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## **Feeding Our Local Communities-The Benefits of Food Assistance Programs at Local Farmers Markets**

Courtney A. Archambeau  
*Michigan Technological University, carchamb@mtu.edu*

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FEEDING OUR LOCAL COMMUNITIES-THE BENEFITS OF FOOD  
ASSISTANCE PROGRAMS AT LOCAL FARMERS MARKETS

By

Courtney A. Archambeau

A THESIS

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

In Environmental and Energy Policy

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This thesis has been approved in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE in Environmental and Energy Policy.

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## **Abstract**

Living in a rural area can make finding food that is good and affordable difficult, especially for those who rely on assistance from the Supplemental Nutrition Assistance Program or SNAP. Federal incentive programs assist those with SNAP benefits to purchase fresh produce. I studied three farmers markets in Houghton County in Michigan's western Upper Peninsula to identify how rural farmers markets are integrating these programs to increase access to fresh produce. Specifically, I asked: 1) How might farmers markets work to be more inviting and make their food more accessible to those of lower socioeconomic status?; 2) By studying these three farmers markets in Houghton County, what can be learned about the integration of food assistance programs, such as the Double Up Food Bucks (DUFB)?; 3) What can be learned across these cases to better inform the integration of food assistance programs at farmers markets? I collected data over a six-month period, July 2021 through December 2021, via participant observation at farmers markets and as well as oral surveys with market consumers to learn more about why they came to the market and what they purchased. Additionally, I conducted 13 semi-structured interviews with key stakeholders, including civic leaders, market managers and farmer vendors, to learn more about farmers markets, their importance within their community, and food assistance program integration within the market. I identified three key findings: 1) market acceptance of food assistance programs fosters community connections within and beyond the market, 2) the importance of the market as a public service within the community facilitating access to fresh foods, and 3) how grassroots collaborative governance is helping the Calumet market become an important community driver to support food security and to inform evolution of other markets. Through grassroots efforts and collaborative governance, people of the local communities are coming together to make the market in their city more inclusive and accessible to all residents.

# 1 Introduction

In the state of Michigan, the number of farmers markets has increased from around ninety markets in 2001 to approximately 300 in 2019 (Farmers Market Coalition, n.d.). In the United States, there were 1,755 markets in 1994, 2,863 in 2000, and in 2015 the number rose to 8,476 registered with the United States Department of Agriculture (USDA) Farmers Market Directory (Feeding America, n.d.). Farmers markets are a public assembly of farmers that sell their products to consumers, who in return get fresh local produce while supporting local agriculture. Most farmers markets are located in temporary spaces, making it difficult for farmers to accept anything other than cash (Farmer et. al., 2019, p. 156). This barrier creates problems in accessing fresh foods at the markets for those that are receiving benefits through the Supplemental Nutrition Assistance Program or SNAP (Bertmann et. al., 2012, p. e53).

## 1.1 Food Assistance Programs

In the State of Michigan, Feeding America estimates that 1,359,650 people are faced with hunger and food insecurity every day--and of them, 318,960 are children, which is 1 in 7 people (Feeding America, n.d.). While SNAP provides assistance to those to purchase food that is good and healthy through their Electronic Benefit Transfer (EBT) card or through the Double Up Food Bucks program, the issue of accessibility and education creates a barrier for those who are not sure how to prepare certain types of fruits and vegetables. While the shift to EBT has been popular with program administrators and those who participate, it does not always anticipate the needs for farmers markets (Jones & Bhatia, 2011, p. 781).

In 2009, the Fair Food Network launched the Double Up Food Bucks (DUFb) program in Michigan. It was launched as a pilot program in five farmers markets in Detroit and has expanded to over 250 locations throughout the state (DUFb MI, 2023b). The DUFb program provides funding for those who use their SNAP benefits to purchase fresh fruits and vegetables to be matched dollar for



dollar, up to \$20 a day<sup>1</sup>. This means that each family gets double the fresh fruits and vegetables. The benefit can be used either at a participating grocery store or a participating farmers market. Today, the program has expanded to more than twenty-five states, including the District of Columbia.

In general, farmers markets are considered one of the healthiest places to purchase food (Roubal et. al., 2016). However, less than one percent of food assistance dollars are redeemed at farmers markets, and farmers markets have been overlooked in the process of transitioning from food stamps to EBT (Farmer et. al. 2019, p. 141). Through the Double Up Food Bucks program, \$6.9 million dollars was used to purchase fresh fruits and vegetables in the State of Michigan in 2019, which benefited a lot of households, approximately 85,000 in fact (DUFBI MI, 2023a), more than 90% of those who used Double Up Food Bucks benefits and who purchased foods at farmers markets ate more fruits and vegetables such as apples, melon, cucumbers and broccoli (DUFBI MI, 2023a). In 2020, there were 253 Double Up Food Bucks sites including 98 grocery stores and 115 farmers markets. At the time of this study, in summer 2021, there were two Double Up Food Bucks sites in the six-county region of the Western Upper Peninsula: the Keweenaw Co-op in Hancock, Michigan and the Calumet Farmers Market in Calumet, Michigan (DUFBI MI, 2023a).

## **1.2 Farmers Markets**

Farmers markets are a public space where farmers or their representatives sell food that they produced, directly to consumers. They facilitate personal connections and bonds of mutual benefits between farmers, shoppers, and communities (Farmers Market Coalition 2018). Taylor et. al.'s (2022) study of Michigan food systems found that while farmers markets helped enhance food access, not everyone purchased from farmers markets. Nutrient-dense foods such as fruits and vegetables

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<sup>1</sup> Due to the COVID-19 pandemic, the Double Up Food Bucks program has had to shift due to the increase of participants and the increase in cost of fresh fruits and vegetables. Due to the increase in participation, the program has not been able to expand to those communities where DUFBI is not accepted. Due to this setback, the Fair Food Network has been forced to pause Double Up earnings at grocery stores effective fall 2022 (USDA, n.d.).

allow for a healthy and active life, however those that are food insecure have unreliable access to these items (Durward et. al, 2019, p. 342). Between 2012 and 2017, the number of SNAP recipients who shop at farmers markets increased by 35.2% (Taylor et. al., 2022, p. 899). In 2017, farmers markets obtained more than \$22.4 million from the purchases of SNAP recipients (Farmers Market Coalition, 2020). Diets that are rich in fruits and vegetables are known to lower the risk of chronic disease; however, very few Americans consume enough to meet the required amounts (Durward et. al., 2019, p. 342). Among those who are low-income, the most commonly reported barriers in preventing an adequate fruit and vegetable consumption are time, cost, access, availability, and lack of knowledge and transportation, while food security status influences food choices among this population (Durward et. al., 2019, p. 342). Governmental, non-profit and corporate efforts to improve the dietary intake of the low-income population are incentivized at grocery stores and farmers markets (Atoloye et. al., 2021, p 1). Programs that give price incentives, coupons or vouchers at the point of purchase offer opportunities to increase not only access but purchases as well.

### **1.3 Rural Local Food Systems**

Studying local food systems is of interest because they have unique characteristics encompassing a multitude of aspects of social impact investing that can include farming practices that benefit the environment, economic stability for local residents and building capacity of local businesses (Farley & Bush, 2019, p. 225). Rural local food systems are understudied, which causes a challenge or problem for those who may want to implement more inclusive practices or policies through federal assistance programs at local farmers markets and grocery stores. Local food systems in the past decade have gained some distinction as a potential economic development strategy among academics and practitioners, especially in rural communities (Hendrickson et. al., 2020, p. 480). This particular argument relies on the idea that if people purchase and consume locally produced foods, that more money will be kept in the local area (Hendrickson, et. al., 2020, p. 480). Due to limited data local food systems often seem to be more of an urban or peri-urban

phenomenon, which suggests that there would be better expansion opportunities in urban areas rather than rural areas. While local food systems provided positive effects in rural areas, they were often small, and rural food production was motivated by pride, satisfaction with their products and the overall contribution to the location in which they lived (Hendrickson, et. al., p 481).

This study focused on western Upper Peninsula farmers markets and, specifically, how these rural farmers markets might be made more inclusive to those who receive benefits through food assistance programs. To do this, I asked: 1) How might farmers markets work to be more inviting and make their food more accessible to those of lower socioeconomic status?; 2) By studying these three farmers markets in Houghton County, what can be learned about the integration of food assistance programs, such as the Double Up Food Bucks (DUFB)?; 3)What can be learned across these cases to better inform the integration of food assistance programs at farmers markets? The aim of this research is to inform further integration of these programs at our local markets as well as to help other rural farmers markets implement the program to help make our local food systems more inclusive.

## **2 Literature Review**

In this literature review I will discuss food insecurity and what it looks like in rural areas, showing data from national sources as well as from the Upper Peninsula of Michigan. I will also introduce the structural barriers and gaps contributing to food insecurity. I will also introduce the food assistance programs, including the Supplemental Nutrition Program (SNAP) and Double Up Food Bucks (DUFEB) program, that are the focus of this study. Then, I will discuss the role of farmers markets in addressing food security, drawing examples from the literature. While the focus of this study is in rural areas, there are examples from urban markets that could be used to inform the implementation of food systems integration at markets in rural areas. Finally, I review collaborative governance in the local food systems literature to identify how it might inform an understanding of food systems integration at local markets in the western Upper Peninsula, as it is a popular approach in social goods/services delivery (Lu & Carter, 2022, p. 3).

### **2.1 What is Food Insecurity?**

Food insecurity is defined as inadequate food and unreliable access to nutrient-dense foods to allow for a healthy and active lifestyle (Durward et. al., 2019, p. 342). In 2021, 89.9 percent of U.S households were food secure, and the remaining 10.2 percent were food insecure (USDA, n.d.). This is a constant struggle for many of low-income status in the United States. Food security is a structural issue and is caused by inadequate food access. Those who are on food assistance programs have a tendency to skip purchasing nutrient-dense foods such as fruits and vegetables, whole grains, and lean meats due to the higher cost, shorter shelf life and lower caloric value compared to the highly processed alternatives (Durward et. al., 2019, p. 342). Food assistance programs cannot be used everywhere, and fresh foods are not incentivized through SNAP. For instance, if someone is using their EBT at a convenience store, they may not be able to purchase fresh produce. In rural areas where stores are a distance away, people may not have transportation, making this a food security barrier as well. Another barrier to access is price. This prohibits individuals from shopping at farmers markets where food could be very comparable

in price. Poverty is a significant contributor to food insecurity and Michigan's poverty rate of thirteen percent is considered high (Taylor et. al., 2022). According to census data for Houghton County, 14.1 percent of residents are in poverty (US Census Bureau, n.d.). In the state of Michigan, 1,150,150 individuals face hunger (1 in 9 people) and 297,150 are children (1 in 7 children) (Feeding America,n.d.). Food assistance programs such as the Supplemental Assistance Program (SNAP) and Double Up Food Bucks (DUFb) program work to address food insecurity issues.

The link between public assistance and food insecurity is difficult to measure. This is due to researchers not being able to draw from credible conclusions. Households most likely to be food insecure are the same households that are most likely to qualify for and participate in food assistance programs. This makes things difficult as the impact of public assistance on food insecurity could be identified through a random experiment where the government provides aid to some, but not to others, denying aid to the control group (Borjas, 2002, p. 1422). This is important as those that may be eligible for food assistance may not be receiving it.

Determinants of food insecurity are being low-income, having a disruption in income, disability status and household structure, which is the number of household members, if they are a single parent or employment status. (Gundersen, 2021, p. 63). Additionally, American Indian communities and communities of color are at higher risk for food insecurity (Gundersen, 2021, p. 66). Households that are low-income are more likely to be food insecure than those who are not low-income (Gundersen, 2021, p. 63). Food insecurity is more likely to be faced when there are changes in income, whether it is a loss of job, change in income, or income volatility along with housing instability. Those who are food insecure have a higher probability of unpaid bills. Housing structure also influences food insecurity as those households could have a single mother as head of the household versus households with two parents (Gundersen, 2021, p. 65). For those who are disabled, the rate of food insecurity is substantially higher than those without a disabled household member (Gundersen, 2021, p. 65). American Indians have a substantial higher amount of food insecurity

than those listed above and is even higher in those households with children (Gundersen, 2021, p. 66).

### ***Federal Food Assistance Programs***

Food assistance programs work to bridge the gap between food that is good and fresh and those that are low-income. The Supplemental Nutrition Program or SNAP is a federally funded program that provides low-income individuals and families with the resources to purchase food. The federal nutrition assistance safety net represents the first line of defense in boosting the food purchasing power and improving the nutritional status of low-income households in the United States (Kantor, 2001, p. 20).

The SNAP program has evolved over the past eighty years and started as a general food assistance program in 1939, and was credited to the Secretary of Agriculture, Henry Wallace and its first administrator, Milo Perkins. The program ended in 1943, due to the fact that the conditions that brought the program into being, which were unmarketable food surpluses and widespread unemployment, no longer existed. The eighteen years between the first food system program and the inception of the next evolution of federal food assistance were filled with studies, reports and legislative proposals, and, in 1961, the actual Food Stamp Program was started. An Executive Order from President John F. Kennedy led to the creation of the Food Stamp Act of 1964 (FNS, n.d.). Due to the leverage of President Lyndon B. Johnson, the permanently established Food Stamp Program began and shifted food assistance under the control of Congress (Holland & Thompson, 2015, p.69). In 2014, President Obama signed the Agricultural Act of 2014 also known as the 2014 Farm Bill into law. In the summer of 2013, the House of Representatives split the bill into two separate bills, with one bill for farm programs and the other for nutrition. In early 2014, the Senate passed a Farm Bill re-combining the two bills. Today, federal food assistance programs continue to be funded through the Title IV Nutrition program in the federal Farm Bill, which is an omnibus bill reauthorized every five years by Congress (Congressional Research Service, 2023).

One program funded through the Title IV Nutrition program of the Farm Bill is Double Up Food Bucks (DUFB). The DUFB program launched in 2009 in Detroit, Michigan and is accepted at more than 150 farmers markets and 80 grocery stores throughout Michigan (Cohen et. al., 2018 p. 182). DUFB provides a one-to-one match of SNAP funds at participating markets or up to twenty dollars per visit. This match is redeemable for produce grown in Michigan. Through the Fair Food Network, expansion of the program went from farmers markets to grocery stores. In 2012, the Fair Food Network, received a special waiver from the United States Department of Agriculture, the first of its kind in the United States to bring their project into three grocery stores in Detroit (USDA, 2023). The trial period ran for three months and has been implemented in twenty-eight states. This program was established to incentivize purchases of fresh produce at farmers markets and grocery stores on produce that is grown in Michigan. It is a non-profit governmental and corporate effort to improve the dietary intake of the low-income population (Atoloye et. al., 2021, p.1). Programs that offer price incentives, vouchers or coupons at the point of sale offer opportunities to increase access, purchases, and the consumption of fresh fruits and vegetables. However, there are barriers to the use of DUFB. According to Garner et. al. (2020), some participants felt ill-informed about the program due to lack of market-level marketing. It was also unclear how the program worked and how to use it. Parking at or near the market was difficult, others lacked transportation all together, while others felt the location was inconvenient.

## **2.2 Farmers Markets and Food Security**

Through a review of the literature, a few important areas of food assistance integration were identified. When a farmers market participates in food assistance programs, it opens the door to food access for those who receive SNAP and DUFB benefits. By having these programs implemented, it allows those to participate in their community while purchasing food that is fresh and good. In California, the nation's largest producer of fruits and vegetables, only fourteen percent of markets were located in low-income neighborhoods and only twenty-two percent accept EBT (Jones & Bhatia, 2011, p. 781). In San Francisco, the Department of Public Health

(SFDPH) has led an urban food policy and planning since 2002, which includes several structural interventions to advance the integration of the priorities of health, equity and resource conservation. The SFDPH has worked in conjunction with the San Francisco Food Systems to conduct in-depth interviews with city employees who are responsible for food assistance programs, farmers market operators and those of low-income communities. While San Francisco is far from a rural area, it is an interest example to study for this project because they face similar challenges to rural populations; the lack of acceptance of EBT at farmers markets was a huge barrier to farmers market participation by low-income residents who are eligible for food assistance programs (Jones & Bhatia, 2011, p. 781). In 2004, thanks to funding from a private source, SFDPH began to directly provide technical assistance to market operators so that EBT could be accepted. The program was promoted by mailing brochures to all SNAP recipients and distributed brochures and posters throughout the area. With the implementation of this program, all 20 farmers markets today in San Francisco must accept all forms of federal nutrition benefits (Jones & Bhatia, 2011, p. 782). Through collaborative governance efforts, it is a requirement of all twenty farmers markets in the San Francisco area to accept all forms of federal nutrition benefits. This example, though from an urban market, provides insight into how food assistance programs might be implemented in all farmers markets in the western Upper Peninsula.

### ***Rural Markets***

In urban areas, farmers markets provide linkages between city residents and rural agricultural communities (Young & Karpyn, 2011, p. 208). Urban areas, like rural areas, also struggle with food that is good, green and fresh due to geographic constraints. Physical access is also difficult in terms of transportation and location, as most farmers markets are situated in affluent, white areas, which makes purchases difficult if not impossible to those of lower socioeconomic status (Farmer et. al., 2019, p. 155). A study of rural food access in an area with high food insecurity in Mississippi found that locating food can be challenging as the only place to purchase food may be a convenience store (Hossfeld & Mendez 2018, p. S7). The federal



government through the USDA acknowledged that the role of local foods systems was to enhance food access and assigned funding for this specific purpose in the Farm Bill through programs like Farmers Market Promotion Program, Local Food Marketing Promotion Program, Local Food Marketing Promotion Program, Community Food Projects, and Federal-State Marketing Improvement Program (Hossfeld & Mendez, 2018. p. S11). Due to the nature of the problem of poverty, food insecurity, and unsustainability of the current food system in Mississippi, communities have come together to address societal-level issues. In order for this to happen, community members have to understand the challenges and possibilities of expanding local food systems to provide health food options to low-income populations (Hossfeld & Mendez, 2018, p. S11). Food is more than food. It is about production and consumption but also means to build communities and develop capacity for economic growth.

### ***Farmers Market Reforms and Policy-Driven Solutions***

Another example of the importance of food systems organizing through farmers markets to address food insecurity is The Food Trust. The Food Trust is a non-profit organization located in Philadelphia, Pennsylvania. It has established and currently has thirty plus regional farmers markets, with the first beginning in 1992. It was started to help those ensure access to fresh local foods for everyone. The network of farmers markets helps to sustain regional farms and serves more than 125,000 customers in the Philadelphia region (Young et. al., 2011, p. 209). Seventy-five percent of the market operated by the Food Trust are located in low-income areas and all accept SNAP benefits through wireless terminals that have the ability to process Electronic Benefit Transfer (EBT) and can be set up to accept debit and credit card transactions. This area also has two programs, one is known as the Women, Infant and Children's Farmers Market Nutrition Program (WIC FMNP) and the Senior Farmers Market Nutrition Program (SFMNP). Both of these programs provide checks to the farmers markets so those with benefits are able to purchase fresh, locally grown fruits and vegetables from farmers markets, authorized farmers or roadside stands. These programs provide twenty dollars per recipient per year,

which is low, however in the financial year 2010, the federal FMNP provided \$22 in WIX FMNP and \$22.5 million in SFMNP to states. This example is important as all of the markets within the trust are in low-income areas. While the study focuses more on obesity, it still focuses on getting fresh food into the hands of those who are low income.

### ***The Double Up Food Bucks Program and Farmers Markets***

A recent Michigan study has identified the importance of markets for communities with a high number of low-income residents because markets can enhance healthy foods, making purchases easier to those who may receive government assistance. (Taylor et. al., 2022, p. 899). Farmers markets have been known to enhance food accessibility and consumption of healthy foods in areas that are low-income and is particularly true in communities that lack stores that sell healthy foods (Taylor et.al., 2022, p. 899). Farmers markets can serve those that are low income and reduce food insecurity by participating in government subsidized programs such as SNAP and WIC. Double Up Food Bucks enhances this experience.

Participation in DUFB is positively received in the states that participate in it. While the program matches dollar for dollar in the state of Michigan up to twenty dollars, the state of Utah matches dollar to dollar up to ten dollars. This may also improve or be positively associated with fresh produce purchases, total fruit and vegetable intake, the variety consumed, dietary quality and food security status, (Garner et. al., 2020, p. 705). Participation in such programming improves or is positively associated with the purchase, variety and consumption of fresh produce, contributing to overall dietary quality and food security status, however in order to have long-term impact, participants must want to and be able to access and use such programs (Garner et. a., 2020, p. 706). Garner et al. (2020) state that there is program satisfaction with the DUFB programs within the farmers markets. The participants and vendors at the market were also extremely satisfied. Participants like talking to the vendors and gaining an understanding of what different products are. There was also satisfaction with the quality of produce. While some market patrons report satisfaction in the quality of produce, most low-income residents who receive

food assistance may not purchase from farmers markets, despite the efforts to increase the number of low-income participants. (Taylor et.al., 2021, p. 901).

## **2.3 Collaborative Governance**

Collaboration is a process by which a group of diverse stakeholders who see different aspects of a situation constructively explore their differences (Cheng, 2006). While doing this, they seek ways to improve the situation that go beyond their limited visions of what is possible (Cheng 2006). These stakeholders could include government, business, nonprofits and community-at-large (Ambrose, et. al., 2022). Stakeholders first need define, understand, and manage conflicting points of view (Cheng 2006). Through collaboration, everyone works together to advance the interests of all parties towards a common objective.

Lu and Carter's (2022) study of emergent collaborative governance in Western Upper Peninsula's food system found that rural local governments in the region may lack sufficient funding and capacity to satisfy the growing needs of local community members regarding food access. For local food systems to progress, collaborative governance may take place (Lu & Carter, 2022). The collaborative governance arrangement brings a variety of stakeholders together, such as the Western Upper Peninsula Planning and Development Region (WUPPDR), the Portage Health Foundation, local farmers and food systems advocates (Lu & Carter, 2022). These stakeholders work to make the markets better with the help from the community members who participate in the market.

Collaborative governance is a popular approach in the delivery of goods and services and can be cost-effective by pooling non-governmental resources and decreasing public service delivery costs and is already taking place in the Western Upper Peninsula's food system development. (Lu & Carter, 2022). I apply Lu and Carter's (2022) findings to understand better how collaborative governance might be supporting the implementation of food assistance programs at the farmers markets in the Houghton County area of the Western Upper Peninsula. For example, during the COVID-19 pandemic, the Portage Health Foundation granted \$530,000 to local food-related organizations to further their work, such as funding the farmers markets,

facilitating a cash-free electronic token system to reduce the workload and minimize the virus spread, and providing free meals to local students (Lu & Carter, 2022, p. 13). Civic leadership is also taking place in leveraging existing networks and resources to benefit regional infrastructure. This includes a survey of farmers market managers and assistance in manager training in using the SNAP and DUFEB programs. (Lu & Carter, 2022, p. 14). In the Western Upper Peninsula, collaborative governance is happening at the intersection of communities' demands for better services and the government's lack of capacity or interest in providing support for local food systems (Lu & Carter, 2022, p. 14).

### 3 Project Area

The data collection for this project happened at three farmers markets in Houghton County, Michigan. Houghton County is located in the rural Keweenaw Peninsula, in the western Upper Peninsula of Michigan. At the time of data collection, only one market accepted both SNAP and DUFEB and that was the Calumet market. The Hancock market had just begun to accept SNAP and was looking to implement DUFEB in the future. Houghton did not participate in SNAP at the time but anticipated that they would probably have to start.

The farmers markets in the area of study are all a little different. While they all have some of the same vendors, they all have different market managers. The city of Houghton farmers market takes place on Tuesdays from 4pm to 7pm. The market is located in downtown Houghton, on the newly constructed pier that is located in between the Portage Lake District Library and the Lakeshore Center. Approximately fifteen to twenty vendors participate on a regular basis. Items included fresh produce, some fresh baked bread, and some jewelry. As you travel through downtown Houghton and across the Portage Lake Lift Bridge, you enter the City of Hancock. The Hancock market happens on Thursdays from 3pm to 6pm and is located right in the heart of downtown Hancock. At one time, there was a Tori, which is Finnish for market, and it had only two vendors. There was also a separate farmers market. They ran on different days, the Tori was on Saturday mornings and the farmers market was on Thursday's at Porvoo Park, which is located on the City of Hancock waterfront. In 2021, the year that I started my data collection, city officials decided that the Tori and the farmers market would be combined into one market instead of two smaller markets. Approximately fifteen to seventeen vendors participate on a weekly basis and have a combination of produce, bakery along and some arts and crafts. If you continue through downtown Hancock, you will hit US 41, which will lead north to Calumet. The Calumet market happens on Saturday mornings and is located on Fifth Street green, and the Calumet Theatre Park located on Sixth Street, which is downtown. This market takes place on Saturdays from 10am to 2pm, has approximately twenty vendors weekly and has a variety of produce, baked goods,

locally grown beef, fish, and some jewelry. Many vendors sold at more than one of the markets. Combined, the three markets provided me with good comparative cases as there were in different geographic locations, organized differently, and accepted varying levels of food assistance.

## **4 Methodology**

In this section, I will discuss the various data collection methods that I used throughout the data collection process. I will also discuss how those that were interviewed were recruited, who was interviewed, and the IRB approval process. The IRB process was delayed during the early summer of 2021 due to the pandemic and university staffing delays, which caused the data collection process to begin later than anticipated. The IRB determined the project was exempt from human subjects' review. All data was stored in a secure MTU Google drive only accessible by myself and my advisor, Angie Carter, PhD.

### **4.1 Data Collection**

Data was obtained by using a multi- method approach for a multi-site case study. I used participant observation, semi-structured interviews and impromptu market interviews. According to Yin (2009), multiple cases in comparison to a single case study can broaden the coverage of your case study. In this study of area farmers markets, there were three case study sites: Calumet, Hancock and Houghton. I began my data collection in the summer of 2021. I chose these sites because they were all in different stages of food assistance program acceptance, yet many of the same vendors and market managers were involved in multiple markets. At the time of my study, Calumet had accepted food assistance programs for some time; Hancock was beginning SNAP benefits summer 2021 but was not eligible for DUFB yet; Houghton did not accept SNAP or DUFB yet.

Data collection began in July 2021 and concluded in December 2021. I conducted participant observations at the three markets in the area of study, impromptu market interviews with market patrons and semi-structured interviews with farmers, civic leaders, market managers, and market volunteers. In total, I completed thirteen interviews, approximately sixty-five people interviewed at the markets, and fifty-five hours of participant observation.

### **4.1.1 Semi-structured Qualitative Interviews**

To interview the vendors, market managers, and civic leaders, I conducted semi-structured qualitative interviews with a variety of actors (see Table 1). Interviews are appropriate when little is already known about the subject (Gill et al., 2008, p. 294). I worked with my advisor to create interview questions after a review of the literature. This gave an overview of what has been done in other communities to make markets more accessible, which in turn helped me inform on the questions that I asked. The interview questions were also reviewed by a market manager and volunteer to ensure that the questions were asking questions that would be of use to the future development of the farmers markets.

I identified potential interviewees by the role that they play in local government, farmers markets and those that support educational and training programs for the government subsidized programs such as SNAP and DUFEB. The interviews consisted of a semi-structured interview guide tailored for each interview group (Appendix A, B, and C). Each interview group was asked a set of different questions; however, the interview guide allowed the interviewee an opportunity to expand and explain how the food system affects their life, their knowledge of farming, how the markets may have assisted them financially and how they feel about government subsidized programs such as SNAP and DUFEB. However, interviewees were asked about their familiarity with SNAP and DUFEB, as well as how they feel about the implementation of these at the farmers markets. This helped define the area being studied, but also allowed the person being interviewed to go in a different direction to pursue knowledge that may have not been thought about before or in more detail (Gill et al., 2008, p. 294).

Interviews were conducted with farmers market coordinators, farmers, local food systems partners, city/village managers, and the Keweenaw Co-op manager. Interviews with farmers market coordinators gave information as to how SNAP benefits work at the farmers markets and if the necessary equipment is provided to accept SNAP benefits. Interviews with farmers were beneficial as they gave information regarding the expansion of benefits at the markets, if the acceptance of



SNAP would be beneficial to them or would it be more work, and to understand their thoughts and views on the program if an expansion were to happen. Since the Keweenaw Co-op participates in the Double Up Food Bucks program, I interviewed the manager to learn how the program works from a retail standpoint and finally, interviews with other local farmers market support partners regarding how SNAP or the Double Up Food Bucks program would work within the farmers market and how one would apply to accept these benefits.

I also interviewed staff of the Portage Health Foundation (PHF), as they have been sponsoring such initiatives as the DUFEB program in the area along with other food initiatives to help make food access easier. Through their sponsorship, they were able to help implement a token system at the farmers market in Calumet and Hancock to allow those with SNAP to use their benefits with any vendor. Additionally, they supported other local food education efforts, such as partnering with the Portage Lake District Library to implement their Biblio Bistro series, a digital cooking program that shows viewers how to use fresh fruit and vegetables in different dishes, providing printed materials to the farmers markets in the study area along with those located in Baraga and Ontonagon Counties and grant money which has assisted the markets in staying safe and open, during the COVID-19 pandemic (Portage Health Foundation, 2020).

Recruiting vendors to interview was pretty simple as I spent a lot of time at the markets in which relationships were made. The recruitment of the farmers was the easiest as they were excited to talk about their farms, how they got started, the crops they grow and what accepting SNAP means to them. Recruitment of the city and village managers was a little more difficult as they were a little more apprehensive to give an interview as they really did not feel that they were the best to be interviewed. This was due to the fact that they are not always at the market, not completely sure how the market worked, and were there on more of a logistical level. The market managers were happy to be interviewed to give their insight of the markets, how SNAP and DUFEB programs are assisting those that participate in their markets and the process of implementation of the benefits. In total, thirteen

interviews were conducted. Each person that was interviewed signed a consent form. The consent form explained who I was and the research that was being conducted. It also explained that the information that was being collected was confidential and that the only ones that would have access to it were myself and my advisor, Angie Carter, PhD. If at any point the interviewee felt uncomfortable, they were allowed to stop the interview, no questions asked. Some interviews happened over zoom due to people feeling more comfortable due to the pandemic, so those consent forms were emailed to each participant for signature and were received prior to the interview.

**Table 1. Interviews Conducted**

Group Interviewed	Number	Reason of Importance
City/Village Managers	3	What was their viewpoint on implementation of food assistance programs at the market? How do the markets connect to other work within the city?
Farmers	4	How would/does implementation of food assistance programs at the market influence their business?
Market Manager, Community Members, Volunteers	6	What does implementation of these programs look like in practice at the markets? How does the implementation of these programs influence the markets?
Total Number of Interviews	13	

#### **4.1.2 Participant Observation**

Participant observation was also used to see how patrons of farmers markets interact with the vendors and what their purchase habits are. Participant observation

was helpful as it assists in understanding human existence (Jorgensen, 1989, p.12). It was interesting to see if the same people participated every week or just once in a while, especially when certain crops are more in season, such as tomatoes, potatoes or lettuce. Participant observation focuses on the meanings of human existence as seen from the standpoint of insiders (Jorgensen, 1989, p. 12). This was important in my data collection to understand the processes that people go through. Being on the inside made it more beneficial for the type of data that is being collected and it helped to make some sense of how people go about their daily lives. It also helped as I was able to observe their purchasing habits, if they attended the market alone or with others and how they interacted with the vendors. Between the three markets, Calumet, Hancock and Houghton, I spent a total of fifty-eight hours observing. Through these observations, it was interesting to see the purchasing habits of people or if they were using the market as more of a social network. Even on the one day that it poured rain and was fifty-three degrees, people attended the market to make purchases. Rain or shine, people are there. Before attending the market, I asked for permission from the market managers so that it didn't seem awkward. At the Calumet market, I would normally sit in a different spot each week to get the full effect of the market and its patrons. At the Hancock market I would either sit on the wall at the entrance of the market or in the back for the same reason. At the Houghton market, I would also vary where I was sitting. Sometimes I would walk around. People did ask what I was doing, and I explained that I was collecting data for my thesis. When they asked what I was studying and it was explained to them, they were genuinely interested and asked how they could help. At one point, someone thought I was a local artist doing sketches. Things that I watched or looked for were the number of vendors a patron visited, and if they appeared to be alone or with someone or a group of people. The notes that were taken were handwritten in a notebook only used by me. Each market visit was written up in a document that is kept in a secure Michigan Tech Google drive that only my advisor and I have access to. Notes on who was observed, if they were with family, friends or appeared to be alone, how many vendors they visited were kept on a form located in Appendix E.

### **4.1.3 Market Interviews**

I also conducted oral market surveys at the three markets. These were with randomly selected people and asked questions about their transportation to the markets, if they attended the market with others, and ideas for how to improve the markets. I conducted a total of eighty-five oral market surveys in total among the three markets in the study area: thirty at the Calumet market, twenty-five at the Hancock market, and thirty at the Houghton market. Oral market surveys were conducted over the entire data collection process and ten people were interviewed at a time. Individuals were randomly selected from those at the market and approached in a polite manner. I introduced myself and explained who I was, why the research was being conducted and then asked if I could ask a few questions pertaining to the market. In all the oral market surveys I did, only one person turned me down stating that they didn't have time but proceeded to answer all my questions without being prompted. Approximately five to ten minutes were spent with each individual. This data is important as it will help current market managers understand the needs of the people who visit the markets.

### **4.1.4 Stakeholder Analysis**

According to Brugha and Varvasovszky (2000), stakeholder analysis as a tool has become increasingly popular in the management, development and health policy fields. Stakeholder analysis has been used within health care management in the United States. It has evolved into a systemic approach, clearly identifying steps and applications for scanning the current and future organizational environment (Brugha & Varvasovszky, 2000, p. 241). In my analysis, I applied stakeholder analysis to gain knowledge from vendors, market managers and city officials, on how these programs could be made more available at the markets in the project area. The purpose of the stakeholder analysis is to evaluate both within and outside the field of scope, groups and individuals to evaluate threats and opportunities for change (Brugha & Varvasovszky, 2000, p. 241). Understanding the position and importance of the different actors is key. In this instance the actors will range from those receiving SNAP benefits, to the farmers, to the market coordinators to local

agencies and private foundations. Through the interviews with the various actors, I was able to identify not only their intentions, behavior, interests, interrelations and the agenda they may have, but also resources that they may bring to the decision-making process, as future expansion of these programs into different markets appears to be the end goal. I also identified the different levels of importance that each stakeholder may hold (Brugha & Varvasovsky, 2000, p. 241). A stakeholder analysis helps not only in the importance of interests, but also to achieve specific goals and assist with building alliances with other organizations or see those that may pose a threat (Brugha & Varvasovsky, 2000, p. 241). While stakeholder analysis is one of many tools used to analyze policy, this one worked the best for the scope of research that I chose to do, because it assisted in identifying possible needs in the local area. The overall goal was to provide information to civic leaders that may help implement changes into the current SNAP benefit program locally, while considering the interest and influence of the stakeholders. These findings could also inform training for businesses and markets to participate in the DUFB program or to train market coordinators how to use SNAP machines. This would make our food system more inclusive.

## **4.2 Data Analysis**

The interviews were recorded, transcribed and coded. The interviews that were conducted were beneficial in obtaining data about SNAP, the DUFB program and how these services have impacted those not only accepting the benefits, such as farmers but those that utilize the benefits to increase their overall health. I used Grounded theory methods to analyze the data (Charmaz 1996). Grounded theory was an appropriate method to use to analyze this data because of the inclusive research design and my focus on an understudied area (Charmaz 1996). By having a process that is iterative and generative, I was able to ask a variety of people, from vendors to participants, market managers to city/village employees questions to build theory in the location and experiences of those involved. Coding is the pivotal link between collecting data and developing an emergent theory to explain the data (Charmaz, 1996, p. 37). Initial coding happened with paper and pencil, and then transcripts were

loaded into NVivo. Once uploaded into NVivo, I continued to code the data. All interview transcripts, notes from participant observations and memos from my data collection were coded. My advisor Angie Carter and I met bi-weekly to discuss the codes that I identified. By studying the emerging codes in the data, paying close attention to the respondent's language, I was able to take an analytical stance towards the work that is being performed to develop emergent theories about the integration of the food assistance programs at the farmers markets.

## **5 Findings and Discussion**

I identified three key findings that will be discussed in this section. While they all intersect, they will be explained individually and then brought together in the conclusion. The first finding is that market acceptance of food assistance programs fosters community connections. The second is the importance of fresh fruits and vegetables, being available to everyone, and all community members having the opportunity to participate in the farmers market. These are two of the things that are motivation to integrate food assistance programs at the farmers markets. The third is the importance of grassroots collaborative governance in helping the Calumet market become what it is today and is informing the evolution of the other markets.

### **5.1 Market Food Acceptance Foster Community Connections**

In this section, I will provide evidence for how the acceptance of food assistance programs at farmers markets provides new methods of engagement for those who receive benefits, inviting them to participate in local food systems and contribute to the local economic development in ways otherwise unavailable to them. I identified that this happens through the following processes: 1) community engagement, 2) sense of community at the market, and 3) food as a connection. Community engagement and enhancement bring people together in a common space, creating a sense of belonging. This assists those that have food assistance to purchase directly from local farmers. With the acceptance of food assistance programs at farmers markets, this allows those community members to participate in contributing in an economic and social way that they may not be able to elsewhere. Together, this will enhance the purchasing power of the consumer and benefit farmers economically.

#### **5.1.1 Community Engagement: Making a space where everyone feels welcome.**

Farmers markets fostered connections by bringing different segments of the community together in a common place. Among the partnerships of private, public and nonprofit sectors, the farmers markets have been created to serve as a

community connection and invite everyone to participate no matter their socioeconomic status. In order for members of the community to engage in the farmers markets, it is important that it is understood what is accepted.

### ***Clear Communication***

In order to create a space where everyone feels welcome, the markets must clearly advertise which food assistance programs were accepted. This ensured that there was no confusion. In addition to clear signage, each market also had a market manager who was visible to customers to answer questions and provide assistance if an EBT, credit or debit transaction needed to take place. With the implementation of the token system at the markets, it became easier for consumers to use their benefits. One farmer vendor interviewed stated that cards were given to all farmer vendors that had all the information regarding which food assistance programs were accepted. For instance, if a customer wished to purchase a certain product, such as produce, they could use SNAP and DUFEB. All the information was right there, which made it easier for people to understand. Market managers distributed “SNAP Accepted” signs provided by the State of Michigan to market vendors to place on their tents. While this information was provided, one market manager stated that more advertising should be done to attract more people, such as younger people, who may receive benefits. Markets also advertised on the radio, through social media, and the markets posted signs located outside the market entrances. However, a public health professional thought the promotion of the existing programs was fine with the signage that was provided, but that more of a marketing approach needed to be taken, whether it was getting the existing signage out to the public or in the form of a public service announcement, “It just needs more exposure. More advertising needs to happen beyond the market so that people are aware it exists.” This would help to advertise to those who may not know about the market, inviting them to participate. But the advertising of the markets is not the only thing in creating a welcoming space.

### ***Accessibility to the Physical Location of the Market***



Accessibility within the market is also important, and not just in regard to food access but in other areas as well. Those with mobility issues may need a place to sit for a moment or may have issues with parking as there are not enough accessible spaces. A market volunteer expressed that inclusivity would include not only acceptance of food assistance programs, but also an online presence and marketplace, personalized shopping for those that could not complete the task themselves, activities for children, and music and cooking demonstrations, which will be discussed a little later. While the Calumet market is within walking distance for some, it is not for everyone. Similarly, transportation and parking are key with the Hancock and Houghton markets. One government official stated that they would like to see a bus route run during their market to a couple of apartment complexes in the local area to bring those with transportation or mobility issues to the market. Another person interviewed expressed that parking around the market is what it is and that sometimes it can be a challenge, but they were impressed that one market participated with their local transit system to transport seniors from a high rise apartment complex in their city, and they wished there was more of that: “If we could get regular bus routes, that would be great.” One market manager stated that she wished there was a way to get transportation for younger people to the market, such as those who attend the local universities and may not have their own car. The examples provided show how important it is for everyone to have access to the market, whether it be transportation to and from, a place to park, or access for those that may have mobility issues.

### **5.1.2 Sense of Community Within the Market**

In this section, I will show how this sense of community is made. Through education, outreach and cooking demonstrations, customers have the ability to connect with vendors as well as other customers and community members. This creates a community environment and allows those who participate in the market to learn something new.

### *5.1.2.1 Farmers Educating Customers*

The farmers markets in Houghton County are a place for community members to gather and participate. The market atmosphere is welcoming and creates a sense of community within the market. Education is important in regard to the products at the market, as some people may not know what to do with a particular item as it may not be seen in the grocery store.

Other educational opportunities also happen at the market. For instance, in my observations at the Calumet market, I noticed that one vendor, Superior Mycology, would feature recipes near their stand on a sandwich board to educate people about different ways to use their mushrooms. I noted in the oral market surveys that people came to the markets with the intention to purchase fresh produce; however, people also shared that they were introduced to foods that they may have never encountered before. In the case of Superior Mycology, most of the mushrooms they sell may not be found in the grocery store. At the Calumet market, a woman, speaking to her friend, stated that she never knew that mushrooms could grow in this area. After stopping and speaking to Superior Mycology, she walked away with a mushroom purchase and a recipe she was planning on making that evening, stating “My husband is going to be so excited when I get home with these.” Another instance of market consumers learning about new types of food products is the patty pan or pancake squash. I observed one of the market vendors at the Calumet explain what they were as a woman exclaimed, “I have never seen anything like this! How do you cook them?” After a little education on how to cook them, the woman purchased some of the squash. The customer came back the next week to purchase more stating that her family loved them. Both of these examples illustrate how vendors took an active role in educating consumers about their product.

Through education and connections, customers come back each week to make purchases, as the product changes throughout the season. Things that may have been available at the beginning of the market season were no longer available towards the middle or the end of the season. In one interview, a farmer stated that some of their repeat customers would be hesitant on a particular item. The farmer would educate them, while forming a bond and trust. The farmer shared that they

love seeing people expand their palate. This was also noted by another farmer who sold edible flowers. People were so pleased with them but were terrified to purchase them. A consumer stated the following to a farmer, “WOW! I haven’t had edible flowers since my grandmother was alive! These bring back so many memories!” While food education is important, community outreach also happened at the market.

#### *5.1.2.2 Community Outreach and Cooking Demonstrations*

Community outreach also happened at the farmers markets. During my time observing the markets, I saw educational collaborations happening at the Hancock market, where they had a COVID-19 immunization clinic sponsored through the Western Upper Peninsula Health Department. Another day the Hancock market had Miss Digg, a program with a mobile trailer that everyone could walk through. Miss Digg is a statewide, one call notification system that allows excavators to report to multiple companies with underground facilities where a dig will be made. At the market, Miss Digg had an Educational Mobile Unit that once stationary opened into a fully operational activity center. Its main purpose was not only to educate but have fun. Another way education happened was through cooking demonstrations in which products from the market were used to make a specific dish while having the recipe on hand to distribute. I observed this at the Houghton market and people loved it. They had the opportunity to watch the demonstration, taste the end product and walk away with the recipe. This also allowed customers to purchase products that were readily available from the vendors at the market. Through funds from the Portage Health Foundation, these demonstrations were able to take place, which also assisted with a healthier lifestyle (Portage Health Foundation, n.d.).

In addition to these events, study participants shared other ideas for future educational opportunities. Community outreach is another form of education that one public health professional would like to see happen. They offered that further public health education could happen at the farmers market through a collaborative effort with the Portage Health Foundation where they have a registered dietician on staff. This individual was interested in doing outreach at the markets. She suggested it would also be good to collaborate with other agencies in the community, such as the

SNAP education providers, the Western Upper Peninsula Health Department, the Copper Country Mental Health Institute, and the Michigan State Extension office, along with some food educators in the community.

### *5.1.2.3 Food as a Connection*

In addition to educating customers at the market about foods that were new to them, farmers also worked to develop longer term relationships with their customers. This was observed at the markets and learned through market interviews. Many market vendors engage with customers on social media accounts, such as Facebook and Instagram, where they may share updates about products, advertise their Community Supported Agriculture (CSA) subscriptions, canning classes, hours or farm stands. One farmer shared that their use of Instagram has helped make connections with consumers as they are able to comment on a post, ask questions or react to a story. This helps keep the connections in place and makes the consumer feel important and valued. Farmers connections with consumers also create a relationship that assists in the expansion of sales due to knowledge of products and the fact that people want to return, creating a larger customer base. In my participant observation at the markets, I noticed that repeat market customers normally bought from the same vendors or group of vendors. This helped increase the amount of money that is spent through specific vendors because they have knowledge of the product and know how to prepare it, creating an economic benefit. Connections also help the vendors learn from things their consumers may participate in.

Vendor education also takes place at the market. Through connections, vendors have learned various things and benefitted from the lessons they have learned from those who patronized their market booths. Another farmer vendor stated that through the connections they have made with customers they are amazed at how much they have been able to learn. The connections are important because as one farmer stated, “People can teach you things you’ve never even thought of. We learned how to keep bees and about all different kinds of herbs from one consumer.” The same farmer stated how important the positive relationships and friendships are as the market is community based. Another farmer vendor stated that the people they

have met have such an appreciation for what the farmer has to offer. These connections have forced one farmer to speak to people she didn't know as she is not a socially outward person: "The people that I have met have enriched my life beyond the point that I can't even describe. Those that I have connected with have actually changed me. It's crazy." Through the connections food has created, vendors and consumers alike have gained knowledge on different things. This has happened due to consumers wanting to purchase produce from them and questions being raised. Without the exchange to purchase the produce, there may not be the connection.

#### *5.1.2.4 Community Enhancement: Wider Market Impacts Within Community*

The farmers markets in the local area give the opportunity for people to participate in their community while supporting local agriculture. One market manager stated that having food assistance programs just enables a lot more people to come and participate just like everyone else. Food assistance programs create possibilities for those who receive the benefits to engage in supporting local agriculture in a way they cannot in other places. There are a lot of people in our community that have a need for food and they're able to use their benefits at the farmers market. While the farmers markets provide food, education and connections with the members of the community, it also has wider impacts within the community. It allows people to see what the city or village has to offer outside of the market and helps to show what the people in their community can provide. A city official stated that their downtown area used to have a grocery store. That is no longer there, so the farmers market brings people downtown. David Geisler<sup>2</sup>, acting village manager for the Village of Calumet, stated that the farmers market in Calumet attracts everybody. It brings in those from low to moderate income and people from the lakefront that live in half a million-dollar homes. Another city official stated that the farmers market adds a lot of value to the residents. It brings different items to the table that individuals may not be exposed to. They also feel that it is an activity that the family can participate in together. One market manager stated

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<sup>2</sup> Some participants granted permission to use their names in the sharing of the research. If not named, interviewees requested to be noted only by their position in relation to the research.

that by having a farmers market in the community, it is introducing people to local food while showing the benefits of eating and supporting local. It allows consumers to understand what micro agriculture looks like in the community and to gain knowledge. With the acceptance of food assistance programs, this could only enhance the experience.

Food assistance programs being implemented at the local farmers markets would be a benefit for those who are recipients. However, this is just one step in making markets more inclusive to those of lower socio-economic status. A city official shared that the acceptance of food assistance programs such as SNAP and DUFB could only be better for the community as getting fresh fruits and vegetables into anybody's hands can only help. They also felt that it would help the vendors benefit economically because people would have more money to spend at the markets and that it would be a win-win situation. Consumers would be able to purchase more produce and vendors would make more money.

In speaking with market patrons through the oral market interviews, 62 out of 85 interviewed stated the reason they come to the market is to purchase locally grown foods and to support the local area. However, one person stood out stating that if they could change one thing, it would be for the Houghton market to have a card reader so that EBT could be accepted. With the implementation of a card reader, those with SNAP benefits would be able to use their benefit to get tokens to purchase from local vendors without the stigma of people knowing a government supported benefit is being used.

### **5.1.3 How Markets Economically Benefit Surrounding Communities**

The location of all three markets helps to integrate them within the downtown areas of the cities and facilitates economic benefits to the downtown regions. Interviewees from all three markets also identified the importance that farmers markets had to the downtown community. The Houghton market is located on the pier. The pier, newly constructed, is located on the waterfront, in between the Portage Lake District Library and the Lakeshore Center. The pier was constructed so

that the farmers market could be moved from its old location, which was a parking lot located just above the walking path. The walking path is a non-motorized trail that is used in the summer for walking, biking, running and part of it is used in the winter for snowmobiling. The walking path runs from the Ray Kestner waterfront park and can be traveled to Chassell, Michigan which is a small town located eight miles to the east. While visiting the market, customers may decide to explore the surrounding area or make their way to one of the city parks. Interviewees noted that people who came downtown for the market might also stay a while and visit other businesses. One city official told me that while farmers market customers may not purchase a t-shirt from a local gift store, they may purchase a cup of coffee, an ice cream cone or stay for dinner when they hadn't planned on it. Dave Geisler, the acting village manager for the Village of Calumet felt the same way in the fact that it brings people to town. Nothing makes him happier than seeing Fifth Street lined with cars. He hopes that when people come to the market, they take a walk down the street and notice what is there. Even if farmers market customers may not purchase from a specific downtown business, they would at least notice that it is there and wonder about the businesses and different storefronts. One city official noted that if more of the downtown businesses were vendors at the market, it would help with the economic aspect of the market and the downtown district as well. They also stated that they have a number of restaurants and local businesses that people may explore after visiting the market. The Calumet market manager shared that Buckos Party Store has had a Saturday sales spike from foot traffic from the farmers market and Frozen Farms Company, which is a vendor now has a store front across the street from the market. This shows how the market helps as a small business incubator. They also stated that you see people walking around with coffee which could have come from either Keweenaw Coffee Works or Cafe Rosetta. Locating the markets in the downtown area of the city or village brings more people to the area that may not have normally frequented the area before. This has economically benefited the businesses in that area.

## **5.2 Motivations for Food Assistance Program**

## **Integration**

Providing a public service to the local community motivates civic leaders to support the markets. Additionally, vendors shared that they were motivated to remove the stigma of food assistance and to provide improved food access to fresh and locally produced food, while market patrons that were interviewed went to the market to purchase fresh produce and support local. Together, these things show how the markets can be a facilitator of food security, however food assistance acceptance is just one way to get those of lower socio-economic status to the markets. It is one small piece of a larger puzzle that was studied. The markets have gone above and beyond to restructure themselves to administer and take on this extra work of these programs.

### **5.2.1 A Public Service to Communities**

Participants in the study described the implementation of food assistance programs such as SNAP and DUFEB as a public service to the community. One local government leader shared that the surrounding communities are fairly poor—with a median family income of \$24,000, which is far below the national average. They also emphasized that the communities have many elderly people who are on a fixed income, as well as single parent families. With the implementation of these programs, people can attend the markets rather than having to go to Family Dollar or having to purchase food that is high in sodium and heavily processed. As the city official explained, “It’s clearly needed in this area. Why would people be opposed to something that is needed?” The farmers markets in Houghton County brings people from all walks of life together in a common space at a common time. While observing at the markets I saw women with children, families, people with dogs, individuals, those that were first time market goers and those that attended every week, whether they needed something or not. One woman expressed her complete devotion to the Calumet market, stating that she came from Hancock every week. Her reasoning was to see her friends, the expansive variety of products and just the people in general. I also observed those with SNAP and DUFEB benefits at the Calumet market and SNAP participants at the Hancock market. This is important as



the markets are more accessible than if they were located on the outskirts, as transportation can be an issue. The people that I observed at the markets were there to purchase food and support local agriculture.

### **5.2.2 Working to Remove the Stigma of Government Assisted Programs**

At the time of this study, only Calumet and Hancock markets used a token system to process SNAP and DUFEB programs. This allows those that have benefits to use their Electronic Benefits Card (EBT) to get tokens to purchase from the vendors, rather than using a voucher system. This helps to remove the stigma of poverty that is associated with government supported programs. This is done by all market vendors accepting tokens or cash. Tokens can be purchased using a credit or debit card from the market booth. One of the farmers shared that they wished they had these programs when they were growing up, as they were from a food insecure home. They couldn't imagine how much healthier they would be today. Similarly, a market manager stated that implementing these programs at their market would be a huge benefit for the consumers, allowing them to have access to incredibly locally grown food and would allow them to support their local community. Another farmer stated that they love the programs. They are able to get their produce out to more people and more people have access to it. They feel that it just makes so much sense for the markets to accept food assistance. In speaking with farmers, they don't want people to be embarrassed about using their benefits. One stated that the government is giving the participants money towards the freshest produce, and they should use it and not be embarrassed by it. A public health professional stated that the utilization of SNAP and DUFEB is exciting. While the majority of people are for the implementation of the programs, the logistics of implementation can seem a little daunting and is not supported by everyone.

While interviewees supported the implementation of these programs, some noted that the logistics of their implementation can be challenging and that cities may lack capacity to properly train and manage the integration of these programs at the market. Market managers don't always stay in the position, which makes

maintaining the programs on the backend costly as a different person may need to be trained each year. Rural cities/villages may not have the capacity to implement the programs due to the lack of employees and needing someone on the backend to ensure that the vendors are properly reimbursed, the tokens are counted correctly, and that everything is reported properly. The Calumet market is at an advantage on this front because they have the support of Main Street Calumet. Main Street Calumet is an economic development agency located in Calumet, Michigan and was founded in 2003 as a result of community interest in the historic preservation which was sparked by the Keweenaw National Historical Park (Mainstreet Calumet, n.d.). Mainstreet Calumet is a 501(c)(3) non-profit organization with a mission to promote collaboration among government, organizations, businesses, and individuals to create a vibrant community (Mainstreet Calumet, n.d.). They work to promote the downtown or commercial district as the center of the community, which creates a positive image and show cases the community's unique characteristics (Mainstreet Calumet, n.d.). Through the assistance of Mainstreet Calumet, the Calumet farmers market had increased capacity in implementing the food assistance that it accepts as they had one person that handled all of the backend work in regard to reporting. The other markets at the time of the data collection did not have the support of an entity like Mainstreet Calumet.

### **5.2.3 Increased Accessibility to Healthy Foods**

During the COVID-19 pandemic, federal food assistance programs were expanded through Section 1101 of the Families First Coronavirus Response Act (FFCRA) as amended by the Continuing Appropriations Act of 2022, and Others Extension Act (CR) for any household with students that may have received free or reduced school meals. Through this, the Pandemic Electronic Benefits Transfer or P-EBT was administered to those students who qualified. This was administered at the state level through the Michigan Department of Health and Human Services (MDHHS) and assisted those who may be missing out on school meals. This opened the door to a lot of different people that normally would not have patronized the

market and allowed me to observe how these new market customers navigated the food assistance integration at the market.

DUFB has been an incredible resource for those in the community as it has increased the purchasing power of the local community while helping local vendors. Through participant observation at one of the market days in Calumet, a woman carrying her infant grandson stopped at the market booth to ask questions about coupons her daughter-in-law had received. They were WIC coupons, and they were five dollars apiece. She seemed to have quite the stack of them. Calumet does participate in WIC Project Fresh, and these coupons could be used at the market. The woman was very excited and went shopping. She was a first-time market patron and was thrilled that she had learned what these coupons were for. She stated, “Now that I know what these can be used on, I will definitely be back.” The vendors have been very happy to see the expansion of food assistance programs at the farmers markets as they have seen an increase in use in the community. It was also shared that they are repeat customers returning each week and are building relationships with SNAP users. The farmers feel rewarded to know that their food is going to help those of lower socioeconomic status by helping to improve their food access. A government leader stated that the implementation of DUFB would make food access that much easier. People love two for one. A market volunteer stated that there is an increase in dollars at the markets by using SNAP and DUFB. It was stated that hundreds of dollars in produce in our local refrigerators and that fresh food is seen as a class issue, so the implementation of these programs at all the markets would be huge. While the data shows the importance of implementation, there are still some logistical issues and pushback that can become present with the implementation of these programs.

#### **5.2.4 Implementation Logistics of Food Assistance Programs**

Study participants emphasized the importance of the implementation of food assistance programs throughout the markets in Houghton County, however the implementation of these programs presented some logistical challenges due to a lack of capacity. One city official pointed to concerns about logistics of program

integration being an issue in their city's market. They worried about the accounting aspect of the program as the city is a small entity with only five employees, all of whom already wore multiple hats. The city official would like to keep things simple and not have to spend a lot of money, nor do they want to charge their vendors that participate in the market. This city official acknowledged that food assistance program integration at the markets will eventually be something the city has to adopt but concerns about capacity were expressed. Another city official stated that while their city's farmers market accepts SNAP, all the programs cause backlog and paperwork, but as a city government they feel that it is their duty to help the residents and make the market stronger. A farmer stated that while the programs are great, the accounting end of it can be a headache because mistakes are made, tokens are miscounted, and there can be confusion in the tokens, as there are different colored tokens. EBT tokens were one color, credit and debit tokens another color. She also stated that some of the vendors went to the vendor training offered to all vendors in spring 2021 and paid for by the Portage Health Foundation.<sup>3</sup> While accidents happen, vendors accepted tokens that they shouldn't have, and some accepted the wrong-colored tokens. The farmer suggested that perhaps there is a better way to go about managing the tokens, as logistics can be difficult. A public health professional and market advocate shared that the actual implementation of the token system is not that challenging but requires a fair amount of capacity in terms of staffing. The Portage Health Foundation has provided scholarship opportunities for market managers to go through the Michigan Farmers Market Association (MiFMA) training programs, which provides market managers more training so that they feel comfortable managing the markets and the food access programs. At the time of the data collection only one market manager had participated in the training which had really helped the growth of the market in that community. This suggests that through the contributions of community partners, farmers markets can be made better to

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<sup>3</sup> In the spring of 2021, The Portage Health Foundation dispersed funds in the amount of \$33,000 to the local markets in the area including but not limited to Calumet, Hancock and Houghton (PHF, n.d.).

assist the community and its members. Through collaborative governance, the administrative burden might be better shared if all stakeholders work together, allowing change to happen.

### **5.3 Grass Root Collaborative Governance and The Calumet Market**

In this section, I will discuss how the Calumet market was started using a grassroots collaborative governance approach through the work of farmers, Main Street Calumet and the community, and how collaborative governance continues to be used today to support the integration of the food assistance programs at the market. All the stakeholders came together to re-evaluate the market structure and come up with processes. For instance, a farmer would not be able to make changes to a market process without discussing it with the market manager and city/village official. A city official may have the ability to make the decision to implement food assistance programs into the farmers market in their city. Because the Calumet farmers market is a grassroot effort, they are able to determine what the public needs and face it head on. This is also important that they had Mainstreet Calumet as the intermediary with the village. It was not on their own willpower that the programs were implemented. The work that has been conducted by the Calumet market stakeholders will be explained through three examples: 1) collaborative governance, 2) farmer-led structure, and 3) economic impact. Calumet is being used in the example because at the time of the data collection they were the only market that accepted a wide variety of food assistance programs and had an extended season market. Their success in implementing these changes at their market provides a template for how other local markets might evolve to better support the acceptance of food assistance programs and improve accessibility for community members to fresh, healthy foods at the market. Through collaborative governance, lasting solutions to a public problem were implemented in the Calumet market.

### **5.3.1 What Role Does Collaborative Governance Play In The Calumet Market?**

Collaborative governance involves a group of stakeholders such as the government, along with the community and private sector coming together to create lasting solutions to a public problem (Purdy, 2012, p. 409). The Calumet farmers market manager had a vision of what the market could be, even if it was only a couple of vendors that set up tables on the corner of Fifth Street and Portland. Over time, the consistency and commitment of those involved, have made the market what it is today. David Geisler, acting village manager for the Village of Calumet, stated that the market is a destination. It's something that everyone can participate in on Saturday morning. He loves that the community is being talked about in a positive way. While the community may be talked about in a positive way, it's food that has helped create this.

The Calumet market is a food-invested market. The structure is set up, so they do not accept a lot of arts and crafts booths. Their main focus is food, which people like. Oral market survey participants at the Calumet market shared that they attended the market to purchase produce; one individual stated that they came to purchase their vegetables for the entire week. When I asked how the market could be made better, they replied that they would like to see the market maintain the variety of vendor booths it has. In speaking with a couple, I asked why they attended the market on that particular day. The woman stated that she and her husband enjoyed the freshness of the produce and liked to support the local agriculture. When asked what they purchased, she stated that they purchased a little bit of everything from beef to produce, bakery to books. The woman mentioned to her husband how she had eighty dollars in her pocket and that she had ten dollars left. Her husband stated that he had seventy dollars in his pocket and has ten dollars left, but now they don't have to go to the grocery store, and they supported local. David Geisler, acting village manager, stated that the Calumet market is vetted intentionally so that they don't have a lot of arts and crafts. He states that while those items are nice, people need food. Having the right people in place also helps.

The Calumet market is the way it is today thanks to the people they have in place. As one farmer stated, the market manager, who is a member of Main Street Calumet, is a force. She just gets it done and does it for the people. While one farmer stated that they kind of started the market, she stated that if it wasn't for the market manager working the backend and getting them participating in the food assistance programs, the market would look different today. She was glad that she took the reins because it was too hard for her to be a vendor and successfully get them enrolled in the programs they accept. Main Street Calumet has a membership that cares about the future of the community. Through funding from Main Street Calumet, an intern was hired to manage the market during the summer of my data collection. Having the right people in place can make a difference, as helps to decrease the administrative burdens of implementing food assistance programs. It also helps having people in place that have the capacity to facilitate the needed trainings, hiring, and the management of the programs.

### **5.3.2 Farm-led Market Structure**

Market structure is important to how a market runs. The consistency and commitment of everyone involved is a key factor. A farmer shared that they started the original market on the corner of Fifth Street and Portland and that, at its beginnings, the Calumet market was just their booth selling whatever produce they had. Every now and then a woman with knitting would show up or someone with books. Customers were upset that there were not a lot of vendors and would complain there wasn't enough produce, but the farmer just tried to stay consistent. The problem was that while the vendors were being consistent, there weren't enough customers which caused inconsistency. It didn't matter to the farmers who started the market, though. Each week they continued to set up on the corner of Fifth Street and Portland, no matter how little money they made. After time, Main Street Calumet hired the Calumet market manager who had a vision of what the market should look like. Through grassroots efforts and collaborative governance, a committee was formed to make the market better. After some work and creative thinking, the committee expanded the market, and more vendors were added. Currently there are

approximately 20 vendors at each Saturday market during the regular season. Through the vision of the market manager, her understanding of how this could impact the community in a positive way, and the fact that she had vendors that wanted to be there, they decided to do something better than the corner of Fifth Street and Portland. Having a process in place as to how things will work also helps the market structure.

Having a process in place makes things run more smoothly, and this is the case with the Calumet market. While the Hancock market charges very little, the Houghton market charged nothing. The Calumet market charged their vendors ten dollars per day. However, if vendors choose to commit for the entire season, the rate is \$100 for the season. Having this policy in place helps to maintain the consistency at the market which is important because consistency is key to having successful market. Having vendors who are always there will bring people back. Calumet also has a cold winter market that runs from October until almost Christmas. During the cold weather season, the market charges vendors ten dollars per day. While the cold weather market has some vendor variability, during the summer market they are right around twenty vendors each Saturday. For the other markets, this consistency and commitment varies as the Houghton market does not charge its vendors and the vendors vary depending on the weather, however they were looking to charge in the future. The Hancock market charges five dollars per week to participate. In speaking with a patron at the Calumet market during my observation one day, she stated that she was from out of town and that the market in her area had a waiting list to get into it. She stated that for being such a small community, Calumet sure knew what they were doing.

### **5.3.3 Economic Impact**

Farmers markets are an important resource to Houghton County, and with the implementation of food assistance programs it allows the recipients greater access to fresh locally grown produce. The Calumet market accepts a wide variety of food assistance programs that can benefit the entire community. With the acceptance of these programs, there is also an economic impact. Calumet market is being singled



out as they are the only ones in the area of study that accept a wide variety of programs including SNAP and DUFB. The Calumet market was started through a grassroots collaborative governance.

Economically, the Calumet market has seen huge growth since the implementation of SNAP and DUFB. The market manager stated that in November 2021, the market had done \$12,000 total in SNAP and credit card sales, whereas the previous year they had done approximately \$300. The market manager also shared with me that this did not take into account the cash that was being spent at the market. This is huge growth for a small area. People come from all over. While sitting at the Calumet market booth one Saturday morning, a couple came to use their EBT to get tokens and asked what I was doing. I explained to them my project and they stated to me that while they understood that Hancock accepted SNAP, they preferred to come to Calumet for two reasons. They could use their SNAP and DUFB and there was a greater variety of products. They also liked coming to the Calumet market so that they could get a cup of coffee if they wanted. It was a one stop shop for them. In conducting the oral market interviews, I asked, "In thinking about making the market even better, what is one thing you would like to see changed or added to the market?" One individual who was visiting her mom from out of town, stated that for a small community the market is GREAT! Another market patron stated that they would change nothing as they have everything under the sun from coffee to fish. While the money aspect is important, food accessibility is also an important factor.

The accessibility of fresh food at the market is important as that is what food assistance aims to provide to those that receive benefits. David Geisler, acting village manager for the Village of Calumet, stated that Calumet's market manager has been good about publicizing to the community and those that may receive those benefits so that they can be used. The Calumet market manager mentioned that during the summer of 2021, a woman in her fifties came to the market and stated that she had diabetes and that she needed to be eating more fruits and vegetables, and that she could use her benefits at the market. With a little education and learning what

benefits could be used where, she went shopping. It was nice to see her use her benefits in a way that was going to help her access, help her health. The Calumet market manager also shared that having the food access programs enable a lot more people to come and participate. There are a lot of people with food need in our area and they are able to use their benefits at the farmers market, which is a benefit for everyone.

In conclusion, food is the answer. Through the connections made, the motivations of leaders to get things done, and collaborative governance, the farmers markets in the area of study are becoming a main focal point of the communities in which they live. Markets bring people together in a common space to enjoy the outdoors while supporting local agriculture. Through the collection of the data, I was able to see some of these connections being made, heard people express their gratitude for the acceptance of food assistance programs and watched people learn about different types of food while expanding their palate. The markets are a destination and an event that can be enjoyed by all.

## 6 Policy Implications

Evidence from my study suggests that the integration of food assistance programs such as the Supplemental Nutrition Assistance Program (SNAP) and Double Up Food Bucks (DUFEB) programs would be, or are, a great benefit for the local farmer's markets in the area of study as well as their surrounding communities. City and village officials felt that the market was a great addition to their communities as it brought people to their downtown district and allowed them to see what their community had to offer. Collaborative governance is one way that the Calumet market has been able to address the additional challenges and burdens that come with administering the food assistance programs at the market. Collaborative governance is already happening to get food systems on the policy radar. In Michigan, while federal-funded programs and state-programs encourage food systems, they do not translate to the local level (Lu & Carter, 2022, p.8). The need to institutionalize processes to enable greater adoption at markets is important, and one way to do this would be to support collaborative efforts like the newly formed From the Ground Farmers Market Collective (From the Ground).

Since the completion of my study, some of the study participants have collectively organized From the Ground to address some of the challenges I outlined in the implementation of food assistance programs at the markets, among other reasons. In the 2022 market season, the From the Ground market manager facilitated these programs at all three markets studied. Through educational programs and events, this grassroots organization's purpose is to encourage people to eat, grow and preserve seasonal whole foods in a way that promotes health and nutrition, environmental stewardship, food sovereignty and local economy (From the Ground Farmers Market Collective, n.d.). This is an instance of collaborative governance, where a group of stakeholders come together to implement a process that will make something better. In this instance, it was the start of the From the Ground Collective to see the participating markets accept a wide variety of food assistance programs. With the high rate of poverty in Houghton County, getting fresh food into the hands of our community members is extremely important. This effort addresses concerns

about capacity that those interviewed had. Centralizing and pooling resources helps with the assistance of more consistent management for vendors and customers.

While some city/villages may not have the capacity to integrate food assistance programs at their markets, having an intermediary like From the Ground can help to provide needed support to address the administrative challenges and burdens. Currently, From the Ground pools resources from partner markets to hire and train one person as market manager to ensure that everything is running smoothly with the acceptance and management of food assistance programs. With the collaborative efforts of From the Ground, the cities and villages could pool together their limited resources to allow those cities and villages to with limited capacity to better serve their community members. The collaborative governance approach enables cities and villages to do more while addressing the different capacity issues that each may have.

The implementation of food assistance programs at farmers markets, helps to invite everyone to participate in the markets as a consumer and community member, and helps to increase access to good and fresh food for all. It also provides economic benefits to the local economy as food assistance program participants can contribute their assistance dollars directly to local farmers. It also provides a social benefit as participants of the programs can participate in the market like anyone else. Tokens are purchased from the market booth before shopping for payment to the vendors. With the implementation of food assistance programs at farmers markets throughout the western Upper Peninsula, residents would have a community space that was welcoming and inviting.

## **7 Conclusion**

### **7.1 Limitations of Research**

One of the limitations of this research was the delay in the IRB process. Due to COVID, the lack of employees and the IRB office shut down, the IRB was delayed in approval, which delayed my data collection. However, I was very fortunate to have the opportunity to interview thirteen different individuals for my project. I was also able to observe the markets and conduct market interviews with randomly selected individuals. Through all of these interviews I was able to gain knowledge of how the market worked, how it could be fixed and the economic benefit for the community. I was able to observe the markets to learn shopping patterns, and through market interviews, what people thought of the market, what they purchased and if there were things that needed to be improved. Through all the methods, I collected a lot of information, spoke to a lot of people and gained a lot of knowledge.

An additional limitation to this study was selection bias. The design of this study included observation and oral market surveys from those who attended the markets. I do not have data from those who did not attend the markets. This is a limitation as those that were approached at the market are not able to provide insight as to how to reach those that do not attend the market as they are speaking from their own experiences. Those that receive food assistance benefits may not even realize that the markets exist, let alone that they can use their benefits there.

### **7.2 Opportunities for Future Research**

Through my data collection and analysis, I found that market food acceptance helps to foster community connections. I also identified some of the motivations for the implementation of food assistance programs. Finally, I highlighted how collaborative governance assists local food systems to better provide a needed public service for the community in which they reside. Everyone deserves food that is fresh and good, and the implementation of food assistance programs at the farmers

markets, is an important step in increasing access to these foods to all in the community.

Further research could also study those who are on food assistance, but who do not participate in the markets to better understand why they do not participate. Are they not participating because they don't know they can use their benefits at the markets, or is it for other reasons? This research could improve the logistics of the markets in regard to advertising amongst other things such as market education on food assistance programs and transportation to the markets. This study focused on three markets in Houghton County. It would be interesting to study how similar sorts of collaborative governance efforts might help to support other rural farmers markets across the western Upper Peninsula.

If SNAP and DUFEB were implemented in the project area and the western Upper Peninsula, how would this affect how farmers markets are perceived to those in local government and the public in general?

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# **A Farmer Interview Guide**

## **Introduction**

Before we begin the interview, I have some information to share with you about this research project and the interview itself. Please stop me, to ask questions at any time.

My name is Courtney Archambeau and I am a masters student in the environmental and policy program at Michigan Technological University. I grew up in Houghton, Michigan, and am working on my thesis project where I'm interested in learning more about how we can make our local farmers market more inclusive and inviting for those who are of lower socioeconomic status while supporting local agriculture.

I have a consent form to review with you prior to beginning the interview. This consent form contains general information about the research project and interview, the contact information for myself and my university's Institutional Review Board in case you wish to contact us in the future with any questions, and a place for us both to sign if you agree to take part in this interview. I've brought two copies—one for you to take with you, and one for me to place in my files.

As part of the interview, I'm asking your permission to record our discussion today. This allows me to listen better to you at the present moment, and then after the interview to transcribe our discussion and analyze the transcript. I will immediately delete your audio file upon transcribing the interview, and all files will be stored in my password protected and secured Google file drive through Michigan Tech University, accessible only to me. If there is something you say now, or realize later you might have said, that you want removed from the interview, just let me know and I will be sure to leave those comments out of the transcript. You will also have the opportunity to look over the transcript for accuracy later.

I will remove any identifying information about you from my transcripts and assign all your files a participant number to help protect your confidentiality. However, you may choose to share your name if you identify as a public figure. If so, please be sure to check that box. Also, my data files could be subpoenaed by a court of law and so I ask that you not share with me any illegal activity.

You can end this interview at any time and choose to skip or not answer any questions you don't want to answer or that make you feel uncomfortable. Your participation is entirely voluntary, and there are no consequences to you for choosing to end your participation. At the end of the interview, I have a short demographic form for you to complete. Do you have any questions before we begin?

## Questions

1. Tell me about yourself...
  1. How did you get involved in farming?
2. Tell me about your farm...
  1. What types of crops do you grow?
  2. Do you farm alone or with others?
  3. How long have you been farming here?
3. Tell me about your role in local farmers markets?
  1. Why do you choose to participate in farmers markets?
  2. Which markets do you participate in? (Calumet, Houghton, Hancock or all of them)
  3. How long have you been participating in the markets?
4. Are you familiar with the Supplemental Nutrition Assistance Program, also known as SNAP? What about the Double Up Food Bucks program?
  1. How do you feel about implementation of these programs at the farmers markets? Why?
5. What is most important to you about the farmers markets?
6. What kind of connections have you made through the farmers markets?
  1. Have you made more connections with other farmers?
  2. Have you made more connections with consumers?
  3. What is important about these connections?
7. Do you have anything else that you would like to add?

Thank you for your time today. I will follow up once I have the interview transcribed, and at that time you will have the option to review and edit the transcript if you wish.

## **B City Official Interview Guide**

### **Introduction**

Before we begin the interview, I have some information to share with you about this research project and the interview itself. Please stop me to ask questions at any time.

My name is Courtney Archambeau and I am a masters student in the environmental and policy program at Michigan Technological University. I grew up in Houghton, Michigan, and am working on my thesis project where I'm interested in learning more about how we can make our local farmers market more inclusive and inviting for those who are of lower socioeconomic status while supporting local agriculture.

I have a consent form to review with you prior to beginning the interview. This consent form contains general information about the research project and interview, the contact information for myself and my university's research integrity in case you wish to contact us in the future with any questions, and a place for us both to sign if you agree to take part in this interview. I've brought two copies—one for you to take with you, and one for me to place in my files.

As part of the interview, I'm asking your permission to record our discussion today. This allows me to listen better to you at the present moment, and then after the interview to transcribe our discussion and analyze the transcript. I will immediately delete your audio file upon transcribing the interview, and all files will be stored in my password protected and secured Google file drive through Michigan Tech University, accessible only to me. If there is something you say now, or realize later you might have said, that you want removed from the interview, just let me know and I will be sure to leave those comments out of the transcript. You will also have the opportunity to look over the transcript for accuracy later.

I will remove any identifying information about you from my transcripts and assign all your files a participant number to help protect your confidentiality. However, you may choose to share your name if you identify as a public figure. If so, please be sure to check that box. Also, my data files could be subpoenaed by a court of law and so I ask that you not share with me any illegal activity.

You can end this interview at any time and choose to skip or not answer any questions you don't want to answer or that make you feel uncomfortable. Your participation is entirely voluntary, and there are no consequences to you for choosing to end your participation. At the end of the interview, I have a short demographic form for you to complete. Do you have any questions before we begin?

## Questions

1. Tell me about yourself
  1. How long have you been involved in a position of leadership with the city or village?
2. What are your thoughts on the farmers market in your city/village?
  1. What interactions have you had with the vendors who participate?
3. How does the farmers market contribute to the local economy?
  1. How might these contributions be improved?
  2. Where is there potential for greater collaboration or integration for economic growth and benefits?
4. What have you heard from local businesses about the farmers market?
  1. What concerns do local businesses have?
  2. What contributions do local businesses see?
  3. What existing or possible collaborations or partnerships might there be?
5. How might the farmers market be more inclusive and inviting for all in our community?
  1. What things is it already doing well?
  2. What improvements might be needed?
  3. What are your thoughts on the market's location?
  4. In what ways could transportation to the markets be improved for those who may not have their own transportation?
  5. What are your thoughts on the promotion or advertising of the farmers, market?
  6. How might your office/position help to support the farmers market being accessible to all residents?
6. What do you know about food assistance programs at the farmers market?
  1. Currently, only the Calumet Farmers Market accepts the Supplemental Nutrition Assistance Program, also known as SNAP, but this assistance can be accepted at any market that has the proper training and equipment. What would be the impacts of expanding SNAP acceptance to other markets?
  2. Additionally, the state's Double Up Food Bucks program, in which the state matches dollar for dollar money that those on food assistance spend on fresh foods up to \$20/day, can be used at the farmers market. Currently, only the Calumet Farmers Market and the Keweenaw Co-Op accept Double Up Food Bucks. What would be the impacts of expanding Double Up Food Bucks to other markets?
  3. What concerns or questions do you have about expanding the acceptance of these programs at the farmers markets?
  4. How might the implementation of these programs benefit consumers and/or vendors at the farmers market?
7. Is there anything else you would like to share?

Thank you for your time today. I will follow up once I have the interview transcribed, and at that time you will have the option to review and edit the transcript if you wish.

## **C Market Manager Interview Guide**

### **Introduction**

Before we begin the interview, I have some information to share with you about this research project and the interview itself. Please stop me, to ask questions at any time.

My name is Courtney Archambeau and I am a masters student in the environmental and policy program at Michigan Technological University. I grew up in Houghton, Michigan, and am working on my thesis project where I'm interested in learning more about how we can make our local farmers markets for inclusive and inviting for those who are of lower socioeconomic status while supporting local agriculture.

I have a consent form to review with you prior to beginning the interview. This consent form contains general information about the research project and interview, the contact information for myself and my university's research integrity in case you wish to contact us in the future with any questions, and a place for us both to sign if you agree to take part in this interview. I've brought two copies—one for you to take with you, and one for me to place in my files.

As part of the interview, I'm asking your permission to record our discussion today. This allows me to listen better to you at the present moment, and then after the interview to transcribe our discussion and analyze the transcript. I will immediately delete your audio file upon transcribing the interview, and all files will be stored in my password protected and secured Google file drive through Michigan Tech University, accessible only to me. If there is something you say now, or realize later you might have said, that you want removed from the interview, just let me know and I will be sure to leave those comments out of the transcript. You will also have the opportunity to look over the transcript for accuracy later.

I will remove any identifying information about you from my transcripts and assign all your files a participant number to help protect your confidentiality. However, you may choose to share your name if you identify as a public figure. If so, please be sure to check that box. Also, my data files could be subpoenaed by a court of law and so I ask that you not share with me any illegal activity.

You can end this interview at any time and choose to skip or not answer any questions you don't want to answer or that make you feel uncomfortable. Your participation is entirely voluntary, and there are no consequences to you for choosing to end your participation. At the end of the interview, I have a short demographic form for you to complete. Do you have any questions before we begin?

## Questions

1. To start, please tell me a little about yourself...
  1. Where did you grow up? What sparked your interest in the farmers markets?
2. Tell me about your current role at the market.
  1. How long have you been involved in the farmers markets?
3. Tell me about the vendors at the market...
  1. Approximately how many vendors do you have at your market?
  2. Are they the same vendors each week, or do they vary?
  3. How much do you charge for the vendors to participate?
  4. What sort of transportation do most people use to get to the market?
4. Tell me about the role you feel the market plays in our larger community...
  1. How does the market support local economies?
  2. How does the market support local food access?
5. Are you familiar with the Supplemental Nutrition Assistance Program, also known as SNAP? What about the Double Up Food Bucks program?
  1. Do you accept either of them at your market currently?
    1. Why or why not?
  2. *If they do not accept one of them currently...* Would you be interested in implementing [name of program] benefits at your market?
    1. If no, why?
  3. *If they do not accept one of them currently...* If the implementation of these programs were to happen at your market, how might they benefit consumers? How might they benefit vendors??
  4. *If they do accept one of them currently....* How has the implementation of these programs benefited consumers at the market? How have they benefited vendors?
6. What ideas do you have about how to make the market accessible to more people?
  1. What does a more inclusive market look like? Feature?
7. Do you have anything extra that you would like to add?

Thank you for your time today. I will follow up once I have the interview transcribed, and at that time you will have the option to review and edit the transcript if you wish.



## **D Consent Form**

### **CONSENT TO PARTICIPATE IN RESEARCH**

This form describes a research project led by Courtney Archambeau, a masters student from Michigan Technological University. Your participation is entirely voluntary. Please read the information below and ask questions about anything you do not understand before deciding whether or not to participate.

#### **INTRODUCTION**

Courtney Archambeau, a masters student, is conducting this study as a masters thesis project to learn more about how farmers markets in the area can be made more inclusive. I invite you to participate in this study because your experience is important to understanding how our local farmers markets are supporting food access for all community members.

#### **DESCRIPTION OF PROCEDURES**

If you agree to participate in this study, you will participate in a semi-structured interview lasting approximately an hour, depending upon what you wish to share. I will ask you questions about your experience with local farmers markets. You may end the interview at any time. The interview will be digitally recorded and then transcribed. Any identifying information about you will remain confidential and known only to the researcher. However, if you identify as a public figure in the community, you may check this box and I will use your name

Following the interview, I will transcribe the recorded conversation and send you a copy of the transcript to review. I will ask you to review the transcript and let me know if there is any information you like to remove or revise within the transcript prior to my analysis of the data. At this time, you may also choose to remove yourself from the study in its entirety.

#### **POTENTIAL BENEFITS**

This study will not bring you specific benefits outside of an opportunity to share your perspectives about food access at the local farmers markets.

#### **POTENTIAL RISKS**

This project is not intended to provoke any physical or emotional discomfort. However, you may choose to share sensitive and confidential information during the interview. All efforts will be made to ensure confidentiality. In the event of physical and/or mental injury resulting from participation in this research project, Michigan Technological University does not provide any medical, hospitalization or other insurance for participants in this research study, nor will Michigan Technological University provide any medical treatment or

compensation for any injury sustained as a result of participation in this research study, except as required by law.

#### COSTS AND COMPENSATION

You will not have any costs from participating in this study other than your time. You will not be compensated for participating in this study.

#### PARTICIPANT RIGHTS

Your participation in this study is completely voluntary. You may choose to not answer questions or you may choose to leave the study at any time without consequences.

#### CONFIDENTIALITY

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. To ensure confidentiality to the extent permitted by law, the following measures will be taken: all participants will be assigned a unique code that will be used on forms instead of their names; study records will be available only to the researcher; recordings and transcripts will be stored in a secured, password protected electronic storage file accessible only to the researcher; hard copy consent forms will be scanned to the secure file and then destroyed; recordings and transcripts will be destroyed three years after the project is completed. If results from this research project are published, your identity will remain confidential.

#### IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about this research, please contact me:

Courtney Archambeau, [carchamb@mtu.edu](mailto:carchamb@mtu.edu) 906-370-3180

Or my advisor:

Dr. Angie Carter, [ancarter@mtu.edu](mailto:ancarter@mtu.edu), 906-487-1431

#### RIGHTS OF RESEARCH SUBJECTS

The Michigan Tech Office of Research Integrity has reviewed my request to conduct this project. If you have any concerns about your rights in this study, please contact the Compliance Office at 906-487-2902 or email [IRB@mtu.edu](mailto:IRB@mtu.edu).

#### PARTICIPANT SIGNATURE

**You will receive a copy of the written informed consent prior to your participation in the study. Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document, and that your questions have been satisfactorily answered.**

Participant's Name  
(printed) \_\_\_\_\_

(Participant's Signature)

(Date)

**INVESTIGATOR SIGNATURE**

I certify that the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion that the participant understands the purpose, risks, benefits, and the procedures that will be followed in this study and has voluntarily agreed to participate.

Investigator's Name (printed)

(Investigator's Signature)

(Date)

## E Participant Observation Guide

This form will be used during participant observation at the Calumet, Houghton, and Hancock Farmers Markets. We have permission from all market managers to observe during the markets.

Location

Date:

Start time:

End time:

Participants	Details
# of unique participants	e.g., make marks for each person in multiples of 5
# of groups seeming to be together as friends or families	e.g., make marks for each person in multiples of 5
# of people with children	e.g., make marks for each person in multiples of 5
# of people with pets	e.g., make marks for each person in multiples of 5
# of people alone	e.g., make marks for each person in multiples of 5
# of vendors visited	e.g., Woman shopping alone in blue shirt visited five different vendors but only purchased from two
Types of interactions (conversations, transactions, looking not buying, other)	e.g., woman shopping alone in blue shirt has long conversation with group of people buying cookies; man in red hat looks around at each vendor's table and doesn't buy anything
Items purchased (in as much detail, describe what people observed are purchasing)	e.g., Woman shopping alone in blue shirt purchased eggs and potatoes from different vendors
Transportation (if possible, can you see how people are arriving to market -- if in car, public transport, bicycle, walking?)	e.g., position close enough to see how people are arriving. If walking, what direction did they come from.

## **F Market Informal Interview Guide**

Hi! My name is Courtney Archambeau and I am a masters student at Michigan Technological University in the Social Science department. I'm studying how to make the farmers markets even better. Would you be willing to participate in a short research study by answering a few questions? I will not ask for or disclose your name or other identifying information. The questions will take 3-5 minutes.

*If No...*

Thank you--have a great day!

*If Yes,*

Great! Thank you. Before I begin, I need to ask your consent to ask you some brief questions about why you came to the farmers market. The questions will take 3-5 minutes, are voluntary, and will not ask you any personal information. May we begin?

Question 1: Did anyone come with you to the market today?

Question 2: What mode of transportation did you use to get here?

Question 3: Why do you come to the market?

Question 4: What do you usually buy at the market?

Question 5: In thinking about how we can make the market even better, what is one thing you would like to see changed at or added to the market?

Thank you -- I will summarize this information to share with the market managers at the end of summer. I appreciate your sharing more about your experience with me.