




Southcentral Alaska Agriculture and Food Hub Market Analysis

SPORK

Authored by Melissa Heuer
SPORK Consulting | January, 2018








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Photo Credit: SPORK Consulting

Executive Summary

A combination of business demand and increased production has resulted in notable levels of local produce purchases in Southcentral Alaska. Continued growth and demand are expected for local produce in the region. Businesses of all types and sizes are able and interested in buying more locally grown products, and most farmers have the ability and intention to increase their production. There is considerable room for growth in local foods consumption with a range of opportunities from expanding or taking over existing farms, starting alternative operations, or filling needs within processing and distribution. Throughout the system, a number of mutually beneficial opportunities exist in the local food sector in Southcentral Alaska.

Southcentral Buyers

In 2016, excluding large grocery chains, participating businesses spent an average of $64,234 a year on produce purchases. The majority of produce purchased in the state is imported to Alaska; however, of the businesses interviewed, on average an impressive 28% of produce is obtained from Anchorage area and Palmer businesses, with an additional 4% purchased from other parts of Alaska.

Organization leadership, rather than perceived customer demand, is driving local food growth. Almost 75% of businesses in this survey are buying directly from local farmers in the Municipality of Anchorage and Palmer. The range of local produce usage varies across sectors, by the size of business and business type, and appears to be driven internally by each company.

Restaurant buyers are most interested in the flavor of produce, seasonality, sustainability, and customer preference. Many examine the quality of the fresh produce, the ease at which the product can be secured, and the final selling price for the dish compared to the cost of the product. Restaurants explicitly indicated that they could change their menus ranging from one week to two hours out, but they need knowledgeable staff that knows how and has the time to process the produce. Restaurants expressed concern about minimum order requirements, as some of the produce items are only available in more significant quantities than they might use.

Every business indicated their ability to scale up their local produce purchases. If quantities were available, three-quarters of companies would use more than 50% local produce in their daily operations, while slightly less than half of the businesses would use 90% - 100% Alaska grown produce if available. Additionally, the majority of companies, 89%, would be willing to pay more for local produce, and more than half are willing to pay up to 15% more than for produce that has been imported to Alaska.

Southcentral Farmers

Photo Credit: Spenard Farmers' Market

Southcentral Alaska producers vary significantly in the size, type, and style of farming techniques including both small indoor and hydroponic operations and larger (one hundred acres and up) well-established farms. Anchorage is home to smaller traditional farms and hydroponic growers, likely due to the higher cost of land in Anchorage, the low fixed price for reliable clean water, and the lowest power rates in the state. Farming outside of Anchorage is done almost exclusively outdoors through traditional farming practices. Farms vary in age, with new, inexperienced farmers starting operations in Anchorage, and more experienced farmers farming on established farms on more significant plots of land outside of Anchorage.

This region represents a mix of experienced and new farmers selling their produce in a variety of ways from direct marketing, through a distributor, or by participating in farmers' markets and online food hubs. Many farmers can sell the majority of their crops, with some saved for personal use or given away; very little produce grown in the region is unused or composted for lack of market. More than 75% of farmers have the ability of scale up their overall production. In 2017, more than half of farmers grew their operation, and an additional 58% are planning to expand their operation in 2018.

The Future of a Food Hub

Produce Buyers: The vast majority of buyers, 93%, feel that the development of a food hub, co-op, or alternative distribution model in Anchorage would benefit their business: it could add convenience, include a number of farmers, and streamline purchasing.

Buyers indicated that the potential services of a food hub could provide consistency and convenience for pick-up and planning as well as allow buyers to buy more quantities at one time from multiple local sources. Many buyers also felt that an alternative distribution model could help address specific regulatory issues (though did not specify what these were), and aid in an economy of scale barriers.

Produce Farmers: In general the majority of farmers, 80%, feel that the development of a food hub, co-op, or alternative distribution model in Anchorage would benefit their business. However, a number of farmers noted their concern about higher prices based on the Alaskan Grown label on produce that would be sold through the alternative model and felt that if that were the case, it would decrease the appeal for customers.

Overall farmers indicated that a food hub would provide them with a way to collectively join their voices to increase their marketing abilities, address food processing regulations, and potentially create a space for processing and value-added products.

General Business Community: The majority of participants, 75%, felt that the development of a food hub or alternative distribution model in Anchorage would benefit their business.

Photo Credit: Anchorage Daily News

Community Space: The most significant need in regards to community space is test kitchens. Both current and anticipated demands far outweigh what is currently available.

Funding: There is high demand for funding now and an even higher expected market in the future. There is a more significant need for general grant funding and increased demand is expected, with few existing opportunities. While there is some existing equipment funding, there is not enough to meet current needs and there is expected to be an even greater need in the future.

Land: Overall, the available land is greater than the current demand for land. Existing available space meets or exceeds demand in all categories.

Processing: There is an overall need now and an expected need for all types of processing equipment and space. While there is some commercial kitchen space available now, the current and future needs outweigh available supply. Demand for meat processing facilities are currently outpacing supply and are expected to substantially do so in the near future.

Storage: The current demand for storage can be met with currently available resources. There is a surplus of dry storage and chest freezers, and while the market is expected to grow, the community may have enough resources to meet this need.

Transportation: There is a demand for both in-state and out-of-state distribution, with the need for both expected to rise in the future. While current supply can be meeting demand in both logistics and box truck space, the market for both is expected to increase as well.

Overall, while the demand is high for many of the services a potential food hub or alternative distribution model could provide, there are a number of resources currently available in our community that are going unused. The reasons for this vary; a limited ability to share available resources with the broader community is likely one of the main limitations, but the quality of the supply, price to use the resource, and location of the resource may also be deterrents. Demand is generally expected to increase for most community resources and could present a number of opportunities for individuals and organizations hoping to start a food hub or alternative distribution model, or for those trying to tackle a specific area of need.

Photo Credit: SPORK Consulting

Background

Spork Consulting, with funding provided by the Division of Agricultures Specialty Crop Block Grant, conducted a ten-month market analysis to understand the size and scope of the current wholesale market for specialty produce crops in the Municipality of Anchorage and to identify potential areas for growth and distribution. The study focused solely on buyers in the Municipality of Anchorage and growers in both the Palmer and Anchorage areas. The analysis aims to provide information with which Southcentral Alaska growers can determine what type of joint marketing efforts, such as a food hub, co-op, or another type of distribution facility, would be best to facilitate increases in net farm production and income while increasing the amount of locally produced specialty crops purchased in Anchorage.

Wholesale buyers typically fall into one of three general categories: institutions, retail grocery stores, and restaurants. Specific areas of focus for this study include preferences, pricing, buying cycles, and requirements of wholesale, retail, and institutional buyers. Producers are separated into large and small operations. Specific areas included in the producer's analysis include: produce quantity produced, type of produce produced, growing season, growing preference, ability to expand, and requirements of producers to sell their products. This market analysis focuses on the needs and requirements of the four groups most able to affect immediate change (i.e., producers, institutions, retail grocery stores, and restaurants). It also addresses additional issues such as the need for processing and distribution infrastructure, local food policies, the communication network between producers and wholesale buyers, and marketing resources.

Project Objectives

Photo Credit: The Alaska State Fair

In recent years, the discussion of and demand for local foods has increased substantially. This trend has been spurred by consumers' desire for supporting local communities, diversifying our state economy, more nutritious and flavorful dining options, and in response to recent concerns about the lack of independent food security in the State of Alaska.

According to a July 2014 report by the Alaska Food Policy Council (AFPC) and Ken Meter (Meter and Goldenberg, 2014), 95% of the $2 billion spent annually on food purchased in Alaska is imported. Anchorage, which is the largest city in the state and home to almost one-third of Alaska's residents, is an urban center with limited agricultural potential. Palmer, which is approximately 45 miles outside of Anchorage, is a rich agricultural area that may be able to provide a higher quantity of locally grown food to Anchorage consumers.

Producers and buyers face a number of barriers, both perceived and real, to expanding the production and sale of local agricultural products. Some of the obstacles include inconsistency and lack of supply to meet demand, insignificant communication channels, lack of distribution capacity, and time demands when dealing with multiple customers. These barriers prevent Alaskan producers from both meeting existing demand and selling directly to larger retail and wholesale markets throughout the state. Because of these challenges, there has been a substantial increase in the discussions around and intention to form alternative distribution channels, such as cooperative businesses and food hubs, for Alaskan grown produce. This includes a recent series of meetings with the Anchorage Economic Development Council (AEDC) and the Alaska Food Policy Council (AFPC) regarding food hubs as well as a number of specific conferences organized by individuals and non-profits in the region. These alternative models may provide a way for local products to reach consumers on a larger scale while avoiding the barriers to traditional distribution.

This study aims to bridge the knowledge gap between producers and buyers by informing Anchorage area and Palmer-based farmers of the opportunities that exist to expand sales and production, as well as to inform Anchorage buyers about the availability of Alaskan agricultural products.

Study Methodology

The information in this study is derived from the best available data published by the United States Department of Agriculture, the United States Census, and the State of Alaska. Survey data was collected on a volunteer basis with producer and commercial buyers who expressed an interest and willingness to participate. The surveys were broadly distributed through community list-serves, targeted Facebook advertising tools, and the Anchorage Economic Development Corporation. The majority of surveys were completed through in-person interviews with Melissa Heuer, MBA or Ming Stephens, M.S. as well as online through Survey Monkey. A potential bias may exist in this study because of the voluntary basis of participation. Buyers and producers who are interested in expanding and incorporating locally grown produce may have been more likely to participate in this survey.

Photo Credit: Laurie Constantino

Local

The term "local" in this report refers to farms and organizations located within the Municipality of Anchorage and Palmer including the communities of Eagle River and Girdwood. Although the Alaska Grown definition of local includes produce from throughout the state of Alaska, the focus of this study was solely focused on produce grown and purchased in this geographic region. In this study, "local" is explicitly referring to produce produced in the Municipality of Anchorage and Palmer.

Agricultural Scope

The aims of this study were solely focused on produce, which includes vegetables, fruits, and herbs. There are a number of farmers in Southcentral exclusively growing flowers, feed grains, and livestock who were intentionally excluded from this study.

Producer Survey

This survey focused on produce farmers based within the Municipality of Anchorage and the Palmer area. Producer data was gathered over the phone and digitally collected using Survey Monkey from July through October 2017. Using the Alaska Grown Online Sourcebook, identifying farmers that participated in area Farmers Markets, and through speaking with restaurants and other farmers, 52 potential farms were identified. Of the 52 farms, ten were discounted for either not meeting the requirements of the survey or for no longer being in business, and an additional ten were unable or unwilling to participate in the study. Thirty-two farmers, slightly more than 75% of the qualified farmers in the region, completed the survey fully.

Buyer Survey
A buyer list was developed from businesses listed with the Anchorage Economic Development Corporation, the Alaska Division of Agriculture, through distribution lists from area distributors, and by word-of-mouth. Buyer data was gathered over the phone and digitally collected using Survey Monkey from September through November 2017. Of the 109 restaurants, hospitals, distributors, and grocery retailers contacted, 39 completed the survey (36%).

Anchorage

The Municipality of Anchorage, traditionally home to the Dena'ina people, is the largest metropolitan city in Alaska and is home to roughly 40% of Alaskan residents. Located in Southcentral Alaska, Anchorage has maintained a stable population of around 300,000 residents,[1] experiencing only a small population growth of 2.2% over the most recent census period from 2010 to 2016.

Residents of the Municipality of Anchorage access food from a diverse supply chain operating under challenging variables. According to the State of Alaska Department of Health and Social Services, 65% of all Alaskans participate in the harvesting of wild foods by gathering, hunting or fishing at least once per year.[2] Furthermore, 50% of the population purchases fresh produce from farmers' markets, farm stands, U-pick farms or Community Supported Agriculture (CSA), while 34% of the population eats produce from their garden.

[1] United States Census Bureau, 2016. Quick Facts 2016, Municipality of Anchorage, Alaska. https://www.census.gov/quickfacts/fact/table/anchoragemunicipalityalaska,anchoragemunicipalityalaskacounty/PST045216

[2] DHSS, 2013. Alaska Obesity Facts: Local Foods, Alaska Department of Health and Social Services Obesity Prevention and Control Program. http://dhss.alaska.gov/dph/Chronic/Documents/Obesity/pubs/factsheet_LocalFoods.pdf

Palmer

Palmer, traditionally home to the Dena'ina and Ahtna Athabascans, is now one of the main agricultural areas of Alaska. Palmer is a small, historically agricultural area of Alaska that has seen a steady population growth of 17.9% from 2010 to 2016 with a current population of 7,000 people.[3] Located 42 miles northeast of Anchorage, Palmer is ideally located along the transportation corridor to provide produce to the large population center of Anchorage.

Photo Credit: Mat-Su Convention and Visitors Bureau

Southcentral Area Businesses

In 2016, excluding large grocery chains, 88% of participating businesses that responded to this question spent a total of $1,638,700 on produce, with the average company spending $64,234 a year on produce purchases. This figure fluctuates with the business size, ranging from smallest businesses spending $1,000 a year, while most spend between $15,000 - $45,000. A number of the larger businesses are spending between $200,00 - $600,000 a year on all produce purchases.

The majority of produce purchased in the state are imported to Alaska. Of the businesses interviewed, an average of 28% of produce is purchased from Anchorage area and Palmer businesses; and an additional 4% is purchased from other parts of Alaska. The amount of local produce being used varies substantially among businesses, with 17% of businesses buying local for more than 80% of their produce needs, while 43% of businesses use 10% or less of local produce. The range of local produce usage varies across sectors, size of business, and business type and appears to be driven individually by each business.

Organization leadership, rather than perceived customer demand, is driving local food growth. When asked on a scale of 1-10, with one being not at all important to 10 being extremely important, how vital supplying local food to local businesses is, 60% of buyers responded that it is extremely important to them, with 10% responding with less than a five, and no one responding that it is not at all important.

[3] United States Census Bureau, 2016, Quick Facts 2016 Palmer, Alaska.
https://www.census.gov/quickfacts/fact/table/palmercityalaska,anchoragemunicipalityalaskacounty/POP010210

When asked on a scale of 1-10, with one being not at all important to 10 being extremely important, how important they thought supplying local food was to their customers, 30% responded that they thought it was extremely important to their customers, with slightly more than a quarter responding that they felt it was less important to their customers.

Southcentral Buyers

Thirty-two local buyers and seven chain retailers, institutions, and distributors participated in this survey. The majority of respondents are located in Anchorage, with additional participants from Indian, Girdwood, and Eagle River. Many businesses fill multiple roles, such as dining and catering, or brewery and café, and provide insight into multiple sectors of produce buying.

Eighty percent of the participating businesses have been in business for five or more years while 12% percent have been in business for two or fewer years. Overall, 75% of businesses are run by experienced individuals who have been operating their organization for five or more years and only one organization with a buyer who had been with them for one year or less.

Table 1. Purchaser Participation Distribution

Business Type	# Interviewed
Bakery	1
Brewery	3
Catering Company	5
Distributor	2
Food Hub	1
Grocery Retailer; Chain	1
Grocery Retailer; Independent	2
Hospital	1
Private Chef	1
Resort/Hotel	1
Restaurant; Café	6
Restaurant; Casual Dining	17
Restaurant; Fine Dining	7
Restaurant; Food Truck	1
Restaurant; Sandwich Shop	1
Restaurant; Seasonal	2
Specialty Retailer	3
Theatre Pub	1
Wholesale Manufacturing	2

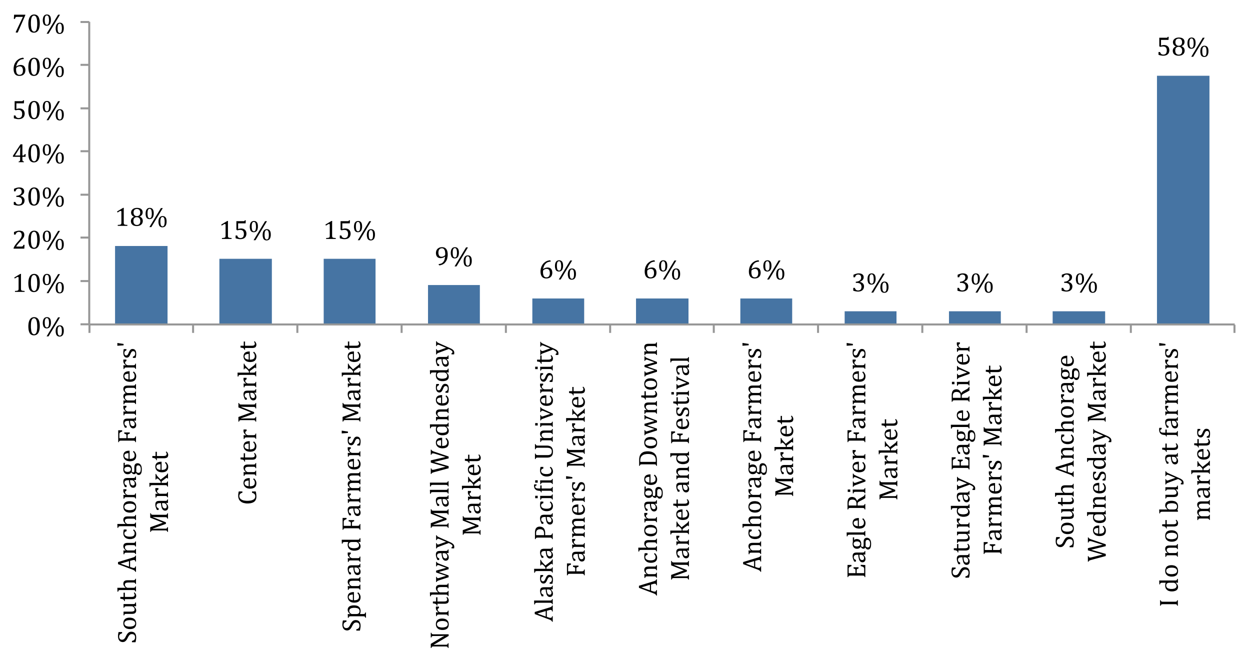
Local Purchasing

Almost 75% of businesses are buying directly from local farmers in the Municipality of Anchorage and Palmer. These farms include A&D Farms, Alaska Natural Organics, Alaska Sprouts, Arctic Organics, Bell's Nursery, Brown Dog Farms, Bushes Bunches, Chugach Farms, Fry Funny Farm, Rempel Family, Seeds of Change, Vanderweel, and others. Many purchasers indicated existing purchasing agreements with a range of farmers to supply specific items throughout the year, but few reported limitations about working with other farmers.

Source of Local Purchases

Currently, none of the businesses we spoke to are purchasing through the existing Kenai Peninsula/Anchorage online food hub, although few were expecting to in the future. About one-third of business are purchasing from farmers' markets, the most popular being the South Anchorage Farmers' Market, the Spenard Farmers' Market, and the Center Market. While a number of other markets operate in the area, markets that were not attended by buyers were not included in the results. Businesses that are shopping at farmers' markets are looking for seasonally fresh items and generally can change their menus on a regular basis. The most commonly bought items are leafy greens, cabbage, beets, and squash.

Figure 1. Buyer Farmers' Market Participation



Almost 75% of buyers are using a distributor that supplies them with local produce. Of those, Arctic Harvest is the most commonly used local food specific distributor. DiTomaso, Charlie's Produce, Food Services of America (FSA), and Sysco are also distributing local produce.

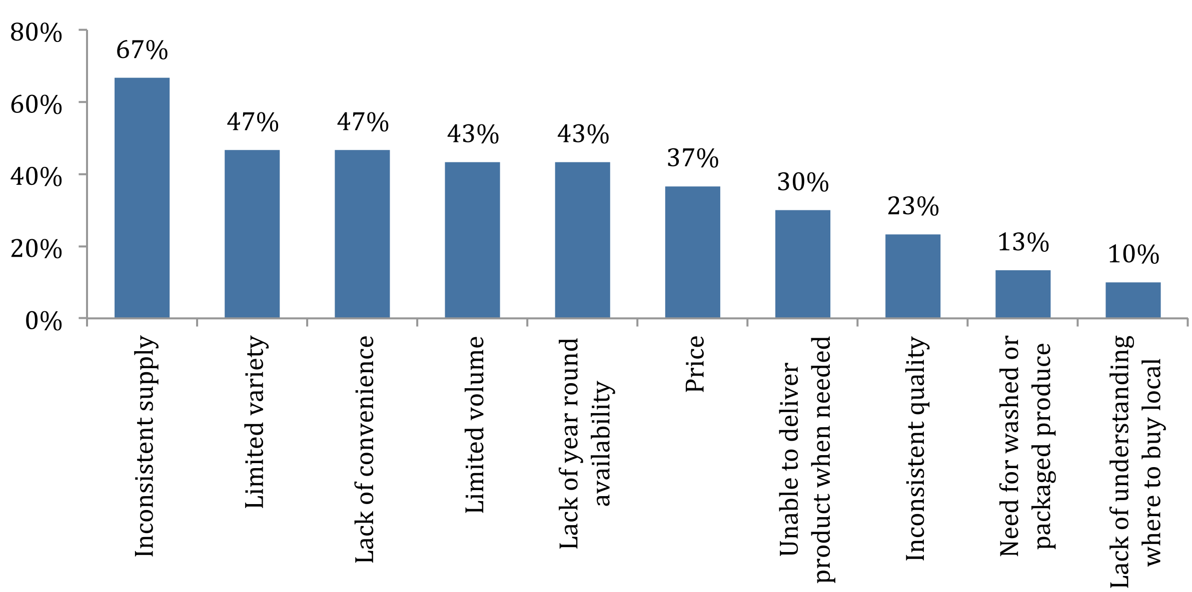
Photo Credit: Anchorage Daily News

Photo Credit: PotatoGrower.com

Buyer Challenges

All buyers, including those who are currently buying local produce as well as those who are not, were asked what their barriers were to buying locally and what would make the process easier to buy more local produce in the future. Buyers indicated a number of challenges with inconsistent supply, limited variety, and lack of convenience working with growers as their greatest barrier to purchasing local product.

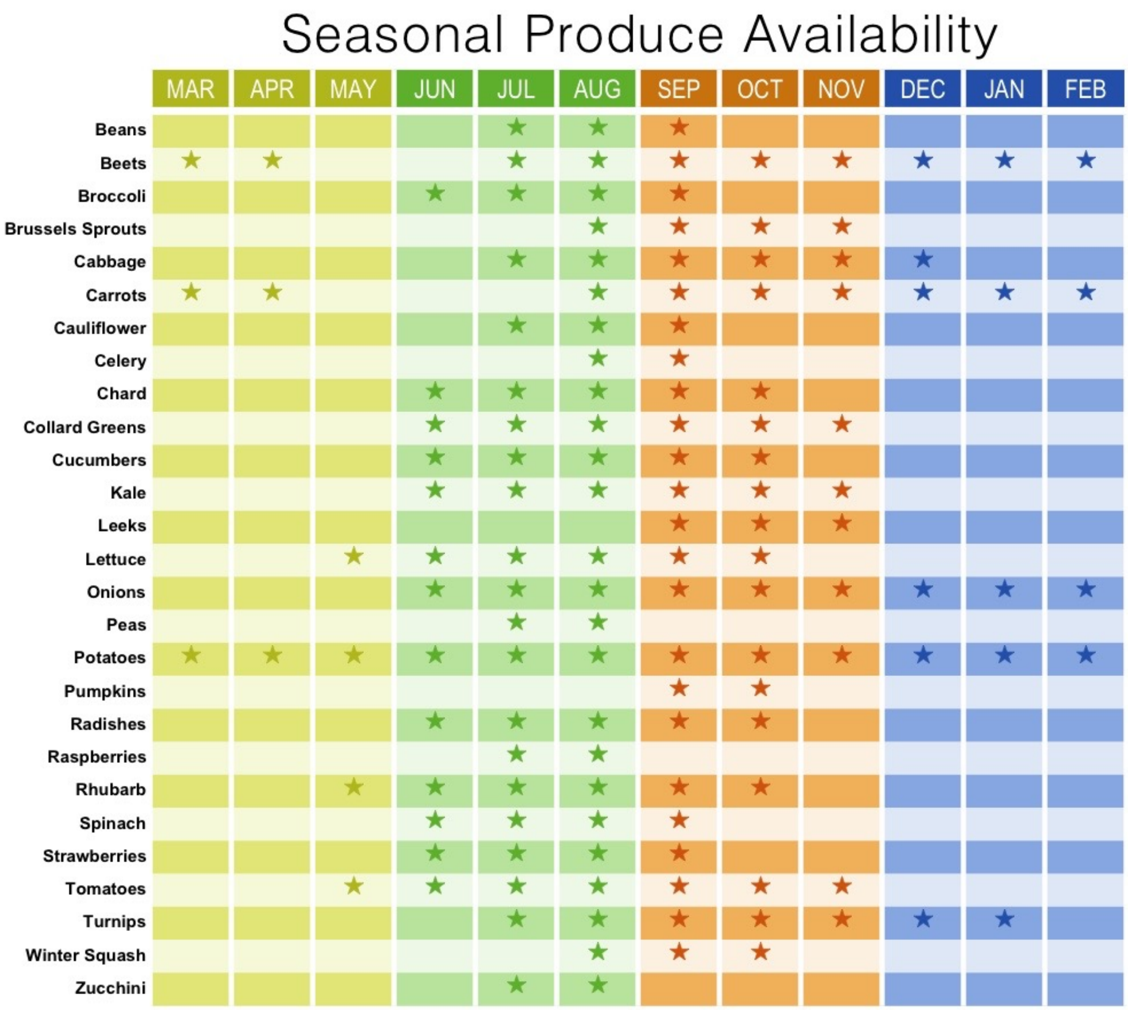
Figure 2. Purchaser Challenges to Buying Locally



Even with additions such as high tunnels, hoop houses, and greenhouses, the growing season for tradition produce in Alaska is limited.[4] Indoor hydroponic operations are extending the season for a number of leafy greens, herbs, and other vegetables and as this type of farming continues to expand in Alaska, we may see a greater variety and supply of Alaska grown produce in winter and spring months. Longer growing seasons may also address barriers around limited volume and lack of year-round availability.

Businesses are also facing issues when wanting to purchase smaller quantities of produce. Communicating and farmer relationships also present a challenge, and multiple buyers expressed frustration about working with specific farmers who are likely better at farming than at the business and logistical side of an operation.

Figure 3. Seasonal Produce Availability



Seasonal Produce Availability

	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
Beans					★	★	★					
Beets	★	★			★	★	★	★	★	★	★	★
Broccoli				★	★	★	★					
Brussels Sprouts						★	★	★	★			
Cabbage					★	★	★	★	★	★		
Carrots	★	★				★	★	★	★	★	★	★
Cauliflower					★	★	★					
Celery						★	★					
Chard				★	★	★	★	★				
Collard Greens				★	★	★	★	★	★			
Cucumbers				★	★	★	★	★				
Kale				★	★	★	★	★	★			
Leeks							★	★	★			
Lettuce			★	★	★	★	★	★				
Onions				★	★	★	★	★	★	★	★	★
Peas					★	★						
Potatoes	★	★	★	★	★	★	★	★	★	★	★	★
Pumpkins							★	★				
Radishes				★	★	★	★	★				
Raspberries					★	★						
Rhubarb			★	★	★	★	★	★				
Spinach				★	★	★	★					
Strawberries				★	★	★	★					
Tomatoes			★	★	★	★	★	★	★			
Turnips					★	★	★	★	★	★	★	
Winter Squash						★	★	★				
Zucchini					★	★						

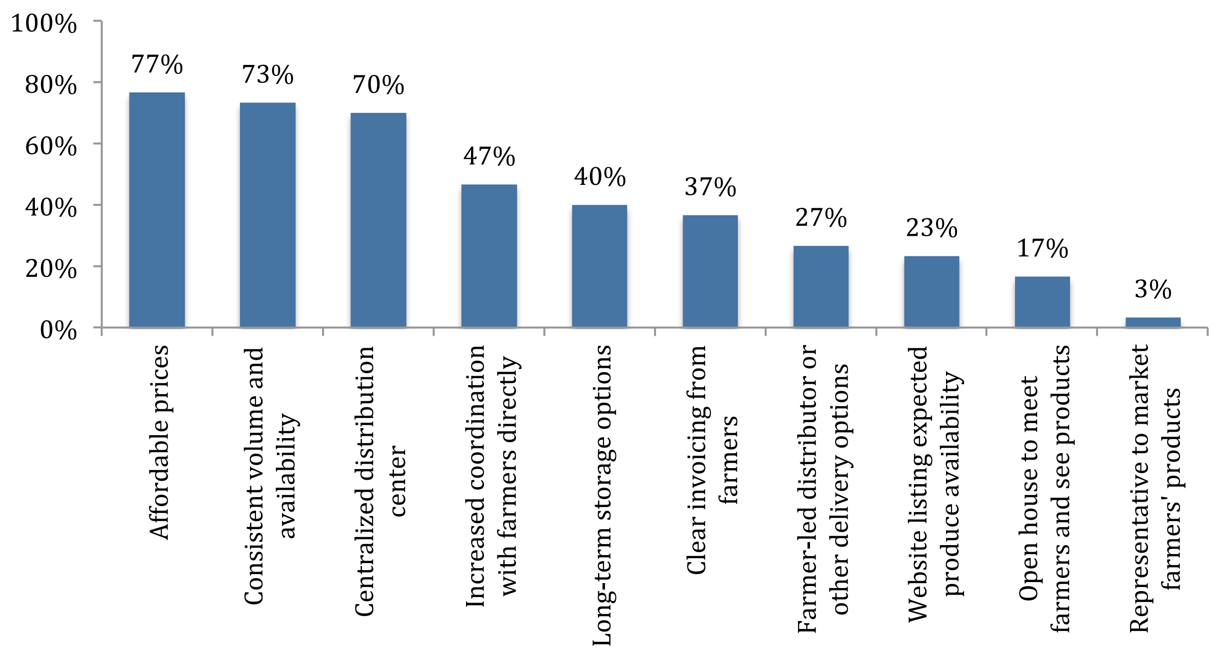
*Produce available between November and April is from storage

[4] DNR, 2014. Seasonal Produce Availability, Alaska Department of Natural Resources, Seasonal Produce Availability. http://dnr.alaska.gov/ag/Marketing/PRODCHART.jpg

Buyer Solutions

Buyers felt a number of solutions could alleviate some of the barriers they face, including more affordable prices, consistent volume and availability, and a centralized distribution center. Buyers also felt that increased coordination and pre-planning with farmers directly, as well as long-term storage options for surplus crops, would help with supply and variety issues. Some also felt that clear invoicing from farmers and farmer-led distribution and delivery would be helpful. In general, few buyers felt that an open house to meet farmers and see their products or a representative to market farmer's products and coordinate sales would be helpful. While many buyers are already working with farmers directly, it is clear that there is room for improved communication and pre-planning when working directly with each other.

Figure 4. Buyer Interest in Potential System Improvements



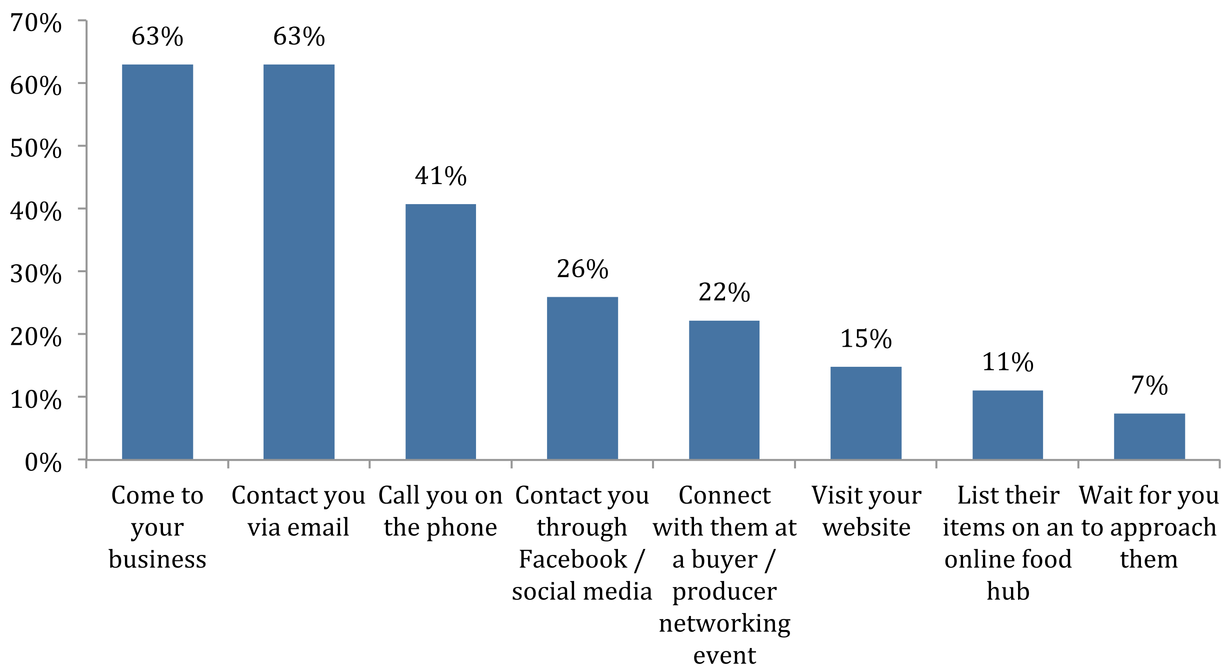
Produce Planning

There are a number of additional considerations in regards to buying local produce. Restaurant buyers are most interested in the flavor of produce, seasonality, sustainability, and customer preference. Many examine the quality of fresh produce, the ease at which the product can be secured, and the final selling price for the dish compared to the cost of the product. Restaurants explicitly indicated that they can change their menus ranging from one week to two hours out, but they need knowledgeable staff that knows how and has the time to process the produce. Restaurants expressed concern about minimum order requirements, as some of the produce items are only available in larger quantities than they might use.

Buyers are also concerned about consistency and the state of the produce, such as how much dirt is on the product and how much labor will be involved in processing. The temperament of the farmer including the willingness to work with a buyer and their ability to communicate also plays a huge role. Finding the right buyer or finding the right producer is key as each buyer is looking for something different. For instance, some buyers are looking for smaller quantities of heirloom varieties while others are looking for "funny shaped" vegetables or large amounts of one or two items.

For a farmer trying to connect with a buyer, direct communication from the farmer, whether in person at their business, through email, or over the phone, was overwhelming the first choice for buyers. Connecting with them through social media or their website were also acceptable choices for some businesses. A few businesses indicated that they would look at an online food hub, while only a couple of participants indicated that farmers should wait for an invitation to be approached.

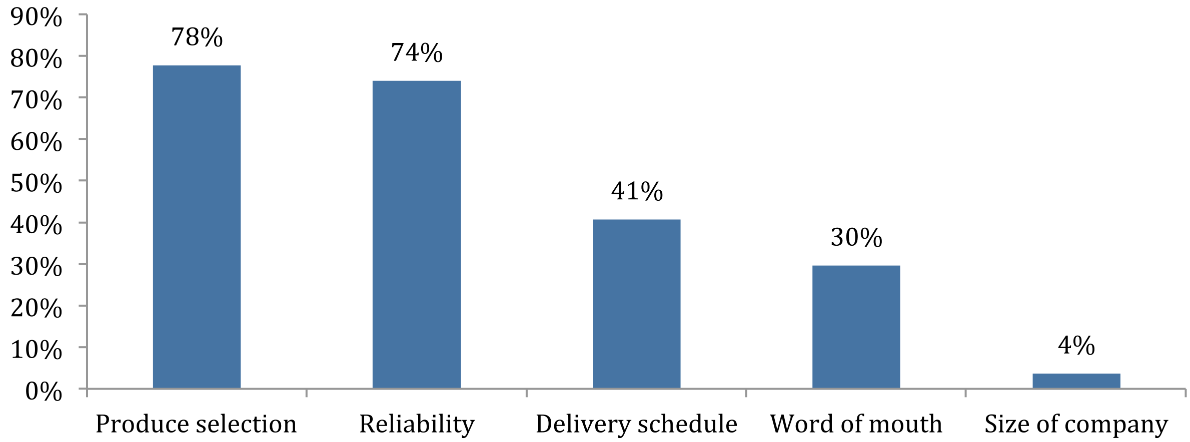
Figure 5. Connecting with a Local Business



Businesses can adjust their purchases on a relatively short timeline. Many buyers, 34%, can adapt their purchases daily and 55% can adjust their purchases once or twice a week. Businesses were relatively split about the best time to contact them. Those that are looking for larger quantities and want to work directly with farmers can communicate with them about their needs for the following year between September and May. However, many businesses do not want to plan their purchases months in advance and would rather work with what is available during the growing season.

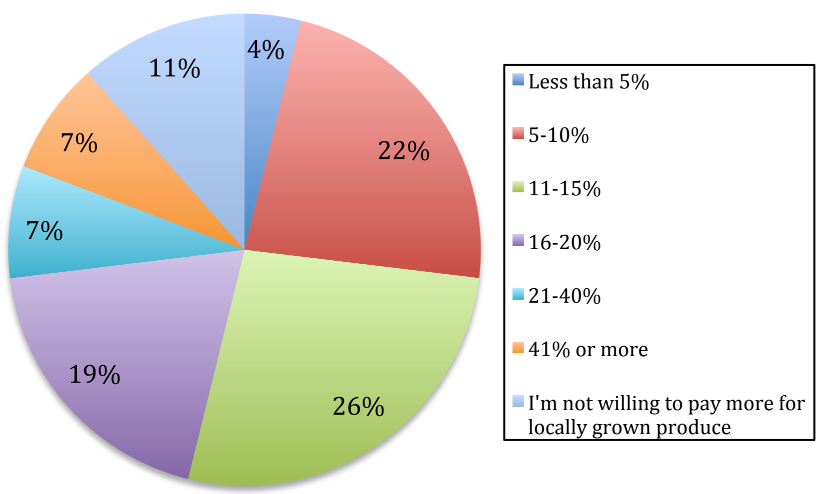
Buyers value freshness over produce durability in their purchases and were more likely to buy locally if they knew the produce had been harvested in the last 48 hours. When choosing a vendor, buyers favor produce selection and reliability but also prefer a flexible delivery schedule and farmer reputation among other buyers. Most buyers are not influenced by the size of the company the distributor is representing.

Figure 6. Buyer Vendor Preference



Most businesses do not have explicit loyalty agreements preventing them from buying from other distributors or producers that are selling local produce, however many businesses have established relationships with both distributors and farmers that they hope to maintain.

Figure 7. Price % Increase Buyers will pay for Local Produce



Every business indicated their ability to scale up their local produce purchases. If quantities were available, three-quarters of companies would use more than 50% local produce in their daily operations, while slightly less than half of the businesses would use 90% - 100% of local produce if available. Additionally, the majority of businesses, 89%, would be willing to pay more for local produce, and more than half are willing to pay up to 15% more than for produce that has been imported to Alaska. It is important to note that while businesses indicated their willingness to pay more for local produce, buyers have also indicated that product pricing is a barrier to purchasing more local produce, and in reality, these estimates may be higher then what buyers are willing to pay on a regular basis.

Buyer Produce Preference

Buyers are looking for a range of products, both commonly found in Alaska and imported from elsewhere. The most in-demand, high quantity items businesses are looking for are leafy greens, (specifically romaine and mix lettuce), tomatoes, chard, carrots, onions, and potatoes. While this study focused on Southcentral produce preferences, many buyers are interested in purchasing other types of locally grown products. Buyers are particularly interested in protein such as chicken, turkey, lamb, eggs, and elk. The majority of buyers are interested in or are currently buying, value-added Alaskan products, which are products that have been enhanced through some form of processing.

Southcentral Producers

Southcentral Producers vary considerably in the size, type, and style of farming techniques they utilize and range from small indoor and hydroponic operations to larger (one hundred acres or more) well-established farms. This region represents a mix of experienced and new farmers selling their produce in a variety of ways from direct marketing, selling through a distributor, or by participating in farmers' markets and online food hubs. When asked on a scale of 1-10 how important supplying local food to local businesses is, with one being not at all important to 10 being extremely important, more than 60% responded that supplying local food is extremely important to them, 25% responded with less than a five and only one respondent said that it is not at all important.

The majority of Southcentral farmers are selling their produce within the Anchorage and Palmer community areas with an additional one-third selling beyond the study region to other parts of Alaska including Fairbanks, Cordova, the Kenai Peninsula, Illiamna, Homer, and other remote areas through air cargo services.

Southcentral Farmers

Fifty-two farmers, including hydroponic growers, located in the Municipality of Anchorage and Palmer were contacted for this survey. Of the 52 farmers identified, thirty-two were qualified and willing to participate in the study.

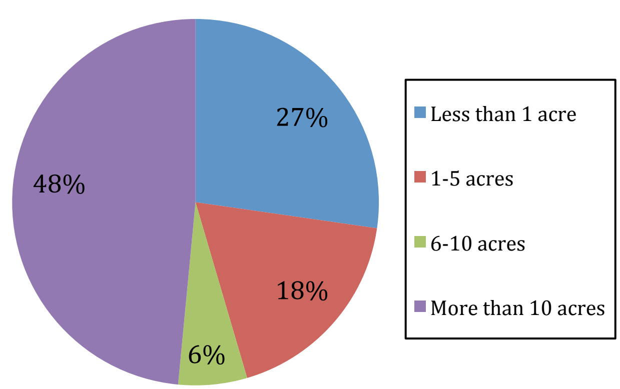
Table 2. Farmer Participation Distribution

Farm Location	# Interviewed
Anchorage	8
Chickaloon	1
Eagle River	2
Palmer	21
Total Participants	32

Farm Size

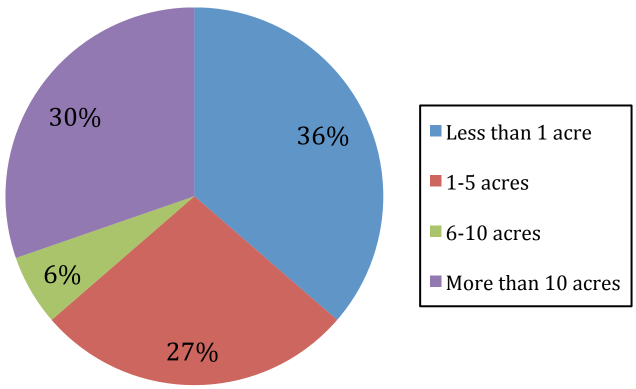
Of the participating farms, slightly more than 50% of farmers are farming on more than six acres. Farm size and production method vary greatly depending on farm location. At this time, hydroponic farms are almost exclusively located in Anchorage and are primarily less than one acre in size. Many hydroponic farms in Anchorage use vertical scaling to

Figure 8. Size of Farm in Acres



maximize growing capacity while minimizing their land footprint. Many hydroponic growers are growing on multiple levels of an indoor building. All of the more traditionally run outdoor farms in Anchorage are less than one acre in size. This trend could be due to the higher cost of land in Anchorage, low fixed prices for reliable, clean water, and the lowest power rates in the state. Outside of Anchorage, farms in Chickaloon, Eagle River, and Palmer are almost exclusively using traditional, outdoor farming techniques and in general, are farming on more than five acres of land.

Figure 9. Number of Acres in Production



Acres in Production

Most of the participating farmers, 70%, are actively farming less than ten acres of land. Many of the participants that are actively farming more than ten acres are also farming hay and fodder for livestock. Some participants indicated intentionally leaving land out of production to "rest," while others are farming 100% of their available land.

Southcentral Farmers

Farmer experience varies throughout the study region, with a mix of new and experienced farmers. Except one Palmer participant, the majority of new farmers (those with less than five years of experience) are based in Anchorage. Roughly half of the new farmers are growing indoors and produce on less than one acre of land.

Figure 10. Number of Years of Farming Experience

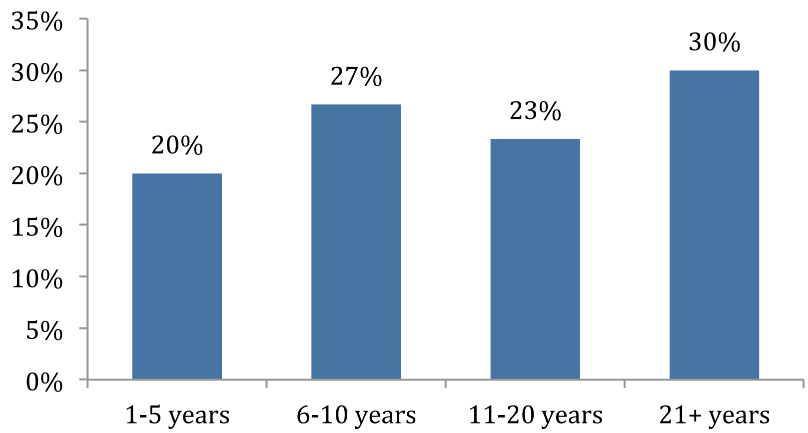


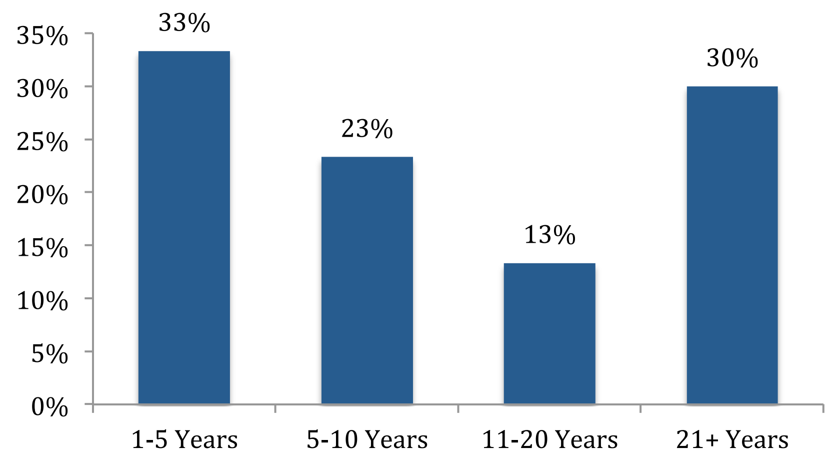
Photo Credit: Around Alaska Blogspot

Photo Credit: SPORK Consulting

Farm Age

One-third of the participating farms were started within the last five years. There are a number of established farms, mainly located outside of Anchorage. More than 20% of all farmers surveyed indicated that their farms have been operating for more than 40 years.

Figure 11. Number of Years on Current Farm



Sales Avenues

Business to Business

Slightly more than 50% of participants are selling their products directly to local restaurants and grocery stores, while zero participants are currently selling directly to institutions. Depending on the farmer, some are bringing their produce directly to their business, while others require the business to pick up from their farm. Asian and Chinese restaurants appear to be one of largest purchasers of local cucumbers, while the Bear Tooth, 49th State Brewing, Midnight Sun, and Spenard Roadhouse appear to be purchasing from multiple farmers as they were commonly listed in responses. Farmers are also dealing directly with Safeway, Fred Meyer, Walmart, New Sagaya, Red Apple, Natural Pantry, Arctic Harvest CSA, and Evie's Brinery.

Anchorage Food Hub

The Anchorage Food Hub began operating in Anchorage in spring of 2017. The Food Hub is part of a larger Kenai and Homer-based organization that runs on a membership basis. The Food Hub mainly targets Anchorage residents. In their first season of operating they had more than 130 members and ten producers (as well as other non-produce producers). Of these ten producers, nine were based in the survey area.

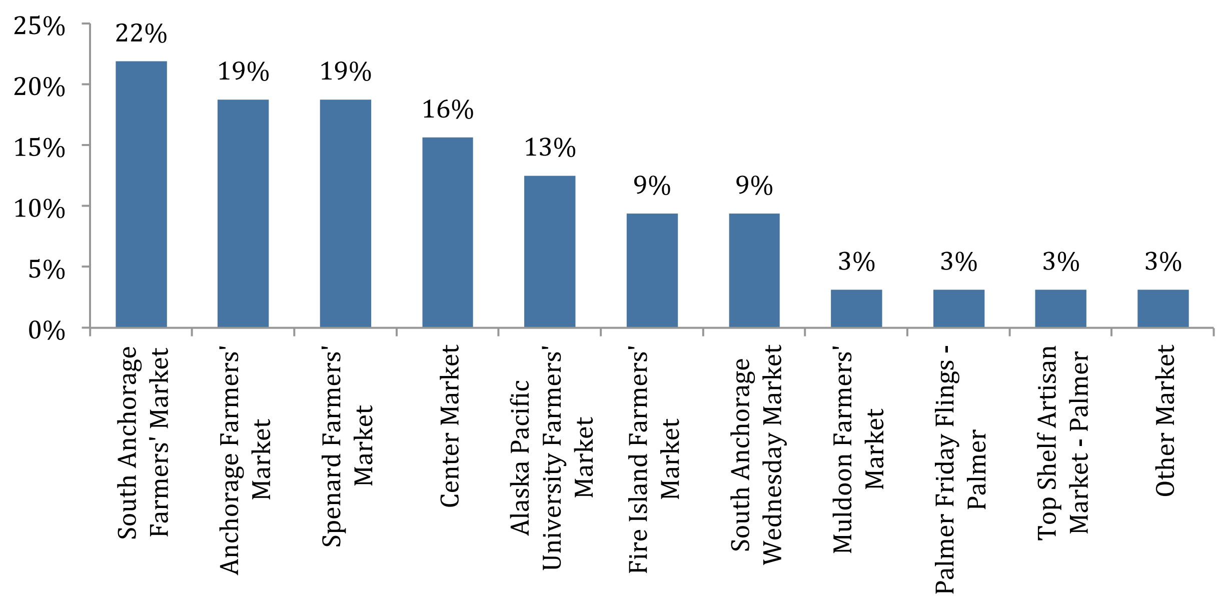
The Anchorage Food hub reported sales of just under $5,000 at the time of the interview, about two-thirds through their season. The products with the highest demand were leafy greens, beans and peas, herbs, carrots, winter squash, cucumbers, tomatoes, potatoes, and cabbage. Many growers and businesses were unaware that the food hub was an option in Anchorage. Of the producers we spoke with, roughly 12% supplied produce to the food hub. Some farmers indicated they were waiting for the food hub to expand before supplying produce, or were in the process of signing up to be a vendor. Other producers did not have enough produce to meet the demands of another customer.

See the Food Hub section on page 25 for more information on the future of the Anchorage Food Hub as well as community opinions and needs for a food hub in Anchorage.

Farmers' Markets

Half of the farmers interviewed did not sell at farmers' markets. Of the 50% that do, many sell at more than one market, and a number of farmers sell their produce to a farmers' market vendor who collects and sells their produce. The most common markets for farmers to sell at are all located in Anchorage. They are the Saturday South Anchorage market, the Saturday Spenard market, the Saturday Anchorage Market on Cordova Street, and the Center Market at Sears. While included as options, no farmers indicated their participation in the Depot market in Palmer, the Anchorage Downtown Market and Festival, the Eagle River market, or the Northway Mall Wednesday market, all of which were excluded from Figure 12.

Figure 12. Farmers' Market Participation



Farmer Challenges

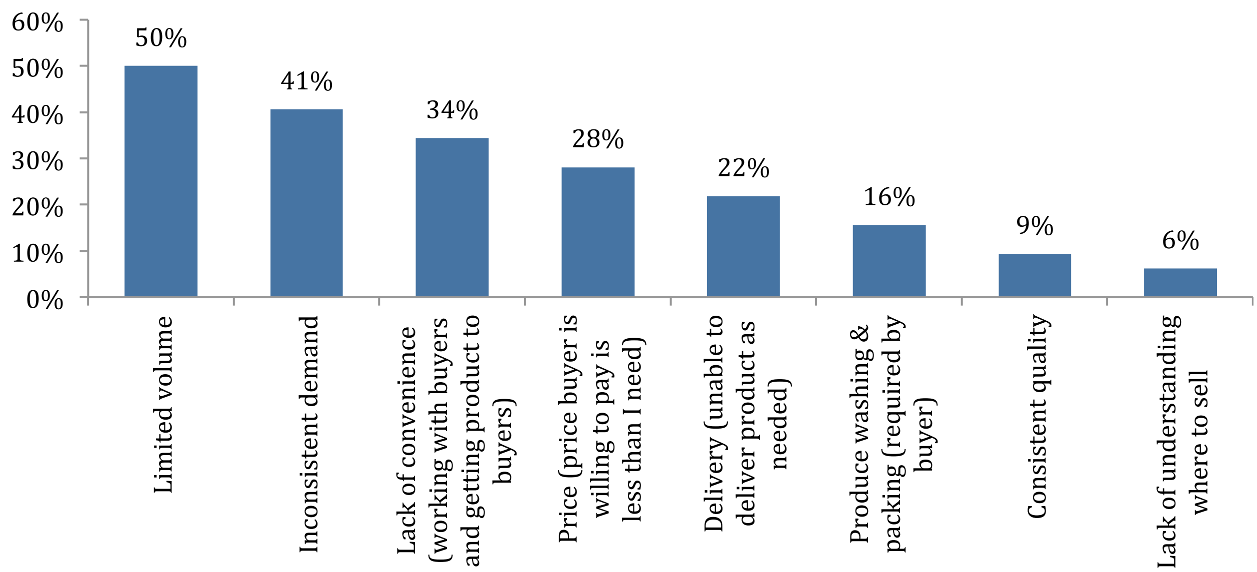
Unlike other parts of Alaska,[5] the majority of farmers in Palmer and the Municipality of Anchorage are full-time working farmers who are not pursuing additional employment outside of farming. Farmers face a number of challenges when it comes to getting local produce to the public. While few indicated a

[5] Heuer, Melissa, 2017. Central Peninsula Agricultural Market Analysis. Agricultural Market Analysis, Spork Consulting. http://docs.wixstatic.com/ugd/5382df_6e631ce74f5e4120b608505d5f542cc4.pdf

problem selling their produce, many noted limited volume, inconsistent demand, and lack of convenience working with buyers as their greatest challenges. Other challenges included selling their products for enough to cover their costs and getting their products to buyers.

Farmers are also facing a number of barriers to entering larger grocery retailers and are hindered by third-party audit requirements, grocery store bureaucracy, and consumer education. Many new farmers experience a steep learning curve while both learning how farming works in general, understanding crop rotations for Alaska and deciding where the best locations and marketing efforts are placed with limited time away from the farm.

Figure 13. Farmer Challenges to Selling Locally



Outside of actual farming, farmers indicated a number of hurdles to general operations with the greatest being labor. Finding affordable and reliable labor is an issue across the board for farmers. Food safety regulations, cottage food regulations, marketing, aging and expensive equipment, insurance costs, and general capital funding for growth are other operational hurdles facing farmers.

Farmer Solutions

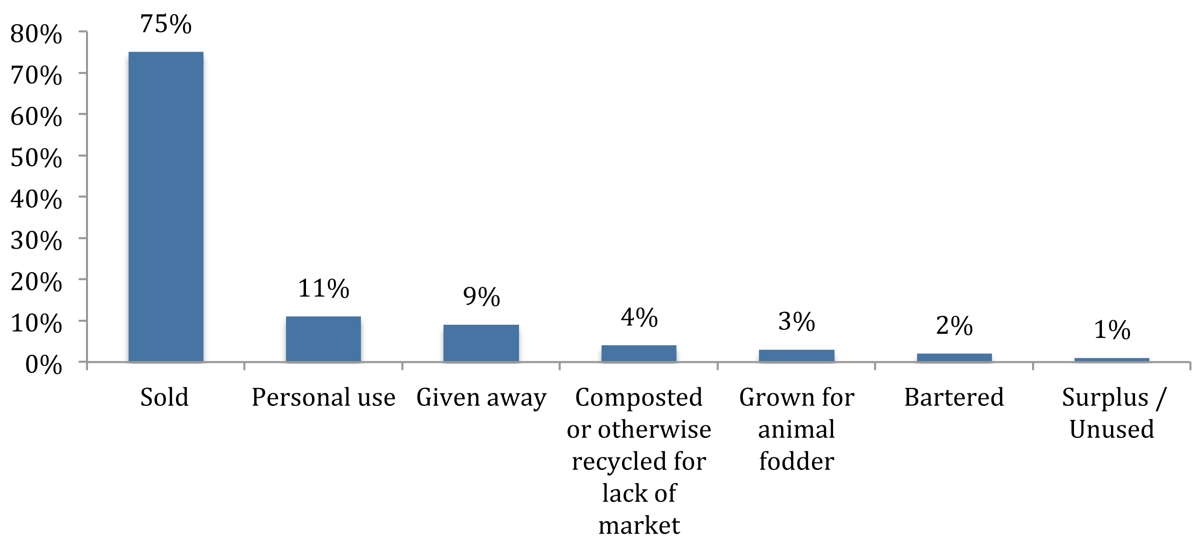
Farmers indicated many solutions to streamline the distribution process. Of equal importance are the creation of a centralized distribution center, a website for farmers to list expected product availability two to three weeks before it is harvested, increased coordination and pre-planning with buyers directly, and long-term storage for surplus product. These solutions could be executed in a number of ways, but one potential option would be the development or expansion of a centralized facility that could accomplish many of these needs.

Farmer Product

Based on survey results, 75% of total production was sold. However, almost 40% of farmers sold more than 90% of their total crops. Few farmers are keeping product for their own personal use, with 38% reporting using less than 1% for themselves, 22% using less than 10% of their total crop for their households and 16% using 15% or more of their crop including one individual that is primarily growing for themselves and reported growing 80% for personal use. A small group of farmers are growing produce for animal fodder, to barter, or to give away and one new farmer is only growing for personal use, trade, or barter.

There is a minimal amount of unused or composted produce with 35% of farmers accounting for the overall 4% of produce that is composted or recycled for a lack of market and 12% of farmers accounting for the overall 1% of surplus or unused produce. The majority of farmers, 58%, reported using 100% of their produce with zero produce being composted or unused.

Figure 14. Average Farmer Produce Usage



Distribution, Crop Planning, and Additional Sales Considerations

Fewer than one-third of producers are using a distributor. While many distributors have specific requirements for working with farmers, many distributors are working with local farmers. These distributors include Arctic Harvest Deliveries, Charlie's Produce, Sysco, DiTomasso, Food Services of America, Palmer Produce, and Sagaya Wholesale.

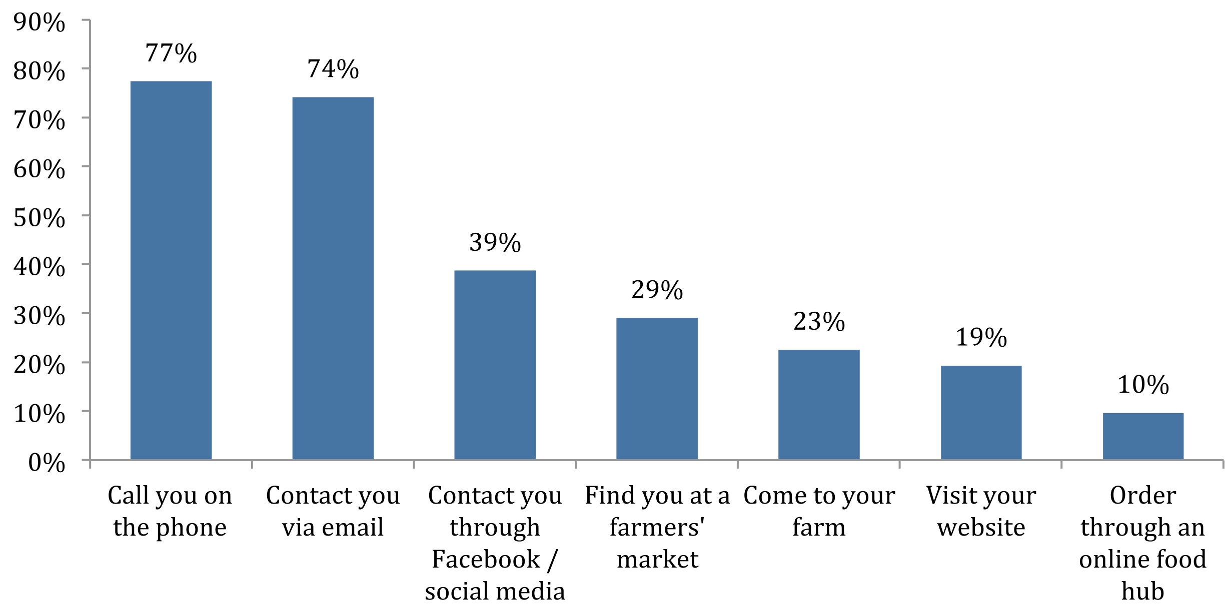
On average, farmers plan their crops five and half months before planting season, with some planning more than a year in advance and others up to two years to stay competitive at farmers' markets. There are a number of additional considerations farmers make around local selling decisions. Some farmers who are working directly with restaurants note that it can be easier to sell to higher end restaurants because many of the other ones cannot afford local produce, others are reliant on inconsistent labor including WWoofers,[6] and some are dependent on pre-orders for crop planning.

Connecting with a Farmer

The majority of farmers, 77%, prefer to be reached by telephone, followed closely by 74% who prefer to be reached through email. Contacting farmers through their Facebook and social media pages, finding them at farmers' markets, and visiting them at their farms were also acceptable ways to communicate with them. Many indicated that they have limited time for social media, especially during the farming season. One farmer suggested finding them in the Alaska Grown Sourcebook, while others stated that they were open to trying the online food hub in future years.

The best time to contact the majority of farmers was spring and winter, though many indicated a year-round availability, with weekdays being a more favorable time to be reached. Some farmers did note that if businesses are looking for regular or larger quantities they should contact the farmers before spring and that for many of the farmers, their produce is spoken for by early summer.

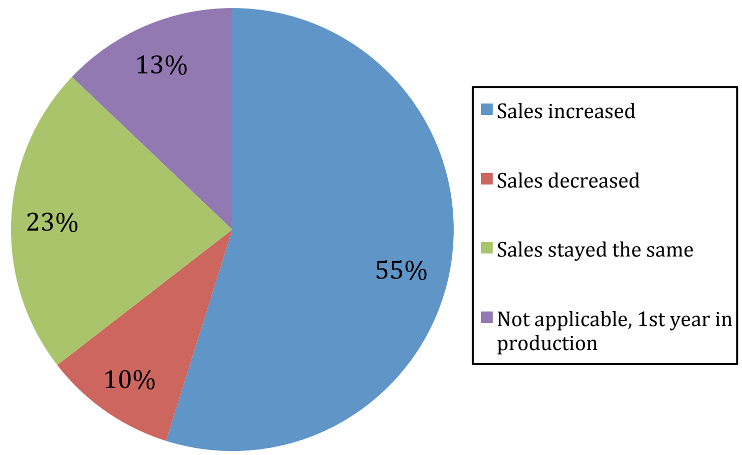
Figure 15. Connecting with a Local Farmer



[6] "WWOOF is a worldwide movement linking volunteers with organic farmers and growers to promote cultural and educational experiences based on trust and non-monetary exchange, thereby helping to build a sustainable, global community." WWOOF Federation of WWOOF Organizations, 2016. About WWOOF. http://wwoof.net/

Sales Growth and Potential

Figure 16. 2016 Sales vs. 2015 Sales

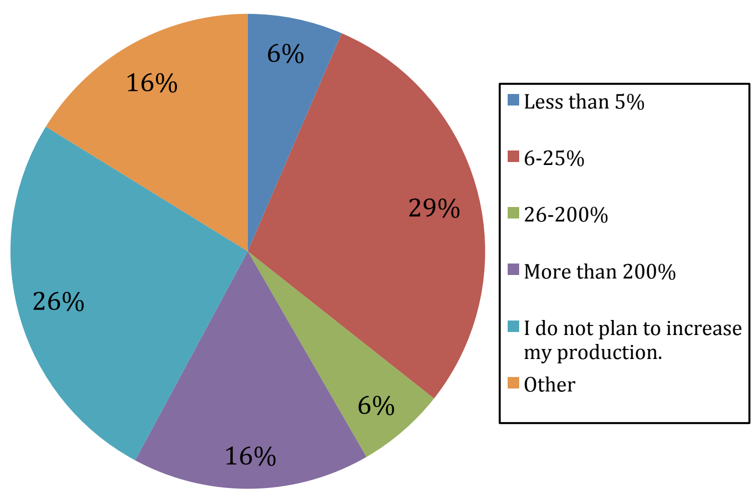


Sales for more than half of Southcentral farmers increased in the last full farming year. Of the 10% of farmers that indicated a decrease in sales, they noted that marketing for individual farmers' markets has decreased which has spread out buyer dollars amongst a broader range of markets. Some noted there was a variation due to weather and crop yields, while others were just getting started or were still growing. One farmer indicated they transitioned part of their crops from produce to flowers, therefore decreasing their yield.

Of the roughly 40% of farmers that increased their production, most added new products, increased the area/acreage of production, or increased the volume owing to more intensive growing techniques. A smaller percentage extended their growing season by adding hoop houses or using a greenhouse.

Farm Expansion

Figure 17. Farm Growth Potential



More than 75% of farmers can scale up their production. In 2018, 52% of applicable farmers are planning to expand in a number of ways. Of those planning to expand, 39% are planning on increasing their production area, while others are planning on maintaining the same acreage but using more intensive growing techniques or adding new products. Just under 25% of farmers that are planning to expand will be extending their growing season by adding either hoop houses, a greenhouse, or another growth medium.

Among farmers who indicated they would not increase production in 2018, reasons cited included a lack of land to expand, hopes to sell their farm and retire, or uncertainty of their plans in the coming year.

Figure 18. Expected increase in Production in 2018

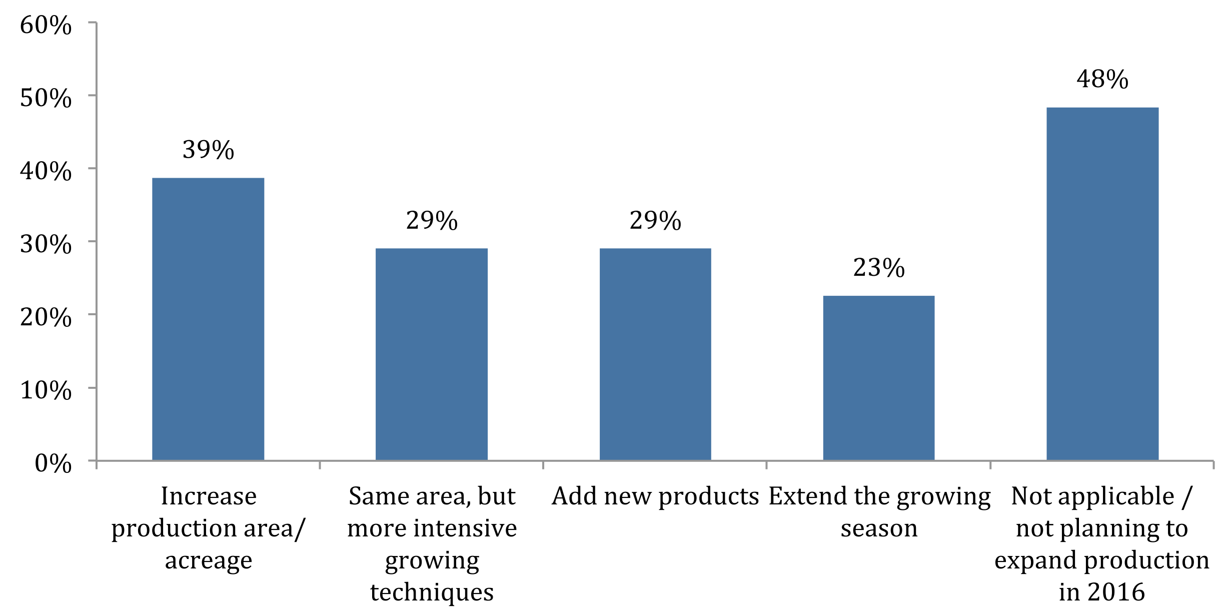


Photo Credit: Travel Alaska

Product Growth

Southcentral producers are growing a range of products using both traditional techniques and newer hydroponic techniques. Some conventional growers are also taking advantage of greenhouses, hoop houses and other methods that extend their growing season. When farmers were asked what the top five, high-volume items they were most interested in growing, the list was extensive. Carrots, beets, kale, blueberries, and herbs topped the list. Few produce farmers are interested in expanding to livestock or grains, while around 50% of farmers were interested in providing honey and other value-added products.[7]

[7] "A value added product is: of, relating to, or being a product whose value has been increased especially by special manufacturing, marketing, or processing." Mirriam-Webster, Incorporated, 2017. https://www.merriam-webster.com/dictionary/value-added

Future Food Hub or Alternative Distribution Model

As part of the broader market analysis, two surveys were conducted that focused on the need for a food hub or alternative distribution model in Anchorage. The first study was part of the larger marketing study referenced in prior sections, while the second focused exclusively on the need for an alternative distribution model, food hub, or co-op and included a much broader audience from all sectors of the community.

Buyers

The vast majority of buyers, 93%, feel that the development of a food hub, co-op, or alternative distribution model in Anchorage would benefit their business: it could add convenience, include a number of farmers, and streamline purchasing. Buyers felt that there were a number of key resources or functions a food hub could provide including an online ordering system, a physical place to shop for businesses such as caterers who may not know in advance what they need, a place that could supply a variety of items at a reasonable price, and an area that provides delivery of aggregated products. Buyers who did not sense a food hub would be beneficial indicated that the system is working well now and that the assumed additional cost would make any new system irrelevant.

Buyers are also interested in a commercial kitchen space for market vendors and a warehousing facility for food trucks, especially in winter months. These services could provide consistency and convenience for pick-up and planning as well as allow buyers to buy more quantities at one time from multiple local sources. Many buyers also felt that an alternative distribution model could help address specific regulatory issues, though did not specify what these were, and aid in the economy of scale barriers.

Farmers

In general, the majority of farmers, 80%, feel that the development of a food hub, co-op, or alternative distribution model in Anchorage would benefit their business. However, a number of farmers noted their concern about higher prices based on the Alaskan Grown label on products that would be sold through the alternative model and felt that if that were the case, it would decrease the appeal for customers.

Farmers felt there were a number of functions the alternative model could provide: centralized distribution and sales, commercial kitchen space, storage, a third party seller (i.e., farmers could drop off their produce for someone else to sell), frozen storage, produce processing, and the ability to aggregate produce from multiple producers to sell larger quantities of produce to larger retailers, as well as website and marketing assistance.

Farmers also felt that an alternative distribution model would help address regulatory issues and barriers, and aid them economically by assisting farmers in scaling up their production. Specifically, farmers are facing issues finding people to conduct third-party audits for food safety, which are required for many produce outlets including most grocery stores. Newer farmers indicated the desire to find grants and mentors for local food production, and through a network of users, these connections could be made.

Overall farmers indicated that a food hub would provide them with a way to collectively join their voices to increase their marketing abilities, address food processing regulations, and potentially create a space for processing and value-added products.

Table 3: Business Participation Distribution

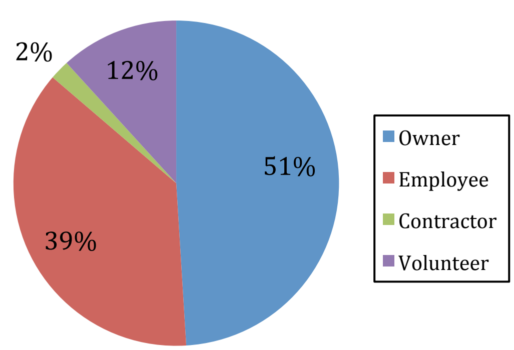
Business Type	# Interviewed
Bed and Breakfast	1
Brewery	1
Brick and Mortar Restaurant	1
Catering Company	4
Co-Op	3
Distribution Company	3
Farmer	8
Farmers' Market	3
Federal Agency	2
Fish Monger	3
Fishermen	1
Food Entrepreneur	16
Food Hub	4
Food Truck	1
Government Agency	2
Institution; Hospital, Senior Center, Rehabilitation Center	5
Investor	2
Lending Agency	3
Non-Profit	13
Other	1
Retailer	6
School	6
Social Enterprise	1
Storage Facility	3
Test Kitchen	1

Southcentral Food Resource Participations

The broader "Food Resources Assessment" survey was conducted from March through May 2017. Of the 212 participants, 49 surveys were completed within the geographic study area of Palmer and the Municipality of Anchorage. The survey was distributed through boosted targeted Facebook advertising tools, listserve emails and through outreach channels with the Anchorage Economic Development Corporation and the Alaska Food Policy Council.

The majority of participants, 75%, felt that the development of a food hub or alternative distribution model in Anchorage would benefit their business..

Figure 19. Participant Role in Business



Of the participants, more than 50% were the business owners, followed by employees and volunteers. Almost 60% of the businesses that participated have been in business for five or more years, while more than 30% had been in business for 20 years or more. While the businesses surveyed are well established, the majority of respondents have been with their current company for ten years or less.

Community Space

The most significant need in the community in regards to community space is test kitchens. Both current and anticipated demand far outweighs what is currently available. Additional storefront and office space are also needed as current, and expected demand exceeds what is presently available.

Based on these results, storefront and test kitchens are good opportunities for investment whereas there is likely enough event space and mixed-used public space as the current market shows a surplus of these resources.

Figure 20. Current Need for Community Space

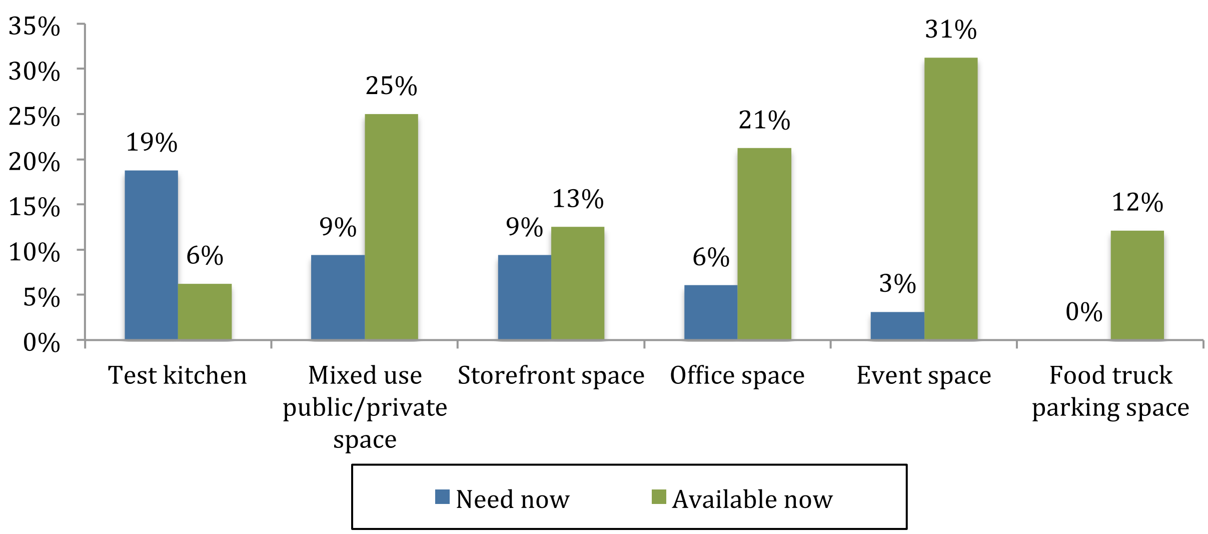
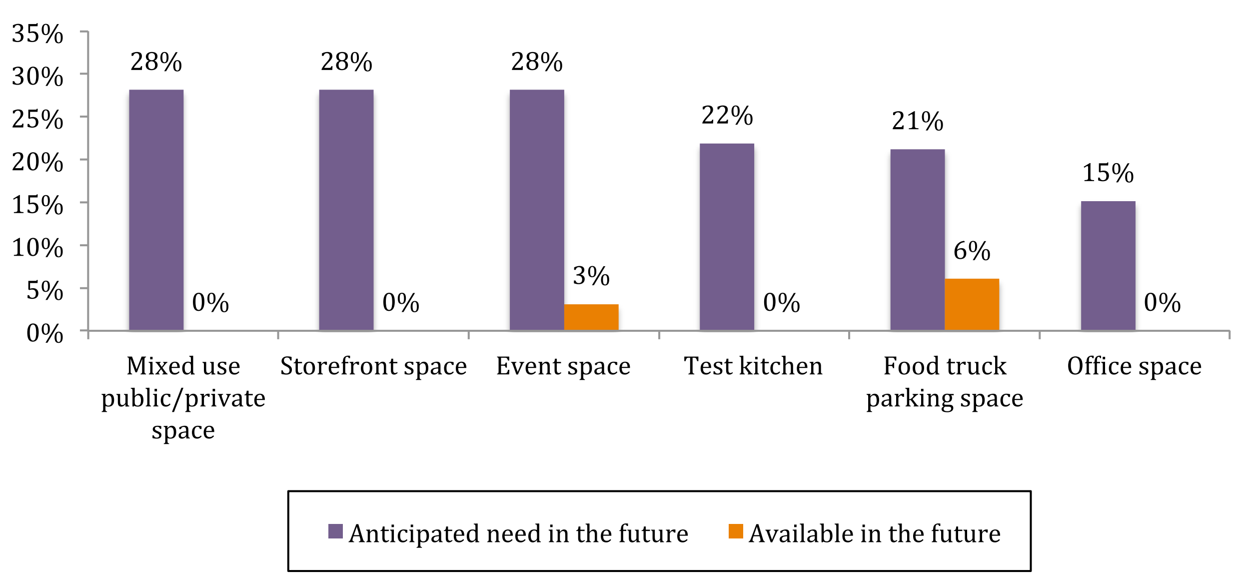


Figure 21. Expected Need for Community Space



Funding

There is a high demand for funding now and an even greater expected demand in the future. There is a much more significant need for general grant funding with increased demand in the near future, with few existing opportunities. While there is some existing equipment funding, there is not enough to meet current needs, and there is expected to be an even greater need in the future. Additionally, start-up grant funding has the greatest demand overall, as there is no available funding nor is there expected to be any funding in the near future. There is currently more funding available for farmer training than is needed, but this funding is likely to be required shortly as participants are expecting to need additional training.

Figure 22. Current Need for Community Funding

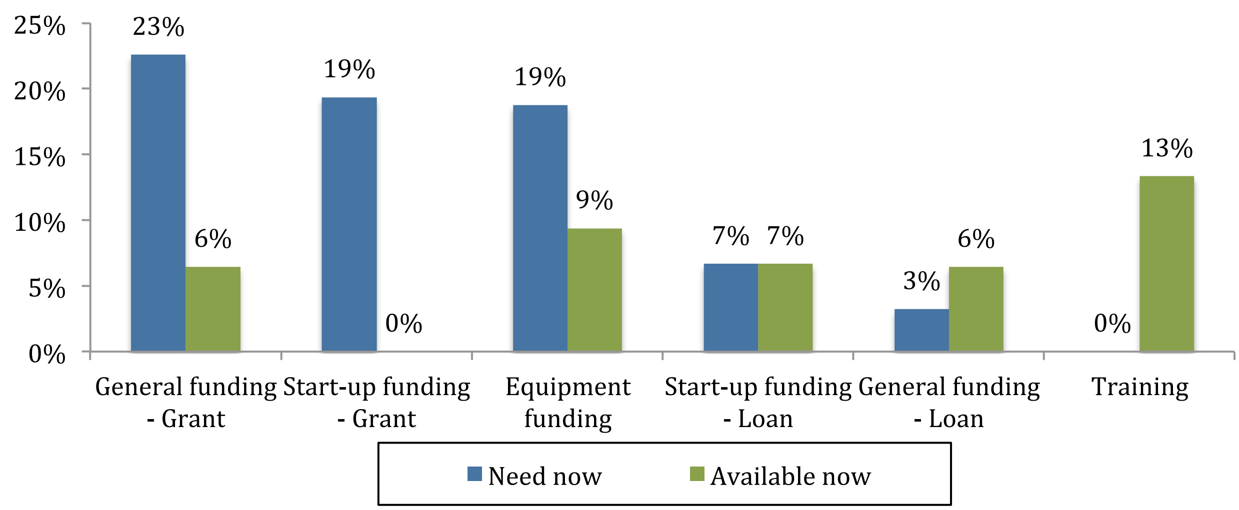
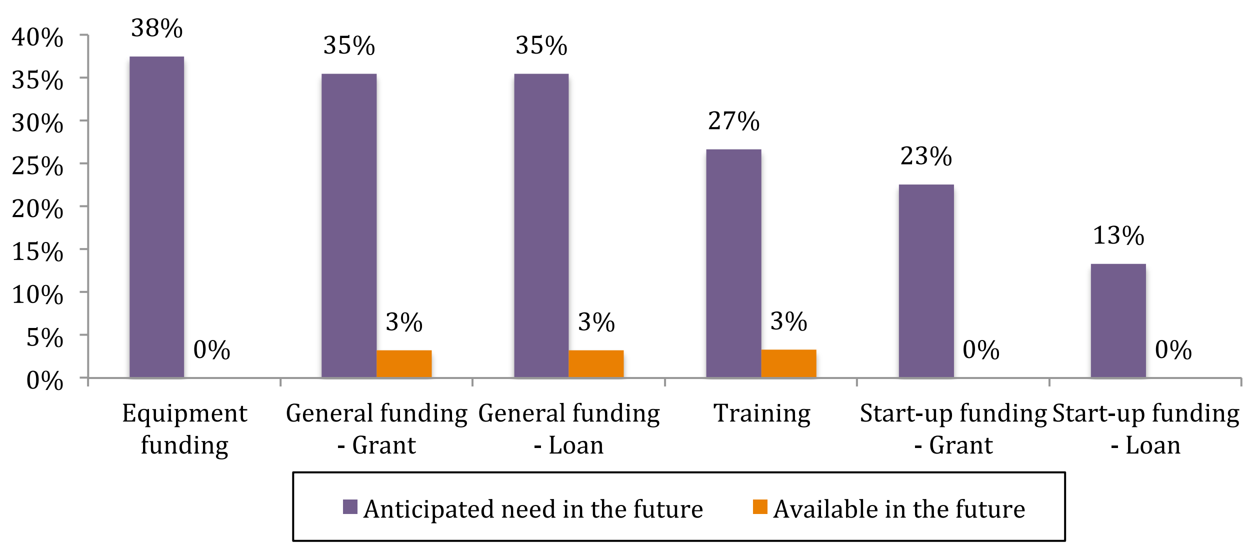


Figure 23. Expected Need for Community Funding



Land

Overall, the amount of available land is greater than the current demand for land. Presently available space meets or exceeds demand in all categories. Efficient utilization of this land will determine future availability. There is likely going to be a higher demand for urban land for farming and land with an existing structure on it.

Figure 24. Current Need for Land

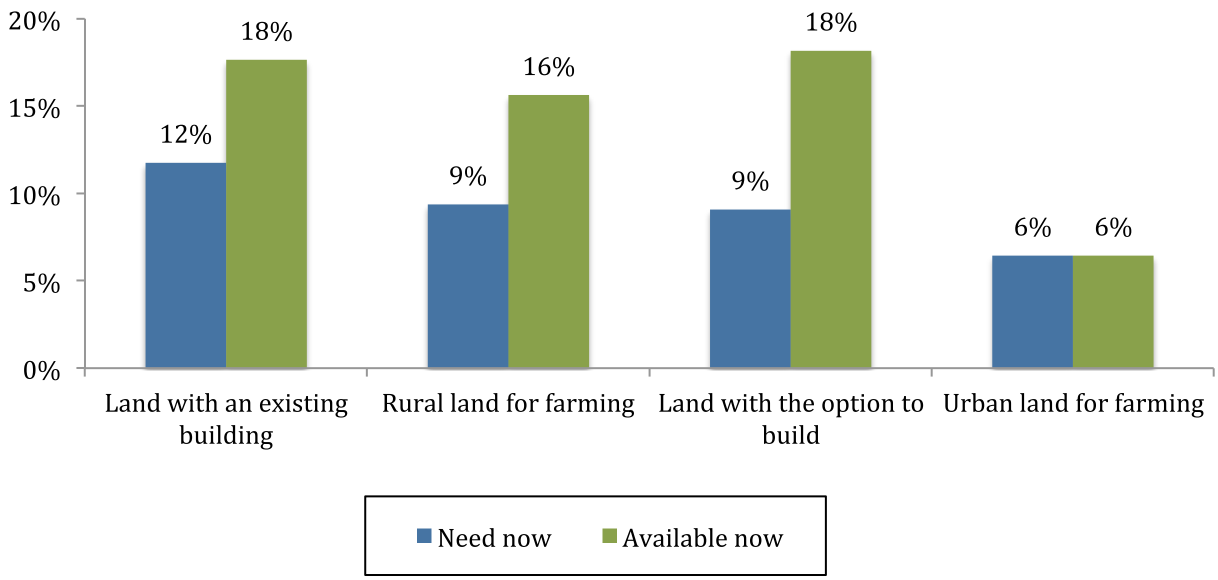
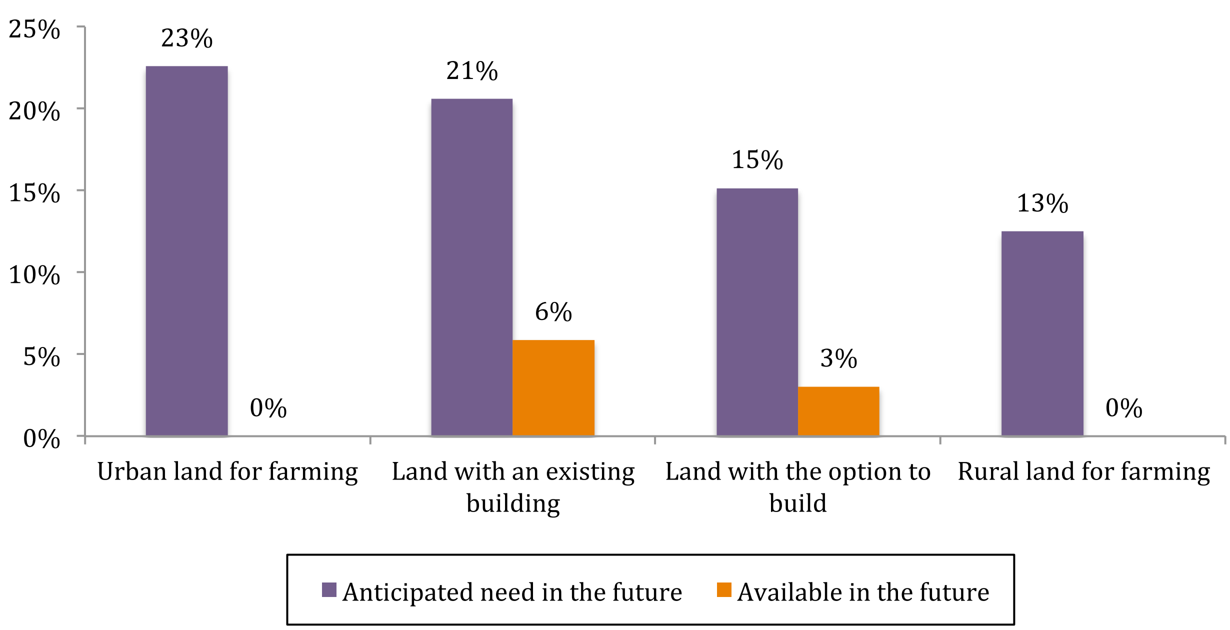


Figure 25. Expected Need for Land



Processing

There an overall need now and expected demand for all types of processing equipment and space. While there is some commercial kitchen space available now, the current and future needs outweigh available supply. Meat processing facility demand is currently outpacing supply, and these demands are expected to substantially increase in the near future. While there is less current demand for drying and pasteurization, there is expected to be much greater demand for both in the future. The need for processing equipment is expected to rise and could potentially be an opportunity for future investment for the community.

Figure 26. Current Need for Processing

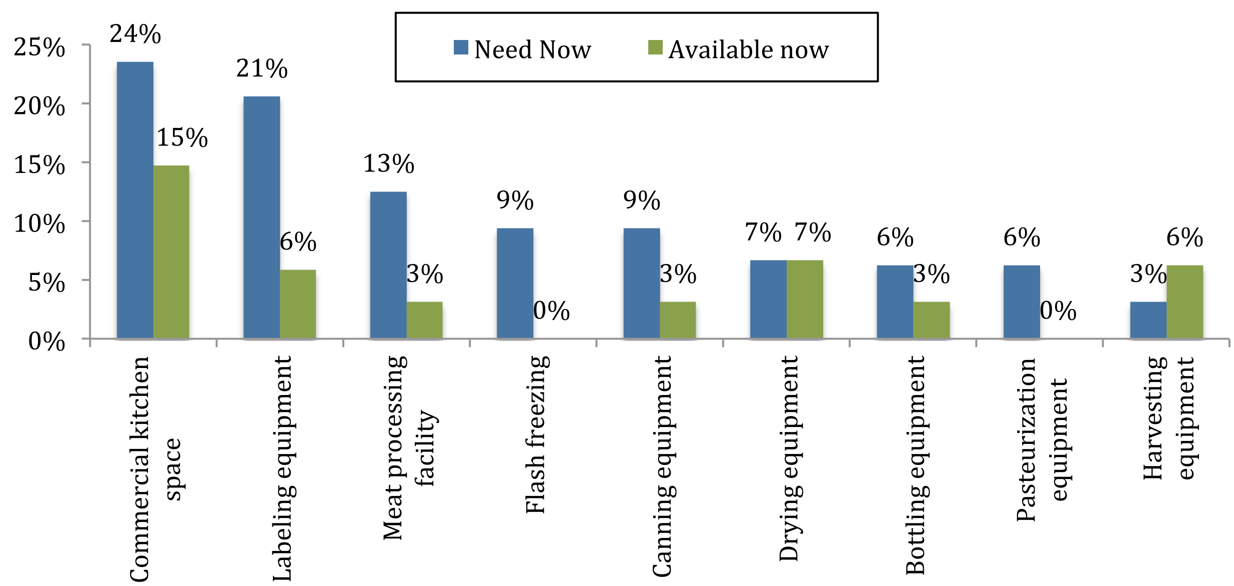
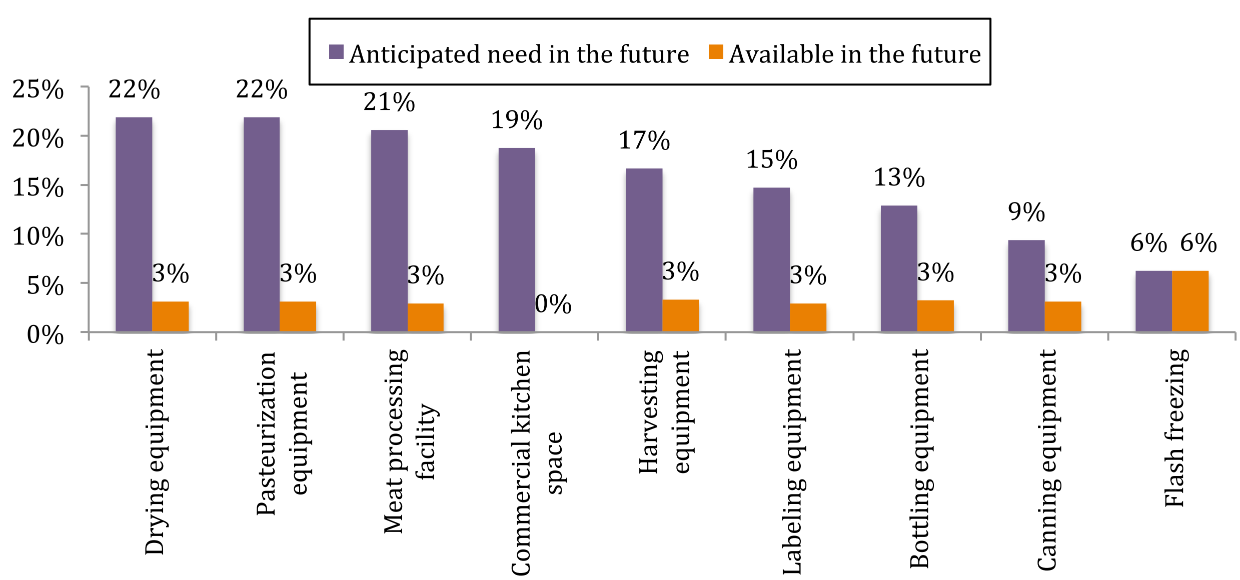


Figure 27. Expected Need for Processing



Storage

The current demand for storage can be met with currently available resources. There is a surplus of dry storage and chest freezers, and while the demand is expected to grow, the community may have enough resources to meet this need. There is a growing demand for long-term storage, short-term storage, and cold storage that will outpace current supply in the near future.

Figure 28. Current Need for Storage

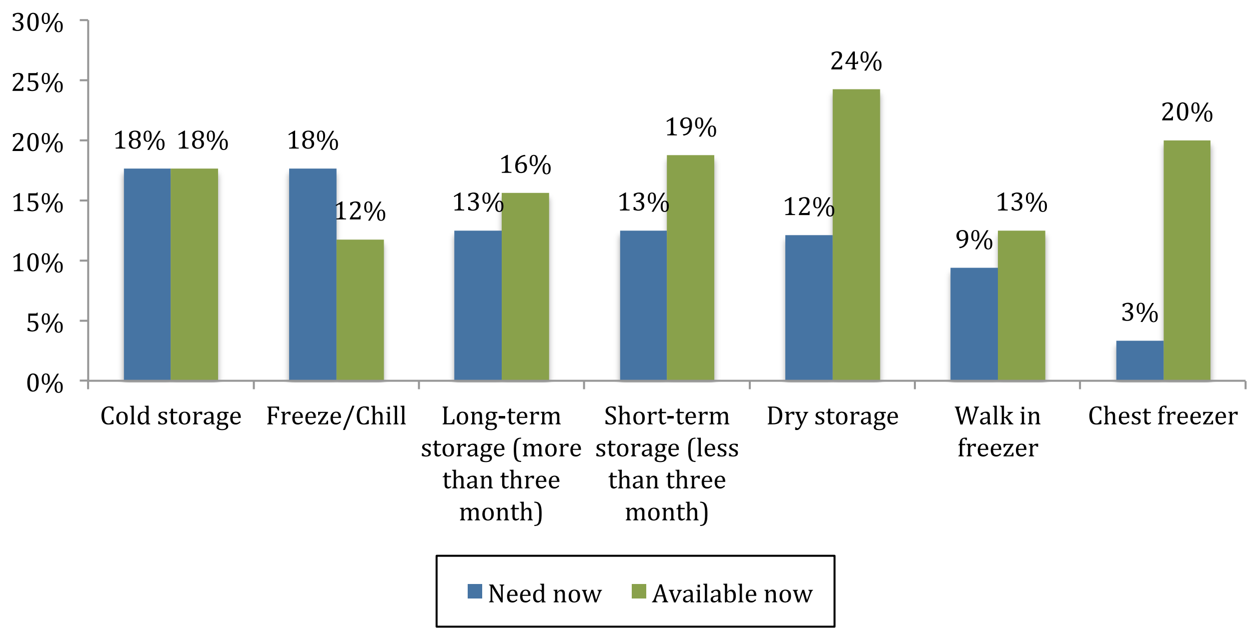
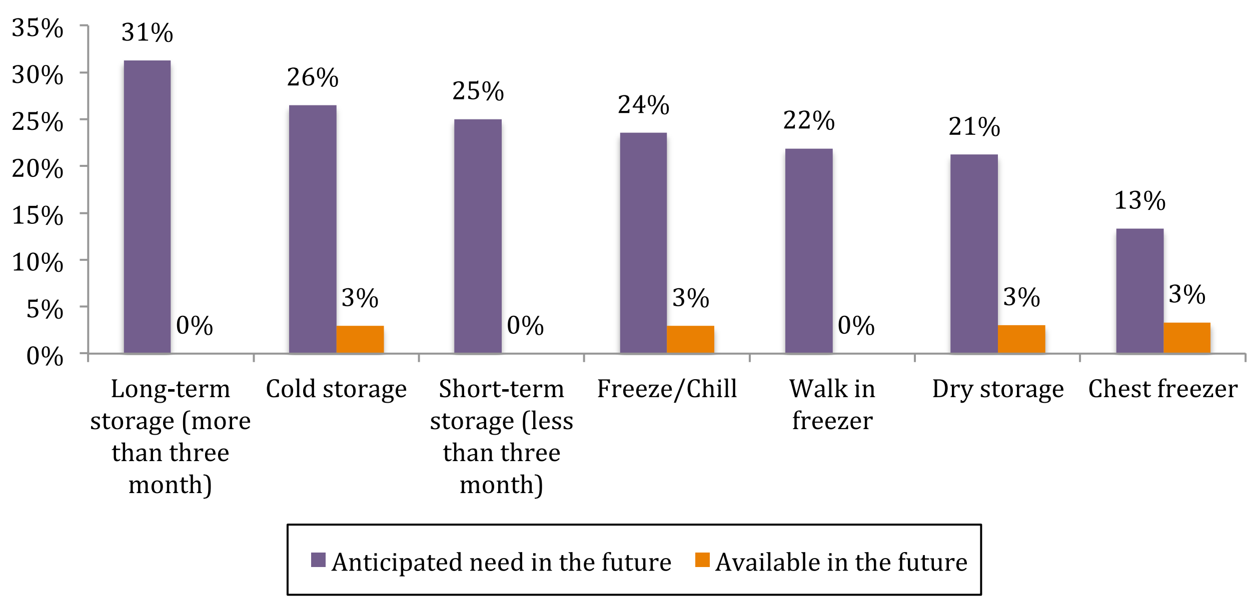


Figure 29. Expected Need for Storage



Transportation

There is a demand for both in-state and out-of-state distribution, with the need for both expected to rise in the future. While current supply is meeting demand in both logistics and box truck space, the demand for both is expected to increase as well.

Figure 30. Current Need for Transportation

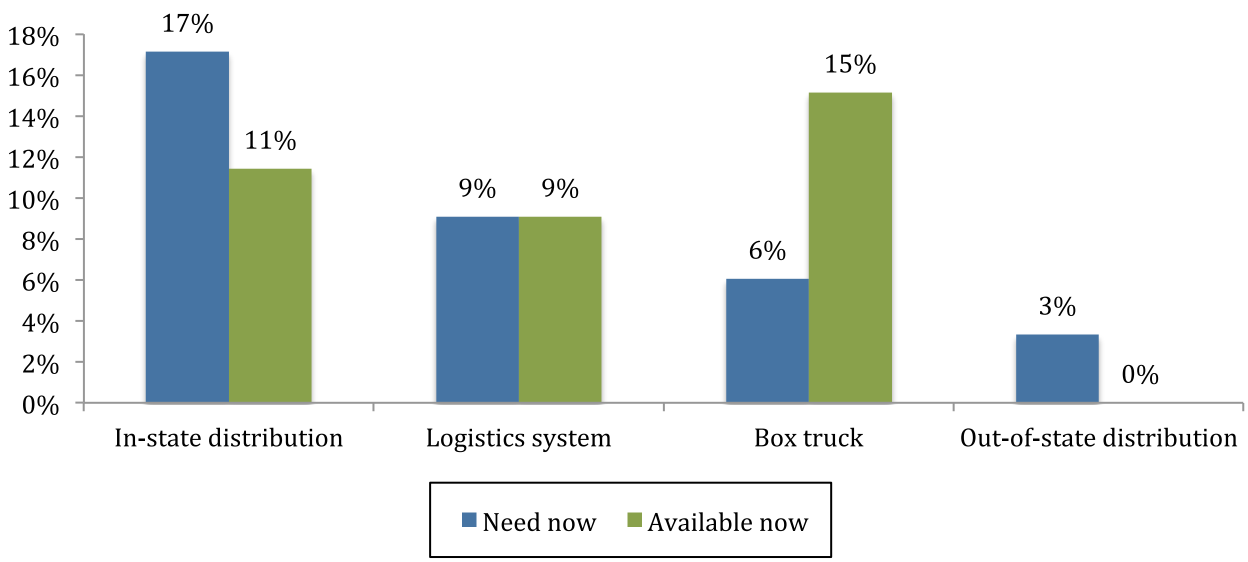
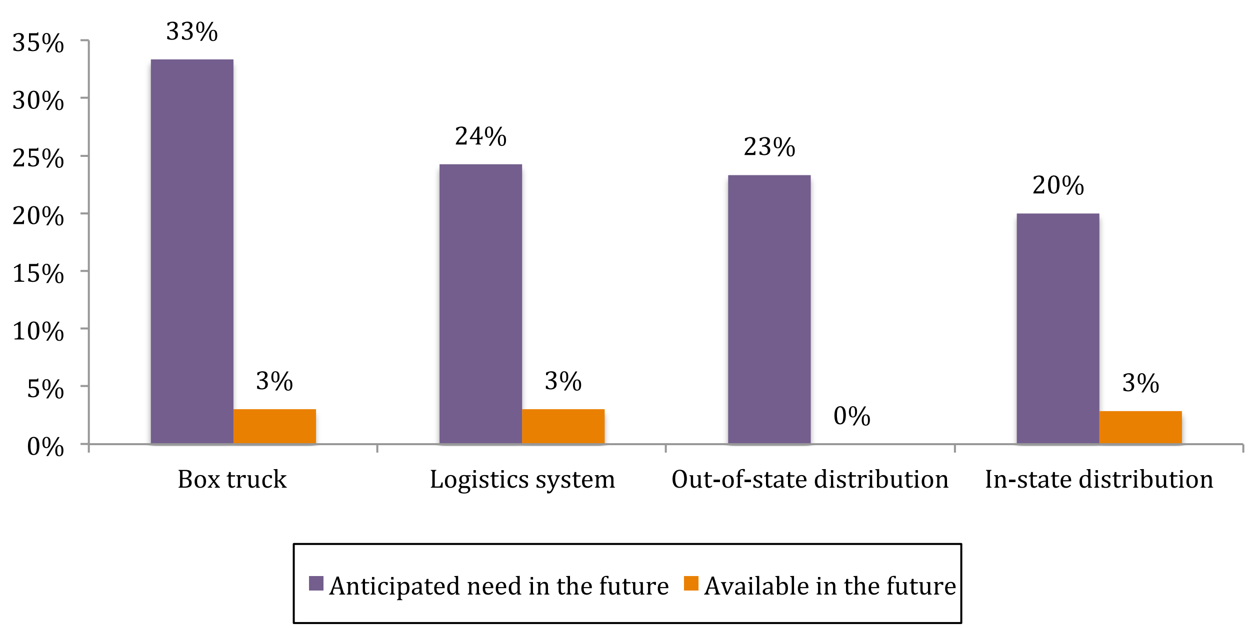


Figure 31. Expected Need for Transportation



Overall, while the demand is high for many of the services a potential food hub or alternative distribution model could provide, there are a number of resources currently available in our community that are going unused. The reasons for this vary; a limited ability to share available resources with the broader community is likely one of the main limitations, but the quality of the resource, price to use the resource, and location of the resource may also be deterrents.

Demand is expected to increase for most community resources and could present many opportunities for individuals and organizations hoping to start a food hub or alternative distribution model, or for those trying to tackle a specific area of need. Additionally, people that have available resources and that are hoping to rent or share them need to communicate this availability to the public.

Conclusion

A combination of business demand and increased production has resulted in notable levels of local produce purchases in Southcentral Alaska. Continued growth and demand are expected for local produce in the region. Businesses of all types and sizes are able and interested in buying more locally grown products, and most farmers have the ability and intention to increase their production. There is considerable room for growth in local foods consumption with a range of opportunities from expanding or taking over existing farms, starting alternative operations, or filling needs within processing and distribution. Throughout the system, a number of mutually beneficial opportunities exist in the local food sector in Southcentral Alaska.

Photo Credit: Stephen Nowers/alaskaphoto.net