



LOCAL FOOD FOR LOCAL KIDS

REDUCING BARRIERS TO LOCAL FOOD PROCUREMENT IN
MONTANA SCHOOLS

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MONTANA FARM TO SCHOOL NETWORK

Each year, Montana schools serve 20 million meals to students (MT-OPI, 2019). Research shows that school lunch is essential for student health and ability to learn, especially for low-income students. School lunches can reduce food insecurity, improve dietary intake, positively impact student health, lower obesity rates, and lead to better learning environments by providing students the nutrition needed for a full school day (Hartline-Grafton, 2019). School meals are an essential source of nutrition for the 43.8% of Montana students who receive free or reduced price school meals (MT-OPI, 2019).

School meal programs are an excellent opportunity for farmers, ranchers, and food businesses to sell their products to schools. Schools can provide a new and reliable market opportunity for Montana producers. Each dollar spent on local foods can spur up to \$2.16 in additional local economic activity (National Farm to School Network, 2020). With support from Montana Farm to School, nearly 450 schools have successfully connected with Montana producers in order to feed the state's children healthy foods produced in Montana in the 2018-2019 school year. (Montana Farm to School, 2019).

However, challenges still exist when it comes to getting local food into Montana schools. This study investigates what's working and what's not working at the school food service level when it comes to Montana's Farm to School programs. Nine food service directors across the state were interviewed in order to understand the barriers to greater local food procurement in Montana school. Based on the results of the interviews, recommendations for improving and expanding school procurement of local food for policymakers, producers, food service personnel, and community advocates are provided at the end of the report.



Where we are
TODAY

MONTANA FARM TO SCHOOL PROGRAM

Farm to school (F2S) programming has been an essential part of the Montana food system. F2S programming includes three core elements: procurement, education and school gardens (National Farm to School Network, 2020). These elements work together to enrich “the connection communities have with fresh, healthy food and local food producers by enhancing food purchasing and education practices at schools and early care and education sites.” (National Farm to School Network, 2020). Since 2008, F2S programming has expanded in Montana, connecting producers with school cafeterias, introducing kids to new foods, and building connections in local communities.

This expansion has been led by the Montana Team Nutrition Program at Montana State University, and supported by organizations such as the National Center for Appropriate Technology, Montana No Kid Hungry, Montana Department of Agriculture. Initiatives such as Montana Harvest of the Month and Farm to Cafeteria Network have helped connect producers to school districts in an effort to support agricultural producers and increase nutrition education in schools. These initiatives are supported by public health officials, teachers, administrators, farmers, health professionals, parents, and community members. In the 2018-2019 school year 447 schools reported implementing farm to school in some capacity, representing 58% of schools in Montana, (Montana Farm to School, 2019).



Health and Educational Benefits of Montana Farm to School

More and more schools and communities are recognizing the many benefits of connecting with local producers and putting fresh, nutritious food on the menu. F2S educational programs support Montana's agricultural economy and the well-being of communities across Montana. Understanding where food comes from and how it affects the body, creates a stronger connection to community and personal health. F2S programming offers the opportunity for producers to sell to stable, local markets and contribute to programming that emphasizes the connections between food and health.

Montana has a rich agricultural heritage, and farming and ranching have always been a major part of the state's economy. From the large scale production of wheat, lentils, and beef to smaller scale production of specialty products like cherries, melons, kale, apples, other produce, and even bison, there is a wide variety of produce available from Montana agricultural producers, despite the short growing season. The local food system is strengthened by F2S programs, which teaches the younger generation about the origins of their food and encourages them to support or become involved in the food system. The average age of farmers in Montana is 58 years old, and F2S programming introduces students to agricultural careers and helps prepare the next generation of producers (Montana Farm to School, 2019).

Montana is also home to the Montana Harvest of the Month (HOM) Program, coordinated by Montana Team Nutrition Program and National Center for Appropriate Technology. Schools and organizations across the state are registered members of this program. Each month, a "harvest of the month" locally grown or raised items, such as apples, squash, or dairy, are highlighted. Each HOM food comes with its own set of recipes, resources, and materials for promotion. Schools are encouraged to highlight the HOM foods by including these items on the school menu, conducting taste tests, and providing educational activities (Roth, 2020).

Schools are also encouraged to connect with farmers and bring them into the school or plan field trips for hands-on experiences. These connections serve to educate kids, provide economic avenues for producers, and foster a sense of pride for their community and state. The long-term benefits of F2S programming can expand beyond the cafeteria as well. F2S programs can increase students' preferences for and consumption of fruits and vegetables (National Farm to School Network, 2020). Studies have also shown that there is an association between diet and mental health; children who had poor dietary patterns were more likely to have poorer mental health than children with good diets (O'Neil et al, 2014).

F2S education can provide a space for children to build these important habits early in life. With many students eating breakfast and lunch at school, school districts have an opportunity to promote habits that lead to good quality diets both in the cafeteria and later in life. Garden education is another important part of F2S programming that can be beneficial for all students. A school garden can provide a space for students to learn outside, introduce students to their local food system, and encourage them to try new foods in the garden and the cafeteria.





Economic Impact of Montana Farm to School

In addition to the educational and health benefits of F2S programs, the economic impact of keeping school spending in state is substantial. Local producers are able to connect with nearby schools with F2S programs and potentially grow their business. By providing a large and stable market farm to school partnerships can increase economic growth, market diversification, and long term revenue streams for local producers (National Farm to School Network, 2020). Schools can provide a market for all types of producers, whether they grow livestock, fruits and vegetables, or grains and other staples, as these products are all important components of a school meal.

The National Farm to School Program was developed, in part, to address the challenges faced by schools in procuring local foods in order to allow local farmers to sell their products in these institutional markets and support local, equitable food systems. Public institutional food service facilities, like schools and hospitals, purchase about \$120 billion worth of food each year and serve some of the nation's most vulnerable populations (ERS, 2016). However, based on the most recent Ag Census, local or regional food is estimated to make up \$3.4 billion of those sales--a mere 2.8 percent of the market share (USDA, 2015). Local food has only gained a small amount of the market share in wholesale institutional channels as these customers often require large volumes at a low cost.

With tight budgets, limited food service staff time, and complex procurement policies, public K-12 schools have additional barriers compared to other institutions such as hospitals or universities when it comes to procuring local foods. However, the economic and social impact of increasing the amount of local foods in Montana schools are great. A study of 16 Montana school districts with farm to school programs found that an estimated \$878,185 was spent by these schools on local foods, or 23 percent of the total food expenditures in these districts (Lee, 2014). In that same school year, total food expenditures reached an estimated \$30 million for all Montana school districts. If all 57 school districts in Montana were to spend 23 percent of food budgets on local foods, the researcher estimated that \$6.9 million would be spent on local food products, resulting in an overall economic impact would range from \$9 million to over \$12.8 million.

Tight budgets can hinder many public school districts from purchasing local foods, but the additional time required to procure, process, and prepare local foods can also create a barrier. Purchasing foods through national programs, such as the USDA commodities program, provide food service directors the convenience of ordering a variety of fresh and processed low-cost products delivered by large distributors with a single, streamlined online platform (McCleay and Barron, 2006). By contrast, no similarly convenient system exists for ordering from local growers, and as a result buying local foods can be more logistically complex.

THE ROLE OF REGIONAL FOOD HUBS AND PROCESSORS IN LOCAL FOOD PROCUREMENT IN SCHOOLS

Regional food hubs which aggregate the produce of many locally-scaled producers can alleviate the logistical challenges of procuring local foods for institutions. Institutional markets often require high-volume consistent products with strict food safety requirements. Food hubs can help local farmers work together to meet these demands and sell to schools and other institutions. For example, the Western Montana Growers Cooperative (WMGC), which started in 2003, aggregates and distributes the produce from about 100 local producers. WMGC has helped ease the logistical challenges of purchasing local foods in Montana; in 2015, a study of farm to school programs revealed that all food service directors interviewed in Western Montana were procuring at least some local foods through the cooperative food hub (Lee, 2015).

Cooperative food hubs are particularly beneficial to local growers and local economies, because they are democratically owned and controlled by the farmers who grow the produce distributed by the hub. Whereas the majority of the profits from large distributors are sent to corporate offices out of state, agricultural cooperatives keep this money in the pockets of Montana farmers. The food hubs not only provide marketing and distribution services to their members; as co-op owners, the producers also economically benefit by receiving a portion of the profit based on their patronage of the hub. In addition to the services provided through the co-op, WMGC has been able to allocate and distribute nearly \$100,000 in profits back to members (D. Prather, personal communication, April 2020).

Recognizing the social and economic benefits of local food procurement, community economic development organizations and nonprofits have also worked to remove the barriers that come with processing local foods for institutional markets. For example, since 2000, Mission West Community Development Partners, an economic development organization, in Ronan, MT has operated the Mission Mountain Food Enterprise Center (MMFEC), a USDA-inspected shared-use food processing facility.

This facility provides local farmers, food hubs, and food entrepreneurs the ability to process fresh produce into products that are more readily usable for institutional markets. A pilot program between MMFEC and WMGC, focused on processing five local fruit and vegetable products using second standard quality produce. The products were used directly in school breakfast and lunches. By 2012, nine school districts were purchasing processed produce, sales of Montana grown and processed produce increased 80% from 2012 to 2013, and nearly 55,000 pounds of produce were processed and sold for \$54,450 (Tusick and Prather, 2013). The success of this pilot program demonstrates the market potential for increasing sales of processed local foods to school markets.





ABOUT THIS STUDY

Despite Montana's strong agricultural economy, well developed F2S program, and well-documented economic and social benefits of procuring and serving local foods at K-12 schools, public schools remain an untapped market for local producers and food hubs. Western Montana Growers Cooperative, a major distributor of local foods in Montana, has reported recent fluctuations and a general decline in purchases by local schools since 2014, including major reductions in procurement by several larger school districts (WMGC, 2019). The aim of this study is to identify what's working and what isn't when it comes to local food procurement by Montana public school districts. This study builds upon a broad body of literature demonstrating the impact of F2S programs, in order to provide additional information to local food advocates and producers, stakeholders, and policymakers. The research objective is to identify the barriers at the school food service level in order to further lift these barriers and feed Montana children more fresh healthy produce from Montana farms and farmers cooperatives.

Two researchers from Mission West Community Development Partners and National Center for Appropriate Technology completed in-depth interviews with public school food service directors. Interviewers used a semi-structured format in order to provide the participants with enough freedom to speak conversationally while also covering specific thematic areas. Each question included a number of additional probing questions which the interviewers could use to elicit a more detailed response. The final interview guide contained 16 questions that were organized thematically (see Appendix A). The first set of questions were about the school districts' food service operations, the second set of questions covered procurement, the third set of questions related to the challenges of procuring local foods, and the final set was about opportunities related to local procurement.

ABOUT THE SCHOOL DISTRICTS INTERVIEWED

Eighteen food service managers were contacted for an interview. A total of nine food service managers from nine school districts were reached and interviewed by phone or video conference. These districts, geographically located in western and south central Montana, included a total of 29 elementary schools, 12 middle schools, and 10 high schools.

Across these nine school districts, 24,582 students are enrolled, which represents 16% of Montana's K-12 student population. The districts varied in size, with three districts enrolling less than 1,000 students, four districts enrolling between 1,000 and 2,000, and two districts enrolling more than 7,000.

A total of 16,060 meals (breakfast and lunch) are served daily in these nine districts. Meals served in each school district ranged from 210 to 5600 meals a day. On average, 43% of students qualified for free or reduced lunch in these nine districts, which is nearly equal to the Montana statewide average of 43.6 percent. This percentage ranged widely for the districts included in this report (16% to 93%).

The number of kitchen staff in the districts ranged from 4 to 65. All of the districts use a central kitchen model, and all food service managers reported that 50 percent or more of their cooking is from scratch.

All districts rely on purchasing from USDA Foods (formerly known as commodity program) with their allotment through the National School Lunch Program. All districts reported purchasing from US Foods. Five districts also purchased food from Sysco. Other commercial vendors used by the school districts included Spokane Produce, local grocery stores, and Foodservice Rewards.



Food service managers reported purchasing a wide variety of Montana grown or produced items. Apples, milk, and beef were among the most common local purchases. Other local items mentioned include pasta, flour, lentils, carrots, beets, kale, cherries, and potatoes. All school districts interviewed have been purchasing local foods for at least five years.

Most food service managers reported that they purchase local food from both local distributors and directly from producers. Western Montana Growers Cooperative, Quality Foods Distributing, Wicked Good Produce, Kalispell Creamery, MeadowGold, and Lower Valley Meat Processing were commonly mentioned local vendors, in addition to multiple producers who sell directly to school districts.

WHAT IS WORKING WELL WITH LOCAL FOOD PROCUREMENT IN SCHOOLS

Several themes emerged from the interviews about what is working well in their local food procurement initiatives.

Local Food is Valued

First, food service managers report that they, the schools, and the community place a high value on purchasing local food.

"I like to go with local as much as I can, I like to support the local myself, so I try to keep it here in the school as much as possible."

Food service managers cited multiple reasons for valuing local food, including supporting local growers, promoting healthy eating, providing food and agriculture educational opportunities, and offering high quality products to students.

Supporting local growers and the local economy was cited by four managers as a key reason that they purchase local foods:

"There's always been a strong, "We need to support our local communities and farmers and ranchers and producers and the like." So I would suggest that probably was the motivation [for purchasing local food] as much as anything."

"I think the local farmers are doing really good, I'd like to try and support them as best I can."

Because of their high-volume purchasing, schools are able to boost the local food economy and provide economic support to Montana farmers and ranchers. Local food procurement in schools has been shown to boost job creation, increase local economic activity, and strengthen relationships within the local food system (National Farm to School Network, 2020).



Health and wellness was also mentioned as an important reason for valuing local food purchasing by school staff, parents, and community members.

"There is definitely a big push and desire for more local including parents, wellness board, and our school board is [also] very supportive of purchasing local. Our entire community is very geared toward healthier eating and healthier meals, which includes local rather than processed and commercial."

"When it comes to local food and healthy eating, we have a very supportive group of parents that way and really push that, so as far as parents go, very supportive and so are the kids."

One manager talked about how surprised he was that the students in his district liked the salad bar option so much:

"These kids at [school district] tear up a salad bar. It's a beautiful thing, it's amazing how much salad, K-12, the highschoolers, they [all] eat salad. And so what a wonderful thing."

Students who have access to healthy food options, like fresh fruits and vegetables, tend to eat more of them and develop healthier lifetime eating habits. When these healthy options are also local, students can connect healthy eating to broader knowledge of a local and healthy food system.

The educational opportunities about nutrition, agriculture, and the food system provided by local food were also cited by several food service managers as important aspects of their local food procurement plans.

"First we're supporting our local economy, we know where it's coming from, and it gives kids an ownership of the food. It may not be hands on where they're actually growing it, but if we say, "Hey, this comes from Montana," it gives kids ownership over their food and what's in their lunch, which is really cool."

"[Purchasing local food] just encourages the kids to buy local...We advertise, "These are Moss's apples," you know, whatever we've got, and I think they kind of like that. They know where it's coming from or they will talk to them about where the farm is, things like that."

Local food can be used for lessons about nutrition, health, and agriculture, but it can also provide a platform to connect food across other subjects, such as math, science, and language arts (National Farm to School Network, 2020). Making these connections across subjects can enhance critical thinking skills for students and broaden their understanding of the food system.



Finally, local food is valued because of its high quality.

"Prices are high, but this a local food. [The] investment is worth the quality of the product."

One manager stated that the initial event that led to her purchasing local food was a beef recall, which impacted her shipment of commodity beef.

"There was immediately a recall for commodity beef, the quality of that commodity beef was miserable, when you cooked it it just smelled, so the recall really cinched it for me. I found a local rancher that year and she agreed to sell me her beef, she took the prime cuts and sold them at a local market and the rest turned into hamburger for us. I was going through 250 pounds of beef every six weeks."

Food can travel thousands of miles and pass through multiple distribution or processing centers before it reaches its final destination. Freshness, taste, quality, and safety of the food can be negatively impacted by these long supply chains. Locally grown or processed foods often travel along shorter supply chains, resulting in a noticeable difference in quality and freshness. A high value is placed on purchasing local food by food service managers, school staff, and the community because it allows them to support the local economy, promote healthy eating, provide educational opportunities, and offer high-quality products in their meals. Many managers expressed a desire to purchase more local food.

"I'm a supporter, I wish I could do more, I wish I could make it all local. I think we could be self-sufficient with Montana grown foods since we do have a lot of...variety."



"Anything I find that I can afford, I do, and I'm always on the lookout for more."

Food service managers clearly value serving local foods and have observed multiple benefits to their students, schools, and community from their local food purchasing efforts. The high value placed on serving local foods can motivate school districts to increase local food procurement and incentivize policymakers to create policies that make local food more accessible for all schools.

Strong Relationships with Local Vendors

Several food service managers noted that they have been able to create strong relationships with local food vendors. Food service managers stated that local vendors have been trustworthy, reliable, and have accommodated their price needs and busy schedules.

"Living Root Farms does an exceptional job...adaptable and simple, accommodating. No commitment on a dollar amount."

"We have gotten to know them [local farmer], they know to call me when they are coming to town, so I can place my order. They have made it really easy on me and they have also worked with us on price so that we can continue to afford them."



"It was just so much easier going through [WMGC] and getting it purchased and delivered. It just made it so much easier for me. I didn't mind paying a little bit more. He was already getting it local and I trusted his sources so... I really trust them [WMGC]. I don't think I've had any trouble ever."

Dealing with local vendors may allow food service staff to form strong business relationships, as they are less likely to be dealing with a faceless company and instead can build trust directly with the owner/operator. These relationships are valued by food service staff and can make purchasing local food easier and simpler. Local vendors and producers can also benefit from these relationships. School districts can offer new and reliable market opportunities, which can allow farmers and vendors to plan for the year ahead and provide them with some financial stability (National Farm to School Network, 2020).

Montana Farm to School and Harvest of the Month

Several food service managers also discussed how Montana Farm to School and the Montana Harvest of the Month program has been successful in bringing more local foods into their schools. A couple managers mentioned that building a stronger farm to school program motivated them to start purchasing local food for their food service.

"I think the incorporation of a stronger farm to school program, which coexists within the kitchen [motivated us to purchase local food]."

Through their multiple partner organizations on the Montana Farm to School Leadership Team and several different working groups, Montana Farm to School has created a strong network and presence in Montana's school system, that was noted by many interviewees.

According to several food service managers Harvest of the Month program is working particularly well in their schools and helps encourage local food purchasing.

"We try to educate the kids, [FoodCorps volunteer] will go in and do a class with local stuff every month or cook something - she does it a lot with Harvest of the Month, so we use that a lot in our menu."

"[We] follow Harvest of the Month for local foods and just buy locally when we can."

"Any of the apples, carrots - we were buying quite a bit of carrots...just getting the kale or anything when we're doing Harvest of the Month, about all of that works really well for us."

In the 2018-2019 school year, 138 schools participated in HOM, benefiting over 111 local producers and pumping over \$400,000 into the local food economy (Montana Farm to School, 2019). HOM provides accessible classroom education and meal service ideas for purchasing and serving local foods and can act as a guide for local food procurement. This makes the program a great entry point for school districts who want to start purchasing local food but may not have the capacity to create their own plan.

School Gardens

Three food service managers also mentioned that their school gardens were a successful aspect of incorporating local food into their meal services. School gardens provide onsite access to fresh and nutritious foods that can be immediately incorporated into meals or stored for later use.

"In our gardens we grow a lot of kale, chard, lettuce greens, squash, beets, potatoes, onions, basil, a lot of herbs...The quantity and volume of growing spaces that we have here on site at our schools is an additional resource."

"Up until this year, we had a really large school garden where we've produced anywhere up to 1000 lbs potatoes...I'll process those, I'll parboil those and freeze them in 5 gallon buckets, and then that's a mashed potato meal once a month."

School gardens also offer opportunities to partner with community organizations who have the time and expertise to manage a garden, particularly during the summer when gardens are active but school is not in session.

"We have a strong partnership with Garden City Harvest, we have gardens at all but one school and I think they are getting one. We have 16 raised beds at the central kitchen which is managed with Garden City Harvest...Anything we can grow we use."





School gardens can be a valuable asset for schools that want to incorporate more fresh, local produce into their meal service. Additionally, school gardens can become a community resource, providing hands-on opportunities for students, school staff, and community members to learn about food and agriculture. For schools that are not on major distribution routes and experience challenges with food delivery, on-site gardens can be a major source of fresh and locally grown produce. Gardens can have significant start-up costs, so schools that are interested in developing or expanding their gardens sites may want to seek funding to assist in their project development. For example, one school district in this study received a federal grant to expand Farm to School activities, which includes building a high tunnel and greenhouse on school grounds. Innovative projects like this offer hands-on educational opportunities for students as well as a steady supply of fresh and local foods.

School and Food Service Staff

Finally, dedicated farm to school staff and a strong team of food service staff were also mentioned as successful elements of local food purchasing plans. Two food service managers described the benefits of having assistance in sourcing local food items from dedicated staff or community partners:

"I had [member] from FoodCorps and she was awesome. She did a lot of research and she helped me a lot to learn how to go about to do this."

"We have farm to school staff, and they are able to make contact with local farmers...Our food resource center in town, he does an amazing job with procuring from local farmers...He does mass ordering and processing and they make a lot of foods there that go out for our pantry, but also gives us the ability to get from him the items processed in the manor that WE need them, so we can incorporate them easier."

Support from food service staff was also viewed by three managers as an important element of their success in purchasing and serving local foods.

"I think the acceptance by labor, definitely they have bought into the idea and they know what good food looks like, so they love being able to use it and serve it."

"We got staff who were willing to change, to do more of the scratch cooking and processing necessary for us to make this change. My head cook now is willing to try new things to make the food as fresh and healthy as possible."

In some cases, purchasing food items from local vendors or farmers results in additional time and energy necessary to process those items, such as washing and chopping fresh produce. Adequate staff time and a common staff goal to provide students with local and healthy foods are important elements of successful local food purchasing programs.

CHALLENGES WITH LOCAL FOOD PROCUREMENT IN SCHOOLS

The shared challenges to purchasing local foods reported by food service managers were cost, seasonality, quantity, and delivery.

The Cost of Local Foods

Seven of the nine school districts reported the cost of local foods to be a barrier to their ability to purchase local foods.

"Cost is my biggest challenge, if I had unlimited budget, I would buy all local."

Local foods can cost more for school districts to purchase than conventional products or items available to the schools through the USDA Foods. The average cost of school lunch in the state is less than \$3.00 and the average cost of breakfast is under \$2.00 (School Nutrition Association, 2018). Food service managers acknowledged this fact and work strategically within tight budgets to keep the cost of school meals low while still featuring local products. However, this can be a difficult balancing act as food prices for items shipped from out of state are also increasing in cost.

"Unfortunately, higher purchasing costs always translates to the consumer...I had to raise lunch prices several times in the last few years and I don't want to raise it more because I don't want to lose kids."

Food service managers interviewed stated they work to balance their USDA Foods allotment with available local foods, offering a blended menu that features ingredients from conventional, commodity, and local sources. Focusing commodity purchases on items that are not as readily available from in-state producers like frozen chicken, canned fruit and beans, peanut butter, and cheese, allows some food service managers to expand their local purchasing.



One food service manager said that cost was an initial barrier to buying local foods but was able to manage a way to offer both:

"The cost there for a while was [a challenge], but I have learned how to make that up with my commodities, [I] try to order local and commodities. I have been doing pretty good with that, I think."

There are also the additional labor costs that are factored in when purchasing local foods. Due to limited cleaning and processing facilities available to Montana producers, food service directors often must factor in additional washing and preparation of local produce, when comparatively purchasing conventional or commodity items come pre-cleaned or processed. This means an increase in staff labor and training.

"I would say preparing is one of the biggest [challenges]...when you get cleaned ready to go carrots from Sysco or US foods, versus a giant tub of carrots that still have dirt on them that you have to wash and clean and prep and scrape and cut, it takes a lot of time away from what is already a tight schedule of getting meals produced every day."

Even when processing facilities are available to producers, the additional cost of having the local products cleaned and processed before delivery to the school is sometimes a cost that is difficult for some food service managers to afford. One food service manager stated:

"Sometimes it is cost prohibitive...if the seller wants to do the processing for us which can be expensive."

Food service managers recognize it is also a challenge for local producers to consistently meet the prices needed to stay within their strict budgets. As mentioned before, local foods are valued by food service managers despite varying levels of ability in purchasing. One food service manager stated:

"...I have really appreciated that people [local producers] are willing to work with and I'm just not comfortable asking them to lower their prices. I understand the need to make a living... margins are slim, it's a tough gig and you're at the mercy of the weather sometimes, so I do understand the dilemma of not offering schools a lower rate."

The tight budgeting constraints at times mean that local food producers may not be willing or able to work with schools. Another food service manager shared the following about their experience with working with local vendors:

"The problems I have had with local foods is that a lot of vendors aren't really willing to work with schools. Historically, they can go to restaurants and get much higher price per pound, and I get it, they are trying to make money...We can't mark food up just because it is local. We can only ask the same price so we actually lose a lot of money when we menu local items."



Seasonality & Quantity

Seasonality and quantity to meet demand were two other common themes that surfaced during the food service interview, with five out of nine school districts reporting it as a challenge.

The limited growing season in Montana is a challenge for producers and school food service managers alike. During the warm summer and harvest months, local growers are inclined to sell their products through direct to consumer channels, like farmers markets, CSAs, and farm stands, or wholesale to regional grocery stores and restaurants. This can create a demand problem when school begins in the fall with limited or exhausted inventory for things like local cherries, pears, tomatoes, and leafy greens.

Season extension through methods such as high tunnels, hoop houses, or greenhouses can be a challenge for small to medium-sized producers due to the required on-farm planning and additional financing. Some hearty Montana crops can be kept in cold storage for extended periods of time, but storage capabilities at both schools and on-farm are limited, requiring producers to sell through their inventory.

For schools in Montana that are committed to serving a high percentage of local foods, quantity is cited as being a major barrier.

"We need someone to grow as much as we need, volume is really critical for us. We had some local growers who talked about putting in greenhouses to extend the season, but that didn't happen. We need growers who can put money into greenhouses, but those are not cheap..."



Foods service managers interviewed stated they would be interested in purchasing a variety of local items throughout the school year if they were readily available. Six of the food managers stated that salad greens were a highly sought-after product that is not available at the quantities needed to support the rate in which the schools go through it. One food service manager had this to say:

"...we live in Montana, so the growing season is what it is. Lettuces would be amazing but there is no way that there would be enough with the way the schools go through it, there is just no way."



Delivery and Access

Delivery and access to local producer markets was also cited as a barrier, especially for food service managers in more rural areas of Montana. Schools located in central and eastern parts of the state have increased difficulty in accessing local producers. Delivery routes for some local producers are limited or non-existent and local producers are not as densely populated as they are on the western side of Montana. This means local food must travel farther to reach these schools, or in some instances, the food service staff must travel to pick up the food themselves, which can vary from a two to three hour (or more) round trip depending on weather and traffic variabilities. When the responsibility to travel to pick up ingredients rests with food service staff, the cost of those ingredients increases due to the additional labor and fuel costs. One food service shared the following:

"We try to do as much local food as we can, but it is really hard for us because of our location so we don't get it delivered to us, like Western Montana Growers Co-op, if we order from them, we have to go pick it up from Helena mostly, once in a while Butte, but mostly, Helena."

Access to delivery routes is only one part of the equation. For schools in rural areas making contact and developing a relationship with local vendors is also a challenge. Food service managers interviewed stated they rely on their FoodCorps service members to help track down potential vendors. Without the additional assistance the FoodCorps service members provide, some of the food service managers would not have the capacity to research potential local food vendors. Because FoodCorps service members typically serve one year terms, this limits the ability to develop the relationships required for a long lasting partnership between school and producer.



CONCLUSION

Food service managers noted several positive and successful aspects of their local food purchasing initiatives, including recognizing the value in adding local food to their meal programs, creating strong relationships with local producers, incorporating programs like Montana Farm to School and Harvest of the Month into their food service, utilizing school gardens, and having dedicated farm to school and kitchen staff. However, they also noted significant barriers to local food procurement. Cost, seasonality and quantity, and delivery and access were the major challenges for food service managers.

Despite the barriers, these food service managers are finding ways to incorporate local foods into their menus and are eager to expand their local food offerings. With agriculture being the leading industry in the state, Montana has great potential to develop stronger local food purchasing opportunities for our school systems. Whether you are a policy maker, producer, food service manager, or community member, there are action steps that you can take to support local food procurement in our schools.





TAKE ACTION

Recommendations for Policymakers

Agriculture is the leading industry in Montana, valued at \$4 billion. Policies that support local food procurement in schools benefits Montana's students, producers, and overall food system. Here are some actionable steps that policymakers can take to support local food in Montana's schools:

Learn more about the Farm to School Bill in the 2021 legislative session.

This bill creates a competitive state farm to school grant that encourages schools to design effective farm to school activities with an emphasis on increasing local food purchasing and encouraging economic development and job creation. Montana schools serve 20 million meals a year, providing a substantial market opportunity for local agriculture. Farm to school activities, supported by the Farm to School Bill, can increase local economic activity by keeping school spending in state and supporting Montana's producers. Because local food can be cost prohibitive for food service managers, additional funding is necessary for schools to create robust local food purchasing programs. The Farm to School Grant Bill provides a needed boost in funding for local food procurement and will assist Montana schools in developing strong farm to school activities. [Learn more here.](#)

Support the development of small and mid-scale food processing and distribution centers.

The conventional food system is based on long supply chains and centralized processing and distribution. This centralized structure is inflexible and vulnerable to disturbances along the supply chain, as witnessed during the COVID-19 pandemic. As the country's major processing centers reduced their capacity or shut down, farmers and ranchers had very limited options for processing their products, and the resulting supply shortages trickled down to consumers. For example, only 20 state or federally inspected meat processing facilities exist in Montana, which do not have the capacity to process all of the state's cattle.

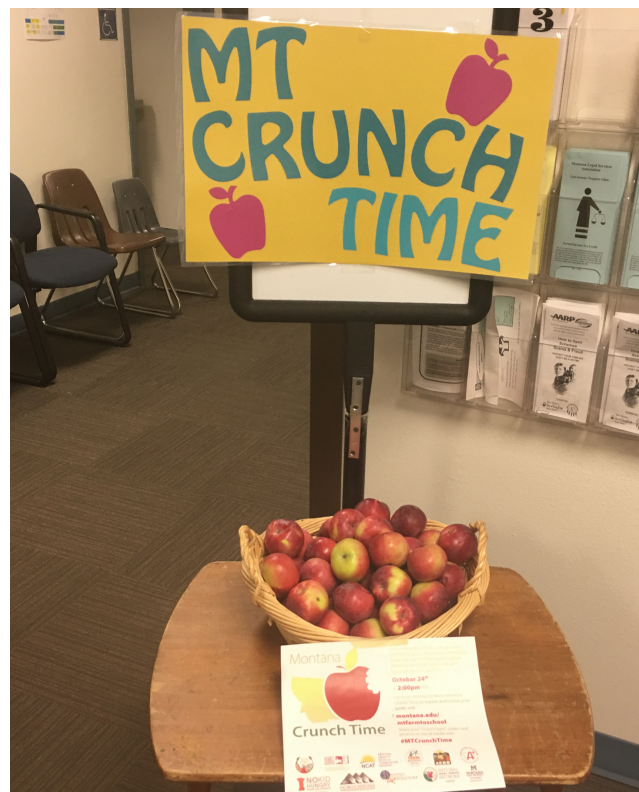
With multiple local or regionally based processing centers, however, redundancy is built into the food system and encourages local economic development. Shorter supply chains, supported by the development of local processing centers, will encourage a more resilient food system while expanding opportunities for local food procurement in schools. In particular, Montana has the potential to develop strong beef to school partnerships with 2.5 million head of cattle in the state. Increasing the number of processing facilities will help ranchers process their cattle locally and provide more opportunities for schools to purchase Montana beef that meets procurement regulations.

Recommendations for Foods Service Directors

There are many resources available to food service directors interested in starting or expanding local farm to cafeteria programming. Developing a successful local foods program is something that will take time, so it is okay to start small. Consider integrating one or two local ingredients into a meal once a week, or once a month if that is what is feasible for your school. Here are some ways you can increase the amount of local food on your schools' menu.

Utilize [The Farm to Cafeteria Manual](#), a great resource for food service directors. This manual gives examples of how local foods can be integrated into a school's existing meal programs or special events like "local grown lunch" that features multiple local ingredients as well as regulations and best practices.

Participate in [Montana Harvest of the Month \(HOM\) program](#) to begin or expand local foods programming. Each month, participating sites focus on promoting one locally grown item (e.g., summer squash) by displaying HOM materials in the school, whether that is in the cafeteria, classrooms, or other parts of the school.



Participating HOM sites receive a free packet of materials as well as additional resources and training opportunities on increasing local food offerings. HOM is a wonderful way to feature local products by using an easy to use framework that helps get people excited about Montana produced food. HOM is available to K-12 schools, early care and education facilities, institutions including hospitals and senior care centers, grocery stores, and food banks. Interested sites can learn more about HOM and register for the program [at this site](#).

Use available resources and directories to engage students with local foods, connect to local producers and other food service managers, and partners with food processing and resource centers. Montana Farm to School has many resources, templates, and informational posters available for promoting local foods in school cafeterias. There is also information about how to participate in local food focused events like National and Montana Farm to School Month, and Montana Crunch Time, a designated day and time each October where Montanans across the state, whether at work or school, take time to crunch into a locally or regionally grown apple! Find these resources and more [here](#).

Food service directors can find local producers in Montana by using both the [Farm to Cafeteria Directory](#), and [Abundant Montana](#). Each directory will provide contact information for producers and types of products offered.

Food service managers can also connect with their colleagues through the Montana Lunchline listserv managed by OPI. The listserv offers an opportunity to connect with other managers and share ideas and resources about local food procurement. Food service directors can contact Montana OPI to be added to this list.

Cooperative purchasing of local foods amongst school districts is another option, although none of the food service managers interviewed for this study had cited it as a method they practiced. With cooperative purchasing, food service managers of school districts that are geographically close could potentially combine the purchasing power to reduce the overall cost of products and shipping. Cooperative or pooled purchasing would require coordination among food service managers. For food service managers interested in exploring this option, use the Montana Lunchline listserv to coordinate with other food service managers.

Some food service managers interviewed for this project discussed the benefits of partnering with local food processing or food resource centers. These centers can assist in washing and processing products so they can be ready to use by food service staff. There are eight state funded centers in Montana, as well as private or non-profit centers around the state that can assist with processing or help connect you to a processor in your region. More information about the state funded Food and Agriculture Development Centers can be found [here](#).



Recommendations for Local Producers and Vendors

The food service managers who were interviewed indicated they highly valued local foods and local foods were generally appreciated by students, school staff, and the broader community. Several food service managers indicated that they value the relationships that they have developed with local growers and distributors. They noted that they found local vendors to be trustworthy, reliable, and flexible. Local producers can find more information about how to sell products to schools in Montana in the [Farm to Cafeteria Manual](#), which was developed by the National Center for Appropriate Technology. Here are a few ways you can take action if you would like to see the food you produce served at Montana schools:



Reach out to food service managers directly.

Most food service managers emphasized that they have a limited amount of time to spend on procurement of local foods. Local producers, farmers cooperatives, and distributors seeking to sell food to schools are encouraged to reach out to food service directors directly to see if they are interested in purchasing local foods. Local vendors can use the [Montana Farm to Cafeteria Institution Directory](#) to find schools that participate in the farm to school program and the contact information for food service directors across Montana. Consider adding your farm, ranch, or food business to the [Farm to Cafeteria Producers Directory](#) and the [Abundant Montana Directory](#) as well.

Consider joining a farmers cooperative. Volume was also a challenge for buying local produce for school meals. Joining a producers cooperative or selling through a food hub, such as [Western Montana Growers Cooperative](#), can be a great way for producers to aggregate products and reach the volume and price point required by institutional markets. Additionally, a cooperative or food hub, can help producers meet food safety requirements and process food so that it can be more readily used in school meals. If a local producers cooperative doesn't exist yet in your region, consider joining together with other producers to form one. You can find [resources and support for forming a co-op here](#).

Think about how you can extend your growing season. Many food service managers noted that the seasonality of Montana produce presented a challenge to procuring local foods. Grant and loan programs such as the [Montana Department of Agriculture- Growth through Agriculture](#) or the [National Resource Conservation Service- EQUIP program](#) can assist producers in season extension projects such as building hoop houses or expanding storage capacity.



The Montana Food and Agriculture Development Network can also connect local producers with resources and technical assistance to innovate and grow their business. ATTRA, NCAT's sustainable agriculture program has many resources for producers who are seeking to expand their farm operations. [ATTRA resources are free and available](#) on topics ranging from Season Extension for Market Gardeners to Growing for Institutional Markets.

Recommendations for the Public

If you are a community member who feels strongly about supporting local foods and would like to see more of it provided to students in your area, take time to talk with someone at your school about how you can support their farm to school efforts. Food service managers interviewed for this study indicated their school garden was an important source for their local food offerings. Consider volunteering at a community or school garden that supports farm to cafeteria programs. Shop locally and support local producers either through farmers markets, CSAs or choosing local products when available at your grocery store. If local products are not available, talk with the store manager and request they provide more local food offerings.

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APPENDIX A

Food Service Director Interview Guide

The goal of this interview is to learn more about strategies for incorporating locally grown foods into school menus. We want to learn more about the experiences you've had when introducing local foods into your food service, and we hope to identify the opportunities and challenges to farm-to-school programs. By local, we mean food that is grown, produced or processed in Montana.

Ask: Would it be ok with you if I recorded this interview? The recording would only be for transcription purposes so I can accurately capture your answers and it will be deleted once the transcription is complete.

Fill out in advance of interview:

Name of school district: _____

Your name and position: _____, _____

Number and approximate size of schools at each level:

Pre-K: _____

Primary: _____

Middle: _____

High: _____

Other: _____

Approximate percent of students in district eligible for free and reduced lunch: _____%

WMGC Sales Trend: _____

Warm-up Questions:

1) How does your food service operation work in terms of:

Number of kitchens? _____

Central kitchen? Y/N

Storage: Do you have a central warehouse? Y/N

Total number of food service staff? _____

Average number of meals served during the week?school year? _____

2) Can you tell me a little bit about our food preparation processes?

If necessary, probe for:

Scratch cooking?

What types of foods do you cook from scratch?

Procurement Procedures:

3) Next we'd like to know more about your procurement procedure for commercial foods. Can you tell us a bit about your process for procuring commercial foods?

If necessary, probe for:

Who are your vendors (eg. commercial distributors, shippers, wholesalers, farmers? And who are they (ie-Sysco, QFD)

How many vendors do you have?_____

What do they offer in terms of products, services, or financial incentives?

4) Next we'd like to know more about your procurement of locally grown foods. Can you tell us a bit about how local foods have fit into your food service operation?

If necessary, probe for:

Who are your vendors? (eg. direct from farmers, through WMGC, another distributor?)

What locally grown foods do you buy?

5) Can you tell me a little bit about your commodity allotment and how that impacts your food purchasing decisions?

6) Do you know what year your school district started purchasing locally grown foods?

7) What initially motivated you (or your district's food service operation) to start buying locally grown food?

General Questions on Local Procurement Challenges

8) Has your purchasing of local foods increased or decreased in the last two years?

9) What's working well when it comes to procuring local foods?

10) What are the challenges and barriers you have encountered when buying local foods?

If necessary, probe for:

- Ordering
- Receiving
- Storing
- Preparing
- Cost
- Quantity
- Too time consuming
- Staff capacity to process or prepare
- Student or parent complaints
- Food waste
- Other

11) What do you need to overcome the barriers to buying local food?

12) What would motivate you to increase the amount of locally grown food that you purchase?

Other Influencers

13) Do federal, state, or local procurement policies impact your ability to buy locally grown food? If so, how?

14) Does your business manager, school board, or MT-OPI influence your decisions or abilities to buy local foods? If so, how?

Opportunities

15) Do you have any plans to increase the amount of locally grown foods your food service operation buys?

If yes: Tell us more about your plans. For example: How much do you plan to increase local foods? Where will you get the food (direct from farmers, WMGC, other distributors)?

16) Are there specific foods you would buy if they were available locally?

If necessary, probe for:

- Vegetables
- Fruits
- Meats
- Grains, beans, lentils, etc.
- Dairy products
- Processed foods

17) Is there anything else that you would like to talk about with regard to local foods?