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EXECUTIVE SUMMARY

In August 2020 the Iowa Department of Agriculture and Land Stewardship (IDALS) announced several grant programs to support local food systems and farm to school and early care (F2SEC) in Iowa. Local Produce and Protein Program (LPPP) grants were available to fruit and vegetable farmers (equipment grants), schools (equipment and local food grants), and food hubs (equipment). Eligible schools included early care and education sites (ECEs), K-12 schools, and colleges/universities.

The Iowa Food Hub Managers Working Group (FHMWG) is a collaboration of ten food hubs in Iowa. The FHMWG has been working together to coordinate local food aggregation and delivery since 2015. Many of the food hubs involved in Iowa's FHMWG sold local food to schools which were granted LPPP grant funds. Most of the food hubs also received an equipment grant.

FINDINGS

Food hubs contributed to making the Local Produce and Protein Program a success. Food hubs serviced 51 percent of grantees, and 50 percent of funds allocated to schools to purchase local food were spent at food hubs.

lowa State University Extension and Outreach, which is one of the coordinating organizations of the FHMWG, evaluated the impact of the LPPP on food hubs by asking food hub managers to share the data from their IDALS performance reports. This data was analyzed and is summarized in this report. The following are highlights of the findings:

- Schools in 53 of lowa's 99 counties participated in the Local Produce and Protein Program grant to purchase local food. In 25 (47 percent) of these counties, schools purchased local food through a food hub involved with the Iowa FHMWG.
- Of the \$225,000 reimbursed to schools for local food purchases, 51 percent was spent at food hubs and 51 percent (41 of 80) of grantees were served by food hubs.
- Originally, 108 schools were awarded a grant to purchase local food, but only 80 fulfilled the grant
 and were reimbursed for local food purchases. Reasons for not fulfilling the grant included
 difficulty finding local food products, difficulty in arranging delivery of local product, and school
 staffing problems due to the COVID-19 pandemic. Schools that worked with a food hub were able
 to avoid the challenges of locating product and delivery, because those are tasks food hubs fulfill.
- Schools' purchases of local food from food hubs were often under \$1,000 and ranged from \$70 to over \$36,000. From March 1 to December 1, 2020, food hubs sold a total of \$224,008 in local food to schools. Food hub sales to schools using grant funds were about equal to sales to schools which paid with their own funds.
- The majority of farm to school sales from food hubs were to K-12 institutions, with a total of \$185,339 in sales. This is followed by colleges and universities, who purchased \$33,234 in local food from food hubs. ECEs spent \$5,435 on local food from food hubs.
- ECEs were the least likely to spend their own funds on local food and the most reliant on grant funds to purchase local food. ECEs were also most likely to be new food hub customers.

- In total, food hubs served 52 unique farm to school customers between March 1 and December 1, 2020. Of these customers, 27 (52 percent) had never purchased from a food hub. All the new farm to school customers were grant funded, demonstrating how the Local Produce and Protein Program grant incentivized schools to purchase local food for the first time.
- For the most part, new customers spent only grant funds on local food, funding 98 percent of their purchases with grant funds. In contrast, established customers funded less than half (34 percent) of their local food purchases with grant funds. This demonstrates that once schools are established as food hub customers, they are less reliant upon grant funding and more able to spend their own funds on local food.
- Existing food hub customers spent more on local food than new customers on average. Median
 purchases of existing customers were approximately \$2,500, and median purchases of new
 customers were \$1,370.

RECOMMENDATIONS

The following recommendations to increase the capacity of lowa food hubs to support local food procurement in lowa schools flow from the results of this report:

- Invest in aggregation and distribution infrastructure at lowa food hubs and key geographic locations to support access to markets for farmers.
- Facilitate relationships between schools and food hubs, so food hubs can help overcome the challenges of locating product and arranging delivery.
- Explore ways to continue the LPPP or a similar grant program in 2021 and beyond to help more ECEs, K-12 schools and colleges/universities get started with local food procurement.
- Any future incentives should be timed for schools, farms, and food hubs to plan menus and local purchases in advance, and for purchasing periods to encompass the peak of harvest season to help schools more readily access volume and variety of local foods, if possible.
- Continue to financially support food producers as they build infrastructure to harvest, clean, store and distribute food products to sell to ECEs, K-12 schools and colleges/universities. This will create ripple effects in the private marketplace. When serviced by food hubs, farmers can increase production, and private institutional markets- like restaurants and hospitals- can participate in the local food economy, supporting farmers and food hubs alike.
- Look for the results of the Local Food Makes Cents for lowa's Kids and Farmers pilot program that will be conducted in 2021. This program is exploring how to incentivize and support local food procurement by ECEs.

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Title page photo caption: Karla Stevenson and Dede Shaull receive local apples from Field to Family Food Hub at Mary Welsch Elementary in Williamsburg, fall 2020. (Source: Field to Family)

Disclaimer: Some of the images used throughout this report were taken prior to the COVID-19 pandemic.

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INTRODUCTION

In August 2020 the Iowa Department of Agriculture and Land Stewardship (IDALS) announced a grant to support local food systems and farm to school and early care (F2SEC) in Iowa. Local Produce and Protein Program (LPPP) grants were available to fruit and vegetable farmers (equipment grants), schools (equipment and local food grants), and food hubs (equipment). Eligible schools included early care and education sites (ECEs), K-12 schools, and colleges/universities. Throughout this report the word "school" encompasses these three types of educational institutions. The words "farm to school and early care" (F2SEC) are used to refer to sales from local farms to these three types of educational institutions.

Originally, a total of \$490,000 was available in grants and an additional \$250,000 was later allocated, for a total of \$740,000. As of January 7, 2021, \$603,000 of those funds had been spent. \$101,000 had been reimbursed for school kitchen equipment, \$277,000 for producer equipment, and \$225,000 for school food.

The Iowa Food Hub Managers Working Group (FHMWG) is a collaboration of 10 food hubs in Iowa. The National Food Hub Collaboration defines a food hub as "a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand." In Iowa, the FHMWG has been collaborating since 2015 to coordinate aggregation and delivery, strategize, and learn together. The group is currently coordinated by Iowa Valley Resource Conservation and Development and Iowa State University Extension and Outreach.

Seven food hubs involved in the FHMWG sold local food to schools through the LPPP. Several of the food hubs also received an equipment grant. This report summarizes the impact of this grant program on lowa's Food Hub Managers Working Group.

The following image (Figure 1) is a map displaying the sales territory of the seven food hubs involved in the FHMWG that sold local food to schools through the LPPP. It shows that these hubs together serve most of the state of lowa. However, northwest lowa, the Waterloo area, and far southern lowa are not served by any food hub at this time. These regions would be served by existing food hubs if enough demand for local food was expressed.

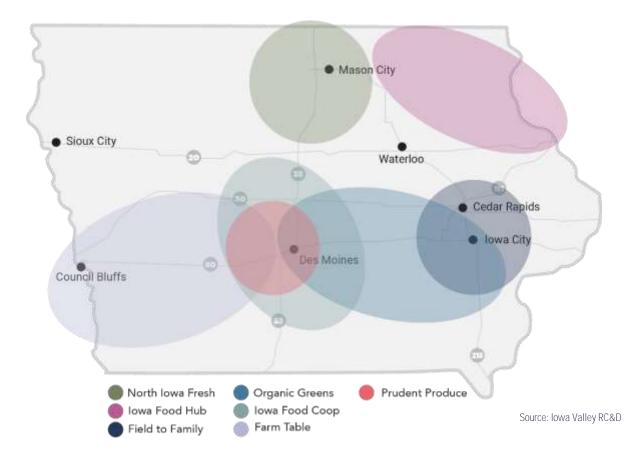


Figure 1: Seven food hubs collectively serve most of the state of lowa.

METHODS

All grant recipients were required to submit a performance report to IDALS by December 15, 2020. Kayla Koether, a food systems specialist with Iowa State University Extension and Outreach, asked each food hub involved with the FHMWG to share the data they collected for their performance report with her. (She did not attempt to collect performance reports from schools or farmers.) Seven food hubs provided a copy of their report. The reports included the name of each school that purchased from the food hub between March 1 and December 1, 2020, and the total cost of their purchases. It also included whether they were a first-time customer or a repeat customer.

A list of schools that received LPPP funding was accessed from the IDALS website. This data was used to categorize the customers in the food hubs' performance reports as grant funded or not grant funded. The total value of the grant received by each LPPP-funded school was added to the dataset by another lowa State University Extension and Outreach employee who had access to that data. A dataset set was built in Excel. The data was analyzed using summary statistics.

RESULTS

How many school food grant recipients were served by food hubs?

Schools in 53 of lowa's 99 counties participated in the Local Produce and Protein Program grant to purchase local food. Figure 2 shows that in 25 (47 percent) of these counties, schools purchased local food through a food hub involved with the lowa FHMWG. This demonstrates the key role that food hubs played in helping schools in much of the state access local food.

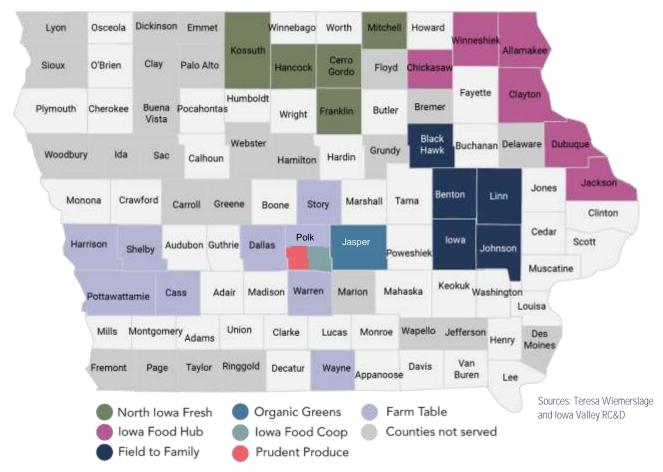


Figure 2: Schools in 25 counties purchased local food from a food hub using grant funds.

Nearly half of LPPP funds allocated to schools to purchase local foods were spent at food hubs.

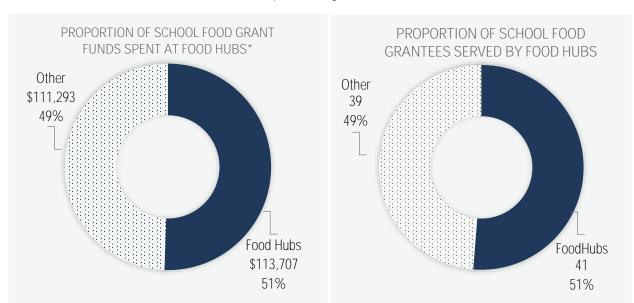
Figure 3 shows that of the \$225,000 given to schools to purchase local food, 51 percent was spent at food hubs. The remaining 49 percent was likely spent by purchasing food directly from farmers.

Figure 3 also shows that 51 percent (41 of 80) of grantees were served by food hubs. Originally, 108 schools were awarded a grant to purchase local food, but only 80 fulfilled the grant and were reimbursed for local food purchases. Based on communications from Tammy Stotts, IDALS Marketing Specialist and Farm to School Coordinator, reasons for not fulfilling the grant included:

- Difficulty finding local food products, possibly because the grant funds were made available during a time when the outdoor fruit and vegetable growing season was coming to an end in lowa.
- Difficulty in arranging delivery of local product.
- School staffing problems due to the COVID-19 pandemic. This includes not having enough kitchen staff due to quarantine or not having enough staff time to locate and procure local products.

All existing food hub customers who received LPPP grants were able to fulfill the grant at least partially. Schools that worked with the food hub were able to reduce the challenges related to locating product and delivery. Food hubs have connections with local growers and can locate a variety of local foods for schools to buy with one order. Food hubs also arrange for the delivery of the product, whether that is with a food hub's own truck or using delivery vehicles owned by farms or other local businesses.

Figure 3: Over half of funds allocated to schools to purchase local food was spent at food hubs; food hubs serviced 51 percent of grantees.



^{*}The total awarded to schools for foods was \$225,000 as of January 7, 2021. This number may change slightly once all reimbursements are finalized.

How did grant funds affect total food hub sales to schools in 2020?

From March 1 to December 1, 2020, food hubs sold a total of \$224,008 in local food to schools.

Food hubs sales to schools using grant funds (\$113,707) was about equal to sales to schools which paid with their own funds (\$110,301, Figure 4).



Figure 4: Food hubs sold a total of \$224,008 in local food to schools from March 1 to December 1, 2020.

It is difficult to tease out how the grant program affected farm to school sales in 2020, because of the COVID-19 pandemic, as many things were different at schools in 2020 than in other years. For example, some schools that normally would not qualify to participate in the summer feeding program could participate in 2020. During the pandemic, any school could participate in the summer feeding program, whereas in the past only schools with a high percentage of students who qualify for free or reduced lunch qualified. Some of these schools purchased local food for summer feeding in 2020, whereas in a normal year they would not purchase local food in the summer. On the other hand, schools that would normally purchase local food may have chosen not to because they needed to focus on implementing other changes to operate during the pandemic.

Figure 5 shows that schools' purchases of local food from food hubs were often under \$1,000 and ranged from \$70 to over \$36,000. An analysis using linear regression was performed to determine which of the following factors, if any, were predictive of how much a school would spend on local food: school type (ECE, K-12, or college/university), whether it was a new or existing food hub customer or grant recipient vs. non-recipient. The analysis showed none of these factors correlated significantly with the amount a school spent.



Figure 5: School purchases of local food from food hubs ranged from \$70 to over \$36,000.

For all hubs, grant-funded sales of food to schools were significant. Figure 6 shows that four hubs made over half of their farm to school sales funded by the grant: FarmTable Delivery (89 percent), lowa Food Co-op (100 percent), North Iowa Fresh (99 percent), and Prudent Produce (100 percent). Therefore, the grant contributed to these food hubs gaining new customers and experience in farm to school sales.

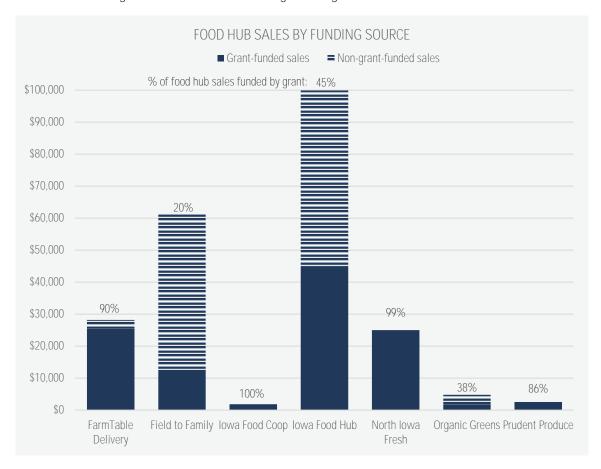


Figure 6: Some food hubs had significant grant-funded sales to schools.

What differences appear in the data between types of school institutions?

The majority of farm to school sales from food hubs were to K-12 institutions, with a total of \$185,339 in sales.

This is followed by colleges and universities, which spent \$33,234 on local food from food hubs. ECEs spent \$5,435 on local food from food hubs (Figure 7). ECEs received smaller grants than other types of schools, reflecting that they tend to serve fewer children than other types of schools, and those children often eat less than older children. Data presented later in the report also shows that ECEs were more likely than other types of schools to purchase local food from a food hub for the first time in 2020, which may also contribute to lower purchases.

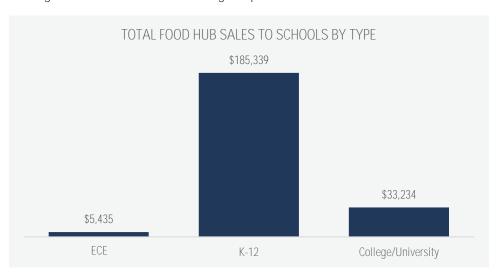


Figure 7: K-12 schools made the highest purchases of local food from food hubs.

Figure 8 shows the percentage of purchases funded by the LPPP grant by each type of school. While all types of institutions spent some of their own money to purchase local foods, ECEs were the least likely to spend their own funds on local food and the most reliant on grant funds to purchase local food. In fact, 71 percent of funds spent by ECEs on local food from food hubs were grant funds. In contrast, nearly all funds spent by colleges and universities were non-grant funds, with only one percent of their purchases funded by the grant. This demonstrates that colleges and universities were much less reliant on grant funding to purchase local foods than other types of educational institutions. However, only four colleges and universities are included in the dataset, making it difficult to make broad generalizations for all colleges and universities in lowa. In addition, colleges and universities may have seen drops in enrollment or reduction in number of students choosing campus housing due to the pandemic. In a normal year, the grant may have incentivized some colleges or universities to purchase local food, but in 2020, the pandemic may have impeded potential first-time buyers of local food.

Therefore, ECEs appears to be most in need of funding assistance to purchase local foods. The lowa Farm to School and Early Care Coalition received a grant from the Association of State Public Health Nutritionists (ASPHN) in November 2020, part of which will be used to pilot the Local Food Makes Cents for lowa's Kids and Farmers program. This program will provide grant funding to ECEs to purchase local food between April and September 2021. The data collected here from food hubs demonstrates that programs like this are especially needed for ECEs to begin purchasing local food.

That is not to say that K-12 schools do not also need support or incentives to purchase local foods. Over half of the money spent by schools (59 percent) was grant-funded, showing they also were reliant on grant funds to purchase local foods.

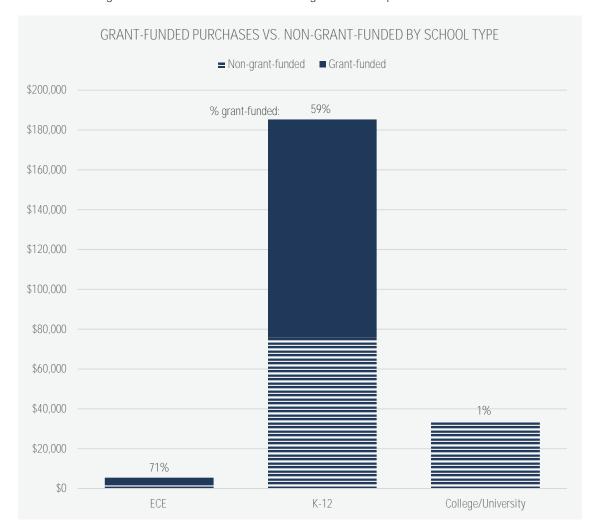


Figure 8: ECEs were the most reliant on grant funds to purchase local foods.

How did grant funds affect total food hub farm to school customers in 2020?

In total, lowa food hubs served 52 unique farm to school customers between March 1 and December 1, 2020. Of these customers, 27 (52 percent) were new customers, meaning they had never purchased from a food hub before (Table 1). All the new food hub farm to school customers were grant-funded, demonstrating how the Local Produce and Protein Program grant incentivized schools to purchase local food for the first time.

Table 1: All 27 new food hub customers in 2020 were awarded a Local Produce and Protein Program grant.

	LPPP grantee	Non-grantee
New food hub customer	27	0
Existing food hub customer	12	13

What are the differences between new and existing food hub customers?

For the most part, new customers spent only grant funds on local food, funding 98 percent of their purchases with grant funds (Figure 9). In contrast, established customers funded less than half (34 percent) of their local food purchases with grant funds. This demonstrates that once schools are established as food hub customers, they are less reliant upon grant funding and more able to spend their own funds on local food.



Figure 9: Existing school customers were more likely than new customers to spend their own funds on local food.

In 2020, food hubs gained new farm to school customers of all types. New food hub customers were most likely to be K-12 schools. Table 2 shows they gained 8 ECEs, 18 K-12 schools, and 1 college/university. The data also shows that over half of ECEs were new in 2020. This gives added context as to why ECEs were most reliant on grant funds to make purchases; they were most likely to be purchasing local food from a food hub for the first time (and possibly their first time purchasing local food from any source). This is followed by schools, just over half of which (51 percent) were new food hub customers in 2020.

Table 2: ECEs were most likely of the three school types to be new food hub customers

	K-12 Schools	ECEs	Colleges/Universities
New food hub customer	18	8	1
Existing food hub customer	17	5	3

Seven food hubs involved in the FHMWG gained new F2SEC customers in 2020. Figure 10 shows that the lowa Food Coop and Prudent Produce served farm to school customers for the first time in 2020, with all of their F2SEC customers being new. North lowa Fresh gained seven new F2SEC customers in 2020, with only two existing F2SEC customers.

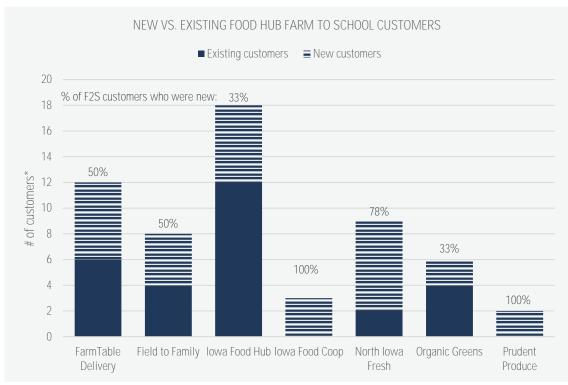


Figure 10: Seven food hubs in the FHMWG gained new farm to school customers in 2020.

*Six customers purchased from more than one hub.

Existing food hub customers spent more on local food then new customers on average.

Table 3 shows that the average purchase of existing food hub customers was \$6,570, compared with \$2,214 in purchases from new customers. Median purchases of existing customers were \$2,449, and median purchases of new customers were \$1,373.

The average purchases of both existing and new customers are significantly higher than the median purchase. This is because a few customers made very high purchases in 2020, which skews the average, especially for existing customers. The median is more representative of what existing and new farm to school food hub customers purchased.

		n new customers	

	Average purchase	Median purchase	Total purchase	# of F2SEC
Existing customers	\$6,570	\$2,449	\$164,240	25
New customers	\$2,214	\$1,373	\$59,768	27

Table 4: Existing food hub customers were less likely to receive an LPPP grant than new customers, but those who did participate in the grant received larger awards.

	Average LPPP	Median	Maximum	Minimum	# of grantees
Existing customers	\$5,748	\$6,000	\$12,000	\$500	12
New customers	\$3,519	\$2,000	\$14,000	\$500	27

Several factors explain why existing food hub customers purchased more local food in 2020 than new customers:

- 1. New customers relied almost entirely on LPPP grant funds to make their local food purchases. This limits the quantity that grantees could spend in two ways:
 - a. Total grant funds available to school grantees which purchased from a food hub ranged from \$500 to \$14,000, with a median award of \$2,000. For those who financed their local food purchases primarily or entirely with grant funds, the amount awarded capped what they could spend.
 - b. If most new customers did not begin to procure local food until after the grant awards were announced, they only had a few weeks during which to spend the funds. Because awardees were required to spend at least 50 percent on fruits and vegetables, and the outdoor growing season was coming to an end at the time the awards were announced, some grantees may not have been able to procure as much food as they would have liked.
- 2. Existing food hub customers were more likely than new customers to purchase local food from food hubs throughout the growing season, even before the LPPP grant was announced. Schools could be reimbursed for local food purchases dating back to March 1, 2020. Hence existing customers had more time to purchase local food. In some cases, local food filled the gap causes by shortages in the supply chain at the start of the pandemic.¹
- 3. Existing food hub customers already had experience purchasing and using local food in school meals and snacks. Therefore, they were already familiar with what products they wanted, what products were available and when, how to order through a food hub, etc. This familiarity with how farm to school procurement can work through a food hub makes F2SEC purchases easier, facilitating higher and more frequent purchases.

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¹ See the story *Food hub provides local products for Decorah student meals during closure* by Chad Elliot (5/1/2020) https://www.extension.iastate.edu/ffed/decorah-students-local-products-closure/

4. The median LPPP grant award to existing food hub customers was \$6,000 (Table 4), compared with \$2,000 to new food hub customers. The larger awards granted to existing food hub customers facilitated larger purchases. While the maximum award a school district could receive was based on the number of school buildings in the district, a school could apply for less than the maximum. It appears schools already purchasing from a food hub were more likely to apply for the maximum award than schools not already connected with a food hub. Presumably having a pre-existing connection with a local food supply chain gave them confidence that they could spend a larger grant award, or they had already spent money on local food that could be reimbursed.

CONCLUSIONS AND RECOMMENDATIONS

Food hubs contributed to making the Local Produce and Protein Program a success. Food hubs serviced 51 percent of grantees and 50 percent of funds allocated to schools to purchase local food were spent at food hubs.

Additionally, the LPPP grant was successful in bringing new farm to school customers to food hubs. Food hubs served 52 unique farm to school customers in 2020, 27 of whom had never purchased from a food hub before. All the new customers were LPPP grantees.

These new food hub customers made median purchases of local food of nearly \$1,400. In contrast, existing customers made median purchases of local food from food hubs of over \$2,400, showing that once schools are established with a food hub, they may be able to make larger and more frequent local food purchases. Of the original 108 LPPP local food awardees, 28 were not able to complete the grant. Reasons for not completing included not being able to locate local food product, inability to arrange delivery, and limited staff availability due to the COVID-19 pandemic. Schools working with a food hub could reduce the challenge of locating local food products and arranging delivery, because those are services that food hubs provide.

New food hub customers relied heavily on grant funds to make their local food purchases, with 98 percent of the funds they spent reimbursed by the grant. In contrast, 34 percent of the funds spent by existing food hub customers were grant funds, showing that once schools are established with a food hub, they are able to spend their own funds on local food.

ECEs were strongly incentivized by the LPPP. They were most likely to be first time food hub customers and most likely to rely on grant funds to purchase local food. It appears that ECEs were more likely than other types of schools to be purchasing local food for the first time, illustrating that the grant played an important role in their actions. Supporting ECEs to access local food may require additional grant funds or other types of support, because they tend to be new to local food procurement and they serve children when their taste preferences are developing. The LPPP funds also supported and motivated K-12 schools; many of them were also first-time food hub customers and relied on grant funds to purchase local food.

In conclusion, the LPPP was crucial to introducing schools to local food purchasing. The program drove new school customers to food hubs and allowed some food hubs to serve farm to school customers for the first time. Further, food hubs are critical infrastructure for facilitating local procurement by lowa schools, as exemplified by the large role they played in facilitating school purchases for the LPPP. With food hub partnerships, schools were able to source local food and successfully complete their grants, putting the LPPP funds to use and ensuring the program's success.

RECOMMENDATIONS

The following recommendations to increase the capacity of lowa food hubs to support local food procurement in lowa schools flow from the results of this report:

- Invest in aggregation and distribution infrastructure at lowa food hubs and key geographic locations to support access to markets for farmers.
- Facilitate relationships between schools and food hubs, so food hubs can help overcome the challenges of locating product and arranging delivery.
- Explore ways to continue the LPPP or a similar grant program in 2021 and beyond to help more ECEs, K-12 schools and colleges/universities get started with local food procurement.
- Any future incentives should be timed for schools, farms, and food hubs to plan menus and local purchases in advance, and for purchasing periods to encompass the peak of harvest season to help schools more readily access volume and variety of local foods, if possible.
- Continue to financially support food producers as they build infrastructure to harvest, clean, store and distribute food products to sell to ECEs, K-12 schools and colleges/universities. This will create ripple effects in the private marketplace. When serviced by food hubs, farmers can increase production, and private institutional markets- like restaurants and hospitals- can participate in the local food economy, supporting farmers and food hubs alike.
- Look for the results of the Local Food Makes Cents for lowa's Kids and Farmers pilot program that will be conducted in 2021. This program is exploring how to incentivize and support local food procurement by ECEs.

NORTH IOWA FRESH

Clear Lake, Iowa



Marie Boyd of Healthy Harvest of North Iowa (left) and Andrea Evelsizer of North Iowa Fresh serve Country View Dairy yogurt at Hampton South Side Elementary in February 2019. (Source: North Iowa Fresh)

SUMMARY

Though North Iowa Fresh (NIF) has been building markets for local food in the Clear Lake and Mason City region since 2016, 2020 was a breakthrough year in farm to school for their food hub and their region. Support from the Iowa Department of Agriculture and Land Stewardship's Local Produce and Protein Program (LPPP) helped schools get engaged for the first time, including many who had been interested before but didn't know where to begin or that a local food hub was available to help.

Nine schools (6 K-12 schools and 3 ECEs) sourced \$25,000 worth of local farm products from NIF from March 1- December 1, 2020, a drastic increase from 2019, when they worked with three school districts in the area and sold \$1,700 of local food to schools.

To fill the increased demand, North lowa Fresh worked with four new farmers. They found that schools were also able to utilize the local food grants because some received processing grants to acquire equipment that helped them process and store fresh produce. Farmers were better prepared to sell to schools because of the equipment grants they received; one farmer who received a grant for a potato washer will now be better able to supply potatoes to the hub for farm to school sales as a result.

EXPERIENCE WITH THE 2020 LOCAL PRODUCE AND PROTEIN PROGRAM

Virtually all of the food service directors who participated for the first time in 2020 said they had been interested in farm to school in years past, but they didn't know how to get started and were limited by time and budgets. They had no idea a food hub like NIF existed that could help them source a diversity of products from multiple local farms and simplify logistics. Once schools in North lowa signed up for the Local Produce and Protein Local Food grant, they received materials from the lowa Department of Agriculture and Land Stewardship sharing sources for local food. That resource helped food service directors connect with NIF manager Andrea Evelsizer and find out about the hub's products and services for the first time.

With a low risk opportunity to try farm to school and a local food hub to support them, food service directors got motivated. Seven new schools participated in farm to school with North Iowa Fresh in 2020, a dramatic increase from 2019, when NIF served three schools. All nine school customers participated in the LPPP and drove an impressive increase in NIF's total farm to school sales. They purchased \$25,000 worth of locally grown products from NIF, an amount Evelsizer calls "totally unprecedented." In 2019, the total was around \$1,700.

Existing school customers were also able to expand farm to school purchasing. In one school district, school administrators were skeptical that their food service director would be able to spend the local food grant dollars. But the director had worked with North lowa Fresh to order small quantities before and felt confident to pursue the grant, knowing they had a trusted source to procure local products.

Overall, produce made up the bulk of school purchasing- approximately \$17,000 worth of sales- while the remaining \$8,000 consisted of proteins such as yogurt and pork patties. NIF reached out to four new producers to fill the school demand. They brought on Huntley Gardens, an apple producer, as well as Kittleson Brothers, a potato and onion grower. They also added bulk dried beans from Grimm Family Farm and expanded what had been a pilot program with Country View Dairy into robust yogurt sales to schools. This product expansion also leveraged new partnerships. NIF worked with That lowa Girl to transport yogurt, and with the lowa Food Hub to source sweet potatoes.



Source: North Iowa Fresh

Evelsizer said that with local food grant money to support purchasing, food service directors approached farm to school with more flexibility and openness. They experimented with multicolored carrots and purple potatoes, and said the kids really enjoyed trying the colorful vegetables. Schools also purchased local apples, replacing their purchases of pre-bagged apple slices as well as whole apples, which they typically halved to fill serving sizes. The smaller local apples were sized to serve whole, and the students were excited about the whole apples, much preferring them to the packaged apple slices.

North lowa Fresh's experience also underscores how the comprehensive structure of the Produce and Protein Program effectively strengthened farm to school along the entire supply chain. K-12 schools could be flexible about the variety, sizing, and specifications of produce thanks to processing equipment purchased through the grant. Items like commercial food processors significantly reduced the staff time required to

prep whole, local produce and made it feasible to incorporate it into the menu with less concern for sizing. Schools that usually served baggies of baby carrots previously had not been interested in fresh, local carrots because of the processing time to chop them by hand. Now, they were able to efficiently process whole carrots into carrot sticks. The same was true for potatoes; schools had required potatoes sized to specifications, so that whole or half potatoes would meet serving guidelines as a baked potato. Now that they were able to efficiently process whole potatoes into wedges, they could source variously-sized potatoes for their colorful local potato medley. Coleen Hanig, food service director at West Fork CSD said that with the new equipment it took her staff less than an hour to turn a 25-lb. case of cabbage and 15 lb. of carrots into a giant batch of coleslaw.

The processing equipment grant also helped food service directors get other staff onboard. Evelsizer had heard that some food service staff were worried about serving more local produce, thinking it would be an overwhelming amount of additional work. In the end, with commercial food processing equipment, it all went smoothly. Staff buy-in can be key to long-term farm to school success. In the past, Evelsizer had worked with a passionate food service director who championed farm to school and ramped it up heavily before retiring the following year. After that, the school completely ceased purchasing. Andrea felt the staff struggled with the additional work and therefore were not committed to continuing the program.

Producer equipment grants allowed farmers to meet the specific needs of school markets. Ron Rahut at Fertile Valley Gardens, a longtime producer-member of North Iowa Fresh, received a grant to purchase a stainless-steel barrel washer, cutting down washing times for his potatoes and carrots. Rather than washing about 1.5 lbs. of carrots a minute, he can now wash 10-20 lbs. per minute, efficiently filling the schools' large wholesale orders. Another NIF vendor, Apples on the Avenue, received a grant for an apple grader, which will help them quickly sort apples to meet school serving size requirements.

Not only are their farmers now better equipped to serve school demand, North lowa Fresh also used an equipment grant to improve their aggregation and distribution infrastructure. NIF installing a walk-in cooler that will enable them to store wholesale orders and manage short-term inventory. They also purchased heavyduty carts and a dolly for improved handling.

While NIF cites many tangible investments made over the course of the program, from infrastructure to sales, the new relationships and collaborations to come out of these grants may be one of the most important benefits. Now that food service directors have gotten to work with North lowa Fresh and participate in farm to school, they have experiences on which to build. Food service directors were not only introduced to the food hub, they were also able to learn from each other. NIF and their partner, Healthy Harvest of North lowa-a non-profit focused on local food system connections and education- hosted virtual networking sessions for farm to school participants to share which local products are available, find creative ideas to incorporate local produce into school menus, and celebrate their successes.

In one of their final meetings of 2020, the food service directors reflected on the grant programs, their experiences with farm to school, and their plans for the future. The group agreed that that participation in farm to school would not have been feasible without North Iowa Fresh. Planning for local availability and prepping produce already take more time, and they would not have had the time to source each item from an individual producer. The participating schools were all willing to consider purchasing local products from NIF in the future, but also noted that pricing could be a limiting factor. They said it was easier to purchase items that didn't require processing, such as cherry tomatoes, apples and yogurt, and the local food grant incentives helped justify purchasing foods that required processing and staff time. Overall, the purchasing incentives proved an important resource for these schools.

The infrastructure and relationships catalyzed with support from the Local Produce and Protein Program Grant will continue to pay dividends in the food system. Having success with farm to school this year, Evelsizer hopes that schools will be primed to participated again next year, and that there will be incentives to help them continue to learn and further solidify the local supply chain.

The Local Produce and Protein Program has had a huge impact on NIF, even with a short window to apply and use the funds because they arrived after the height of the local harvest season. Evelsizer sees an opportunity to increase the impact of the program through timing alone; if schools have the opportunity to plan in advance and build fall menus that feature local, NIF can secure more local products at the height of the season and leverage more school purchasing.

IOWA FOOD HUB

Waukon, Iowa



Source: Iowa Food Hub

SUMMARY

In 2020, support from the Local Produce and Protein Program strengthened commitments from existing customers, inspired new customers to participate in farm to school, and made it possible for the Iowa Food Hub (IFH) to support a consistent fall route to Dubuque. IFH had previously built infrequent deliveries around large orders to Dubugue Community School District. With support from IDALS funding, Joann Franck at Dubuque CSD committed large deliveries to throughout October, allowing IFH to plan a consistent weekly route. Other

schools, engaged by IDALS funding, wanted to participate in farm to school, and with weekly deliveries already planned to the area they were able to easily integrate into logistics and ordering. The success of the route was self-reinforcing, and IDALs funding catalyzed an increase in sales and a reduction of risk that kept the lowa Food Hub truck on the road to Dubuque throughout the fall.

IFH sold \$27,019 in local food sales to Dubuque-area schools from March 1—Dec 1, 2020, more than quadrupling Dubuque-area sales from \$6,498 in 2019.

EXPERIENCE WITH THE 2020 LOCAL PRODUCE AND PROTEIN PROGRAM

The lowa Food Hub (IFH) is a non-profit organization that specializes in wholesale local food distribution, working specifically with schools, colleges, and early childcare centers to serve their farm to school programs as well as local restaurants and small grocers.

In 2020, funding from the lowa Department of Agriculture and Land Stewardship's Local Produce and Protein Program grant helped the lowa Food Hub gain new customers and expand its service footprint to Dubuque. They supported schools participating in farm to school for the first time while providing new markets for local farmers.

Prior to the Local Produce and Protein Program, the lowa Food Hub served the Dubuque Community School District's (DCSD) farm to school program. But doing so was a logistical challenge. The hub needed \$2,000 in sales to justify the 100-mile trip and break even on the route. In 2019, IFH worked with DCSD food and nutrition manager Joann Franck to put together large orders and consolidate multiple weeks of purchases into four deliveries. This solution works but has its challenges. Only products with longer shelf lives could be stored through the non-delivery weeks, limiting the products the school could serve. Without a consistent delivery schedule, it was difficult to bring on new customers, help them order routinely, and expand the sales that would support a regular route.

In 2020, support from the Local Produce and Protein Program strengthened commitments from existing customers and inspired new customers to participate in farm to school. The interest from new customers made it possible for the food hub to support a weekly fall route to Dubuque. Franck built on Dubuque's previous success with farm to school and committed to weekly purchases averaging \$2,000 throughout October. Her commitment meant the hub could plan on consistent weekly routes to the area for the month.

Meanwhile, other Dubuque-area schools were motivated by the Local Produce and Protein Program. They began to contact the lowa Food Hub to see if they could source local food. With an existing plan for October delivery to the area, the hub was able to serve these new customers and provide a consistent ordering structure. Western Dubuque School District, Holy Family Catholic Schools, Andrew Community School District, Edgewood-Colesburg School District, and Marita Theisen Childcare Center purchased local food from IFH and participated in farm to school.

The new route's success became self-reinforcing, and the momentum from new customers kept the truck on the road to Dubuque throughout the fall. Customers were pleased with the ease of ordering and consistent delivery and continued buying into November. Even when DCSD reduced purchasing after moving to online instruction due to COVID-19, the expanded customer base made it possible for the hub to continue serving the area.

Ultimately, the Local Produce and Protein Program helped Dubuque-area schools participate in farm to school and helped the lowa Food Hub expand its customer base and service territory. Sales growth from Dubuque-area customers made up for reduced sales from other customers due to COVID-19. Dubuque-area purchases generated \$27,019 in local food sales for the lowa Food Hub from March 1—December 1, compared to \$6,498 in 2019.

FIELD TO FAMILY

Iowa City, Iowa



Iowa City Community School District staff from left to right, Margarita Rodriguez, Erin Randall, and Eunice Garcia, display local food from Field to Family.

SUMMARY

Support from the Local Produce and Protein Program Food Grant from the lowa Department of Agriculture and Land Stewardship helped Field to Family connect with three schools who were new to farm to school, expand delivery to Williamsburg, and increase farm to school sales. Williamsburg Early Williamsburg Lutheran Childcare. Interparish, and Williamsburg Community School District all used grant funds to buy a variety of local foods. The experience helped the schools learn what products best fit their needs and helped Field to Family establish relationships, ordering, and logistics with the schools to support them in the future. In addition to adding new schools, existing Farm to School customers ramped up purchasing.

Field to Family sold over \$60,000 in local food to schools from March 1– Dec. 1, 2020– an increase of 50% over the \$41,000 they sold and brokered in 2019.

EXPERIENCE WITH THE 2020 LOCAL PRODUCE AND PROTEIN PROGRAM

Giselle Bruskewitz, Field to Family Food Hub Sales and Partnerships Manager, planned for increased farm to school sales in 2020 before COVID-19 upended those plans. However, the LPPP program put schools back on track and helped increase Field to Family's farm to school sales. Incentives from the Local Produce and Protein Program and the expansion of school summer feeding programs provided schools the opportunity to purchase

far more local than the food hub thought would be possible during the pandemic. Field to Family added three new farm to school customers, including their first early childcare center, and their existing school customers expanded purchasing. In the end, Field to Family's farm to school sales hit \$61,500 from March 1-Dec 1 of 2020, \$20,000 more than they sold and brokered to schools in all of 2019. Not only did this development help the hub build relationships with new customers, it also helped offset the reduction in sales to restaurants and other customers impacted by Covid-19.

First, the LPPP grant incentivized new customers, spurring three new schools to take part in farm to school and become Field to Family customers. Because the new schools were all in Williamsburg, the food hub added a delivery day and expanded its territory to serve them. These new opportunities included Field to Family's first experience working with an early childcare center, where the passionate food director at Williamsburg Early Childcare was excited to get creative with farm to school.

Becky Risdon at Williamsburg Community School District connected to Field to Family with support from Jason Grimm at Iowa Valley Resource Conservation and Development. In the beginning, Williamsburg CSD used their funding to try a wide variety of items. Serving local apples was a big success, so they locked in a weekly pre-order of apples at a higher quantity. Giselle says this story illustrates a trend that she's observed with new school customers, and one that she's excited to replicate. With the incentives, staff at Williamsburg CSD were able to experiment and see which local items fit their needs. Once they had success, they were able to commit to purchasing the apples in a higher quantity, which simplified logistics for the food hub and food service staff. In the future, advance planning and larger quantity purchases could help the hub negotiate lower prices points for high-volume products, plan ahead with growers, and pass on savings to schools as well.

Pat Nielson at Williamsburg Lutheran Interparish, a K-12 private school, was also motivated by the grant program. Giselle was able to help Pat source local product, and even find a unique product that fit the school district's needs while supporting a local egg producer. Salt Fork Farms had plenty of eggs from their pullets (young hens who produce smaller eggs until they reach maturity). But those smaller eggs don't meet the grading for the large or medium eggs they sell to retail customers. Interparish was a perfect customer, using wholesale quantities of the smaller eggs to make scrambled eggs for the students. They also sourced locally to provide school staff with pumpkin pies at Thanksgiving- an extra-special way to show appreciation for staff during the stressful pandemic year.

Schools who had long been active in farm to school and customers of Field to Family grew their commitment with support from the Local Food Grant. Vinton-Shellsburg and Clear Creek Amana public schools both more than doubled their 2019 local food purchasing in 2020. Vinton Shellsburg incorporated a wide range of local products into their menu, including eggs, cheese curds, radishes, lettuce, and apples. That diversity underscores the value of the hub in sourcing from a wide range of producers and simplifying logistics.

At Clear Creek Amana, school food and nutrition director Debbie Klein has long been committed to bringing lowa products to students. She has always gone the extra mile, driving to the food hub for pick-up when necessary. Even for a passionate proponent of farm to school like Debbie, she said it would be difficult to accomplish without Field to Family: "We could not do farm to school without a food hub." Support from the

Local Produce and Protein Program helped her increase her local food purchasing, even during the pandemic year when facing additional time constraints and barriers.

Some school customers were able to ramp up purchases in 2020 during summer feeding programs expanded due to COVID. Clear Creek Amana bought local for their summer feeding programs. Iowa City Community School District (ICCSD) also purchased local items for use in their summer feeding program for the first time. These schools stepped up their purchasing at an especially critical juncture when families faced food insecurity and farmers and food hubs were struggling with reduced demand from restaurants. School supply chains were also being disrupted, and Giselle noted that food service directors were having difficulties sourcing broccoli, cauliflower, yogurt, and lettuce from their traditional suppliers. Sourcing local was a win-win-win, highlighting the resilience of the local food system.

Giselle detailed how ICCSD's summer feeding program had vastly grown in 2020, as did their local purchases. During summer feeding, they served around 400 meals a day in previous summers; in 2020 they served 3,300 children a day in May and 2,000 children in June. In 2019, ICCSD made about \$25,000 in local food purchases coordinated by Field to Family (with some purchases from farmers brokered by the hub, and other items purchased from Field to Family). Even without a LPPP Grant, their purchasing increased by 20 percent in 2020 and branched into new products like local yogurt, which they were struggling to source from their traditional supplier. ICCSD ultimately sourced \$31,000 worth of local food through their partnership with Field to Family from March 1—December 1. Initiating purchasing for summer feeding in 2020 may open opportunities to expand farm to school outside of the traditional school year and extend institutional markets for farmers and food hubs in the future.

IOWA FOOD COOPERATIVE

Des Moines, Iowa



Jennifer Miller (left) of the Iowa Food Coop poses with James Nisly of Organic Greens (right) as he delivers products to the Iowa Food Co-op, where some of the items will be cross-docked. (Source: Iowa Food Cooperative)

SUMMARY

lowa Food Co-op (IFC) plays a critical infrastructure role in local food sales and farm to school throughout the state, acting as a base for cross-docking wholesale quantities of product for other hubs, farms, and food businesses. As a result, lowa growers are able to market their products across the state. Thanks to an equipment grant from the lowa Department of Agriculture and Land Stewardship's Local Produce and Protein Program, IFC was able to strengthen their infrastructure to better serve farm to school customers and to support increased flow of wholesale products at their site.

EXPERIENCE WITH THE 2020 LOCAL PRODUCE AND PROTEIN PROGRAM

lowa Food Co-op is unique in the sheer number of lowa farmers and food producers it engages; annually, 300 different lowa vendors sell products through the co-op's online grocerystore platform. Each two-week order cycle usually includes products from 100 to 125 farmers. Once farmers receive orders from the online platform, they drop their products off at

lowa Food Co-op in Des Moines, so the cooperative can assemble customer orders and prepare them for distribution days when customers pick up their orders.

Farmers and food businesses based near each other often collaborate, arranging for one farmer to deliver multiple orders in one trip. Over time, farmers and food businesses that wanted to sell products to each other began to use IFC as a drop point. When they delivered their IFC order, they would also drop orders for each other to pick up and carry back to other parts of the state from this central mid-point. These drops work on a

smaller scale, where farm stores might feature products from another farm, as well as on a larger scale. Wholesale quantities are often cross-docked for other food hubs, and sometimes product is moved between delivery trucks in the IFC parking lot.

Jennifer Miller, IFC Co-Director, estimates that \$5,000 to \$10,000 worth of local food products are cross-docked in their facility each month—at least \$60,000 each year. With their support for cross-docking, products can reach markets across Iowa. One example is Ellen Walsh-Rosmann's FarmTable Procurement and Delivery food hub, based in Harlan. They serve the Des Moines, Council Bluffs, and Omaha markets as well as small lowa towns in between. Ellen purchases product from Country View Dairy, based in Hawkeye (northeast lowa), and James Nisly of Organic Greens, based in Kalona (southeast) lowa), using the lowa Food Co-op as an exchange point and cross-docking facility to support these transactions.

lowa Food Co-op therefore plays an important role in lowa's local food marketplace, not only through its own sales, but also by facilitating the flow of products between other farms and businesses. Expanding IFC's capacity to store and cross-dock products strengthens the whole food system. As Jennifer explains, "It's crucial to be able to move some of these products to other part of the state, otherwise ...we'd have to look at getting them [from] out of state—that's the alternative."

In 2020, lowa Food Co-op received an equipment grant through the Local Produce and Protein Program that will enhance their capacity to sell larger quantities of local foods and support cross-docking for other food businesses. They used their grant to purchase an 8x6-foot walk-in cooler to accommodate wholesale quantities—a big improvement over the commercial upright coolers they have used for retail sales. IFC also purchased racks and carts to accommodate more wholesale storage. The new infrastructure will help them cross-dock dairy, greens, and dried goods, as well as better store inventory of a variety of items.

The increased capacity will also help IFC meet the needs of local schools. During the LPPP local food grant in fall 2020, schools reached out to IFC to source local for the first time. While the co-op has traditionally served a retail market, they will now be able to better source and handle quantities to accommodate the larger school orders they received as a result of the LPPP.

Ultimately, this infrastructure will help IFC grow their existing market, support new farm to school customers, and facilitate the flow of lowa-grown food across the state. When it comes to transporting lowa products, Jennifer notes that "people don't realize there are actually a lot of small food producers throughout lowa, there just hasn't been a good way to connect them with each other." lowa Food Co-op is a testament to the collaborative approach that farmers, food businesses, and food hubs have taken to build a market for lowagrown products. As a result of this grant project, lowa Food Co-op will be able to strengthen connections between producers, deepen its critical collaboration with other food hubs, and further expand the market for lowa products.