

INCREASING ACCESS TO FARMERS MARKETS
FOR SNAP CUSTOMERS

by

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ABSTRACT

Increasing Access to Farmers Markets for SNAP Customers

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Food insecurity is a challenge that millions of Americans face, as well as having adequate access to healthy foods such as fruits, vegetables, and other whole foods. For many, the lack of access is because they reside in what are called food deserts, but the lack of access can also be due to a variety of other reasons. One way that our federal government has worked to decrease food insecurity is through the Supplemental Nutrition Assistance Program (SNAP). SNAP benefits are accepted at various grocery stores, markets, gas stations, but probably most importantly, they are accepted at many local farmers markets. Farmers markets are great community spaces where people can access fresh local foods, but do SNAP customers come to farmers markets and use their benefits there? By conducting surveys at the West Seattle Farmers Market and the Columbia City Farmers Market I hoped to better understand what barriers SNAP customers face to accessing farmers markets. The Covid-19 Pandemic of 2020 has also caused food insecurity numbers to skyrocket, as just one of the many other challenges that people have faced because of this unexpected event. Through my surveys I also wanted to see how the pandemic has changed or created new challenges for SNAP customer's access to farmers markets. I found three trends: first that some customers do not see the vendors that they would like to see, and that a reason for that could be a lack of culturally significant vendors. Second, that transportation challenges to accessing the market is a challenge for some, and has significantly increased since the pandemic started, and lastly that because of the pandemic customers feel safer and would prefer to use their SNAP benefits at farmers markets.

Table of Contents

<u>INTRODUCTION.....</u>	<u>1</u>
<u>LITERATURE REVIEW</u>	<u>6</u>
FOOD INSECURITY/ACCESS.....	7
NUTRITIONAL ASSISTANCE PROGRAMS	9
URBAN AGRICULTURE.....	14
URBAN AGRICULTURE IN SEATTLE, WASHINGTON	16
FARMERS MARKETS.....	19
COVID-19 PANDEMIC	23
<u>METHODS</u>	<u>25</u>
<u>RESULTS</u>	<u>29</u>
<u>DISCUSSION</u>	<u>38</u>
<u>BIBLIOGRAPHY</u>	<u>42</u>

List of Figures

Figure 1 Eligible and Participation Rate of SNAP Users	10
Figure 2 Food Insecurity Rates 2001-2018.....	10
Figure 3 P-Patch Locations Downtown and South Seattle	17
Figure 4 P-Patch Locations North of Downtown Seattle.....	17
Figure 5 Total US Farmers Markets 1994-2015	20
Figure 6 Responses if Customers See Vendors They Would Like	31
Figure 7 Cultural Significance Important Answers from Agree's in Vendor Question ..	31
Figure 8 Responses From Cultural Significance Question	32
Figure 9 Transportation a Barrier Prior to Covid-19	33
Figure 10 Transportation a Barrier Since Covid-19.....	33
Figure 11 Forms of Transportation Used.....	34
Figure 12 Prefer Using SNAP Benefits at Farmers Market because Covid-19	35
Figure 13 Prefer to Shop Where Social Distancing is Enforced.....	35
Figure 14 Feel Safer Shopping at Farmers Markets	36
Figure 15 New Barriers Because of Covid-19	37

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Introduction

I was lucky enough to grow up in an average, middle class home. I grew up as a first generation American who saw the challenges and obstacles that two Peruvian immigrant parents face when trying to fulfill the American Dream. One part of that dream was to make sure that there was always food on the dining table.

But did we live food insecure? That is something that I started to question more after maturing into adulthood. I can confirm that as a kid I never faced hunger, but I remember those Top Ramen dinners, or the two days in a row of simply eating buttered spaghetti noodles for lunch. Or the trips to McDonald's or the takeout pizza from Papa Murphy's.

I also understand that time is a challenge in our society, and to cook for a family of four takes a lot of it. Maybe it was less a factor of not having the money, but rather the fact that after a long day at work, going to the McDonald's drive thru was an easy alternative that would satisfy my sister and me. Recently, I had a lengthy conversation with my mother to better understand our exact situation when I was growing up.

When I was born in 1993, my father had already spent over a decade living in the United States. My mother had moved only a little over a year before. My father had recently gotten a job for Intel, packaging computers, and my mother was working at a McDonald's. When I was born, we were in a tiny apartment in Portland, Oregon. By the time that I started becoming an active kid, I know that my parents had continued to reach closer to that American Dream. By the time I was in my pre-teen years, we had a nice

home, with a small front and back yard, in a classic middle-class neighborhood, but still faced many of the challenges that middle-class Americans can face.

During our conversation, my mom told me that access to healthy foods was never actually the problem. A major challenge was my sister's and my desire to fit in with the America that we saw on the TV screen, or in movies and magazines. My parents mainly cooked Peruvian foods, of course, that's what they grew up eating. But we didn't want that. We wanted a hamburger, or mac and cheese, the new Taco Bell item that we just saw a commercial for. This knowledge created a whole different conversation in my mind of the challenges that cause people to not eat healthy foods. One of those can be the power of advertisement from major food corporations.

I asked my mom about farmers markets, why we did not go more often, or if my parents cared to go at all. I do recall the occasional Saturday trip to Seattle because my dad loved buying basil from the Pike Place Market any time he wanted to make homemade pesto sauce, but growing up in Olympia, Washington, I could not remember any time that we had gone to the Olympia Farmers Market. My mom's comments about farmers markets were surprising because of how closely they still resonate with some of the conversations that occur around farmers markets today. She said that my parents did not go to farmers markets often because they saw it as a place of privilege and exclusion, a place where people go to spend extra money on the same produce they could get at the grocery store closer to the house.

She brought up the realization that she once had about the location of farmers markets too. She asked me, "Why is it that the markets are always in these pretty, higher class, downtown locations, but where we lived, they were building a Wal-Mart?"

She also questioned the vendors of a farmer's market. She brought up the pastry vendors that you see at the market. She asked me, "Where are the Latino bakers? You don't see them. You just see so-called high-quality pastries from white businesses."

This conversation gave me a firsthand look into a person of color's opinion of a farmers market. In the case of my parents, the privilege aspect of markets, as well as the inability to relate to the products sold at the market were the main factors why I did not have as many experiences at the farmers market growing up.

However, the questions that I asked my mom, and the questions that I started to ask myself about what me and my family was eating growing up, did not come out of sudden curiosity. I discovered my interest in food systems, and food justice, in 2015 during my junior year of undergraduate studies, in a short summer semester class at the University of Colorado. The course was simply titled "Food and Geography". This class wasn't even my first choice for my summer class. When the first choice was full, I scrambled to find something else that I might have some sort of interest in. Little would I know that this class would begin a path and focus that I continue to follow today, and potentially for the rest of my future.

In that class, we spent many days discussing the topic of food deserts in America. I had never heard of the term before. It fascinated me to learn about the reality that there are people who do not have access to healthy foods. I had never considered that access to healthy foods is a privilege due to economic conditions. It made me think a lot about the conditions that I grew up in.

Looking back, I know that access to healthy food was not a concern, because both my parents had a car. While learning about food deserts, and the people that lacked

access to food because of economic or location challenges, I felt grateful to have grown up with access to transportation. I thought about the millions who do not have transportation access to buy groceries, or the willingness to go through the hell and back of public transportation. I started to notice what challenges this country has created for the people in need to eat better, think better, and live better.

After learning about food deserts, I began my journey into understanding food systems, the challenges that we face in these systems, and the ways that our government and our people are trying to fight these challenges. One way our government helps those in need, even if many can argue that it's not enough, is through nutritional assistance programs. These include the Supplemental Nutrition Assistance Program (SNAP), previously known as Food Stamps, and the Women, Infants, and Children program (WIC). So, as I have continued to dive deeper into the subject of food justice, I started to understand and notice the challenges and benefits of SNAP and WIC/ EBT (Electronic Benefit Transfer).

One benefit is that many farmer markets around Washington State, and the country, accept nutritional assistance programs like SNAP and WIC, but were the people that have those benefits actually coming to farmers markets? Based on my personal inspections, and socially tailored opinions, I began to have doubts whether people actually take advantage of their SNAP/EBT benefits at farmer markets, where there is an abundant amount of healthy, fresh produce. I wanted to know if what seems to be true through observation was simply that, or reality.

For that, I chose to conduct in-person surveys at two different farmers markets in the city of Seattle that accept SNAP/EBT. I asked: What determines why and where

SNAP/EBT participants decide to use their benefits. Is it at the local farmers market or another option such as corner stores, grocery stores, and super markets? Also, as we prepare for a post covid-19 world, what impact and changes has the pandemic caused users of SNAP/EBT at farmers markets? Going into this research, I hypothesize that decision-making related to the use of SNAP/EBT will be affected by transportation challenges, higher prices at farmers markets, or even social opinions of the people seen at these markets.

A new and ever evolving challenge that will have an impact on SNAP/EBT participants is the 2020 Covid-19 pandemic that has paused modern life in a way that has never been seen. Every single sector of the U.S. and world economy has been affected in one way or another by this pandemic. What impact COVID-19 had on SNAP/EBT users, and on their participation in farmers markets is still unclear.

By answering these questions, I aimed to find trends in the responses from SNAP/EBT customers, and how they use their benefits. Understanding what barriers SNAP/EBT customers face will help the organizers of the farmers markets, and other SNAP program participants, such as various farm stands, have a greater understanding of what they can do to make their markets easier to access for SNAP/EBT customers. Increasing SNAP/EBT participation at their markets will also increase access to healthy foods.

After getting a better understanding of the food access situation where I grew up, I am grateful to have had the foods I did. I was also intrigued to learn more about my parents and their opinions about farmers markets, without even considering them as locations of access to healthy foods, and the reasoning behind that. I hope that through

this study I will understand in greater detail if there are similar factors that can cause low levels of SNAP/EBT turnout at farmers markets, or if there is another barrier.

Literature Review

People in the United States do not suddenly become reliant on SNAP/EBT benefits to have a way to purchase foods, both healthy and not. Many just end up in unfortunate situations that require them to turn to our government for support. The process to receive SNAP benefits is also no easy matter. First of all, to be eligible for SNAP participants must meet certain requirements. First, the household gross monthly income of the household must be 130% of the federal poverty level or below, and household net monthly income must be at or below 100% the federal poverty level (Aussenberg, 2014). Participants then have to apply and will also have to do an interview before they can receive benefits (USDA, 2020). There are also restrictions on certain categories of people, such as college students and nonlegal citizens (Aussenberg, 2014). SNAP customers face many challenges to become eligible for SNAP and must go through a challenging process to begin receiving these benefits, but as outlined below, SNAP customers and food insecure residents in America face far greater struggles.

In this literature review I first provide a broad explanation of what food insecurity is in America, and what are some of the consequences that we see from it. Next, I examine some of the nutritional assistance programs that our federal government offers, how they work, and what benefits citizens receive from these programs. Afterwards, I explore the field of urban agriculture, and later urban agriculture in Seattle, Washington. A new form of agriculture that has the potential to play a vital role in decreasing food

insecurity. Lastly, I discuss farmers markets, what their role is in food systems, and what their impact can be on food insecurity.

Food Insecurity/Access

Food, one of the essential needs in life, would seem easily accessible to all citizens living in one of the wealthiest first world countries on Earth. However, in 2015, more than 13 million children in the United States were living in homes that lacked daily access to adequate food (Ralston & Coleman, 2017). In 2017, 12% of households in the United States lived food insecure; out of those 12%, four and a half percent lived in very low food insecure homes (Coleman et al, 2018).

The U.S. Department of Agriculture (USDA) defines food insecurity as follows: “A household-level economic and social condition of limited or uncertain access to adequate food” (Murthy, 2016). A key term in this definition is the word “adequate”, which is defined as “satisfactory or acceptable in quality or quantity” (Lexico Dictionary). The USDA defines very low food insecure as those whose food intake is decreased and normal eating habits are disrupted due to a lack of money and resources for food access (USDA, 2020). In total, 30 million Americans struggle to access sufficient levels of nutritious foods such as vegetables, fruits, and other whole foods (Oberst, 2017).

Due to the lack of nutrition, food insecure citizens can face many challenges. Teachers see decreased performances in school from food insecure kids (Rubinstein, 2015). Children who are food insecure struggle with test scores and are more likely to have poor behavior in class. These behaviors result from the social, cognitive and

emotional development limitations that can be caused by malnutrition (Houston et al, 2013).

Another challenge of food insecurity is the impact on health. Many who live food insecure also live in low-income food deserts. According to the American Nutrition Association, food deserts are parts of a city that lack of fruits, vegetables, and other whole foods. Especially in major cities, people who reside in food deserts are disproportionately people of color (Illinois Advisory Committee, 2011). Citizens who reside in these food desert neighborhoods face increased risks of obesity, diabetes, and cardiovascular diseases (Franco et al, 2009).

According to the U.S. Department of Agriculture (USDA), “To qualify as a ‘low-access community,’ [or food desert] at least 500 people and/or at least 33 percent of the census tract's population must reside more than one mile from a supermarket or large grocery store (for rural census tracts, the distance is more than 10 miles)” (USDA). Citizens in food deserts lack access to healthy foods because of a lack of grocery stores and supermarkets, and also because of economic barriers, or distance from outlets carrying healthy options.

Living in a food desert can be one reason why people lack access to healthy foods, but a lack of healthy foods can be due to many other factors as well. Studies show that many of the overlapping challenges that arise from living in a state of poverty can be paired with the lack of access to sufficient levels of nutritious, healthy foods (Bublitz et al, 2019). Factors such as high prices at the most accessible source of nutritious foods, lack of time to actually go to the store, or challenges with travel routines--such as lacking access to a private vehicle or inefficient public transportation--can all impact someone's

access to food (DiSantis et al, 2016). Government nutritional assistance programs have been established to address some of the challenges of food insecurity and try to increase food access.

Nutritional Assistance Programs

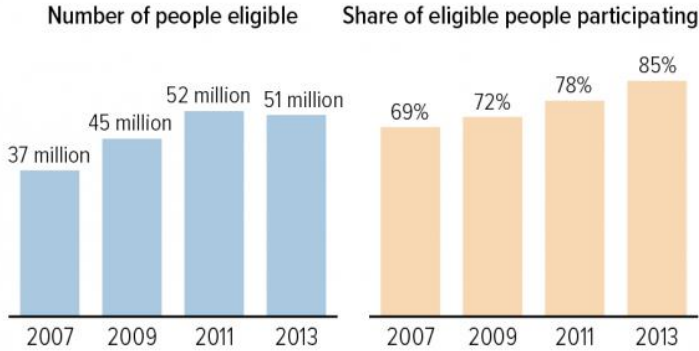
The biggest federal nutrition assistance program is the Supplemental Nutrition Assistance Program (SNAP), previously known as Food Stamps. SNAP feeds more than 31 million Americans annually (Libal et al, 2014). Other programs include the Women, Infants, and Children program (WIC) and the National School Lunch Program (NSLP), which focus on women with children and healthier school lunches for our youth.

Although these nutrition programs can alleviate food insecurity, that is not always the case. Although SNAP participation increased by 25% after the Great Recession began (Nord, 2009), food insecure households increased from 11% pre-recession, to 14.5% by 2012 (Coleman et al, 2013).

Figure 1

Eligible and Participation Rate of SNAP Users

For SNAP, Number Eligible and Participation Rate Higher During and After Recession



Note: This figure uses annual Agriculture Department (USDA) estimates of eligible and participating individuals. USDA revised the methodology for these estimates starting with the 2010 estimates, so the 2007, 2009 and 2011 estimates are not directly comparable. The revised methodology does not change the underlying trends.

Source: USDA Food and Nutrition Service, "Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2010 to 2016," July 2018.

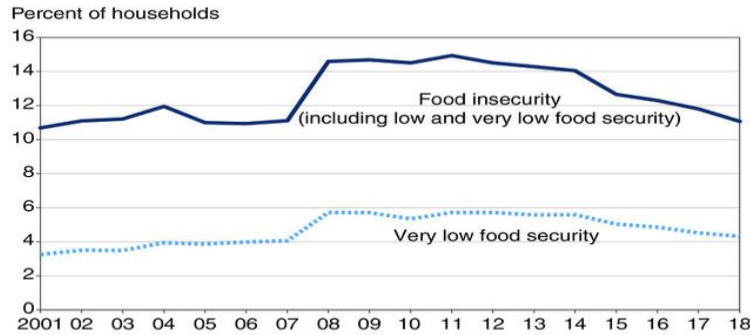
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(ROSENBAUM, D., & KEITH-JENNINGS, B., 2019).

Figure 2

Food Insecurity Rates 2001-2018

Prevalence of food insecurity in 2018 is down from 2017



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey Food Security Supplement.

(Coleman-Jensen, P., 2019).

This increase occurred despite 96% of SNAP users having spent some of their SNAP money at supermarkets where they have access to healthier foods (Castner, 2011). Further research showed that SNAP participants are willing to travel further distances than their surrounding neighborhood (Castern & Henke, 2011).

Food insecurity can be higher among people of color, who are more prone to live in food deserts. For example, in Chicago, African Americans are most likely to lack access to either major chain grocery stores or small markets (Mari Gallagher Research, 2006). Out of the 77 neighborhoods in Chicago, 22 do not have a large grocery store. Of those neighborhoods, fifteen have a majority of African American citizens, with five more of these neighborhoods strongly culturally mixed (Block et al, 2008). Structural inequalities and the legacies of segregation caused many people of color to live in neighborhoods of poverty (Eggers, 1990). As white communities separated from communities of color, grocery stores would follow, leaving the communities of color without access to healthy foods (Rubinstein, 2015).

People of color tend to be more susceptible to food insecurity. In the United States, African Americans are twice as likely to be food insecure than whites (Burke et al, 2018). A study in South Carolina found that the rate of food insecurity is higher for African Americans due to socially constructed discrimination (Burke et al, 2018). This study found a direct tie between food insecurity and racial discrimination, pointing out that those who experienced discrimination at work and/or at school, those who were stigmatized, were also more likely to face food insecurity (Burke et al, 2018).

Census data shows that African Americans are also more likely to face poverty. About 1 in 5 African Americans (22%) live below the poverty line, compared to only 1 in

8 (13%) of the general U.S. population (U.S. Census Bureau, 2017). African American households also experience a greater percentage of food insecurity, 23%, compared to 12% among the general population. Trends within Hispanic communities follow those of African Americans (Coleman-Jensen et al, 2017). About 1 in 5 Hispanics (19%) live below the poverty level compared to the 1 in 8 of the general public (U.S. Census Bureau, 2017). Nineteen percent of Hispanic households are food insecure--higher than the national average of 12% percent (Coleman-Jensen et al, 2017).

Although people of color are more likely to live below the poverty line compared to the general public, they do not make up the majority of SNAP users. The estimates from the most recent U.S. census show that 60.4% of the population is white alone (not Hispanic or Latino), 13.4% is African American, and 18.3% is Hispanic (Census.gov). USDA data from 2013 found that 40.2% of SNAP participants were white, 25.7% were black, and only 10.3% were Hispanic. The rest of SNAP participants are Asian, Native American, Multiple races, or unknown (Alday, 2015). Currently there are at least 38 million Americans who receive SNAP benefits (Nchako, 2020). These numbers indicate that white people participate in SNAP at a lower rate than their percentage in the general population. They also suggest that if people of color were to participate more in SNAP, food insecurity levels could decrease. In particular, the numbers demonstrate that Hispanics are underrepresented in SNAP and that increasing their numbers of participants should be prioritized. However, this is not the only challenge that SNAP faces.

Another reason that SNAP does not have a positive impact on food security could be due to the lack of motivation to purchase healthier foods. You could argue that this is due to personal choice, a lack of understanding on the different impacts of certain foods,

or lack of restrictions on what can be purchased with SNAP benefits. Only certain items are restricted from purchase with SNAP, including alcohol and tobacco products, medicines, hot foods or foods ready for in store consumption, and nonfood items (What Can SNAP Buy?, 2017). SNAP lacks restrictions that could push participants to purchase healthier foods and thus decrease food insecurity. Although people might be able to get a full stomach from SNAP benefits even if they buy high calorie, high salt, and high sugar content snacks and frozen dinners, recall that in the definition of food security the word adequate is included which means quantity but most importantly quality.

Other nutrition programs, like WIC, have stronger guidelines. WIC participants may only purchase specific foods. These include fruits, vegetables, dairy, and other items that meet supplemental needs. Participants also must follow specific details, for example, if purchasing cereal: it must contain at least 28 mg of iron (Solomon et al, 2018), to ensure women get the amount of iron their bodies need.

The National School Lunch Program (NSLP) also has guidelines that improve access to healthy foods. Due to the Healthy, Hunger Free Act of 2010, access to fruits, vegetables, and whole grains increased in schools. Students now choose between a fruit or vegetable with every school meal (Ralston et al, 2017). These healthier school lunch options help our youth have access to more nutritious foods.

All in all, programs such as SNAP, WIC, and NSLP have the mission to decrease food insecurity in the United States. As the local food movement has grown, we see new ways that food insecurity is being dealt with, and new ways that SNAP and WIC participants can use their benefits towards healthier foods.

Urban Agriculture

Urban agriculture (UA) is considered one way to decrease food insecurity and improve community. This modern form of agriculture can bring many benefits including fighting poverty and world hunger, and forming more sustainable food systems between producers and consumers (Game, 2015). UA has been defined by the United Nations as “the growing, processing, and distribution of food and other products through plant cultivation and seldom raising livestock in and around cities for feeding local populations” (Game, 2015). UA comes in many forms including, urban farms, community gardens, vertical farms, hydroponics, and zero-acreages farming which include rooftop greenhouses and rooftop gardens (Siegener, 2018).

UA can increase food security. It can increase accessibility of fresh, healthy foods to residents of all socioeconomic statuses (Brock, 2008). UA has the potential to increase access and security of healthy foods (Horst, 2017). UA can also produce foods that match the needs and demands of diverse communities that are found in major urban cities. This allows for the growth of culturally significant foods. The produce grown on local farms can also have twice the levels of vitamins and nutrients than supermarket produce, meaning better health for consumers (K.H. Brown & Carter, 2003).

As UA has increased many studies have been conducted to see the benefits and potential for growth. The studies have generally looked at three trends in the field. These include a focus on the production potential, on the outcomes and community benefits, such as nutrition and health, and the analysis of UA through a perspective of food justice (Siegener, 2018).

The amount of production possible through urban farming is promising. There is a lot of space in urban settings that can be used for urban agriculture including rooftops,

vacant lots, and vacant parcels of land (Grewal, 2012; Brown, 2003). Unfortunately, while food production can increase through urban farms, their presence does not guarantee that food insecure residents' can access this increase in production (Horst, 2017).

The community impact of UA is also impressive. UA creates community empowerment through education of food literacy, nutrition, and culinary skills. UA also gives people in the community a connection to the environment through agriculture, empowering residents, and producing social goods, all with the mission to improve food security (Siegener, 2018). Through UA we also see community gardens that can benefit residents in the community to access land to grow their own produce.

Analyzing UA through a perspective of food justice is more challenging. Although there is no confirmed definition of food justice, those who use the term usually argue that access to healthy foods should be for all, and focus on the structural forces that created these disparities to accessing healthy foods (Food Print, 2020). Although studies show that UA can be a part of the solution in creating food justice, there are many other players involved. They include policy makers and planners, civic engagement from the community, nutrition education programs, farm to school programs, and other programs that are formed to educate the community of the structural causes of food insecurity (Siegener, 2018).

Others have looked at the systematic inequalities that have occurred in UA. Due to the high costs of operating in an urban setting, Specht et al. (2014) argued that UA can fall into a hypocritical cycle. The urban farms produce food and promote it, saying that it's for improving food security in the community, but only those already privileged can

afford to purchase the products. Some go as far as to argue that the rise of UA's local food movements has always hovered around wealth and privilege (Guthman, 2010). Due to the financial disadvantage that people of color face, resources, funding, and connections to key decision makers tend to lack for people of color and give the advantage to white people in UA (Rosenbaum, Keith-Jennings, 2016).

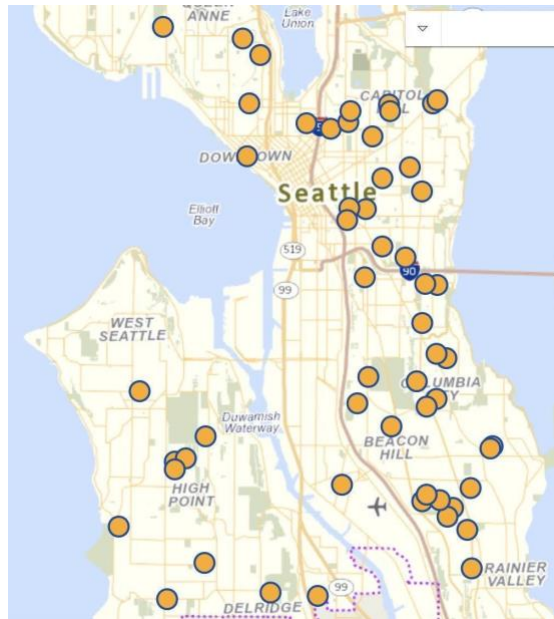
Urban Agriculture in Seattle, Washington

In the city of Seattle, WA, urban agriculture has been successful in many ways. The city has adopted planning and policy for UA using an equity lens. Analysts have criticized UA when not approached through this lens because of the risks of reinforcing structural injustices, such as racism, and benefiting people that are already well off rather than low income or marginalized populations (Siegener, 2018).

In Seattle, community gardens and urban farms are found in low-income communities around the city, especially through the city P-Patch garden program. This allows for increased food security and has helped form culturally inclusive programs for low-income residents of color. Some of the lowest income communities in Seattle are found in South Seattle in neighborhoods such as Rainier Beach, South Park, and Westwood-Highland (Cohen, 2019). Seattle has intertwined UA goals with food justice goals (Horst, 2017). Even so, food insecurity continues to exist in the city. Below are maps of Seattle's P-Patch garden locations.

Figure 3

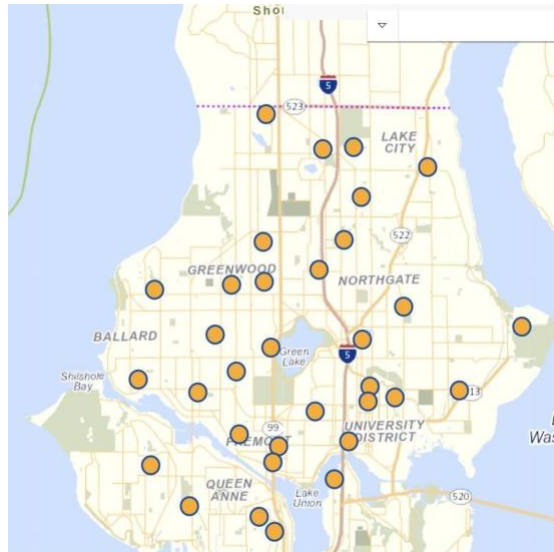
P-Patch Locations Downtown and South Seattle



(P-Patch Map, n.d.)

Figure 4

P-Patch Locations North of Downtown Seattle



(P-Patch Map, n.d.)

Seattle's latest Food Access Plan of 2012 outlines many food-related challenges (Food Access Plan, 2012). The plan reported that food insecurity is not distributed evenly, and that people of color, especially Latino/Latina/Latinx, and African American residents, are more likely to be food insecure. Fourteen percent of Seattle residents were food insecure in 2012, including 1 in 5 children (Food Access Plan, 2012). The number of monthly visitors to food banks increased from 61,000 per month in 2009 to 122,000 per month in 2012. SNAP participants during the same time period increased by 83%. By 2019, Seattle food banks were serving 15,403 on average within the twenty-nine food banks that are members of the Seattle Food Committee (Bolt K, et al, 2019). Since the great recession ended, Seattle has seen food banks serving an average of 446,687 a year by 2019.

Using census data, we can determine that in 2017, in King County, 69.8% of SNAP users were white, 15.7% were Asian, 7.0% were Hispanic or Latino/a/x, and 6.1% were African American (Census.gov). At the same time, the population was 58.9% white (non-Hispanic or Latino/a/x), 19.2% Asian, 9.8% Hispanic or Latino/a/x, and 6.9% African American. This aligns with previous SNAP data, showing that a majority of participants in SNAP were white, although studies show that people of color are more likely to be food insecure. Taken together, this data underscores the disconnect between the food insecure and those who use SNAP benefits.

As the Seattle population continues to increase, food insecurity and SNAP participants are likely to grow. The Seattle Office of Planning and Community Development predicts that the city population will increase by 125,000 residents by the

year 2035. They also predict the Western Washington region to see an increased population of over 5 million.

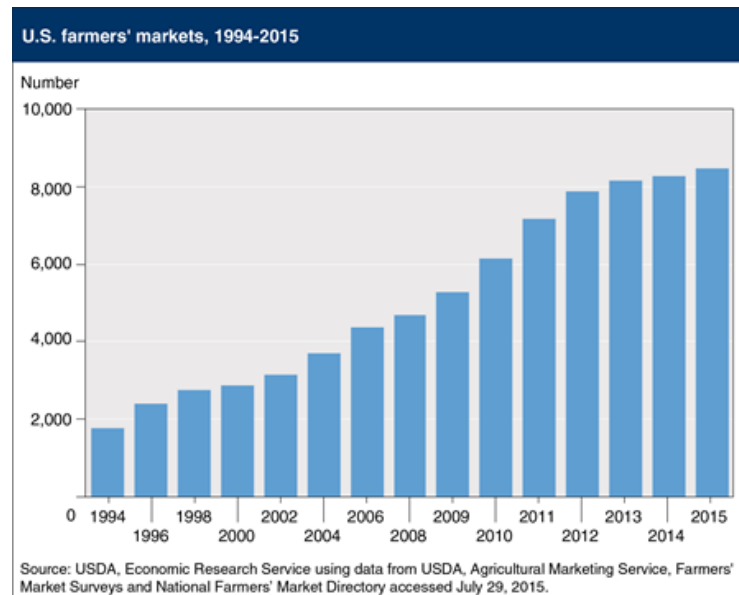
Farmers Markets

One of the best ways to access fresh, local foods, from urban agriculture, or other local forms of agriculture, is at farmers markets. These markets have been a space for gathering and accessing fresh foods for decades now. Here in Western Washington, we are lucky to have the opportunity to be near the Pike Place Market, one of the most historic and well-known farmers markets in the country, as well as all of the hundreds of other small, local markets.

New farmers markets have been starting up all around the country. In 2014 there were 8,400 farmers markets nationwide. The trend of farmers markets, and accessing local healthy foods have continued to grow, with the sense that they are good for economic growth and community (Colman, 2018). In 1994, the USDA reported that there were 1,755 farmers markets in the United States. That number had increased to 5,274 by 2009, and that number has continued to grow, with 8,400 in 2014. By 2015, total farmers markets around the country were at 8,476 (USDA, 2015). This trend in new farmers markets is part of a movement of connecting consumers with producers and realizing the importance of supporting your local food systems (Francis & Griffith, 2011).

Figure 5

Total US Farmers Markets 1994-2015



(USDA, 2015).

Farmers markets are a place where producers and consumers can connect. In farmers markets, people have open access to a non-vehicular space where they can purchase local or regional goods (Francis & Griffith, 2011). Farmers markets are a space that can be beneficial to community organizations, local government, local nonprofits, local farmers, and of course the consumers, as explained below (Coleman, 2018).

First, farmers markets bring a sense of place that can be important for vendors. Sense of place means that producers and consumers can feel a sense of trust in these spaces--they help create a sense of community and can benefit other parts of the wide-reaching community (Aucoin & Fry, 2015). Farmers markets are a place to see local food systems at work, access healthy foods, have an opportunity to support the local economy, and a space to interact with other community members (Coleman, 2018).

The local food movement began in the 1960s, and focused on the values, relationships, and methods connected between production and distribution of high quality, anti-industrial foods (Coit, 2008). Farmers markets expand the mission of the local food movement: to have seasonally appropriate and regional products sold to the local community (Starr, 2010). Expanding on that, local foods tend to be environmentally sustainable, higher in quality, and healthier for consumers (Dunn et al, 2011). Farmers markets, and the local food movement have given consumers and producers an alternative to industrial food systems.

Many farmers markets in the nation also aim to increase access to healthy foods for a great portion of the population. Farmers markets, as well as other alternative food systems, such as CSA's and community gardens, want to tackle the food and health inequalities that have risen from the structural food system and its unequal access to foods for all social groups (Larson et al, 2009). But attracting the underrepresented has been a major challenge for farmers markets. One way of doing this has been by accepting nutritional assistance programs such as SNAP and WIC to decrease economic barriers faced by some customers.

Accepting SNAP is one-way farmers markets try to bring in more low-income citizens, minorities, and people who reside in food deserts. Customers at farmers markets tend to be white, affluent, and do not lack access to healthy foods (Hinrichs, 2000). The term "progressive whiteness" has been used for what we see in many farmers markets. The term also gets used to describe organizers who reach out to underrepresented social groups, but keep a cultural distance, creating an exclusionary space (Slocum, 2007). As a result, it is unclear if the lack of people from underrepresented groups at farmers markets

is due to a cultural stockpile of beliefs that these markets are just for white people, or if it is due to another barrier (Larimore, 2017).

The term “progressive whiteness” also can be used when examining the geography of foods and people in alternative forms of food systems, such as farmers markets. Those involved in farmers markets tend to be middle class, economically well-off people. These are also people that can likely afford healthy, local, organic foods. Whether they desire it or not, a large gathering of privileged people creates an exclusionary space merely through their presence and the connection that that presence has to their status (Slocum, 2007). That space does not feel welcoming to other segments of the population.

The desire to eat healthy is not exclusive to whites, the use of land for people and food also is not exclusive to whites, but the organizing and strategizing of how to access healthy foods and how to use space for that access tends to overlook communities as a whole (Slocum, 2007). By missing that inclusion of the whole community, the image of a farmers market can be skewed. A farmers market can seem more like a place of exclusion such as Whole Foods stores, or local food coops, where white, wealthier people are more likely to be shopping (Saldanha, 2006). Farmers markets, food systems, and society as a whole have been impacted by the Covid-19 pandemic that we are dealing with in 2020, and will continue to deal with at least into 2021. The pandemic has, and will continue, to change many parts of what we considered as normal life, including our farmers markets, and our food system.

Covid-19 Pandemic

The Covid-19 pandemic was an unexpected event that has impacted most parts of contemporary life. Covid-19 is a coronavirus disease that was first discovered in Wuhan City, China, in December 2019, and since has spread around the world (Singkun et al, 2020). Symptoms include a fever, dry cough, shortness of breath, and fatigue, with additional symptoms experienced by many, some symptoms being severe. By April 2020 Covid cases around the world were close to three million (Singkun et al, 2020). That number has increased significantly since then, and will continue to increase until a safe vaccine is created and widely used. The Covid-19 pandemic has had a major impact on all sectors of the food system, including farmers markets.

Farmers markets have had to change and adapt to the Covid-19 pandemic to safely continue operating for staff, farmers, and customers. The pandemic has had an impact on food purchasing habits across the food system, and including at farmers markets (Benz, 2020). Seattle farmers markets, as well as other markets in the region, have had to follow new regulations to safely operate. Seattle markets have had to cap the number of vendors operating at any given time. Farmers markets in King County, where Seattle is located, have had decent sales, but they fall short of what they were last year (Ran, 2020). In addition, farmers markets in Washington State were not considered essential businesses at first by the governor, but that quickly changed. Many markets needed additional weeks after being allowed to reopen, to plan and strategize how to follow new regulations (Secaira, 2020).

The changes in farmers markets, and the missed weeks while markets adjusted, had a significant impact on local farmers as well. Many farmers had to increase their Community Supported Agriculture (CSA) programs, which have been essential for

farmers sales (Ran, 2020). Many vendors have had to shift to fulfilling online orders to sell their products. Some, such as Jim McGinn, president of the Olympia farmers market, remarked that farmers markets are safer spaces to purchase your foods (Secaira, 2020). While farmers and farmers markets have seen significant support from their communities (Secaira, 2020), challenges will continue to face farmers and farmers markets until the Covid-19 pandemic is under control.

As the pandemic continues, farmer market customers also need support as food insecurity has significantly increased, as a consequence of the pandemic. In 2018 14.3 million Americans were food insecure, but due to the pandemic that number is estimated to have jumped to over 50 million in 2020, which includes 17 million children (Feeding America, 2020). Now more than ever, citizens are lacking access to food, and farmers markets can be a space where food insecure citizens could access fresh healthy foods.

Studies and data have shown that food insecurity is a serious problem faced in the United States. There are ways that our government has tried to tackle this problem. We also see studies that show possible ways of decreasing the problem of food insecurity, such as urban agriculture and especially farmers markets. But are the people that lack access actually the ones that are benefiting? With this study I hope to find what the barriers are that get in the way of accessing fresh, healthy foods, at farmers markets, for those who receive SNAP/EBT, and how those barriers have changed since the Covid-19 pandemic started.

Methods

For my study I conducted surveys with farmers market customers who receive SNAP/EBT benefits. My goal in this study was to uncover the barriers or challenges these people face in accessing farmers markets and what, if anything, has changed since the start of the Covid-19 pandemic. With the unexpected pandemic, local farmers markets and their customers faced many new challenges and concerns. Through my surveys I also hope to find out what new challenges or barriers SNAP/EBT users encountered. By understanding what barriers this portion of the clientele has faced, farmers markets will have information on how to decrease the impact that these barriers have, leading to easier access for their SNAP/EBT customers, and hopefully see increases in total SNAP/EBT sales.

I conducted surveys at the West Seattle Farmers Market from 10am - 2pm on three separate Sundays during the month of September 2020. I also conducted surveys at the Columbia City Farmers Market two times from 3pm - 7pm on Wednesdays in September 2020. At both markets, I set up a table next to the manager booth, where SNAP/EBT customers go to swipe their card and receive their benefits. When customers came to swipe their SNAP/EBT card, a market staff member or I would ask if they were willing to fill out a quick survey. If they completed the survey they would receive \$2 in Farm Bucks, which could also be used as additional cash to purchase any product at the market, including flowers . I would also explain why I was collecting surveys, explain my thesis project, my affiliated school, and what I hoped to accomplish from my research. Note that the survey had been cleared by the Master of Environmental Studies' Human Subjects Review panel at the Evergreen State College, prior to undertaking this research.

My survey consisted of sixteen questions, and an additional comments section. Questions asked for personal opinions of topics such as nutritional value of food, cost, and how many days a week they cook. Some questions asked for personal opinions of the farmers market. Additional questions probed changes in opinion and barriers because of the Covid-19 Pandemic. Those included changes in transportation, changes in purchasing habits, and changes in opinion of farmers markets. After collecting all of my surveys I used Microsoft Excel to examine my data, look for patterns in the responses, and trends. Below is an example of the survey that customers filled out.

Accessing Farmers Markets for SNAP Participants

Please see the separate sheet with details about the purpose of this study and guarantee of confidentiality.

1. How many days per week do you cook at home?

1 2 3 4 5 6 7

2. What form of transportation do you use? (Circle all that apply.)

Foot, Car, Carpool, Bus, Light rail, Lyft/Uber, Bike, Other

Circle the number that best represents your answer to each question. If you wish, you may provide additional information in the comment space provided.

1=STRONGLY DISAGREE 2=DISAGREE 3=NEUTRAL

4=AGREE 5=STRONGLY AGREE

1 2 3 4 5

3. Prior to the Covid-19, my transportation options constrain/limit my access to preferred foods.

1 2 3 4 5

4. Since Covid-19 pandemic started, my transportation options constrain/limit my access to preferred foods.

1 2 3 4 5

5. Nutritional value is an important factor in my food purchases.

1 2 3 4 5

6. Cost is an important factor in my food purchases at the farmers market.

1 2 3 4 5

7. Cultural significance is an important factor in my food purchases.

1 2 3 4 5

8. I feel a sense of community when I visit my farmers market.

1 2 3 4 5

9. I do not find the vendors that I would like to see at my local farmers market.

1 2 3 4 5

10. I have experienced new barriers to accessing the farmers market because of the Covid-19 pandemic.

1 2 3 4 5

11. I currently receive SNAP/EBT benefits.

Yes No

12. The Covid-19 pandemic has made the farmers market my preferred location to use my SNAP/EBT benefits.

1 2 3 4 5

13. Because of Covid-19 I prefer to purchase foods where it is less crowded or social distancing is enforced.

1 2 3 4 5

14. Because of the Covid-19 I feel safer shopping at a farmer's market than at a grocery store.

1 2 3 4 5

15. Gender:

Male Female Non-Binary Other Prefer not to answer

16. Ethnicity:

White Black/African American Hispanic/Latin Asian

American Indian/Alaska Native

Native Hawaiian/Pacific Islander

Other_____

Additional Comments:

Results

Meeting and getting to chat with people who took my survey felt heartwarming and rewarding. Many of these customers expressed how grateful they were that I am doing a project that could have a significant impact on their access to the market where they shop. I am grateful that the Seattle Neighborhood Farmers Markets allowed me to conduct my surveys at these two markets that they manage. In total, the organization manages seven markets in Seattle, but this year only had four markets open because of the pandemic. The organization let me give respondents “farm bucks”, which can be used as cash, to purchase produce at any of their markets, a significant factor to why so many customers took the extra time filling out my survey.

After spending two evenings at the Columbia City Farmers Market (August 26, September 9, 2020), and three mornings at the West Seattle Farmers Market (August 30, September 13, September 20, 2020), I collected a total of 70 surveys. My surveys were completed mostly by market customers that currently use SNAP/EBT. Twelve of my surveys got filled out by customers who said they do not currently use SNAP/EBT; however, in none of my questions do the answers from these 12 respondents significantly change the results. Of my 70 respondents, 47 identified as white, and 29 identified as people of color, including Black/African American, Hispanic/Latin, Asian, American

Indian/Alaska Native, Native Hawaiian/Pacific Islander, or Other categories. Six people considered themselves more than one race, which explains why the total number of races adds to 76 instead of 70.

I started by coding my surveys. I separated answers in three categories, combining 1 = strongly disagree, and 2 = disagree into one category, 3 = neutral as another category, and 4 = agree, and 5 = strongly agree into the third category. Questions where I did not use this scale included those in which I asked the form of transportation that respondents use, gender and ethnicity, and how many days per week respondents cook at home. Lastly, I asked if respondents currently got SNAP/EBT (Yes/No). In the following paragraphs I will discuss the key findings that I gathered through my surveys.

My data showed that some customers do not see their preferred vendors at these farmers markets (See Figures 6, 7, and 8). A total of 37 disagree, 14 were neutral, and 19 agree. Although the majority of respondents disagreed, there was something interesting regarding the respondents that did say that they don't see the vendors that they would like. Almost half (9) of the 19 respondents also agree to the question asking if cultural significance was important to them when making their food purchases. This could mean that many who do not see the vendors that they would like to see may agree because they do not see the vendors that would sell the culturally significant products that they would like to see. In the question about cultural significance, there were a total of 28 agree, 19 remained neutral, and 23 disagree.

Figure 6

Responses if Customers See Vendors They Would Like

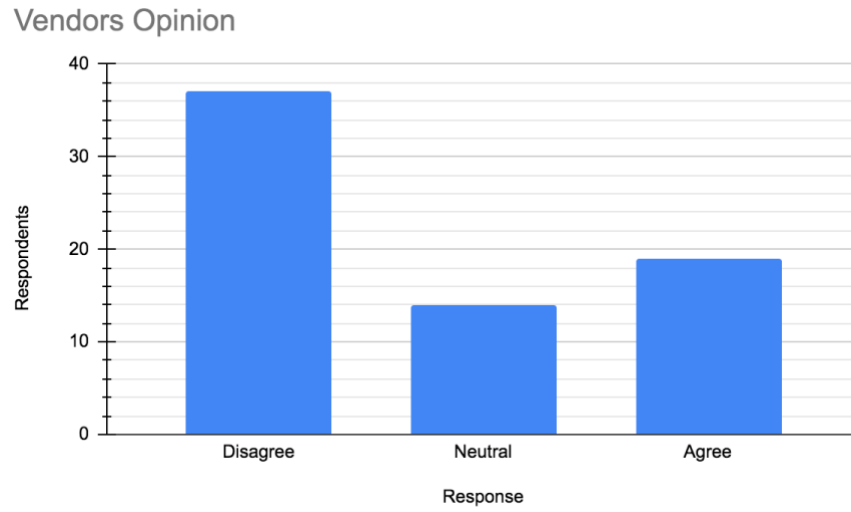


Figure 7

Cultural Significance Important Answers from Agree's in Vendor Question

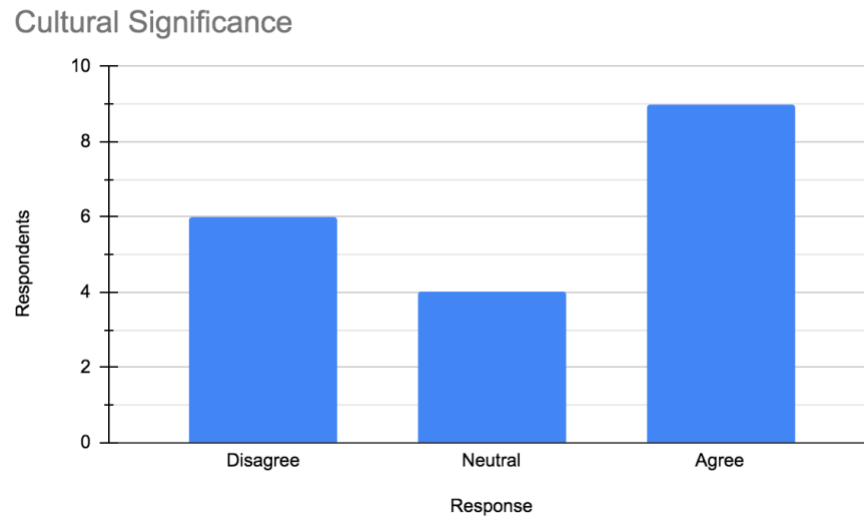
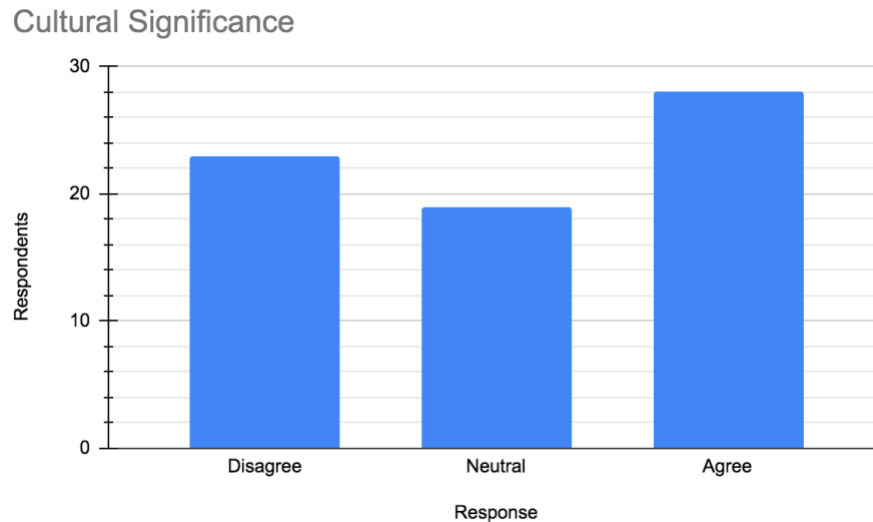


Figure 8

Responses From Cultural Significance Question



It was clear from responses that transportation has been a barrier for customers access to farmers markets, and has only gotten harder as a consequence of the pandemic. When asked if transportation options limited their access to preferred foods 42 disagree, 18 neutral, and 9 agree, one respondent did not answer this question. When asked if transportation has been a barrier to accessing preferred foods since the Covid-19 pandemic, 39 disagree, 10 were neutral, and 21 agree. See Figures 9 and 10. The more than double of agreed answers from prior to the pandemic indicates the consequences of the pandemic for access to transportation. For SNAP/EBT customers, access to farmers markets could already be a challenge because of transportation, and that has only increased since the start of the pandemic.

Figure 9

Transportation a Barrier Prior to Covid-19

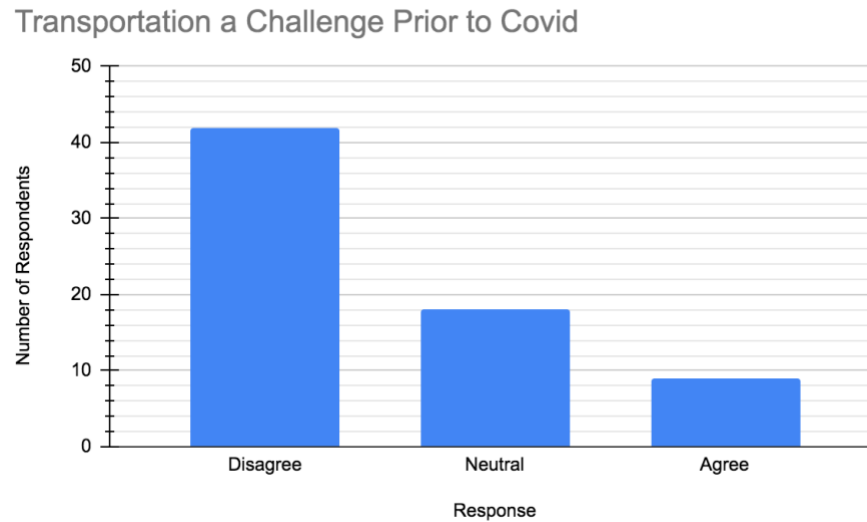
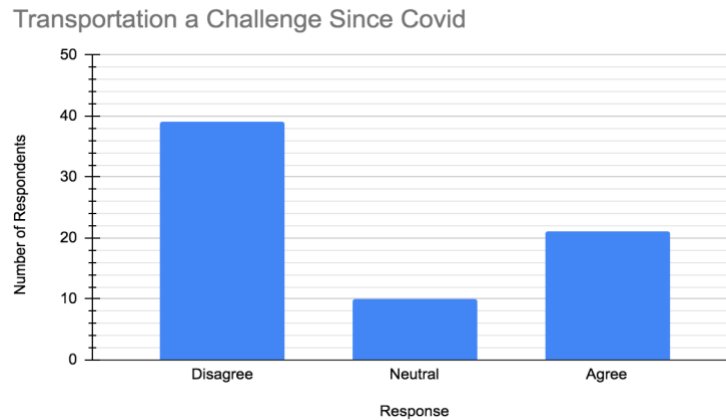


Figure 10

Transportation a Barrier Since Covid-19

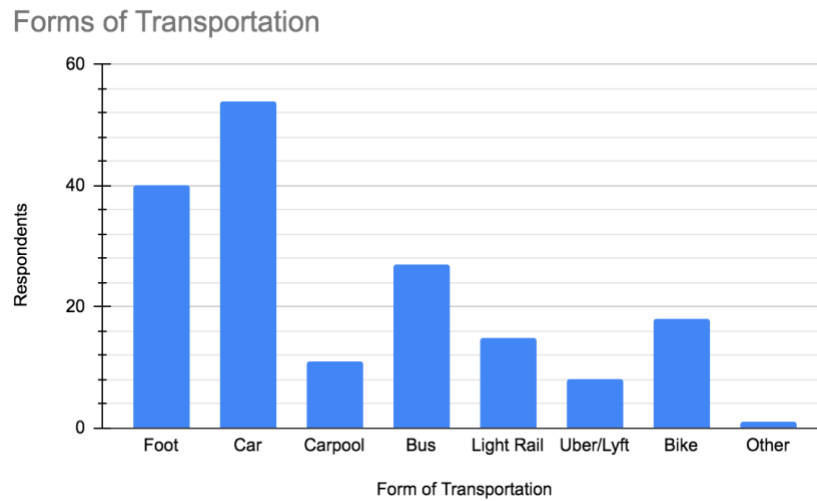


I also asked what form of transportation farmers market customers used; respondents could circle more than one answer. Although 57 out of my 70 respondents circled car (Figure 11), 120 chose something other than car. They could also circle transportation via foot, bus, carpool, light rail, Uber, bike, or other. The high number of

other answers indicates that for many of these customers cars may not be their preferred or most reliable form of transportation.

Figure 11

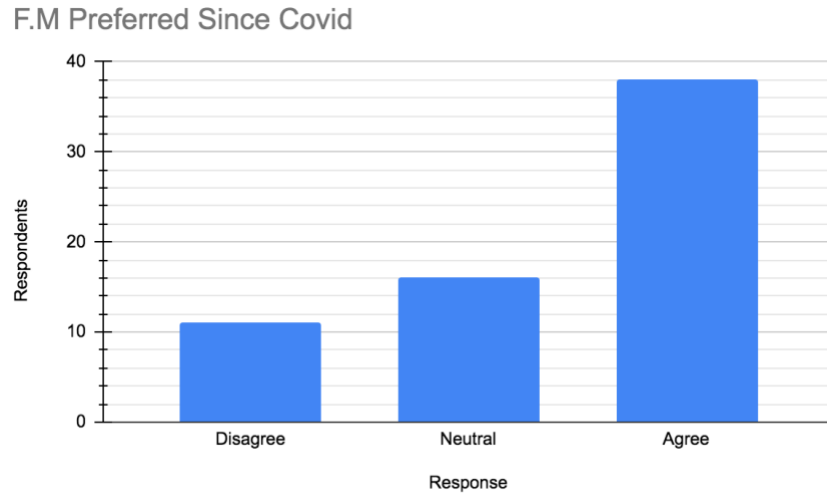
Forms of Transportation Used



The impact that the Covid-19 pandemic has had on farmers markets, and customer's access to farmers markets, cannot be underestimated. All respondents provided similar answers on the Covid-19 related questions. For example, when asked if the pandemic has made farmers markets their preferred location to shop and use their SNAP/EBT benefits, 11 disagree, 16 chose neutral, and 38 agree. Five respondents did not answer this question (Figure 12)

Figure 12

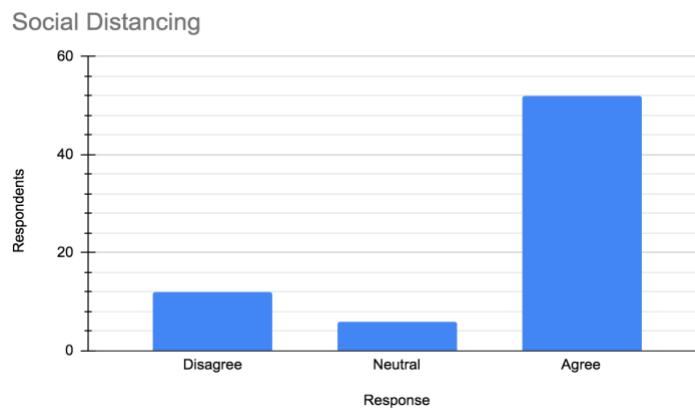
Prefer Using SNAP Benefits at Farmers Market because Covid-19



When asked if respondents prefer to purchase food at less crowded stores, or where social distancing is being enforced, a requirement under Covid protocols, and something that Seattle farmers markets, and markets around the region, have been doing, 52 agree, 6 remained neutral, and 12 disagree (Figure 13 below).

Figure 13

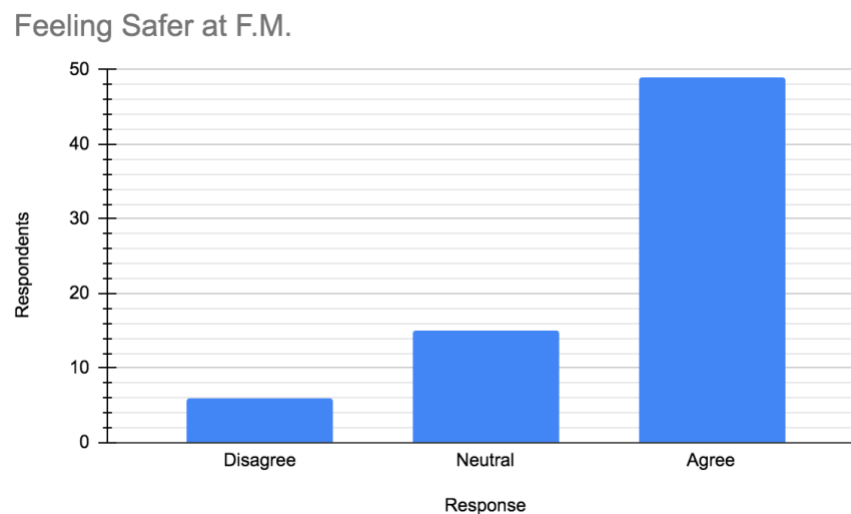
Prefer to Shop Where Social Distancing is Enforced



The results of the question relating to whether respondents feel safer shopping at the farmers market are shown in Figure 14. When compared to other spaces such as a grocery store, 49 agree, 15 were neutral, 6 disagree. This does not surprise me because farmers markets in the region must enforce social distancing during the pandemic, and the fact that these are outdoor markets that are in open spaces with free air circulation, instead of being confined inside a building.

Figure 14

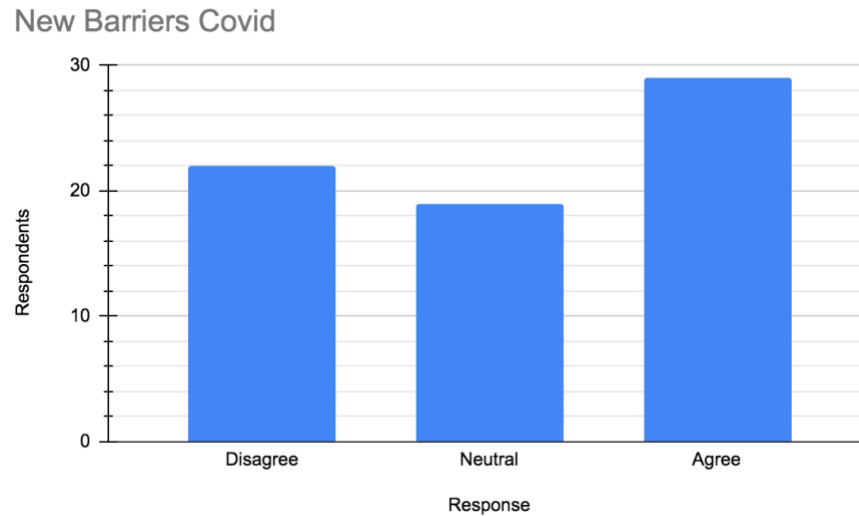
Feel Safer Shopping at Farmers Markets



Although a majority of respondents feels safer and prefers to shop at the farmers market because of Covid-19, this pandemic has created barriers that have impacted customers' access to farmers markets: 29 agree, 19 stayed neutral, 22 disagree (Figure 15). I did not ask respondents to state exactly what the new barriers that they face are, so it is unclear if these new barriers have any impact on their access to the farmers market or not.

Figure 15

New Barriers Because of Covid-19



Most of my respondents do mainly cook at home, rather than eating out. Sixty respondents answered that they cook from home 5, 6, or 7 days of the week. When asked if nutritional value is important when making food purchases, 68 agree. This indicates that these SNAP/EBT participants will use their benefits to buy nutritious and healthy foods. When asked if cost is an important factor when shopping at the farmers market, 54 agree, 12 neutral, and 4 disagree. This shows that the price that vendors charge for their products could affect how many SNAP/EBT customers shop at their stand. Lastly, a majority of my respondents do experience a sense of community when visiting their local farmers market: 62 agree, 5 choose neutral, and only 3 disagree. This shows that the farmers markets create a sense of community and everyone being welcomed.

Discussion

I have reached three major conclusions based on the results of this survey. First, my results indicate that customers do not see the vendors that they would like to see at the farmers market, and the importance of cultural significance of food could play a role in that. Second, that some people had already been facing transportation barriers, and since the pandemic started, those transportation barriers have significantly increased to people that receive SNAP/EBT, and the community in general. Finally, that because of the pandemic, people prefer and feel safer shopping at farmers markets because of the Covid-19 pandemic.

I would recommend that farmers markets conduct additional studies to better understand who are the vendors that customers would like to see. Although a higher majority of my respondents disagreed that they don't see the vendors that they would like to see, the correlation between those who did agree, and also agreed on the importance of cultural significance when making food purchases should not be overlooked. After collecting that data, markets should check if these suggested vendors would have any impact on the cultural diversity of the vendors that are found at the particular farmers markets.

It would also be valuable to look into the cultural communities not found at the farmers market. Could it be that people of these communities are not seen at your market because they already know that they will not see the vendors that they would like to see? Please keep in mind that for my study all respondents were people who were present at the markets. My study does not represent those who may already avoid going to the

market, perhaps because they know that they will not find the vendors that they would like to see.

A major reason behind that decision could be because they know that the vendors at the market will not have the culturally significant or appropriate foods that they would like to purchase, but of course, future studies could also find that there are other facts as to why someone would decide not to go to their local farmers market.

My question regarding what forms of transportation respondents use saw a surprisingly high number of people that answered “Foot”. This can mean that many shoppers at these farmers market come from the surrounding neighborhoods that are walking distance to the market. It could be beneficial to also conduct a study that looks at the cultural and ethnic demographics of the surrounding neighborhoods around a market to better understand what ways your market can better serve them.

The question that asked if nutrition value is important to them also shows something significant. A majority of respondents agree that nutritional value does matter, showing that these SNAP/EBT customers are using their benefits to purchase mainly healthy foods. A valuable future study should be done that sees if SNAP/EBT customers come to the market because they will be able to purchase healthy foods, or do they purchase healthy foods because they came to the market. If there were to be increased education on healthy foods, and that markets are a space where these foods can be purchased using your SNAP benefits, it could lead to increasing levels of SNAP customers who do go to farmers markets as well as decrease how many customers use their benefit to purchase unhealthy foods.

Secondly, I would recommend markets study the barriers to transportation in local communities. Transportation to accessing markets has been a challenge for some, but has significantly increased since the pandemic started. I suggest that markets conduct studies that look into the local communities, and into what are the neighborhoods that see the highest levels of transportation barriers. Keep in mind, again, that through my study, I only collected data from respondents who shopped at the farmers market. My data shows that transportation is a challenge, but it does not represent those who may already face transportation challenges that cause them to not attend the farmers market. I believe that by conducting a study that finds what parts of your community face the highest transportation barriers could have a positive impact for farmers markets.

After a study on transportation is conducted I would recommend that farmers markets and city officials work with their local public transportation companies to adjust or create new bus routes that go through the neighborhoods that have the highest levels of transportation barriers and stop through the local farmers market. By forming these new routes, or adjusting existing ones, many people will be able to access the farmers market through public transportation. This will also increase access for those who do not visit a market because of transportation barriers. Increasing access for them may also be increasing access for customers who receive SNAP/EBT. This is especially true as we continue to face challenges from the Covid-19 pandemic.

Finally, I recommend that farmers markets continue working with state and city officials to prioritize and continue updating guidelines and regulations on farmers markets, while we get through the pandemic. This study clearly shows that people feel safer and prefer to shop at farmers markets right now. It also shows that SNAP customers

prefer to use their benefits at markets. At the same time, the increased regulations that have been placed on farmers markets have made it harder to access markets with the restrictions on what the capacity of people inside the market at one time can be, as well as the limit of how many vendors can be selling at the market, and what kind of vendors. Although these regulations have been placed to ensure that markets operate safely for staff, vendors, and customers it restricts how many people can shop at a market and what products can be sold. Officials should continue listening to market recommendations about what are the safest ways for them to operate and at what capacity they can continue to operate safely. There could be the potential that markets could increase their capacities, increase vendors, or have vendors that sell a variety of other products.

I believe that if farmers markets were to follow the recommendations that I have suggested we would see increased participation and access to farmers markets for SNAP customers and for the general public. Now more than ever, as we live through the pandemic, and prepare for the lasting impacts that this event could have for many years to come, increasing access to healthy foods is extremely important. SNAP customers can be people that are at the edge of falling into food insecurity, if they aren't already in that position. Many farmers markets are places that accept SNAP benefits, as well as spaces where they can access fresh, healthy produce. By increasing access to farmers markets for SNAP customers, not only are we increasing access to healthy foods for these customers, we would also be helping to decrease food insecurity in our communities.

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