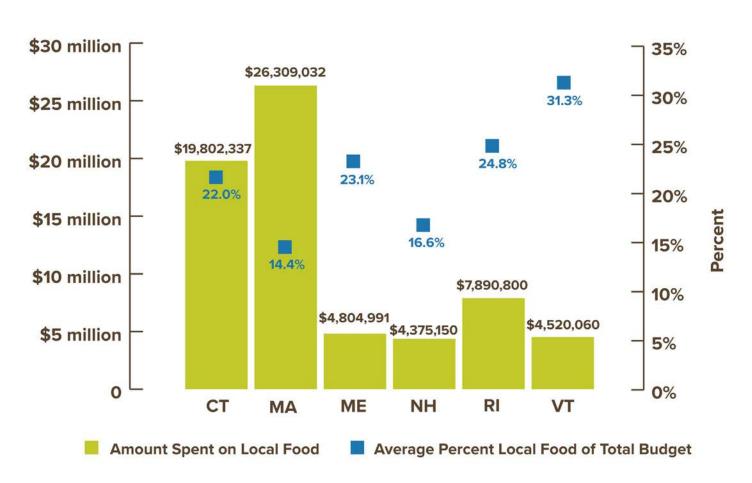


LOCAL FOOD SPENDING BY STATE

The total amount spent on local food by responding colleges, along with the average percentage of total budget spent on local food, vary widely among the New England states. While Massachusetts and Connecticut colleges spent, on average, a much lower proportion of their food budget on local food than colleges in many of the other states (Figure 10), they accounted for more than two thirds (68.1%) of the total local food purchases made by

participating New England colleges over the last fiscal year. This is likely a result of the size of food budgets for colleges in these states and the number of colleges reporting. As in 2015, Vermont colleges, on average, spent the highest proportion of their food budgets on local food, but did not generate higher levels of spending on local food, most likely due to the relatively smaller food budgets in the state's colleges.

FIGURE 10: AMOUNT SPENT (MILLIONS AND AVERAGE) BY PARTICIPATING NEW ENGLAND COLLEGES BY STATE, 2017-2018



N=90. CT (11), MA (35), ME (15), NH (10), RI (4), VT (15)

HOW NEW ENGLAND COLLEGES SOURCE LOCAL FOOD PRODUCTS

As described earlier, local products are often sourced through distributors. However, direct relationships with producers are also an important component of farm to institution. Approximately half of the responding colleges reported procuring local products directly from at least one producer or producer cooperative, including fishers/fishing cooperatives.

On average, colleges reported procuring local food directly from 6.8 producers and approximately two producer cooperatives, which represent multiple producers (Table 4). Self-operated dining services generally procured directly from producer and producer cooperatives in greater numbers, although there was no statistical difference.

TABLE 4: AVERAGE NUMBER OF PRODUCERS AND PRODUCER COOPERATIVES PROCURED FROM DIRECTLY BY PARTICIPATING NEW ENGLAND COLLEGES, 2017-2018

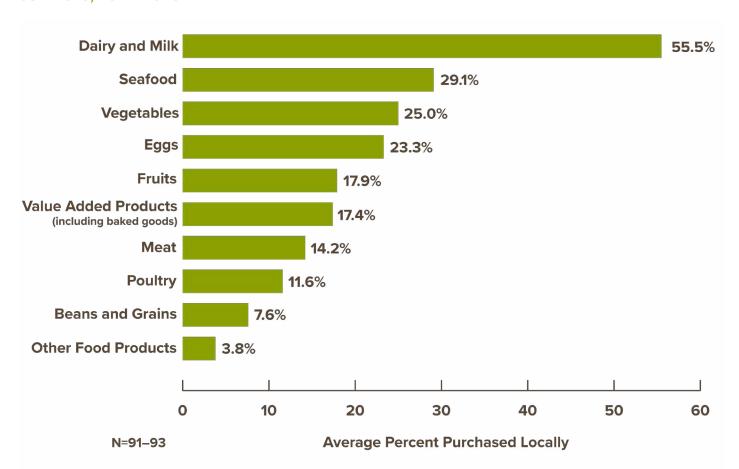
OPERATION OF FACILITY	N	PRODUCERS	PRODUCERS COOPERATIVE
Self-operated	28	8.7	2.3
Food Service Management Company	63	5.9	1.7
All	91	6.8	1.9



FOODS NEW ENGLAND COLLEGES ARE SOURCING LOCALLY

Colleges were asked about the percentage of specific food product categories sourced locally (using the colleges' definition of "local") (Figure 11). Not surprising given the local/regional supply chains for dairy and milk, colleges reported that an average of 55.5% of their dairy and milk was sourced locally. Other food products sourced locally in high percentages include seafood (an average of 29.1%), vegetables (25.0%), and eggs (23.3%).

FIGURE 11: AVERAGE PERCENTAGE OF PRODUCTS SOURCED LOCALLY (BY VALUE) BY RESPONDING COLLEGES, 2017-2018





LOCAL PROCUREMENT FROM CAMPUS FARMS/GARDENS

Fresh local products for campus dining facilities may also be sourced from on-campus facilities, such as campus farms or gardens. Overall, 45% of the participating colleges reported that their campus has a campus garden or farm (Table 5). Of those colleges that had a garden or farm, 63% utilized at least some amount of product from the garden or farm in dining services, and close to a third (32%) reported purchasing the products from the campus farm or garden.

TABLE 5: NUMBER OF PARTICIPATING NEW ENGLAND COLLEGES WITH CAMPUS GARDENS/FARMS, 2017-2018

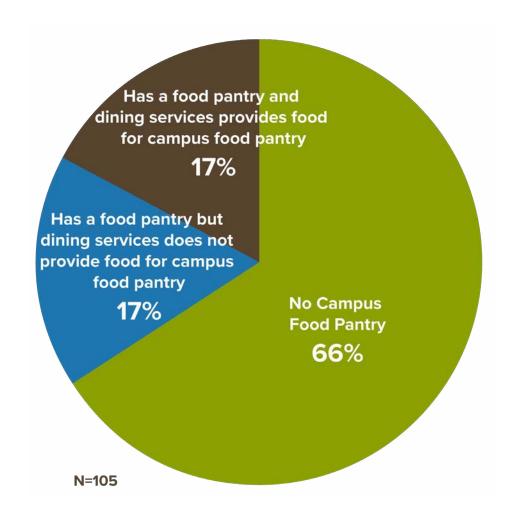
STATE	NUMBER OF COLLEGES WITH GARDENS/FARMS	COLLEGES WITH GARDENS/FARMS (%)	COLLEGES RECEIVED PRODUCT FROM GARDENS/ FARMS (%) (N=48)	COLLEGES PURCHASED PRODUCTS FROM GARDEN/ FARM (%) (N=48)
Connecticut	8	57%	50%	13%
Maine	7	41%	100%	57%
Massachusetts	19	45%	70%	17%
New Hampshire	4	36%	100%	25%
Rhode Island	3	43%	100%	33%
Vermont	7	44%	100%	71%
Total	48	45%	63%	32%



CAMPUS FOOD PANTRIES

About one-third of responding colleges reported they had a campus food pantry. In half of these (17% of all responding colleges), dining services provided food for the pantry (Figure 12). A full two-thirds of campus reported that they did not have a food pantry. The information on food pantries from the FTC survey provides some insight into the often overlooked issue of food security on campus.

FIGURE 12: CAMPUS FOOD PANTRY AND COLLEGE DINING SERVICES RELATIONSHIP WITH PANTRIES, 2017-2018



LOCAL FOOD PROCUREMENT CHALLENGES

Campuses face multiple and interconnected barriers in the procurement of local food for their dining services. Survey respondents were asked to list the top five local products that were most difficult to source for their college and they were asked to be as specific as possible. Table 6 outlines the top products listed by respondents. As in the last survey undertaken in 2015 (where respondents were asked a different question that examined the same idea), meat and meat products, whether poultry, pork or beef, were at the top of the list of local products that dining services have found difficult to source locally.



TABLE 6: TOP 18 PRODUCTS LISTED AS MOST DIFFICULT FOR PARTICIPATING NEW ENGLAND COLLEGES TO SOURCE LOCALLY, 2017-2018

PRODUCT	TIMES MENTIONED
Chicken and Poultry Products	50
Meat and Meat Products	31
Seafood and Fish	14
Fruits	13
Lettuces	13
Pork and Pork Products	13
Grains	12
Beans	6
Eggs	6
Broccoli	5
Flour	5
Produce Year Round	4
Apples	3
Bananas	3
Eggs, Liquid	3
Pasta/Tomato Sauce	3
Processed Lettuces/Greens	3
Vegetables	3

In the 2015 survey, college representatives were asked to rank a list of barriers to purchasing local products. In that year, 52% of the respondents reported that the year-round availability of local food from their distributors was a major barrier. Price and insufficient volume of local food were also ranked as major barriers by almost a third of the respondents. Other high ranked barriers included the insufficient availability of local processed products and limited variety of local foods.

In the 2018 survey, respondents were asked an open-ended question: What are the biggest challenges your institution faces in procuring local food? The answers to this question were coded and quantified and can be found in Table 7. As in the earlier survey, cost, year-round availability, overall availability of local food, and fulfilling volume needs were mentioned by the highest number of respondents. In addition, consistency and quality of product were mentioned by seven respondents.



TABLE 7: MAJOR CHALLENGES COLLEGE REPRESENTATIVES REPORTED IN PURCHASING LOCAL PRODUCTS, 2017-2018

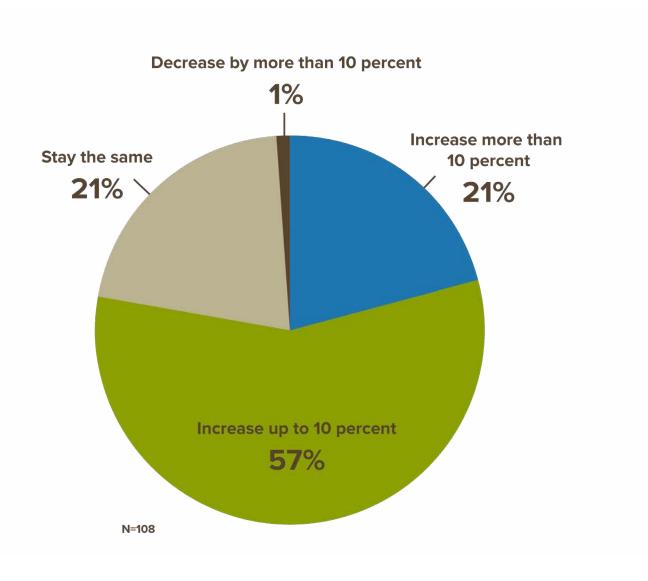
CHALLENGES TO BUYING LOCAL FOOD	NUMBER OF TIMES MENTIONED
Cost / price point	27
Off-season availability / sourcing	13
Availability / supply	11
Consistency / quality	7
Fulfilling volume needs	7
Distribution / delivery of products	5
Communicating / relationship with farmers and purveyors	4
Improved understanding of locally available products: product specs, volume, weekly availability	4
Staffing / time to source	4
Calendar for school not linking up with season calendar	3
Purchasing regulations and restrictions	3
Sourcing	3
Farms and cooperatives meeting purchasing guidelines	2
Insurance requirements for farms	2
Liability	2
Payment and delivery terms of vendors	2
Purchasing agreements	2
Selection of products / vendor inventory	2
Staff training	2
Storage / processing space	2
Weather	2
Ability to pay vendors	1
Access	1
Administrative	1
All supplies have to go through specific distributor	1
Collaboration with current food services vendor	1
Company compliance guidelines	1
Food service packaging	1
Lack of distributors for area	1
Seasonal menuing is incompatible with slow-changing menu management software	1
Sodexo procurement and DRIVE purchasing program	1
AASHE guidelines too stringent	1

LOOKING AHEAD

FUTURE LOCAL FOOD PURCHASES

College representatives were asked to look ahead three years and predict how the procurement of local food products might change for their college. Only one respondent believed local food procurement would decrease, and most predicted that it would increase up to 10% (57% of respondents) or more than 10% (21% of respondents) (Figure 13).

FIGURE 13: OUTLOOK FOR FUTURE (LOOKING AHEAD THREE YEARS) PROCUREMENT OF LOCAL PRODUCTS BY PARTICIPATING NEW ENGLAND COLLEGES



PROCUREMENT GOALS FOR LOCAL FOOD PURCHASES

Asked whether the representative's college had a local procurement goal, 52.5% of the respondents reported that they did. The specifics of these goals were also reported, with most having quantified the goal in percentage of food procurement. Many reported having set goals for 2020, whether it was 20% by 2020 or 50% by 2020 (Table 8). Other colleges had just a percentage goal, without a year attached to it.

TABLE 8: LOCAL FOOD PROCUREMENT GOALS REPORTED BY PARTICIPATING NEW ENGLAND COLLEGES, 2017-2018

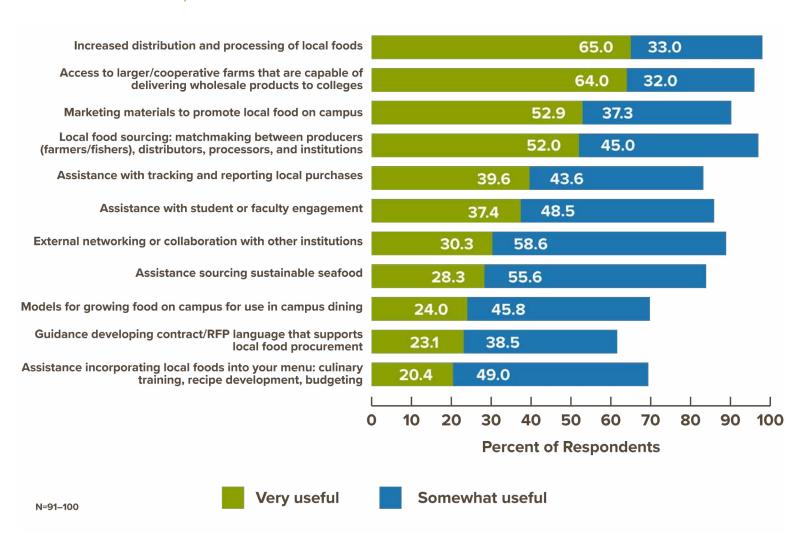
GOAL	NUMBER OF RESPONDENTS
10%	2
16%	1
20% by 2020	15
20% increase by 2020	1
20% by 2028	1
20%	7
25%	2
25% by 2020	1
26%	1
27% by 2020	1
30%	1
30% by 2020	1
40% by 2020	1
50% by 2020	2
50% increase by 2060	1
50%	1
65%	1
90% by 2020	1
Increase to a specific amount	3
Increase year after year	2

TECHNICAL ASSISTANCE NEEDS

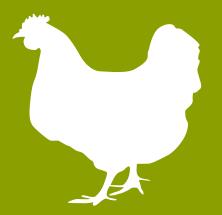
As an organization, FINE seeks to support those along the farm to campus supply chain as they work to get more local food into their dining services. In order to better understand how to do this effectively, our 2018 farm to campus survey focused on a number of technical assistance areas and asked respondents to rank their usefulness (Figure 14). Many answered that the most useful

assistance would be access to additional local food—that is, increased distribution and processing of local food (65% said this would be very useful) or access to larger cooperatives/farms (64%). More than half of respondents also noted that marketing materials to promote local food on campus (52.9%) and matchmaking between the source and the colleges, would be very useful (52%).

FIGURE 14: TECHNICAL ASSISTANCE NEEDS FOR FARM TO CAMPUS PROGRAMS, PARTICIPATING NEW ENGLAND COLLEGES, 2017-2018



CONCLUSION AND RECOMMENDATIONS



The campus dining survey undertaken by FINE in 2018 confirms many of the trends found in the 2015 survey. Interest in local food remains strong across colleges and universities in New England, with the vast majority of colleges sourcing at least some food locally. Indications are that local food procurement by colleges will continue to grow. While the survey respondents reported spending \$67.7 million on local food, only about half the colleges in New England reported data in this survey. FINE estimates that all New England colleges spent between \$100-115 million on local food during a year's time in 2017-18.

Colleges are reporting substantial purchases of local dairy and milk, seafood, vegetables, and egg products. However, college representatives reported that meat and meat products, whether poultry, pork or beef, as well as seafood/fish, eggs, and beans and grains were still hard to purchase locally. As in the 2015 survey, college representatives reported that the cost of local food, year-round availability of local food, overall availability of local food, and fulfilling volume needs were still major challenges in procuring local food.

Tracking of local and regional foods also remains challenging for colleges. Colleges find it difficult to get the information they need about local food from their suppliers/vendors, complicated in part by the use of different definitions of local food. As a result of these findings, FINE is working with the campus sector to address challenges with tracking local and regional foods, and to provide additional information and resources.

College representatives suggested that they need the most help in increasing access to local foods or larger producer cooperatives and farms. More than half of respondents also reported that marketing materials to promote local food on campus and matchmaking between the source and the colleges, would be very useful. FINE and its partners are exploring additional opportunities to assist the campus sector in these areas.

Based on the results of this survey and FINE's work in the campus sector over multiple years, the following is a list of recommendations for stakeholders across the farm to campus landscape.

DINING OPERATORS (DIRECTORS, CHEFS, COOKS AND OTHERS) AND PROCUREMENT OFFICE STAFF

PARTNER WITH DISTRIBUTORS, VENDORS, AND FOOD SERVICE MANAGEMENT COMPANIES TO PRIORITIZE LOCAL AND REGIONAL PROCUREMENT

- Use contracts and requests for proposals (RFPs) to increase local and regional procurement. Determine if existing distributor, vendor, and food service management company contracts include language around procurement goals and consider adding language, goals, and definitions in your next RFP and/or contract.
- Consider working with smaller distributors and food hubs who may carry a larger percentage of local and regional products.
- Utilize existing tools, such as FINE's Food Service Project Toolkit (www.farmtoinst.org/ toolkit) to view sample language and other resources.

DEVELOP MEANINGFUL TRACKING SYSTEMS

- Adopt a clear definition of "local." In addition to tracking "local" purchases, consider also tracking "regional" food purchases as food grown, raised, or harvested from within the six New England States.
- Choose to work with vendors and distributors who are willing to share detailed reporting with your institution.
- Work with existing distributors and vendors to access transparent reporting on point of origin, growing practices, and other data.
 Request reports in spreadsheet format so the data can be analyzed more easily.
- Become familiar with national standards for local and sustainable food already in place like the Real Food Challenge, AASHE, and the Center for Good Food Purchasing.



ADDRESS POTENTIAL BARRIERS AROUND COST, SEASONALITY. AND ACCESS TO LOCAL FOOD

- Explore opportunities to offset cost increases through menu changes, ingredient substitutions, utilizing all parts of products, and operational eco-efficiencies.
- Continue to advocate for a larger and more flexible food budget to your administration.
 Make the case for building farm to campus activity into existing curriculum and sustainability commitments. Emphasize dining services role in supporting state and regional food system goals.
- Consider featuring seasonal items more regularly on your menu; include recipe cards for products that diners might not be as familiar with.
- Consider working directly with farmers, fishers, and producer cooperatives if distributors are not able to meet your local and regional needs. Work with those stakeholders to identify specific products that have been difficult to source locally

and explore the possibility of building those products into their growing or sourcing plans. Be prepared to share details like volume, quality, packaging, delivery needs, certification and insurance requirements, and cost. Discuss the possibility of forward contracting with the producers you are working with.

FOR FOOD SERVICE MANAGEMENT COMPANIES

- Leverage the company's size to create efficient tracking systems across multiple campuses. Consider appointing a central staff person to aggregate information requests for distributors/vendors and then distribute subsequent reports to campuses.
- Consider aligning standards around local and sustainable food with existing thirdparty auditing systems like Real Food Challenge, AASHE, and the Center for Good Food Purchasing.



DISTRIBUTORS

WORK WITH INSTITUTIONS TO UNDERSTAND THE DEMAND FOR LOCAL AND REGIONAL FOOD

- Work with existing institutional clients to understand institutional priorities around local and regional food, including specific food categories that they want to focus on. Understanding nuances in demand, from product form preferences to delivery requirements to volume needs, can help with sales.
- Consider cultivating contracts or seasonal agreements between institutions and regional food producers/producer cooperatives that meet their requirements.

PROVIDE RELIABLE REPORTING TO INSTITUTIONS

Work with institutions to provide reports
that include product point of origin, producer
name, zip code and other data requested
by the institution. Consider adding data
fields for third party certifications that align
with nationally recognized standards like
the Real Food Challenge and the Center for
Good Food Purchasing. Share reports
in spreadsheet form so they can be
analyzed more easily.

FARMERS

BECOME "WHOLESALE READY"

- Attend wholesale readiness and meet the buyer events to become familiar with institutional needs and stakeholders.
- Work with producer service providers to identify the types of institutions that make sense for you to work with.

BECOME FAMILIAR WITH THE INSTITUTIONS AND DISTRIBUTORS IN YOUR AREA

- Work with institutions in your area to identify products they currently struggle to find locally. Consider including those products in your growing plans.
- Work with institutions to develop marketing agreements or forward contracts that will secure a stable market for you while guaranteeing institutions specific quantities at fair prices.
- Work with the distributors in your area to identify institutional clients and understand details about the products they are looking to source locally.



FUNDERS AND NON-PROFITS

SUPPORT TRAININGS AND INNOVATIVE FARM TO INSTITUTION PROGRAMS

- Support wholesale readiness trainings and tools for producers so they can efficiently serve institutional markets. Support season extension research and implementation so producers can supply institutions with local and regional products throughout the year.
- Support innovative programs that increase opportunities for institutions to purchase local and regional foods

SUPPORT RESEARCH AND TRACKING EFFORTS

- Support increased research around the impact of local and regional food purchases on economic impact, land use, food insecurity, and nutrition.
- Support development of improved tracking systems, whether through technology solutions, trainings, or additional staff dedicated to tracking efforts.
- Support regional efforts to identify shared metrics and goals that will help farm to institution stakeholders measure progress more effectively.

GOVERNMENT OFFICIALS AND POLICY MAKERS

PRIORITIZE SUPPORTIVE FARM TO INSTITUTION POLICY

- Prioritize farm to institution activity in state food plans and strategies and create working groups in state food policy councils.
- Support policy that makes it easier for institutions to procure local and regional food, including reimbursement and local preference laws. Emphasize the importance of tracking and accountability mechanisms in all institutional procurement policy.

SUPPORT RESEARCH AND TRACKING EFFORTS

- Support wholesale readiness trainings and tools for producers, including support for food safety requirements, so they can efficiently serve institutional markets.
- Support season extension research and implementation so producers can supply institutions with local and regional products throughout the year.



THANKS FOR READING!

Feel free to email us with any questions or suggestions at info@farmtoinst.org

