Meadow Ridge Apartments

West Chester, OH

HEAL MAPPS™

Community Report

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Meadow Ridge Community HEAL MAPPS™ Report

This report describes the methods and findings of a community-based participatory research program called HEAL MAPPS[TM] (Mapping Attributes using Participatory Photographic Surveys) which documenting the lived experiences and challenges related to accessing food for Meadow Ridge Apartment residents in West Chester, Ohio.

West Chester is a suburban township located in Butler County, Ohio. The Township is part of the Cincinnati Metropolitan Area, and is approximately 18 miles north of the city. US Census population data from 2010 states the population as 60,958[i]. Located in the southwest corner of Butler County, the township is surrounded by seven other jurisdictions. West Chester is home to the Lakota Local School District. The local school distinguished district is one of its largest employers in West Chester (second only to GE Aviation), providing jobs for approximately 1,827 full-time regional employees according to the 2014 West Chester Comprehensive Annual Financial Report[ii]. West Chester is home to former US Speaker of the House of Representatives, John A Boehner. This area has a reputation as a wealthy and safe southeastern Ohio suburb.

Home to a regional superstore, Ikea, West Chester has the highest level of interstate access of any community in the region, outside the Cincinnati urban center. It sits between Interstates 75, 275, and 71 on the western and southern edge. While just over half of the land use in the county is agricultural (51 percent, according to the CLAS County Profile)[iii], the township owns and manages approximately 300 acres of park property for recreational opportunities.[iv] The abundance of green and agricultural space seem almost reminiscent of the township's rural roots.

The average household income in West Chester is $86,854 and the poverty rate stands at 7.2 percent[v]. However, consistent with the nature of development patterns in townships, this poverty is concentrated in specific census block groups. The 2.4 percent growth in poverty rates in West Chester between 2010 and 2014 is consistent with national trends which indicate that poverty is now growing faster in suburban spaces than in the urban core[vi]. In fact, today there are more people living in poverty in suburban than urban spaces[vii]. This changing geography of poverty suggests the possibility that there are certain groups living in suburban neighborhoods struggling with food insecurity. Almost 80 percent of suburban service providers report seeing more families with food needs than they did the previous year[viii]. In anecdotal findings from food pantries and food assistance service providers in West Chester, the number of residents requiring food assistance has increased dramatically in recent years. A very recent study also found that in 2009, after accounting for income and education levels, suburban households were more likely to be food insecure than rural households and as likely to be food insecure as urban households[ix]. Access to a safe and consistent supply of food is no longer just an urban problem, it is now very much a suburban challenge as well.

Butler County ranks 44th, out of 88 counties in Ohio for Overall Health Outcomes according to the Robert Wood Johnson Foundation's 2015 County Health Rankings. The obesity rate is 30 percent, which is consistent with State and National percentages. The food insecurity rate is 15 percent, compared to a state average of 18 percent, as outlined in the Map the Meal Gap project published by Feeding America in 2013[x].

There are a number of programs in place to help alleviate the problem of limited food resources for low income households. These include federal programs such as the Supplemental Nutrition

Assistance Program (SNAP), the Special Supplement Program for Women, Infants and Children (WIC), the School Breakfast Program and National School Lunch Programs (that offers low-cost / free lunch and breakfast to qualified children), as well as non-profit programs such as the Feeding America Backpack program (that offers food for low-income children to take home on the weekends), food banks, and the broader hunger relief network.

Although there is no township (or zip code) data on SNAP participation, Census tract county-level counts estimate that low-income persons in Butler County who are SNAP participants are 40.43 percent of the population[xi].

Previous Research on Suburban Food Insecurity

These social safety nets help alleviate food insecurity among low-income families. However, The Brookings Institute suggests that those living in exurban or suburban communities showed lower rates of SNAP participation as compared to city counterparts - 39.2 percent of families used SNAP in cities as compared to only 32 percent in the suburbs[xii]. In Iowa, suburban food pantry users were less likely to participate in food assistance programs or community gardens[xiii]. The authors offer a few explanations for these findings, including a lack of awareness, stigmatization associated with using public assistance, difficulties accessing SNAP offices (often located in urban centers), and transportation problems[xiv]. Research suggests that social stigma around these benefits can prevent vulnerable households from accessing these services[xv]. The stigmatization felt by the food insecure populations can be intensified in different environments. Our proposal recognizes previous definitions of food security that include the idea of "acquiring food in socially acceptable ways."[xvi]

Physical, economic, and healthy access to food can also be a challenge[xvii]. For example, distance to a store, car availability, the price of food, whether or not a retailer is SNAP authorized (accepts EBT), and what variety of products are offered at the store, impact access. In many ways the food desert literature focuses on this problem, identifying low-income inner city neighborhoods where there are few supermarkets that offer a greater variety of foods most often at lower prices), and more convenience stores that offer a smaller selection of foods at higher prices[xviii]. Less research has been focused on suburban areas. Many low-income communities express concerns whether retailers in suburban areas are responding to changes in customer needs. Some interventions that have sought to address food deserts in inner cities, such as policies to incentivize grocery stores, or farmer's market EBT programs, but these policies have had mixed results in terms of participation and improving healthy eating. Some of the criticism revolves around the idea that the low-income community was never engaged in decision making; that the interventions were not marketed to the wants, needs, and challenges to the target audience.

HEAL MAPPS Process: A community-based participatory research project to address suburban food insecurity and healthy food access

HEAL MAPPS is a Community-Based Participatory Research (CBPR) method developed by Oregon State University to assess rural obesogenic food environments. The Food Opportunity Research Collaborative (FORC) adopted the HEAL MAPPS methodology in order to understand the lived experience of food insecurity.

The research team engaged West Chester residents in a CBPR project consisting of six initial steps to catalyze community change: 1) Community participants, in this case youth and adult leaders, are trained on digital photography and Global Positioning Systems. 2) Trained teams of three or four take digital photographs and GPS coordinates of community features that support or inhibit healthy eating and physical activity. Pictures and coordinates are sent to the Food Opportunity Research Collaborative (FORC) at Ohio State University where they are organized and formatted. 3) Teams reconvene and decide upon which pictures best profile their communities. 4) Using Geographic

Community 'MAPPers' used GPS to map routes and take pictures...

Information Systems, FORC then overlays the selected pictures onto community maps according to where they were taken. The photomaps and possibly some other data sources (i.e. maps of SNAP authorized retailers) are used to develop a presentation for the community. The teams, working with a site coordinator, use the presentation to facilitate a "community conversation" with stakeholders using "Turning Point" instant polling technology. Stakeholder opinions are gathered about each of the features. 5) Using qualitative research techniques, FORC organizes the stakeholder opinions to facilitate the development of a community action plan based on the community's readiness to change. 6) Under the leadership of the site coordinator, the community uses the plan to improve environments so they are supportive of healthy eating and physical activity.
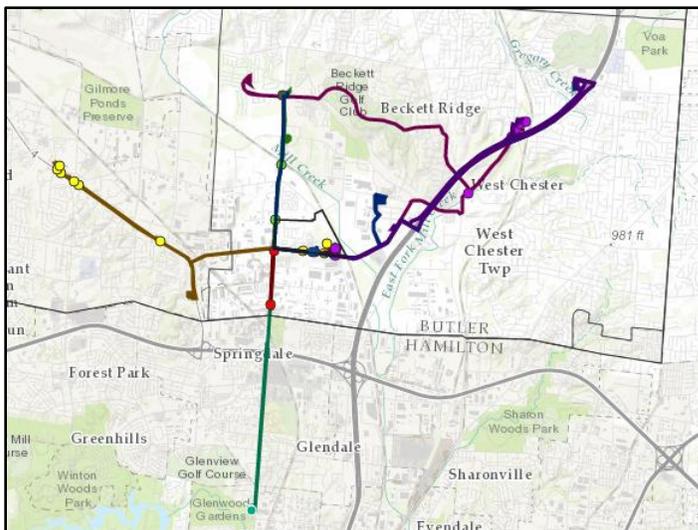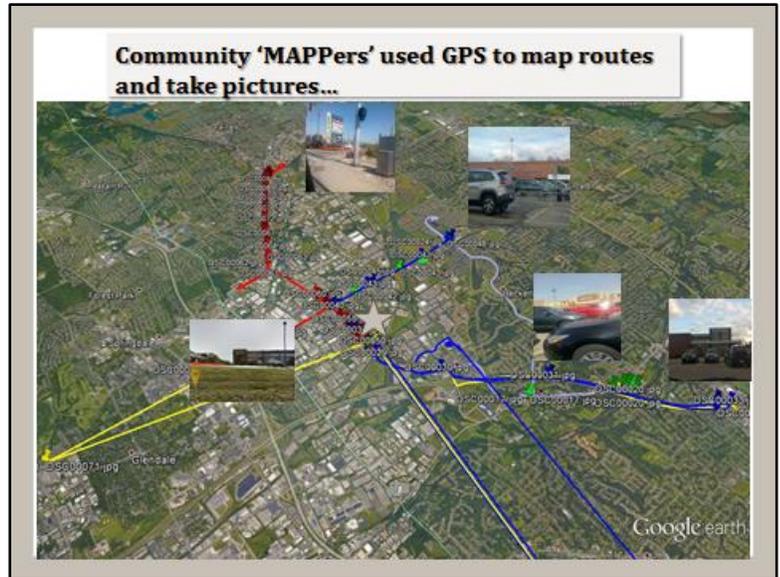
The HEAL MAPPS researchers and community partners recruited youth (13-up) and adults residing in Meadow Ridge Apartments, a low income community within suburban West Chester Township, to implement a community-based participatory research program called HEAL MAPPS. The objectives of this partnership included:

1.   Youth (13 and up) and adult leaders (MAPPERs) photographed and mapped physical or social features that relate to suburban food access.

2.   Using selected community maps and photos, MAPPERs developed a presentation for the West Chester community to raise awareness, dialogue, and action around suburban food access.

3.   Researchers, Extension professionals, and MAPPERs disseminate results at Extension (4-H) and SNAP-Ed / FCS conferences, scholarly articles, and social media.

Meadow Ridge Apartments and West Chester HEAL MAPPS Activities

Monthly planning meetings between research and community partners began on 7/15/15. Most meetings were webinars, however, FORC travelled to Butler County twice during this process to meet with community partners. Participants included representatives of OSU Extension Butler County, OSU faculty from the Department of City and Regional Planning, College of Human Ecology and Education, College of Food, Agricultural, and Environmental Sciences, the Kirwan Institute for the Study of Race and Ethnicity, and Butler County Success in the Lakota School District in West Chester. On average, ten people participated in the planning meetings. Accomplishments included obtaining an Institutional Review Board (IRB) approval, identifying and selecting a community of focus, identifying stakeholders, discussing a timeline, and delegation of tasks and responsibilities.

Initial Stakeholder Dinner and Discussion (February 4, 2016): The purpose of the initial stakeholder meeting was to inform the community of the objectives of HEAL MAPPS, assess their own experiences and perceptions related to suburban food insecurity, discuss how they or their organizations might be able to contribute to HEAL MAPPS, addressed suburban food insecurity, and identify who else should be invited to participate in the process. In all 35

stakeholders attended including representatives from Lakota School District (several principals and administrators), Shared Harvest Foodbank, OSU Extension Butler County, community action agencies, several churches, Meadow Ridge Apartments, University of Cincinnati Hospital, as well as State Representative Margi Condit. Following a presentation on HEAL MAPPS, the stakeholders asked questions and offered suggestions on who else to invite into the process. Stakeholders also shared some of their opinions regarding and experiences with suburban food insecurity.

HEAL MAPPS Training (April 14, 2016): Seven youth and four adult MAPPERs from the Meadow Ridge community participated in the HEAL MAPPS training. Several OSU research team members and Kevin Harris, 4H educator Butler County, introduced the objectives and overall process of HEAL MAPPS. The community MAPPers were then assigned the task of choosing a route in the community and photographing features that make it easy or hard to access food. Each family was then assigned GPS/ camera units and route journals and were shown how to use them. A portion of this training was spent allowing the community MAPPers to practice using the GPS devices. Additionally, each MAPPer was given $20 in cash and asked to spend it out food along their route. MAPPers also signed IRB-approved consent forms at this time and received $15 gift cards for participating.

Photo Mapping (April 14-April 25, 2016): The MAPPERs worked in teams or as individuals, but youth and adults were asked to work separately. In all, seven routes were created, with over 100 pictures taken. MAPPers kept journals of their routes and explained why they took each picture to the context of food access.

MAPPer focus group (May 12, 2016): Five youth and one adult reconvened, with the adult and youth meeting separately with researchers to discuss the pictures and maps and decide upon which pictures best represent to community. Two other adults were not able to attend the focus groups but were interviewed separately. Throughout the collective focus group and interview process with the MAPPers, no more than 25 out of the more than 100 photographs were selected for the final published route maps. During the focus groups, the MAPPers were also asked how and where they spent their $20 and what factors influenced their decision making in terms of their food purchasing. Finally, the MAPPers were asked if they would like to co-present at a community conversations event, and were given marketing materials to distribute.

The research team used the focus group information to develop the presentation used during the community conversation using the HEAL MAPPS template.

Community Conversation (May 31, 2016): MAPPers, and researchers presented the routes, pictures, and discussed how the $20 was used. Instant polling was used to assess perceptions of community readiness to address food insecurity. Thirty-three people participated in the conversations including the original stakeholders, community residents of Meadow Ridge, and the MAPPers.

The resulting conversation transcripts were used by researchers to develop a community report and accompanying story map. The report and story map will highlight perceived barriers and supports to healthy food access and food security (the lived experience of food insecurity), overall community readiness to address suburban food security, and recommended actions.

Community Conversation Findings and Recommendations

Community Readiness

Communities differ in many ways including their readiness to take action on an issue and implement relevant programs. The level of community readiness is a major factor in determining whether a particular program can be effectively implemented and supported by a community. Assessing the level of readiness for efforts to address food insecurity and healthy food access is thereby a critical component of obesity prevention, program planning, and evaluation.

The Community Readiness Assessment Model is a tool we used to gain an understanding of the Meadow Ridge community's resources and readiness for addressing food insecurity and healthy food access. The assessment is divided into six dimensions that influence a community's readiness to take action on an issue. The six dimensions are: community knowledge about the issue, community efforts, community knowledge of the efforts, local leadership, community climate, and local resources related to the issue. Questions representing each dimension were asked during the Meadow Ridge Community Conversation and the participants shared their perception of readiness and preparedness for change. Each dimension was then scored by three independent evaluators and combined to identify the overall stage of readiness. Meadow Ridge's stage of readiness to implement strategies to address healthy food access and food insecurity falls somewhere between stage **PRE-PLANNING** and **PREPARATION** indicated by the arrow on the Stages of Readiness graph. At this level, people are ready to start thinking about how to address the issue more comprehensively especially related to changing policies, systems, and environments. Overall, the community conversation suggested that participants recognized the problem of food insecurity, healthy food access, and recognized local efforts that address the issues such as Reach Out Lakota, Shared Harvest food pantries, the Lakota school summer feeding program, and others. However, participants cited many Meadow Ridge residents were still unaware of food assistance programs and services, and in some situations felt uncomfortable asking for assistance or about existing resources due to stigma or pride. Community Conversation participants did offer some consensus: that the number of service providers was insufficient to address the need. Residents and community leaders were generally unaware of the link amongst community environments (sidewalks, roadways, store locations), food insecurity, healthy food access, and health outcomes. In general, many government, school, and business leaders are unaware of the problem of food insecurity and healthy food access. While others are engaged, they are not sure how to go about changing policies, systems, and environments to improve the situation. The issue would become more of a priority if leaders were more aware of the financial implications of poor diets, associated morbidity, and mortality. Participants felt that the West Chester community, and in particular community leaders, would be willing to step up and engage these issues, but the right people need to be at the table to address complex issues.

Some strategies to improve community readiness to address healthy food access and food insecurity:

> Establish a task force of Meadow Ridge residents, business, school, and government leaders to change policies, systems and environments in order to improve food insecurity and healthy food access. Work on getting the "right people to the table."

- Make more Meadow Ridge residents, government, school, and other community leaders aware of the link between the physical features of community environments (lack of sidewalks, busy roadways, store locations), food insecurity, healthy food access, and financially burdensome health outcomes.

  o Promote the attached "Story Map" through social media outlets
  o Radio, Television, and newspaper stories could also raise awareness
  o Make public speaking engagement with local organizations and groups

- Promote existing West Chester food assistance services and programs within the Meadow Ridge neighborhood.

Stages of Community Readiness[1]
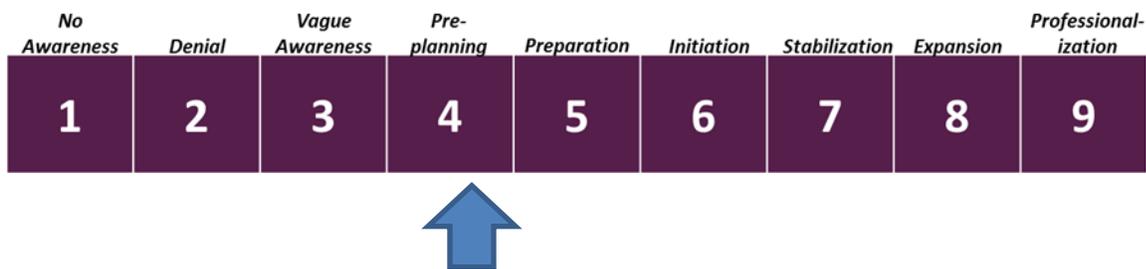
Summary Scores for Each Dimension of Community Readiness
(1= "low" to 9= "high" level of readiness)
for Community Conversation questions

Community Conversation Poll Results and Discussion

Dimension A – Community Knowledge of Efforts to Address Food Insecurity and Healthy Food Access (Summary Score: 7)

How supportive are members of West Chester in efforts to address food insecurity?

- 0 percent: Not at all
- 29 percent: Mildly Supportive
- 19 percent: Moderately Supportive
- 67 percent: Very Supportive

Good quality food is an issue in the West Chester area. The community sustains a number of organizations that provide links in the food safety net. Reach Out Lakota is a well-established organization offering food and other assistance to area households that meet a number of requirements including religious affiliation. A community leader commented that there is a

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[1] For more information about the Community Readiness Model, stages of community readiness, and stage-based strategies to increase community readiness to address health issues visit: http://www.colostate.edu/Dept/TEC/article3.htm.

burdensome reliance on area churches, Faith Community United Methodist Church, and Reach Out Lakota to provide emergency food to households. School summer programs have expanded their service to include entire families. The local farmers market accepts SNAP allowing for household acquisition of fruits, vegetables, and other nutritious meal components. WIC coupons can also be used at the farmer's market. One participant indicated that one of the local apartment complexes operates a food program.

The participants are aware of several child-related programs to improve consumption of healthy foods. They know of a weekend food program for school age kids. They are also cognizant that a new grant has been received to provide bridging programs for summer food. One participant explained in a follow-up statement that she believes the school lunch program was improving the healthfulness of the food served; the school was increasing their purchase of "healthier" food items and removing sweets. Although this process was not a direct classroom program, it does provide indirect education to the students and the community through conversations regarding the initiative for healthful consumption.

While this group of participants is aware of a number of programs, such as Shared Harvest, they feel that many other people in their community are not as conscious of the available assistance. One participant did state that while there are programs, there are "not a lot" of them, indicating a greater number are needed. Better communication about existing resources and how to access them is needed to increase participation.

One participant explained that it is difficult to start conversations regarding food needs and scarcity. He stated that he uses his personal history (being raised by a single mom and growing up "without much") to identify with people that may be in need. He found that "families are more comfortable talking if they know you have an understanding of where they've been", this created a relationship and "then they talk". However, many people living and growing up in West Chester cannot relate to the experience of poverty, therefore the community needs to think critically about stigma-related barrier to seeking assistance that the low-income population may face.

When asked what information leaders have regarding West Chester demographics, participants indicated that the information is limited. One participant acknowledged that there are "some food pantries" in West Chester. Participants indicated that there is available information on food pantry patrons and pantry usage. They also indicated general media awareness including newspaper articles, social media, the 211 hotline, and the United Way Resource Center. Another participant shared that an organization known as C3 has resources listed on their website.

Dimension B – Existing Community Efforts to Address Food Insecurity and Healthy Food Access (==Summary Score: 4==)

> ***How confident are you that the people in your community who provide programs, services, activities, and establish policies have expertise to help people who are food insecure?***

- 8 percent: Not at all confident
- 58 percent: Mildly confident
- 17 percent: Moderately confident
- 17 percent: Completely confident

Participant generally felt there was a lack of information about the issue, resources available, and specifically nutritional information. The community is supportive of nutrition and food scarcity remediation, but they are unaware of specific needs or ways to assist in alleviating the problem. The participants acknowledge that many community members would like to help, to strengthen the food assistance programs in the area, but again, there is a lack of knowledge as to hope to plug into the volunteer networks of organizations already doing this work. Communication is needed to increase participation in this aspect of the food assistance net. While there are number of services available, they are not sufficient for the community needs.

There is a belief that individuals, who work in the food assistance sector, are too few in number and that they do not understand the challenges that community members face. There is a greater need for communication between those that have experienced poverty and those that have not. There is a need for communication regarding the full range of services that are available and those services that are necessary.

The potential construction of a new Kroger store was used by one participant as an example of how neighborhoods could withhold the development because some members were unaware of the need for accessible food choices. In regard to challenges to accessing healthy food, another participant pointed out "some people don't know, some don't want to know or they just don't try to find out."

Dimension C - Leadership (Summary Score: 3)

> **How engaged do you feel that your community leaders are in efforts to address food insecurity?**

- 17 percent: Not at all
- 43 percent: Mildly engaged
- 30 percent: Moderately engaged
- 9 percent: Very engaged

The participants were ambivalent regarding leader engagement. They feel that some are aware of problems surrounding the access of healthy food while others "don't know yet". There is a feeling that other leaders know of the problems, but do not know how to help. One elected official was in the room and her presence was acknowledged; she was thanked for her attendance. There were suggestions that improvement of the healthy food environment needed to be resolved not only by the local community and its leaders but also the larger business community. There was a call for investment from the retail sector, specifically Kroger to establish another store. There is a belief that a healthy full-service grocery store closer to Meadow Ridge will improve the local economy.

One participant suggested that legislators, stakeholders, businesses, and community members could be better informed regarding the long term negative health effects of an unhealthy food environment. This needs to be translated into financial outcomes to increase the systemic motivation. Another participant stated that many of the leaders are unaware of the fiscal diversity within West Chester; that they have "eyes blinded". She further explained that many of the leaders are aware of the bus situation in West Chester, but they are not moved to resolve the problem. She said that "blows my mind".

The discussion turned to the belief that emotional responsiveness is not enough; the barrier is not compassion, but financial constraint. Sidewalk construction was given as an example. When the group was asked if people would want to volunteer time, donate money or provide space to improve community health, one participant responded succinctly, it is not just having enough people at the table, it's having the right people at the table because, "you can't help what you don't know".

Dimension D - Community Climate Related to Food Insecurity and Healthy Food Access (<mark>Summary Score: 4</mark>)

Do you believe food insecurity is an issue of concern in your community?

Community members are generally aware of the issue. One participant, a teacher, stated that he sees things that the rest of the community does not. There is an assumption in the larger community that the West Chester area is a wealthy or financially comfortable area and thus does not have students that struggle. He stated that people need to have their eyes opened because many kids don't have what they need. Participants suggested that community members needed to have the opportunity to share their needs so that businesses can "open their hearts" and that there is a lot of denial that there are any issues in the community; a lot of people don't know and don't want to know.

There is an awareness that the business's need to be involved in the problem solving process so that they understand what the community's needs are and that there is an economic impact from poor nutritional health. There is consensus between leaders, community members, and Kroger that a new store is needed in this area.

It is challenging for the issue of need to be expressed among the community members. There is a high level of stigma about asking for help. People are more willing to share when they believe that others in the conversation have similar experiences of need and scarcity. Many people simply cannot bring themselves to ask for help, despite their need.

There needs to be interest and the correct kind of interest in the foodscape. One participant emphasized that she would not feel confident running any assistance program. Many of her friends are volunteers, but they had not experienced poverty. She related their lack of empathy with impoverished community members simply because they had no relatable lived experience. This participant felt it was very important to include those who had experienced poverty and struggle, that a mix of trained and empathetic volunteers would be invaluable.

Community members expressed frustration at the lack of communication about the changes within their neighborhood. One participant stated that a restaurant that had been torn down did not make an announcement and no indicators as to the replacement business have appeared. The participants guessed, "Probably put another hotel or restaurant there" while someone else mentioned the construction of additional Section 8 housing in the area.

Dimension E - Community Knowledge about the Issue of Food Security and healthy Food Access (<mark>Summary Score: 3</mark>)

How knowledgeable are the people in your community about the link between the community environment (roadways, sidewalks, stores) and food security

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- 32 percent: Not at all knowledgeable
- 52 percent: Mildly knowledgeable
- 24 percent: Moderately knowledgeable
- 0 percent: Very knowledgeable

Most participants in the room feel that nutrition education is lacking in West Chester. One participant expressed concern regarding the knowledge base of the individuals running the programs. She does not feel they are knowledgeable of the multilevel struggles of those who have a lived experience of poverty. Often the program leadership are direct college graduates who are unfamiliar with the lived experiences of poverty, complicating empathic understanding. These leaders are not as cognizant that true remediation is more than just giving someone a bag of groceries. Program leadership needs to be a mix of individuals with academic or business training and those who have the lived experience.

Retail entities should consider location of new builds for stores and what the perception is as to the impact of these projects.

The participants were asked what types of health information was available about the people in their community, such as local physical activity levels, who participates in physical activity, nutrition behaviors such as fruit and vegetables consumption or health statistics such as obesity rates. They were asked how people would get this information. No one had any responses to these questions.

Individual awareness of the food environment's impact on others is minimal. One participant explained, "You are knowledgeable to your situation" – as it relates to one's own food security status. This indicates that challenges or scarcity information is not extending beyond the immediate circle where the need occurs. A suggestion that news articles or other media pieces could assist in disseminating the information thus increasing awareness and participation in remediation efforts. There was no awareness of how individuals or groups would seek out this information. Community members are more aware of remediation programs than of health and nutritional outcomes from the struggles within in the obesogenic environment. People who are unaware of the negative food environment are perceived as not wanting to know about the situation.

One participant discussed the value of the soup kitchens, stating that these organizations have value but they do not solve the problem. He noted the impact that stigma and pride can have on people's ability to access assistance. He gave the example of a single mother as being unwilling to go to a soup kitchen, yet being willing to walk two miles to a grocery store to use what little financial resources she had. He explained that he knows individuals have pride and who would rather use cash than access the free soup kitchen resource.

In direct response to the slide showing a prepackaged veggie tray the respondents identified it as healthy food but not a complete meal because it does not show multiple food groups; no protein or other items. There was agreement, "it is just a small snack."

Dimension F - Resources (people, money, time, space, etc.) Related to the Issue of Food Insecurity and Healthy Food Access (Summary Score: 3)

> ***My community has adequate resources (programs, services) to help a variety of community members who are food insecure.***

- 21 percent: Strongly Disagree
- 50 percent: Disagree
- 29 percent: Agree
- 13percent: Strongly Agree

The terminology of "adequate" is difficult to answer due to its subjective nature. One participant declared that if it means "okay" then they agreed with the statement.

Some services and resources are available for community members to access, but are insufficient for the needs of the entire community. Programs do not do enough, they have limited days and hours which limits community member accessibility. There are multiple gateways for assistance, like Shared Harvest and the school based programs, there just aren't enough of them. A community leader stressed there was burdensome reliance on faith based programs such as Faith Community United Methodist Church and Reach Out Lakota. The community is supportive of remediation overall, but specific issues are difficult to pinpoint.

One of the resources that is inadequate is the presence of sidewalks. They involve a considerable cost and it is not felt that the community has the financial resources to construct them; property owners are not able to carry this cost. It was pointed out that the community leaders are not lacking in compassion as much as constrained by fiscal limitation.

Transportation to access grocery stores will be helpful, "Just look at any of the new Krogers they are attempting to build." Kroger is trying to build near a housing development but neighborhoods are expected to object due expected traffic congestion as a result of the new store.

Barriers to Healthy Food Access and Food Security in Meadow Ridge and West Chester (*148 references in Community Conversations*)

- Transportation is a major challenge for many residents of Meadow Ridge who don't have regular access to a car. There are not any sidewalks, cross walks, or bike trails connecting the apartments to food retail and roads are dangerous. In addition, residents do not have access to public transportation. Biking and walking to the grocery is not only dangerous, but limits the amount and type of food that you can buy.

- The location of full service grocery stores is not convenient, even for those who have cars. Kroger is located about 4 miles away, and depending on the time of day, traffic can be stressful and time-consuming. Jungle Jim's is even further and the roads are busier, especially with heavy traffic. Aldi's and Walmart offer reasonable prices and many choices but are also far away, and routes are congested. Dollar general is about a mile away, within walking distance. However, healthy options are lacking, and prices aren't always reasonable.

- Fast food is much easier to purchase regularly since it is close, affordable and quick especially for working, single parents. However, many thought it was harder to eat healthy at these places.

- Many of the grocery stores are busy, and parking lots are congested and unsafe leading to stressful shopping experiences.

- On limited food budgets, one person said that she couldn't afford to buy healthy foods if she wasn't sure her family would like them.

- The stairs on the apartments at Meadow Ridge are difficult for some to carry groceries up, especially those who are disabled.

- Some feel as if local food assistance workers are not empathic, or can't relate to those who are food insecure because they have never experienced similar situations.

- Some people in the community are too prideful to use food assistance. There is also stigma associated with using Reach Out Lakota

- Many thought people are unaware and uneducated about healthy eating, never been taught how to prepare meals.

- Eating healthy is perceived to be more expensive. Cheaper food is viewed to be less healthy but also lasts longer, and can be more filling.

- It can be difficult to learn about food assistance programs without a cell phone or computer.

- Food Assistance programs are not always accessible during certain days of the week and don't always provide enough food.

Supports to Food Access (*37 references in Community Conversations*)

- There are many faith-based, and non-profit food assistance programs that serve the community such as Shared Harvest, Faith Community United Methodist Church, Reach Out Lakota and some other food pantries.

- Lakota Schools are supportive of families in need. In particular, there is a weekend backpack program that provides snacks during the weekends and also a summer lunch program for families. One community conversation participant noted that school lunches at Lakota have become healthier.

- One participant stated that local schools are "doing a good job at removing sweets and unhealthy food from (their) system and purchasing healthier food"

- Farmer's markets in West Chester have become supportive to food insecure residents. WIC offers farmers market coupons; the West Chester farmer's market accepts EBT.

- Social media, newspapers, a website called C3, and United Way 211 are ways in which residence can become aware of food assistance programs.

- Grocery Stores such as Aldi's offer healthy choices at reasonable prices. Many groceries offer coupons. One participant noted that bagged fruit items are easy to carry.

- Meadow Ridge has an after school tutoring program that often offers snacks and meals.

- One participant stated that calories listed on a menu "helps (you) think twice about what (you) are purchasing and having the family eat"

Resident Informed Recommendations for Change

- Build a grocery store within walking distance of Meadow Ridge that carries more options and healthier choices

- Develop or expand sidewalks (from UDF)

- Build awareness and understanding within the community, government, school, and business leaders regarding food insecurity, food access challenges, and other needs

- Bring more fresh fruit into the apartment complex (fruit stand, give-away, etc.)

- Start a community garden within the apartment complex

- Nutrition Education is needed to show people how to prepare healthy meals and snacks

Figure 1. Represents all routes generated by the Meadow Ridge community MAPPers.
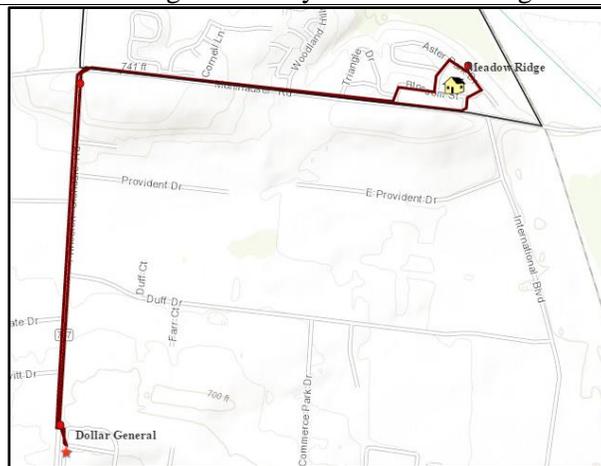
Figure 2. Represents an example of a route generated while using a personal motorized vehicle. All photograph location coordinates are in decimal degrees. Jodi was not able to access healthy food when she did not have a vehicle.
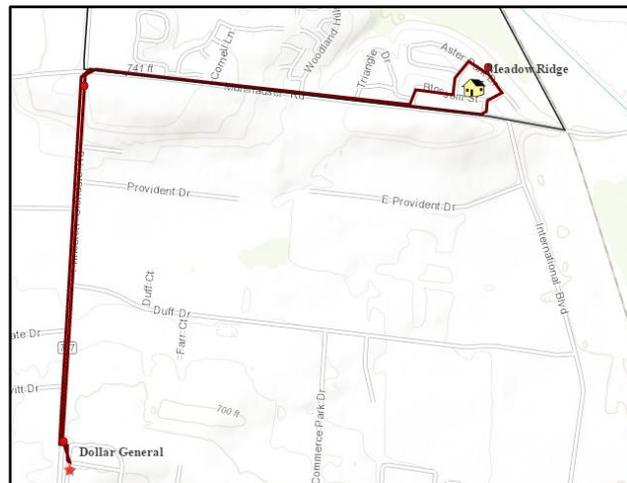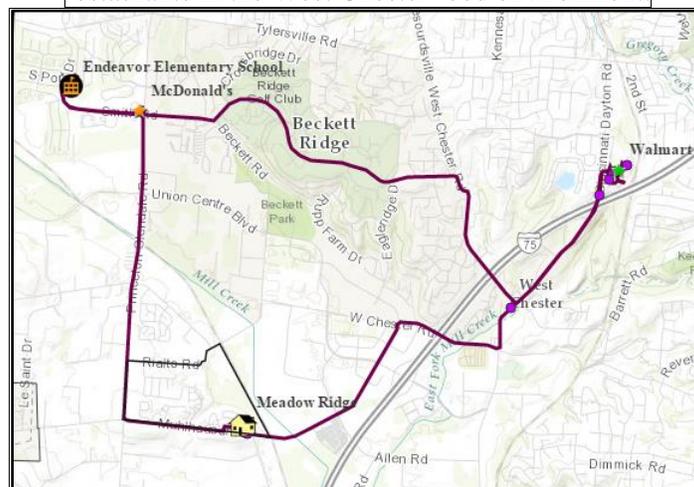

Figure 3. Represents a walking route and the features encountered along the route that enable or hinder healthy eating – Ethan's route and pictures illustrate the many high fat, high sodium, fast food restaurants in the West Chester food environment.

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