











### Central Peninsula Agricultural Market Analysis

Authored by Melissa Heuer SPORK Consulting | April, 2017





















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#### **Executive Summary**

Now is the ideal time for local food expansion in the Central Peninsula. Businesses and organizations are interested in buying more local food; growers are interested in expanding their production and there are few barriers limiting this increased growth. Currently local Central Peninsula produce is only filling a sliver of the potential market. With demand from buyers high and the potential scalability of local farms, mutually beneficial opportunities exist.

According to the American Independent Business Alliance, every dollar spent on locally grown produce generates \$1.48 of economic impact, compared to the \$1.14 that is generated from products grown outside of the area. An increase in local purchases can result in substantial economic growth for the Central Peninsula. Kenai Peninsula residents could generate an additional \$1.1 million in the local economy by purchasing 10% of their produce from local growers. Additionally, if the 126 Central Peninsula small businesses that were identified as produce purchasers buy 15% of their produce locally, an additional \$165,000 economic impact is generated. While there is currently not enough supply from the Central Peninsula, larger grocery chains on the Central Peninsula could generate an additional \$340,000 in Alaska's economy by purchasing 5% of their produce from Alaskan farmers. When it comes to local produce in the Central Peninsula, small increases allow for sustained growth and financial benefit to the local economy.

#### **Farmer Interest**

In 2016, farm production increased from the prior year for 70% of participating farmers through a variety of improvements, including the total area farmed, new products being grown, and infrastructure changes to allow for a longer season through the addition of high tunnels and heated facilities. There is potential for exponential agricultural growth in the Central Peninsula, with more than 95% of participants indicating the ability to scale up their production and over 80% intending to increase their production levels in 2017.

#### **Buyer Interest**

All participating Central Peninsula buyers want to buy more local produce. If quantities become available, more than three-quarters of buyers indicated they would source more than 50% of their produce locally in the future. The majority of buyers are willing to pay more for local produce and there are no pre-existing loyalty agreements that would prevent any of the organizations from working with any number of local producers.

<sup>&</sup>lt;sup>1</sup> American Independent Business Alliance, 2017. The Multiplier Effect of Local Independent Businesses. https://www.amiba.net/resources/multiplier-effect/

<sup>&</sup>lt;sup>2</sup> Assumptions: Price per serving fruits and veggies \$0.50 (USDA, 2010); 3 servings of fruits/veggies consumed for average Alaskan (State of Alaska DHSS, 2013); 58,506 Kenai Peninsula population (US Census, 2016)

<sup>&</sup>lt;sup>3</sup> Based on annual average produce purchases of \$25,800 per organization.

<sup>&</sup>lt;sup>4</sup> Based on annual produce purchases of \$2 million in the Central Peninsula

#### **Promising Growth Potential**

The Central Peninsula is prime for local food growth. Businesses and organizations are seeking more local foods and have the flexibility and capacity to increase their local food purchases. Larger grocery chains and institutions are interested in purchasing local foods, but because of the requirements, the most promising sales avenues for small-scale producers are restaurants, small grocery stores, and smaller institutions.

#### **Potential Market**

Smaller, local, non-chain restaurants and institutions are the largest consumers of Central Peninsula produce. This is likely because they can work with a smaller produce quantity; they are more amenable to working with the seasonality of Central Peninsula produce and often have a more direct link with Central Peninsula growers. As small-scale farmers expand, the survey indicates that smaller local businesses have fewer barriers to market entry and are more likely to support local producers than larger businesses.

#### **Project History**

In the fall of 2016, the Kenai Soil and Water Conservation District (SWCD) contracted SPORK Consulting to conduct a market analysis based on the methodology used in the *Interior Alaska 2014 Market Study*, by the Alaska Cooperative Development Program. While the 2014 study was focused on the interest in forming a cooperative enterprise, the study methodology informed the direction of this study. This project was made possible by a Rural Business Development Grant from USDA Rural Development and was coordinated with a market study steering committee to ensure the needs of both farmer and purchaser insight and interests. The committee members include: Heidi Chay from Kenai Soil and Water Conservation District; Abraham England from Abundant Blessings Farm; Louise Heite from Eagle Glade Farm; Ben Shaw from Garden of Spices; Amy Seitz with the Alaska Farm Bureau and Lancashire Farms; and Megan Schaafsma with Odie's Deli and Honeywheat Catering.



Photo Credit: Alaska Dispatch



Photo Credit: Travel Alaska

#### **Background**

In recent years, interest in and demand for local foods in Alaska has increased substantially. This trend has been spurred by consumers' desire for supporting local communities, diversifying our state economy, having more nutritious and flavorful dining options, and in response to recent concerns around the lack of independent food security in the State of Alaska. According to a July 2014 report by the Alaska Food Policy Council and Ken Meter with Crossroads Resource Center, of the \$2 billion spent annually on food purchased in Alaska, 95% is spent on imported food.<sup>5</sup>

On the Kenai Peninsula, most of the current market farms grew out of the high tunnel boom that started in 2010. According to the most recent Census of Agriculture, the Kenai Peninsula outpaced the state as a whole in the rate of farm formation between 2007 and 2012. In that period, the number of Kenai Peninsula farms selling food direct to consumers more than doubled (27 to 56). Total farms increased 30% (124 to 162) while average farm size, including pasture, woodland and other uses, decreased by

42% (309 acres to 180 acres). Growth in the local food sector has continued since 2012 as evidenced by increasing high tunnel numbers and numerous experimental efforts to develop the production and marketing infrastructure necessary to expand local food production. The typical new farm business is small in size (1-5 acres) and headed by a farmer with less than five years of experience on their current farm.

#### **Kenai Soil and Water Conservation District**

Area homesteaders founded the Kenai Soil and Water Conservation District soon after Alaska statehood in 1959. Originally known as the Kenai-Kasilof Soil Conservation District, the District is a locally controlled, state-authorized entity with responsibilities delegated by the Alaska Department of Natural Resources Commissioner under Alaska Statute 41.10. A five-member volunteer Board of Supervisors elected from among the District's cooperators oversees District staff and establishes goals and projects to meet cooperators' needs. District sources of funding include private, state and federal grants, donations and fees-for-services.

<sup>&</sup>lt;sup>5</sup> Meter and Goldenberg, 2014. Building Food Security in Alaska. https://static1.squarespace.com/static/584221c6725e25d0d2a19363/t/58b47081e6f2e17fc47f4656/1488220290961/14-09-17\_building-food-security-in-ak\_exec-summary-recommendations.pdf

<sup>&</sup>lt;sup>6</sup> USDA, 2012. Census of Agriculture, Area Profile, Kenai Peninsula Area Alaska. https://www.agcensus.usda.gov/Publications/2012/Online\_Resources/County\_Profiles/Alaska/cp02122.pdf

Incorporating lessons learned from the 1930's Dust Bowl disaster, the initial focus of the soil and water conservation districts in Alaska was to promote environmentally responsible methods of farming to prevent soil erosion. Today, Alaska's 12 districts carry out projects not only to promote sustainable agriculture and conserve farmland, but also to protect wetlands and watersheds, promote forest health, fight the spread of invasive plants, and engage youth in learning about resource conservation. The SWCD contracted SPORK Consulting to conduct this survey in aims of meeting their goals to strengthen the local food system.

#### **Project Objectives**

This market analysis aims to provide an improved understanding of both farmer and wholesale customer needs and identify the current state of relationships between buyers and local producers, as well as the potential for growth and improvement. The intent of this study is to facilitate informed decision-making by farmers regarding key areas such as crop choice, expansion, marketing options, value-added production, and input and machinery purchases. It will aid in the development of processing, storage, and transportation infrastructure and the business framework necessary to manage such enterprises.

The ultimate goal is to enable farmers to be more profitable and to provide significantly improved access to local produce to Kenai



Photo Credit: Spenard Farmers Market

Peninsula consumers through the development of the Kenai Peninsula's agriculture production and consumption, with subsequent increases in food security and economic development. Through this study, producers will gain the knowledge they need to grow their businesses to meet local demand and increase their overall profits. The local community will have better access to local produce and will contribute financially to strengthening and maintaining local economies by spending resources on local businesses.

#### **Study Methodology**

The information in this study is derived from the best available information 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, Facebook advertising tools, postcard invites, and the Kenai and Soldotna Chamber of Commerce as well as direct phone calls. 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 be more likely to participate in this survey.

#### Local

The term "local" in this report refers to farms and organizations located within the Central Peninsula including the communities of Kenai, Nikiski, Soldotna, Sterling, Funny River, Kasilof, Clam Gulch and one producer from Anchor Point who sells most of his produce in the Central Peninsula. Although the Alaska Grown definition of local includes produce from throughout the state of Alaska, the focus of this study is the Central Peninsula.

#### Agricultural Scope

The aims of this study were solely focused on produce, which includes vegetables, fruits, and herbs. There are a number of farmers on the Central Peninsula growing flowers, shellfish, and livestock who were intentionally excluded from this study.

#### **Producer Survey**

This survey focused on produce farmers based within the Central Peninsula, with the exception of one producer in Anchor Point. Producer data was gathered over the phone and digitally collected using Survey Monkey during November and December, 2016. The Alaska Grown Online Source book lists over 62 farms in the Kenai Peninsula, however only 23 of these are vegetable producers within the study region. Email invitations were sent to 44 known producers. 26 producers took the survey, and 23 producers completed the survey fully. See Appendix A for the Producer Survey template.

#### **Buyer Survey**

A buyer list was developed of businesses listed with the Kenai and Soldotna Chamber of Commerce, the Kenai Peninsula Tourism Marketing Council, and word-of-mouth. Buyer data was gathered over the phone and digitally collected using Survey Monkey in November and December, 2016. Postcard invitations were sent to 128 food purchasers including restaurants, seasonal lodges, bed and breakfasts, grocery retailers, distributors and institutions. 27 organizations participated in the study. See Appendix B for the Buyer Survey template.



Photo Credit: Melissa Heuer

<sup>&</sup>lt;sup>7</sup> USDA, 2016. Alaska Department of Natural Resources, Division of Agriculture, Alaska Grown Source Book 2016-2017 Edition, Kenai Peninsula Alaska Farms, http://dnr.alaska.gov/ag/sourcebook/KNindex2016.html

Figure 1. Map of the Kenai Peninsula, Alaska

#### The Kenai Peninsula

The Central Peninsula is experiencing steady growth with an estimated population of 59.000.8 Residents of the Central Peninsula 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. 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 own garden.

**Table 1: Farmer Participant Distribution** 

Farm Location	# Interviewed
Anchor Point	1
Kasilof	4
Kenai	10
Soldotna	7
Sterling	4
<b>Total Participants</b>	26

#### **Central Peninsula Producers**

Twenty-six farmers from Kasilof, Kenai, Soldotna, Sterling, and Anchor Point participated in the study. While the Anchor Point participant was outside of the original study boundary, their results were included because of their almost exclusive sale and distribution in the Central Peninsula.

http://dhss.alaska.gov/dph/Chronic/Documents/Obesity/pubs/factsheet LocalFoods.pdf

<sup>&</sup>lt;sup>8</sup> United States Census Bureau, Quick Facts, Kenai Peninsula Borough, Alaska, https://www.census.gov/quickfacts/table/PST045215/02122

<sup>&</sup>lt;sup>9</sup> DHSS, 2013. Alaska Department of Health and Social Services Obesity Prevention and Control Program, Alaska Obesity Facts: Local Foods,

Figure 2. Size of Farm in Acres

#### Farm Size

Of the participating farms, approximately 70% had access to five acres or less of farmland.

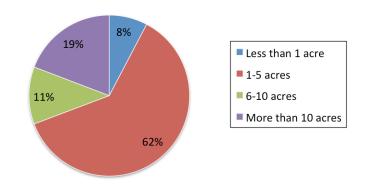
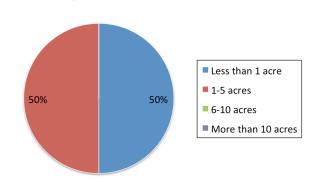


Figure 3. Number of Acres in Production

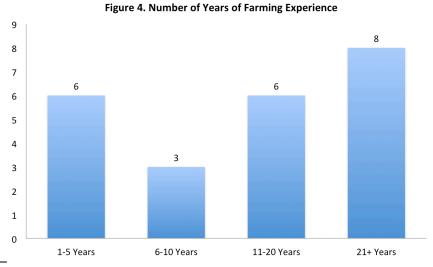


#### **Acres of Production**

All of the participating farmers are actively farming fewer than five acres while half of the participants were actively farming on less than 1 acre. This is significantly smaller than the national average of 434 acres <sup>10</sup> and highlights the importance for smaller, direct to market sales in the Central Peninsula region.

#### Central Peninsula Farmers

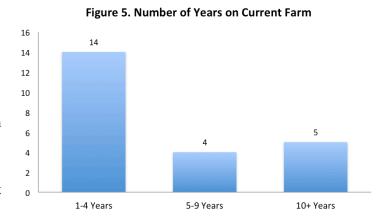
Generally, Central Peninsula farmers have experience farming, with more than 70% having been farming for six or more years and 60% having more than 11 years of farming experience.



<sup>&</sup>lt;sup>10</sup> USDA, 2012. Average Size of Farms in Acres: 2012. https://www.agcensus.usda.gov/Publications/2012/Online\_Resources/Ag\_Atlas\_Maps/Farms/Size/12-M003-RGBChorlargetext.pdf

In contrast, the number of years farmers have been working on their current farm is lower than their total farming experience. This highlights the expansion in number of farms in the Central Peninsula region.

The majority of farmers, 65%, have been farming on their farm for less than five years while 30% have been farming their current land for less than two years. Slightly over 20% of farmers have been farming their current land for ten years or more, with the remaining having 5-9 years of



experience on their farms. More than half of current farmers are working another job outside of farming, with the expressed hope that many would be able to become full time farmers in the near future.

#### **Sales Avenues**

#### **Business to Business**

Overall, the majority (65%) of participants felt that supplying local food to local businesses was extremely important, while about a quarter of the participants were indiscriminant about where they sold their produce and did not feel it was important to sell their produce to local businesses. Just over 20% of local farmers are marketing their products outside of the Central Peninsula to other Alaska communities, including Seward and Anchorage.

#### Kenai Peninsula Food Hub

Fewer than a quarter of growers are selling through the Kenai Peninsula Food Hub, an online farmers market launched in early 2016. Only 17% of growers are choosing this route, and the reasons varied from a perceived lack of suppy and variety within their own production, a lack of knowledge that the food hub was an option, and a lack of need for additional sales avenues. Some participants indicated an intent to begin using the food hub in 2017, and those that were using it found it to be "a very convenient way to sell efficiently to indviduals." Generally, growers did not see this as a viable way to reach wholesale customers. Participants reported that they most commonly sold mushrooms, greens, herbs, garlic, peppers, cucumbers, green beans, and squash through the food hub.

The Kenai Peninsula Food Hub reported \$3,820 of produce sales in the Central Peninsula Region in 2016, with carrots, green cabbage, mixed greens, tomatoes and bunching onions amongst the highest sellers yielding the greatest revenue. White onions, Yukon Gold potatoes, tomatoes, green cabbage, salad greens, cilantro, orange carrots, spicy salad mix, and arugula were identified in the top ten most popular items by volume. Every week, the hub sold out of carrots, broccoli, cucumbers, spinach, peppers, radishes and white turnips, and frequently ran out of sugar snap

<sup>11</sup> Kenai Peninsula Food Hub, 2016. Kenai Peninsula Food Hub: Pilot Project, One-Year Review Community Meeting.

peas, cherry tomatoes, white cauliflower, cilantro, celery, mushrooms, and salad greens. The Kenai Peninsula Food Hub continues to grow and can be a low barrier way to sell to consumers.

#### Farmers' Markets

Slightly under half of all growers sell at one or more of the Central Peninsula farmers' markets with the Soldotna Saturday Market and the Farmer's Fresh Market being the most common markets and the Kenai Saturday Market being the least used market. Many of the participants indicated that they had sold at farmers' markets in past but were now selling directly from their farms or directly to businesses. One of the greatest reasons for not participating in farmers' markets is the time commitment, which detracts from working directly on the farm while sitting through intermittent crowds and experiencing variable sales.

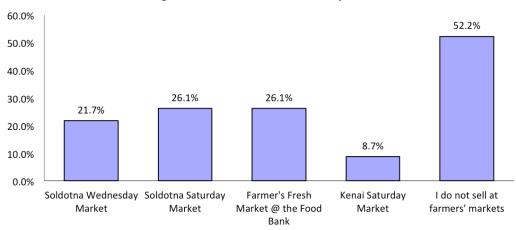


Figure 6. Farmers' Market Participation

#### **Farmer Challenges**

The Central Peninsula is comprised of small-scale farmers, many of whom work secondary non-farming jobs. While few farmers indicated a problem selling all of their produce, they indicated that lack of quantity, lack of demand, and working with buyers are their greatest challenges. Time management was a challenge for part time farmers (balancing demands of other employment with farming) and full time farmers (managing all aspects of planting, harvesting, selling, etc.). Lack of winter storage was an additional challenge. While many people did indicate that it was an

Photo Credit: Alaska Public Media

produce to buyers, only one farmer indicated that delivery was an issue. These results highlight the need for better communication between growers and purchasers and an opportunity to aid farmers and purchasers in identifying the markets and time lines for product demand.

inconvenience or a challenge to work with and get

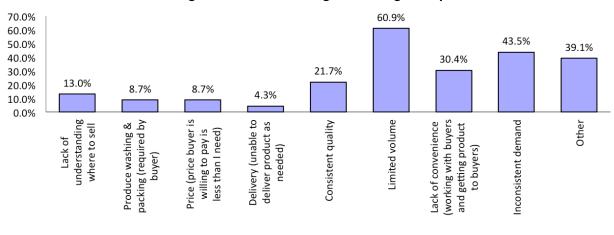


Figure 7. Farmer Challenges to Selling Locally

#### **Farmer Solutions**

Farmers indicated a number of solutions that could help alleviate some of the challenges that accompany farming. Farmers focused on areas that help them identify and communicate with potential purchasers. Two of the most helpful tools were a website for farmers to post their expected harvest (see Appendix C for possible platforms) and continued open houses to connect farmers and buyers. Increased coordination and pre-planning with buyers directly were indicated as some of the most helpful tools.

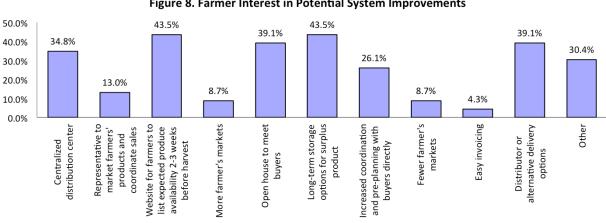


Figure 8. Farmer Interest in Potential System Improvements

Farmers also indicated long-term storage options would allow them to produce and sell more in the winter. In addition to farmer delivery and a centralized distribution center, farmers indicated a need for a local distributor or alternative delivery option. During the survey period, a number of local residents and the Kenai Peninsula Food Hub discussed their mutual interest in starting a local distribution business in the Central Peninsula. Based on conversations and data from this survey, part of the distribution center need could be met by educating people about the existence, role, and availability of the Kenai Peninsula Food Hub.

#### What are Farmers Doing with Their Product?

Based on survey results, 60% of the total produce grown by surveyed farmers was sold. However, not all participating farmers were growing food for sale. Of the farmers that were trying to sell their food, 40% sold more than 90% of their crops while 20% of farmers kept 50% or more of their crops for personal use. Almost one-third of total produce grown was for personal use, animal fodder, or for bartering. With the exception of one farm who composted 80% of their crop, the majority of farmers had less than 10% waste and most indicated 0-5% surplus or unused crop.

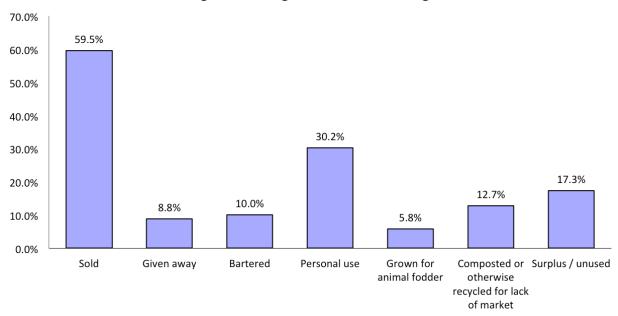


Figure 9. Average Farmer Produce Usage

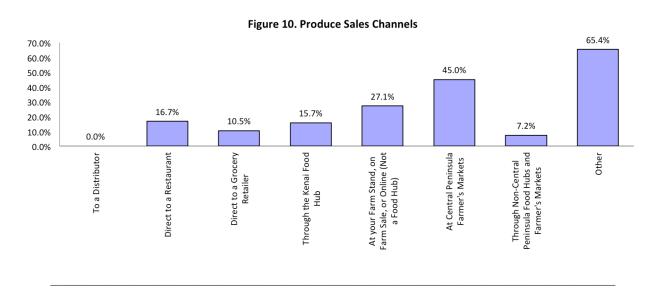
As these are small-scale farms, it seems reasonable that some of the produce would be grown for personal consumption. As these farms expand and their markets increase, we can expect to see the total percent of overall sales increase and personal use decrease as a percentage of the entire crop. While none of the farmers we surveyed are using a distributor, two of the farmers are growing for their personal restaurants with 100% of their food going directly to their business, but not necessarily being identified as "sold".

#### **Crop Cycles and Planning**

Farmers plan their crops up to 36 months in advance, though on average they plan about eight months in advance. Farmers purchase the majority of their seeds for the following season in the fall and spring with some hoop house and green house growers buying seeds and planting year round. Less than 15% of farmers take into account buyers' schedules when planning, noting that many of them grow what they think will sell and then find a market for it once it has been harvested. Many farmers indicated concern about growing for a specific buyer without non-reimbursable payment upfront in fear they may be left with a crop that the buyer has changed their mind about and that they can no longer sell. Buyers have been hesitant to pre-purchase a crop for fear that the product may not be the quality they need nor the quantity they are expecting.

#### **Farmer Sales**

Central Peninsula farmers' markets were the most common way that farmers sold their produce, followed by on-farm sales. While some farmers sold exclusively at markets or on their farms, most sold in a variety of places focusing their time on one avenue, but also have a secondary or tertiary option. Farmers who did not sell produce were placed in the "other" category as well as farmers who were growing explicitly for their own restaurants or businesses.



#### Connecting with a Farmer

The majority of farmers, 78%, preferred to be reached by phone, followed closely at 65% who preferred email. Contacting farmers through their Facebook sites, visiting them at the farm and speaking with them at farmers' markets were all acceptable ways to contact them as well. Farmers did indicate that they check email and Facebook less reliably outside of the growing season. Farmers showed a slight preference to be contacted in the fall to work out details for the following season, but generally they could be contacted any day of the week or time of the year.

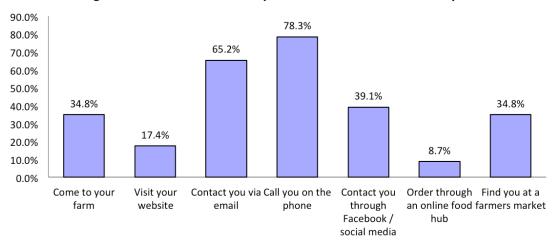
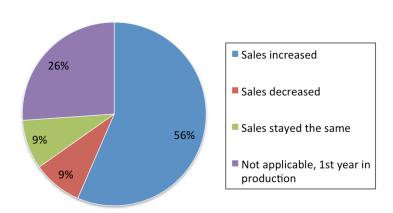


Figure 11. What is the best way for a local business to contact you?

### Sales Growth and Potential

The Central Peninsula farmer population is growing, as is overall production. Sales from 2016 compared to 2015 increased for more than 50% of farmers, with some farmers indicating that their sales increase every year and others reporting that their sales double every year. Over 25% of farmers were farming for commercial use for the first time in 2016 and had

Figure 12. 2016 Sales vs. 2015 Sales

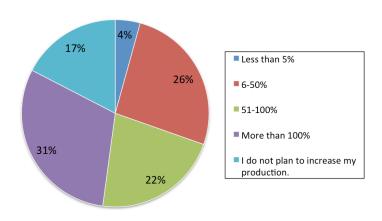


nothing to compare sales to, while only 2 farmers saw an overall decrease in sales on the previous year.

In 2016, farm production increased for 70% of participating farmers through a variety of improvements, including the total area farmed, new products being grown, and infrastructure changes to allow for a longer season through the addition of high tunnels and heated facilities. There is potential for exponential agricultural growth in the Central Peninsula, with more than 95% of participants indicating the ability to scale up their production and over 80% intending to increase their production levels in 2017.

More than 65% of farmers are planning to expand their production area by opening up new land to farming during the 2017 season. Farmers are also expecting to extend their growing seasons by adding additional high tunnels and introducing new crops. Some farmers are focusing on "planting more wisely" by focusing on quality over quantity while more than 25% will be focused on more intensive growing

Figure 13. Five Year Expected Production Growth



techniques to increase their overall yields. More than half of the growers indicated that they would like to see their overall production increase by 50% or more of their current production levels over the next five years.

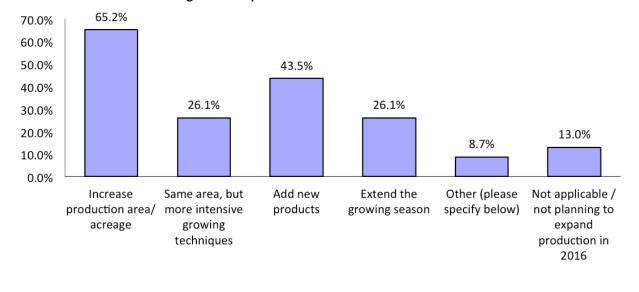


Figure 14. Expected Increase in Production in 2017

#### **Product Growth**

Central Peninsula growers are producing a wide range of products. With the addition of high tunnels and heated green houses, the variety of produce goes far beyond the traditional limitations of Alaskan agriculture. When farmers were asked what the top five, high-volume items they were most interested in selling, the response was quite varied. Tomatoes, fruit, strawberries, cucumbers, and beets rated the most highly. The growers' preferences for low-quantity, specialty crop items are also highly diverse, with farmers most interested in growing herbs, fruits, garlic, onions, and brussel sprouts. There is also some interest from farmers in expanding to other locally grown and value-added products outside of produce.



Photo Credit: Redoubt Reporter

**Table 2: Buyer Participant Distribution** 

Twenty-seven local buyers and five chain retailers and
distributors from the Central Peninsula participated in
this survey. The organizations who responded are
based in Soldotna, Kenai, Cooper Landing, Sterling,
Kasilof, Homer, and Ninilchik and represented a
number of regional produce purchasers.

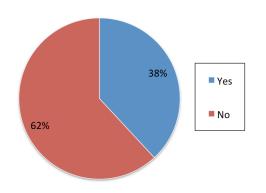
Central Peninsula Buvers

Over 70% of the businesses that participated have been in business for five or more years, while fewer than 10% had been in business for less than two years. However, the majority of representatives that answered the survey had been making purchasing decisions for their organization for five years or less.

<b>Business Location</b>	# Interviewed
Bed and Breakfast	2
Catering Company	1
Grocery Retailer; Independent	1
Grocery Retailer; Chain	1
Institution; Rehabilitation Center	2
Institution; Senior Center	3
Institution; Other	2
Lodge	3
Restaurant; Casual Dining	2
Restaurant; Cafe	1
Restaurant; Fine Dining	3
Restaurant; Food Truck	2
Restaurant; Seasonal	2
Other	2

#### **Local Purchasing**

Figure 15. Does your business currently buy produce from Central Peninsula Growers? (Not including food hubs or farmers' markets.)



Slightly more than one-third of organizations stated that they purchased from Central Peninsula growers, however, many indicated that they bought from local chain grocery stores and distributors. These local chain outlets do not carry Central Peninsula produce. The amount of local produce bought is likely overestimated by purchasers who are buying produce with the Alaskan Grown label assuming that the produce is coming from their surrounding communities.

#### **Source of Local Food Purchases**

Very few businesses are purchasing from the Kenai Peninsula Food Hub, while slightly more than 40% are buying from local farmers' markets. The most popular markets for produce buyers are the Soldotna Wednesday and Saturday market and the Farmer's Fresh Market at the Food Bank, which is similar to usage reported by producers. Except for one organization, neither farmers nor purchasers indicated using the Kenai Saturday Market on a regular basis. With the exception of fresh greens, businesses are purchasing produce at markets based on what is available and looks fresh, rather than going to the market with specific needs in mind.

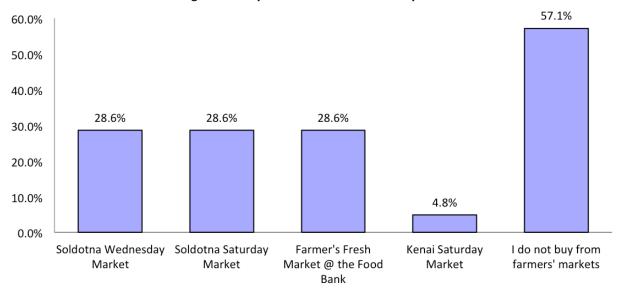


Figure 16. Buyer Farmers' Market Participation

At most, 30% of Central Peninsula businesses receive local produce from distributors or large grocery retailers, and that estimate may be high. As with purchasing local food directly, many businesses may be assuming that the "Alaskan Grown" label translates to "grown in the Central Peninsula" rather than in other parts of Alaska and are likely overestimating their purchases. It is likely more accurate that approximately 30% of businesses are receiving Alaskan Grown produce from their distributors.

#### **Local Businesses**

In 2016, excluding large grocery chains and distributors, Central Peninsula businesses participating in this survey spent a total of \$464,000 on produce, with an average of \$25,800 a year per business. This figure fluctuates depending on the business size, with smaller businesses spending less than \$1,000 a year and many of the larger businesses spending more than \$100,000 a year.



Photo Credit: The Alaska State Fair



Photo Credit: Redoubt Reporter

The majority of this produce is imported to Alaska. Most Central Peninsula businesses are using between 5-15% Alaskan Grown produce, which is substantially higher than the state average. This result could be due to the business demographic that participated in this survey or it could be due to a higher rate of local food consumption on the Central Peninsula.

Approximately 3% of all produce comes from Central Peninsula growers. These growers supply a large quantity to a small group of restaurants and businesses. Overall, smaller, local, non-chain restaurants and institutions are using more Central Peninsula produce. This is likely because they can work with a smaller produce quantity; they are more amenable to working with the seasonality of Central Peninsula produce and often have a more direct link with Central Peninsula growers. As small-scale farmers grow and expand, the survey indicates that smaller, local businesses have fewer barriers to entry, and are more likely to support local producers than larger businesses.

Organization leadership, rather than perceived consumer wants are driving the demand for local food. Businesses rated the importance of using locally grown produce as extremely important to their companies, giving an average rating of 8.0 out of a 1 to 10 scale. This is an encouraging, business-led direction, since businesses perceived providing local food to be less important to their customers, which received an average score of 5.9 on a 1 to 10 scale of importance.

#### **Buyer Challenges**

All buyers, including those who are currently buying local produce as well as those that are not, were asked what their current barriers were to buying local and what would make the process easier for buying local produce in the future.

Buyers indicated a number of challenges to purchasing locally. Lack of year round availability and the price for local produce were listed as the greatest challenges as was lack of reliable quantity.

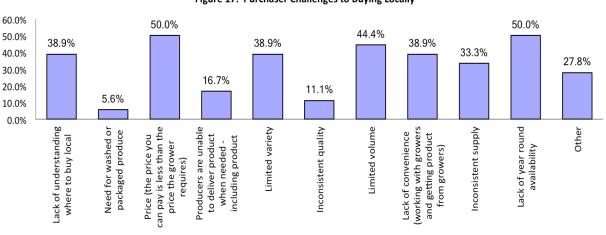


Figure 17: Purchaser Challenges to Buying Locally

Even with additions such as high tunnels and hoop houses, the growing season for produce in Alaska is limited. <sup>12</sup> Other challenges were closely aligned with grower concerns: there is an obvious lack of understanding about where to get produce locally and the current systems that are in place for working with local growers are inconvenient. Other issues buyers are dealing with include limited variety of available produce and inconsistent supply to meet their needs.

Figure 18. Seasonal Produce Availability

Seasonal Produce Availability

#### JUN DEC OCT **FEB** Beans \* \* Beets **Brussels Sprouts** Cabbage Carrots Cauliflower Celery Chard **Collard Greens** Cucumbers Kale Leeks Lettuce Onions Peas Potatoes **Pumpkins** Radishes Raspberries Rhubarb

\*Produce available between November and April is from storage

Central Peninsula Market Analysis

Spinach Strawberries Tomatoes Turnips Winter Squash Zucchini

<sup>&</sup>lt;sup>12</sup> DNR 2014. Alaska Department of Natural Resources, Seasonal Produce Availability. http://dnr.alaska.gov/ag/sourcebook/2014SBimages/Seasonalproduce.pdf

#### **Buyer Solutions**

Buyers felt a number of solutions could help alleviate some of these issues, including more affordable prices and a centralized distribution center as well as consistent quality and supply from farmers. Increased coordination and pre-planning with farmers as well as a website where farmers could list available produce a few weeks in advance was also thought to be helpful. Long-term storage options and farmer-led distribution choices were also seen as potential valuable solutions. In general, people did not see the need for a farmers' market representative to market farmers' produce. The demand from buyers exists, but they have a difficult time reliably connecting to a local produce supply.

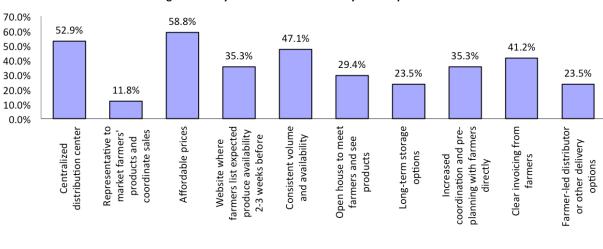


Figure 19. Buyer Interest in Potential System Improvements

#### **Produce Planning**

Working with restaurants could be a good starting point for smaller growers to expand outside of on-farm sales or farmers' markets. One benefit of working with restaurants and smaller institutions is their flexibility around menu planning and their ability to highlight premium local produce in their menus and in-store specials.

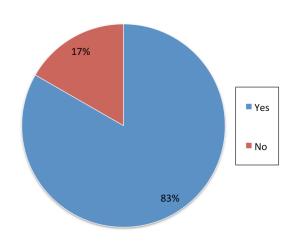


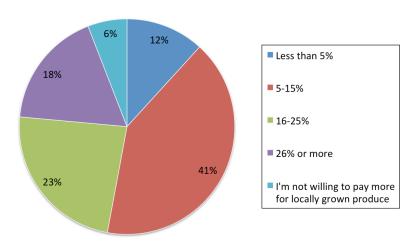
Figure 20. Buyer Ability to Scale up Local Food Purchases

On the Central Peninsula, twothirds of produce buyers plan their purchases on a weekly basis, while one-third plan their purchases daily. Very few buyers indicated that they plan their purchases on a monthly or vearly schedule. However. buyers indicated that they could communicate with farmers about their needs for the following growing season during the winter and spring. Additionally, more than 80% of buyers indicated that they could adjust their purchases throughout the year to carry more local, seasonal produce.

Buyers equally valued freshness and durability in their purchases and were more likely to buy locally if they knew that the produce was harvested in the last 48 hours. When choosing a vendor, buyers favored reliability over all else, but also valued produce selection and a relationship with their farmers.

For the farmer trying to connect with a buyer, direct communication from the farmer was overwhelmingly the first choice from buyers. Buyers prefer to be contacted on the phone, through email, or by stopping at their business. Listing their items on an online platform was also a popular choice. None of the buyers indicated that they would visit a farmers' website or that any of the farmers should wait for a buyer to approach them. Spring is the best time to approach a buyer, with the rest of the year being acceptable. Weekday contact is preferable to weekends. More than two-thirds of buyers have the ability to scale-up their local purchases immediately.





All of the buyers surveyed want to buy more local produce: if quantities were available more than three-quarters of the buyers indicated that they would like to see more than 50% of their produce supplied locally in the future. The majority of buyers are willing to pay more for local produce. Nearly half of the buyers are willing to pay a premium of 15% or more for local produce and there are no pre-existing loyalty agreements that would prevent any of the organizations from working directly with local producers.

#### **Buyer Produce Preference**

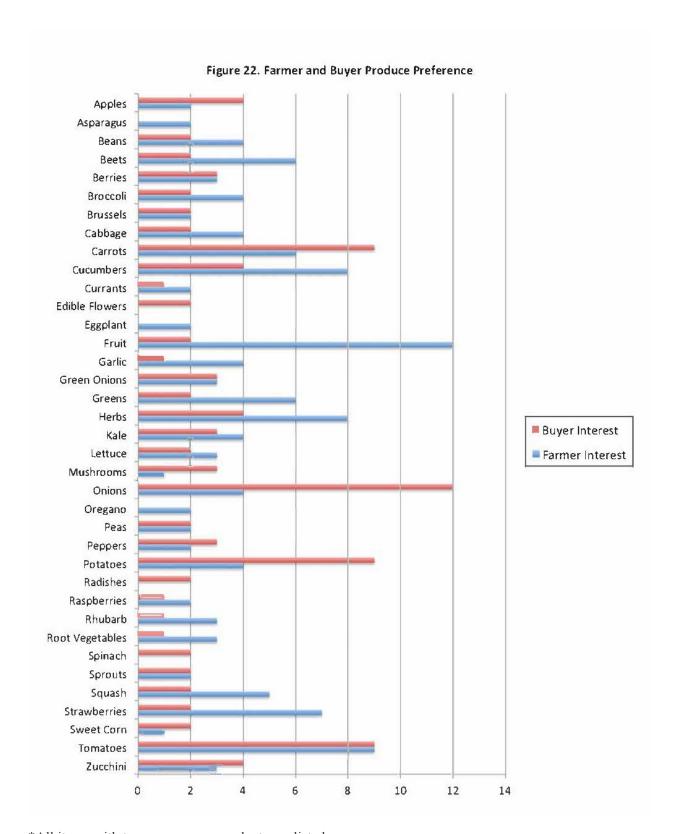
Buyers are looking for a range of produce. The most in-demand, high quantity items are lettuce, tomatoes, onions, carrots, and potatoes. The most in-demand low-volume, specialty items are onions, herbs, mushrooms, cucumbers, and radishes. (see Figure 22. Farmer and Buyer Produce Preference)

While this study focused on Central Peninsula produce, buyers indicated interest in purchasing other types of locally grown products. Buyers are especially interested in beef, chicken and eggs. The majority of the buyers are interested in or are currently

buying value-added products, which are products that have been enhanced, through some form of processing.



Photo Credit: Laurie Constantino



<sup>\*</sup>All items with two or more respondents are listed.

#### **Chain Grocery Retailers and Distributors**

The larger chain grocery stores and distributors including Sysco, Fred Meyer, Safeway, and Three Bears are selling well over a combined \$20 million in produce annually. At most, 2% of their produce is Alaskan Grown and none of their produce is coming from the Central Peninsula. The produce they are carrying are potatoes and carrots from VanderWeele Farm in Palmer and tomatoes and cucumbers from Bell's Nursery in Anchorage.

Larger chains are looking for more specialty items that don't ship well from the lower-48, including berries, herbs, mushrooms and tomatoes. They are also interested in larger quantities of 3lb bag yellow potatoes, 5lb bag red potatoes, 5lb bag Yukon Gold potatoes, 10lb bag Yukon Gold potatoes, 5lb bag carrots and 2lb bag carrots, as well as broccoli, head lettuce, green lettuce, red leaf, romaine, green cabbage, red cabbage, cucumbers and hot house tomatoes.

When working with a distributor, generally the more a large company buys the less they pay. When calculating prices, there is usually a 15-25% mark-up in the final retail price: this market information can be used by local farmers to competitively price their produce to buyers from all sizes of organizations. All of the stores and distributors would like to carry more Central Peninsula and Alaskan Grown produce, but understand that there are barriers to entry for growers. Growers need to go through the stores' main offices and depending on the business, farmers will need to carry at least \$1 million dollars of liability insurance and many require some form of an audit. Farmers who are interested in selling to large chain retailers or distributors should contact the stores' main office directly to learn what the specific requirements are for each organization. In Alaska, USDA GAP audits can be conducted through the Division of Agriculture Palmer office by Doug Warner. <sup>13</sup>

#### **Conclusion**

Now is the ideal time for local food expansion in the Central Peninsula. Businesses and organizations are interested in buying more local food; growers are interested in expanding their production and there are few barriers limiting this increased growth. Currently local Central Peninsula produce is only filling a sliver of the potential market. With demand from buyers high and the potential scalability of local farms, mutually beneficial opportunities exist.



Photo Credit: Melissa Heuer

<sup>&</sup>lt;sup>13</sup> USDA, 2017. United States Department of Agriculture, Agriculture Marketing Service. How to Request a GAP and GHP Audit. https://www.ams.usda.gov/services/how-request-gap-and-ghp-audit

## Appendix A Producer Survey



LOCAL - For the purposes of this survey, "local" is defined to include the communities within the Central Peninsula, including Nikiski, Kenai, Soldotna, Sterling, Funny River, Kasilof and Clam Gulch.

PRODUCE ONLY - For the purposes of this study, we are only quantifying produce. "Produce" includes vegetables, fruits, and herbs. Please do not include other locally produced items in your response.

*(1)	Contact Information	
	Your Name	
	Business Name	
	Address	
	Address 2 (optional)	
	City/Town	
	ZIP/Postal Code	
	Email Address	
	Phone Number	
*(2)	In acres, what is the size of your farm ?  Comments	
*(3)	How many acres are in production?  Comments	



LOCAL - For the purposes of this survey, "local" is defined to include the communities within the Central Peninsula, including Nikiski, Kenai, Soldotna, Sterling, Funny River, Kasilof and Clam Gulch.

PRODUCE ONLY - For the purposes of this study, we are only quantifying produce. "Produce" includes vegetables, fruits, and herbs. Please do not include other locally produced items in your response.

4	(For example, restaurants, grocery stores, and seasonal lodges. This does not include sales through food hubs or farmer's markets.)
	include sales through food hubs or farmer's markets.)
	Yes
	○ No
	Comments
* 5	Do you sell produce through the Kenai Peninsula Food Hub? If so what products?
	Yes
	○ No
	Products sold and additional comments:

1 - Not at all Important					10 = EX	tremely i	mportan	t)	
	2	3	4	5	6	7	8	9	10 - Extremely Important
5	<u>~</u>	\$	$\stackrel{\bullet}{\sim}$	$\stackrel{\circ}{\sim}$	\$	\$	\$	\$	A S
No									
Where are you	u market	ting your p	roduce outs	side of the (	Central Per	insula?			

*(9) What are your biggest challenges to selling your products locally?
Please select (up to) your 5 greatest challenges.
Lack of understanding where to sell
Produce washing & packing (required by buyer)
Price (price buyer is willing to pay is less than I need)
Delivery (unable to deliver product as needed)
Consistent quality
Limited volume
Lack of convenience (working with buyers and getting product to buyers)
Inconsistent demand
Other (please specify)
*(10) What would make it easier for you to sell your product locally?
Please select (up to) your top 5 choices.
Centralized distribution center
Representative to market farmers' products and coordinate sales
Website for farmers to list expected produce availability 2-3 weeks before harvest
More farmer's markets
Open house to meet buyers
Long-term storage options for surplus product
Increased coordination and pre-planning with buyers directly
Fewer farmer's markets
Easy invoicing
Distributor or alternative delivery options
Other (please specify)



LOCAL - For the purposes of this survey, "local" is defined to include the communities within the Central Peninsula, including Nikiski, Kenai, Soldotna, Sterling, Funny River, Kasilof and Clam Gulch.

PRODUCE ONLY - For the purposes of this study, we are only quantifying produce. "Produce" includes vegetables, fruits, and herbs. Please do not include other locally produced items in your response.

In 2016, approximately what percentage of your farm produce did you sell, give away, barter, use in your own household or on the farm, and what percentage was not used? (Please answer in whole numbers. The total must equal 100.) % Sold % Given away % Bartered

% Personal use % Grown for animal fodder % Composted or otherwise recycled for lack of market % Surplus / unused

	tor	
% Direct to a F	estaurant	
% Direct to a 0	rocery Retailer	
% Through the	Kenai Food Hub	
% At your Farr	n Stand, on Farm Sale, or Online (Not a Fo	ood Hub)
% At Central F	eninsula Farmer's Markets	
70711 001111011		
└──── % Through No	n-Central Peninsula Food Hubs and Farme	er's Markets
% Other		
Do you use	a distributor? If so, what is the ne	ame of the distributor that you use?
	a distributor? If so, what is the ha	ame of the distributor that you use?
Yes		
No No		
	utor(s):	
○ No	utor(s):	
O No	utor(s):	
No Name of distri		hen it comes to making local selling
No Name of distri	e any additional considerations w	when it comes to making local selling
No Name of distri	e any additional considerations w	when it comes to making local selling
No Name of distri	e any additional considerations w	when it comes to making local selling

When do you buy your seeds for the upcoming season? (Select all that apply.)  January  February  March  April  May  June  July  August  September  October  November  December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No  Comments:	January   February   March   April   May   June   July   August   September   October   November   December   Comments:   Do local buyers' schedules impact your seed buying schedule?   Yes   No	January   February   March   April   May   June   July   August   September   October   November   December   Comments:   Do local buyers' schedules impact your seed buying schedule?   Yes   No		do you huy your goods for the uncoming season? (Select all that apply)
February  March April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	February  March  April  May  June  July  August  September  October  November  December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No	February  March  April  May  June  July  August  September  October  November  December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No	Ja	do you buy your seeds for the apcorning season: (Select all that apply.)
March April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule? Yes No	March April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule? Yes No	March April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No		nuary
April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule? Yes No	April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	Fe	bruary
April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule? Yes No	April May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	M	arch
May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule? Yes No	May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule? Yes No	May June July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	☐ Ar	ril
July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	July August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No		
July August September October November December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	July August September October November December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	July August September October November December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No		
August September October November December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	August September October November December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	August September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No		
September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	September October November December Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No		
October  November  December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No	October  November  December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No	October  November  December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No		
November December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	November December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes No	November  December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No		
December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No	December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No	December  Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No		
Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No	Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No	Comments:  Do local buyers' schedules impact your seed buying schedule?  Yes  No		
Do local buyers' schedules impact your seed buying schedule?  Yes  No	Do local buyers' schedules impact your seed buying schedule?  Yes  No	Do local buyers' schedules impact your seed buying schedule?  Yes  No		
Yes No	Yes No	Yes No	Comme	ents:
Yes No	Yes No	Yes No		
Yes No	Yes No	Yes No		
Yes No	Yes No	Yes No		
○ No	○ No	○ No	Do lo	cal buyers' schedules impact your seed buying schedule?
			○ Ye	s
Comments:	Comments:	Comments:	O No	



<b>LOCAL</b> - For the purposes of this survey, "local" is defined to include the communities within the Central Peninsula, including Nikiski, Kenai, Soldotna, Sterling, Funny River, Kasilof and Clam Gulch.
<b>PRODUCE ONLY</b> - For the purposes of this study, we are only quantifying produce. "Produce" includes vegetables, fruits, and herbs. Please do not include other locally produced items in your response.
* 18 If a local business is interested in buying your product, what is the best way for you to be contacted? (Check all that apply.)
Come to your farm
Visit your website
Contact you via email
Call you on the phone
Contact you through Facebook / social media
Order through an online food hub
Find you at a farmers market
Other (please specify)

	If a local business is interested in buying from you when is the best time for you to be contacted? (Check all that apply.)
[	Spring
	Summer
[	Fall
	Winter
	Weekday
-	Weekend
[	Any / all of the above
	Other (please specify)
)	In 2016, how did your farm sales compare to 2015 farm sales?  Sales increased
	Sales increased  Sales decreased
,	Sales stayed the same
	Not applicable, 1st year in production
[	Other (please specify)
	Whether or not sales increased, did you expand production in 2016 compared with 2015 For example, did you do any of the following? (Check all that apply.)  Increase volume?
] ] ] ]	Increase area/acreage or production?  Add new products?  Extend your growing season?  Expand in some other way?  Not applicable / did not expand production  f you selected "expand in some other way," please specify how you expanded.

Yes No  Are you planning to expand production in 2017? If so, how?  Increase production area/acreage Same area, but more intensive growing techniques Add new products Extend the growing season Other (please specify below) Not applicable / not planning to expand production in 2016 Other (please specify)   24 Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce? Less than 5% 6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production. Other (please specify)	22 Do	you have the capacity to scale up your production?	
23 Are you planning to expand production in 2017? If so, how?    Increase production area/acreage   Same area, but more intensive growing techniques   Add new products   Extend the growing season   Other (please specify below)   Not applicable / not planning to expand production in 2016  Other (please specify)  24 Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce?   Less than 5%   6-25%   26-50%   51-75%   76-100%   150%   200%   More than 200%   I do not plan to increase my production.		Yes	
Increase production area/acreage Same area, but more intensive growing techniques Add new products Extend the growing season Other (please specify below) Not applicable / not planning to expand production in 2016 Other (please specify)  Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce? Less than 5% 6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.		No	
Same area, but more intensive growing techniques  Add new products  Extend the growing season  Other (please specify below)  Not applicable / not planning to expand production in 2016  Other (please specify)  Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce?  Less than 5%  6-25%  26-50%  51-75%  76-100%  150%  200%  More than 200%  I do not plan to increase my production.	23) Ar	e you planning to expand production in 2017? If so, how?	
Add new products  Extend the growing season  Other (please specify below)  Not applicable / not planning to expand production in 2016  Other (please specify)  Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce?  Less than 5%  6-25%  26-50%  51-75%  76-100%  150%  200%  More than 200%  I do not plan to increase my production.		Increase production area/acreage	
Extend the growing season Other (please specify below) Not applicable / not planning to expand production in 2016 Other (please specify)  Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce? Less than 5% 6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.		Same area, but more intensive growing techniques	
Other (please specify below) Not applicable / not planning to expand production in 2016 Other (please specify)  Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce? Less than 5% 6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.		Add new products	
Not applicable / not planning to expand production in 2016  Other (please specify)  Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce?  Less than 5% 6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.		Extend the growing season	
Other (please specify)  Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce?  Less than 5% 6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.		Other (please specify below)	
Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce?  Less than 5% 6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.		Not applicable / not planning to expand production in 2016	
Looking ahead 5 years, compared to 2016, how much do you plan to increase your production produce?  Less than 5% 6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.	Oth	er (please specify)	
produce?  Less than 5%  6-25%  26-50%  51-75%  76-100%  150%  200%  More than 200%  I do not plan to increase my production.			
produce?  Less than 5%  6-25%  26-50%  51-75%  76-100%  150%  200%  More than 200%  I do not plan to increase my production.			
6-25% 26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.	pro		
26-50% 51-75% 76-100% 150% 200% More than 200% I do not plan to increase my production.			
51-75%  76-100%  150%  200%  More than 200%  I do not plan to increase my production.			
76-100% 150% 200% More than 200% I do not plan to increase my production.			
150% 200% More than 200% I do not plan to increase my production.	0		
200%  More than 200%  I do not plan to increase my production.	0		
More than 200%  I do not plan to increase my production.	0	150%	
I do not plan to increase my production.			
Other (please specify)	0	More than 200%	
	0	More than 200%  I do not plan to increase my production.	
		More than 200%  I do not plan to increase my production.	
	0	More than 200%  I do not plan to increase my production.	
	0	More than 200%  I do not plan to increase my production.	
		More than 200%  I do not plan to increase my production.	
		More than 200%  I do not plan to increase my production.	
		More than 200%  I do not plan to increase my production.	



### SPORK Kenai Local Foods Market Study: **Survey for Producers**

LOCAL - For the purposes of this survey, "local" is defined to include the communities within the Central Peninsula, including Nikiski, Kenai, Soldotna, Sterling, Funny River, Kasilof and Clam Gulch.

* (25)	What are the 5 to	op high-volume items that you are interested in se	lling?
	Item 1		
	Item 2		
	Item 3		
	Item 4		
	Item 5		
* 26	What are the top	5 low-volume, specialty items that you are interest	sted in selling?
* 26	What are the top	5 low-volume, specialty items that you are interes	sted in selling?
* 26		5 low-volume, specialty items that you are interes	sted in selling?
* 26	Item 1	5 low-volume, specialty items that you are interest	sted in selling?
* 26	Item 1 Item 2	5 low-volume, specialty items that you are interest	sted in selling?
* 26	Item 1 Item 2 Item 3	5 low-volume, specialty items that you are interest	sted in selling?

arown products? S			cing other locally
<b>5</b>	Select items below.  Producing	Interested in Producing	Not Interested in Producing
Beef	Troducing	Theresida in Florida ing	Not interested in 1 roddeling
Bison		$\bigcirc$	
Elk			
Lamb	0	0	0
Pork			
Reindeer			
Chicken			
Turkey			
Eggs		$\bigcirc$	
Flour		$\circ$	$\bigcirc$
Honey			
Value Added Products	$\bigcirc$	$\bigcirc$	
How many years h	nave you been farm	ning?	
	nave you been farm		
How many years h	nas your farm been		
How many years h  Do you have anoth  Yes  No	nas your farm been	in business?	
How many years h  Do you have anoth	nas your farm been	in business?	
How many years h  Do you have anoth  Yes  No  Comments	nas your farm been	in business?	?
How many years h  Do you have anoth  Yes  No  Comments	nas your farm been	in business?	?

Please list any questions or addition	nal comments you may have: (Optional)	

# Appendix B Buyer Survey



## SPORK Kenai Local Foods Market Study: Survey for Buyers

LOCAL - For the purposes of this survey, "local" is defined to include the communities within the Central Peninsula, including Nikiski, Kenai, Soldotna, Sterling, Funny River, Kasilof and Clam Gulch.

PRODUCE ONLY - For the purposes of this study, we are only quantifying produce. "Produce" includes vegetables, fruits, and herbs. Please do not include other locally produced items in your response.



### **Contact Information**

Your Name	
Business Name	
Address	
Address 2 (optional)	
City/Town	
ZIP/Postal Code	
Email Address	
Phone Number	

	Bed and Breakfast
	Catering Company
	Grocery Retailer; Independent
	Grocery Retailer; Chain
	Institution; Hospital
	Institution; Rehabilitation Center
	Institution; School
	Institution; Senior Center
	Lodge
	Restaurant; Casual Dining
	Restaurant; Cafe
	Restaurant; Fine Dining
	Restaurant; Food Truck
	Restaurant; Seasonal
	Other (please specify)
nu	ow many years has your business been in operation? (Please answer with a mber.)
Ho	mber.)  ow many years have you been operating your business? (Please answer with a
Ho	mber.)
Ho	mber.)  ow many years have you been operating your business? (Please answer with a
Ho nu	mber.)  ow many years have you been operating your business? (Please answer with a mber.)
Ho nu	mber.)  ow many years have you been operating your business? (Please answer with a
Ho nu	mber.)  ow many years have you been operating your business? (Please answer with a mber.)  oes your business currently buy produce from Central Peninsula growers? (Not
Hoo nu	mber.)  ow many years have you been operating your business? (Please answer with a mber.)  oes your business currently buy produce from Central Peninsula growers? (Not cluding food hubs or farmer's markets.)
Ho nu Do inc	mber.)  ow many years have you been operating your business? (Please answer with a mber.)  oes your business currently buy produce from Central Peninsula growers? (Not cluding food hubs or farmer's markets.)  Yes

Yes No Products purchased and additional comments:  Do you buy produce from Central Peninsula Farmer's Markets? (Please select all that apply.) Soldotna Wednesday Market Farmer's Fresh Market @ the Food Bank Kenai Saturday Market I do not buy from farmer's markets Product(s) purchased:  Do you use a distributor that supplies you with local produce? Yes No Which distributor(s) do you use?		Do you buy from the Kenai Peninsula Food Hub? If so what products?
Products purchased and additional comments:    Do you buy produce from Central Peninsula Farmer's Markets? (Please select all that apply.)   Soldotna Wednesday Market   Soldotna Saturday Market   Farmer's Fresh Market @ the Food Bank   Kenai Saturday Market   I do not buy from farmer's markets   Product(s) purchased:   Do you use a distributor that supplies you with local produce?   Yes   No	(	Yes
Do you buy produce from Central Peninsula Farmer's Markets? (Please select all that apply.)  Soldotna Wednesday Market  Soldotna Saturday Market  Farmer's Fresh Market @ the Food Bank  Kenai Saturday Market  I do not buy from farmer's markets  Product(s) purchased:  Do you use a distributor that supplies you with local produce?  Yes  No	(	○ No
apply.)  Soldotna Wednesday Market Soldotna Saturday Market Farmer's Fresh Market @ the Food Bank Kenai Saturday Market I do not buy from farmer's markets  Product(s) purchased:  Do you use a distributor that supplies you with local produce? Yes No	1	Products purchased and additional comments:
apply.)  Soldotna Wednesday Market Soldotna Saturday Market Farmer's Fresh Market @ the Food Bank Kenai Saturday Market I do not buy from farmer's markets  Product(s) purchased:  Do you use a distributor that supplies you with local produce? Yes No		
apply.)  Soldotna Wednesday Market Soldotna Saturday Market Farmer's Fresh Market @ the Food Bank Kenai Saturday Market I do not buy from farmer's markets  Product(s) purchased:  Do you use a distributor that supplies you with local produce? Yes No		
Soldotna Saturday Market Farmer's Fresh Market @ the Food Bank Kenai Saturday Market I do not buy from farmer's markets  Product(s) purchased:  Do you use a distributor that supplies you with local produce?  Yes No		
Farmer's Fresh Market @ the Food Bank  Kenai Saturday Market  I do not buy from farmer's markets  Product(s) purchased:  Do you use a distributor that supplies you with local produce?  Yes  No		Soldotna Wednesday Market
<ul> <li>□ Kenai Saturday Market</li> <li>□ I do not buy from farmer's markets</li> <li>Product(s) purchased:</li> <li>□ Do you use a distributor that supplies you with local produce?</li> <li>□ Yes</li> <li>□ No</li> </ul>		Soldotna Saturday Market
I do not buy from farmer's markets  Product(s) purchased:  Do you use a distributor that supplies you with local produce?  Yes  No		Farmer's Fresh Market @ the Food Bank
Product(s) purchased:  Do you use a distributor that supplies you with local produce?  Yes  No		Kenai Saturday Market
Do you use a distributor that supplies you with local produce?  Yes  No		I do not buy from farmer's markets
Yes No	ŀ	Product(s) purchased:
○ No		
Which distributor(s) do you use?	) [	
	)	Yes
	(	Yes No



1 - Not at all

Important

3

## SPORK Kenai Local Foods Market Study: Survey for Buyers

10 -

Extremely

Important

<b>LOCAL</b> - For the purposes of this survey, "local" is defined to include the communities within the Central Peninsula, including Nikiski, Kenai, Soldotna, Sterling, Funny River, Kasilof and Clam Gulch.
<b>PRODUCE ONLY</b> - For the purposes of this study, we are only quantifying produce. "Produce" includes vegetables, fruits, and herbs. Please do not include other locally produced items in your response.
* Estimated total amount spent, in dollars, on produce products purchased annually.
(Enter a whole number without decimals or symbols.)
This information is confidential and will only be used in aggregated (summary) answers.
* 10 In 2016, approximately what percentage of the produce you purchased (or will purchase) was grown in the following locations:
(The total must equal 100 - please answer in whole numbers.)
% Grown in the Central Peninsula
% Grown in Alaska, but not the Central Peninsula
% Other, i.e. imported to Alaska
* On a scale of 1-10, how important to you is using locally grown produce in your business?
(1 = Not at all important, 10 = Extremely important)

5

greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)	(1 = Not at all important, 10 = Extremely important)  1 - Not at all	(1 = Not at all important, 10 = Extremely important)  1 - Not at all	(1 = Not at all important, 10 = Extremely important)  1 - Not at all important, 10 = Extremely important)  1 - Not at all important 2 3 4 5 6 7 8 9 important  What are your biggest challenges to buying your produce locally? Please select (up to) your greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times  Limited variety  Inconsistent quality  Limited volume  Lack of convenience (working with growers and getting product from growers)  Inconsistent supply  Lack of year round availability	(1 = Not at all important, 10 = Extremely important)  1 - Not at all	On a scale			-	-	customer	s is hav	ing the c	ption of	locally
1 - Not at all Extremely Important 2 3 4 5 6 7 8 9 Important  What are your biggest challenges to buying your produce locally? Please select (up to) y greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times Limited variety  Inconsistent quality  Limited volume	1 - Not at all	1 - Not at all	1 - Not at all	1 - Not at all			-			portant)				
What are your biggest challenges to buying your produce locally? Please select (up to) y greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times Limited variety  Inconsistent quality  Limited volume	What are your biggest challenges to buying your produce locally? Please select (up to) your greatest challenges.  Lack of understanding where to buy local Need for washed or packaged produce Price (the price you can pay is less than the price the grower requires) Producers are unable to deliver product when needed - including product delivery flexibility and delivery times Limited variety Inconsistent quality Limited volume Lack of convenience (working with growers and getting product from growers) Inconsistent supply Lack of year round availability	What are your biggest challenges to buying your produce locally? Please select (up to) your greatest challenges.  Lack of understanding where to buy local Need for washed or packaged produce Price (the price you can pay is less than the price the grower requires) Producers are unable to deliver product when needed - including product delivery flexibility and delivery times Limited variety Inconsistent quality Limited volume Lack of convenience (working with growers and getting product from growers) Inconsistent supply Lack of year round availability	What are your biggest challenges to buying your produce locally? Please select (up to) your greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times  Limited variety  Inconsistent quality  Limited volume  Lack of convenience (working with growers and getting product from growers)  Inconsistent supply  Lack of year round availability	What are your biggest challenges to buying your produce locally? Please select (up to) your greatest challenges.  Lack of understanding where to buy local Need for washed or packaged produce Price (the price you can pay is less than the price the grower requires) Producers are unable to deliver product when needed - including product delivery flexibility and delivery times Limited variety Inconsistent quality Limited volume Lack of convenience (working with growers and getting product from growers) Inconsistent supply Lack of year round availability	1 - Not at all				-		7	8	9	Extremely
greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times  Limited variety  Inconsistent quality  Limited volume	greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times  Limited variety  Inconsistent quality  Limited volume  Lack of convenience (working with growers and getting product from growers)  Inconsistent supply  Lack of year round availability	greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times  Limited variety  Inconsistent quality  Limited volume  Lack of convenience (working with growers and getting product from growers)  Inconsistent supply  Lack of year round availability	greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times  Limited variety  Inconsistent quality  Limited volume  Lack of convenience (working with growers and getting product from growers)  Inconsistent supply  Lack of year round availability	greatest challenges.  Lack of understanding where to buy local  Need for washed or packaged produce  Price (the price you can pay is less than the price the grower requires)  Producers are unable to deliver product when needed - including product delivery flexibility and delivery times  Limited variety  Inconsistent quality  Limited volume  Lack of convenience (working with growers and getting product from growers)  Inconsistent supply  Lack of year round availability	$\stackrel{\wedge}{\sim}$	$\stackrel{\wedge}{\sim}$	$\stackrel{\wedge}{\sim}$	$\stackrel{\wedge}{\sim}$	$\Delta$	$\stackrel{\wedge}{\sim}$	$\Delta$	$\stackrel{\wedge}{\sim}$	$\Rightarrow$	$\sim$
		Other (please specify)	Other (please specify)	Other (please specify)	greatest cl  Lack of the Need for Price (the Produce Limited to Inconsis Lack of the Inconsis	halleng understar r washed he price you ers are un variety stent quali volume convenier	es.  Inding where or package ou can pay able to deli ty  Ince (working)	e to buy loc ed produce is less tha ver produce	cal n the price t when nee	the grower ded - includ	requires) ding produ	ct delivery		
Other (please specify)														
Other (prease specify)														
Other (please specify)														
Unier (piease specify)														
Other (please specify)														

*(14) What would make it easier for you to secure local food purchases? Please select (up to)	
your top 5 choices.	
Centralized distribution center	
Representative to market farmers' products and coordinate sales	
Affordable prices	
Website where farmers list expected produce availability 2-3 weeks before harvest	
Consistent volume and availability	
Open house to meet farmers and see products	
Long-term storage options	
Increased coordination and pre-planning with farmers directly	
Clear invoicing from farmers	
Farmer-led distributor or other delivery options	
Other (please specify)	



## Survey 6 D Survey for Buyers

<b>LOCAL</b> - For the purposes of this survey,	"local" is defined to include the	e communities within the (	Central Peninsula,
including Nikiski, Kenai, Soldotna, Sterling	g, Funny River, Kasilof and Cla	am Gulch.	

* (15)	What are the factors that affect your produce purchases? (For example: how much
	time do you need for purchasing, product delivery, determining floor space or menu
	items, and staff to prepare and stock items?)
16	What additional considerations affect your local purchasing decisions? (For example:
	knowledge of point of origin, uniformity of vegetables, packaging consistency, etc.)
	(Optional)
* 17	How often do you plan your produce purchases?
	Daily
	Weekly
	Monthly
	Seasonally
	Yearly
	Other (please specify)

	tallawing year? (For inctance, it you know you concictantly need 3 nounde at ariigula a
	following year? (For instance, if you know you consistently need 3 pounds of arugula a
	week for the entire summer, at what point could you communicate with a farmer so that the can grow what you need?)
,	
(	Spring (March, April, May)
(	Summer (June, July, August)
(	Fall (September, October, November)
(	Winter (December, January, February)
[	Other (please specify)
_ا إ (	Do you have the ability to adjust your purchases seasonally throughout the year?
	(For example, do you have a flexible menu that can change or the ability to carry seasonal items?)
(	Yes
(	○ No
(	Comments:
] ] ]	How often do you make changes to your menu/inventory?  Daily  Weekly  Bi-Weekly  Monthly
_ [	Quarterly
[	Bi-Annually
[	Yearly
[	Seasonally
[	As needed
L [	The menu / produce inventory is fixed and does not change throughout the year.
L	
- (	Comments:
ľ	

\*(21) On a scale of 1-10, how much do you value fresh produce vs produce durability when making purchasing decisions? (1 = Value produce freshness more, 10 = Value produce durability more)

				5 - Value					
				Produce					10 -
1 - Value				Freshness					Value
Produce				and					Produce
Freshness				Durability					Durability
More	2	3	4	Equally	6	7	8	9	More
$\Rightarrow$	$\stackrel{\wedge}{\sim}$	$\stackrel{\wedge}{\sim}$	$\Rightarrow$	$\Rightarrow$	$\Rightarrow$	$\stackrel{\wedge}{\sim}$	$\Delta$	$\Rightarrow$	$\stackrel{\wedge}{\sim}$

On a scale of 1-10, would you be more inclined to buy locally grown produce if you knew it was harvested at its peak in the last 48 hours? (1 = Not at all inclined, 10 = Extremely inclined)

1 - Not at									10 -
all									Extremely
Inclined	2	3	4	5	6	7	8	9	Inclined
$\stackrel{\wedge}{\sim}$	$\mathcal{L}$	$\stackrel{\wedge}{\searrow}$	$\mathcal{L}$	$\stackrel{\wedge}{\Sigma}$	$\Delta$	$\stackrel{\wedge}{\Sigma}$	$\mathcal{L}$	$\Rightarrow$	$\Delta$



## Sport Survey Sur Survey for Buyers

LOCAL - For the pur	rposes of this survey,	"local" is defined to	include the com	munities within the C	Central Peninsula,
including Nikiski, Ker	nai, Soldotna, Sterlin	g, Funny River, Kas	ilof and Clam Gul	lch.	

23	When you choose a vendor, what are the factors that influence your decisions?
	(Select all that apply.)
	Delivery schedule
	Size of company
	Word of mouth
	Reliability
	Produce selection
	Other (please specify)

be approached? (Check all that apply.)
Come to your business
Visit your website
Connect with them at a buyer / producer networking event
Contact you via email
Contact you through Facebook / social media
Call you on the phone
List their items on an online food hub
Wait for you to approach them
Other (please specify)
4 4 40 (01 4 114) 4 4 4 4
contacted? (Check all that apply.)  Spring  Summer  Winter  Fall  Weekday  Weekend  Any / all of the above
Spring Summer Winter Fall Weekday Weekend
Spring Summer Winter Fall Weekday Weekend Any / all of the above

*(27)	By percent, if quantities are available, how much of your produce supply would you
	like to see being sourced locally in the future?
	Less than 5%
	5-10%
	11-15%
	16-20%
	21-25%
	26-30%
	31-35%
	36-40%
	41-45%
	46-50%
	51% or more
*	
*(28)	Would you be willing to pay more for locally grown produce? If so, how much?
	Less than 5%
	5-10%
	<u>11-15%</u>
	<u> </u>
	21-25%
	26-30%
	31-35%
	36-40%
	41% or more
	I'm not willing to pay more for locally grown produce

*(29)	Would any loyalty agreements with existing partnerships affect your capacity to scale	
_	up locally grown purchases? (For example, have distributors required exclusive or	
	year round purchasing requirements to use their service?)	
	Yes	
	○ No	
	○ N/A	
	Other (please specify)	



### SPORK Kenai Local Foods Market Study: Survey for Buyers

LOCAL - For the purposes of this survey, "local" is defined to include the communities within the Central Peninsula, including Nikiski, Kenai, Soldotna, Sterling, Funny River, Kasilof and Clam Gulch.

30	What are the top	5 high volume produce items that you are interes	ted in buying?
	Item 1		
	Item 2		
	Item 3		
	Item 4		
	Item 5		
* 31	What are the top buying?	5 low volume, specialty produce items that you a	re interested in
	Item 1		
	Item 2		
	Item 3		
	Item 4		
	Item 5		

	Currently Buying	Interested in Buying	Not Interested in Buying
Beef			
Bison	$\bigcirc$		
Elk			
Lamb			
Pork			
Reindeer			
Chicken			
Turkey			
Eggs			
Honey			
Other (please specify)	)		
Are you currently sources? (A value such as milling w	buying or interested in e-added product has be heat into flour or making ying value-added products	een changed in either	physical state or form
Are you currently sources? (A value such as milling w  I am currently but I am interested in	e-added product has be heat into flour or making ying value-added products buying value-added producted in buying value-added	een changed in either ng strawberries into ja ts	physical state or form
Are you currently sources? (A value such as milling w  I am currently but I am interested in I am not interested What value added pro	e-added product has be heat into flour or making ying value-added products a buying value-added producted in buying value-added products are you buying/interest	teen changed in eithering strawberries into ja	physical state or form
Are you currently sources? (A value such as milling was a	e-added product has be heat into flour or making ying value-added products buying value-added producted in buying value-added	teen changed in eithering strawberries into ja	physical state or form
Are you currently sources? (A value such as milling was a	e-added product has be heat into flour or making ying value-added products a buying value-added producted in buying value-added products are you buying/interest	teen changed in eithering strawberries into ja	physical state or form
Are you currently sources? (A value such as milling w  I am currently but I am interested in I am not interested What value added pro	e-added product has be heat into flour or making ying value-added products a buying value-added producted in buying value-added products are you buying/interest	teen changed in eithering strawberries into ja	physical state or form

# Appendix C Online Platforms

#### Online Platforms

Farmers and purchasers both expressed interest in an "online bulletin board" that would allow farmers to post their expected crops a few weeks ahead of time and allow buyers the ability to see what is expected to be available. While this was slightly less important to buyers, it was critical to growers in the survey results. Buyers indicated a need for more variety and quantity before the online platform. This issue is more challenging to overcome in the short-term, but housing all of the products in one place could potentially begin to address this concern. While the Kenai Peninsula Food Hub could work in this way, there was little interest from any of the stakeholder groups in using the food hub. Part of the reason for this may because many people don't understand how the food hub works and others are less interested in working with a middle-man that doesn't eliminate the need to organize and provide transportation. Many of the participants expressed interest in an online platform, and an alternative model could entice more participation locally from both sectors.

#### **Examples of online platforms:**

**Local Orbit** – https://localorbit.com/ - Highly recommended directly from farmer and rancher connections in Washington. They did note that there needs to be an intermediary organization to maintain the platform.

Company Synopsis: Food buyers and suppliers are reinventing the way they operate to meet consumer demand for local, sustainably produced food. Local Orbit's platform supports these emerging supply chains that are changing the way we eat. Affordable, thoughtfully designed Sales and Business Management Tools for local food aggregators, distributors, and producers. Dashboard & Data Visualization Services that enable organizations to measure, track and improve local and sustainable procurement. A network that connects suppliers with new markets; buyers with new suppliers; and helps businesses leverage existing delivery capacity in their communities.

**Eco Trust Food Hub Software** - https://ecotrust.org/project/foodhub/ - This is a passive software that is designed for local food trade. This is aimed at Food Hub projects, but could be designed to work as a billboard.

Company Synopsis: Similar to an online dating site for the local food trade, FoodHub is an online platform that connects farmers, ranchers, fishermen and specialty producers with wholesale food buyers in their region.

**Local Food Marketplace** - http://home.localfoodmarketplace.com/ - This is a software that is used by many Washington food hub groups. While this generally works well, the interface hard to work with.

Company Synopsis: We support food hubs selling to consumers, restaurants, grocery stores, and institutions with tools dedicated to making it easy to support your customers as you grow. Our white label mobile app (branded for your food hub) is a favorite of consumers and restaurant chefs that are on the go, while our custom price lists and VIN and UPC integration help you serve grocery stores with multiple departments and buyers.

**Farm Fan** – http://about.farmfanapp.com/about/ - This platform is based off of texting consumers. I signed up through one of their test models for a week and found the interface to not be user friendly and not an experience that I would likely use as a consumer.

• Company Synopsis: A whopping 98% of all text messages are read by their recipients, versus only 25% of emails and as little as 4% for many social media channels. So while keeping Facebook pages and email accounts up to date is important for farms and other small businesses, text message marketing is where it's at. Our main goal is to bring farmers the easiest and most effective ways to market and grow their businesses, and keeping customers informed of farmer's market days and building reward systems are one of the best ways to do that.