

FINDING HEALTHY FOOD IN A LAND OF PLENTY: FOOD ACCESS SURVEY OF A BATTLE CREEK NEIGHBORHOOD

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GOOD FOOD Battle Creek



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PHOTO CREDIT

Page 1 (left to right) – J.R. Reynolds, Good Food Battle Creek, Battle Creek, MI; J.R. Reynolds, Good Food Battle Creek, Battle Creek, MI; Courtesy of the Food Bank of South Central Michigan, Battle Creek, MI; J.R. Reynolds, Good Food Battle Creek, Battle Creek, MI.

Page 5 (left to right) – J.R. Reynolds, Good Food Battle Creek, Battle Creek, MI; J.R. Reynolds, Good Food Battle Creek, Battle Creek, MI; Courtesy of the Food Bank of South Central Michigan, Battle Creek, MI.

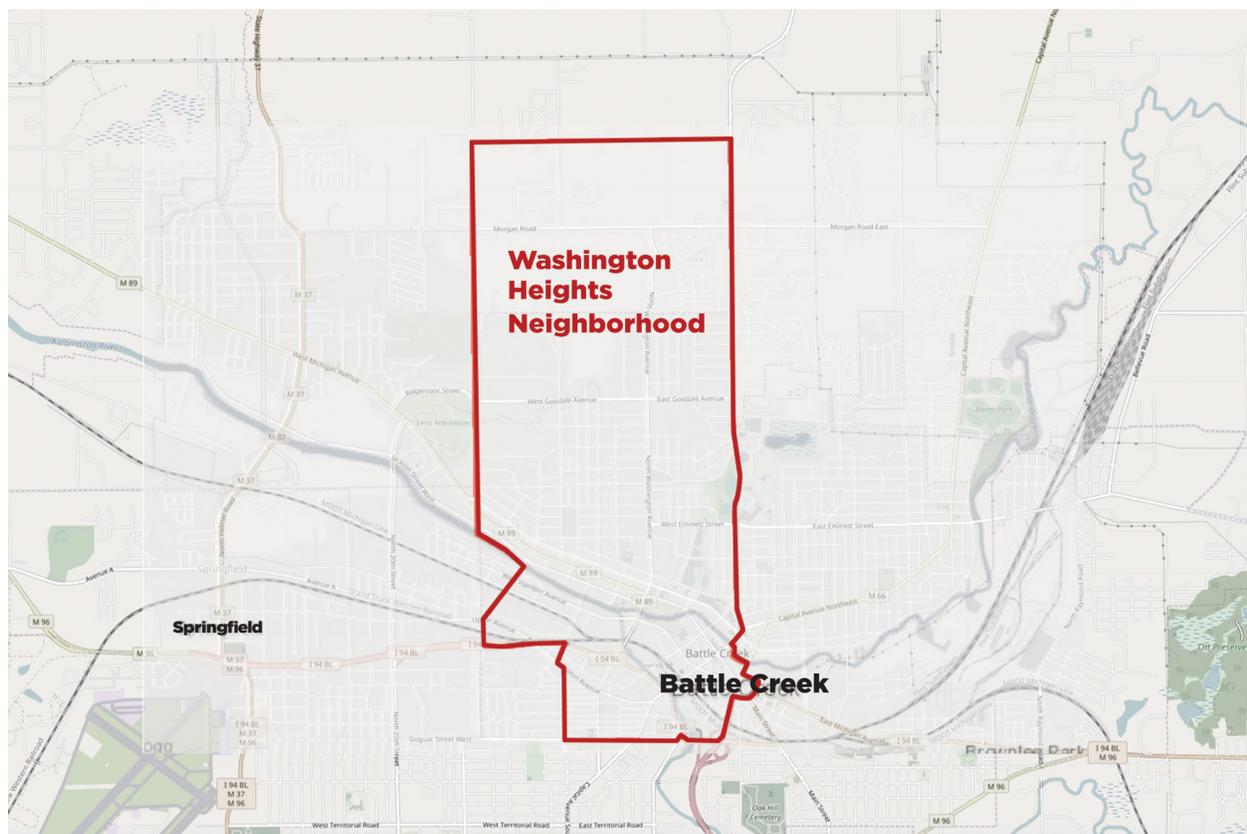
Page 12 – Andrea Weiss, MSU Center for Regional Food Systems.

This survey was conducted as part of the Michigan Good Food Charter Shared Measurement project, which aims to catalyze the development of common measures of food system change, foster collaboration in data collection, and build collective capacity for collecting, using, and sharing data. The Shared Measurement project is coordinated by the Michigan State University Center for Regional Food Systems, with technical support from the Gretchen Swanson Center for Nutrition and funding from the W.K. Kellogg Foundation.

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► INTRODUCTION

The following report is the result of a food access pilot survey conducted in the Washington Heights neighborhood of Battle Creek, Michigan. The findings will help drive the ongoing food systems and racial equity work conducted by Good Food Battle Creek and its partners by bringing residents' perceptions and needs into greater focus. We hope that community leaders will be able to use this report to better understand the needs of Washington Heights residents and more effectively leverage resources to meet those needs.



WASHINGTON HEIGHTS NEIGHBORHOOD

Battle Creek, Michigan has a legacy as a food town. A small city of about 50,000 residents, Battle Creek's iconic "Cereal City" moniker comes from being home to both Kellogg and Post cereal companies. It is an ever-present reminder of the community's rich, historic reputation associated with food. The neighborhood of Washington Heights, located on the city's historic northside, is primarily African American with a population of about 5,000. Washington Heights was home to the Battle Creek Sanitarium, the health and wellness capital of the world at the turn of the 20th century.

Racial Disparities

Today, Battle Creek faces significant racial disparities. According to a recent report,¹ the Black population in Battle Creek is nearly twice as likely to be unemployed (21%) as the White population (11%), despite similar labor force participation. Approximately 45% of Black children live in poverty compared to 26% of White children. Unfortunately, these challenges are particularly significant in the Washington Heights neighborhood. Washington Heights is one of the neighborhoods where the Black population is most concentrated, as well as where the percentage of the population below the poverty line is the highest. Between 2000 and 2014, the percentage of people below the poverty line in Washington Heights increased by more than 12%, one of the highest rates of increase across the city. As of 2014, Battle Creek had 50% more households without a vehicle (12% of households) than either Calhoun County or the state of Michigan overall (both 8%).

Employment, poverty rates, and car ownership are all intricately connected to an ability to afford and access healthy food. The Battle Creek food system is also broken. As with many Battle Creek neighborhoods, general healthy food access for Washington Heights residents is spotty at best.

Challenges But Also Cause for Hope

Virtually all food sources reside on the perimeter of the community. For instance, food outlets like Save-a-Lot, Dollar General, Rite Aid, Walgreens, Marathon gas station, and Burger King all are clustered on the easternmost border of the neighborhood (i.e., North Ave.). There are other food outlets on the southernmost border but none located on the west side of the neighborhood or in its interior. This positioning of food sources makes access challenging for many residents.

Still, there is cause for hope. Many Battle Creek residents are passionate and highly committed to their community. This is especially true among those in the food movement. Interest in urban agriculture is evident from the rise in backyard and community gardens in recent years and the presence of two urban farms in the neighborhood: Sprout and Leila Arboretum 365 Urban Farm. Battle Creek also benefits from the ongoing support of local businesses that provide vital resources to hunger-relief agencies. Finally, Good Food Battle Creek represents a network of organizations committed to providing access to nutritious, fresh food for all Battle Creek residents.



¹ National Equity Atlas. (2017) *An Equity Profile of Battle Creek*. Policy Link and USC Program for Environmental & Regional Equity. Available from: <http://nationalequityatlas.org/sites/default/files/BattleCreek-profile.pdf>. Note: all statistics in the following paragraph are cited from this report.

WHO TOOK THE SURVEY

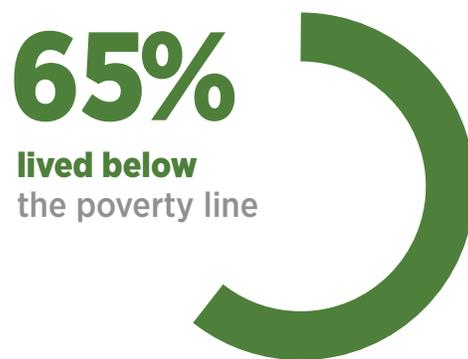
Between April and December 2016, Good Food Battle Creek surveyed 176 Battle Creek residents, mostly from the Washington Heights neighborhood, about shopping behavior and access to healthy food options. Survey locations included the neighborhood's primary food bank distribution site, Second Missionary Baptist Church, the food pantry at Mt. Zion African Methodist Episcopal Church, Kool Family Center, Woman's Co-op monthly meetings, and Northwestern Middle School (after school student pick-up zone). Additional surveys were conducted during the annual Juneteenth celebration at Claude Evans Park and a community celebration held at Washington Heights United Methodist Church.

The survey was conducted with a non-probability convenience sample of individuals at community centers and neighborhood events, mostly in the Washington Heights neighborhood. Because the sample was not selected randomly from all neighborhoods or Battle Creek residents, the results of this survey are limited in that we cannot make statistical inferences about the population as a whole. In other words, the findings are not necessarily representative of all residents in the neighborhood or all residents in Battle Creek.

Nevertheless, convenience sampling is useful when research resources are limited. Convenience sampling is also useful for identifying the kinds of challenges and patterns of behavior that exist for individuals in the community, even if the precise frequency of those challenges or behavior patterns in the broader community cannot be determined.

The vast majority (82%) of people who took the survey identified themselves as the primary shopper for their household. People taking the survey tended to be older and without children—66% age 45 and older; 40% had children at home. The majority of respondents were people of color—55% Black, 5% American Indian or Alaska Native, 3% self-describing, and 1% Asian. Six individuals (3%) identified as Latino. People taking the survey also tended to report low household income. Forty percent of people reported their household earned \$10,000 or less per year. Approximately 65% of people said they earned less than \$20,000 per year. Only 9% of survey respondents (15 people) reported household income of more than \$50,000 per year. While 59% of respondents fell at or below 133% of the federal poverty line (which means they are likely eligible for SNAP), only 46% reported that they currently participate in SNAP. Many people reported participating in Medicaid/Medicare (49%) and disability benefits (32%).

Among the people who took the survey



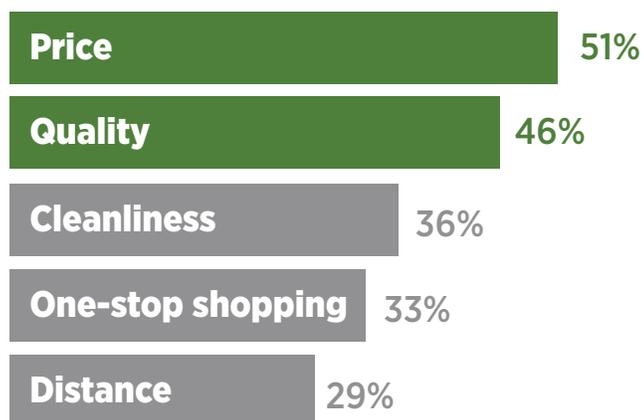
» WHERE PEOPLE SHOP AND WHY

Where people shop for food is influenced by the factors that they consider important. Major supermarkets, such as Walmart, Meijer, and Family Fare, which are all outside of the neighborhood, are by far the most common places people taking the survey obtain food. Factors cited as among the most important to them in deciding where to grocery shop were prices, sales, or discounts; quality of food; cleanliness; and the ability to find everything in one place. Distance from home or work was a top factor for just under one third of people. “Foods from my culture” was an apparent low priority—it was in the top three factors for just seven people (4%). The other eight factors listed—Michigan grown foods; locally-owned store; organic, sustainable, or ethically raised products; safety; customer service; and foods that meet diet restrictions—were in the top three factors for 9-17% of people.

Most survey participants obtain food from multiple outlets. On average, people frequent 2.5 different locations each month. For those who shop at convenience stores, finding everything in one place was far less important. Convenience store shoppers were 4.2 times more likely to not value finding all items in one place.

Most people reported shopping for food at supermarkets outside the neighborhood.

PRICE and **QUALITY** were the most important factors in deciding where to shop



Nearly all people shopped at **SUPERMARKETS**, and over half relied on food pantries and dollar stores



Based on the survey results, many Washington Heights residents shop at dollar stores for food. More than two thirds of people (69%) indicate getting food from a dollar store “always” or “often” during the past month. This aligns with the survey finding that about half of people responding (51%) ranked price as a top factor in deciding where to shop. On the other hand, quality ranked almost equally as a top factor (46%) among people taking the survey. Interestingly, people shopping at dollar stores were 4.3 times more likely to report adequate access to quality fruits and vegetables than those who did not shop at dollar stores for food. This could indicate that people are generally satisfied with the quality they find at dollar stores. In-store observations indicated that dollar stores near Washington Heights sell dairy items, frozen processed foods, and canned goods but do not stock produce. These findings bring up questions about the meaning of “quality food” to survey takers. For instance, does quality food mean “fresh”? Does it mean “good tasting”? Or “not rotten”?

Just under half of Washington Heights residents responding to the survey indicate they shop at small grocery stores. The survey results suggest that such stores are seen as more expensive. People who said price was important were 3.0 times more likely to not shop at small grocery stores compared to those who didn’t include price as one of their top three factors in deciding where to grocery shop. While a relatively low number of people (11%) selected a locally-owned store as being in their top three factors when deciding where to grocery shop, the preference for locally-owned stores seems to motivate people to avoid larger chain supermarkets. Those shopping at supermarkets were 3.7 times more likely to indicate that a locally-owned store was not a priority, compared to those who did not shop at supermarkets.

► TRANSPORTATION

More than half of people surveyed indicated they typically travel less than ten minutes for groceries.

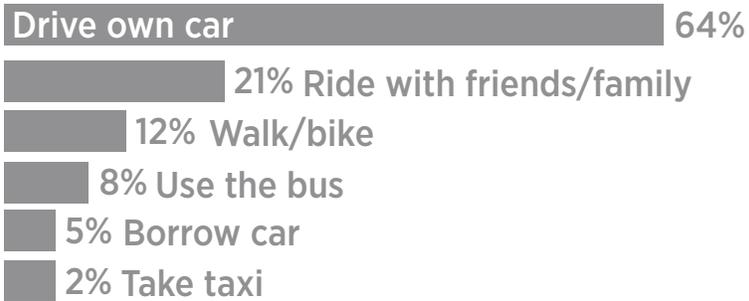
However, 10% of people are traveling for 20-30 minutes to reach groceries and 5% of people are traveling more than 30 minutes, which is considered a long travel time for residents of an urban neighborhood.² Travel time relates to mode of transportation. More than one third of Washington Heights residents do not drive their own car to get groceries. However, most are still accessing private transportation, whether by riding with friends or family or borrowing a car. Very few Washington Heights residents reported using the bus to get groceries (8%), especially compared to residents of Ypsilanti, Michigan (21%).³

15% traveled **MORE THAN 20 MINUTES** to buy their food



More than one third **DON'T DRIVE THEIR OWN CAR** to get groceries

Don't drive own car 36%



² The USDA Food Desert Locator, for example, considers a census tract "low access" if at least 500 persons or 33% of the population lives more than a mile from a supermarket or large grocery store. See: <https://www.fns.usda.gov/tags/food-desert-locator>.

³ Miller, M., Freeman, E., & Colasanti, K. (2017) *Ypsilanti Area Food Access Survey 2016*. Michigan State University Center for Regional Food Systems. December 2017. Available at: <https://www.canr.msu.edu/resources/ypsilanti-area-food-access-survey-2016>

PERCEPTIONS OF ACCESS

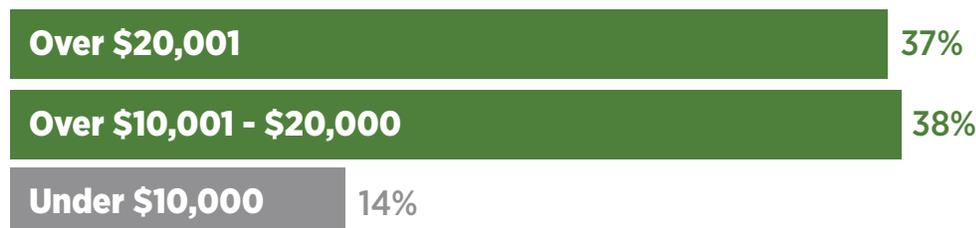
While most Washington Heights residents (81%) responding to the survey felt that they had adequate access to stores meeting their needs, significantly fewer people reported adequate access to fresh fruits and vegetables. Two thirds of people (66%) agreed that it is easy to find fresh fruits and vegetables in their neighborhood.⁴ Even fewer people responding agreed that the fruits and vegetables in their neighborhood are high quality (59%) or that there is a large selection of Michigan-grown foods available in their neighborhood (50%). This suggests that many people are not looking for high-quality fruits and vegetables when selecting a store that meets their needs.

The likelihood of reporting poor access may be influenced by income. Among Washington Heights residents without kids at home, those with higher incomes are more likely to say that fresh fruits and vegetables in their neighborhood are unavailable.⁵ While this may seem counterintuitive, it might be explained by rising expectations. As people have more money to spend, they are more likely to be able to afford and attempt to buy produce. In other words, the more people look for fresh fruits and vegetables, the more they realize that they are not readily available. Because this association was not observed in residents with kids at home, it could be that parents of young children are more likely to be looking for (and not finding) fresh produce, regardless of income level.

This theory also may help explain other findings. Even though a slightly larger percentage of men (53%) than women (42%) indicated that Michigan-grown food was an important factor in deciding where to shop, women in this survey were more likely than men to say they have a hard time finding Michigan-grown foods. Women are much more likely to be the primary shopper—70% of women in this sample are the primary shopper compared to 30% of men. Women, therefore, are presumably more likely to be aware of the qualities of foods available.

Perceptions of access also seem correlated with behavior in several cases. People who shop at small grocery stores and people who shop at drugstores more frequently reported that the fruits and vegetables in their neighborhood are high quality. Those who shop for food at small grocery stores were 3.0 times more likely to report adequate access to quality fruits and vegetables than those who did not shop at small grocery stores. Those who shopped for food at drugstores were 5.5 times more likely to report adequate access to quality fruits and vegetables than those who did not shop at drugstores. There are two drug stores in Washington Heights: Walgreens and Rite Aid, both on the eastern border of the neighborhood. In-store observations indicated that these stores offer a selection of food items similar to dollar stores: frozen processed foods, dairy products, and canned goods. Those who reported that they

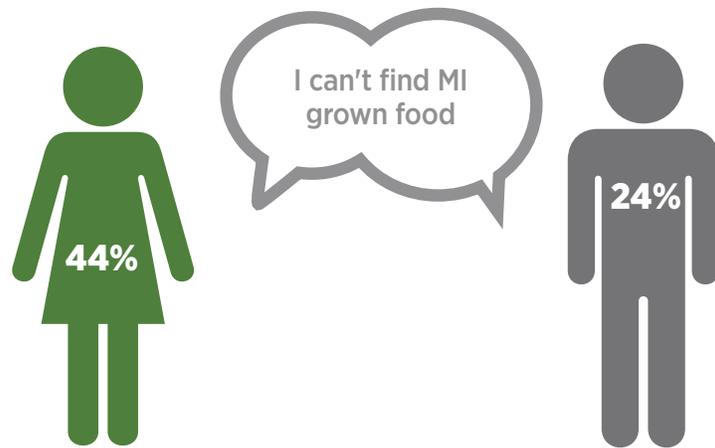
People with **HIGHER INCOMES** were more likely to report poor access to fresh fruit and vegetables in their neighborhood.



⁴ "Neighborhood" was defined in the survey as "the area you can easily walk, bike, drive, or take the bus to from your home."

⁵ $p = .0029$

More **WOMEN** than men were unhappy with access to Michigan-grown food



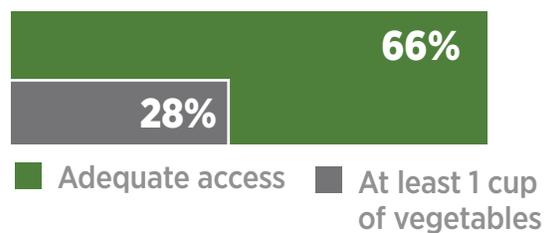
traveled 10 minutes or more for groceries were 4.3 times more likely to report poor access to stores meeting their needs than those who traveled 10 minutes or less. Even though distance from home or work was not a top factor in determining where to buy food for most people, this suggests that long travel times impact whether people feel like they have access to food stores that meet their needs.

In these results, women tend to report consuming more cups of vegetables than men. For women, 83% reported eating over 1 cup of vegetables a day, whereas 53% of men reported eating over 1 cup of vegetables a day. Among those with children, those shopping for food at warehouse stores reported consuming more cups of vegetables. For households with children, 93% of warehouse shoppers reported eating over 1 cup of vegetables daily whereas 56% of non-warehouse shoppers reported eating over 1 cup of vegetables daily. A similar trend was seen in fruit consumption. This suggests that shopping at warehouses extends household food budgets in a way that allows the purchase of more produce and possibly access to greater variety and quality of produce.

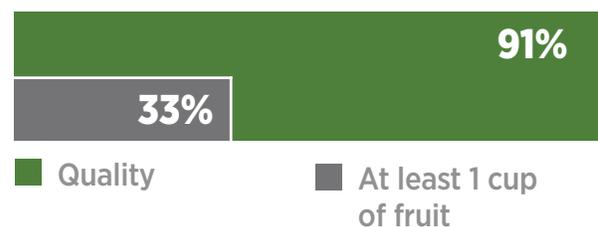
While convenience store shoppers were more likely to agree that their neighborhood had adequate access to quality fruits and vegetables, they were significantly less likely to eat fruits and vegetables. In fact, those not shopping at convenience stores were 5.1 times more likely to consume more than 1 cup of fruit daily. Looking at all survey responses shows a similar trend. Two thirds of shoppers reported

adequate access to fresh fruits and vegetables in their neighborhood, but less than one third eat at least 1 cup of vegetables per day. This reveals that believing that quality fruits and vegetables are available is far more common than eating recommended quantities fruits and vegetables.

TWO-THIRDS of shoppers reported adequate access to fresh fruits and vegetables, yet less than a third consumed at least 1 cup of vegetables per day



Most **CONVENIENCE STORE** shoppers reported adequate access to **QUALITY** fruit and vegetables, yet only a third consumed at least 1 CUP of fruit per day



CONCLUSIONS



The findings from this survey reveal that nearly all people are shopping at supermarkets, which means they are traveling outside the neighborhood for groceries. The survey results also show that over half of respondents get food from dollar stores and food pantries, places with limited options. While most people indicate they are able to reach stores that meet their needs, and more than half are satisfied with their access to high-quality fruits and vegetables, a significant minority are unsatisfied with their access to food stores generally and to fruits and vegetables specifically, particularly those grown in state.

However, the discrepancy between those agreeing that they have adequate access to produce and those who are eating recommended quantities of fruits and vegetables shows that there are other important factors involved. From the survey results, it is also not clear specifically what selection of foods or food attributes people have in mind when they think about stores that meet their needs or their ability to find fruits and vegetables.

Given that two thirds of the people responding to this survey were below the poverty line, and half were utilizing food pantries, meeting basic food needs is likely a challenge for many. In this context, people may tend to choose cheaper and more calorie-dense options over fruits and vegetables. To this end, it makes sense that as income rises, so does ability to expand food choices, leading people to realize that the neighborhood food retailers do not offer as many options as they would like. However, this trend should be interpreted with caution, given that it was not seen in the findings from similar surveys conducted in Ypsilanti and Pontiac, Michigan.^{6,7}

KEY RECOMMENDATIONS

Drawing from the survey results presented here, we propose the following five recommendations.

- 1.** Increase healthy food options at dollar stores. Since many residents in the Washington Heights neighborhood shop for food at dollar stores, extending fruit and vegetable offerings in these settings is a strategy that could impact many people.
- 2.** Improve and promote the bus system. Many low-income households lack access to their own personal vehicle and utilize their social network to access vehicles. However, potential autonomy with a robust transit system may improve healthy food access and quality of life by reducing travel times needed to reach food outlets and increasing access to multiple locations.
- 3.** Develop a greater understanding of non-access barriers to fruit and vegetable consumption. Different ideas of what access to healthy food options means to different people likely influenced these survey findings. If most respondents feel they have adequate access to food choices, yet fruit and vegetable intake is low, identifying other barriers to consumption such as affordability, time constraints, and food preparation capacity may be helpful in designing strategies to comprehensively improve food access.
- 4.** Investigate opportunities to develop new food retail outlets in the Washington Heights neighborhood.
- 5.** Explore residents' interest in gardening in community, church, school, and backyard settings. Identify the reach of urban farms in the Washington Heights area and explore opportunities to expand farm-direct sales.

⁶ Miller, M., Freeman, E. & Colasanti, K. (2017) *Ypsilanti Area Food Access Survey 2016*. Michigan State University Center for Regional Food Systems. December 2017. Available at: <https://www.canr.msu.edu/resources/ypsilanti-area-food-access-survey-2016>

⁷ *Shared Measurement Healthy Food Access Survey - Pontiac*. (2016) Unpublished data.



Created in 2010, Good Food Battle Creek is a group of organizations and individuals who work together to promote healthy food choices through education, support of local producers, and creating access to good food for all people. Our work ranges from supporting food justice and sovereignty to promoting access to urban gardening, farms, and farmers markets.

The CRFS envisions a thriving economy, equity, and sustainability for Michigan, the country, and the planet through food systems rooted in local regions and centered on Good Food: food that is healthy, green, fair, and affordable. Its mission is to engage the people of Michigan, the United States, and the world in applied research, education, and outreach to develop regionally integrated, sustainable food systems. CRFS joins in Michigan State University's pioneering legacy of applied research, education, and outreach by catalyzing collaboration and fostering innovation among the diverse range of people, processes, and places involved in regional food systems. Working in local, state, national, and global spheres, CRFS' projects span from farm to fork, including production, processing, distribution, policy, and access. Learn more at <http://foodsystems.msu.edu/>.

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