

**Produce Stand Pilot Study:
Final Performance Report**



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Project Summary

The purpose of the Produce Stand pilot study was to understand the demand for Alaska Grown specialty crops (locally grown produce) at the UAA campus. This was gauged by using The Produce Stand, which is a “Farmers Market” style booth where students, staff, and faculty can purchase Alaska Grown produce.

Throughout the project, information was collected from those who purchased from the stand and from those who did not purchase but wanted to offer input. This feedback was used to determine if the UAA community wants to see specialty crops on campus. Information about the feasibility of this project was also collected to inform Alaska specialty crop producers about if this is a worthwhile investment for them in future years. The project was funded by the USDA Specialty Crop Grant, which covered the costs of supplies, produce, and coordinator stipends.

The Produce Stand pilot study took place from 12pm-2pm for seven consecutive Tuesdays and Thursdays of September. The location of the stand varied in order to cover more areas of campus thus reaching a broader demographic of the UAA community; the Social Science Building was determined the most successful location within the study. Devin Johnson, the lead project coordinator, was in charge of collecting data at the stand for the final report. Data was collected in the form of sales records, and by using an interactive poster board system in which visitors to the stand could provide input to the question, “Why do you choose Alaska Grown? Or not?” Kyla Byers, the other project coordinator and the owner of the partnering business Arctic Harvest Deliveries, handled the transactions, the deliveries of the produce, and the selection of the produce to sell. After the end of each day of the Produce Stand, Kyla and Devin would clean up, calculate earned revenue, and then donate any extra produce to UAA Dining Services.

After the one-month pilot, the Produce Stand sold out of product on multiple occasions and received great positive feedback. As a result, it is determined that the UAA community expresses interest in seeing a Produce Stand on campus all year round. The total profit from selling the specialty crops was \$1,559.65, which was lower than the \$1,764.50 spent on the specialty crops. However, this difference is due to lack of marketing, occasionally spoiled produce, and the decision to keep prices low. If a project like this is to continue in the future, adjustments that address these areas will need to be made if this is to be a sustainable project. There are however, similar grant sources available at UAA that could help fund a future project like this, and keep costs low. Based on the positive feedback and the potential to be a sustainable, I recommend that The UAA Produce Stand continue all year long.

Background Literature Review

Producing locally grown food needs to be a major importance for our state, since Alaska imports more than 95% of its food (Food for Thought 2011). In the rise of any major disruption to the supply chain, we would be in serious trouble. Therefore, the topic of food security needs to be of high concern to all Alaskans. However, is this something that we as residents of Anchorage, and citizens of Alaska actually care about? Do we currently choose local? Perhaps the answer is yes on a very small scale, however, the overall current state of our food system does not reflect a strong support for locally grown food. Therefore, it is necessary to dive into the field of research regarding local food systems, why people choose local, and what food systems work to provide locally sourced produce.

For many people, the choice to eat locally is seen as an environmentalist perspective to cut down “food-miles”, or average number of miles for a food item to reach your plate, thus reducing the environmental impact. Nowadays you hear the generalized concept that “the average item of food on your plate travelled 1,500 miles”. This data derives from a study in 1969, commissioned by the Army and the Office of Civil Defense, which examined vulnerabilities in the food supply of the United States in case of a nuclear attack (Brown 1969). However, this study had major gaps such as not taking into account where specific agriculture products are produced and not measuring food shipment data (Schnell 2013). Furthermore, “the largest food retailers (such as Wal-Mart) have increasingly moved to direct purchases from suppliers and their own private warehouse network, and do not make their data publicly available.” (Schnell 2013). Furthermore, the difficulties of calculating the true amount of “food miles” are quite apparent. For example, it took an entire study to calculate the “food miles” of strawberry yogurt due to its multiple ingredients coming from multiple locations (Pirog 2005). I find it quite amusing that the author says trying to calculate the true average food miles for a plate of food is basically meaningless; he states this benchmark is simply an “verbal shorthand, eye-catching, pseudo-quantitative metaphor that is used as an implicit critique of the current food system” (Schnell 2013). Interestingly however, studies have found that “food miles” have actually little to do with people’s decision to eat locally.

So why then do people eat locally? In a qualitative study examined this topic by interviewing 30 members of a Community Supported Agriculture (CSA). A CSA is a subscription with local farmers to receive fresh produce each week. The results of the study showed that people choose to eat local food not to avoid the high number of “food-miles”, but because of the feeling of “connection to place”

that eating local provides (Schnell 2013). Furthermore, similar studies have identified key responses to why people eat local such as local produce being fresher, tasting better, and having a higher nutritional content (Schnell 2013). According to another qualitative study looking at retention rates of CSA members, “the desire for fresh, organic, and local produce and to support a local farmer of farm rated highest in terms of importance” (Oberholtzer 2004).

However, is eating locally grown produce actually fresher? There are a multitude of factors that play into the loss of nutrients for both local and non-local food. These factors include: crop variety, production method, ripeness, post-harvest handling, processing and packaging, storage, and transportation (Firth 2007). In regard to crop variety, most items in supermarkets are strategically selected for yield, growth rate, and ability to withstand long transport. (Firth 2007). Farmers producing for local and direct markets are more likely to prioritize taste and nutritional quality over durability when making varietal decisions (Firth 2007). In regard to ripeness, produce that requires long travel times are typically picked based on whether or not they are “climacteric”, or capable of ripening after being picked from the mother plant (Firth 2007). Produce like this such as apples, melons, and tomatoes, have a higher nutritional content when picked ripe, as opposed to letting them ripen over time. Thus, climacteric produce picked ripe locally do have a higher nutritional content. In addition, post harvest handling has a major impact on produce; mistreatment such as bruising and improper storage can have a negative impact on the nutritional value of produce. Thus, there are a lot of factors that can affect the nutritional value of produce.

According to the author Firth, eating locally has some distinct advantages. First, even with the highest post-harvest handling techniques, foods grown further away have more time for nutrient loss. Second, farmers growing local market favor taste, nutrition, and diversity over ship-ability when choosing varieties. Third, in direct and local marketing, produce is generally sold within 24 hours after harvest, thus is at its peak freshness. Lastly, local produce is handled by fewer people, decreasing potential for damage, and is not harvested with industrial machinery. (Frith 2007).

In addition to having a higher nutritional content, locally grown food actually does have a lower carbon footprint, whether or not it is the reason that people choose local; reducing carbon footprint was seen as one of the lowest responses to why people choose local (Schnell 2013). In fact, consumers are likely not aware of the amount of fossil fuel used in the food transport system, and the increase of greenhouse gas emissions resulting from the use of these fuels (Pirog 2001). A study in Iowa looked at the difference between energy use between the conventional, regional, and local food systems. The Conventional system, which is the classic large truck delivery system that is currently used nationwide, used 4-17 times more fuel, and released 5-17 more CO₂ from burning fuel than the other two food systems. (Pirog 2001).

Furthermore, most consumers are not aware of the reduction of greenhouse emissions resulting in the advent of increased local food consumption. Based on a study which looked specifically at the state of Iowa, “growing 10 percent more produce for Iowa consumption in a regional and local system would result in an annual savings ranging from 280 to 346 thousand gallons of fuel, depending on the system and truck type (Pirog 2001). This is the equivalent of the average annual diesel fuel use of 108 Iowa farms! However, in order to make regional and local food systems competitive with the conventional system, fuel energy costs will need to rise significantly (Pirog 2001).

So does the current state of our food system, with locally grown food at higher prices, exclude certain socio-economic groups from purchasing locally grown produce? The Harlem-based Corbin-Hill farm does not think so. Their mission is to provide locally grown foods to low-income families in New York, thus showing that eating local is not only for the “food elite”. They created a system in which residents can become CSA shareholders, and purchase a week in advance, can cancel anytime, and can use any form of payment – including food stamps (Thompson 2012). The founder of this program explains the key to their success is very straightforward. He states, “We provide quality. And it’s affordable. And accessible.” However the program has not yet broke even, however, it is on the path to breaking even with the annual increase in shareholders (Thompson 2012). The more people buy in the easier it is to keep prices affordable. Such ideologies could translate directly to our context within Alaska.

So how do we get more people involved so we can get the prices low, and create a reliable market for locally grown foods? According to Freedman (2011), the answer is to create a locally-based coalition that is participatory and focused on promoting food security by creating food systems change. Freedman’s study examined the results of forming such a coalition. Results of the study indicated a rise in the number of connections between organizational partners in the network, including a central group of partners, or “core” that included universities. (Freedman 2011) The goal of the study to establish new connections among partners was accomplished with a positive trend in collaborative efforts related to food security. However, after the one year mark of the study, groups still indicated that the coalition was still in the formation stage building a well connected local food system. “Nevertheless, the overall upward trend has important implications for efficiency because as network density increases the possible pathways through which information and resources may flow also increases.” (Freedman 2011) Basically, this coalition has become a great foundation for future collective action of food security. This study though revealed gaps in the network, which included important stakeholders such as the “food processors, packers, shippers, marketers, and retailers” (Freedman 2011). If such as coalition was to be formed in Anchorage, these stakeholders should be included. In this case, food security was used as a

mobilizing tool for inspiring local community engagement. Interestingly, this article states that food in general and food security and a potential organizing tool for bringing diverse stakeholders to the proverbial climate change table.

Due to the state of food security in Alaska, an increase in locally grown foods needs to be adopted if we are to provide a secure future. This, however, will require outreach and education on the importance of eating locally, as well as exploratory research to address the current demand for local foods within our community. In addition, the formation of a local food coalition in Anchorage similar to that in Freedman's study would be a great way to begin to form the connections needed to make this a reality. This project aims to explore the demand for local food at UAA.

Project Approach

Date	Activities Performed	Responsible Authority
August 2015	Order supplies and assemble Produce Stand. Set dates, reserve location, and advertise. Create Survey	Devin Johnson, Project Coordinator Aid from David Weaver, Director of Housing, Dining, and Conference Services, for Produce Stand logistics plan and business model.
September 2015	Weekly pickup of specialty crops at AAC Parking lot @ Mondays at 5pm. Sell Specialty Crops at Produce Stand to be held 2 times a week. Administer survey during produce stand.	Devin Johnson, Project Coordinator. Aid from Kyla Byers, Arctic Harvest Deliveries, for specialty crop delivery.
October 2015	Input data and write up the report.	Devin Johnson, Project Coordinator

Project Coordinator - Devin Johnson

- Devin is an Honors Student and Senior in the Environment & Society program at UAA. As the Project Coordinator, Devin will staff the Produce Stand, collect feedback, record sales, and write final report.

Project Advisor – David Weaver

- David Weaver is the Director of Housing, Dining, and Conference Services at UAA. He will provide supplies for the project including:

refrigerator space in the Dining Service's kitchen, baskets and crates from the Bear Necessities, and a table from Conference Services.

Project Advisor – Alaska Food Policy Council

- The Alaska Food Policy Council is comprised of a variety of Alaska food system experts who will oversee the distribution of funds, project reporting, and dissemination of results. Alaska Food Policy Council will serve as the fiscal entity for the project funds.

Specialty Crop Distributor – Kyla Byers of Artic Harvest Deliveries

- Kyla is a recent graduate of UAA and currently the owner of Artic Harvest Deliveries. All specialty crops used for this study will be purchased from this vendor. As the distributor, Kyla will transport the specialty crops to the drop off located at UAA's Alaska Airlines Center Parking Lot every Monday from 4:30-6:00PM. In addition, Kyla will staff the stand and aid with sales.

Any left-over produce will be donated to the dining facilities to experiment with in new recipes for future menu plans. Any money collected from the sales of the produce stand will go toward costs associated with the travel to present the findings to the UAF campus. The UAA campus is a 7 hour drive, or 45 minute flight, from the UAF campus. Any travel funds would be an enormous help to disseminate the results.

Expected Measurable Outcomes

The UAA student, Devin Johnson, leading this project will collect the data to report with. The goal is that students on campus will purchase 75% of the Alaska Grown produce offered at the produce stand. The produce stand will be open 4-8 times in September and at least three Alaska Grown produce grower's product will be featured. The following data will be collected:

- Demographics of those who purchase (i.e. students, faculty, UAA admin).
- Interest in having the produce stand.
- Interest in the types of produce offered and suggestions for others.
- Reasons for purchasing, or not purchasing, the food (understanding the motivations).
- Sales report that will document produce purchased, donated, and what the top sellers were.
- Location (what locations worked, and what did not)

Methodology

- **Demographics:** This data was collected using a poster-board system. Guests place a sticker in a category of whether or not they would like to see a Produce Stand on Campus. Each sticker has a color corresponding to student, staff, or faculty, or other. The data collected from everyone that participated in the poster-board activity is used to estimate the demographics and number of guests visiting the stand. This methodology was only used for the first 3 days of the Produce Stand.
- **Interest in a Produce Stand:** This data was collected using a poster-board system where guests place a sticker in a category of whether or not they would like to see a Produce Stand on Campus. Each sticker has a color corresponding to student, staff, or faculty, or other.
- **Interest in the types of food offered:** Interest in types of food offered was gauged in two ways. The first is through the sales data, using the overall highest/lowest selling produce as indicators. (See the Appendix for the complete sales report).

The second way the study gauged interested in the types of food offered was by asking visitors to the stand, "What is your favorite vegetable or fruit?" Results from this question were collected on multiple poster-boards. The results were then compiled using a program, which displays the text by size according to how popular the response is. (See the Appendix or Results for the complete list of preferences).

- **Reasons for choosing Alaska Grown** was gauged in multiple ways. The first was by using a poster-board system, in which visitors to the stand placed a sticker next to a reason they choose to eat local. The possible options included: convenience, supports local economy, fresher, healthier, knowing where food comes from, cheaper.

After a few days of using this method, I noticed these categories were limiting to the respondents. Thus, I switched my methodology to allow respondents to write their own, original response on a poster-board. I simply asked visitors to the stand, "Why do you choose Alaska Grown?" I then grouped the responses based on similarity. The results were then imputed in a program that displays text size based on the frequency of the word. Thus the most popular reasons for choosing Alaska Grown are displayed larger.

- **Survey Data Collection:** A survey will be distributed to collect more data on demographics and preference for Alaskan Grown produce. (See Appendix for survey questions and survey methodology).

Results

- **Outcomes Achieved:** The produce stand was open 7 times during the month of September, which was within the goal of being open 4-8 times. Of the \$1,764.50 spent on produce, \$1,559.65 was earned at the Produce Stand. Thus the goal of selling 75% of the produce was achieved monetarily, with 88% sold overall.

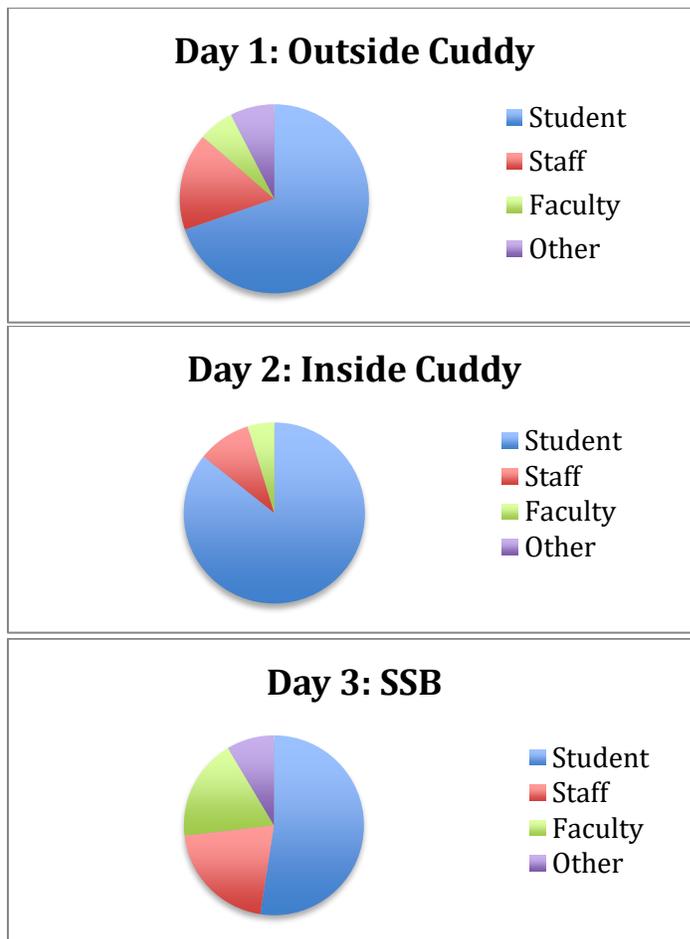
The highest selling day was in the Social Science Building, with \$392.25 earned through sales. The top five grossing products at the stand, with the highest grossing listed first, were tomatoes, carrots, potatoes, strawberries, and brussels sprouts. The top reason indicated for choosing Alaska Grown is because it supports the local economy. The verbal feedback from the consumers indicated an interest in seeing the Produce Stand all year round.

Results of this project will be disseminated to both UAA and UAF through multiple venues. This report will be used in campus news sources, present it at a relevant campus activity such as the annual sustainability club discussions/event, and present it to the annual SARE conference that has a high attendance of specialty crop producers who may be interested in the campus market.



This photo was taken after selling out on Day 3 at the SSB.

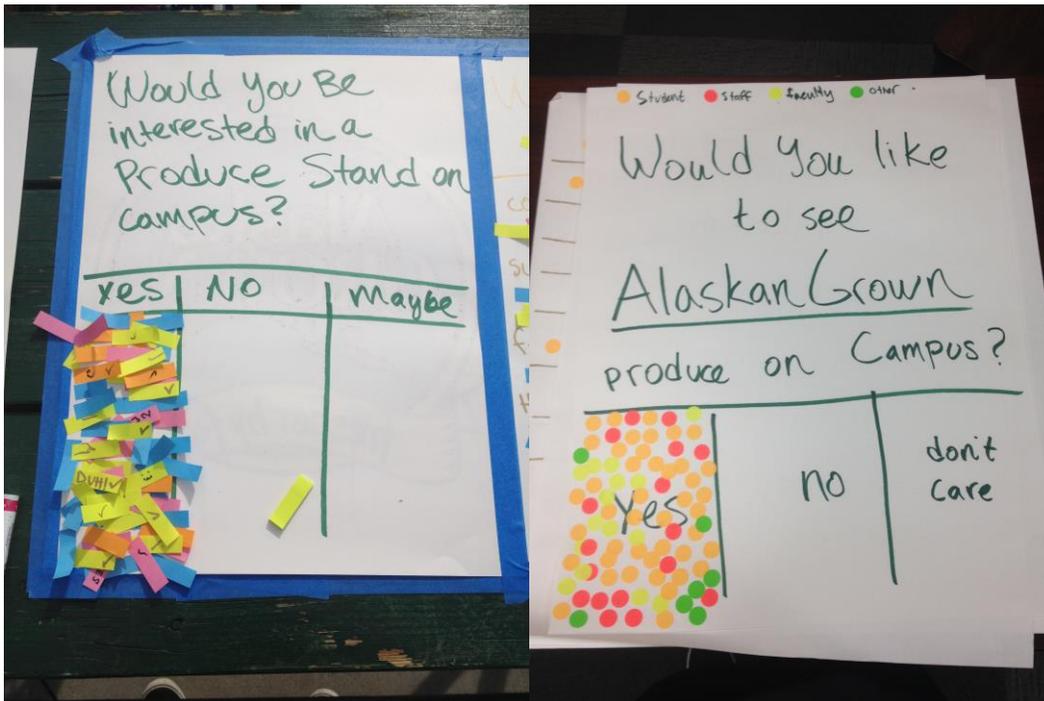
- **Demographics:** Students made up the majority of visitors to the stand at all locations. However, there was an increase in the participation of Staff and Faculty when the Produce Stand was in the SSB. During the first day the stand was at the SSB, a faculty member was so excited about the Produce Stand, she sent out an email to all other faculty telling them to check it out. Overall, the SSB served as the best location due to highest number of sales.
 - Day 1, Outside of the Cuddy. 46 Students, 11 Staff, 4 Faculty, and 5 others (no UAA affiliation) visited the Stand.
 - Day 2, Inside of the Cuddy. 18 students, 1 faculty, and 2 staff visited the stand.
 - Day 3, In the SSB. 43 Students, 17 Staff, 15 Faculty, 7 Other (no UAA affiliation).
 - Day 4 – 7, no record of demographics



- **Interest in a Produce Stand:** 169 UAA community members indicated they want to see a produce stand on campus. Only two respondents disagreed; they indicated that indicated they “don’t care”. Nobody indicated they do not want to see the Produce Stand on campus. The photos below illustrate this feedback. (The one sticker on the “no” category was moved from its original position due to the wind”

In addition, there was much verbal positive feed back from the stand; people expressed interest in seeing the stand all year round. Also, there were several returning customers who bought produce from multiple days at the stand. After the study ended, people continued to call the Student Union info desk to ask where the Produce Stand is. Furthermore, examples of documented quotes that expressed interest in the stand included:

- “It would be nice to have the option [for the Produce Stand] on campus.”
- “I have no car and live on campus, so it’s hard to go to the grocery store. It’s really convenient to get it right here.”
- “I wish you were doing this all year round!”



- **Interest in the types of food offered:** *The top five grossing products at the stand, with the highest grossing listed first, were tomatoes, carrots, potatoes, strawberries, and brussels sprouts. The lowest grossing products were squash, lettuce, and leeks. (See the Appendix for the complete sales report).*

The top three preferred vegetables indicated were carrots, kale, and broccoli. The top three preferred fruit indicated were strawberries, blueberries, and then apples. See below for the results compiled using a program, which displays the text by size according to how popular the response is. (See the Appendix for the complete list of preferences).

Food Item	Total Sold	Sold by	Total Revenue	Best Seller Ranking
Kale	37	~ \$3 Bunch	\$111.00	5
Tomatoes	59.3	~ \$6.50 Lbs	\$385.45	1
Potatoes	80	\$2 Lbs	\$160.00	3
Beets, Reds	43.6	\$2 Lbs	\$87.20	7
Broccoli	34	\$2.50 Bunch	\$85.00	8
Sweet Onions	18	\$2.50 each	\$45.00	10
Lettuce	16	\$2 each	\$32.00	13
Cabbage, Green	21	\$2 each	\$42.00	11
Carrots	60	\$5 Bunch	\$300.00	2
Strawberries	25	\$5 Box	\$125.00	4
Califlower	14	\$4 each	\$56.00	9
Squash	6	\$4 each	\$24.00	14
Leeks	18	\$2 each	\$36.00	12
Brussel Sprouts	18	\$6 dollars each	\$108.00	6

(Does not include data from Day 4)

Top 5 Overall Best Sellers

Tomatoes
Carrots
Potatoes
Strawberries
Brussel Sprouts

Bottom 3

Squash
Lettuce
Leeks

- **Interest in the types of food offered continued:** The following are a list of preferred vegetables and fruit. In addition, below is a graphic that displays the most preferred vegetables with larger text.

Favorite Vegetable	# of Responses	Favorite Fruit	
Carrots	22	Strawberries	18
Bokchoi	4	Apples	12
Kale	14	Blueberries	17
Cucumbers	13	Avacados	1
Green Beans	8	Mangos	2
Arugula	4		
Beets	8		
Spinach	10		
Zuchini	7		
Broccoli	14		
Kohlroabi	1		
Rhubarb	1		
Califlower	3		
Chollard Greens	1		
Mustard Greens	1		



- **Reasons for choosing Alaska Grown:** The following list is the results for choosing Alaska Grown, with the notable responses included. Also below is a graphic that displays the most popular reasons with larger text. (See Appendix for the complete list of reasons for choosing Alaska Grown).

Why Choose Alaska Grown?	# of Responses	Notable Responses
Convenient	22	
Supports Local Economy**	29	• “Fresh is Best!”
Fresher*	26	• “Better than fast food”
Healthier*	26	• “The environment will thank you”
Low Environmental Impact	20	• I don’t have to go to the grocery store”
Knowing Where food Comes From	21	• “Ain’t nothing like a garden fresh tomato”
Cheaper	2	• “Carrots and potatoes in AK are the best!”
Food Security	2	• “Its natural, and natural things are good for you”
Connection to Place	5	• “I miss having a farmers market to go to every week”
Taste Better	14	• “my boy was selling it”
Organic Option	4	• “Its organic and wild, just like me”
No Shipping	1	• “Right here right now veggies”
Used to buying local	4	• “Grew up in Alaska”
For the Love	3	• “Because I wanted to, and its local”
		• “Keeps more nutritious”
Why not Choose Alaska Grown?		
Don't know if its Alaska Grown	1	
Too expensive	2	
I grow my own vegetables	1	
Need More fruit	1	
No way to prepare, I live on campus.	1	
I don't do the shopping	1	
No options in stores.	1	

Knowing. Where. food. Comes. From
Supports. Local. Economy
Healthier Organic **Fresher** Connection to Place **Convenient**
Tastes. Better
Low. Environmental. Impact

- **Locations:** The following are brief reviews of each location the Produce Stand Served. In addition, possible future locations are discussed.
 - **Cuddy Quad:** The Produce Stand was at this location for Day 1. This is an ideal location for sunny weather. The outside location increases the visibility of the stand, which promotes sales. In addition, being outside truly creates the feel of a true Farmer's Market.
 - **Inside Cuddy:** The Produce Stand was at this location for Day 2, 4, and 5. This was originally the permanent planned location for the project. However, sales at this spot were comparatively low, thus prompting the decision to experiment with other spots on campus. Perhaps the relatively lower sales are because people visit the Cuddy to purchase ready-made meals, whereas most items at the Produce Stand need to be prepared.
 - **Social Science Building Lobby:** The Produce Stand was at this location for Day 3 and 7. The Social Science building contains many staff and faculty offices, making it an ideal location for vending to this demographic. More specifically, the stand's location within the lobby of the SSB make it clearly visible for anyone at the neighboring Kaladi Brothers Cafe or anyone passing by this high traffic area. The Produce Stand had the highest grossing sales at this location.
 - **Upstairs Student Union:** The Produce Stand was at this location for Day 6. This is an extremely high traffic area on campus. However, there are typically many different groups tabling at this location daily, which creates a "gauntlet" for students to pass through. The majority of students will typically walk through this location with the intention of ignoring the tables. As a result this location provided the second lowest grossing day.
 - **Future Possibilities:** Other potential locations for the Produce Stand are at the Gorsuch Commons, Fine Arts building, and the Conoco Phillips Integrated Science Building (CPISB). The Gorsuch Commons poses as a great potential location due to its proximity to on campus residents with kitchen access and no meal plan. In addition, the commons has ATM capabilities if the stand is to continue operating on a cash-only basis. The other two locations, Fine Arts and the CPISB pose as potentially successful options due to the lack of food served on the East side of campus. Further studies in these areas would need to be preformed to assess this possibility.

Conclusions

In terms of demographics, students visited the stand the most. This is expected because students were the target market for the project. With the huge success and a sell out during Day 3 and 7 at the SSB, however, the study showed that staff and faculty pose as a great and continuing market for the project. The SSB houses many offices for staff and faculty, making it an ideal location to sell produce to this demographic. The demographic results give a small sample of portions of each demographic served, however more research will need to be done to better represent the demographics of the true population.

The grand majority of UAA members, all but two, that approached the stand indicated they want to see a produce stand on campus. However, it is unlikely that someone opposed to the idea of a produce stand would approach the table. Regardless, the information collected verbally and quantitatively both indicate the desire for a produce stand on campus all year round.

Looking at the sales data provides insight on the interest in the types of food offered. Based on the sales data, emphasis in future stands should be put on the produce that sold the best. This list includes: tomatoes, carrots, potatoes, strawberries and brussel sprouts. In addition, more fruit such as strawberries and blueberries should be offered to appeal to the “ready-to-eat” market. Also, nonconventional produce such as purple potatoes, brussel sprouts, and squash, sold well and should be used in future sales. It is notable that there could be potential gaps in the results of sales data, due to certain produce only being offered on certain days.

The result that most people choose Alaska Grown because it “supports local economy” provides insight on the mindset of consumers within our State. This is comparable with research with the background review of literature, which states that people choose to eat local not because of “food miles” but because of the connection to place. The result that people do not choose Alaska Grown because it is “too expensive” indicates that if local prices were comparable, more people would eat local. If more people choose to eat local, the prices can lower due to a larger demand.

In terms of location, the SSB is the best selling location due to the most diverse demographic access. If it is a sunny day, the Cuddy Quad is a great location to house the Produce Stand, due to the increased visibility.

Future studies will need to be done to assess the potential of hosting the stand in the Gorsuch Commons, the CPISB, or any other East Campus location.

Overall, the study concludes that a Produce Stand should be held all year round at UAA.

Beneficiaries

Potential Impacts: This project has the potential to be the starting point of an annual Produce Stand at UAA. With all the positive feedback the Produce Stand received, it makes sense to provide this service all year round.

First and foremost, an annual produce stand would benefit the student body by providing a convenient location to purchase the healthy option of fresh, locally grown produce. For students who live on campus with a kitchen and no car, this would be a great opportunity to buy produce without having to walk or find a ride to the grocery store.

Secondly, staff and faculty would greatly benefit with the option to purchase from a UAA Produce Stand. When at the SSB (Social Science Building), many staff and faculty expressed delight in being able to walk downstairs from their offices and purchase produce on campus. This “major convenience” allows them to skip the trip to the grocery store after work.

Third, Dining Services has the potential to benefit from further collaboration. If the Produce Stand continues with a similar model of operations, Dining Services can continue to receive donations from the project. In addition, Dining Services will benefit from the connections made with specialty crop producers and specialty crop distributors, such as Arctic Harvest Deliveries. These businesses can provide specialty crops to UAA all year round if Dining Services decides to use their service. Furthermore, the Produce Stand has the potential to be a point of sales for Dining Services if a system was set up in a way where students could use their meal plan to purchase the produce.

Acknowledgements: First, I would like to personally thank Johanna Heron for this opportunity. Second, I would like to help Kyla Byers of Arctic Harvest Deliveries for partnering with me as a Project Coordinator throughout the project. Lastly, I'd like to thank everyone who helped donate supplies and their time to make this project a possibility.

Lessons Learned/ Things to Improve

- **Marketing/Advertising:** Due to the delay in funding, I was not able to advertise the stand as much as I would have liked to. Many people that approached the stand said they just happened to walk by, and that's how they were made aware of the project. I had a poster made to advertise the project, however, only 10 copies were made. In the future, I would greatly improve the visibility of the advertising for the project to ensure the UAA community is aware of the Produce Stand. Regardless, I was amazed by how, even with the lack of marketing, we were able to sell out of items on various days.
- **Timeliness:** The Produce Stand was scheduled to be open from 12-2pm on Tuesdays and Thursdays. However, due to the Project coordinator's short window of time before 12pm, the stand usually opened around 12:30pm. Thus the stand could have lost customers if they arrived on-time at 12pm. Furthermore, on Tuesdays I had a class at 2:30 pm after the Produce Stand, which on one occasion (Day 4) prevented me from compiling the sales data before class. If I were to do this differently I would allot one hour before the stand opens for set-up, then one hour after the stand for take down and note taking.
- **Note Taking/Data Collection:** I was unable to record sales data for Day 4 due to class, so there are potential gaps in the results. In the future, I would make sure to collect the sales data for each day. In addition, I would keep record of the demographic from each sale (Student, Staff, Faculty, or Other), in order to provide more data on who exactly is buying from the stand. Furthermore, I would count each customer to the stand to provide an estimate of the overall customers to the stand.
- **Presentation:** In terms of the Presentation, I owe thanks to the following: The Honors College for the donation of plates and a tablecloth for the project, The Bear Necessities for the wooden crates and basket, and The Food Policy Council for the Alaska Grown Swag. To improve the future presentation of the project, it would be beneficial to have a printed tablecloth that reads "UAA Produce Stand", in order to increase the transparency and visibility of the project.
- **Supply/Demand:** Since this was the first study of its kind, the amount of produce to purchase was unknown. After discovering the high demand for local produce at UAA, it would be beneficial to purchase more produce in the future. In addition, the access to storage space allowed us to store unsold produce for sales at the next produce stand.

- **Location:** Since this was the first study of its kind, the ideal location for the produce stand was unknown. My first choice of location at the Cuddy worked out well when the Produce Stand was outside, due to increased visibility. However, when the Produce Stand was inside the Cuddy, sales decreased. I conclude that this is because people visit the Cuddy to purchase ready-made meals, whereas most of the food at the Produce Stand needs to be prepared.

When at the Student Union, an extremely high traffic area, I noticed many students walk by with little regard for the stand. However, I conclude that because the Upstairs Student Union is a popular location for clubs and groups to table, thus students have become accustomed to ignoring the tables as a defense to the bombardment of sign-up sheets from clubs. Perhaps if the Produce Stand moved downstairs in the cafeteria sales would do better. However from this study, the Student Union proved to be less than ideal for a location.

Based on sales data, the SSB proved to be the best location for the Produce Stand. Due to the high number of staff and faculty offices in the building, and the frequently packed Kaladi Brother's Café nearby, the SSB lobby is a high traffic area that is perfect for the Produce Stand. However, competition from other tabling groups can pose a threat. For example, one day a petition collector was directly in front of our booth. Many people attempt to avoid petitioners, thus our sales could have been potentially affected.

- **Date and Time:** Due to the fact that many classes fall on the same time for Monday/Wednesday and Tuesday/Thursday, some students, staff, or faculty might not have had the chance to visit the Produce Stand due to a conflicting class. Therefore in future studies, it would be beneficial to have the Produce Stand open on varying days, such as a Monday and a Thursday, to prevent the any conflict with classes. Thus, more of the UAA community would have access to the Produce Stand.
- **Formatting:** I had issues transferring excel documents into Microsoft word. In the future I would like to improve on this.

Appendix

Produce Stand Sales Data

Supplies

Survey

References

Relevant Contacts

Produce Stand Sales Data

Fall 2015

**Indicates Highest Seller

* Indicates Second Highest Seller

^Indicates Lowest Seller

Day 1: Cuddy Quad

10-Sep

Item	Price	Unit	Quantity at Start	Quantity at End	Amount Sold	Gross Total	
Kale	\$2.50	Bunch	6	0	6	\$15.00	Sold out
Tomatoes**	\$5.00	lb	12	0	12	\$60.00	Sold out
Potatoes^	\$2.00	lb	12	8.5	3.5	\$7.00	
Beets, Reds	\$2.00	lbs	12	4	8	\$16.00	
Broccoli	\$2.50	lb	7.5	0	7.5	\$18.75	Sold out
Sweet Onions	\$2.50	Each	10	6	4	\$10.00	
Lettuce	\$2.00	Each	8	2	6	\$12.00	
Cabbage, Green	\$2.00	Each	8	4	4	\$8.00	
Carrots*	\$5.00	Bunch	8	0	8	\$40.00	Sold out
Strawberries*	\$5.00	Box	8	0	8	\$40.00	Sold out
Till Start	\$95.00					Gross total	\$226.75
Till End	\$301.75						
Net Total	\$206.75						

Day 2: Cuddy

15-Sep

Item	Price	Unit	Quantity at Start	Quantity at End	Amount Sold	Gross Total	
Kale	\$3.50	Bunch	10	8	2	\$7.00	
Tomatoes*	\$6.50	lb	15	11.5	3.5	\$22.75	
Potatoes	\$2.00	lb	8.5	6	2.5	\$5.00	
Beets, Reds	\$2.00	lbs	14	10	4	\$8.00	
Broccoli^	\$2.50	lb	30	29	1	\$2.50	
Sweet Onions^	\$2.50	Each	6	5	1	\$2.50	
Lettuce	\$2.00	Each	10	7	3	\$6.00	
Cabbage, Green	\$2.00	Each	8	7	1	\$2.00	
Carrots	\$5.00	Bunch	17	14	3	\$15.00	
Califlower	\$4.00	Each	8	7	1	\$4.00	
Squash	\$4.00	Each	6	3	3	\$12.00	
Strawberries**	\$5.00	Box	17	11	6	\$30.00	
Till Start	\$95.00					Gross total	\$116.75
Till End	\$207.75						
Net Total	\$112.75						

Produce Stand 23

Day 3: SSB

17-Sep

Item	Price	Unit	Quantity at Start	Quantity at End	Amount Sold	Gross Total	
Kale	\$3.00	Bunch	8	0	8	\$24.00	Sold out
Tomatoes**	\$6.50	lb	11.5	0	11.5	\$74.75	Sold out
Potatoes	\$2.00	lb	16	0	16	\$32.00	Sold out
Beets, Reds	\$2.00	lbs	10	0	10	\$20.00	Sold out
Broccoli	\$2.50	lb	29	3.5	25.5	\$63.75	
Sweet Onions	\$2.50	Each	5	0	5	\$12.50	Sold out
Lettuce	\$2.00	Each	7	0	7	\$14.00	Sold out
Cabbage, Green	\$2.00	Each	7	1	6	\$12.00	
Carrots*	\$5.00	Bunch	14	0	14	\$70.00	Sold out
Califlower	\$4.00	Each	7	0	7	\$28.00	Sold out
Squash^	\$4.00	Each	3	0	3	\$12.00	Sold out
Strawberries	\$5.00	Box	11	0	11	\$55.00	Sold out
Till Start	\$207.75					Gross total	\$418.00
Till End	\$580						
Net Total	\$372						

Day 4: Cuddy

21-Sep No Data Recorded

Day 5: Cuddy

24-Sep

Item	Price	Unit	Quantity at Start	Quantity at End	Amount Sold	Gross Total	Donated
Kale	\$3.50	Bunch	13	7	6	\$21.00	7 Bunches
Tomatoes**	\$5.00	lb	22	8.4	13.6	\$68.00	8.4 tomatoes
Potatoes	\$2.00	lb	52.5	33.8	18.7	\$37.40	
Beets, Reds	\$2.00	lbs	25	18.4	6.6	\$13.20	
Cabbage, Green^	\$2.00	Each	8	7	1	\$2.00	
Carrots*	\$5.00	Bunch	17	4	13	\$65.00	4 Bunches
Califlower	\$4.00	Each	6	0	6	\$24.00	
Till Start	\$95.00					Gross total	\$230.60
Till End	\$304.50						
Net Total	\$209.50						

Produce Stand 24

Day 6: Student Union 29-Sep

Item	Price	Unit	Quantity at Start	Quantity at End	Amount Sold	Gross Total
Kale	\$3.00	Bunch	10	7	3	\$9.00
Tomatoes	\$6.50	lb	14.3	9.2	5.1	\$33.15
Potatoes	\$2.00	lb	33.8	16.8	17	\$34.00
Beets, Reds	\$2.00	lbs	18.4	12	6.4	\$12.80
Cabbage, Green	\$2.00	Each	7	4	3	\$6.00
Carrots**	\$5.00	Bunch	10	1	9	\$45.00
Brussel Sprouts*	\$6.00	Each	8	2	6	\$36.00
Leeks	\$2.00	Each	10	2	8	\$16.00
Onions	\$2.50	Each	8	7	1	\$2.50
Till Start	\$95.00				Gross total	\$194.45
Till End	\$264.00					
Net Total	\$169.00					

Day 7: SSB 1-Oct

Item	Price	Unit	Quantity at Start	Quantity at End	Amount Sold	Gross Total
Kale	\$3.00	Bunch	13	1	12	\$36.00 Donated leftovers
Tomatoes**	\$6.50	lb	18.2	4.6	13.6	\$88.40 Donated leftovers
Potatoes	\$2.00	lb	26.8	4.5	22.3	\$44.60 Donated leftovers
Beets, Reds	\$2.00	lbs	22	13.4	8.6	\$17.20 Donated leftovers
Cabbage, Green	\$2.00	Each	6	0	6	\$12.00 Sold out
Carrots	\$5.00	Bunch	13	0	13	\$65.00 Sold out
Brussel Sprouts*	\$6.00	Each	14	2	12	\$72.00 Donated Leftovers
Leeks	\$2.00	Each	10	0	10	\$20.00 Sold out
Onions	\$2.50	Each	7	0	7	\$17.50 Sold out
Till Start	\$95.00				Gross total	\$372.70
Till End	\$487.25					
Net Total	\$392.25					

Grand Totals

Day 1	\$206.75	Total Profits	\$1,559.65
Day 2	\$112.75	Total Spent on Produce	\$1,765.50
Day 3	\$372.45	Average Per day	\$222.81
Day 4	\$96.95 Min		
Day 5	\$209.50		
Day 6	\$169.00		
Day 7	\$392.25 Max		

Food Item	Total Sold	Sold by	Total Revenue	Best Seller Ranking	Top Five Overall Best Sellers
Kale	37	~ \$3 Bunch	\$111.00	5	Tomatoes
Tomatoes	59.3	~ \$6.50 Lbs	\$385.45	1	Carrots
Potatoes	80	\$2 Lbs	\$160.00	3	Potatoes
Beets, Reds	43.6	\$2 Lbs	\$87.20	7	Strawberries
Broccoli	34	\$2.50 Bunch	\$85.00	8	Brussel Sprouts
Sweet Onions	18	\$2.50 each	\$45.00	10	
Lettuce	16	\$2 each	\$32.00	13	Bottom Three
Cabbage, Green	21	\$2 each	\$42.00	11	Squash
Carrots	60	\$5 Bunch	\$300.00	2	Lettuce
Strawberries	25	\$5 Box	\$125.00	4	Leeks
Califlower	14	\$4 each	\$56.00	9	
Squash	6	\$4 each	\$24.00	14	
Leeks	18	\$2 each	\$36.00	12	
Brussel Sprouts	18	\$6 dollars each	\$108.00	6	

(Does not include data from Day 4)

Sales Notes: Lowered the price of Kale to \$3.00 on day three. Some tomatoes on day 3 sold for \$4.00 per pound due to lower quality. Some strawberries sold for less on day 3 due to lower quality. I was unable to collect sales data for day 4 due to a class confliction after the Produce Stand. Had to throw out rotten tomatoes and one bad bunch of carrots on day 6.

Supplies

Supplies	Purpose	Provided By	Cost
8' Table	Allowed max space for display	Conference Services	Free (Borrowed)
Tablecloth	Aesthetics	Honors College	Free (Donated)
Baskets	Displaying Produce	Dining Services (Bear Necessities)	Free (Borrowed)
Crates	Displaying Produce	Dining Services (Bear Necessities)	Free (Borrowed)
Specialty Crops	Selling at the Stand	Arctic Harvest Deliveries	\$1,765.50
Poster Boards	Collecting Survey Data	Office Depot	About \$10
Alaska Grown Swag	Advertisement/ Giveaways	Food Policy Council	Free (Donated)
Delivery Truck	Transporting Produce	Arctic Harvest Deliveries	Worked in Collaboration
Storage Space	Storing Produce overnight	Dining Services (Mein Bowl)	Free (Donated)
Sharpie Pens	Writing Survey Data	Office Depot	About \$5
Notebook	Recording Sales Data	Office Depot	About \$5
Certified Scale	Weighing/Vending Produce	Skurla's	\$350
Storage Tubs	Storing Produce overnight	Home Depot	About \$15 each
Advertisement Posters	Advertisement	UAA Copy Print Center	\$75 for the Design
(Optional) Outdoor Tent	Advertisement, Shade	Friend	Free (Donated)
Plastic/Paper Bags	Putting Sold Produce into	Arctic Harvest Deliveries	Free (Donated)
Cashbox	Transactions	Arctic Harvest Deliveries	Free (borrowed)
Twist Ties	Sealing Bags of Produce	Food Policy Council	Free (Donated)
Colored round stickers	Poster-board Data collection	Arctic Harvest Deliveries	Free (Donated)

Survey

This survey will be distributed online through Qualtrics in order to provide supplemental information about local food preference at UAA. The survey will be distributed as need throughout the month of November.

Demographics

1. Which of the following best describes you...
Student, Staff, Faculty, Other (not affiliated with UAA)
2. What is your gender?
Male, Female
3. What is your age group?
18-20 25-29 35-39 45-49 55 and over
21-24 30-34 40-44 50-54
4. What is your marital status?
Single, married, divorced, widow/r, other
5. What is your annual net household income?
 \$0 - \$20,000 \$65,001 - \$80,000 (2)
 \$20,001 - \$35,000 \$80,001 - \$100,000 (2)
 \$35,001 - \$50,000 \$100,001 and above (4)
 \$50,001 - \$65,000 Prefer not to answer (5)
6. What type of residency do you live in?
house apartment other prefer not to answer
7. What area of Anchorage do you live or live nearest to?
Downtown, Midtown, East (Muldoon), West (Spenard), South, U-Med District,
Don't Live in Anchorage

Local Food Questions

8. *Please mark the box that most fits your opinion.*
 - a. Accessing Alaskan Grown Produce in Anchorage is
extremely convenient, convenient, inconvenient, extremely inconvenient ,
N/a
 - b. I actively seek out Alaskan Grown Produce
strongly agree, agree, disagree, strongly disagree, N/a

Why/or Why not _____

c. I care where my food comes from. .
strongly agree, agree, disagree, strongly disagree N/A

9. I would pay more for Alaskan Grown produce, compared to imported produce
Yes, No

If no, why not? _____

10. I would like to see Alaskan Grown food available as an option through Dining
Services.
Yes, No, Don't Care

11. I would like to have a annual Produce Stand on Campus.
Yes, No, Don't Care

12. I would like to see more Alaskan Grown food options on campus.
Strongly agree, agree, neutral, disagree, strongly disagree, don't care

13. I know the benefits of eating local.
Yes, no, don't care

14. How many times have you been to a produce stand in the last year?
Never, 0-5, 5-10, 10-30, 30+

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