



School of
**Hospitality Business
Management**
WASHINGTON STATE UNIVERSITY

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

Prepared by:

TIFFANY COUTURIER | COURTNEY KINSMAN | VICTORIA SUHOTIN | IIS TUSSYADIAH
School of Hospitality Business Management
Carson College of Business
Washington State University Vancouver

In collaboration with the City of Vancouver, WA

August 31, 2015

For more information regarding this report, please contact:

IIS P. TUSSYADIAH, PhD
School of Hospitality Business Management
Carson College of Business
Washington State University Vancouver
14204 NE Salmon Creek Ave, CLS 308T
Vancouver, WA 98686 USA
Phone: +1 (360) 546-9109
Fax: +1 (360) 546-9037
Email: iis.tussyadiah@wsu.edu

CONTENT

- 1. Executive Summary 2
- 2. Introduction 5
- 3. Literature 7
 - 3.1 Consumer Dining Out Motivations 7
 - 3.2 Consumer Dining Out Expectations 8
 - 3.3 Mobile Food Vending Policy 9
 - 3.4 Hypotheses 9
- 4. Methodology 11
 - 4.1 Consumer Survey 11
 - 4.2 Interviews with Food Truck Owners 12
 - 4.3 Case Studies 12
- 5. Demand Assessment: Consumers 14
 - 5.1 Respondent’s Characteristics 14
 - 5.2 Dining Out Behavior 17
 - 5.3 Lunch Behavior 18
 - 5.4 Importance and Performance of Food Truck Attributes 22
 - 5.5 Motivations to Purchase from Food Trucks 25
 - 5.6 Intentions to Purchase from Food Trucks 26
 - 5.7 Support for Food Truck Policy 30
 - 5.8 Respondent’s Comments 35
 - 5.9 Summary of Findings 38
- 6. Key Insights from Mobile Vendors 40
 - 6.1 Characteristics of Interviewees 40
 - 6.2 Summary of Findings 43
- 7. Best Practices in Mobile Vending Policy 45
 - 7.1 Jersey City, New Jersey 45
 - 7.2 Akron, Ohio 46
 - 7.3 Austin, Texas 47
 - 7.4 Washington, District of Columbia 49
 - 7.5 Boulder, Colorado50
- 8. Recommendations 56
- 9. References 60
- 10. Appendix A:1

1. EXECUTIVE SUMMARY

This research aims at identifying the market potential for mobile food vending in Downtown Vancouver, Washington under different policy scenarios. Firstly, this research assesses the potential demand for mobile food vending by identifying the factors that influence consumers' behavioral intention to buy from food trucks. Secondly, this research addresses the need to capture the patterns of dining out behavior, especially for lunch, including when, where, which occasions, and how much money consumers spend at food establishments to illustrate the potential market for mobile food vending. Further, this research better understands consumers' attitude toward food trucks and how it influences their support for different policy options to incentivize the expansion of mobile food vending in Downtown Vancouver, WA.

In order to answer the research questions, several theories were considered for the conceptual framework of this research. First, to identify consumer motivations to purchase from food trucks, Self-determination Theory, which defines intrinsic and extrinsic motivations in consumption behavior, was consulted. Consumer motivations were explained as intrinsic motivations, which come from internal drivers such as trying out new food or supporting a local business that brings internal satisfaction, and extrinsic motivations, which come from external drivers such as trying to fit in with their peers. Secondly, in order to assess the important attributes of food trucks that carry weight in driving consumers' decision to buy from food trucks, Lewin's Expectancy Theory was consulted. The theory focuses on consumers' purchasing decisions based on expectancy disconfirmation, which is the gap between expectation and satisfaction of different attributes of consumption.

This research utilizes multiple methods of data collection and analysis, combining quantitative and qualitative approaches. Data were collected through an online survey targeting daytime residents of Downtown Vancouver, interviews with food truck owners, and a case study approach to capture best practices for mobile food vending policy applied in other cities comparable to Vancouver, WA. The online survey was distributed with convenience sampling by sending the link to the survey to randomly-selected local business addresses and a list of downtown parking pass holders. A total of 512 respondents completed the survey. Most of the respondents were female, with higher levels of income, with higher education levels, working full time, and reside in Vancouver, WA. Despite the potential gender bias, in general, the respondents represent the target population for potential consumers for mobile food vendors in the city. Respondents are driven by values of personal wellbeing and community building, with the former as the determining factor that impacts the respondent's decision making during a purchase.

A majority of respondents dine out mostly for lunch and dinner; they choose food truck options during weekdays and sit down restaurants on weekends, indicating a potential demand for food trucks serving daytime hours, especially targeting downtown employees. Most respondents eat out at food trucks about once a month, suggesting the need to implement changes in order to induce demand. Most respondents do not spend too much money on lunch, suggesting that a food truck might be a viable option for consumers who want quality food for a more reasonable price. The survey also identified how far respondents go and how they travel to different food establishments. More than half of the respondents would rather walk than drive to food

establishments within one mile. Additionally, a majority of the respondents walk to purchase at a food truck, thus showing a potential increase in demand for food truck vendors located closer to consumers' workplaces. In all dining out categories, respondents frequent local food and beverage establishments in Vancouver, WA for lunch, but occasionally travel to other locations.

The levels of expectation in terms of attributes of mobile food vending are met with the satisfaction levels with food trucks in Vancouver, WA. Three attributes are characterized with high expectation and high satisfaction (i.e., Food, Service, and Appearance), indicating that food trucks should "keep up the good work" with regards to these attributes, and one attribute with low expectation and low satisfaction (i.e., Dine-In Atmosphere), indicating low priority. It was identified that positive disconfirmation towards food attributes of the food trucks significantly predicts demand for food trucks, even without policy changes. However, consumer motivations are shown to influence more demand under different policy intervention scenario, including when there are more food trucks and/or when there are designated food truck pods in downtown Vancouver, WA.

Respondents also demonstrate a high agreement for the positive roles of food trucks for the community in general as well as the expected positive impacts of mobile food vending in Vancouver, WA. Consequently, these perceived roles and impacts positively influence their support for various policy options for food trucks in Downtown Vancouver, such as allowing them to stay longer than three hours in the same place, allowing them to operate in public places, and creating food truck pods. Respondents expressed both concern and interest in the development of the mobile food industry. As indicated in respondents' comments, they believe that mobile food vending will attract new talented employees and increase the visitation and livability of the Downtown area. However, it was also noted that food trucks in Portland, Oregon, which is just a few miles from the Downtown Vancouver, are more popular and visited frequently by Vancouver residents. Therefore, respondents believe that with additional food trucks, demand will grow as the food trucks create more foot traffic. Respondents in support of pods consider the walking distance, the food variety, and the convenience they bring to the area. However, there is concern that the creation of pods might result in safety and sanitation issues. Some of these concerns are due to misinformation or past experiences.

The food truck owners were aware of the direct competition with existing food and beverage establishments in Downtown Vancouver, yet they believe in creation of a strong community. The consumers for food trucks are not the same every day and their preferences and tastes change as well as their perceptions and expectations. Therefore, food truck owners encourage consumers to visit other brick and mortar restaurants, encouraging a positive relationship between food truck and other food establishments. In general, food truck owners support the development of pods in the future. However, there is a possibility that pods oversaturate the market if easier policy changes are implemented in the city.

From several case studies, food truck policy change resulted in significant increase in population, economic development and growth, and additional business operations, including food and beverage industries in the cities. However, with many cities implementing many policy changes accommodating food trucks in recent years, future studies should identify the economic impacts of these policy changes as well as mobile food vending industry in general.

Respondents in Downtown Vancouver, WA want more food trucks and pods. A suggestion for city is to create a centralized website with information regarding business application process, policy changes, restrictions, general information, and location of food trucks. Additionally, several pilot studies to test out new policies in a limited time period will allow the city to identify the significance of the market (i.e., demand) and address consumers' feedback before permanently implementing the policies.



“One of the hardest issues with running a creative agency in the tech industry is attracting talent, which currently reside almost exclusively in Portland. Food carts and anything else that makes Vancouver more fun, hip, and modern go A LONG way towards [helping] companies like ours find talent. I believe the value of food carts from a recruitment standpoint is grossly underestimated.”

Respondent



2. INTRODUCTION

Mobile food vending has transformed from small food carts selling carnival treats to a brand new consumer experience; and foodies, communities, and entrepreneurs have taken notice. As of 2013, mobile food vending has grown to produce approximately \$650 million in annual revenue in the United States. According to the National League of Cities, these revenues are expected to increase to roughly \$2.7 billion in revenue over the next five years (2013). With an expected national growth this strong, communities are finding themselves with outdated policies and consumers who are demanding more and more mobile food vending establishments. As a result, communities are turning to larger cities as a model for mitigating growing pains. Vancouver, WA is not immune to these pressures, with outdated policies and a strong desire to build a vibrant culture that is uniquely Vancouver, action must be taken to ensure the healthy development of the mobile food vending sector.

The capstone course in the School of Hospitality Business Management at Washington State University Vancouver has partnered with The City of Vancouver in Washington State to conduct research to assess the demand potentials for mobile food vending establishments. Due to the increasing interest in mobile food vending businesses, the City of Vancouver has identified the need to establish new sets of regulations to support this development. The findings from this study are expected to assist the City of Vancouver in determining new policies to influence the growth of mobile food vending establishments in the downtown area of Vancouver.

The purpose of this research is to identify the market potential for mobile food vending in Vancouver, WA. Specifically, this research has been conducted to identify: (1) consumer perceptions on the drivers and barriers for eating out at food trucks and carts, (2) the potential market size and business growth, and (3) the potential impacts of mobile food vending establishments in the city. To achieve the first goal, several factors associated with consumer motivations (i.e., intrinsic and extrinsic motivations), expectation and evaluation of service attributes (i.e., atmosphere, service, food, and convenience), as well as consumers' demographic and psychographic characteristics were explored. In order to estimate the size of the market for food trucks/carts, the future intention to consume and willingness to pay for food carts/trucks in Downtown Vancouver were considered. Finally, this research explored consumer perception on the potential impacts of mobile food vending establishments in terms of strengthening the sense of place and supporting local businesses in the city. This was achieved through exploring the consumer visitation of the food truck and cart pods as well as the success of the food trucks and carts around the business areas.

When making long-term oriented decisions regarding business policies, it is crucial to reduce the margin of error. It is understood that The City of Vancouver is at a point where more research is needed in order to move forward. Information regarding the viability of mobile food vending in Vancouver is required. In order to produce well-rounded findings and recommendations the following research questions were developed: (1) *What motivates people to buy from food trucks?* (2) *How significant is the Vancouver, WA market for food trucks?* (3) *Do pods attract more consumers than independent trucks?*

These research questions will guide the research to determine what consumers and food truck owners believe about the current state of mobile food vending policies in Vancouver, what their preferences are moving forward, and what their future intentions are so that we might be able to make informed decisions about what will best serve the market. First, identifying consumer motivations for buying from food trucks will allow us to predict future buying behavior based on past expectation and performance. Second, the size and demographic of the food truck market in Vancouver, WA is crucial for deciding what kind of policies the community will support. Not all cities are created equal, so we need to determine the specific demographics of demand in Vancouver in order to decipher how immediate the need for a policy change. And, lastly, if policy changes are warranted at this time, we need to determine what kind of policies the market will support, both from a consumer traffic perspective, and a food truck owner perspective.

The significance of this research reaches beyond food truck owners or potential owners. There are many stakeholders that will be affected by the results and findings of this study:

Food Truck Owners. The current owners could potentially be faced with a changing policy, depending on the results. But, more importantly, they could find themselves in a position of stagnant growth due to the restricting qualities in the current food truck parking policies. Both consequences must be taken into account when making recommendations.

Government/Regulators. The City of Vancouver has a vested interest in the success of small business in Vancouver. The food trucks of Downtown Vancouver are a small but growing force among the small business community. Regulations and enforcement strategies will impact the economic and community development of Vancouver. In order to make informed, smart, decisions, the City of Vancouver must review the strength and type of demand for food trucks. The implications of moving too quickly or not at all could lead to an unsustainable growth pattern.

Consumers. Ultimately, if the consumers are unhappy with the selection, regulation, or community surrounding food trucks, the success of food trucks will diminish. Currently, food trucks have a lot of momentum building in the neighboring city of Portland, OR; but, there is little known about food truck consumers in Vancouver. It's important when making decisions about the food truck market in Vancouver not to assume that all consumers are identical across communities.

General Community. Business policies impact economic development. Food truck owners are affected by business policies as both business owners and as members of the community. From a community development standpoint, the types of businesses that are incentivized to locate in Vancouver will shape the environment of Downtown Vancouver. Therefore, it is important to take a holistic view when making policy decisions.

Overall, this research will aid the City of Vancouver by research consumer demand for food trucks and recommending policies that match the demand and growth expectations.

3. LITERATURE

The sphere of mobile food vending research is severely lacking and is disproportionately qualitative. This study seeks to provide a multi-faceted approach consisting of both qualitative and quantitative analyses, and, in so-doing, add scientific value by expanding on the existing research on mobile food vending in hospitality literature. In literature, there is a profound lack of understanding of the relationship between consumer dining out expectations and how these expectations were formed. Furthermore, existing research on consumer expectations and satisfaction fails to encompass the mobile food vending sphere (e.g., Taylor & Edgar, 1998). Kivela, Inbakaran, and Reece (1999) established that current research on service quality and guest satisfaction is limited to both traditional restaurants and an overall analysis of service quality and satisfaction rather than dining satisfaction. Consequently, this research seeks to measure customer expectations and their relationship to past experiences, values, and motivation using multi-attribute scales. The use of multi-attribute scales will probe the relationship between customer satisfaction and mobile food vending attributes as well as the identification of what the attributes are. Based on an analysis of the existing relevant research and identification of research gaps, the following research questions were established for this research:

RQ1: What motivates people to buy from food trucks?

RQ2: How significant is the Vancouver, WA market for food trucks?

RQ3: Are food truck food pods attracting more consumers/revenues than independent food trucks?

To answer the aforementioned research questions, self-determination theory and Lewin's expectancy theory were identified and applied to decipher customer motivations in the hospitality interaction with mobile food vendors.

3.1 Consumer Dining out Motivations

Self-determination theory (Deci & Ryan, 1985; 1987; Ryan & Deci, 2000) provides a meta-theory framing motivational studies, defining intrinsic and extrinsic sources of motivation in consumption. This theory was applied to consumer's intrinsic and extrinsic motivations in choosing mobile food vending. Self-determination theory assesses how social and cultural aspects facilitate or undercut people's sagacity of choice and drive. Intrinsic motivations, as defined by the self-determination theory, are motivations and drivers to behave in a manner that elicits internal benefits, while extrinsic motivations are motivations and drivers to behave in ways that stimulate external benefit. For example, if an individual goes to a restaurant to try new food or to support a local business, the motivation is intrinsic because the driver comes from internal satisfaction. On the other hand, if the same individual goes to a restaurant because the restaurant is popular and they seek to fit in with their peers, the individual is driven by extrinsic motivations because the drivers are coming from an external source.

Through an analysis of existing research on intrinsic and extrinsic motivation as it applies to the dining out experience, several existing studies were identified. The National League of Cities

identified relevant intrinsic and extrinsic motivators with regards to how people are motivated based on the use of public space, safety, and health (2013). Additionally, in a case study of Singapore, dining out motivations as they directly relate to street vendors in Singapore are identified (Henderson, Yun, Poon, & Biwei, 2012). Henderson, Yun, Poon, and Biwei (2012) assert that motivators such as trying new things, cultural understanding, economic value, comfort, cleanliness, and a sense of community are among some of the motivators in consumers dining out at street vendors in Singapore. Whilst intrinsic and extrinsic motivators are identified in the aforementioned studies, previous research provides no evidence to answer what motivates people to buy from food trucks. Therefore, it is important to apply the theory to explain the following:

- What values do people who buy from food trucks possess?
- What are the significant intrinsic and extrinsic rewards that motivate and/or prevent people to buy from food trucks?

3.2 Consumer Dining Out Expectations

Lewin's expectancy theory asserts that individuals make purchase decisions based on their expectations of the outcomes of a specific action (Kivela, Inbakaran, & Reece, 1999). If the product or service exceeds the expectations, positive disconfirmation occurs. On the other hand, a negative disconfirmation occurs if the expectations of the product or service do not meet expectations. Confirmation occurs if the customer experiences neither positive nor negative disconfirmation (Kivela, Inbakaran, & Reece, 1999). The application of Lewin's expectancy theory has primarily been in the identification of the sources of customer satisfaction rather than isolating consumers' desires and needs. Additionally, Lewin's expectancy theory has been used in existing research to identify indicators of consumer satisfaction (i.e., repeat purchase behavior, brand loyalty, etc.) to be applied in business and marketing strategies. For example, Kivela's (1997) study in Hong Kong is one such study where restaurant attributes are identified and weighted by importance to provide restaurant marketers with implications for their marketing strategy. Through the application of Lewin's expectancy theory, we seek to test and decipher the relationships between customer expectations and satisfaction, as well as how these expectations were assimilated based on past experiences, values, and motivations. We define and measure customer satisfaction with mobile food vendors, consequently providing insight into the potential market for food trucks in Vancouver, WA. The relevant literature will guide in identifying the following:

- How important are food truck service attributes to the consumers?
- How satisfied are the consumers with the service attributes of food trucks in Vancouver, WA? Were expectations met?

3.3 Mobile Food Vending Policy

A mobile food vending establishment is a transportable food cart or truck that can sell a variety of food and beverages to the population in public places. A pod is a cluster of food carts or trucks in a same place in certain areas of the city. While there is ample research on brick and mortar dining establishments, the breadth of research on mobile food vending is severely lacking. Relevant literature identifies economic activity, public space, public health, and public safety as crucial elements for success in mobile food vending policies (National League of Cities, 2013). One key issue identified within public space is parking. The National League conducted a study of mobile food vending across a variety of cities within the United States with a variety of demographics to identify existing policy flaws and their impacts on mobile food vending and the community. One key characteristic identified is that less restrictive parking regulation for mobile food vendors is favorable. This can also include policies to incentivize vendors to locate in a food pod. According to the Urban Vitality Groups study on mobile food vending in Portland, OR food carts have positive impacts on street vitality and neighborhood livability in high-density areas, like downtown Vancouver, WA (2007).

The Urban Vitality Group's study also concluded that when food carts are located in a pod that the increase in foot traffic to the site can negatively impact the surrounding community, particularly with the lack of trash receptacles (2007). Policies need to take the elements identified in existing research into account when designing and implementing policies for mobile food vending. Streamlining the permitting process has proven to increase efficiency and ease of the application process for both mobile food vendors and city employees in the relevant departments. The City of Austin, Texas has implemented a centralized mobile food vending permitting process wherein the requirements for permitting are listed on the city's website including Mobile Food Vendor Permit form (including the cost of the permit), a checklist of additional requirements and who to contact for each, Mobile Vending Unit Physical Inspection Checklist, and a list of mobile food vendor responsibilities (National League of Cities, 2013). According to the National League of Cities, the mobile food vending domain generated \$650 million in revenue annually in 2013 and is projected to generate \$2.7 billion in food revenue over the next five years (2013). Thus, outdated policies that make Vancouver, WA ill-equipped to handle a mobile food vending market need to be addressed. In order to adequately create effective policies for mobile food vending, it is crucial to analyze the following factors:

- Do food truck pods attract more consumers than independent food trucks?
- Does the location of food truck pods affect the success of food trucks?

3.4 Hypotheses

Based on the research questions and the review of literature, the following hypotheses were suggested and tested:

H1: There is a significant relationship between consumer motivations, expectancy disconfirmation, and intention to purchase from mobile food vending establishments.

- H2: There is a significant relationship between consumer perception on mobile food vending and support for mobile food vending in Vancouver, WA.*
- H3: There is a significant difference in terms of consumer attitude toward mobile food vending policy models.*



“I have a strong passion for clean whole food. I want to provide the city of Vancouver with healthy wholesome food and at the same time create a sense of community. I would really like to help Vancouver grow with creative things, and help build a culture independent from Portland. Consumers aren’t just looking at food as a holistic item, it has to taste good too. Consumers are becoming smarter and more educated, thus they are becoming a different kind of buyer.”

Food Truck Owner



4. METHODOLOGY

In order to gather well-rounded information to answer the research questions, this study utilized a mixed method approach. First, quantitative research will be obtained through a consumer survey. Second, qualitative research will be obtained using descriptive statistics through interviews and case studies. The goal of the research is to compile well-rounded results from many viewpoints so that quality, well researched recommendations can be presented.

4.1 Consumer Survey

An online survey was developed on Qualtrics.com to gauge information pertaining to consumer values, customer perception and expectations regarding service attributes, consumer motivations, and demographics concerning the market size and viability of food trucks in downtown Vancouver, WA. First, a pilot study was conducted by sending a preliminary version of the survey to peers at Washington State University Vancouver. The primary purpose of the pilot study is to gather initial information and solicit feedback on the readability of the survey. Based on the data and feedback from the pilot study, adjustments were made in order to create an accurate survey tool to measure the market potential for mobile food vending in Vancouver, WA.

The final survey was distributed to consumers in the downtown Vancouver, WA area. Respondents for the survey were selected using convenience sampling. The list of respondents was provided by the City of Vancouver, including business owners and people who hold yearly parking permits in the downtown area of Vancouver, WA. This specific group was selected because they concentrate their time and food purchases in Downtown Vancouver, especially for lunch during the workweek. Vancouver is largely made up of residential areas with pockets of retail within those residential units. Downtown Vancouver, specifically, is generally made up of independent businesses and professional offices. Since the policy changes are intended for Downtown Vancouver area, the consumer groups targeted for the survey are justified. The survey was administered between March 23, 2015 and April 28, 2015. The survey could be accessed through a web link with any web browser. As an incentive to participate, all respondents were given a chance to enter into a drawing for one of eight reward cards in the amount of \$25 each. A total of 631 started the survey, 512 of responses are complete and included in the analysis.

Different statistical methods were used to analyze the survey data. Data were analyzed with descriptive statistics, independent-samples t-tests, chi-square tests, correlation coefficients, and regression analyses to look for potential cause-and-effect relationships. The survey includes measures of consumers' perceptions, expectations, and opinions on a 5-point Likert scale, which will allow the use of the following statistical tests:

- *Independent-samples t-tests and Chi-square tests*: to identify potential differences in terms of perceptions, expectations, and opinions regarding mobile food vending establishments among different groups of consumers (e.g., demographic characteristics).
- *Correlation and regression analysis*: to measure the strength of association and cause-effect relationships between consumers' values, opinions, future intention, and willingness to pay.

The consumer survey is the primary method that provides answer to three identified research questions. First, the survey will answer *RQ1* by identifying the motivational factors for consumers, perceived drivers that affect demand, and the importance of service attributes for consumers in downtown Vancouver, WA. The survey will also answer *RQ2* by gathering demographic data and allowing the analysis of the market potential in Vancouver, WA for mobile food vending (both individual food trucks or carts and food truck pods). Lastly, this method will provide answers to *RQ3* as the survey asks about consumer opinions on different policy scenarios, including the allocation of food truck pods versus individual food trucks.

4.2 Interviews with Food Truck Owners

In order to understand the current state of food trucks in downtown Vancouver, WA, interviews were conducted with food truck and cart owners. The City of Vancouver provided contact information for food truck owners from the Food Truck Coalition of Vancouver. The Food Truck Coalition of Vancouver is an organization of food truck owners in the Vancouver, WA area. They meet regularly to discuss relevant issues and provide a space for information and advice exchange. Food truck owners in Vancouver overall realize the importance of a community effort in the success of each of their businesses. Therefore, members of the Food Truck Coalition of Vancouver, WA will be interviewed. Interviews will be conducted with individual food truck owners separate from the Food Truck Coalition of Vancouver to minimize the effects of groupthink. Interviewing individuals independently might allow them to be more open to sharing specifics about their business and opinions when they are anonymous and away from the group. The interview results will be compiled and used to make comparisons. Frequencies in responses and consistencies in perceptions or opinions will identify that certain perceptions or opinions are more wide-spread. Interviews will be used to fill in gaps in the research that the consumer survey could not measure and also give the research a two-sided perspective. Interviews will also be expanded to answer research questions. The main purpose for the interviews is to provide information regarding the economic expectations for food carts and trucks in Vancouver, WA. Many of the current food truck owners have been in business for several years and have seen the trends change. Food truck owners' insights are highly valuable for making policy changes and it's crucial to consider their thoughts when potentially changing policies that affect their business. A total of seven food truck owners were contact and three interviews were conducted during the week of March 16, 2015.

4.3 Case Studies

A case study approach will be utilized to review the practices of and policies pertaining to mobile food vending in other cities. A total of five cities were selected. Two were selected with population under 260,000 in order to find cities with a similar population to Vancouver; Akron, OH and Jersey City, NJ. In addition to those two cities, three cities were selected for the purpose of analyzing potential policy changes; Austin, TX, Washington D.C., and Boulder, CO. Then, systematic research using government websites, press releases, and policies were conducted to determine the policy change and the economic impact of such changes. The findings will be compared to identify any frequencies, and cause and effect relationships between policy changes and economic

development. This will allow a context and framework for further research on the widespread effects of mobile food vending policy. The case studies will provide a broader context and answer research question three. Existing frameworks and policies from other cities will allow City of Vancouver to make informed decisions regarding policies for food trucks and pods.



“I would absolutely patronize food trucks more often if I didn't have to always keep track of where they are. Every day I have to remember "*Truck A is at this location, Truck B is over there,*" etc. We need to have food truck pods, which I think would also [make] things much easier for the operators to not have to move every day. If that's not possible maybe a single information source with schedules for all of them so customers don't have to search out information about every different truck. Also, seating is important for visitors who don't have an office to take their food to, or workers who do not want to take their food back to their desk. But when you have seating, you also need someone to be sure the tables are wiped off, trash emptied, etc.”

Respondent



5. DEMAND ASSESSMENT: CONSUMERS

5.1 Respondents' Characteristics

According to the Vancouver city data (Onboard Informatics, 2015), Vancouver, Washington is a city that is slowly but steadily growing with the population of 167,405 in 2010, of whom 81,650 (48.8%) are males and 85,755 (51.2%) are females with a median resident age of 36.6 years. Of the total Vancouver population, 71,985 (43%) are Downtown Vancouver residents who represent the density of the downtown area where a potential market demand exists for food vending establishments. The survey was taken by 512 respondents, of whom (66.5%) were female respondents (see Figure 1). Therefore, it is noteworthy that the respondents in this study might not represent the gender distribution of the general population of Vancouver, WA. In terms of age, the majority of respondents (49.9%) are in the range of 35 to 54 years old and 24.5% in the range of 26 to 34 years of age (see Figure 2), indicating that the age distribution of respondents in this study is comparable to that of Vancouver residents.

Figure 1. Gender (%)

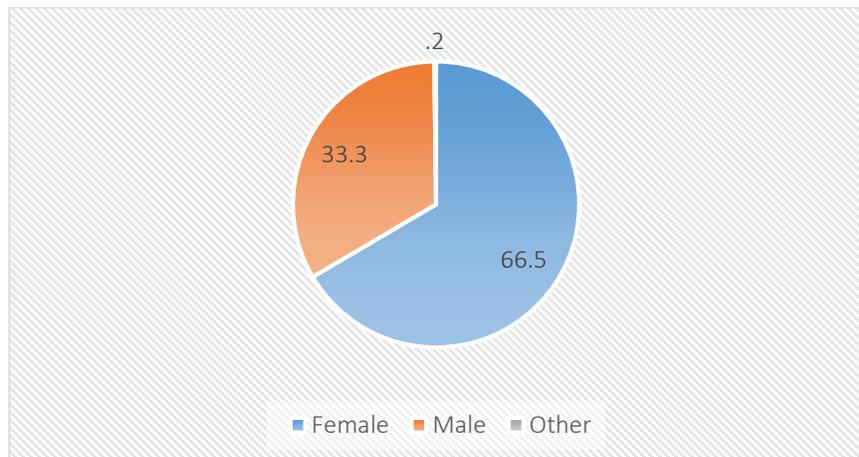
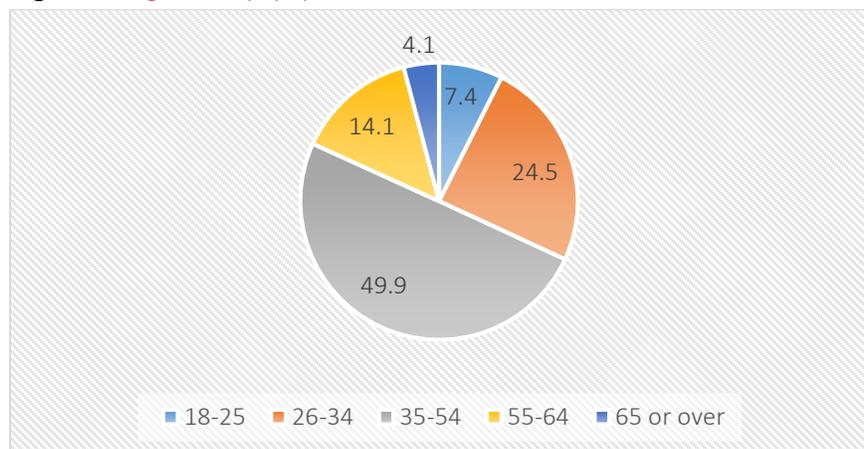


Figure 2. Age Group (%)



In terms of levels of education, the majority of respondents are highly educated. A large portion of the respondents had a four-year College Degree (40.1%) and more than 20% had an advanced degree (i.e., Master’s, Doctoral, or Professional Degrees). The majority of respondents (77%) are working full time (employed for 40 hours or more) and a little less than 11% employed with 20 to 39 hours a week (see Figure 4). Further, 72.5% of respondents stated that they work in Downtown Vancouver. It can be suggested that the respondents are highly educated professionals (i.e., employees, talents) working in Downtown Vancouver, who are the target consumers for food trucks. Therefore, this justifies the relevance of the survey responses in addressing the research questions.

Figure 3. Highest Level of Education (%)

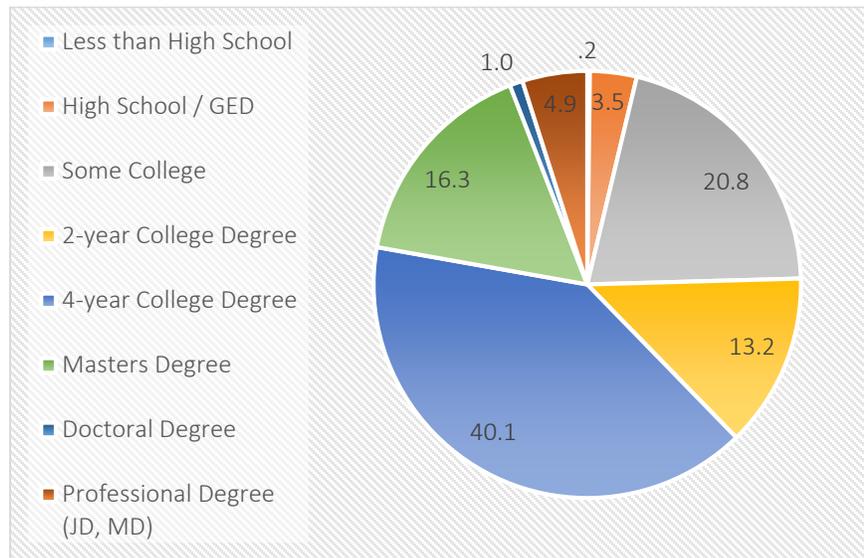
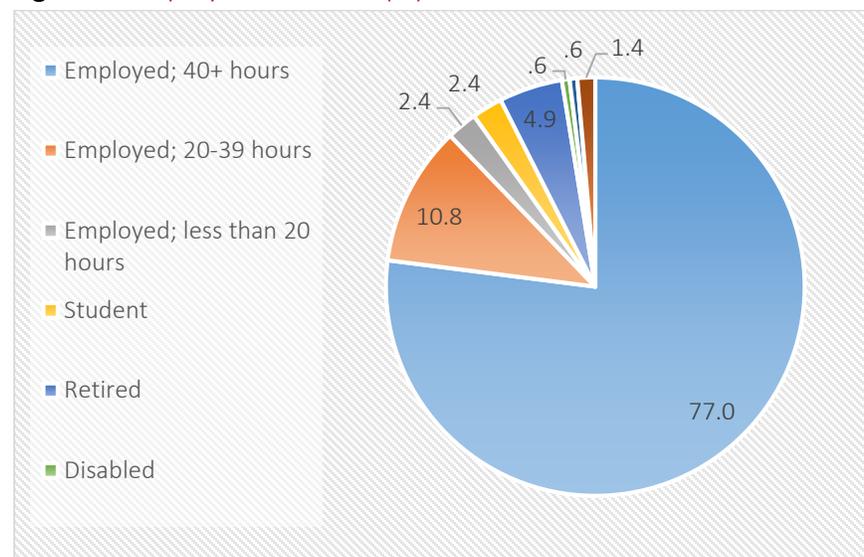
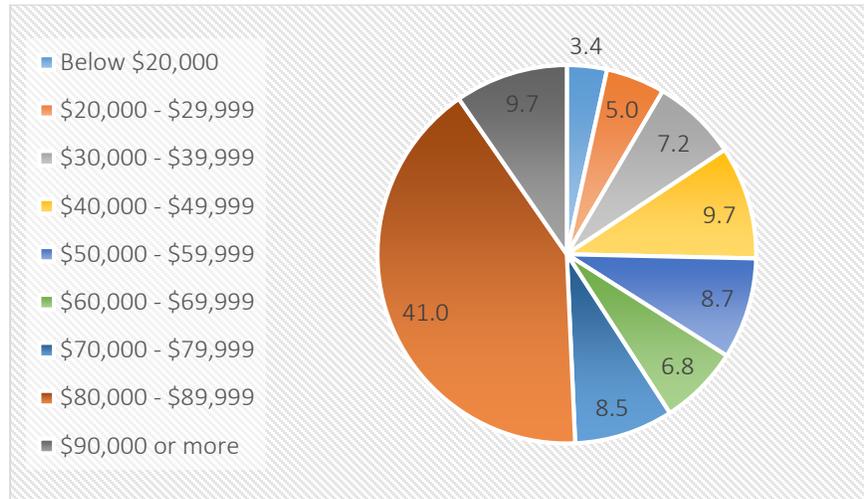


Figure 4. Employment Status (%)



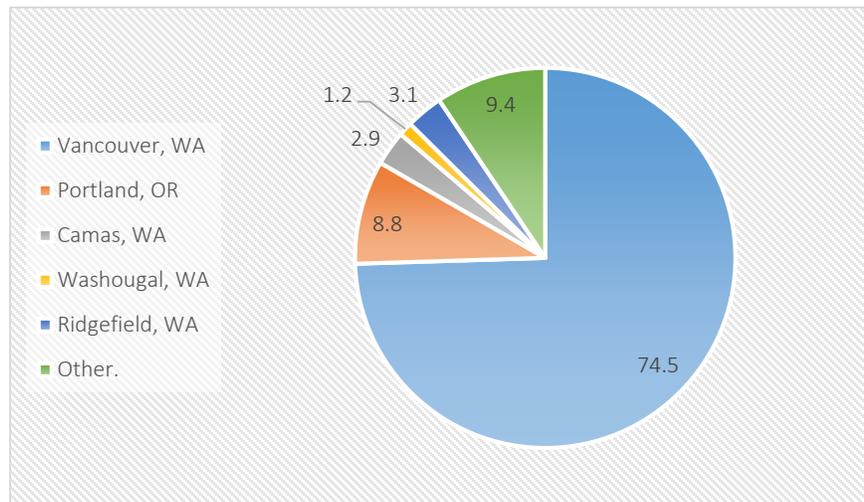
The majority of respondents are in the higher income levels, with 41% reported an annual income between \$80,000 and \$89,999 and 10% with \$90,000 or more. Considering that the estimated median household income in Vancouver in 2012 was \$45,718, it can be suggested that the survey captured high income residents who may represent the daytime population of Downtown Vancouver.

Figure 5. Annual Household Income before Taxes (%)



In the beginning of the survey, respondents were asked if they live or work in Downtown Vancouver or elsewhere. About 43.4% respondents stated that they live in Downtown Vancouver, and 68.6% work there. About 11.5% of respondents do not live or work in Downtown Vancouver. Broadening the scope of respondents' places of residence, the survey captured a large portion of the respondents who live in Vancouver, WA (74.5%). About 9% of respondents live in Portland, OR and about 16% live elsewhere.

Figure 6. Place of Residence (%)



In order to identify the motivations that drive consumption patterns and support for food trucks in Downtown Vancouver, respondents were asked to express their general personal values and lifestyles. Based on the means of each value item, it is suggested that respondents place high importance on values related to personal well-being (such as physical health and nutrition) as well as contribution to a stronger community (such as community involvement). Values related to social connection (e.g., social interaction and social inclusion) are rated relatively lower than others. These value items represent three factors: “Social Life,” “Personal Wellbeing,” and “Community Building,” explaining 73.88% of variance in respondents’ values and lifestyle. Based on the overall means of the value items, “Personal Wellbeing” ($M = 4.37, s.d. = .57$) is rated higher than “Community Building” ($M = 4.23, s.d. = .56$) and “Social Life” ($M = 3.88, s.d. = .66$) indicating that respondents regard personal wellbeing as the most important consideration in life and, thus, this value will be most impactful in their decision making.

Table 1. Respondents’ Values and Lifestyle

Factors Items (Factor Loadings)	Eigenvalue	Cumulative %	Chronbach’s Alpha
Social Life Social Inclusion (.86) Social Interaction (.86) Sense of Adventure (.62)	2.80	40.07	.73
Personal Wellbeing Physical Health (.92) Nutrition (.89)	1.37	59.26	.84
Community Building Supporting Local Businesses (.92) Community Involvement (.77)	1.02	73.88	.60

5.2 Dining Out Behavior

Knowing the dining out frequency and occasions among respondents will assist in identifying the market size for food and beverage establishments serving Downtown Vancouver residents. As presented in Figure 7, as many as 228 respondents (about 45%) dine out 2 - 3 times a week and 102 respondents (about 20%) dine out 4 - 6 times a week. On average, respondents dine out about 2.7 times a week, which is lower than the national average in the US according to Zagat survey in 2015, which is 4.4 times a week (Zagat, 2015). Therefore, a further investigation into the dining out patterns among respondents will help elucidate the motivational or hindrance factors associated with dining out at food trucks.

Further, as presented in Figure 8, the majority of respondents dine out for lunch (88%), followed closely by dinner (80%). There is a large gap between these dining occasions and the next, with breakfast (29%) and late night (18%) indicated by relatively small percentages of respondents. These results confirm that lunch is an important meal occasion for respondents to dine out, suggesting the significant market potential for food trucks serving daytime residents in

Downtown Vancouver, which include employees working in downtown businesses. The percentage of respondents who live in Downtown Vancouver is 43%; indicating that there is a potential for food trucks to capture demand for dinner, even though it is not as significant as for lunch. Hence, the following section describes the patterns of lunch behavior among respondents.

Figure 7. Dining Out Frequency (n)

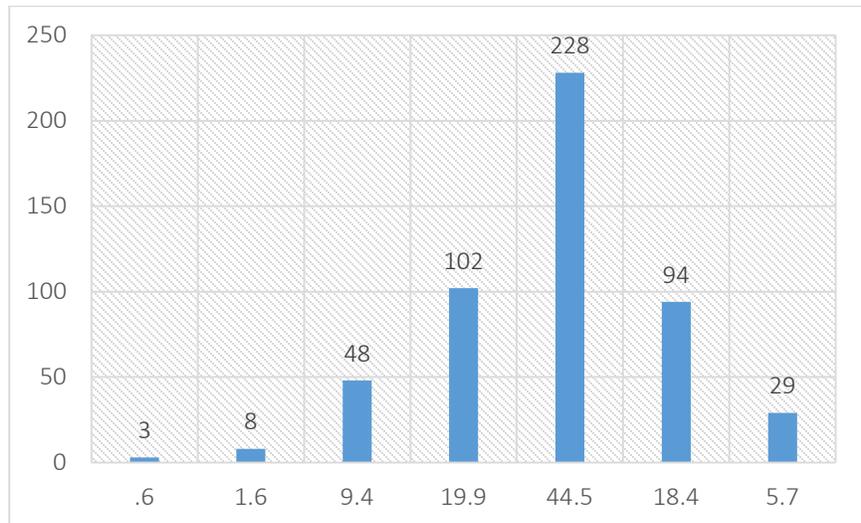
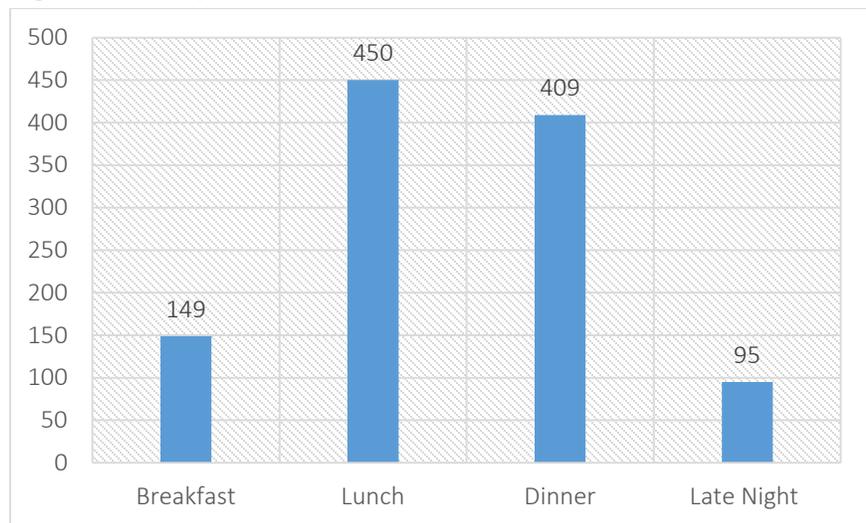


Figure 8. Dining Out Occasions

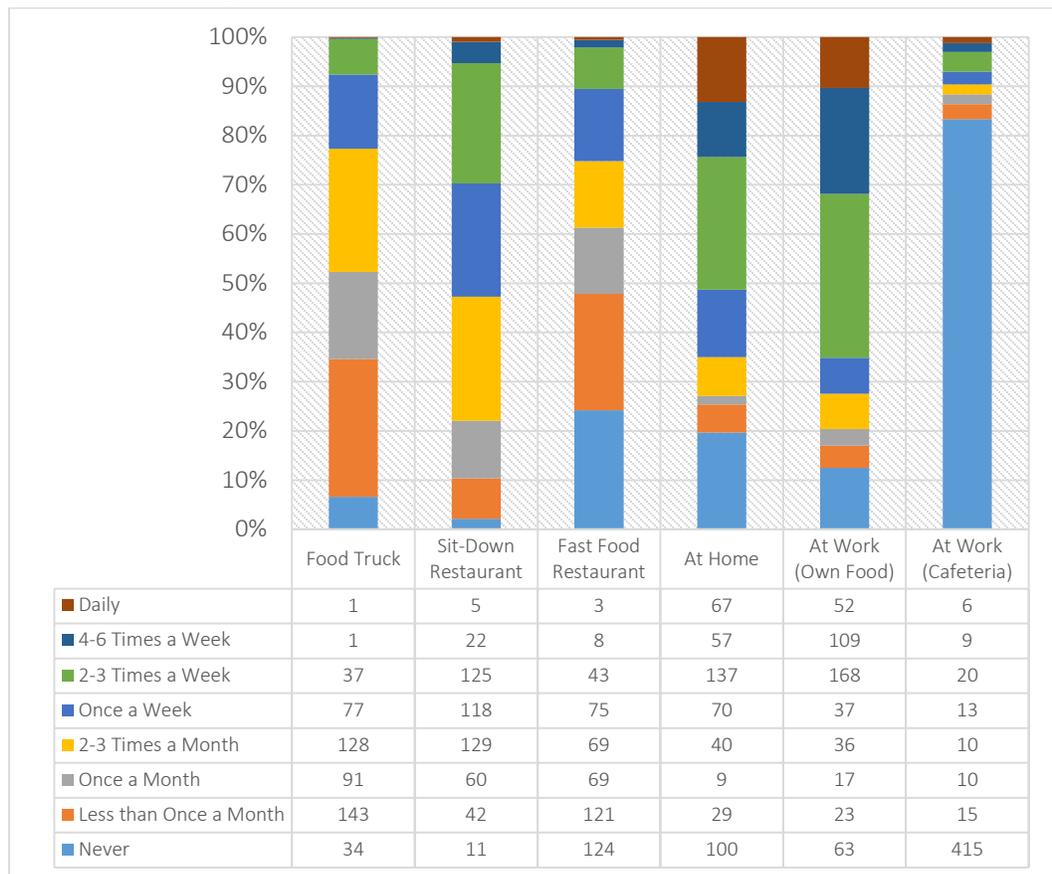


5.3 Lunch Behavior

Considering that lunch is an important dining out occasion that is most relevant to food trucks, respondents were asked a series of questions regarding their lunch behavior. First, Figure 9 presents the frequency of respondents' lunch behavior that include eating out at food trucks, sit-down restaurants, and fast food restaurants, as well as having lunch at home, at work with food from home, and at a cafeteria. It is important to note that a large majority of respondents (about 85%) have never bought lunch from the cafeteria at work, indicating the potential demand for

outside lunch options and food variety. However, more than 30% of respondents reported frequently having lunch at work with own food (i.e., 10% daily and 22% 4 - 5 times a week) and about 25% frequently having lunch at home. These may represent consumers who are less likely to frequent food trucks in the future, unless they see significant changes that allow them to see purchasing lunch from food trucks as a viable option.

Figure 9. Frequency of Lunch Patterns (%)



On the other hand, a majority of respondents stated that they dine out for lunch occasionally, most frequently at sit-down restaurants, nearly 30% of respondents reported having lunch at a sit-down restaurant at least twice a week. On the other hand, only a handful of respondents frequent fast food restaurants (about 10% go out at least twice a week) and food trucks (less than 10% go out at least twice a week). Most respondents (about 30%) indicate that they go out for lunch at a food truck less than once a month. These indicate that the demand for food trucks is still low and policy changes are needed to boost demand and induce daytime residents to buy more frequently from food trucks.

Further, the survey also investigated different behavioral patterns among respondents who eat out for lunch at food trucks, sit-down restaurants, and fast food restaurants. Figure 10 shows the occasions of eating out for lunch during different days of the week. About 75% of respondents indicated that they eat at food trucks on Monday through Friday, whereas 42% on Saturday and 28% Sunday. On the other hand, 78% of respondents reported having lunch at a sit-down

restaurants on Saturday, which is slightly higher than those having lunch on weekdays (74%) and Sunday (58%). Lastly, only about 52% of respondents indicated that they eat lunch at fast food restaurants during weekdays, which is higher than those who eat out for lunch on Saturday (32%) and Sunday (25%). Considering that the number of respondents who eat lunch at food trucks during weekdays is comparable to that of sit-down restaurants, but significantly less on weekends, it can be suggested that the biggest demand potential for food trucks come from employees who work in Downtown Vancouver who are likely to choose food trucks as a lunch option during weekdays.

Figure 10. Eating out for Lunch: When (n)

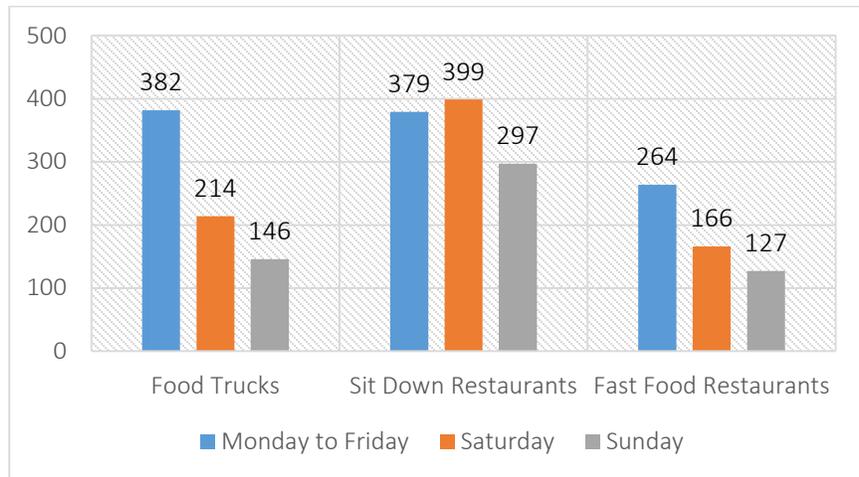
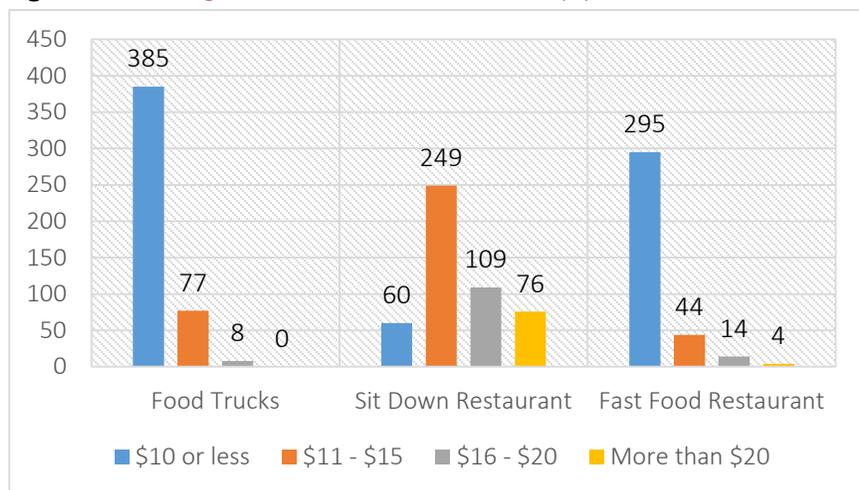


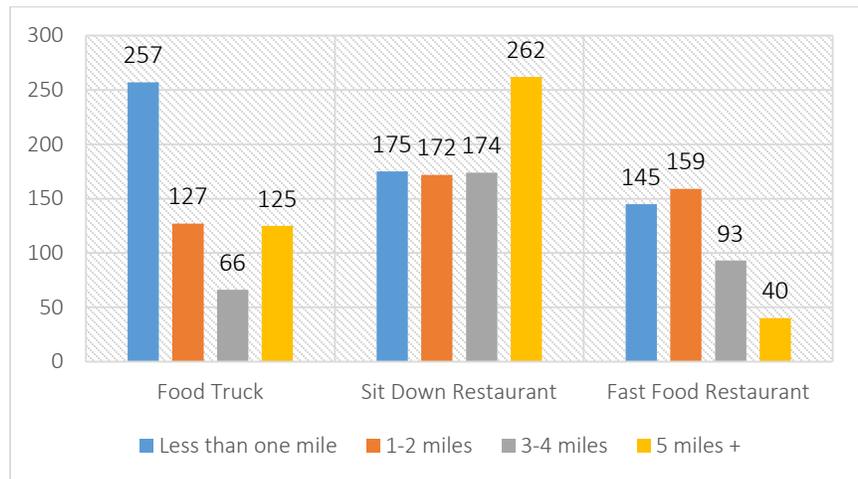
Figure 11 shows how much money respondents usually spend for lunch when dining out at the three different establishments. A majority of respondents spend \$10 or less at a food truck and a fast food restaurant, while most of them spend between \$15 and \$20 for lunch in a sit-down restaurant. About 15% of respondents stated that they spend more than \$20 in a sit down restaurant. This indicates that price is the competitive advantage of food trucks compared to sit-down restaurant, while food quality and/or options could be advantageous for food trucks when compared to fast food restaurants.

Figure 11. Eating out for Lunch: How Much (n)



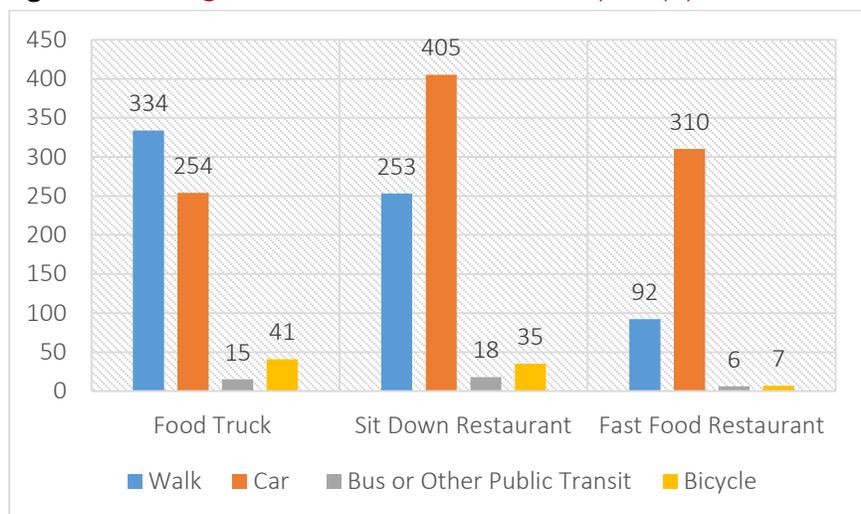
The survey also captured how far respondents go to eat out for lunch. About 50% of respondents travel less than a mile for food trucks, whereas 24% go for five miles or more. On the other hand, respondents travel further away to get to a sit down restaurant. Considering that respondents tend to travel shorter distances to get to food trucks, location can also be a potential competitive advantage for food trucks to attract more demand from employees who work within short distances from a food truck.

Figure 12. Eating out for Lunch: How Far (n)



In terms of modes of transportation, a large number of respondents walk to get to a food truck (65%) for lunch, while 80% use a car to get to a sit down restaurant. These further emphasize the importance of location for food trucks to generate demand from shorter walking distances. Additionally, as a significant number of respondents are also willing to travel farther distances with a car, the availability of short-term parking should be an incentive to generate demand from farther distances.

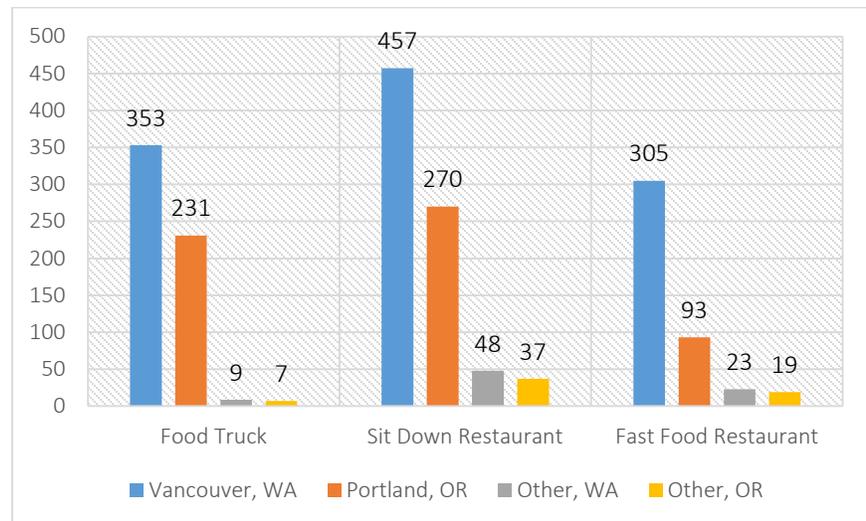
Figure 13. Eating out for Lunch: Mode of Transport (n)



Lastly, respondents were also asked about the locations of dining establishments they frequent for lunch. Most respondents in all categories of dining establishments dine in Vancouver, WA, with

a significant proportion of respondents frequenting dining establishments in Portland, OR. This may be an indication that consumers expect variety in their lunch options. Also, considering Portland, OR has more vibrant food truck scenes with clusters of different food trucks and the fact that it is convenient for Vancouver residents to travel to Portland for lunch, it can be suggested that policy changes are necessary to support the growth of food trucks in Downtown Vancouver to offer more variety and convenience and divert more demand from Portland, especially during weekdays.

Figure 14. Eating out for Lunch: Where (n)



5.4 Importance and Performance of Food Truck Attributes

In order to assess the different aspects of food trucks that contribute significantly to dining out behavior, respondents were asked to rate the importance of different food truck attributes. Later, respondents were also asked to evaluate the performance of food trucks in Vancouver, WA based on the same set of attributes. The comparison between importance and performance of food trucks will provide information on which attributes are performing better or worse than expected, which, in turn, will inform food truck owners with practical guidance to attract more customers and improve revenues. Further, the gap between importance and performance (i.e., positive or negative) identified in this study reflects expectancy disconfirmation, which is considered an important predictor for future consumption. Therefore, analyzing the gap will allow an assessment on which attribute contributes most in motivating consumers to patronize food trucks in the future.

Items representing restaurant attributes corresponding to Food, Service, Atmosphere, and Convenience as proposed by Kivela et al. (1999) were adjusted to capture food truck attributes. Four reliable factors emerged from the analysis, they are labelled as: “Service,” “Food,” “Dining Atmosphere,” “Appearance,” and “Convenience,” explaining 69.30% of variance in food truck attributes. Respondents ($N = 512$) rated the Food factor ($M = 4.26, s.d. = .36$) as the most important attribute for food trucks, followed by Service factor ($M = 4.10, s.d. = .47$), and the Appearance factor ($M = 4.08, s.d. = .56$). On the other hand, the Convenience ($M = 3.33, s.d. = .60$) and Dining Atmosphere factors ($M = 3.21, s.d. = .70$) are considered the least important for respondents.

These suggest that in contrast to sit-down restaurants, food and service criteria may contribute significantly to consumer satisfaction with food trucks, but not necessarily the atmosphere that allows consumers to enjoy the food in the vicinity of or around the food trucks for dining in experiences.

Table 2. Food Trucks Attributes

Factors Items (Factor Loadings)	Eigenvalue	Cumulative %	Chronbach's Alpha
Service	13.81	44.56	.95
Staff Greeting Customers (.85)			
Staff Willing to Serve (.85)			
Attentive Staff (.85)			
Friendly, Polite Staff (.84)			
Staff Knowledgeable of Menu Items (.74)			
Consistency of Service (.72)			
Speedy Service (.59)			
Sympathetic Staff (.59)			
Food	3.33	55.60	.91
Quality of Food (.82)			
Freshness of Food (.80)			
Consistency of Food Quality (.78)			
Temperature of Food (.76)			
Nutrition of Food (.72)			
Presentation of Food (.71)			
Price of Food (.55)			
Variety of Menu (.53)			
Dining Atmosphere	1.75	60.97	.88
Temperature of Facilities (.82)			
Protection from Elements (.80)			
Availability of Seating (.78)			
View from Food Truck (.76)			
Sense of Safety (.61)			
Appearance	1.42	65.54	.91
Cleanliness of Surrounding Area (.75)			
Sense of Comfort (.70)			
Appearance of Food Truck (.69)			
Appearance of Staff (.68)			
Cleanliness of Food Truck (.64)			
Convenience	1.16	69.30	.73
Distance from Work (.72)			
Distance from Home (.70)			
Connectivity/Transportation (.65)			
Parking (.61)			
Hours of Operations (.52)			

In particular, in terms of Food attributes, respondents place a higher importance in the quality of food ($M = 4.74, s.d. = .44$), consistency of food quality ($M = 4.69, s.d. = .47$), freshness of food ($M = 4.66, s.d. = .50$), and temperature of food ($M = 4.41, s.d. = .66$). The most important Service factors for the consumer were staff knowledgeable of menu items ($M = 4.32, s.d. = .70$), friendly and polite staff (Mean = 4.24, $s.d. = .64$), and attentive staff ($M = 4.21, s.d. = .64$), and staff willing to serve ($M = 4.21, s.d. = .67$). Cleanliness of food truck ($M = 4.71, s.d. = .52$) and cleanliness of surrounding area ($M = 4.23, s.d. = .78$) were Appearance factors rated higher in contributing to the important food truck attributes for the customer. Attributes in the Dining Atmosphere factors are rated low in terms of importance, with the most important being sense of safety ($M = 4.10, s.d. = .81$). Lastly, among the attributes in the Convenience factor, hours of operations is considered the most important ($M = 3.99, s.d. = .63$). Based on the importance ratings, the consumer is focused on the food and service rather than the general atmosphere in evaluation of importance when dining at a food truck or cart. The consumer bases specific attributes on what the food trucks do best, provide quality food and service. Although it can be assumed that a consumer would be more willing to consider other aspects in dining-out, the analysis suggested that the other factors are not as important in driving consumer's choice of a food truck or cart.

According to Lewin's expectancy theory, individuals make purchase decisions based on their expectations of specific outcome of a specific action (Kivela, Inbakaran, & Reece, 1999). Further, the theory asserts that positive disconfirmation occurs when a product or service exceeds the individual's expectations whereas a negative disconfirmation occurs when product or service do not meet those expectations. Confirmation is when consumer's experiences are neither positive nor negative disconfirmation (Kivela, Inbakaran, & Reece, 1999). Through this theory, consumer satisfaction with mobile food vending were measured and defined for potential market for food vending establishments in Vancouver, WA.

In terms of satisfaction with existing food trucks, respondents who have purchased from food trucks in Vancouver, WA ($N = 353$) expressed highest level of satisfaction with the Service factor ($M = 4.22, s.d. = .57$), followed by the Appearance factor (Mean = 4.09, $s.d. = .59$) and Food factor ($M = 4.06, s.d. = .56$). They are least satisfied with the Dining Atmosphere ($M = 3.49, s.d. = .63$) and Convenience ($M = 3.35, s.d. = .63$) factors. Comparing the satisfaction rating (i.e., performance) and importance (i.e., expectation) of these attributes, it was identified that significant positive disconfirmation exists in terms of Dine-in Atmosphere factor ($M = .53, s.d. = .98$) and significant negative disconfirmation in terms of Food factor ($M = -.34, s.d. = .61$). These suggest that respondents have high expectation for the quality of food and that the quality of existing food trucks could be improved. On the other hand, respondents have low expectation on the atmosphere of food trucks to dine in, but are relatively satisfied with existing food trucks. Slightly positive disconfirmation is observed in terms of Service ($M = .18, s.d. = .66$) and Appearance ($M = .17, s.d. = .81$) factors, indicating that existing food trucks perform better than respondents' expectation.

The Importance - Performance comparisons of the four attributes of food trucks are illustrated in Figure 16. The three factors within the top right quadrant of the scatter plot (i.e., Food, Service, and Appearance) represent attributes with high expectation and high satisfaction. This quadrant implies that currently food trucks in Vancouver, WA are performing as expected and, hence, should "keep up the good work." Two attributes, Dining Atmosphere and Convenience, occupy

the lower left quadrant of the scatter plot, indicating that these attributes show relatively low performance. However, since respondents have a low expectation for these attributes, it is suggested that they are of a low priority. Typically, factors occupying the bottom right quadrant of the scatter plot (i.e., high expectation - low performance) should be considered high priority, for which businesses need to invest in improvements. The results from this study indicate that the priorities of food trucks in Vancouver, WA are in line with consumers' expectation.

Figure 15. Importance vs. Satisfaction with Food Truck Attributes (Mean)

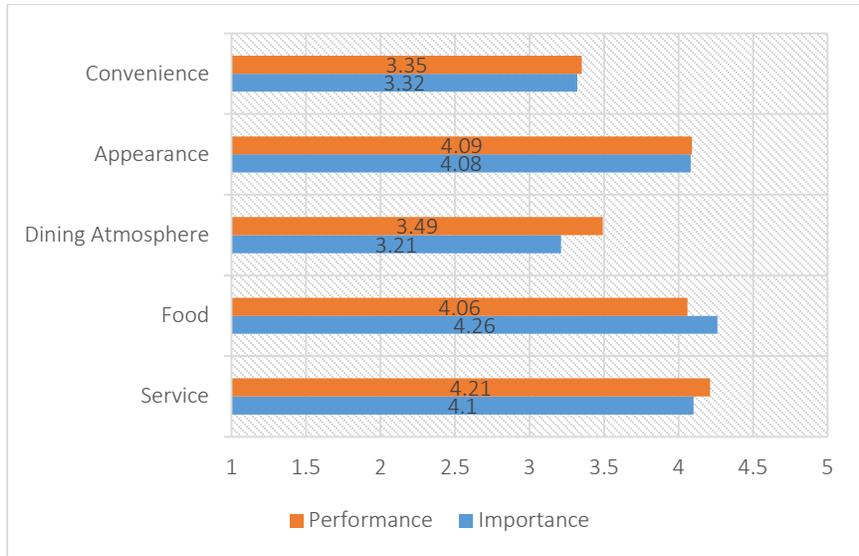
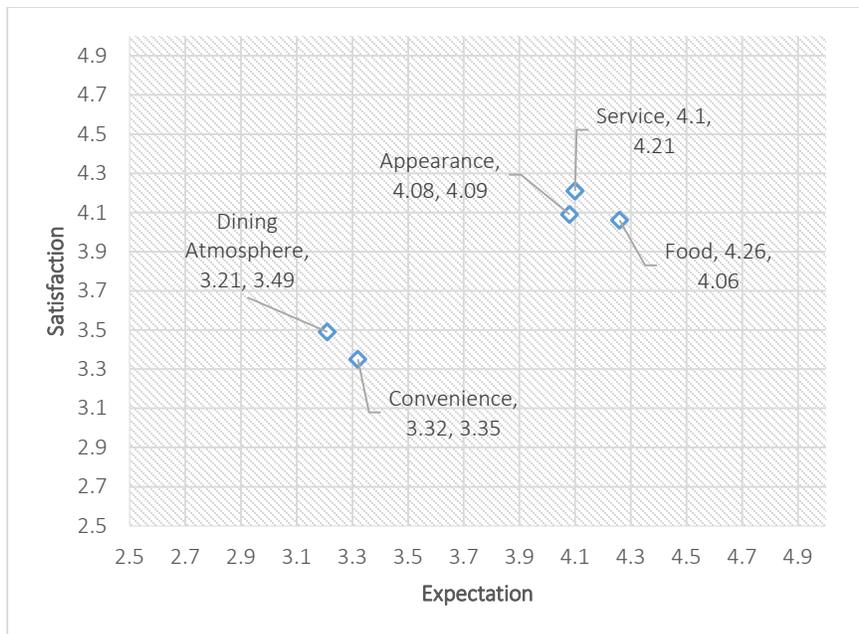


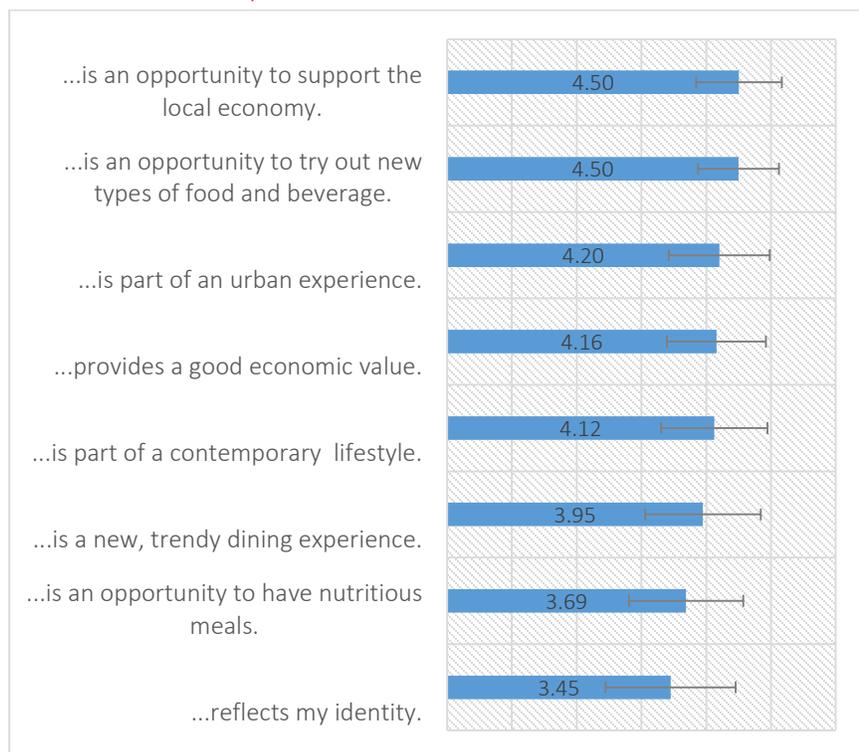
Figure 16. Importance – Performance Analysis of Food Truck Attributes (Mean, Standard Deviation)



5.5 Motivations to Purchase from Food Trucks

Respondents who have purchased from food trucks were also asked to state the extent to which they agree to the motivational factors that drive their consumption. These factors include intrinsic motives, such as supporting the local economy (i.e., altruism), and extrinsic motives, such as achieving economic value (i.e., rewards). Additionally, the motivational factors include respondents' desire to be part of a contemporary, urban lifestyle that food trucks are associated with. These motivations converge into one underlying factor, explaining 55.4% of variance in respondents' reasons to buy from food trucks. Respondents' agreement to different motivations is presented in Figure 17, sorted from the highest to lowest agreement. Among the motivations with the highest agreement from respondents are a drive to support the local economy ($M = 4.50$, $s.d. = .66$), to try out new types of food and beverage ($M = 4.50$, $s.d. = .62$), to become part of the urban experience ($M = 4.20$, $s.d. = .78$), and to achieve good economic value ($M = 4.16$, $s.d. = .76$).

Figure 17. Motivations to Purchase from Food Trucks (Mean, Standard Deviation)



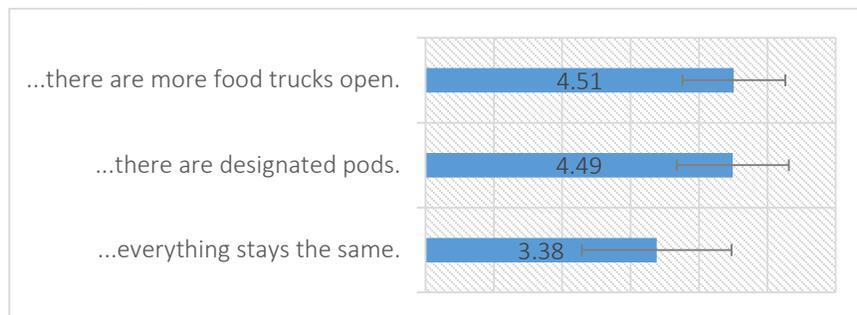
Based on a series of independent-samples t-tests, it was found that there are differences in terms of motivation among respondents with different **genders** ($t = 4.07$, $df = 501$, $p < .01$), with female respondents stated higher motivation ($M = 4.16$, $s.d. = .53$) than male respondents ($M = 3.94$, $s.d. = .68$); **ages** ($t = -2.49$, $df = 502$, $p < .01$), with younger respondents stated higher motivation ($M = 4.32$, $s.d. = .44$) than older respondents ($M = 4.07$, $s.d. = .60$), and **levels of income** ($t = -2.43$, $df = 488$, $p < .05$), respondents with annual income of less than \$70,000 are slightly more motivated ($M = 4.18$, $s.d. = .53$) than those with annual income of \$70,000 or higher ($M = 4.05$,

$s.d. = .61$). With consumers becoming more open to a variety of activities including trying out new foods and experiences, the food truck industry will become the focus of those groups. Food trucks also provide good economic value in terms of price and quality and, thus, induce more motivation among younger and lower income respondents.

5.6 Intentions to Purchase from Food Trucks

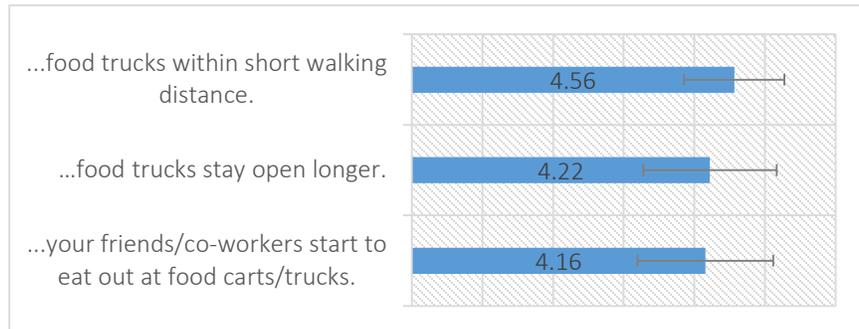
One of the most important questions this research attempts to answer is what makes consumers buy from food trucks and how changes in mobile vending policy will influence demand for food trucks. Respondents were asked to state their intention to purchase from food trucks in the future given different alternative policy scenarios: (1) do nothing (i.e., when everything stays the same), (2) facilitating more business permits (i.e., allowing more food trucks to open), and (3) allocating specific areas for food trucks to co-locate (i.e., creating food truck pods). As presented in Figure 18, respondents' intention to purchase from food trucks under the first scenario is moderate ($M = 3.38, s.d. = 1.10$). Under the second scenario, when there were more food trucks in downtown Vancouver, WA, the intention rate increases significantly ($M = 4.51, s.d. = .75$). However, while there is a significant increase under the third scenario ($M = 4.49, s.d. = .82$), it is lower than intention under the second scenario. These results suggest that without any policy intervention, the demand for food trucks in Downtown Vancouver is moderate, but allowing more food trucks to open will increase demand significantly.

Figure 18. Intention to Purchase from Food Trucks under Policy Scenarios (Mean, Standard Deviation)



To assess other policy-related aspects that would encourage consumers to buy from food trucks, respondents were also asked to state their future intention under the following conditions: (1) food trucks located nearby their home or workplace, (2) food trucks open longer, and (3) people they know (i.e., friends and/or co-workers) start buying more from food trucks. As presented in Figure 19, respondents' intention is highest when food trucks are within short walking distances from their home or workplace ($M = 4.56, s.d. = .71$), indicating the importance of finding convenient locations for mobile vending. Likewise, convenience in terms of hours of operation also induce higher intention to purchase from food trucks ($M = 4.22, s.d. = .94$), while attracting peers to encourage social influence results in a moderate increase in future intention ($M = 4.16, s.d. = .96$). This suggests that convenience (i.e., location and hours of operation) can be an effective strategy to induce more demand.

Figure 19. Intention to Purchase from Food Trucks under Improvement Scenarios (Mean, Standard Deviation)



A series of independent-samples t-tests were performed to better understand the differences in terms of purchase intentions among respondents with different demographic characteristics. The results show the following:

- There are significant **gender differences** in terms of purchase intention under policy scenario 2: there are more food trucks (Female: $M = 4.57$, $s.d. = .65$; Male: $M = 4.39$, $s.d. = .92$; $t = 2.46$, $df = 508$, $p < .05$), when location is convenient: within walking distance from home/work (Female: $M = 4.62$, $s.d. = .61$; Male: $M = 4.46$, $s.d. = .86$, $t = 2.39$, $df = 508$, $p < .05$) and when people they know start to buy from food trucks (Female: $M = 4.26$, $s.d. = .93$; Male: $M = 4.14$, $s.d. = .97$, $t = 2.23$, $df = 508$, $p < .05$). These results show that female respondents demonstrate a higher purchase intention under the three conditions.
- There are significant **age differences** in terms of purchase intention under policy scenario 2: there are more food trucks (Under 34: $M = 4.63$, $s.d. = .51$; 35 and Older: $M = 4.45$, $s.d. = .84$; $t = -2.40$, $df = 441$, $p < .05$), when location is convenient: within walking distance from home/work (Under 34: $M = 4.70$, $s.d. = .50$; 35 and Older: $M = 4.50$, $s.d. = .78$; $t = -2.93$, $df = 509$, $p < .01$), when people they know start to buy from food trucks (Under 34: $M = 4.47$, $s.d. = .74$; 35 and Older: $M = 4.01$, $s.d. = 1.01$; $t = -5.09$, $df = 509$, $p < .01$) and when food trucks stay open longer (Under 34: $M = 4.45$, $s.d. = .75$; 35 and Older: $M = 4.11$, $s.d. = 1.00$; $t = -3.87$, $df = 509$, $p < .01$). These results show that younger respondents demonstrate a higher purchase intention under the five conditions.
- Interestingly, there are significant **differences** in terms of purchase intention when food trucks stay open longer among respondents with different **levels of education** (Less than Bachelor's Degree: $M = 4.35$, $s.d. = .80$; Bachelor's Degree and higher: $M = 4.15$, $s.d. = 1.00$; $t = -2.58$, $df = 507$, $p < .05$) and **levels of income** (Less than \$70,000: $M = 4.34$, $s.d. = .34$; \$70,000 and higher: $M = 4.12$, $s.d. = 1.01$; $t = -2.86$, $df = 495$, $p < .01$). These results show that respondents with lower level of education and lower income would be willing to purchase at food trucks with longer opening hours. This may result from different patterns of working hours and schedule, which may include late work hours. No significant differences were found among respondents with different employment status.

In order to investigate the factors that explain and predict future intention to buy from food trucks, regression analyses were performed using the expectancy disconfirmation rate for the four food truck attributes and the motivational factors as independent variables. It is noteworthy that the dependent and independent variables are measured with Likert-type scales, thus the use of parametric statistics in this study is based on the assumption that the increase from one point scale to the next is always consistent. The results from these regression analyses are as follows.

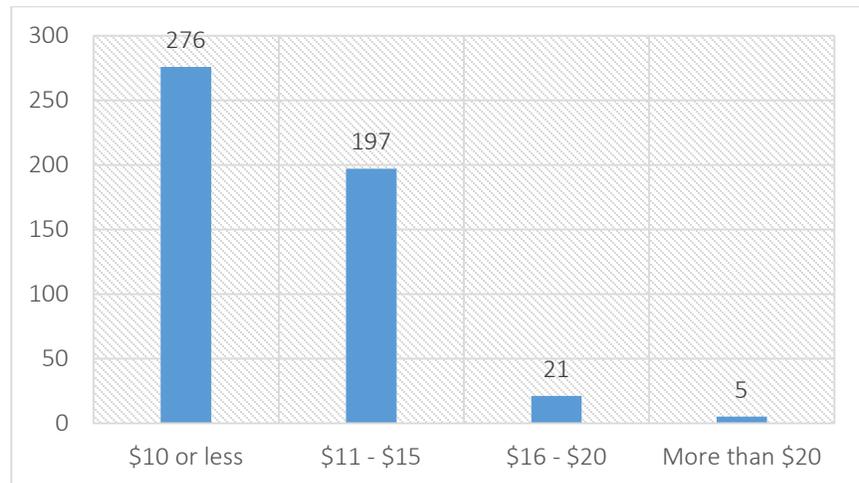
- **Likelihood to purchase:** When everything stays the same (Scenario 1).
The likelihood to purchase from food trucks in the future is significantly predicted by Food Attribute ($\beta = .202$, $t = 2.869$, $p < .001$). The independent variable explains a proportion of variance in future intention ($R^2 = .133$, $F = 3.336$, $p < .001$). No other independent variables were significant to predict future intention.
- **Likelihood to purchase:** When there are more food trucks (Scenario 2).
The likelihood to purchase from food trucks in the future is significantly predicted by Food Truck Motivations ($\beta = .372$, $t = 6.538$, $p < .001$), Age ($\beta = -.107$, $t = -2.024$, $p < .05$), and Income ($\beta = .112$, $t = 2.152$, $p < .001$). The independent variables explain a proportion of variance in future intention ($R^2 = .239$, $F = 6.829$, $p < .001$). No other independent variables were significant to predict future intention.
- **Likelihood to purchase:** When there are food truck pods (Scenario 3).
The likelihood to purchase from food trucks in the future is significantly predicted by Food Truck Motivations ($\beta = .316$, $t = 5.290$, $p < .001$) and Convenience Attribute ($\beta = -.171$, $t = -2.967$, $p < .001$). The independent variable explains a proportion of variance in future intention ($R^2 = .159$, $F = 4.129$, $p < .005$). No other independent variables were significant to predict future intention.

The results indicate that the state of “consumer delight” (i.e., when satisfaction exceeds expectation) with the quality of food predicts respondents’ willingness to purchase from food trucks in the future even when everything stays the same (i.e., without a policy intervention). This emphasizes the importance of perceived food quality to guarantee demand for food trucks. In the two scenarios where changes are expected to the landscape of mobile vending in Downtown Vancouver, consumer intention is significantly predicted by their motivations (i.e., intrinsic and extrinsic motives) to patronize the food trucks. It can be interpreted that respondents who see food truck consumption as part of an urban experience and reflect their identity will be more inclined to buy from food trucks when they are more regulated and, hence, better-organized. Additionally, two demographic variables, age and income, are also significant predictors of the future intention. This signifies that when there are more food trucks, younger and more affluent respondents are more inclined to purchase from food trucks. To that end, it can be suggested that positioning food truck consumption as part of a trendy, urban lifestyle as well as opportunities to seek variety and quality in food consumption would be beneficial in inducing more demand for food trucks in Downtown Vancouver, WA. In terms of policy scenario 3, while intention is significantly influenced by motivations in a positive way, disconfirmation on Convenience aspects of food trucks contributes negatively to future intention. This can be interpreted that providing

food truck pods might not result in a higher demand, especially when consumers perceive that the locations of the pods are not convenient (e.g., farther from work/home, not well connected, etc.). Furthermore, even though respondents rated the Service factor relatively high in terms of importance and performance, it is not significant to predict future intention. It can be suggested that while service is important, it is not the evaluation criterion with which consumers make purchase decision related with food trucks.

Further, respondents were also asked how much they would be willing to spend for a full meal at a food truck. A little more than half of respondents (55%) stated that they would spend \$10 or less, while 38% would spend between \$11 and \$15. Cross tabulations between willingness to spend and demographic characteristics of respondents were performed to identify differences among respondents based on gender, age, levels of income and education, as well as employment status. None of these demographic characteristics is associated with willingness to pay, suggesting that regardless of their characteristics respondents consider an acceptable “standard” for food prices offered by food trucks. Further, a regression analysis with demographic characteristics, personal values, expectancy disconfirmation on food truck attributes, and motivations as independent variables was conducted. However, the regression model was not significant and none of these variables was significant to predict willingness to spend, further suggesting that consumers are not willing to pay more for a full meal at food trucks even if the quality was improved, were align with their values, or they were more motivated.

Figure 20. Willingness to Spend for a Full Meal at a Food Truck (n)



Lastly, respondents were also asked for which meal time (occasions) they would be willing to purchase from food trucks in the future. The majority of them (91%) intend to purchase food from food trucks/carts for lunch and about 62% stated that they intend to buy for dinner, indicating that these two meal occasions have high potential demand. Other occasions, including breakfast, snacks between meals, and late night, were each selected by 33% - 34% of respondents (See Figure 21).

Figure 21. Intention: Meal Time at Food Truck (n)



5.7 Support for Food Truck Policy

Another important aspect of the analysis on consumer demand is the respondents’ support for food truck policy and regulation. First, respondents were asked to rate their agreement on the roles of food trucks as resources for residents and communities in terms of providing food options, employment and entrepreneurship opportunities, and strengthen the community in general. The items corresponding to the roles of food trucks to a community in a general context are explained by three factors: **Role 1: Strengthen Community** represents the roles of food trucks in improving the livability of Vancouver, WA (e.g., in terms of making the neighborhoods more vibrant, the streets safer, etc.) and **Role 2: Provide Opportunity** represents the roles of food trucks in serving and providing opportunities for the local residents (i.e., in terms of providing nutritious meal options, employment opportunities, etc.).

Table 3. General Roles of Food Trucks in a City

Factors Items (Factor Loadings)	Eigenvalue	Cumulative %	Chronbach’s Alpha
Role 1: Strengthen Community	6.120	51.000	.911
...provides an area with a stronger sense of place (.83)			
...creates vibrant and lively neighborhoods (.80)			
...increases the aesthetics of a place (.76)			
...provides a space for socializing (.73)			
...strengthens community economic development (.73)			
...creates an opportunity for social interaction (.72)			
...makes the streets feel safer (.70)			
...supports local business growth and development (.69)			
Role 2: Provide Opportunity	1.255	61.456	.770
...provides employment opportunities for residents (.76)			

- ...provides affordable dining options for residents (.75)
- ...provides nutritious meals for residents (.72)
- ...provides business opportunities for entrepreneurs from diverse backgrounds (.69)

Several independent-samples t-tests were performed to check significant differences in perceived roles of food trucks among respondents with different demographic characteristics. The results from these tests are as follow:

- There are significant **gender differences** in terms of Role 1 (Female: $M = 4.04$, $s.d. = .59$; Male: $M = 3.84$, $s.d. = .76$; $t = 3.34$, $df = 508$, $p < .01$) and Role 2 (Female: $M = 4.11$, $s.d. = .54$; Male: $M = 3.90$, $s.d. = .64$, $t = 3.98$, $df = 508$, $p < .01$). This suggests that female respondents perceive that mobile food vendors contribute to the vitality of the area and, at the same time, serve the residents with nutritious food and business opportunities.
- There is a significant **age difference** in terms of Role 1 (Under 34: $M = 4.10$, $s.d. = .58$; 35 and Older: $M = 3.92$, $s.d. = .72$; $t = -2.68$, $df = 508$, $p < .01$). Younger respondents believe that food trucks make the neighborhoods more vibrant and create a stronger sense of place for the community.
- There is a significant **educational difference** in terms of Role 2 (Less than Bachelor's Degree: $M = 4.14$, $s.d. = .55$; Bachelor's Degree and higher: $M = 3.98$, $s.d. = .60$; $t = -3.00$, $df = 507$, $p < .01$). This indicates that respondents with lower levels of education believe that food trucks allow downtown residents to enjoy healthy, nutritious food as well as employment and entrepreneurship opportunities.
- There are significant **income differences** in terms of Role 1 (Less than \$70,000: $M = 4.08$, $s.d. = .55$; \$70,000 and higher: $M = 3.91$, $s.d. = .71$; $t = -2.97$, $df = 495$, $p < .01$) and Role 2 (Less than \$70,000: $M = 4.12$, $s.d. = .53$; \$70,000 and higher: $M = 3.99$, $s.d. = .60$; $t = -2.56$, $df = 495$, $p < .05$). These indicates that lower income respondents see food trucks as supporting the vitality of the community as well as providing opportunities for residents.

Further, respondents were also asked to rate their agreement on the potential impacts of food trucks in Vancouver, WA. The statements are explained by an underlying factor, labeled as Food Truck Impacts, explaining 69.48% of variance (see Table 4). Respondents believe that having food trucks in Vancouver, WA will strengthen the cultural identity of the city, generate foot traffic that increases visitation to local businesses, and make the city more desirable as a place to live, work, and visit. It can be suggested that food trucks development in Downtown Vancouver would bring in tourism and more talented employees to the area and, thus, support business growth and development.

Table 4. Expected Impacts of Food Trucks in Vancouver, WA

Factor Items (Factor Loadings)	Eigenvalue	Cumulative %	Chronbach's Alpha
Food Truck Impacts	4.169	69.480	.908
...increase the desirability as a place to live (.87)			
...generate foot traffic that increases visitation to local businesses (.86)			
...strengthen the cultural identity of Vancouver, WA. (.85)			
...increase the desirability as a place to visit. (.85)			
...increase the desirability as a place to work. (.82)			
...generate foot traffic that increases visitation to local restaurants. (.76)			

Correlations between the perceived roles of food trucks in the community and the expected impacts of food trucks in Vancouver, WA are presented in Table 5. There is a high correlation between the two factors that represent the perceived roles of food trucks for a community in general ($r = .60$). Further, the factor that represent expected impacts of food trucks in Vancouver, WA is highly correlated with Role 1: Strengthen Community ($r = .78$) and Role 2: Provide Opportunity ($r = .59$). It can be suggested that when respondents perceive that in general the development of mobile vending would contribute positively to the area, they also expect that food trucks will contribute positively to Vancouver, WA.

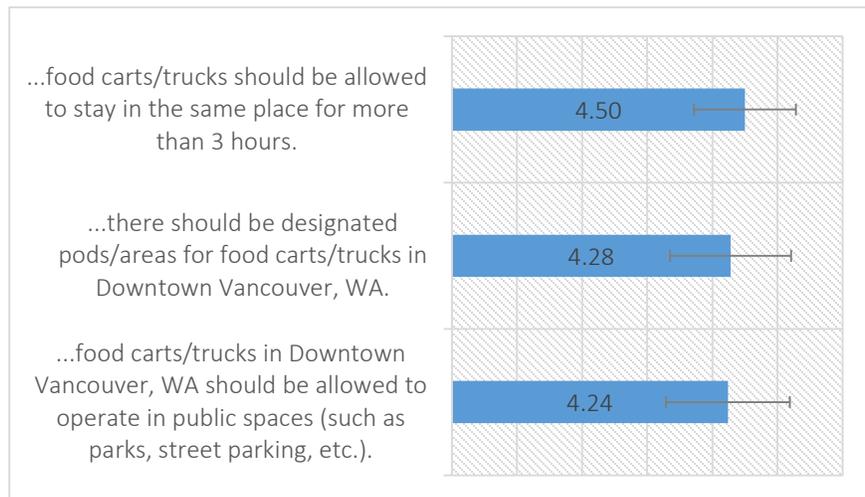
Table 5. Correlations between Perceived Roles and Expected Impacts of Food Trucks

Factors	Role 1	Role 2
Role 1: Strengthen Community	1	
Role 2: Provide Opportunity	.60**	1
Food Truck Impacts in Vancouver, WA	.78**	.59**

**significant at the .01 level

Finally, respondents were asked to rate their agreement on specific aspects pertaining food truck regulations, which include existing and potential regulatory changes. Specifically, three statements were provided that address different aspects in food truck regulations: (1) allowing food trucks to stay in the same place for more than three hours, (2) allowing food trucks to operate in public places such as parks, parking spots, etc., and (3) creating food truck pods where multiple food trucks co-locate. Respondents are highly supportive of the three regulatory statements, as presented in Figure 22.

Figure 22. Respondents Support for Policy Options (Mean, Standard Deviation)



Based on independent-samples *t*-tests, significant differences were found in terms of:

- Food trucks should be allowed to stay in the same place for three hours. There is a significant **age difference** (Under 34: $M = 4.67$, $s.d. = .56$; 35 and Older: $M = 4.42$, $s.d. = .85$; $t = -3.48$, $df = 509$, $p < .001$). There is a significant **educational difference** (Less than Bachelor's Degree: $M = 4.62$, $s.d. = .64$; Bachelor's Degree and higher: $M = 4.43$, $s.d. = .85$; $t = -2.68$, $df = 507$, $p < .01$). There is a significant **income difference** (Less than \$70,000: $M = 4.64$, $s.d. = .57$; \$70,000 and higher: $M = 4.40$, $s.d. = .87$; $t = -3.58$, $df = 495$, $p < .001$). Younger respondents and those with lower levels of education and income are more supportive of the regulation.
- Food trucks should be allowed to operate in public places. There is a significant **age difference** (Under 34: $M = 4.41$, $s.d. = .89$; 35 and Older: $M = 4.16$, $s.d. = .97$; $t = -2.82$, $df = 509$, $p < .01$). Younger respondents are more supportive of the regulation.
- There should be designated pods for food trucks. There is a significant **age difference** (Under 34: $M = 4.40$, $s.d. = .82$; 35 and Older: $M = 4.22$, $s.d. = .97$; $t = -2.09$, $df = 509$, $p < .05$). There is a significant **income difference** (Less than \$70,000: $M = 4.39$, $s.d. = .87$; \$70,000 and higher: $M = 4.21$, $s.d. = .94$; $t = -2.16$, $df = 495$, $p < .05$). Younger respondents and those with lower levels of income are more supportive of the regulation.

Regression analyses were performed to identify the significant predictors of support for specific food truck regulations, using the demographic characteristics of respondents, personal values, perceived roles of food trucks in general, and perceived impacts of food trucks in Vancouver, WA as independent variables. The results are as follow:

- **Support for P1:** Food Trucks should be allowed to stay in the same place for more than three hours.
The policy support is significantly predicted by **Role1: Strengthen Community** ($\beta = .180, t = 3.045, p < .005$), **Role 2: Provide Opportunity** ($\beta = .119, t = 2.504, p < .05$), and **Food Truck Impacts** ($\beta = .335, t = 5.675, p < .001$). The independent variables explain a proportion of variance in policy support ($R^2 = .354, F = 29.499, p < .001$).
- **Support for P2:** Food Trucks should be allowed to operate in public places.
The policy support is significantly predicted by **Role 1: Strengthen Community** ($\beta = .198, t = 3.032, p < .005$), **Food Truck Impacts** ($\beta = .199, t = 3.061, p < .005$), and **Age** ($\beta = -.110, t = -2.476, p < .05$). The independent variables explain a proportion of variance in policy support ($R^2 = .221, F = 14.410, p < .001$).
- **Support for P3:** There should be designated pods for food trucks to co-locate.
The policy support is significantly predicted only by **Food Truck Impacts** ($\beta = .160, t = 2.336, p < .05$). This independent variable explains a proportion of variance in policy support ($R^2 = .123, F = 7.532, p < .001$).

Lastly, in order to assess whether there are significant associations between the policy supports and potential demands (i.e., intention to purchase), correlations coefficients were calculated between the three policy support statements: (1) food trucks allowed to stay in the same place for more than three hours, (2) food trucks allowed to operate in public places, and (3) designated pods, and intentions to purchase from food trucks under the three policy scenarios: (1) do nothing, (2) encourage more food trucks, and (3) designate food truck pods. As presented in Table 6, key findings from correlation analyses are:

- Potential demand with no policy changes (i.e., when everything stays the same) is significantly correlated, albeit small, with support for policy aspect 1 (allowing food trucks to stay longer in the same place) and policy aspect 2 (allowing food trucks to operate from public places).
- Potential demand for when there are more food trucks is significantly correlated with support for all policy aspects, with high correlation coefficients with aspects 1 and 2.
- Potential demand for when there are pods is significantly correlated with support for all aspects of the policy, with a high correlation coefficient with policy aspect 3. As expected, respondents' support for pods policy is highly associated with demand. That is, respondents who think that there should be pods for multiple food trucks to co-locate would be more inclined to purchase from food trucks in the future when there are designated areas housing multiple food trucks.

Table 6. Correlations between Policy Support and Potential Demand for Food Trucks

Factors	Policy Support 1	Policy Support 2	Policy Support 3	Intention 1	Intention 2
Policy Support 1	1				
Policy Support 2	.59**	1			
Policy Support 3	.39**	.15**	1		
Intention 1	.20**	.23**	n.s.	1	
Intention 2	.53**	.44**	.26**	.43**	1
Intention 3	.40**	.21**	.55**	.17**	.59**

**significant at the .01 level; *significant at the .05 level; n.s. = not significant

5.8 Respondents' Comments

Reading through the respondents comments, is it very clear that there are very strong sentiments for and against food trucks. Through these comments, assumption can be made that information and misinformation has played a large part in respondents' attitudes towards and willingness to support mobile food vending in Vancouver. Respondents had many commonalities, concerns, and recommendations, that policy makers should be aware of when making decisions. Survey comments were coded with 1 = being against food trucks or food pods, 2 = being neutral towards food trucks or food pods, and 3 = being for food trucks or food truck pods. The average comment for food trucks rated a 2.72, making the majority of comments pro-food trucks. The average comment for food trucks located in a pod rated a 2.23, making the majority of comments pro-food truck pods (Please see Figures 23 and 24).

Figure 23. Respondents' Sentiments on Food Trucks (n)

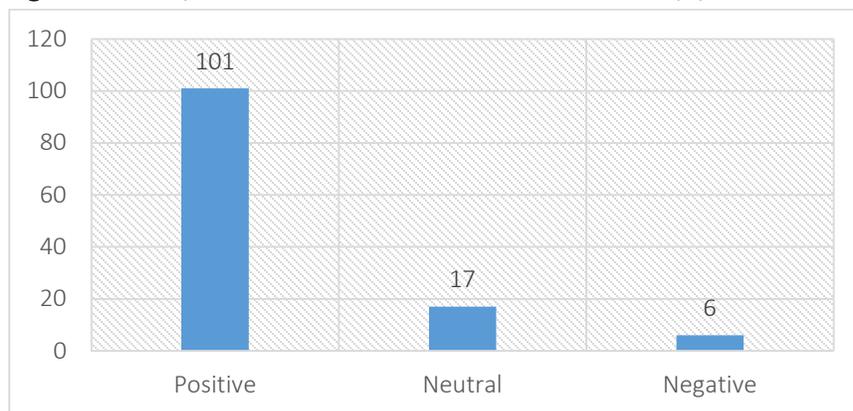
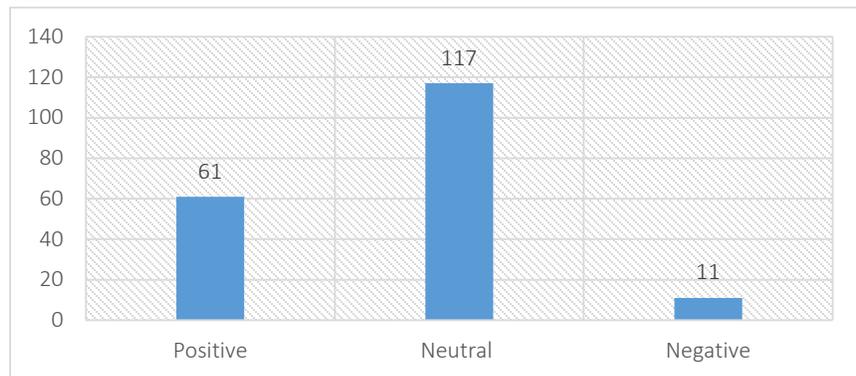


Figure 24. Respondents' Sentiments on Food Truck Pods (n)

Commonalities among the respondents:

City Competition. Many people believe that Vancouver is competing with Portland and other cities to get residents and businesses to locate here. One respondent stated that “food carts... make Vancouver more fun, hip, and modern (which) goes a LONG way towards helping companies like ours find talent.” It is important to a lot of people that the cities they locate in have a vibrant culture, and this includes unique, local, food options. In addition to population, many people stated that Vancouver has to compete with Portland for consumers. Many stated that they frequently drive to Portland for food and food trucks, but would stay in Vancouver if these options were more readily available.

Support for Pods. There are a variety of motivations for people to support the development of pods including making food trucks easier to control, consistent and reliable schedules, more dining options, reduces trucks use of public parking spaces, and would keep consumers from travelling to Portland for diverse dining options. Many people expressed discontent with having to go online to figure out where their favorite food trucks are located on the specific date and time they would like to eat. Therefore, they believe that pods are a good, dependable solution.

Concerns Regarding Pods. City aesthetics, safety, and sanitation are overwhelmingly the top concerns addressed by survey respondents. Some respondents felt that food truck owners do not own and operate proper businesses or adhere to the proper policies and procedures. Some of this can be attributed to misinformation, but a majority can be attributed to perceptions and past experiences. Regardless of the reasons, consumers who are adamant about not allowing food truck pods, is a major obstacle for policy development. In addition to the respondents who attested the food truck pod policy, there were several people who just simply preferred to have mobile food trucks that park in different locations.

Parking. It seems that the major cause for the support of pods is definitely the lack of public parking in the Downtown Vancouver area. Many people simply do not want to compete with food trucks for parking. Others felt that it was an unfair advantage that food trucks do not have to pay a traditional rent and overhead to be in business. On the other hand, many people like the variety and aesthetics of having individual mobile food trucks.

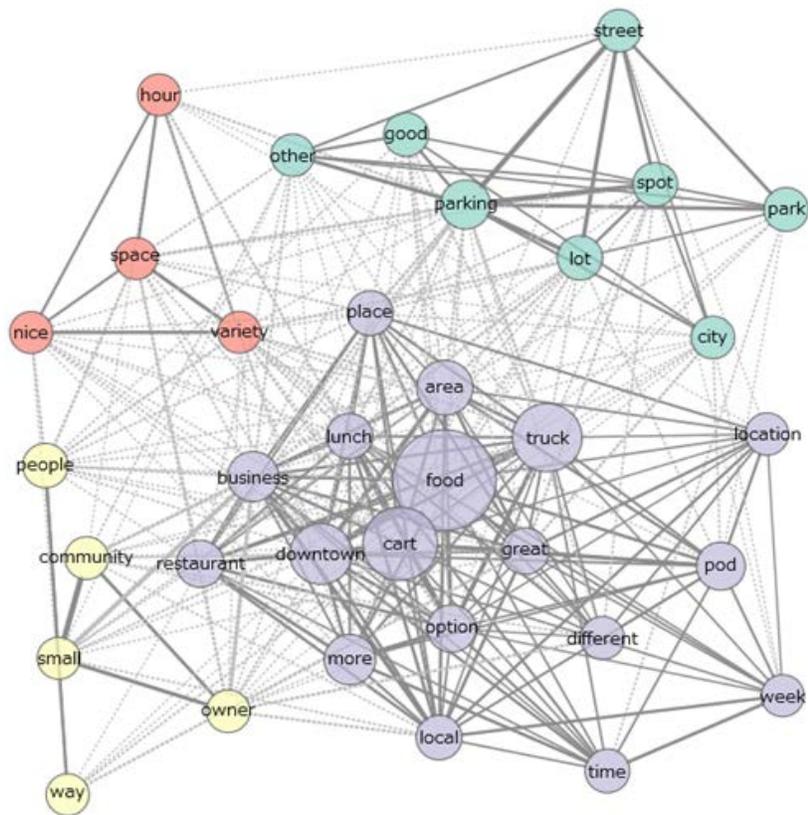
Recommendations from respondents:

Many concerns were addressed by the survey respondents and many people had suggestions for policy changes that would address their concerns. Respondents have recommended some of the following possible policy changes:

- Select 5-10 parking spaces Downtown Vancouver and allow licensed food trucks to purchase monthly rent for the spaces. These spots can be carefully selected as to not interfere with brick and mortar restaurants or to negatively affect the flow of traffic. Consumers will know where they can expect to find food trucks and could even foster a “fun, search for the food truck, mentality.” And finally, food trucks could have the option of working together and rotating around to different spots within the system.
- A variety of options that vary from permanent locations to completely mobile locations and everything in between, such as a semi-permanent location where food trucks can locate during business hours. This gives owners the chance to decide for themselves, and consumers and the city the flexibility of choice.
- Pods that operate in parks and vacant lots is one option. Seating and cover are important to some people and completely irrelevant to others. The locations that consumers brought attention to in the survey are: Hazel Dell area (once), Washington and 8th (mentioned three times), Main and McLoughlin (mentioned once), and public parks such as Esther Short Park (mentioned twice) and Turtle Place Park (mentioned twice).
- Regarding food truck located near the courthouse, parking is of concern. If court usually starts between 8:30am and 9:00am with a lunch hour around 11:00am, it would be preferable that food trucks locating in the area did not utilize public parking, unless it is available after 9:00am, after everyone who needs to be in court, has arrived. Trucks could also have designated space in a lot near the courthouse instead of utilizing street parking.
- No matter what the policy change is, appropriate planning and regulations would need to be established. This could extend beyond the parking, licensing, and health codes to include specific aesthetic and physical requirements of the trucks. In addition to these, proper trash receptacles and exterior cleanliness regulations should be adapted.

The top 100 pairs of keywords mentioned in respondents’ comments are presented in a network as illustrated in Figure 25. The size of bubbles indicates frequency (i.e., how many times the words are mentioned in a comment); thickness of edges indicates similarity of word pairs (i.e., how many times the words appear together in a comment relative to the total number of mentions for each word); color indicates word communities (i.e., dense sub-networks) that summarizes important themes in the comments. At the core of the network, a community with the color purple represents the roles of food trucks for downtown residents and businesses. Green represents locational aspects of food trucks in the city. Orange represents benefits of food trucks for the residents. Yellow represents entrepreneurship and employment opportunities for the community. For a complete list of all comments for the consumer survey respondents, refer to Appendix B.

Figure 25. Theme Extraction from Respondents' Comments



Nodes: 35, Edges: 306, Density: .514

5.9 Summary of Findings

Overall, the research provided the respondents' consumption patterns, support, and values to identifying the motivations and reasons for dining-out at food trucks or carts. It was found that personal wellbeing was among the value factors that identified the respondents' lifestyles. On average, respondents dine out 2.7 times per week making it lower than the national average of 4.4 times per week (Zagat, 2015). A majority of the respondents dine out for lunch and dinner. The potential to capture demand for food trucks significantly higher for the lunch and dinner times especially during the daytime hours with the downtown employees. Additionally, more than half of the respondents would walk a shorter distance (i.e., less than one mile) to a food truck. The availability of food truck pods potentially increases demand by offering more variety in food options. Respondents are not willing to pay more regardless of improvements in food truck attributes, which indicates demand for food trucks that thrive on quality food at a reasonable price. Due to many respondents dining out during lunch time, the employees save time and money when purchasing from food trucks within walking distance from the workplace. Further, more respondents frequent food establishments in Vancouver, WA, but occasionally travel to other locations.

The attributes of importance and satisfaction of the consumer were also evaluated and measured. The four reliable factors of "Food," "Service," and "Appearance" were considered the

most important factors in a consumer's choice of a food truck or cart. In reference, food quality and food consistency were more important in the Food factor whereas friendliness and politeness of staff determined the importance of the Service factor. The Appearance factor consisted of the cleanliness of the surrounding area and the appearance of the food truck or cart. Likewise, the respondent's highest level of satisfaction came from the Service factor then the Food factor and finally, the Appearance factor. Therefore, the current state of the Food factor (e.g. food quality, consistency) has higher expectations from the food trucks than other factors. This suggests negative disconfirmation where the product or service do not meet the consumer's current expectations of a food establishment. Therefore, the Food factor would need improvement to satisfy the consumer. However, in general all the three attributes represent consumer's high satisfaction and met expectations.

Consumption is driven by consumers' motivational factors, which include intrinsic or extrinsic values. Respondents would buy from food trucks or carts to support local businesses, try out new types of food or beverage and experience an urban lifestyle. Thus, according to motivations and intentions that drive consumer consumption, food trucks would satisfy intrinsic and extrinsic rewards and values of the consumer. Likewise, food trucks satisfy the demand for more food options.

Respondents believe food trucks have positive roles in the local community, support the local business growth and development, provide business opportunities for entrepreneurs, and create vibrant neighborhoods. Based on respondents' comments, food truck industry will increase the density and foot traffic in the downtown area as well as support Vancouver, WA as a desirable place to live, work, and visit. Likewise, food truck owners believe that food trucks are important for the economic growth and community development in Vancouver, WA. Though there is huge support for pods from the public, the owners are not yet willing to switch to that option. Additionally, there are concerns such as aesthetics, low density, and parking from the respondents. On the other hand, there is positive support from the respondents in implementing policy changes for the food truck industry.

The research attempts to identify if policy changes for food trucks will influence demand if nothing is done, facilitation of more business permits and allocation of specific food truck areas. Though there is an increase under the third scenario, the demand for food trucks in the downtown area will increase significantly if more food trucks are open even without further policy changes. The implementation of policies was supported by the community especially with younger respondents who have lower income and education levels.

The research and survey findings can conclude that the food trucks would increase the business growth and development in the local community. Likewise, research question on food truck pods attracting more consumers or revenue than independent food trucks was supported as respondents show a stronger support for food trucks pods than individual food trucks or carts.

6. KEY INSIGHTS FROM MOBILE VENDORS

6.1 Characteristics of Interviewees

All three interviewees had very similar characteristics beyond being independent, mobile, food trucks in Downtown Vancouver. All interviewees pride themselves in providing unique and healthy options for consumers. In addition to the methodology behind the type of food they serve, the owners were also adamant about being mobile and enjoying their mobility. One food truck owner stated that they like to “bring food options to the people who don’t have options” (Expert 3, personal communication, March 19, 2015). This sentiment seems to fit most food truck owners in Vancouver as all interviewees expressed a passion for providing good food to people around the city, especially to those who, due to location, don’t have a lot of options.

Beyond their motivations for owning and operating a food truck, interviewees had been previously employed but decided to become an entrepreneur for the freedom it provides. Also, they all had a strong passion for food and the people of Vancouver. There was a true sense of wanting to share their unique food and story with the community. Below are the specific findings for each interview question (interview transcripts can be found in the appendix, for more detailed information):

1. Reasons Customers Buy from Food Trucks

Food cart owners believe that they offer something new, unique, and exciting to consumers in Vancouver, WA. They have found that they, as owners, enjoy their ability to bring people out of offices and confined spaces and into the community; providing a place to gather and a place to be. Beyond the aesthetics and branding of their carts and facilities, owners believe that their models are sustainable because they provide good food that people like and will buy again. Every day could potentially present different options to consumers, even within the same cart, giving consumers interesting choices to try and experience.

2. How Food Truck Owners Chose a Location

There are a few different models for location selection that are in use by the current food cart owners. First, there is a model of locating in preapproved spaces that have been used by other carts and proven to be successful given the density of people and the consumer expectation of there being a food cart at that specific location. Second, a model of true trial and error can take a long time to perfect, but can be very beneficial to the owners new to the area. Third, a model of providing a convenient location for consumers where they do not have a lot of other food options. All owners interviewed do not like to park close to a restaurant and firmly believe that food carts and brick and mortar restaurants should be working together to cultivate a Vancouver food scene and culture. Locating around complementary businesses is important to grow small businesses of all types in the area. Overall parking and use of public spaces is definitely a major concern for owners.

3. Food Truck Owner's Future Financial Expectations

All of the owners interviewed are most interested in focusing on growth through forecasting and planning. There is a consensus that their current models are working well right now, but might not work as well in the future and more research and planning is needed to truly understand this shift. Owners have a variety of options in the mix when thinking about the future, such as commissary kitchens, brick and mortar restaurants that can also act like a central kitchen, and expanding the number of food trucks they currently have to serve more people each day. Overall the owners feel that they need to continue with their branding and work on consistency in location and food quality. They believe that there isn't enough demand in the market for expansion just yet.

4. Goals of Food Truck Owners

Food cart owners overwhelmingly state that a passion for sharing their food and creating a community is the most important goal for them beyond making money. They want to build Vancouver culture, cultivate innovation, and provide for their communities by being involved in them. One food cart owner stated that consumers aren't just looking at the food as a holistic item but, they are becoming smarter, more educated, and a different buyer. The food cart owners would like to provide for this changing consumer demographic by providing food that meets these new needs. Ultimately, it's all about simplicity, interacting with people, and being involved in a community where they live and work.

5. Food Trucks' Impact on Surrounding Businesses

Food cart owners are aware that they are viewed as direct competition from local restaurants. But, they believe that this competition can be a healthy driver for innovation; it forces restaurants to continue to develop and not become complacent. One food cart owner explicitly stated that their goal as a food cart owner is not to put other people out of business. Consumers are not the same consumer every day, their needs and preferences change each day as their purpose for eating out does. Food carts create density by drawing people out into the city and then these consumer might see a shop that they've never seen before or people they've never met; it creates a strong local community who supports each other economically and socially.

6. Food Trucks' Impact on Community Development

Owners see their impacts in a variety of different facets. First, they employ local people to work at a local business, they pay taxes; the local governments and agencies use this tax money to develop the area in a variety of ways. Second, food trucks create a vibrant and vital community by stirring the pot, creating innovation, providing a low barrier for entry for entrepreneurs, and drawing the attention downtown. And, all food carts are different when it comes to impact, some locate in higher density locations, some create pockets of density, and some are off the beaten path. Finally, food trucks are forced to be a niche market. Niches create a strong sense of community and tribe-like mindsets among consumers. People will gravitate towards like-minded people and food trucks can give these micro-communities a space to meet. Owners believe that their carts can help people form a sense of identify within their community.

7. Food Trucks' Influence on How Much Time and Money People Spend in the Area

When asked if owners believe their carts positively impact the amount of time and money people spend in an area, the consensus is definitely “Yes,” as one owner simply put it. Other owners have noticed that people will travel to them, regardless of their location. They see that their customers come to location for them, but then might stay if they see other business that look interesting in the area, and vice versa. Another owner have had strong support from other owners in the area to locate where they do. How strong the other businesses wanted them to stay is a good indicator that overall, other businesses are seeing a positive relationship between food carts and foot traffic.

8. Food Truck Pods' Influence on How Much Time and Money People Spend in the Area

All owners agree that pods would create a variety of options and energize pockets in the city. But, they all agree that this model would not work for them right now. One owner was very adamant about travelling to their consumers. They believe that pods would increase the amount of time people spend in the area, but that it would be a disservice to their consumers because of their model. Another owner worries that pods can create a food cart mix that can overshadow each other, where some food carts don't last simply because there isn't enough demand for that many carts in one specific location at this time.

9. Location and Policy System Preference

All owners support pods as a model for growth, in the future. They strongly believe that the infrastructure, demand, and population density is not where it needs to be to support a food truck pod. In addition to these issues, they believe that it's important to still allow street food, in a traditional sense because they like travelling to consumers and having a relationship with consumers from all over the city. They believe that the barriers to entry shouldn't be lowered because as it stands people have to be organized, they have to really want to open a food truck to open a food truck, and that keeps people who are not serious are ready out of the marketplace. The biggest fear with food cart pods is that they will oversaturate the market. Ultimately, as one owner brought up, the success of the pods will depend on the food cart owners themselves and whether or not they embrace the food cart community as much as the current owners have.

10. Other Comments or Concerns Regarding the Potential Policy Change to Incentivize Food Truck Pods

Owners have stated that the parking regulations have influenced their locations decisions, and not always in a negative way. Ultimately it's consumer decision and they see pods as serving a different market than their current one (such as a late night crowd). Permitting pods is a good direction to go in for development, but it the market isn't ready just yet. If the city wanted to create a few pods, one owner stated, then they shouldn't try force food trucks into it through policy. There are three main concerns with current and future policy changes that were brought up in the interviews:

- **Parking.** The fee given for parking infractions is not a big enough deterrent. There needs to be variations in policies and codes so that they can adapt to a changing mobile food

environment. This could mean that better coding might incentivize carts to locate in a pod, but it shouldn't force them to. Pods need to offer the owners and the consumers something they can't get by having pods individually located on the street.

- **Pod Amenities.** Pods should be so good and beneficial to owners that it pulls carts off the streets, by choice. Until there is a model of pods that does this for Vancouver, the development of pods should be delayed. Pods are a better option, but only when the streets are full of carts and customers.
- **Current infrastructure.** Transportation and other elements in the current infrastructure will make pods very hard to sustain. Without a way to move large amount of people in public transport and provide public spaces for people to gather, outside of the pod itself, this model will not work.

One suggestion to aid in development of pods was to create a monthly parking permit for food truck owners to park on the side of the street, possibly in specific locations. This would allow food trucks who wanted to locate on the street, to do so, and provide an incentive for trucks to locate in a pod, if they wanted to. Food cart owners feel that their carts can be a good business and economic development indicator, so it is crucial not to snuff out new carts by forcing them into a model that isn't sustainable in this community yet.

6.2 Summary of Findings

Overall, many owners were proponents of food truck pods and eventual policy changes to incentivize pods versus street parking for food trucks. Although many food truck owners did support food truck pods, most owners would not want to locate their food truck in a pod with the existing demographic makeup of Downtown Vancouver. A common concern for operating food trucks in Vancouver, WA is the lack of population density. All interviewed food truck owners expressed concern over the lack of population density in Downtown Vancouver making it an issue worth further analysis. It is important to note: owners believe that pods can be valuable for community development, but are not economically viable at this point in time in Downtown Vancouver. Interviewees expressed the following, almost unanimously:

Respect for other businesses in the area. It is clearly important to the owners that they remain in a good standing with surrounding businesses, including brick and mortar restaurants. All owners pick locations that are not in direct competition with restaurants or each other, but are in areas that complement their product, as they hope to compliment other businesses as well.

Preference toward being mobile. All interviewees prefer to be mobile or free-standing when asked if they would locate in a pod. They all had individual reasons with the general consensus being that Vancouver is not ready for pods that this exact point in time, but that they agree some policy change should be made in the future once infrastructure and population density increases to a sustainable level for pods. Also, the owners as individuals with individual business plans like being mobile and reaching different customer groups around the Downtown area. One food truck owner claimed that they felt it, "would be a disservice to the customer to make the customer come to us" (Expert 2, personal communication, March 19, 2015).

Vancouver has a lack of appropriate transportation and infrastructure. The public transportation system and other infrastructure is not strong enough to support pods, in the opinions of the current food truck owners. In addition, the policies limit new trucks from entering the market which many of the owners appreciated. They felt that food trucks are fairly new in Vancouver and are still fighting the “roach coach” stereotype. Therefore, these stricter regulations dissuade potential entrants who are not organized and serious about joining the community by providing a clean, unique service to customers. If policy changes were to be implemented, it seems to be preferred that the requirements are lightened, or application process isn’t made easier. Overall the consensus tends to be that the regulations for food trucks, after applying for the appropriate licenses, be lightened regarding where they could locate and for how long.



“Restaurants view food trucks as threatening. They see us as direct competition. Restaurants have a scarcity mindset. They believe that there is a set number of consumers with a set list of needs. Food truck operators tend to view demand as an ever changing variable wherein each consumer is a different consumer each time they consume. Therefore the same customer can have varying needs that will be met by a variety of businesses. Food trucks can’t “steal” customers if the customer is looking for a sit-down experience, instead they provide options for people who aren’t necessarily looking for that experience. This is not an unreasonable response.”

Food Truck Owner



7. BEST PRACTICES IN MOBILE VENDING POLICY

In spite of the wide array of mobile food vending regulations, the demand for food trucks have continually increased and been successful monetarily, creating a wide variety of choices for consumers. This analysis will examine the spectrum of regulations that dictate food trucks in areas across the United States providing possible framework for policy changes in Vancouver, WA.

7.1 Jersey City, New Jersey

Jersey City, New Jersey has a population of 257,342, which is comparable to Vancouver, WA. Several policy changes have been implemented in the city starting in April 1, 2011 and continuing through March 26, 2013. Prior to April 1, 2011, Health Officer Joseph Castagna was issuing food truck permits, called “itinerant catering licenses,” in numbers that far exceeded the legal cap (Memorandum from William C. Matsikoudis, *supra* note 49). Due to this excessive licensing, the city of Jersey City felt the need to implement stronger policies with regards to food trucks. Existing regulations prohibited food trucks from selling food or drink within 300 feet of any licensed eating establishment; additionally, no food truck was allowed to remain in any location for more than forty minutes during a four-hour period (Code of Jersey City, N.J. ch. 175, art. II, § 13.)

Prior to the enactment of all current policy changes in Jersey City, the unemployment rate in June of 2013 was 10.5 percent and Hudson County’s Direct Tourism Employment in 2010 was 16,786 (in millions) (The Economic Impact of Tourism in New Jersey, 2014). The level of tourism in Jersey City in 2010 was \$1,533 (in millions) (The Economic Impact of Tourism in New Jersey, 2014). The population in Jersey City in 2010 was 247, 597 people with a total of 20,193 firms. Sales in accommodation and food service sphere was \$324, 779 (United States Census Bureau, 2015).

After the policy changes, Jersey City’s law department proposed requiring operators to attend a course “on the handling of the food products they will sell,” undergo criminal background checks, submit to a pre-operation inspection, and provide their own trash and recycling receptacles. Jersey City amended Chapter 175 governing Itinerant Eating and Drinking Establishments to lower the distance that food trucks had to stay from licensed food establishments, allowing food trucks to remain only 200 feet away. Further, the amendment enabled food trucks to remain stationary for up to 120 minutes unless they purchased a monthly parking permit which would allow them to stay stationary for a longer duration (Jersey City, N.J. Ordinance 11-150, 2011). The hours in which food trucks could operate was extended to Monday through Friday from 6:00 a.m. until 9:00 p.m. (Code of Jersey City, N.J. ch. 175, art. II, § 9.3(c)). On March 26, 2013 the city of Jersey City added a clause prohibiting food vendors from operating on private property (the council had previously considered allowing property owners to give permission to allow food vendors on their property).

Following the application of the policy changes that were enacted between April 1, 2011 and March 26, 2013, the economic indicators saw significant changes. In addition to hundreds of small businesses, national and international companies from a variety of industries such as Nautica and Timberland, RBC, JPMorgan Chase, Imperial Bag, Peapod/Ahold, Forbes, Charles Komar & Sons, and Actavis are relocating to Jersey City or expanding their presence. Jersey City’s unemployment rate dropped drastically from a staggering 10.5% in June of 2013 to 6.2 percent, with more than 9,000 thousand jobs created ranging from new small businesses to construction jobs and

corporate jobs. (City of Jersey City: Office of the Mayor, 2015). Hudson counties direct tourism employment rose steadily after the policy changes from (in millions) 16,822 in 2011, 16,917 in 2012, 17,141 in 2013, and 17,641 in 2014 with an overall percentage change of 4.3% (The Economic Impact of Tourism in New Jersey, 2014). The level of tourism in Hudson county reflected as tourism direct sales (in millions) was \$1,613 in 2011, \$1,685 in 2012, , \$1,767 in 2013, and \$1,881 in 2014 with an overall percent change of 6.4% (The Economic Impact of Tourism in New Jersey, 2014). Hudson County food and beverage tourism direct sales (in millions) in 2014 was \$566.2. These economic indicators show continued growth in Jersey City's tourism sphere following the food truck policy changes.

As an indicator of overall city growth it is important to note that Hudson County's tourism industry grew from 2013 to 2014 following the implementation of food truck policy changes. Hudson County's 2013 tourism direct spending was as follows (in millions): Lodging \$369.5, Food and Beverage \$528.4, Retail \$372.9, Recreation \$249.8, Transportation \$246.3, Second Homes \$12.7 (The Economic Impact of Tourism in New Jersey, 2014). In 2014, Hudson County's lodging tourism direct sales (in millions) was 389.7, retail tourism direct sales (in millions) was \$393.9, recreation tourism direct sales (in millions) was \$265.6, transportation direct sales (in millions) was \$265.4, and second homes direct sales (in millions) was \$18.0 in 2014 (The Economic Impact of Tourism in New Jersey, 2014). These economic indicators show an increase of tourism following these policy changes, thus it can be deduced that food truck policy changes influenced growth within Jersey City, New Jersey.

7.2 Akron, Ohio

The city of Akron Ohio has a population of 198,000. Prior to policy changes implemented in May 19, 2014, food trucks were granted licenses to operate on private property, much like any other food vendor. Akron health code required them to have kitchen and proper sanitation resources (otherwise known as a commissary). The City of Akron permitted food trucks to operate at city events, but food trucks were never allowed to operate on public property outside of this circumstance. Most food trucks were trying to organize and locate in a pod and sharing a commissary. But the number of food trucks was too small to substantiate the change. The city realized that they needed to try to do something about this before the number of trucks increased too much more.

Prior to re-assessing the existing policies, the city of Akron had 21,000 businesses with 9% of all of its employees in Akron working in food service or other accommodation services. A total of 881 new business starts occurred in 2013 in all of Summit County (Akron Book of Facts: Medina, Portage & Summit Counties, 2014). Of the businesses that existed in Akron, OH in 2013, 10.35% of them consisted of 1-10 employees, 22.55% consisted of 11-50 employees, 13.38% of them consisted of 51-100, 30.29% of them consisted of 101-500 employees, and 23.43% of them consisted of 501 or more employees. Unemployment rates in Summit County in 2014 were 4.4%. While the unemployment rate accounts for all of Summit County (Akron Book of Facts: Medina, Portage & Summit Counties, 2014). It is important to note that Summit County's population is concentrated in Akron, making the Summit County unemployment rate an accurate assessment of the economic environment in Akron, OH.

On May 19, 2014, Akron, OH changed its policies so as to allow food trucks to park and operate on public property. In order to operate in the highly sought after biomedical corridor in Akron, OH, where there is a large concentration of the jobs in the city, prospective food trucks must pay a fee of \$225 for application and \$1,750 if approved for a license to operate in the corridor (Warsmith, 2014). The cost of the fee was an attempt to protect brick and mortar restaurants in Akron who have, in general, been opposed to the loosening of food truck regulation. "The ordinance forbids trucks from being within 50 feet from a residence, 200 feet from a brick and mortar restaurant, 750 feet from a park and 1,000 feet from a school..." (Warsmith, 2014). The higher fee applies to food truck owners who want an assigned parking spot on Locust Street, which is near Akron General Medical Center and Akron Children's Hospital, or Park Street, which is near Grace Park, to operate on public property at specific events and festivals during the summer must pay a \$1,200 fee and the city charges \$1,200 a year for a contractor to lease a public right of way (Warsmith, 2014). Parking near Akron General Medical Center and Akron Children's Hospital can run \$10 a day, but the downtown food truck fee equates to about \$4.80 a day. The legislation was amended to include a penalty section for parking violations for food trucks. A violation would be a third-degree misdemeanor with a \$100 fine for a first offense, \$200 fine for a second offense and \$500 fine for subsequent offenses (Warsmith, 2014).

The implementation of parking violations and fees as well as ordinances is seen as the first step in policy changes in Akron, OH. The city of Akron, OH wants to see what happens with the aforementioned policy changes before giving street use permits on a wider scale. After the implementation of policy changes in Akron, OH, the unemployment rate rose slightly to 4.6% in December of 2014. However, given the recency of the policy changes there is minimal data to accurately scrutinize the effects of the policy changes. Food truck owners find the policy changes extremely inhibiting, however, brick and mortar restaurants are pro policy changes as they protect their business environment from competition. With the existing policies, food trucks are prohibited from parking on public property, thus, Akron, OH is partially incentivizing food truck pods. However, in order for food truck pods to develop, private property owners must be willing to develop their property into a pod. With the current business climate in Akron, OH, and the majority of the demand in the biomedical corridor, the options for pod development are slim. The heavy regulations on food trucks keeping them from the biomedical corridor is hindering development in this sphere. There is a public push for better regulation, especially as individual trucks or carts is concerned.

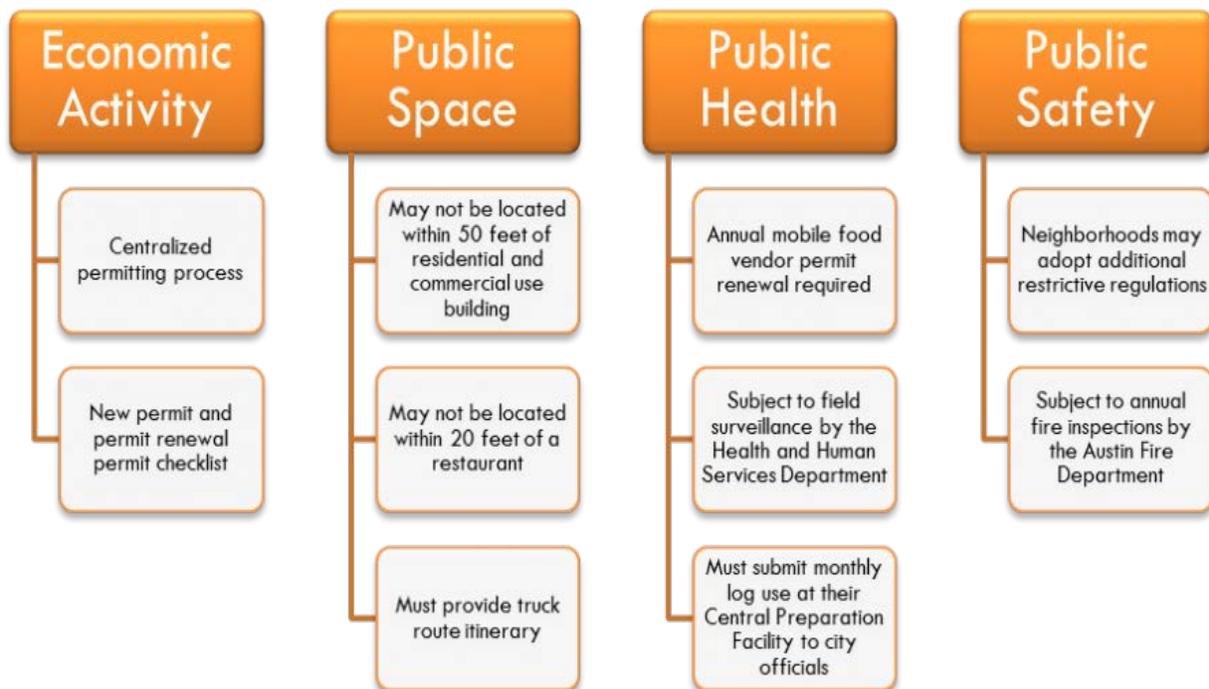
7.3 Austin, Texas

In 2013 the population of Austin, Texas was 885,400 making it significantly larger than Vancouver, WA. Prior to 2008 the food vending sphere in Austin, TX had no permitting process and was rather small. Further, there were no food vending establishment regulations. Regulations on food trucks began being enacted in Austin, TX in 2008 when food trucks became popular as an economical choice during the recession in 2008. Prior to the execution of regulations there were 40,134 business in Austin, TX (The Austin Chamber of Commerce, 2015). The business environment in Austin, TX consisted of 33,944 businesses that had 1-19 employees, 5,236 businesses that had 20-

99 employees, 861 business that had 100-499 employees, and 93 business that had 500 or more employees (The Austin Chamber of Commerce, 2015).

Since 2008 there have been numerous policy changes in Austin, TX that have changed the face of the food truck domain in the city. One of the changes was to create a centralized permitting process, rather than requiring prospective food truck owners to apply to each entity separately. This streamlined process made the application process easier for food trucks (Austin City Code, Sec. 10-3-1: Mobile Food Establishments). Further changes in policy stipulated that food trucks could not be located within 50 feet of a residential and/or commercial use building. Additionally, food trucks are prohibited from being located within 20 feet of a restaurant. Austin, TX mandated in the Austin City Code, Sec. 10-3-1: Mobile Food Establishments, that mobile food truck must provide the city with a truck route itinerary. To protect public safety, and retain neighborhoods distinct cultures and sense of individuality and independence, Austin, TX municipal code implemented policies within the code that allowed neighborhoods to adopt additional restrictive regulations as they see fit for their neighborhood with approval from the City Council. All food truck establishments are subject to annual fire inspections by the Austin Fire Department and annual mobile food vendor renewal process as well as random field surveillance by the Health and Human Services Department (Huey, 2015). Huey (2015) provides a summation of the mobile food vending policy changes in Figure 25.

Figure 25. Mobile Food Vending Policy Changes in Austin, TX (Source: Huey, 2015)



Following the enactment of the updated Austin City Codes, the economy in Austin, TX saw a drastic increase in the number of businesses. The total number of businesses increased from 40,134 businesses in 2008 to 43,746 in 2012. The unemployment rate in 2015 in Austin, TX was only 3.4% (Austin: Southwest Information Office). While there was growth in all sizes of business

in Austin, TX, the number of businesses grew most specifically in the small business sector. Overall, the number of businesses grew dramatically from 2008-2012. The number of businesses employing 1-19 employees grew from 33,944 businesses to 37,186. Businesses employing 20-99 employees grew from 5,236 businesses in 2008 to 5,550 in 2012, 100-499 grew from 861 to 910, and businesses employing over 500 employees grew from 93 business to 100. (The Austin Chamber of Commerce, 2015). On a whole, the population of Austin, TX has grown consistently. In 2013 Austin, TX had a gross metro product growth of 4.6% (The Austin Chamber of Commerce, 2015).

The city of Austin, TX policy changes have incentivized individual food trucks. By allowing food trucks to park in close proximity to brick and mortar restaurants, residential and community lots, the amount of locations available for use by food trucks were drastically increased as well as the amount of demand, seeing that food trucks are allowed to park and/or take up residence in high traffic areas. Additionally, streamlining the application process for food truck applicants lowered the fees, and time and energy it takes food truck owners to apply for licenses, and re-apply.

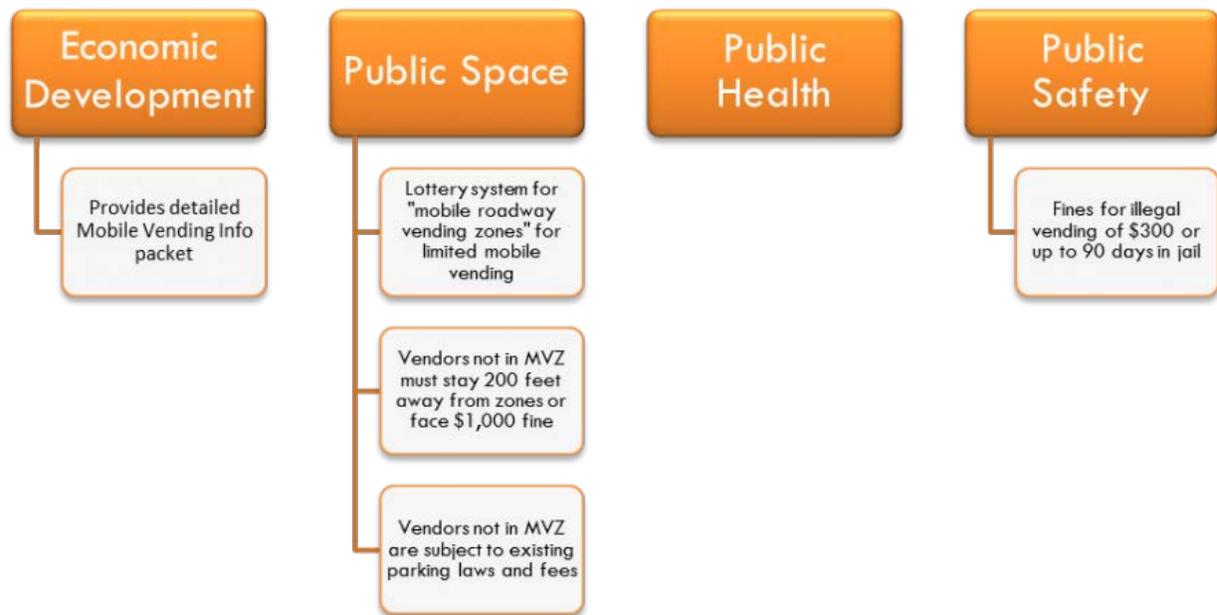
7.4 Washington, District of Columbia

The population of Washington, D.C. was 658,893 in 2014. While the population is much larger than Vancouver, WA, it is growing steadily and can provide a valuable example for how to create policies around mobile food vending (Carman, 2013). Prior to the 2013 policy change regarding food trucks, Washington, D.C. had a total employment of 482,838 people at a total of almost 55,887 firms (U.S. Department of Commerce, 2014).

Practices before policy changes on December 1, 2013 required mobile food vendors to operate under ice cream truck laws because there weren't any regulations implemented that catered to food trucks specifically (Carman, 2013). The city government did not foresee that social media would play a strong role in the development of food trucks, creating a conflict between the owners and policymakers. The main motivation behind the policy change was how strict the traffic and parking rules were. Much like Vancouver, parking was a strong deterrent from opening a food truck. Washington, D.C. had 200 food trucks licensed but only 107 had parking spots allocated for food truck occupation (D.C. Food Truck Association, 2012).

The policy change resulted in changes in parking and consequences for illegal vending. First, Washington, D.C. implemented a lottery system to allot the 95 parking spaces. This lottery limited mobile vending to the newly allotted "mobile roadway vending zones" by rotating the allotted spots monthly by preferred locations. In order to enforce the new mobile vending zones, any vendor locating in a MVZ without a permit will now be fined \$1,000 for each offence. Vendors not participating in the MVZ are subject to existing parking laws and fees, as they had traditionally been. For any vendor illegally vending (includes incorrect permitting and licensing) the fine is \$300 or up to 90 days in jail (Huey, 2015). A summation of Washington, D.C.'s policy changes can be seen in Huey's visual (2015) in Figure 26.

Figure 26. Mobile Food Vending Policy Changes in Washington, DC (Source: Huey, 2015)



These regulations were meant to strongly incentivize owners to participate in the mobile vending zone lottery and to keep illegal and unpermitted mobile vendors off the streets. Washington, D.C. saw employment levels of 184,000 and 763,000 at Downtown and D.C., correspondingly (2014 Annual Report: Economic Development, 2015). While this is a significant growth, the growth cannot be accurately attributed to the change in food truck policies without further research. So far in 2015, there have been 10 new restaurants projects. Therefore, we can conclude that the new policies which incentivize food trucks to populate public spaces is not negatively impacting the success of brick and mortar restaurants. (2014 Annual Report: Economic Development, 2015). Overall, the policy incentivized individual food trucks to populate Washington, D.C. and so far it seems to be a success for food truck owners and for the local economy as well.

7.5 Boulder, Colorado

Boulder, Colorado is home to 313,333 residents (United States Census Bureau, 2015). Prior to April 26, 2011 food trucks were prohibited in Boulder, CO due to fear that food trucks would take business away from existing brick and mortar restaurants in the city (Bounds & Meltzer, 2014). The City Council also saw unhealthy competition between brick and mortar restaurants who paid some of the highest rents and taxes in the city compared to food trucks (Bounds & Meltzer, 2014). Prior to allowing food trucks in the city, Boulder, CO had a population of 294,567 and the number of firms in the city was 42,506 in 2007.

Practices in Boulder, CO, before policy changes were implemented, allowed two mobile food trucks to operate on private property (Mobile Food Vehicles, n.d.). Hours of operation and location restrictions were severe leaving many food truck owners driving to Broomfield and Westminster,

CO to make enough money to stay afloat. Thus, we can conclude that the initial policies were too restricting and/or demand for food trucks in Boulder, CO was not significant enough for economic prosperity.

After food trucks were allowed in Boulder, CO, policy changes were put into place over the next couple of years. The city approved a pilot study in 2013 allowing food trucks to operate in city parks during the summer season. Boulder, CO concluded from the pilot study that food trucks were allowed to operate only during daytime hours during the summer in the parks, and had to send an email to the city when they were in/out of the designated park(s) (Mobile Food Vehicles, n.d.). A second pilot study was conducted to determine whether or not food trucks should be allowed to operate during late night hours. The pilot study concluded that there is a demand for food trucks during late night hours (until 2 or 3 a.m.), thus Boulder, CO determined under the pilot program for food trucks that they should be allowed to operate in popular parks near Park Central Building during late night hours (Bounds & Meltzer, 2014). Independent of the parks, food trucks were allowed to operate in the right-of-way of industrial, business, and downtown zones with property approval (Mobile Food Vehicles, 2015). Additionally, food trucks were given their own legal parking spot, so they did not have to fear being ticketed or towed. To protect brick and mortar business, but still allow food trucks to engage in healthy competition, policies were changed to state that food trucks cannot operate within 150 feet of restaurants and residence even when closed (Mobile Food Vehicles, 2015). As of June 1, 2011, current application processes require food truck owners to obtain a Boulder County Public Health Certificate, pay \$231 application fee, and a \$25 sales tax license fee valid until December 31st of each year (Mobile Food Vehicles, 2015).

After the aforementioned policy changes in Boulder, CO the unemployment rate was 3.9% in 2015 (Boulder, CO Economy at a Glance, 2015). Further, as of May 2014 Boulder, CO had 167, 200 jobs in all occupations (Boulder, CO Economy at a Glance, 2015). The businesses mix within Boulder, CO had 11,543 private nonfarm establishments and 34,789 non-employer establishments in 2012, with a total of 46,332 firms after the policy changes were implemented (United States Census Bureau, 2015).

Through these policies Boulder has incentivized food trucks to locate as individual businesses on public property. While these are still highly restrictive, especially regarding the restrictions with locating near restaurants, these policies allow individual food truck operators an opportunity to operate on public property and in high traffic locations. Independent of the parks, food trucks are allowed to operate in the right-of way of industrial, business, and downtown zones with property approval. Boulder, CO is giving legal parking spots to food trucks, so as to minimize ticketing, and incentivize stationary locations. In addition to allowing food trucks on public property the city is open to pilot studies to test possible policies for the future. This will become crucial to the success of the policies and of the food truck industry.

Table 7. Case Studies: Policy Comparisons

City/Policy Date Change	Policy before	Policy after	Economic Indicators Before Policy Change	Economic Indicators After Policy Change	Pods vs. Individual
Jersey City, NJ April 1, 2011- March 26, 2013	<ul style="list-style-type: none"> Licensing exceeded legal cap Prohibited from operating 300 ft. from licensed eating establishment Stationary for only 40 minutes in a 4 hr. period 	<ul style="list-style-type: none"> Operators to attend food handling course Undergo criminal background check Submit to pre-operation inspection Provide own trash receptacles Operate 200 ft. away from licensed eating establishment Stationary for 120 minutes unless purchase monthly parking pass Hours of operation M-F 6am-9pm Prohibited from operating on private property 	<ul style="list-style-type: none"> Unemployment Rate: 10.5% Tourism Employment 2010: 16,786 Tourism Revenue: 1,533 (in millions) Population: 247,597 	<ul style="list-style-type: none"> Unemployment Rate: 6.2% Increase in international and national company presence 9,000 jobs created Hudson County Tourism Direct Sales 2014 \$1,881 (in millions) Hudson County Food and Beverage Tourism Sales 2014 \$566.2 (in millions) 	Individual
Akron, OH May 19, 2014	<ul style="list-style-type: none"> Licenses to operate on private property Health code regulations Operate at city events Never allowed to operate on public property except for city events 	<ul style="list-style-type: none"> Operate on public property Fee of \$225 for application and \$1,750 for application and license to operate in biomedical corridor Prohibits operation within 50 ft. of residence, 200 ft. from brick and mortar, 750 ft. from a park, 1,000 ft. from a school Higher fee of \$1200 for event permit \$1,200 fee for an assigned spot on street \$1,200 fee a year to lease public right of way Amendment adding penalty section for parking violations for food trucks: 3rd degree misdemeanor with a \$100 fine for first offence, \$200 fine 2nd offense, \$500 fine for subsequent offenses 	<ul style="list-style-type: none"> Unemployment Rate: 4.4% Number of Businesses: 21,000 9% employees working in food service or accommodation services Size of Businesses: 10.35% 1-10 employees, 22.55% 11-50 employees, 13.38% 51-100 employees, 30.29% 101-500 employees, 23.43% 501+ employees, 	<ul style="list-style-type: none"> Unemployment Rate 2014: 4.6% 	Individual

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

City/Policy Date Change	Policy before	Policy after	Economic Indicators Before Policy Change	Economic Indicators After Policy Change	Pods vs. Individual
Austin, TX 2008	No policies	<ul style="list-style-type: none"> Centralized permitting process Prohibited from operating within 50 ft. of residential or commercial use building Prohibited from locating with 20 ft. of a restaurant Neighborhoods can adopt restrictive regulations with approval from City Council Annual fire inspections Subject to random field surveillance Annual vendor permit renewal Submit monthly log use at Central Preparation Facility to city officials Provide truck route itinerary 	<ul style="list-style-type: none"> Number of Businesses: 40,134 Size of Businesses: 33,944 businesses 1-19 employees, 5,236 businesses 20-99 employees, 861 business 100-499 employees, 93 business 500+ employees 	<ul style="list-style-type: none"> # of businesses- 43,746 (2012) Unemployment rate 2015: 3.4% Size of businesses: 37,186 with 1-19 employees, 5,550 with 20-99 employees, 910 with 100-499 employees, 100 with 500+ employees Population Growth 2013: 4.6% 	Individual
Washington, D.C. December 1, 2013	<ul style="list-style-type: none"> Required mobile food vendors to operate under ice cream truck laws Minimal parking spot allocation (107/200 food trucks) 	<ul style="list-style-type: none"> Provide detailed mobile vending info packet to vendors Lottery system for "mobile roadway vending zones" for limited mobile vending Vendors not in MVZ must stay 200 ft. away from zones or face \$1,000 fine Vendors not in MVZ are subject to existing parking laws and fees Fines for illegal vending of \$300 or up to 90 days in jail 	<ul style="list-style-type: none"> Total Employment (2012): 482,838 Number of Firms: 55,887 	<ul style="list-style-type: none"> Employment levels (2014): 184,000 and 763,000 at Downtown and D.C. Number of new restaurants: 10 new restaurants projects in 2015 	Individual

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

City/Policy Date Change	Policy before	Policy after	Economic Indicators Before Policy Change	Economic Indicators After Policy Change	Pods vs. Individual
Boulder, CO April 26, 2011	<ul style="list-style-type: none"> Food trucks were prohibited in Boulder, CO Two mobile food trucks allowed to operate on private property 	<ul style="list-style-type: none"> Food trucks allowed to operate in city parks during the summer season Allowed to operate only during daytime hours during the summer in the parks Send email to the city when in/out of the designated park(s) 2nd pilot study if allowed to operate during late night hours -Allowed to operate in parks near Park Central Building during late night hours (2-3a.m.) Can operate in the right-of-way of industrial, business, and downtown zones with property approval Given their own legal parking spot - Cannot operate within 150 feet of restaurants and residence even when closed Must obtain a Boulder County Public Health Certificate Pay \$231 application fee, and a \$25 sales tax license fee valid until December 31st of each year 	<ul style="list-style-type: none"> Population: 294,567 (2007) Number of firms: 42,506 (2007) 	<ul style="list-style-type: none"> Unemployment rate: 3.9% (2015) Number of jobs: 167, 200 (May 2014) Number of firms: 11,543 Firm Mix: 11,543 private nonfarm establishments and 34,789 non-employer establishments in (2012) 	Individual

The variation in the types and levels of restrictiveness of the policies implemented in the case studies is immense. However, even given the discrepancies in demographics all cities moved towards incentivizing individual food trucks. With respect to the three proposed policy changes presented in the consumer survey, the aforementioned case studies address the same issues: parking, operation in public spaces, as well as pods/areas for operation. As seen in the consumer survey, potential demand for food trucks is dependent on what action Vancouver, WA takes with regards to policy changes. All of the case studies implemented restrictions on the distance in which food truck may operate from brick and mortar restaurants, while some took it a step further and implemented restrictions on distance of operation from commercially zoned buildings, schools, and residential areas addressing the issue of public property. As seen in Boulder, CO, food truck pods were allowed to operate on more public spaces because a demand was identified both during the summer season in parks, as well as during late night hours from their pilot studies. It is important to note that the congregation of pods in the parks during the summer season closely resemble the pod model. Boulder, CO additionally supports food truck presence on public property by giving food trucks their own legal parking spot and allowing them to operate in the right-of-way of industrial, business, and downtown zones with property approval. Akron, OH adopted a similar approach to public space but implemented fees of \$1,200 for an assigned spot on the street in addition to a \$1,200 yearly fee to lease public right of way.

Boulder, CO further supports the proposed policies in Vancouver, WA in both their identification of a demand in late night hours (2-3 a.m.) from their pilot study as well as through their allowance of food trucks operating during this time. Jersey City, NJ supplements this support in allowing food trucks to stay in the same place for longer periods. Although Jersey City's existing policies only allow food trucks to remain stationary for 120 minutes, policy dictates that food truck owners may purchase monthly passes that allow them to stay in a parking place indefinitely, thus making them only at the will of the cities hours of operation restriction of M-F from 6a.m.-9p.m.

8. RECOMMENDATIONS

All of the cities examined are incentivizing food trucks, but seem to be putting policies into practice that promote individual mobile trucks rather than pods. However, the cities examined seem to be doing so with mixed results and responses from the brick and mortar restaurants, food truck owners, and population. The majority of the cities examined saw dramatic growth in the economic indicators, and thus it is concluded that incentivizing food trucks is affecting growth positively, with only one seeing a slight increase in the unemployment rate. Although the feelings of brick and mortar restaurants overwhelmingly want stricter restrictions on food trucks, the economic indicators show dramatic growth in brick and mortar restaurants, small businesses, as well as large corporations in cities following the application of policies incentivizing food trucks. Thus it is recommended, that the city of Vancouver, WA enact policies incentivizing food trucks.

Through the consumer survey it was determined that the consumers in Vancouver, WA want more food trucks and more food pods. With the implementation of policies incentivizing food trucks, the city of Vancouver, WA will attract more potential food truck owners. However, existing food truck owners and many potential consumers have misinformation about food trucks and/or the ramifications of increasing the number of food trucks. It became clear in the consumer survey and in expert interviews that there were many misconceptions about what would happen if there were more food trucks in Vancouver, WA. For example, one consumer wrote, “if you want to open an eating establishment open one and do it right, [don't] open one basically out of the back of your car” and another wrote, “food trucks do not pay property taxes, provide proper sanitation for the customers, the employees, and the processes of food preparation and disposal. Food trucks are not required to comply with the same sanitation, parking, tax [structure], and other laws and statutes as brick and mortar businesses.” Both are clear issues of misinformation about food trucks in Vancouver, WA.

The experts interviewed similarly had misconceptions, but rather about the economic impact of incentivizing food trucks in Vancouver, WA. All of the experts interviewed expressed concern over the lack of density, and of Vancouver’s inability to support more food trucks. However, as seen in the case studies, cities with comparable demographics executed policies incentivizing food trucks and saw increases in the economic indicators. Thus, it is proposed that the city of Vancouver, WA make available this study, and any future studies to the existing food truck owners in the city of Vancouver. Making available information will minimize separation of entities, minimize misconceptions about the market potential and provide examples of similar incentives in cities with similar demographics.

It is recommended that Vancouver create a centralized information source to cater to the needs of potential food truck owners as well as the consumers. It is suggested that Vancouver create a website with a centralized application process for food truck owners promoting food truck applications, reducing confusion and language barriers, and/or issues with the application process due to a lack of an easy to follow process. Further it is proposed that the website have information about the food trucks in Vancouver, the policies that food trucks must adhere to, as well as the locations of the food trucks. It is believed that the availability of information to the consumers will

minimize misconceptions about food trucks in Vancouver, WA, as well as promote demand through awareness.

In the examination of existing literature and through the consumer survey it was identified that appearance was in issue of importance. In the consumer survey it was identified that one of the four reliable factors that were considered the most important factors in a consumer's choice of a food truck or cart. The Appearance factor consists of cleanliness of the surrounding area and the appearance of the food truck or cart. According to the Urban Vitality Groups study on mobile food vending in Portland, OR food carts have positive impacts on street vitality and neighborhood livability in high-density areas, like downtown Vancouver, WA (2007). The Urban Vitality Group's study also concluded that when food carts are located in a pod that the increase in foot traffic to the site can negatively impact the surrounding community, particularly with the lack of trash receptacles (2007). As such, it is highly recommended that the city of Vancouver require food truck owners whether in pods or on public space to provide their own trash receptacles with a fine for not doing so. Implementation of such a policy would appease consumer concern that food trucks degrade the surrounding environment and maintain existing public spaces aesthetic appeal. Precedence for such policies can be seen in Jersey City, NJ which mandates that all food truck's supply their own trash receptacles.

In addition to trash receptacles, food trucks should be subject to a variety of agency inspections and ramifications in order to ensure health and safety standards. It is recommended that food trucks in Vancouver, WA be subject to annual fire inspections and be subject to random field surveillance just as Austin, TX's policies mandate. Further food carts/trucks should be required to obtain a Clark County Public Health Certificate or a health certificate in the presiding county (similar to Boulder, CO). It is also recommended that Vancouver, WA mandate that food truck owners and operators not only obtain food handler cards, but also attend a city ran food handling course similar to that seen in the case study of Jersey City, NJ.

Given the variety of policies seen in the cases examined, as well as in existing literature and consumer suggestions, it is proposed that the city of Vancouver, WA engage in pilot studies similar to Boulder, CO to determine the individual market potential for Vancouver during specific times and specific locations. Engaging in pilot studies will allow Vancouver to determine which areas elicit the most consumer response, hours of demand, and overall, the potential market. Several locations have been suggested by both consumers and experts. Turtle Park is one such location that the city should do a pilot study both for daytime hours and late night hours given the proximity to the nightlife scene downtown. This location was specifically suggested by two individuals. Further both the experts and consumers suggested the gravel lot located on Washington and 8th street, one of the experts recommended this location as well as three of the consumers. Lastly, two consumers identified Esther Short Park as a potential location for a food truck pod in the consumer survey. The three mentioned locations all are within walking distance of most of the places of employment of the individuals surveyed. It should be noted that 68% of the respondents stated that they walk to go to food trucks/carts for lunch, thus proximity is of high importance in selecting a location for a pod or for individual food truck/cart locations. Also, considering Portland, OR has more vibrant food truck scenes with clusters of various food trucks/carts and the fact that it is convenient for Vancouver residents to travel to Portland for lunch, it is important to create

variety within close distance to divert the 80% of respondents who stated that they drive to a dine-in restaurants for lunch from traveling to Portland, OR for particularly during the weekdays.

In accordance with public space issues, it is recommended that the city of Vancouver implement a lottery system similar to Washington, D.C. in designating highly sought after locations. This system will alleviate favoritism in selection and minimize the number of vendors in those locations, addressing the potential parking issues that consumers expressed concern with. Upon selection, it is proposed that a fee is charged for a yearly pass for the right to operate in the public space. An example of this can be seen in Akron, OH wherein a fee of \$1200 is charged for an event permit, \$1,200 fee for an assigned spot on street, and \$1,200 fee annually to lease public right of way. Further, Vancouver should add a penalty section to policies for parking violations with incremental increases for each violation, incentivizing food truck owners to follow parking policies, and consider locating in a pod. A paradigm is Boulder, CO's system for parking violations for food trucks: 3rd degree misdemeanor with a \$100 fine for first offence, \$200 fine 2nd offense, and \$500 fine for subsequent offenses.

While this assessment and research took a multi-faceted approach, it is by no means comprehensive. The consumer survey only captured 443 respondents, and of those, the majority were workers of downtown Vancouver. Given the demographics and layout of Vancouver, WA the survey captured only a fraction of the potential consumers. As identified in the consumer survey, age was a major demographic factor in the future intentions to purchase from food trucks in Vancouver, WA. Being that the survey identified that individuals of a younger age are more likely to purchase, the city should further examine this sector for the potential market and in decisions about location for potential food truck pods. Future studies should examine the effects of the recently adopted policy changes in the aforementioned case studies. Being that many of the case studies adopted new policies within the last year, the availability of information as well as the ability to identify changes within the economic indicators is compromised. It is recommended that the city of Vancouver, WA monitor the changes in the case studies over the next year to observe the economic impact as well as the opinions of the public, brick and mortar restaurants, as well as food truck owners as the effects of the policy changes actualize.



“I like the food carts and trucks. However, I think the trucks near the courthouse take up valuable parking spaces in the morning when people need to be in court. Most people purchase food during the lunch hour, so I don't think the trucks should be parked near the courthouse until around 11:00.

Court starts at 8:30 or 9:00. It would be nice to have a designated place for a lot of trucks and carts. I prefer to visit trucks that are near free parking, such as in a large parking lot that usually isn't full. Like the variety of food offered by the vendors and enjoy ethnic cuisine I might not have a chance to try otherwise.”

Respondent



9. REFERENCES

- 2014 Annual Report: Economic Development. (2015, February 26). Retrieved April 25, 2015, from <http://www.downtowndc.org/annualreport/2014/economic-development>
- Akron Book of Facts: Medina, Portage & Summit Counties. (2014, January 1). Retrieved April 15, 2015, from <http://www.greaterakronchamber.org/GAC/files/76/765081b9-1070-47ba-9505-ed1db241a80e.pdf>
- Akron, Ohio Unemployment. (2015, January 1). Retrieved March 15, 2015, from <http://www.deptofnumbers.com/unemployment/ohio/akron/>
- Austin: Southwest Information Office. (n.d.). Retrieved April 25, 2015, from http://www.bls.gov/regions/southwest/tx_austin_msa.htm
- The Austin Chamber of Commerce (2015). Business & Industry. Retrieved April 25, 2015, from <http://www.austinchamber.com/site-selection/greater-austin-profile/business-industry.php>
- Boulder, CO Economy at a Glance. (2015, April 22). Retrieved April 26, 2015, from http://www.bls.gov/eag/eag.co_boulder_msa.htm
- Bounds, A., & Meltzer, E. (2014, April 15). Boulder may relax food-truck rules, but operators say it's not enough. Retrieved April 26, 2015, from http://www.dailycamera.com/news/boulder/ci_25573268/boulder-may-relax-food-truck-rules-but-operators
- Business & Industry. (2015, January 1). Retrieved April 15, 2015, from <http://www.austinchamber.com/site-selection/greater-austin-profile/business-industry.php>
- Carman, T. (2013, December 2). D.C. food truck vendors, no longer fighting for parking, praise new regulations. Retrieved April 25, 2015, from http://www.washingtonpost.com/local/dc-food-truck-vendors-no-longer-fighting-for-parking-praise-new-regulations/2013/12/02/84232692-5b82-11e3-bf7e-f567ee61ae21_story.html
- City of Jersey City: Office of the Mayor (2015). U.S Bureau of Labor Statistics for January Show Jersey City Unemployment Rate Continues to Decline at More Rapid Pace than State and Region. (2015, March 23). Retrieved April 14, 2015, from http://www.cityofjerseycity.com/uploadedFiles/Public_Notices/Press_Releases/unemployment_press_release_03.23.2015.pdf
- Code of Jersey City, N.J. ch. 175, art. II, § 13.
- Code of Jersey City, N.J. ch. 175, art. II, § 9.3(c).
- DC Food Truck Association. (October 18, 2012). Retrieved April 25, 2015, from <http://www.dcfoodtrucks.org/threat.html>
- Deci, E. & Ryan, R. (1985). Intrinsic Motivation and Self-Determination in Human Behavior. New York: Plenum.

- Deci, E. & Ryan, R. (2000). The what and why of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- District Of Columbia Economy at a Glance. (2014, April 14). Retrieved April 13, 2015, from <http://www.bls.gov/eag/eag.DC.htm>
- The Economic Impact of Tourism in New Jersey. (2014, January 1). Retrieved April 14, 2015, from <http://www.visitnj.org/sites/default/master/files/2014-nj-economic-impact.pdf>
- Food Safety. (2015, January 1). Retrieved March 15, 2015, from <http://www.scphoh.org/ENVIRONMENTAL/ENV-FoodSafety.html>
- Henderson, J.C., Yun, O. S., Poon, P., & Biwei, X. (2012). Hawker centres as tourist attractions: The case of Singapore. *International Journal of Hospitality Management*, 31, 849-855.
- Huey, J. (2015, March 3). Case Study: On the Go - Insights into Food Truck Regulation in US Cities Data-Smart City Solutions. Retrieved April 25, 2015, from <http://datasmart.ash.harvard.edu/news/article/case-study-food-trucks-585>
- Jersey City, N.J. Ordinance 11-150 (Oct. 20, 2011) (first reading). Proposing changes to CODE OF JERSEY CITY, N.J. ch. 175, art. II, § 14.
- Kivela, J.J. (1997). Restaurant marketing: selection and segmentation in Hong Kong. *International Journal of Contemporary Hospitality Management*, 9(3), 116-123.
- Kivela, J., Inbakaran, R., & Reece, J. (1999). Consumer research in the restaurant environment, Part 1: A conceptual model of dining satisfaction and return patronage. *International Journal of Contemporary Hospitality Management*, 11(5), 205-222.
- Memorandum from William C. Matsikoudis, supra note 49. (April 21, 2011). Retrieved from <http://www.scribd.com/doc/53959183/Memo-on-Jersey-CityFood-Truck-Law-Changes>
- Mobile Food Vehicles. (n.d.). Retrieved April 26, 2015, from <https://bouldercolorado.gov/tax-license/mobile-food-vehicles>
- Morrison, A. (2002). Hospitality research: a pause for reflection. *International Journal of Tourism Research*, 4, 161-169.
- National League of Cities. (2013). Food on Wheels: Mobile Vending Goes Mainstream. Retrieved from http://www.nlc.org/Documents/Find%20%20Solutions/Research%20Innovation/Economic%20Development/FoodTruckReport2013_Final_9-26.pdf
- Onboard Informatics. (2015). Vancouver, Washington. Retrieved April 24, 2015 from <http://www.city-data.com/city/Vancouver-Washington.html#b>
- Ryan, R.M. & Deci, E.L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology* 25: 54-67.
- Taylor, S., & Edgar, D. (1998). Hospitality research: the emperor's new clothes? *International Journal of Hospitality Management*, 15(3), 211-227.

- United States Census Bureau. (2015, March 15). Retrieved April 25, 2015, from <http://quickfacts.census.gov/qfd/states/34/3436000.html>
- United States Census Bureau. (2015, March 31). Retrieved April 26, 2015, from <http://quickfacts.census.gov/qfd/states/08/08013.html>
- Urban Vitality Group. (2007). Foodcartology: Rethinking Urban Spaces and People Places. Retrieved from <http://www.portlandoregon.gov/bps/article/200738>
- U.S. Department of Commerce. (2014, July 1). Population estimates. V 2014. (n.d.). Retrieved April 25, 2015, from <http://www.census.gov/quickfacts/table/PST045214/11,00>
- Warsmith, S. (2014, May 19). Akron City Council approves food truck legislation. Retrieved March 15, 2015, from <http://www.ohio.com/news/local/akron-city-council-approves-food-truck-legislation-1.489232>
- Williams, T. C. (2013, June 16). A Hungry Industry on Rolling Regulations: A Look at Food Truck Regulations in Cities across the United States. Main Law Review. Retrieved March 12, from <http://www.mainelawreview.com/wp-content/uploads/2013/06/16-Williams.pdf>
- Zagat (2015, January 20). The State of American Dining in 2015. Retrieved April 24, 2015 from <https://www.zagat.com/b/the-state-of-american-dining-in-2015>

10. APPENDIX

Appendix A: Expert Interview Transcripts:

Interview: Expert 1 (Expert 1, personal communication, March 18, 2015).

Q1. Why do you think people buy from your food cart?

A: We are the first of our kind. We move around a lot so are available to a wide variety of people. People see us and want to try new things. Customers are intrigued by the uniqueness of what we do, the freshness of the atmosphere, the socialization of our friendly staff as well as the atmosphere we create. Our food truck creates a fun place to gather. In the end, people like the food too, beyond the taste, the quality, and the healthfulness. Ultimately, this is the sustainable part of what we do.

Q2. How do you chose your current location(s) and why?

A: Honestly, a lot of trial and error. We just tried to be around people and be seen to figure out where there was demand. In essence, it was a nuance piece figuring out what will work and what wouldn't. However, even if there was demand somewhere we tried to be conscious of not being in front of brick and mortar restaurants. We didn't want to be jerks and make people mad. Another thing we had to take into account was the parking. This is the biggest issue that the city has to deal with. We get tickets for overstaying time allotments in the parking spots but there are minimal places where there is enough density, visibility, and accessibility.

Q3. What are your financial expectations for the future of your food cart?

A: I have staff that run the current truck but I would like to focus more on growth. From a financial standpoint, we have to get the model figured out. We keep quality records, but I have no formal business training to know where to analyze these records. Are we making money? I don't get paid, so it's easy for the business to look successful but we still haven't show a huge profit because the margins are so small. I am not sure from our records where we can cut costs and increase profit. This industry is labor intensive, especially with the quality of our food and I have to manage the risk of who is driving the food truck around, making having more than one food truck difficult.

There is more demand on the consumer side than on the side of people calling in and wanting us, but we can't make food fast enough in the truck, and I can't afford to hire more workers with our margins. Plus there is limited space in the truck so we are looking into other options. We are exploring the option of a brick and mortar restaurant a little but more because there might be a higher potential to keep up with demand and increase margins as a result. We could have a commissary built into the restaurant and proper equipment. We could have the brick and mortar but use the commissary for food trucks and set trucks out with set schedules and to different locals. We could just show up and serve food! But it's not a very good model.

Right now we are in the same locations every week but we move to different locations depending on the day of the week. I am pro-pod but I worry that there is not enough density downtown to support pods. Currently, there is a lack of transportation and infrastructure to support pods. If the city moves to the model too soon, it'll snuff out food trucks in Vancouver, and then where will we be? It is a process. Pods are better, but we have to get their first. If the city of Vancouver gets there, gets more people out to downtown it'll work. I won't pull my food truck off the route until this happens. By moving around we build artificial pockets of density. The city needs to build infrastructure like tap rooms and amenities and take into account that there are differences in areas of Vancouver. There are possibilities for suburban pods like the one popping up on 78th street and downtown pods. While these may look similar, they are different demographically. The city should look at the possibility of adding it in addition to street food. For example there is nowhere for food trucks to park in Salmon Creek/Eastside but there is a demand there.

Q4. What are your goals as a food cart owner, beyond making a profit?

A: To change the world with food of course! I have a strong passion for clean whole food. I want to provide the city of Vancouver with healthy wholesome food and at the same time create a sense of community. I would really like to help Vancouver grow with creative things, and help build a culture independent from Portland. Consumers aren't just looking at food as a holistic item, it has to taste good too. Consumers are becoming smarter and more educated, thus they are becoming a different kind of buyer.

We can create jobs. That is a personal passion of mine, helping out the community by providing opportunities. We don't want the food truck industry here to become a race to the bottom, who can offer the cheapest food at the cheapest price. That does not improve the quality of life or create a food culture. We want to pay the people well, and create quality jobs. But now there's the question of "will the market pay the price to increase minimum wage?" The market needs to be ready for increases in minimum wage.

Q5. How do you believe your food cart impacts surrounding businesses?

A: Restaurants view food trucks as threatening. They see us as direct competition. Restaurants have a scarcity mindset. They believe that there is a set number of consumers with a set list of needs. Food truck operators tend to view demand as an ever changing variable wherein each consumer is a different consumer each time they consume. Therefore the same customer can have varying needs that will be met by a variety of businesses. Food trucks can't "steal" customers if the customer is looking for a sit-down experience, instead they provide options for people who aren't necessarily looking for that experience. This is not an unreasonable response. The brick and mortar restaurants have a right to feel fearful of competition, it's their business and their livelihood. We are not trying to put others out of business. What we do, and we try to do, is force innovation. That restaurant down the road that has had the same menu for years and wonders why no one comes into their restaurant may be forced to re-evaluate what they're doing because the healthy competition we provide.

We create a culture that forces people to eat out more through quality of food, and banks on the fact that we are all a different consumer every day. Consumers are driven by food innovation to eat out more. This innovation and creativity creates more density in downtown. It's exciting really. We bring people in the local area to help local businesses flourish. The city shouldn't just compete with downtown business, we should create something so great that people will come to us from the entire country.

Q6. How do you believe your food cart impacts community development?

A: The city of Vancouver has a mission to create a messy vitality, where different cultures can come together to create a very vibrant livable sustainable culture. Our business really plays into that. Food trucks stir the pot, creating innovation, and a low barrier for food innovation. This creates excitement and draws attention to downtown. However, this challenges the county and the city agencies in how they do codes and write laws. This forces the city to look at how they draw more people into the city.

Food trucks are forced to be a niche. There is a lack of resources. Niches, however create communities, almost a tribe like-minded community. So people that eat at my food truck gravitate towards each other. It creates a commonality between them. People actually get emotional about it. Food is something that is close to home, I mean, everyone has to eat and nourish. So, we create micro-communities around food. It's really a sense of identity for people, for example eating clean, being vegan, paleo. People really take that as a part of who they are.

Q7. Do you believe food carts positively influence how much time and money people spend in the area that the food cart is located?

A: Yes, absolutely. I think I already touched on that.

Q8. How do you think this would change if the food carts were located in a pod?

A: I think food truck pods would create more synergy. It creates a variety of options in one place.

Q9. Which location and policy system would you prefer, from a business development perspective, individual food carts or food cart pods?

A: It depends if we move to a brick and mortar model. It has to be the right situation for us. I support pods a lot, but you can still have street food.

Q10. Any other comments or concerns regarding the potential policy change to incentivize food truck pods?

A: The city doesn't like giving tickets, but the City has to give us tickets. The way things are now obviously isn't working for either side of the debate, so this needs to be the main thing that is addressed. The city likes what we are doing, and want to support business growth, plus the fee isn't a big enough deterrent for us not to park and operate. I think there should definitely be a variance in the codes that deals with food trucks. Better parking in general might incentivize people to move into pods but pods need to help the city gain something. Pods need to offer amenities and all this structural stuff that doesn't exist. Pods should be

so good that they pull food trucks off of the streets, and the pods themselves incentivize food trucks to move into pods. This will happen when the streets are full of food trucks, but right now, there are only three food trucks downtown. If there were more than food truck pods would be the better option. But without proper transportation and infrastructure pods won't work. Public transit provides the opportunity to move large amounts of people, but we have to cultivate a community that supports and uses alternative modes of transportation.

Interview: Expert 2 (Expert 2, personal communication, March 19, 2015).

Q1. Why do you think people buy from your food cart?

A: The color and the quality of the truck keep people coming for the food. The awning helps too.

Q2. How do you chose your current location(s) and why?

A: We're at a different location every day at locations that have already been approved by the city traffic engineer because it's convenient. Locations are already determined by the previous food carts and determined by the density of people.

Q3. What are your financial expectations for the future of your food cart?

A: We are looking at having a store-front with our own commissary and five food trucks.

Q4. What are your goals as a food cart owner, beyond making a profit?

A: We want to feed people good, healthy food. We started this because she developed heart disease and saw the importance of a healthy diet. So we have a rub that we donate \$1.00 of each purchase to the American Heart Association.

Q5. How do you believe your food cart impacts surrounding businesses?

A: We draw people to the area. We bring people out into the city. We also provide healthy competition with brick and mortar restaurants so they can't get lazy with menus and creativity with food. It forces innovation.

Q6. How do you believe your food cart impacts community development?

A: We impact community development through employment. We pay taxes; that tax money goes to the city and helps development in however they use it.

Q7. Do you believe food carts positively influence how much time and money people spend in the area that the food cart is located?

A: Yes, absolutely. People travel to us. They find us on social media and know where we will be on any given day. I don't know how people marry food trucks with other businesses, but when customers come here they come for us and may see new businesses they didn't see before and decide to go buy something and vice versa. When people go to the salon they see our food truck or other food trucks and decide to visit.

Q8. How do you think this would change if the food carts were located in a pod?

A: Having brick and mortar pods would increase amount of time people spend in an area. But pods would not work for us. It would be a disservice to our customer to make them come to us. We pride ourselves on going to them.

Q9. Which location and policy system would you prefer, from a business development perspective, individual food carts or food cart pods?

A: If the city wants to increase parking tickets it doesn't help anybody, both the city and the food trucks. It creates a distrust between the city and food truck owners. The whole thing is working itself out. They shouldn't make the application process to be an operating food truck easier because then the market will be oversaturated making it impossible survive. Vancouver should keep the permitting process complicated to weed out those that don't really want it, because operating a food truck is hard work. The density of population is not enough to keep everyone afloat. There are not enough people to be walking by to sustain multiple food truck pods.

Q10. Any other comments or concerns regarding the potential policy change to incentivize food truck pods?

A: Unless Vancouver cultivates a culinary scene pods wouldn't work. Maybe the city of Vancouver could extend permits to a few for pods but not try to make everyone go in pods. Or maybe there could be monthly parking permits for food truck owners to park on the side of the roads, because there are not many preferable places to park in Vancouver.

Interview: Expert 3 (Expert 3, personal communication, March 19, 2015).

Q1. Why do you think people buy from your food cart?

A: Because we are providing different things every day. We supply hot dogs for the people who gave up on hot dogs. It's all a part of our branding. But beyond the marketing, I would say because they have positive experiences. Having only one employee, me, they see where the food comes from, they get to know me, and I get the regulars who feel I provide a unique consistent product.

Q2. How do you chose your current location(s) and why?

A: We only have one spot so people know where we are. We use social media to let customers know what days we are open and what times. I chose a private lot so it's less constrictive. Additionally, this place is like a neighborhood of small business that support one another. I refer my customers to others, and they refer their customers to me. It provides us all with visibility.

Q3. What are your financial expectations for the future of your food cart?

A: Well, I left the corporate world for the simplicity of this life. I want to be able to support myself and a future family with this as well has have the flexibility and free time to spend time with them. I would eventually like to have several cart locations, but that would

require me to hire employees. So I've juggled with the idea of having a very small brick and mortar store front with just a window. I'd be happy with that option too.

Q4. What are your goals as a food cart owner, beyond making a profit?

A: Keeping things simple. I pride myself on simplicity. It's about finding a way to pursue your passion, and traveling, food, and interacting with people are my passions. To be able to combine all of them into something I can make a living off of is rare. It's a blessing to be thoroughly in love with what I do.

Q5. How do you believe your food cart impacts surrounding businesses?

A: Very well, but that's up to the perception of other owners. I bring people into the area, people that may not have otherwise come to this area in Vancouver. It's important to make sure you don't overshadow any of the current other business, but instead compliment them. Especially if there were a dichotomy in the customer base. I am finding a new location currently because I am being conscientious of other businesses who do not like my presence, so I will move. I also think I have to be conscientious of the change in consumer base. We have to work together as a food cart community to keep the food cart community clean and keep it in a positive light both in the eyes of consumers and other businesses. Otherwise competition can be like a funnel. We should aim to increase innovation to serve the untapped demographic.

Q6. How do you believe your food cart impacts community development?

A: It's all about how that person and company presents itself in the situation. All carts have a different impact, especially since Vancouver is small. We want to make it like a "why wouldn't we go there" for consumers coming to Vancouver. Food carts are off the beaten path, something new to bring new business in.

Q7. Do you believe food carts positively influence how much time and money people spend in the area that the food cart is located?

A: Yeah. That can be seen in how other business owners want me to stay here in my current location. I bring additional traffic. I think I am a good person, and my business is a plus to that, hence why people like to work with me in a community. I gain credibility through others, through our good relationships. Food trucks increase independent/small business, so you see Vancouver's small businesses continuing to develop.

Q8. How do you think this would change if the food carts were located in a pod?

A: I mean, carts have liked being in pods, but having a mix of several vendors in one location can overshadow some of the individual carts. I like to provide a service where people don't have a lot of options. Finding a market that doesn't have something already is an easy introduction to people who want to start a food truck. To have a pod, you have to have the density and the daily foot traffic to support it. I prefer to create my own gathering place because I like having a sort of fostered community versus a community of a large gathering of people that creates artificial traffic. What I would like to do is provide my own seating to create a sort of independent gathering place so I can cultivate an experience.

Q9. Which location and policy system would you prefer, from a business development perspective, individual food carts or food cart pods?

A: Pods create a community of food cart owners but the cart competition isn't really there. It'll all depend on the owners who enter the community. Right now carts are being part of a community that is not a cart related community because carts can bring a whole other aesthetic to a community. Carts are fulfilling a need.

Q10. Any other comments or concerns regarding the potential policy change to incentivize food truck pods?

A: Parking has influenced location decision, but it's more consumer decisions. Creating a late night crowd would be better for pods. So if Vancouver can develop a nightlife scene I think there would be more of a demand than there is now.

Appendix B: Respondents' Comments

Sentiments for Trucks	Sentiments for Pods	Comments
3	2	One of the hardest issues with running a creative agency in the tech industry is attracting talent, which currently reside almost exclusively in Portland. Food carts and anything else that makes Vancouver more fun, hip, and modern go A LONG way towards [helping] companies like ours find talent. I believe the value of food carts from a recruitment standpoint is grossly underestimated.
3	3	Portland's model can't be wrong - the more food carts/trucks we have, the more vibrant our local culinary scene will become. This will, in time, lend itself to more high-quality brick and mortar restaurants and cafes in downtown Vancouver. This in turn, will lead to more visitors to our area and more businesses and residents interested in relocating to downtown [Vancouver].
3	2	I moved to Portland from Washington D.C. and I see the advantages to both sides - having semi-permanent food truck pods vs having trucks move around. In the long term pods are probably a more sustainable option and may be easier to control. That said, [there] is consumer delight and novelty to the idea of variety and having different food trucks on different days.
1	1	Please do NOT allow [permanent] food pods. Those things are an eyesore!
1	1	Food carts Create unfair competition to restaurants resulting in lost jobs and increased Panhandling and crime as in Portland
2	2	Parking of the carts near brick and mortar restaurants provides a high level of concern for some [restaurateurs] and does take away valuable parking spaces. Having them locate in close proximity for a 3 hour period seems unfair.
3	3	Having several pods would be a nice addition if the population of carts would grow to that size.
2	2	Food trucks can and should be a big part of Vancouver. It is an expensive journey to get them the proper power and sanitation that would be needed to do a food cart row. When allowed to park near brick and mortar food establishment it takes away the [ability] for that restaurant to succeed.
3	1	A good solution would be to pick out 5 - 10 spots in and around Vancouver DT area and let it be known that these spots were available for food truck rental each month. Just like a parking permit they must pay to [renew] to stay in the program. Then

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

the city can more than recoup the lost parking fees, the spots can be carefully chosen to not interfere with brick and mortar cafe's, they can be mapped out in advance and provide a fun search for the food truck mentality. Within the month the spots can rotate so that patrons can have different choices each week at their local stop. If handled properly it could be a great source of income, a fun new "thing" for the Couve and a solution for new entrepreneurs!

3 2 Keep it small, keep it all. This would make excellent small business opportunities for new entrepreneurs and liven up our downtown. City ordinance laws must be loosened up to make opening and operating a cart or restaurant easier - 5 sinks? Really?

3 3 Consistency is important! Lunch for business people is a routine - we don't want to have to search for a different place every day.

3 3 I don't mind the trucks in areas such as parks and lots. I do have a concern about them taking up parking spots.

3 2 I love the designated (i.e. Mississippi St. and downtown PDX) areas however there should be flexibility for Food Cart owner who want to experience different settings in and around the Vancouver area.

3 2 What I worry about is the strong pull East Vancouver has. Although there is a lot of talk about revitalizing the downtown areas (West Vancouver) whenever there is something that would be perceived "cool" East Vancouver residents will rally to get it moved to their side of town. For those of us who live in West Vancouver (downtown area) we like the individualism that his area provides us.

3 2 Although I do not see parking as a high priority it would be nice to have a short term parking to draw business from outside the walking downtown area. If the food is good quality and reasonably priced many of the other factors will not matter.

3 2 More food trucks, more options for dining downtown!

3 3 I'm always searching for a new food truck. I live in Portland, and food trucks, especially ones with permanent locations are a great place to eat and enjoy a variety of foods. It's shocking that Vancouver doesn't have the same options. It is also not [enjoyable] to wait at a food truck with its engine running. It [pollutes] the area and seems like a waste of resources.

3 2 If there were more food trucks in Vancouver, it would also create more competition among restaurants and I think that would spark new ideas, foods, and development. Consumers are stuck with what's available because of limited options.

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

- 3 2 3 hours seems like to short, but permanently seems too long. It is a nice variety when they move around. Relates to [aesthetics] of the surrounding areas as well.
- 3 2 Food carts are so very North West! They definitely belong in downtown Vancouver. Why should our residents have to hop across the river to enjoy them? They provide a great way for an entrepreneur to start a business which, if popularity dictates, move to a brick/mortar venue.
- 3 3 I would love see permanent or semi-permanent food truck pods in easily accessible, walkable locations. Seating and covered/heated areas are not as important as providing the pods/trucks - I take my food to eat elsewhere usually anyway.
- 3 2 It would be nice to have more economic options within walking distance for lunch.
- 3 1 I find the locating of a huge group of food carts together as done in Portland to be a significant detractor. The areas typically look rundown, unsafe, and unappealing. I think it is better to distribute them around the downtown.
- 3 3 They should pay for parking if located on a public street, or be located on private lots if possible, and be scattered throughout city so that everyone has an opportunity to enjoy them. A designated pod area would work, but carts/trucks should be given a [chance] to rotate into those pods.
- 3 3 Turtle Place would be a great spot for a pod.
- 3 2 [T]his would be a great idea. I strongly recommend to have the food carts in the downtown area.
- 3 3 Aspects of the survey are difficult to answer. A nice looking food cart or food truck in the appropriate place could be great. A bunch of ugly carts in the wrong spot would be horrible. Appropriate planning and regulations would be vital.
- 3 2 I think the food carts get people out of their cars and on the sidewalks where they might discover other shops and services only noticeable at a pedestrian level.
- 3 3 I would absolutely patronize food trucks more often if I didn't have to always keep track of where they are. Every day I have to remember "Truck A is at this location, Truck B is over there," etc. We need to have food truck pods, which I think would also [make] things much easier for the operators to not have to move every day. If that's not possible maybe a single information source with schedules for all of them so customers don't have to search out information about every different truck. Also, seating is important for visitors who don't have an office to take their food to, or workers who do not want to take their food back to their desk. But when you have seating, you also need someone to be sure the tables are wiped off, trash emptied, etc.

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

- 3 2 I worked in downtown Portland for 20 years before taking a job in Vancouver. I am aghast that there are only a handful of mobile food trucks around Vancouver. I hope this changes soon.
- 3 3 I would love to see a cart block like Portland has including a beer garden with local microbrews.
- 2 2 Although, I would love to see food carts downtown for more food choices, I personally don't eat out much and having them won't make me go out any more than I already do. I don't think it will draw that many more people out to eat out either. It will just [give] the people that already do eat out more options which ultimately would hurt existing sit-down restaurants. Food carts is a way of life in Portland and is uniquely Portland. Food carts would be nice, but I don't see it as a thriving scene in Vancouver.
- 1 1 My responses are colored by the fact that I think street eating is basically uncivilized.
- 3 2 I think food trucks should be able to operate in Parks, but not in street parking because street parking is already sparse as it is, so if the few street parking spots are taken up with a food truck, then that would not be good for the other businesses in downtown Vancouver.
- 3 3 I keep hoping for a stationary pod of food carts in the lot on Washington and 8th or in the area near Main and McLoughlin. Thanks!
- 3 3 While it is great that food carts travel around from place to place during the week, it would be great if there was a location downtown that would always have a food cart during the week. So if I forget my lunch at home I always know where there is a [great] fresh and local option for lunch.
- 3 2 Having food carts available in Vancouver is a great idea. If I could eat out every meal, I would support local dining and food carts exclusively.
- 3 2 Is there a twitter or Facebook where all the Vancouver food carts can [post] their locations or menus?
- 3 2 I think food trucks are an important part of the Downtown's growth. They should be a place that food entrepreneurs can experiment and produce unique innovative foods that can't easily be found in the area. It also creates "non- traditional" spaces where [people] can gather and eat without the constraints of a more traditional restaurant atmosphere.
- 3 3 Would love an area where we could sample many food truck foods. Much like downtown Portland.

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

- 3 2 Vancouver should not be afraid of something new or different. Food carts are hugely popular in other towns and if Vancouver wants to be considered a town with a vibrant, 24 hour waterfront community our leaders are going to have to learn to welcome [change].
- 3 2 Food carts are amazing! I 100% support this!
- 3 2 I would frequently visit great food carts in downtown Vancouver.
- 3 2 I hope there will soon be several more veg friendly food [carts]/trucks in Downtown Vancouver. I currently go to Portland to eat at several food carts that are fairly close-by to Vancouver, including going on my lunch hour to those in Portland close enough [to] reach and back within an hour. I would much prefer to stay in Vancouver to eat at food carts.
- 3 2 I believe that as Vancouver 'grows up', food truck availability will fuel the cultural diversity & dining options for the increasing number of visitors that participate in the community. As an entrepreneur, I applaud the visionaries willing to be brave [enough] to make their food dreams into a business. I completely support anything that will give fellow small business owners the ability to showcase their products.
- 3 2 I would choose to continue living in Downtown Vancouver and spend more of my leisure time and money there if more diverse and quality food options were available. I would be proud to show my friends out of town a lively food truck community. I would [LOVE] to have more food trucks around.
- 3 2 I used to work in downtown Portland, and I miss the food carts there. Now that I work in downtown Vancouver, there are almost no options in walking distance for a quick, affordable "to go" lunch. I would love it if there was a permanent food cart pod [near] Esther Short Park.
- 3 2 As someone who works in downtown Vancouver, I find myself eating at food trucks 90% of the time due to the fact: lunch is cheaper, quicker (as I eat it at my desk at work), with more nutritious options. I like the local restaurants, but not for lunch. I [don't] have the time, nor can I justify the extra expense to eat at local restaurants for lunch. Without the food carts, I would just eat frozen Trader Joes lunches instead. So I already wouldn't be taking money away from local businesses, in fact I would [adding] more to the local economy by having food trucks more available.
- 1 2 Primary concern is litter and the hanging around of street/homeless [beggars]. Security issue and annoyance
- 1 1 I don't feel there is great enough [oversight] and safety with these establishments. I have only eaten at the food carts in Portland a few times and at different locations and got sick a couple of those times. I feel they can't keep out the pests and

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

- [they're] not as clean as traditional eating [locations]. I feel that if you want to open an eating establishment open one and do it right, [don't] open one basically out of the back of your car.
- 3 3 A sensible idea would be to centralize them in the unused park (8th and Washington). I wouldn't add more, but locating them in one area would make sense.
- 2 2 I don't know very much about this, but I'm sure others do. ~ Be willing to try one idea and if it doesn't work, change things or modify things so it does work for the highest good (i.e., the most people). I think solutions can be found if anyone works [together] to lessen the negatives and increase the positives.
- 3 3 I previously worked in downtown Portland for several years, and the food trucks brought a lot of much-appreciated variety and quality to the lunch options, and also did good business. Much better for the areas they occupied than just another parking lot.
- 3 3 Very trendy right now and good opportunity for entrepreneurs - if it doesn't work out, can always be eliminated so why not give it a try?
- 2 2 Would be nice to have them licensed for food safety.
- 2 2 This quiz was too long and contained terms/concepts that were ambiguous. I would redesign it. Unless the whole point was to bring a useless survey to board members, in that case the quiz was spot on. Also, [someone] went through his quiz and strongly [agreed] to everything, hopefully you rule out top and bottom five percent for outliers.
- 2 2 I certainly don't feel that food trucks "identify" ANY city... they are a [...] place to eat. That's all, ok?
- 3 3 Trucks should not take up public parking spots on the street. Sites in large parking lots are ok, as there are plenty of other parking spot available.
- 3 3 I will NOT log onto some website to see where my favorite truck is today at this particular hour. I want to know that if I go to the same location, during set hours, the truck will be there... say, like Thai food is always at a certain spot M-F, 10:30-2:30pm.
- 2 2 Trucks MUST be spotless, with workers clean shaven, workers with clean aprons, with visible washing facilities nearby... or I won't give [them] the time of day. The "greasy spoon cafe" look with a disheveled cook with a rag that is used for all purposes just don't cut it with me.
- 3 2 Food trucks are good!

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

- 3 2 I love food trucks! Bring more to Vancouver please, and make it easier them to operate in town!
- 3 3 Bring the food carts to Turtle Place/Park.
- 3 3 I'm hesitant to agree that food trucks should have access to parks and street parking. It would need to be managed appropriately, and street parking is starting to come at a premium, so would not like to have to compete.
- 2 2 The last three questions seem to be leading -- I don't know the issues involved in making this decision. If food carts are in public spaces, they may be taking space away from other important participants, for example.
- 3 2 [I] would LOVE and frequent [healthy] food carts for LUNCH on weekdays, please!!!!
- 2 2 I don't mind Food carts though I probably won't be much of a customer. The complaint I have with them is I think they increase food borne litter that serves as a food source to wild animals that can become pests. Waste disposal needs to be [monitored].
- 3 3 Let's Beat Portland's Cartlandia!
- 3 3 Utilize the vacant lot at the NE corner of Columbia St and 8th Street as a food vendor location. There is a substantial amount of high density residential living, commercial shops as well as multiple office buildings surrounding the open lot. Esther Short Park is also across the street. This could also create more of a draw to the Saturday Market as well.
- 3 3 It's going to happen, so let's try to get ahead of the game and be prepared to place them in a safe, prosperous location.
- 3 3 We need more food carts and pods like in Portland.
- 3 3 I'm very hopeful that we downtown residents will soon have more food carts (with some dinner options) and maybe a pod or two downtown.
- 3 2 There need to be more and ones open late night post-closing time.
- 3 2 I believe that food trucks will bring a lot to Vancouver's image and should be embraced, encouraged and supported with a diversity of food truck businesses.
- 3 3 I'd love to see cart pods with seating and shelter as in Portland.

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

3	3	I am now retired and I live 4 miles from downtown Vancouver, but I visit downtown 4-6 times per week and I would eat at a cart pod one or more times per week if it were available.
3	1	I like when the food cart moves around the downtown area.
3	1	I do not like food carts that just stay in the same spot or make an entire block a "food cart block" like in Portland. It makes it seem dirty, unsafe not a sense of pride for the community.
2	2	Really don't like this ideal but these are choices if I did.
3	2	The city should [make] it easier for food carts to operate downtown.
3	2	Food carts are a wonderful opportunity for a quick bite, vendors to start a business at a less costly price point, and provide great food choices during community events and on a daily basis!
3	3	I would love a pod by Esther Short park! I eat at food trucks 1-3 times a week. I would really like to have gyros, sandwiches, or something unique.
3	2	There are plenty of empty spaces in downtown Vancouver that could be utilized by food carts. I feel that it would greatly elevate these areas. Attracting people from around the county to come enjoy downtown, discovering new businesses and restaurants. It [would] also attract people to live and work in a vibrant downtown. Portland has successfully integrated food carts into many areas, and many Clark County residents travel to these areas to enjoy the variety offered. If Vancouver did the same these residents would have the same experience in their backyard. I am a downtown Vancouver "brick & mortar" business owner, and fully support food carts.
2	2	No asked in this survey but of critical importance to the food truck discussion is the noise standards for a food truck's generator. A food truck with an excessively loud generator is a public nuisance that interferes with the public's enjoyment of the [surrounding] area and in some cases, even interferes with a [person's] enjoyment of their private residence or work site.
3	3	I love food carts and pods but I love that they move to different areas each day to add variety to the surrounding areas.
3	2	I love mighty bowl! More vegan options in food trucks [please] :)
3	2	We need more like Mighty Bowl!

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

- | | | |
|---|---|--|
| 3 | 2 | Best idea to ever come to Vancouver, especially with the new waterfront area, it is the next step to making it even more appealing than Portland. |
| 3 | 3 | Food carts should have a place they can be permanent! |
| 3 | 3 | I like the food carts and trucks. However, I think the trucks near the courthouse take up valuable parking spaces in the morning when people need to be in court. Most people purchase food during the lunch hour, so I don't think the trucks should be parked near the courthouse until around 11:00. Court starts at 8:30 or 9:00. It would be nice to have a designated place for a lot of trucks and carts. I prefer to visit trucks that are near free parking, such as in a large parking lot that usually isn't full. Like the variety of food offered by the vendors and enjoy ethnic cuisine I might not have a chance to try otherwise. |
| 2 | 2 | Why not? Let the market decide. People will vote with their dollar. |
| 3 | 3 | I would love to see a designated food cart area somewhere near a vibrant area in downtown Vancouver. Preferably I would love to see a co-op of food cart businesses with a social dining opportunity such as a common beer garden like we see in Portland. |
| 3 | 3 | It would be a great addition to The Couve. My husband and I drive to PDX sometimes just for a food cart pod so each of us can eat different food. |
| 2 | 2 | We need a food hub and commercial kitchen in hazel dell. |
| 3 | 2 | Food carts would give more dining options in an area that is weak with good, quick, affordable and potentially healthy food. |
| 3 | 2 | I really like having them sprinkled throughout the city. |
| 3 | 3 | Food carts add to the overall culture and livability of a town. If done correctly, they are a huge benefit to the downtown food scene. I have been waiting for the day that we have pods, and I hope it happens soon. |
| 3 | 2 | I believe food carts are a win-win situation for everyone. it will Not only affect those that live and work in the area, but provide an increase in visitors to downtown that may normally not frequent downtown Vancouver |

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

- 3 2 I visit 2 carts fairly regularly in addition to several local restaurants for lunch. The carts I visit offer high-quality, fast, nutritious meals that differ from those available from restaurants. I walk to these food carts. I probably get out into [Vancouver] for lunch at least once a week more than I would otherwise.
- 3 2 I can't answer this last question point number two properly as you give two very different situations. I 100% like the food trucks operating in the park. Especially Esther Short during the concerts at lunch and such. However I do not believe they [should] be able to take up street parking. So I marked strongly disagree because I do not like them coming and taking numerous spots especially in uptown village. I think they should have to make arrangements to be in a parking lot or park.
- 3 2 With regard to the public spaces, the carts should pay for the parking spaces they use and have permits for the parks as required for other activities.
- 3 3 The designated area could be the "dirt" park kitty corner from Esther Short park.
- 3 2 I agree they should be available near parks, but disagree about taking up the already minimal street parking for more than a few hours.
- 3 2 I love the idea of food carts. I think they add to our community, improve access to quality food and create a greater sense of community.
- 3 1 I enjoy the few food trucks we have now and cheer them on. I would not want to have TOO many food trucks like parts of downtown and SE Portland does. It's not charming. There is a certain outdoor living crowd that tends to gravitate toward these [establishments] that would not be welcome in downtown Vancouver. As long as the food trucks that come in the future operate like Mighty Bowl (which I love!), then I see it as a positive economic and community movement for small local businesses. I won't eat at just [any] food truck and I REALLY don't want to see them clustered together.
- 3 3 I think food trucks are incredibly important and contribute value, helping create lively vibrant neighborhoods, especially in pods. I have kids and we can't sit down to eat in a restaurant and we don't do fast food so carts are a great option. Vancouver [restaurants] are incredibly expensive, and food carts would be a great alternative. I don't like having to chase food carts around the city. I want to know where to find what I want. Food carts should be encouraged and nurtured by the city, seen as business [incubators] as well as valuable businesses in themselves.
- 3 2 I visit food trucks in downtown Vancouver once a week. The two I frequent have healthy options not found in the [restaurants].
- 3 2 I don't care if the menu only has 3 items, as long as they blow my mind a bit.

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

- 3 2 We need more food cart presence around here, especially in the summer!
- 2 2 Consider including the VA and Clark College in the food truck discussion.
- 3 2 Food trucks incubate small businesses, feed people, keep money in the neighborhood, and encourage visitors to stay longer in an area. We need food trucks.
- 3 2 Get food truck/carts here! And help do something about the CRC getting implemented....

It's a great thing in Portland and I go there often just to visit the cart pods. Variety in foods are amazing. I frequent a few in Vancouver area and I'm excited to see more. The city and the State need to make it easier for more startups to happen as the current process is quite hard and kind of grey area it seems. Long as [health] standards are observed I'm all for more food carts and trucks and it's a good thing locally for our economy.
- 3 2 I would travel to downtown Vancouver for good food carts. Maybe consider some on east side!
- 2 2 More napkins!

I think it would be great to have a whole community of food trucks/carts... a designated area would be a major bonus for Downtown Vancouver. As somebody who lives and works in downtown, I really feel this is [what's] missing. I do enjoy seeing the few truck/pods that are out there, but we need more. Why does the state make it so difficult for local small business owners? "If we build it, they will come"!
- 3 1 Let's do a better job than Portland. Let's keep our food trucks clean and up to high health standards. No pods. Keep the trucks mobile.
- 3 3 Food trucks are great and bring diversity to downtown Vancouver. To be honest, I wish we had pods/food trucks on WSUV just for some variety so we don't always have to drive off campus to get other food.
- 3 3 Please get more food carts in downtown by Summer 2015 AND operating on the weekends. Gravel lot on Washington near Tommy O's might be a start?? I work in Clark County. Coordination for food carts in a couple places in the county would be appreciated. [I'll] thumbs up for a tax break for food cart business owners. It would help boost our local economy.
- 3 2 Good trucks can have a transformative influence on downtown Vancouver and change our image as a place people want to be and to visit.

ASSESSMENT OF MARKET POTENTIAL FOR MOBILE FOOD VENDING IN DOWNTOWN VANCOUVER, WA

2	2	<p>The cost of food from these trucks is no less expensive than going to a sit down restaurant. Food truck/carts provide a quick stop place to get lunch for me. Parking is often an issue so I rarely use them. They seem to have a rather circus feel to them that is not one that I personally embrace. When I spend my hard earned money on prepared food (in this case lunch) I don't want to stand in the weather and wait for food that I could enjoy sitting down, having it served to me.</p>
3	2	<p>Food carts are awesome!</p>
1	1	<p>Over the last decade there has been a considerable effort to renovate and upgrade the Vancouver downtown area. In recent years many small restaurants have taken the risk to choose downtown Vancouver as the place to invest, build, employ, and serve the [residents] and visitors of the area. Food trucks to nothing to further enhance the viability and economic conditions of downtown Vancouver. Our economic system should support those individuals that have invested in our buildings, the esthetics, and safety [of] our community. Food trucks do not pay property taxes, provide proper sanitation for the customers, the employees, and the processes of food preparation and disposal. Food trucks are not required to comply with the same sanitation, parking, tax [structure], and other laws and statutes as brick and mortar businesses. Food trucks are an offshoot of the food service industry that originally serviced county fairs, carnivals, and circuses - all these were temporary and totally transient business models. The [protection] of our downtown brick and mortar restaurants and bars is essential to keeping our downtown as beautiful, economically sound, and safe from transient crime.</p>
3	2	<p>Bring the food carts!</p>

[] = corrected misspellings
 1 = Negative
 2 = Neutral
 3 = Positive