

**UBC FOOD TRUCKS
UBCFSP Final Report**

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LFS 450

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UBC FOOD TRUCKS

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April 10, 2015

Abstract

Objective: To investigate possible options with the goal of enhancing the services of food trucks (The Dog House, Hungry Nomad, and Roaming Bowl). The main focus will be emphasized on the necessity of incorporating breakfast option into the current menu and allocating the food trucks to suitable locations on campus.

Methods and Results: A survey consisting of 13 questions was created and conducted via online or person-to-person format.

Conclusion and Discussion: We found that while most people were aware of the food trucks existence, most had never tried the food from any of the trucks. We found this to be due to observed high-prices and time-constraints.

Executive Summary

The UBC food trucks, part of UBC Food Services, strive to provide consumers with sustainable food selections by using local food ingredients, endorsing composting and waste reduction, as well as providing organic and fair trade products. Currently, there are only three food trucks operating on campus: The Dog House, Hungry Nomad, and Roaming Bowl. Through the SEEDS program, LFS 450 students are given an opportunity to collaborate with UBC Food Services to investigate potential propositions to enhance the services of food trucks on campus. As of the beginning of this project, the food trucks were only serving during lunch hours and the stakeholders are interested in incorporating breakfast options and service hours into the menu and rotation. As a result, the scope of our project focuses on objectives established to examine the viability of food trucks

serving breakfast and identifying the most suitable locations for food truck placements around campus.

After several group discussions and meetings with the project stakeholders, the methodology that the group has agreed upon is the survey approach. Our survey consists of thirteen questions relating to respondents' frequency of purchasing food on campus (food trucks or other on-campus eateries), food prices, social media preference and public awareness of UBC's food truck program. It was conducted both through in-person impromptu conversations (strangers on campus) and online as distributed on social media and through emails to correspondents. In total, we surveyed 164 respondents (92% UBC students; 7% UBC staff; 1% others). The majority of individuals who took part of the survey are students who are in their fourth year or above (35% of 151) and live off campus (77% of 151). It was reported that the majority of the respondents do frequently purchase food on campus (75% of 164 participants reported purchasing food on campus on a weekly or daily basis). This statistic represents lunch and dinner options more than during the breakfast time frame (36% of 164 had never purchase breakfast before). The main type of meal that is purchased on campus is lunch (94% of 150). Less than 13% of respondents state that they rarely or never purchase food on campus. According to the results, the majority of respondents selected 'the foods are too expensive (33% of 164),' 'the line-ups (23% of 164),' and 'preferring to bring their own food (23% of 164).' Some said 'not enough time (15% of 164),' 'not enough selection (11% of 164),' 'do not like the foods (10% of 164)' and 'preferring non-campus sources (8% of 164). Of the 164 respondents, the majority (84%) of the participants noted that they were aware of the existence of the UBC food trucks. As far as social media, most of the respondents felt

comfortable using Facebook and Twitter to follow the UBC food trucks, with 119 (73%) and 55 (34%) votes respectively. With regards to the visiting frequency of each area throughout the UBC campus, the four areas on campus where our 164 respondents visit the most frequently (in ranking order) are Libraries/Sauder/Sciences, Agronomy Road, Buchanan/SUB, and Hospital/Woodward Library.

Our group's recommendation to our stakeholders is to relocate the food truck placement to Sauder, Sciences, and Koerner and Irving Libraries. This is because of the high pedestrian traffic, which can render the food trucks to be more visible. Given that the second highest volume among participants is found near agronomy (environmental sciences area) along with the lack of competition from other restaurants, we suggest this as a viable location to place the trucks as well. The latter location has been utilized more frequently since our project began and comparing the sales in this location to others would be a good way of monitoring this location as a potential permanent area to bring some of the food trucks. The menu should consist of healthier selection to appeal to a greater diversity of consumers. As for the breakfast menu items, this is a potential area for future LFS 450 students to conduct more research. Another recommendation is that our stakeholders should constantly monitor and update their social media (e.g. Facebook, twitter, Instagram) to promote awareness and attract customers. Discount strategies can also be applied to attract customers.

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Introduction

Project Background

The University of British Columbia (UBC) is an educational institution grounded upon values of sustainability. From UBC's vision statement we see that "the University of British Columbia creates an exceptional learning environment that fosters global citizenship, *advances a civil and sustainable society*, and supports outstanding research to serve the people of British Columbia, Canada and the world," [emphasis added] (UBC Vision & Values). Food system sustainability is a major focus found in every core class taught in UBC's faculty of Land and Food Systems (LFS). The UBC Food Systems Project (UBCFSP) was established in 2001 between the faculty of LFS and the SEEDS (Social Ecological Economic Development Studies) program to foster collaboration between students and staff engaging in community-based action research projects. These UBCFSP's deal with practical issues of sustainability for key stakeholders and community partners affiliated with UBC's Vancouver campus food security (Rojas, Richer, & Wagner, 2007). Our group was charged with investigating potential propositions to enhance the food truck services on campus operated by UBC Food Services.

The mobile food services industry has received positive responses in various small and large North American cities (Domonell, 2012). Throughout Canada as of 2014, there were 1,097 mobile food enterprises operating 1,278 establishments (food trucks, beverage carts, hot dog carts, etc.) (Brennan, 2014). Additionally, food trucks can also target and decrease food insecurity across North America in areas described as "food

deserts,” meaning there is little or no access to nutritious, healthy food options in the area, with options like corner stores, and fast food establishments (Bartley & Best, n.d.). Food trucks provide alternative mobile food options for consumers, frequenting areas where food access inequity is prominent (Bartley & Best, n.d.). The advantageous aspects of food trucks have allured North American universities and colleges to implement programs to offer these services on campus (Jennings, 2012).

One such advantage that guides universities and colleges to establish private mobile food service programs is that food truck customers in Canada are typically within the age range of people on college campus (Brennan, 2014). Moreover, food trucks offer students the option to purchase quick, portable meals (Duffey & Fasano, 2014), which is especially attractive for individuals with busy schedules that do not have enough time for sit down meals.

UBC joined the mobile food services movement beginning in 2013, when UBC Food Services created a food truck division with the purpose of offering quick, affordable, and chef inspired meal options for the UBC community on-the-go. Currently, there are three food trucks operating on campus: The Dog House, Hungry Nomad, and Roaming Bowl. These mobile food enterprises also strive to provide sustainable food options for consumers by using local food ingredients, endorsing composting and waste reduction, as well as providing organic and fair trade products. At first, the food trucks only focused on serving lunch, but recently UBC Food Services has begun to incorporate breakfast options for morning campus goes. As a result of our preliminary research, we decided to focus primarily on the viability of food trucks

serving breakfast meals as well as identifying the most suitable locations to place the food trucks throughout campus to attract the most customers.

Value Assumptions

Our UBCFSP group constituted a diverse team of LFS students from several different cultural and disciplinary backgrounds. Despite our diversity, we all share the same value regarding the importance of UBC campus *food system sustainability* and thus maintained this objective as a priority throughout the duration of conceptualizing and carrying out the project. This value assumption was reflected in our survey questions, as there were no questions asked to consumers regarding concerns of sustainability. This reveals our group's supposition that UBC food truck consumers will be equally as interested in food system sustainability on campus.

Keeping sustainability in mind, our group was to also develop ideas that could aid the UBC food truck division to expand its customer base, yet group members had distinct perspectives on how this could be achieved. There were group members more inclined to the marketing and economic aspect in order to the word out encourage people to try the food-trucks, while others wanted to focus on the nutritional, ecological and social side in order to attract long term customers who value social responsibility. These different values were tied to the educational fields present in our group, ranging from Plants and Soil Sciences, Food Science, Food and the Environment, and Food Market Analysis. As a result, our group developed survey questions related to food prices, social media preferences, and public awareness of food trucks. While our recommendations and

project objectives were established around food trucks maintaining and promoting their current sustainable practices, and thus endorsing a sustainable food system on campus.

UBCFSP Vision for a Utopian Food System

The UBCFSP *Vision for a Utopian Food System* focuses on ideals that will render a sustainable food system, able to fulfill current community needs without compromising the same ability for future generations. This can be attained by protecting the health and integrity of connected ecosystems, supporting local food production and consumption, encouraging food production in socially responsible manners, waste reduction, humane treatment of animals raised for food, building food security, and increasing the involvement of communities with their local food systems (UBC Food System Project, 2011). This vision statement also targets the importance and influence that the UBC food system can have on surrounding food systems (Rojas, Richer, & Wagner, 2007).

Our group agreed with the pillars presented in the UBCFSP vision statement, however, we believed the concept of “local food systems” was lacking a detailed definition. We believe that the word “local” has definition, and thus it is essential to explain the specific geographic context when using the word “local.” However, our group supported the values presented in the vision statement, and therefore we strived to build our project around these ideals.

Methodology

Team development

Prior to project initiation, our team gathered together to share different experiences and thoughts with each other. Through understanding different values, we were able to assign responsibilities and establish ground rules within the team. This allowed us to develop ways to overcome our differences in regard to project related opinions, and as a result we came to establish a mutual understanding. Through each member's commitment to the project and timely completion of assigned tasks we developed trust among ourselves. In addition, we discussed expectations and questions regarding the project, which allowed us to prepare better for our meeting with our project's stakeholders.

Contact with Stakeholders

We visited the food trucks during operation with our community partners, David and Paula, to grasp the actual situations of the project. Meetings and e-mail correspondence with our project stakeholders had allowed us to identify possible objectives and develop the scope for our research. To maintain consistency and avoid confusion, one team member was responsible to be the main contact between the team and project stakeholders.

Literature Review and Project Plan

Literature research was conducted to gather useful information from relevant projects as well a general overview of the food truck market in Canada. This has allowed us to learn from others' experiences and incorporate useful insights into our project. The project plan was constructed with the goal of establishing objectives and quantifying the details of each procedure required to complete our project. A brief timeline was created to allow our team to carry out the project in a timely and appropriate manner.

Project Timeline

Dates	Activities
March 5	Met with stakeholders and visited the food trucks
March 6	Formulated the project outline (Literature Review and Project outline)
March 10	Released online-survey and shared the associated link
March 17	Conducted in-person surveys around the campus
March 20	Closed online-survey link and gathered the responses
March 31	Completed the first draft of the final report
April 5	Finalize the report and prepare for presentation
April 8	Final project presentation
April 9	Final confirmation of the project report
April 10	Submit the final project report

Survey

Given the goal of our project to assess the awareness of food trucks from UBC students and other campus goers in different locations of the campus, a survey was the best method to gauge a response. The on-line survey allowed our team the flexibility and higher response rates within the given timeframe as well as an easy way to collect the data and limit the potential for human error in transcribing the results. During the survey creation phase, our team sent updates of survey drafts to our project stakeholders to garner their opinions and concerns. After just a few modifications to the questionnaire we were able establish an equitable survey that we thought would fulfill the objectives of our project and thus satisfy the needs of our stakeholders.

We divided the team into two sub-groups to conduct in-person surveys (using iPads) throughout the campus in common high-traffic areas (along main mall and near the SUB). The online survey was created through Google form, and the associated link was sent out to individuals in different faculties as well as through random distribution channels.

Ethics and Consent

Prior to releasing and conducting the surveys, we requested final approval and permission to proceed with the project from our stakeholders. For the individuals we surveyed, both in-person and online, we explained the purpose of the survey and ensured that their participation would be confidential. For every survey conducted, we obtained the

individual's consent before proceeding. We had also informed the participants of their rights to refuse answering any questions at any point during the survey.

Data management and analysis

A Google spreadsheet was created to record the responses from the surveys. After we were finished collecting responses, the spreadsheet was then downloaded as an excel file in order to more accurately analyze and visualize the data in graphs. Responses were organized into different categories according to the classifications set.

Results

The purpose of the survey was to assess the future potential and awareness of UBC food trucks through investigating on-campus eating habits and opinions that UBC students and staff have toward the current on-campus food services. Depending on whether the survey respondents' occupation was a student or others, they were able to answer a total of 13 or 9 questions respectively. Please refer to Appendix A for the survey sample. Graphs that were made based upon the responses can be found in Appendix B.

Demographics

Our group collected a total of 164 results from both in-person and online surveys. Out of 164 respondents, 151 of them were UBC students, which makes up the majority (92%) of the total sample. The rest of the sample population was comprised of UBC staff (7%) and others (1%) such as visitors from outside of UBC (Figure 1).

As we looked at the faculties of our student respondents, we found that among the 151 student respondents, the faculties of Science and Applied Science evenly constituted over half of the sample (52%). Meanwhile, 21% and 13% of the survey participants were from faculties of Arts and Land and Food Systems respectively. The minority groups included students from the Sauder School of Business (9%), and departments of Pharmacy (2%), Forestry (1%), Dentistry (1%), and Education (1%) (Figure 2).

We then proceeded to look at the student respondents in terms of their year level. Of the 151 surveyed UBC students reported being in their fourth year or above, representing about 35% of the total sample, and making them the biggest group of participants. Students in their first, second, and third years each represented about 13%, 21%, and 27% of the sample respectively. Post-graduate students comprised only around 4% of the total student respondents (Figure 3).

When asked about the general living situation, 116 out of 151 student respondents (77%) reported to live-off campus while the remaining 23% of participants percent live on campus represented in Figure 4 in Appendix b.

Frequency of Purchasing On-Campus Food

We next looked at the habits and frequency of participants in regards to purchasing meals on campus. Among the 164 respondents, about 36% of them stated that they typically purchase food on campus 1 to 3 times per week, which makes this the common frequency compared to all the other choices. Meanwhile, 22% of participants reported buying meals on campus 4 to 6 times per week and 17% of them do this more than 7 times a week. On the other hand, 13% of respondents said that they only purchase foods on campus 1 to 3 times a month and the rest either do so less than once a month (6%) or never buy any food on campus (6%) (Figure 5).

Since one of our objectives was to investigate breakfast potential, we assessed the frequency of people purchasing breakfast on UBC campus. Among 162 survey participants who answered this question, 36% of them stated that they have never purchased breakfast on campus. Furthermore, 9% of them buy breakfast on campus less than once a month and 15% of them do so 1 to 3 times a month. On the other hand, 13% of the total respondents reported to purchase breakfast on campus everyday, and 10% and 17% of them do so 4 to 6 times per week and 1 to 3 times per week respectively (Figure 6).

We expanded our research further and explored the purchasing frequency for each type of meals on the UBC campus. According to the responses from the 150 respondents, about one third of them (51) only purchased lunch on campus and the majority (139) reported to purchase more than one meal on campus. The participants who purchase only breakfast, dinner, or late night snacks on campus were the minority (Figure 7). For

simplicity we organized the data into four major categories : Breakfast, Lunch, Dinner, and Late Night Snack. After the organization, with a total of 298 votes, the main type of meal being purchased on campus is still lunch (48%). On the contrary, breakfast and dinner purchased on campus yield approximately the same frequency, with 66 and 65 votes respectively (approximately 22% each). Late night snack was the least frequently purchased type of meal on campus, with only 25 votes (8%) (Figure 8).

Reasons for Not Purchasing On-Campus Food

There were a wide variety of reasons that respondents reported for not purchasing food on campus. Allowing multiple selections we garnered a total of 207 reasons for avoiding campus-food. The votes broke down as follows: ‘the foods are too expensive (54 or 26%),’ ‘the line-ups (38 or 18%),’ and ‘preferring to bring their own food (37 or 18%).’ Some said ‘not enough time (24 or 12%),’ ‘not enough selection (18 or 9%),’ ‘do not like the foods (17 or 8%)’ and ‘preferring non-campus sources (13 or 6%).’ Few of them reported that they typically do not eat while on campus (5) or have personal reasons such as on diet (1) amounting to less than 3% of the total vote combined (Figure 9).

Awareness Regarding UBC Food Trucks

Of the 164 respondents, the majority (84%) of participants reported to be aware of the existence of the UBC food trucks (Figure 10). When asked which UBC food trucks they

had heard of, most respondents were aware of Hungry Nomad (96%). Meanwhile, 63% of respondents reported knowing Roaming Bowl while only 27% respondents were aware of The Dog House (Figure 11).

In regards to previous consumption at UBC food trucks, 38 out of 138 (28%) respondents claimed to have purchased food from the Hungry Nomad. Meanwhile, 17% of respondents reported to have purchased food from the Roaming Bowl while 10% had tried the Dog House prior to being surveyed. The majority of respondents, a substantial 62% (85 out of 138) of surveyed individuals who were aware of at least one of UBC's food trucks had not purchased a meal from any of them prior to completing this survey (Figure 12).

Social Media

In terms of using different social media platforms to help customers find information about UBC's food trucks including location and menu items, we asked on the survey which social media sites respondents already use or would use for these purposes. Most of the respondents felt comfortable using Facebook and Twitter to follow the UBC food trucks, with 73% and 34% respectively. Some used Instagram and Vancouver Street Food App. Other social media were not frequently used; they together had a total of 16 votes (Figure 13).

Location

With regards to the visiting frequency of each area on UBC campus we asked participants to select the two areas they frequent most while on UBC campus. The four areas on campus where our total of 164 respondents visit the most frequently rank in order as: “Libraries/Sauder/Sciences,” “Agronomy Road,” “Buchanan/SUB,” and “Hospital/Woodward Library” area. Other areas, “West Mall,” “Rose Garden/Flagpole,” “South Campus,” and “Other”, appeared to be much less frequented (Figure 14).

Discussion

Students’ Awareness of the food trucks

Based on the survey responses, awareness of the on-campus food trucks in the UBC community is quite acceptable; the majority of our survey respondents (84%) were aware of the UBC food trucks in general. As we continued to explore the awareness on each of the UBC food trucks specifically, we found that the Hungry Nomad had yielded significantly higher recognition (105 out of 109 respondents or 96%) in comparison to the other two available food trucks: the Dog House and Roaming Bowl. This is probably because the Hungry Nomad was the first food truck operated by UBC Food Services and it has been set up in several different areas on campus. However, the ratio of people who have actually eaten at the food trucks to people aware of the food trucks definitely needs to be strengthened; 85 out of 138 survey respondents claimed that they had never purchased food from the food trucks on campus before while only 38 of them reported to

have purchased food from the Hungry Nomad while the Dog House and Roaming Bowl yielded even lower purchases made. This suggests that awareness is not the major factor determining why UBC students or staff would not purchase food from the food trucks and seek other, often less convenient sources. The focus should be on exploring potential attractive features to encourage UBC students and staff to purchase products from UBC food trucks. One idea would be to offer one-time coupons and punch cards or other incentives for the UBC community to try the food trucks and become repeat customers.

Students' Demand

We proceeded to further investigate the possible underlying factors for why people seldom purchase from on-campus food sources (not just food trucks). According to our findings, many respondents preferred to bring food from home or preferred off-campus food sources such as the nearby University Village because they felt that on-campus food sources are too expensive, and healthy food options are limited. Concerning the cost-benefit balance, the food trucks will never be able to compete with the low cost of preparing and bringing all one's own meals to campus, so the UBC community who chooses this option will likely not be a regular customer. Nevertheless, this finding indicates that designing healthier menu choices with lower price may be a good way to develop potential market advantage over other competitors. Meanwhile, a few of the respondents felt that they did not have enough time to purchase food, especially when there is a long-line up or delays ahead. Depending on the food trucks' menu and location, they can potentially serve their food very fast and fulfill the needs of people who do not

have time for a sit-down meal. In addition, mobility is one the strongest advantages of a food truck in comparison with other food stores with a fixed location. A few of the respondents also felt that there is not enough food choice on campus; except for the SUB, most of the cafes on campus sell very similar foods which makes the food truck program stand out among its competition. This finding indicates another advantage of the UBC food trucks; because professional cooks operate them, their menus can be changed to seasonal or other new items and they have the ability to respond to client demands more readily than chain or AMS restaurant competitors on campus.

Breakfast Potential and Best Truck Locations

Based on the survey results, of the 150 respondents who claimed to purchase food on campus, only 66 of them would buy breakfast. This is significantly less than the total of lunch purchased on campus. According to this finding, it seems that breakfast is not a popular meal choice among UBC students and staff; however, it does not mean that the potential of expanding breakfast service is futile, considering breakfast is the most skipped meal, especially for university students. We believed, based on the results, that many UBC students usually just rush for their classes in the morning and have no time to buy breakfast. In addition, UBC students, especially freshmen, usually have consecutive mornings classes until noon; the short time gaps between classes may not allow them to purchase food or there is simply no appropriate food source available on the way between classes.

The potential factors that lower UBC students' willingness to buy breakfast on campus discussed could play to the advantage of the food trucks in that they are able to offer quick meals near classes or high-traffic areas. Our findings suggested that the top areas where our respondents spend the majority of their time on campus were: Koerner Library area, Agronomy/ Forestry area, then Woodward library, and finally near the SUB. Therefore, we suggest that the UBC food trucks services search for possible parking locations near Agronomy road (the area near LFS, forestry, and engineering buildings), where limited food sources are available, especially for the morning time-frame, given the early classes required by engineering students. In addition, the UBC food truck services should also develop healthier breakfast choices with faster services to encourage students' willingness to stop and purchase for fast-to-go meals. We suggest looking into the option of healthy smoothies.

Potential Promotion Options

In terms of possible options to promote UBC food trucks to expand its market share in the on-campus food sectors, we asked our survey participants which social medias they would use to track down the latest updates of UBC food trucks. Our results revealed that 119 out of 164 respondents would use Facebook as the major update source while 55 out of 164 respondents would use twitter to follow the updates. A few suggested Instagram and Vancouver Street which could also be useful seeing as Facebook can often be seen as unprofessional to represent a business. Therefore, we believe that UBC food truck services will yield better promotion results through promoting their latest updates through

Twitter and Instagram as well as maintaining a Facebook page with information on all of the UBC food trucks. In addition, frequent maintenance and updates are essential to increase UBC students and staff's awareness regarding these established sites. Additional promotion activities can be offered to raise people's willingness to support the established UBC food truck accounts. These promotions can be activities such as "like the FB page of UBC food trucks or share the tweet to receive 10 percent discount at any available UBC food trucks." Because awareness of the food truck program was not the issue, but the number of people who reported to have tried the food was very low. As a food business who operates under best practices; offers good tasting, ecologically and nutritiously healthy options, and can be transparent with this information through social media, the biggest obstacle is getting people "in the door" to try the food and become repeat customers. For this reason we suggest offering one-time, 50%-off coupon redeemable on one entre item at any UBC food truck, or similar incentive to make sure that everyone on campus has at least tried some of the mobile food options available.

Limitations

Since the majority of our survey respondents are third year or fourth year students, we were not able to fully grasp the opinions that first and second year students, as well as UBC staff may have regarding the food and UBC food trucks on campus. In addition, due to the time constraint, we were unable to cover all the areas on campus for the in-person survey. This can cause bias to our demographic questions. Therefore, our results might not be fully generalized as we aimed it to be.

Another limitation of our survey is that the quality of the information provided by the respondents is fully dependent on their willingness because it is based on self-reported data. In addition, since we also performed online-surveys, there are possibilities that participants misunderstood the questions or did not answer the questions correctly. We also had some unexpected unanswered questions in the survey. This is probably because we did not phrase the questions in the way that most people can easily understand.

With the limited timeframe, we were only able to target a limited number of factors determining people's willingness to purchase food at the trucks on campus by assuming other external conditions such as weather and exam periods are constant and do not affect people choices. However, in reality, these external conditions may influence people's consumption decisions and their willingness to purchase food from UBC food trucks.

Stakeholder Recommendations

Location and Breakfast Meals

One of our main objectives was to investigate which locations were most viable for the placement of the food trucks; taking into consideration factors such as preference and convenience of students/staff/others, and peak pedestrian-traffic areas. Based on the results, the area where Sauder, Sciences, and Koerner and Irving Libraries are was the most commonly visited campus area from the 164 surveyed individuals (UBC students, UBC staff, and others). The second most common location was around Buchanan and

the SUB. Mobility is one the strongest advantages of a food truck in comparison to brick-and-mortar food enterprises. Our group recommends that food truck placement should be near areas where seating places and Wifi internet connections are available. Additionally, food truck establishment in campus areas lacking many or any food service outlets can increase food security of those individuals commonly spending time in such locations. Another advantage of these areas is that pedestrian traffic is high, rendering the food trucks more visible. This could be advantageous, especially in the morning, around the SUB, where many commuting individuals arrive and can purchase a quick on-the-go breakfast meal from the food trucks.

The feasibility of breakfast foods sold at the UBC food trucks was also explored throughout the course of our project. Although lunch was the most commonly purchased meal on campus, breakfast menus could still be a suitable option for individuals who have early schedules and do not have time to eat breakfast prior to arriving on campus. As a result, the UBC food trucks could offer those individuals breakfast foods that are portable and quickly prepared. Moreover, we recommend future LFS 450 students to explore breakfast menu items preferred by consumers by also performing a survey. Although breakfast item preferences were not part of the scope our investigation, our group recommends that our stakeholders consider the addition of smoothies to their breakfast menu. Our group supports this idea given that smoothies are optimal for on-the-go meals attracting individuals with busy schedules. Additionally, smoothies could target consumers who value healthy food alternatives. Our group thinks that smoothies could be an appropriate menu option for the Hungry Nomad, Roaming Bowl, The Dog House, as well as the new food trucks. Furthermore, our group recommends a greater

variety of selection in the breakfast menus in order to target different ethnic groups as well as individuals with certain dietary restrictions. For instance, The Dog House food truck could provide food items that are gluten-free, lactose-free, vegetarian and/or vegan.

Discount Options

A crucial finding from our research was related to why individuals did not prefer to buy food on campus. The two main reasons were that individuals preferred to bring meals from home, and that campus foods are overpriced. Given that high food price is an obstacle, this can be overcome by incentives such as the “bring a friend with you and get a discount” strategy or the “two for one” special. Currently, all food trucks offer the possibility for students to pay with their UBC student meal plans and receive a 5% discount. As this is an attractive option, our group suggests for this option to be promoted by the food trucks as a possible way to attract more UBC students. Other possible approaches can include punch cards for loyalty (buy 10 get one free) and signing up with UBC’s existing container-saver program where customers bring their own containers. The latter is also an opportunity for UBC mobile food services to promote the sustainability concept. Additionally, certain practices such as food scrap composting, utilizing UBC Farm produce when available, biodegradable take-out containers and cutlery, are currently applied at the food trucks. Therefore, we encourage the food trucks to promote these attributes to target those consumers that prefer sustainable and ecologically friendly foods, as well as supporting a campus food system that aims to reduce waste and stimulate local food production and consumption.

Social Media

The integration of online social networking for marketing purposes has become immensely indispensable for burgeoning food trucks. Now recognized as integral components in the success and excitement attributed to food trucks, are social networks, such as Twitter, Facebook, Foursquare, and Instagram. According to our results, the majority surveyed participants have selected Facebook and Twitter as their primary source of social network.

These websites have allowed food truck owner/operators to develop an online and physical community around their brands. The use of social media goes far beyond only updating customers to a trucks locations or new additions to the menu. It allows the food truck owners to personally communicate with their customers and build a deeper rapport where their patrons become something more than paying customers; they become fans, friends, or as Twitter labels them, Followers. Currently, our community partners have a Twitter account set up for the food trucks but do not have a Facebook page. Therefore, we suggest that they open a Facebook account and increase activity in their Twitter page. For instance, a way to attract consumers could be through posting pictures of the food items offered at the trucks. Frequent maintenance and updates are essential to increase UBC students and staff's awareness regarding these established sites. Meanwhile, additional promotion activities can be offered via social media outlets to raise people's willingness to support the established UBC food truck accounts. These promotion can be activities such as "Like" the UBC food trucks Facebook page or share the "tweet" to receive 10% discount at any available UBC food trucks.

As users compose and forward tweets, they create their own social networks and personal brands. Through this method, they are able to build social capital that, with time, will translate into economic capital once their allure spreads and reaches increasingly more potential customers. The use of social media is unique in its ability to use virtual connections to persuade and direct followers to the street food they provide which in turn creates a communication that invokes subjective conversation around a substantive object, food, that will be sought after for actual consumption.

Smartphone apps, such as Instagram and Vancouver Street Food App can also be a useful method for the food trucks to effectively communicate with consumers. Although our survey results revealed that most individuals would not use a “food truck app”, our group recommends future LFS 450 students to look further into the applicability of UBC food trucks using an app to promote their services. For instance, UBC Food Services could reach out to UBC students in computer sciences or engineering, via the SEEDS Program, to help develop a simple food truck app providing services such as food truck movement and menu options and possibly on-line ordering. This option could potentially help UBC Food Services to reduce expenditure on app development while encouraging student collaboration at the same time, resulting in potential inter-disciplinary opportunities. Furthermore, this approach could engage numerous students from multidisciplinary backgrounds to collaborate with UBC Food Services, and thus promote student community involvement. Perhaps the dietetics and nutrition programs could also be included. For instance, these students could be assigned a SEEDS projects related to the menu products like nutritional assessments of the sold food products.

Scenario Evaluation

Our group thinks that our chosen method for our UBCFSP was the most appropriate for the project objectives and to fulfill our stakeholders' expectations. Moreover, our group aimed to have a survey sample size of at least 50 individuals, yet we were impressed with the willingness of UBC community members to answer our questions. This was definitely a positive aspect as we were able to have a larger sample size and surveyed individuals outside of the Land and Food Systems Faculty.

However, an important limitation from our results was the lack of respondents from first and second year, which have might very valuable information given that many freshmen students live on campus residences. Additionally, another important area of improvement for our project could have been to include more questions regarding meal purchasing from the food trucks. For instance, we could have asked individuals if they would consider buying breakfast from the diverse UBC food truck enterprises or if they had ever had breakfast food from the Hungry Nomad. As a group, we focused mostly on how aware the UBC community was aware of the existence of the trucks, and our group was interested in knowing this given that that the campus food trucks have been on campus for about two years or less.

Therefore, for future initiatives around UBC food truck expansion, our group thinks that an adequate approach is to survey individuals specifically on meal purchasing from the food trucks.

This has been a positive experience and has allowed our group to better understand the campus food system. Although at the beginning of the project we were

indecisive on what our main project purposes should be, with the help of our community partners David and Paula, our professor and teaching assistant, and the SEEDS Project coordinator we were able to narrow down our focus. We recommend for the LFS teaching team to continue to support the students throughout the course of the project, and to provide more detailed information on project background and about the stakeholders. We appreciated the enthusiasm of our community partners to include and trust us on numerous possibilities for food truck expansion, however, due to time limitations we were unfortunately unable to target all of their objectives. Thank you for this opportunity and experience.

Group Reflection

William's Reflection

Overall, working on the UBCSFP was really a precious experience; it allowed us to apply what we have learned on dealing with all sorts of issues regarding food sustainability through working with stakeholders from local food services. I believe this kind of real-life opportunity is rarely provided by other courses at UBC. Throughout out the process of this project, interactions with our stakeholders went quite well and the LFS teaching team was extremely helpful in providing practical suggestions. After all, it would be especially exciting to see if our recommendations were actually taken by our stakeholders and put into practice.

Felix's Reflection

UBCSFP provided an opportunity for the students to utilize what they have learned from their undergraduate studies to apply to real life scenarios. Instead of graduating empty handed and feeling like one has not contributed or made a difference, it is nice to know what you have done would remain as a reference and guideline for future LFS 450 students. Despite of the awkwardness of asking people to participate in the survey, I would say the project was quite enjoyable and rewarding. I hope our findings were enough to help our stakeholders to successfully expand their business and provide better services to the students of UBC.

Jenny's Reflection

As a student majoring in food market analysis, I am glad that I had the opportunity to apply my knowledge and experience market research in real-life settings. Even though I was a bit worried before starting the project, having my teammates along the way had made this whole project process incredible. Although we could not look into every aspect that our community partners desire, I still hope that our findings and recommendations can still help our stakeholders to expand and enhance their business. After the UBCSFP, I now feel more connected and more willing to engage to the community than before.

Valeria's Reflection

Although I felt overwhelmed at the start of this project because our group and community partners had so many ideas that we wanted to fulfill, narrowing down the scope of our project allowed this experience to be highly rewarding. I appreciated the relationship our group was able to establish with our stakeholders from the very first day. The idea that our research could potentially help them expand the UBC food truck services makes me feel as if our group succeeded in applying our classroom knowledge into real-life scenarios. I also value how this project allowed us to become more engaged with our campus' food system and become more involved with our UBC community.

Elliott's Reflection

Once again another LFS project knocked out of the park. All jokes aside I enjoyed this project thoroughly, our group was awesome and contributed evenly across the board. We each had our individual roles in relation to the group, mine was communications and so I was in charge of relaying information between our group and our community partners and the SEEDS coordinator, David. I thought that we were all able to utilize our strengths and that everyone contributed to completing this project in a timely and efficient manner. I hope we get to see more from the food trucks as a result of our and future SEEDS projects. Thank you.

Media Release

The UBC Food System Project (UBCFSP) provides an opportunity for students to assess and propose practical applications on the sustainability of local food services. Our group of LFS 450 students worked with the food truck division of UBC Food Services with an objective to explore the potential, with focuses on location and breakfast service, for expanding their overall business in a sustainable way. We conducted a survey to assess the pedestrian traffic and the food-purchasing habit within the UBC community. An important supposition for our survey was that UBC food truck consumers would be equally as interested in food system sustainability on campus. By finding out the major concerns that discouraged our survey respondents to purchase food on campus, we believed that the food trucks are capable of satisfying the UBC market's demands based on further developing their own advantages, which are quick service, locational mobility, professional cooks, diverse menus, and local food ingredients. We also made recommendations on discount strategies and social media promotion for attracting more customers. After all, working on this UBCFSP was really a precious experience and it would be especially exciting to see if our recommendations were actually taken by our stakeholders and put into practice.



UBC Food Trucks on campus: Roaming Bowl (left) and the Hungry Nomad (right)

Photo Credit: Elliott Waldman

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Appendix

a) Appendix A - Survey Questions

1. Occupation?

- A. Students
- B. UBC Staff (proceed to Q.5)
- C. Others (proceed to Q.5)

2. If you are a student, what is your year of study?

- A. 1st year
- B. 2nd year
- C. 3rd year
- D. 4th year and +
- E. Post-Grad

3. What faculty are you in?

4. If you are a student, what is your living situation?

- A. Live on Campus
- B. Live off Campus

5. How often do you purchase food on campus

- A. 1-3 times per week
- B. 4-6 times per week
- C. More than 7 times per week
- D. 1-3 times a month
- E. Less than once a month
- F. Never

6. what prepared meals do you typically purchase? (Check all that apply)

- A. Breakfast (8:00 am - 10:59 am)
- B. Lunch (11:00 am - 2:59 am)
- C. Dinner (3:00 pm - 7:59 pm)
- D. Late night snack/ late dinner (8:00 pm - 2:00 am)

7. How often do you purchase breakfast on campus?

- A. Everyday
- B. 1-3 times per week
- C. 4-6 times per week
- D. 1-3 times a month
- E. Less than once a month
- F. Never

8. If you seldom or never buy food on campus, please tell us why. (Check all that apply)

- A. Prefer to bring food from home
 - B. Not enough selection
 - C. Don't like the food
 - D. Food is too expensive
 - E. Not enough time
 - F. Line-ups/delays
 - G. Prefer non-campus sources
 - H. Don't typically eat while on campus
- Other:

9. Were you previously aware of UBC Food Trucks?

- Yes
- No (go to question 12)



10. Which of the following UBC Food Trucks have you heard of? (Check all that apply)

- Hungry Nomad
- The Dog House
- Roaming Bowl

11. Which the the following UBC Food Trucks have you eaten at? (Check all that apply)

- Hungry Nomad
- The Dog House
- Roaming Bowl
- None of the above

12. What social media sites would you use to locate the food truck. (Check all that apply)

- A. Facebook
- B. Twitter
- C. Foursquare
- D. Vancouver Street Food App

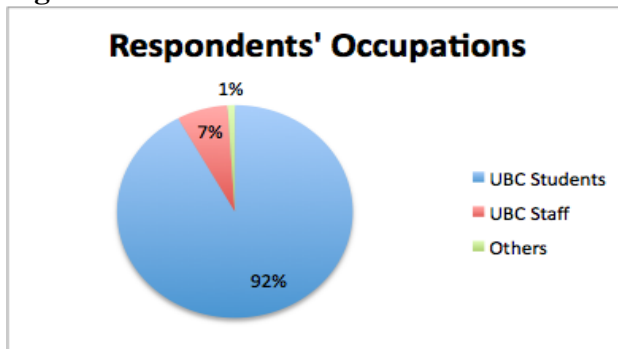
Other:



13. According to the map shown above, please list the top two areas that you spend the majority of your time while on campus For example: 1) 4, 2) 7

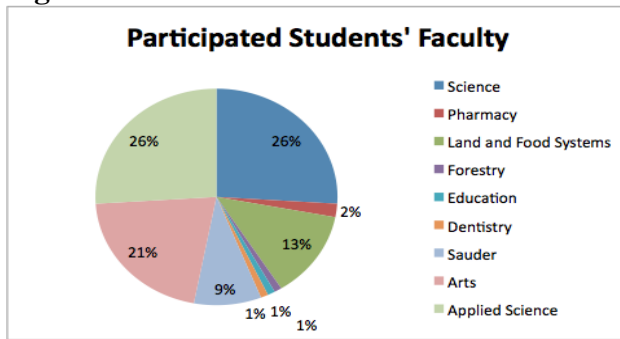
b) Appendix B - Figures

Figure 1.



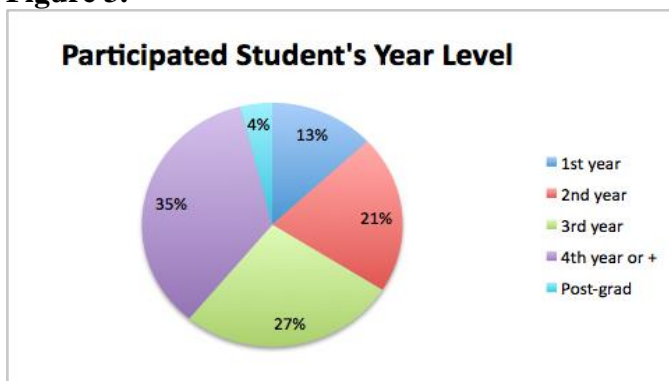
Percentage of the UBC students, staff, and others (n=164)

Figure 2.



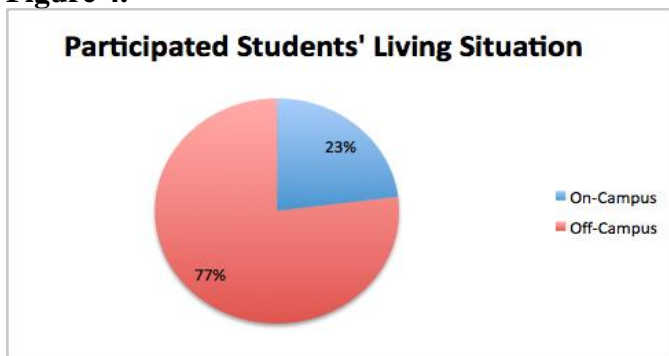
Faculty percentage of the students (n=151)

Figure 3.



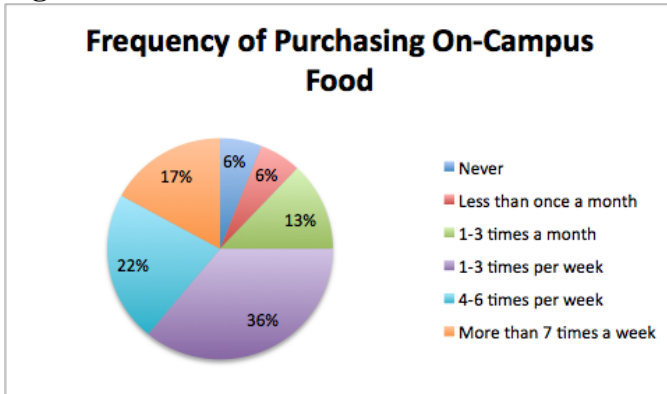
Percentage of the students' year level (n=151)

Figure 4.



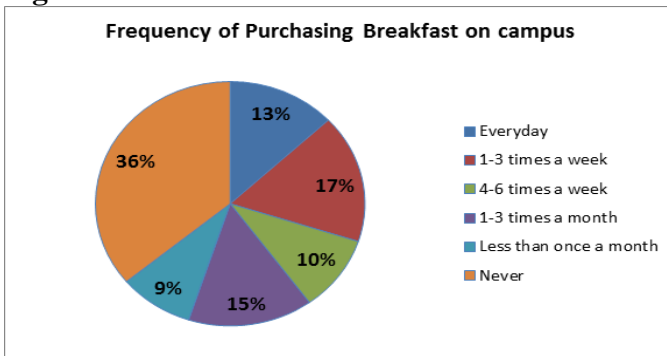
Percentage of the students' living situation (n=151)

Figure 5.



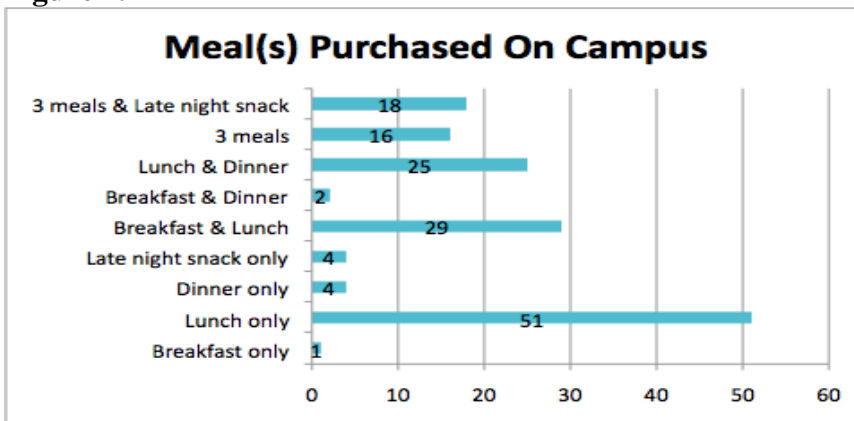
Distribution of the respondents' frequency on purchasing foods on campus (n=164)

Figure 6.



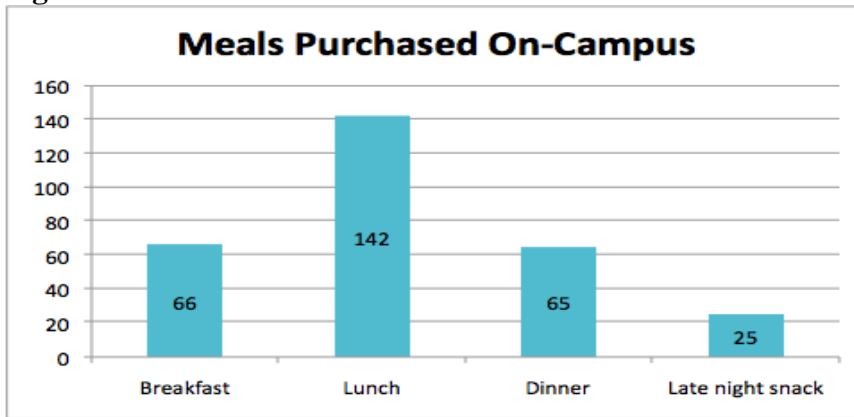
Distribution of the respondents' frequency on purchasing breakfast on campus (n=164)

Figure 7.



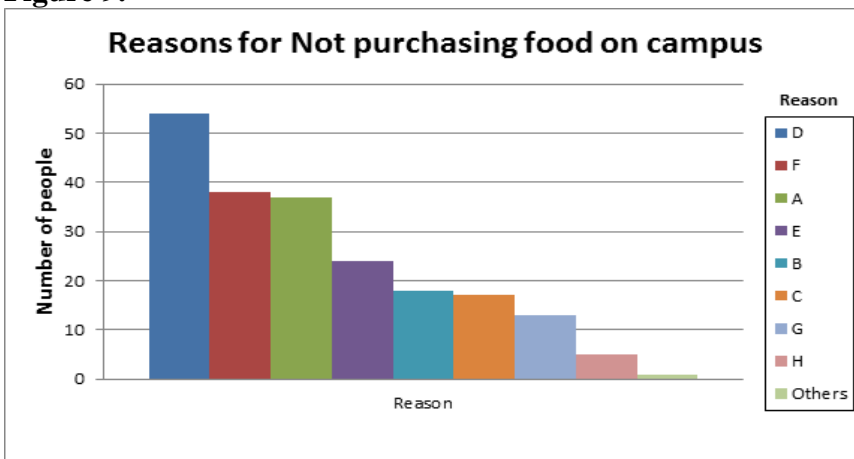
Frequency of meal types purchased on campus (n=150)

Figure 8.



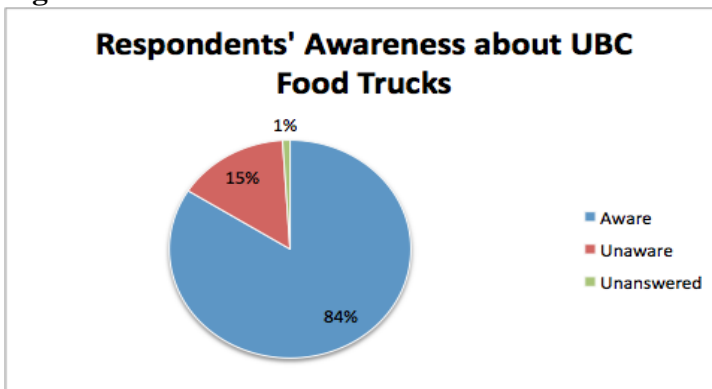
(Reorganized) Frequency of meal types purchased on campus

Figure 9.



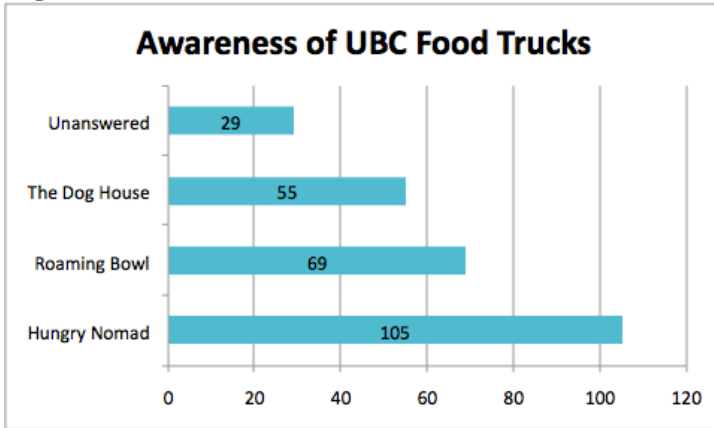
Distributions of reasons for not buying food on campus (for the reason details, please refer to Appendix A question 8)

Figure 10.



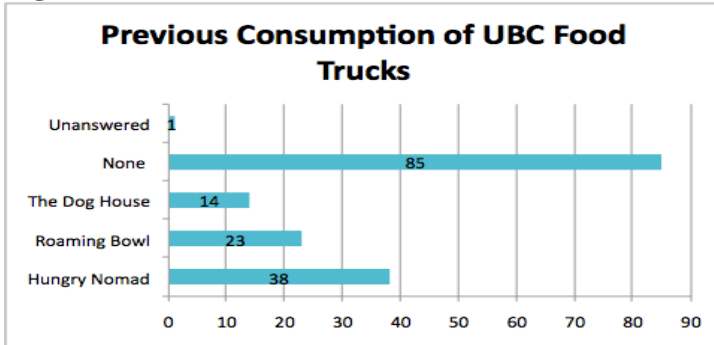
Percentage awareness of the food trucks on campus (n=164)

Figure 11.



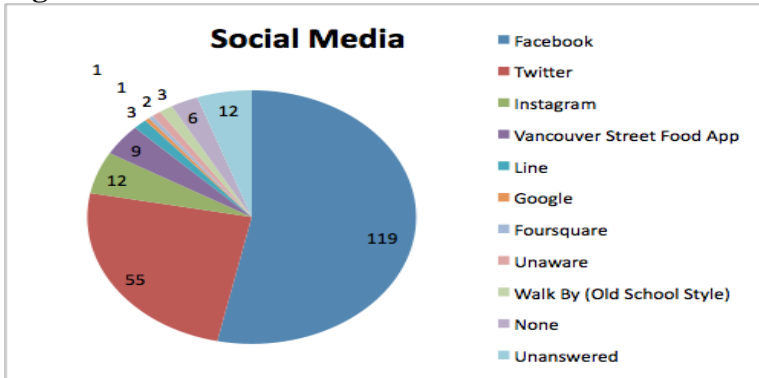
Awareness about each of the 3 food trucks on campus (n=109, unanswered excluded)

Figure 12.



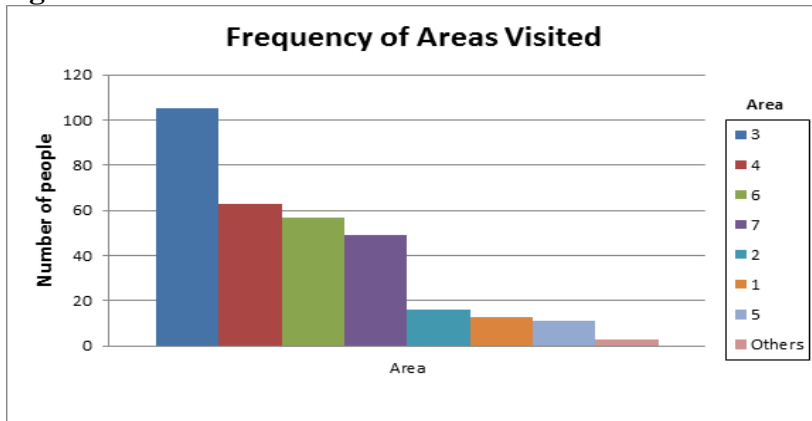
Consumption at each of the 3 food trucks on campus (n=138)

Figure 13.



Distribution of social media used to locate the food trucks (n=164 w/ “check all that apply”)

Figure 14.



Pedestrian traffic in each area of the UBC campus (for the area details, please refer to Appendix A question 13)