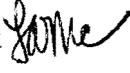


HHS&GO COMM #2
June 23, 2016

MEMORANDUM

June 21, 2016

TO: Health and Human Services Committee
Government Operations and Fiscal Policy Committee

FROM: Linda McMillan, Senior Legislative Analyst 

SUBJECT: **Updates: Food Hub, Kitchen Incubator, Food Council, and
Community Food Rescue**

The Chief Innovation Officer, Executive staff, and representatives from the Montgomery County Food Council and Manna Food (contractor for Community Food Rescue) will provide updates to the joint Committee on their activities. Presentation materials will be distributed when they are available.

As background, the following are web links to the Innovation Program's discussion of the Food Hub and Kitchen Incubator, the Montgomery County Food Council, and Community Food Rescue. The Community Food Rescue site provides information on how to use the food recovery matching tool/app.

<http://mcinnovationlab.com/tag/food-hub/>

<http://mocofoodcouncil.org/>

<https://communityfoodrescue.org/>

HHS&GO COMM #2
June 23, 2016

ADDENDUM

MEMORANDUM

June 23, 2016

TO: Health and Human Services Committee
Government Operations and Fiscal Policy Committee

FROM: Linda McMillan, Senior Legislative Analyst 

SUBJECT: **Updates: Food Hub, Kitchen Incubator, Food Council, and
Community Food Rescue**

Attached are presentation and discussion materials for this session. Attached at ©1-2 is a summary from Chief Innovation Officer Dan Hoffman on these projects.

Kitchen Incubator

The summary (©1) indicates that study over the past year has determined there are benefits to such an incubator and that it could become financially sustainable in three years. It would serve about 50 start-ups at any given time. The County will partner with WorkSource Montgomery for the next phase of the project. The County engaged Union Kitchen and Street Sense as consultants for development of the plan.

Food Hub

Attached at ©3-4 is a summary from the Montgomery County Food Council on the fiscal impact of establishing a “food hub” in Montgomery County. The Food Council contracted with Cultivate Ventures to conduct the study.

- A “food hub” is defined as a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally and regionally produced food products.

- The report recommends that the County not begin by launching an institutional food hub but instead “design a set of market-led programmatic interventions under a broad mission to improve the overall competitiveness of Montgomery County based emerging and enterprise farmers...” The goal is to diversify farm income and overall markets and to increase the supply of, and market access for, Montgomery County table crops, meats, and other locally produced products.

Montgomery County Food Council

The Montgomery County Food Council has four priorities that are addressed through its committees: (1) food recovery and access, (2) food economy, (3) food literacy, and (4) environmental impact. Attached at ©5-42 is the Community Food Access Assessment that is a basis for much of its ongoing planning and program efforts. The following is a summary of each workgroup.

1. Food Recovery and Access

The mission of the Food Recovery and Access working group is to increase recovery of, equitable access to, and advocacy for more healthful food for Montgomery County residents. We will do this by building capacity of food-related organizations, reducing food waste, and integrating local and regional efforts with community, non-profit, business and government stakeholders.

Our goals include:

- Increase the amount of fresh, local food served in Montgomery County Schools, hospitals, senior centers, retailers, and other institutions.
- Increase access to healthy, local food in underserved communities
- Implement initiatives to address food access issues
- Develop and post information about organizations, non-profits, county offices, and other entities with programs that address food access issues
- Raise awareness of local and regional recovery efforts and build capacity of recovery organizations to address consumer needs

Current Projects:

Hunger-Free Zone – As a follow-up to our 2015 Food Community Access Assessment Report, we are working to define and develop metrics for a Hunger-Free Zone, to improve coordination and capacity of food assistance organizations, and to reduce the number of people in Montgomery County who are categorized as food insecure.

Strengthening SNAP – We are examining ways to increase the number of SNAP/WIC approved retailers, to improve ability for eligible households to receive and maintain benefits, and to work with Maryland Hunger Solutions to support the SNAP program in Montgomery County.

Hunger Relief Directory – We are creating a comprehensive list of all current hunger relief resources and emergency food providers in Montgomery County. This directory – which will be a valuable resource for individuals experiencing food insecurity, providers, and government agency staff – will frame the current state of food insecurity in the County and highlight existing efforts and gaps in services provided.

Building Working Group Process and Participation – As a newly merged working group, we are working to strengthen our group member recruitment, retention and feedback, and to formalize our decision-making processes.

2. Food Economy

Our goal is to develop and sustain an economically viable local food system. We represent and support all stakeholders including:

- farmers, producers, food entrepreneurs
- chefs and restaurateurs
- distributors
- retailers
- consumers of local foods

Current Projects:

Eat Local MoCo Guide – We are currently creating a comprehensive “Eat Local MoCo Guide” for all Montgomery County food and beverage products and we invite all local food and beverage businesses to participate.

Eat Local Challenge – We coordinate the first year-long Eat Local Challenge, featuring four seasonal recipe challenges, in partnership with local farmers, restaurants, and markets to connect local producers with local purchasers, promote place branded marketing, and highlight the quality of county products.

Establish a Food Hub – Conduct supply chain analysis and advocacy to support the development of a Food Hub and establish greater connectivity between farmers, food retailers, and food producers.

Kitchen Incubator – Advise the progress of the kitchen incubator project to ensure that it is realized as envisioned, monitoring and facilitating the development process and continuously engaging with stakeholders.

3. Food Literacy

The Food Literacy Working Group’s mission is to improve eating the habits of those who live, work, or play in Montgomery County.

We implement this goal through advocacy and education on:

- healthy food choices,

- cooking skills,
- food safety,
- food marketing, and
- participating in the local, sustainable food system.

Current projects include:

Resource List: Develop a comprehensive list of Food Literacy resources and stakeholders in Montgomery County.

Advocacy Listserv: Establish a listserv to connect local policy, advocacy groups, businesses and individuals to discuss current policy issues and provide a forum for circulating relevant petitions and advocacy opportunities.

4. Environmental Impact

Our mission is to protect and improve the local environmental resources of Montgomery County related to agriculture and food.

Focus issues include:

- soil
- water
- biodiversity

Current projects include:

Improve Food Waste Metrics – Identify and analyze current metrics for food waste incineration and diversion in Montgomery County.

Support Composting – Convene current providers of residential and municipal composting services and programs to promote regulatory and legislative opportunities for composting facilities of various scale within Montgomery County.

Increase Composting on Farms – Connect Montgomery County farmers with resources and opportunities to encourage on-farm composting. Conduct a survey of Montgomery County farmers to identify which farmers compost on farm, what methods they use, and if they intend to expand their composting efforts to take source material from others within the allowed guidelines.

Policy Response – Respond to and advocate for local, state, or national policies that impact Montgomery County soil and water health as connected to the food system.

Community Food Rescue

Attached at ©43-44 is a report of the highlights of the Community Food Rescue Network. Community Food Rescue is the effort that was sparked from the Council's food recovery workgroup and its recommendations. The County contracts with Manna Food to coordinate and manage this program.

- The report shares that in 2015, CFR network agencies reported receiving 2,802,265 pounds of rescued food valued at \$4,935,613. This is about 2,335,221 meals.
- Manna has brought new financial support to the Capacity Building Mini Grant program. The summary notes that in FY16, \$20,000 of County funds were matched by private donors so that \$60,000 in grants could be distributed.
- Community Food Rescue has implemented a food-matching software called "Chow Match" that was developed by the non-profit Peninsula Food Runners.



OFFICES OF THE COUNTY EXECUTIVE

Isiah Leggett
County Executive

Timothy L. Firestine
Chief Administrative Officer

Food System Project Updates June 20th, 2016

The food system in Montgomery County is an important part of the County's quality of life. From our Agricultural Reserve, our restaurants, and our hunger relief programs our food system touches every resident in the County. We are pleased to provide you an update on several projects intended to enhance this system:

- **Kitchen Incubator**: Last year we began developing a plan and programmatic requirements for a large scale shared commercial kitchen in Montgomery County. We engaged Union Kitchen and Street Sense as consultants to develop this plan. The planning confirmed that such a facility would be beneficial and could become financially sustainable in three years from establishment. The incubator would serve approximately 50 start-ups at any given time and follow a true incubator model. The programs would also help support the other smaller-scale shared kitchen initiatives around the County. With the work completed, the County Executive was briefed and follow-up steps were identified. These included: identifying specific potential properties based on the site selection in the plan, begin identifying potential funding sources, and begin conveying this information to the partnering organizations. Although this project is moving slower than anticipated due to staffing issues associated with the economic development transition, we are pleased to announce that we are partnering with WorkSource Montgomery which will help provide staffing resources for the next phase of the project. This is well aligned with their Hospitality Alliance.
- **Community Food Rescue**: Community Food Rescue (CFR), a program of Manna Food Center and the Department of Health and Human Services, fulfills the need to coordinate and build the capacity of our community to rescue and redistribute unsold, surplus food to people experiencing hunger. With generous County and private support, Community Food Rescue has achieved many of its milestones since its inception in spring 2014 and public launch in March 2015. Responding to stakeholders' needs, CFR has developed and implemented: food safety protocols, capacity building grants, matching software and mobile app, online information, and public recognition programs. The CFR Network currently has 26 food assistance organizations, 96 food donors and 38 volunteer food runners. In 2015, 20 CFR Network agencies reported receiving 2,802,265 lbs. (2,335,221 meals) of rescued food valued at \$4,935,613.
- **Food Hub Study**: The Montgomery County Food Council (MCFC) served as the convener of a project to conduct research on the fiscal impact of a food hub in Montgomery County, funded through a County Council grant. MCFC contracted Cultivate Ventures as the consultant to conduct a feasibility study on a food hub, including defining its potential

structure, necessary resources, regional context, and next steps to present recommendations to local government leaders. Stage I of the project recently concluded and included: completing a Montgomery County internal review and interviews, conducting desk study of best/worst practices (case studies) of food hubs nationally, creating a comprehensive definition of food hub, regional analysis of Southern Maryland, Northern Virginia, and Washington DC to quantify and document regional local food assets and stakeholders, and field analysis and interviews with farmers and ancillary value chain players to assess market demand for a food hub and its key services. The deliverable for this stage was a 51-page written report, "*Framing Food Hub Investment and Programming Opportunities in Montgomery County*," submitted in June 2016, including a complete vision with a set of recommendations for how Montgomery County can best design and invest in a food hub concept or offer alternative strategies for value chain engagement. This report was the work of our consultants, outlining their observations of research findings and their recommendations for next steps, which include conducting internal working groups with stakeholders to measure reaction to the findings and determine broader public/private sector interest.

Attached are additional materials related to these projects. If you have any additional questions please feel free to contact Daniel Hoffman at daniel.hoffman@montgomerycountymd.gov or 240-777-2553.



The Montgomery County Food Council (MCFC) served as the convener of a project to conduct research on the fiscal impact of a food hub in Montgomery County, funded through a County Council grant. MCFC contracted Cultivate Ventures as the consultant to conduct a feasibility study on a food hub, including defining its potential structure, necessary resources, regional context, and next steps to present recommendations to local government leaders. Stage I of the project recently concluded and included: completing a Montgomery County internal review and interviews; conducting desk study of best/worst practices (case studies) of food hubs nationally; creating a comprehensive definition of food hub; regional analysis of Southern Maryland, Northern Virginia, and Washington DC to quantify and document regional local food assets and stakeholders; and field analysis and interviews with farmers and ancillary value chain players to assess market demand for a food hub and its key services. The deliverable for this stage was a 51-page written report, "*Framing Food Hub Investment and Programming Opportunities in Montgomery County*," submitted in June 2016, including a complete vision with a set of recommendations for how Montgomery County can best design and invest in a food hub concept or offer alternative strategies for value chain engagement. This report was the work of our consultants, outlining their observations of research findings and their recommendations for next steps, which include conducting internal working groups with stakeholders to measure reaction to the findings and determine broader public/private sector interest.

This brief study provided a framework of analysis for the Montgomery County Food Council and its partners to determine the applicability and feasibility of possible investments in food hub related programming and infrastructure in the county. The Food Council and Montgomery County leadership are committed to providing the right level and type of support for its dynamic farming community, and this report clarifies the optimal models for future programmatic support to small- and medium-farmers.

The report acknowledges that there are many differing models for technical and financial support for small- and medium-sized farms — a food hub being just one available option. The report therefore strongly recommends that there is clearly enough supply and demand, value chain stakeholder support, and current overall momentum to warrant MCFC and its partners to advocate and plan for a comprehensive expansion of current Food Economy programming.

The report does not recommend however that MCFC and the County focus initially on designing, developing and launching a full institutional food hub, defined as *a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and / or marketing of locally and regionally produced food products*. The lack of available county-centric volumes of produce, combined with a highly competitive regional landscape of produce aggregation, distribution and retailing, does not suggest there is an operating or market environment to justify another similar player entering the market. Additionally, it is not clear if the capital investments required to make an institutional investment of this nature is available.



The report therefore recommends that MCFC advocates strongly that the County takes an incremental approach. MCFC should design a set of market-led programmatic interventions under a broad mission: to improve overall competitiveness of Montgomery County based emerging and enterprise farmers; to increase / diversify farm income and the overall market environment; and to expand the supply of available farmers (especially from disadvantaged and low-income stakeholder groups).

Key elements of a successful market-led approach include:

- Integrate all programming into tangible, well-funded, long-term focused ecosystems of technical resources that can provide required assistance for expanding capacity at the farmer level.
- Focus on increasing producer level market linkages and logistical support as broadly as possible, fostering in particular deeper relationships with regional food distributors.
- Engage the private sector as much as possible.
- Encourage regional collaboration wherever feasible.
- Integrate market strengthening programming with targeted advocacy support that is focused on improving the competitiveness of the local agriculture policy environment.
- Ensure that expanding market oriented programming does not reduce the overall Montgomery County focus on improving access to at-risk and impoverished County residents to local food.

Any food hub market oriented program should concentrate time and resources on developing and expanding the market linkages that will allow smaller-to-emerging farmers to capitalize on these diverse market opportunities, rather than rather than direct distribution / aggregation. Additionally, any service and support should also focus on volume maximization, crop diversification, value added production, packaging and branding, e-commerce and general support on achieving market standards.

Services spawned via these programmatic investments should focus on increasing supply of, and market access for, Montgomery County table crops, meat and other value added, locally produced products in the broader DMV and Baltimore markets. If financial resources are available, programs should also be designed to spur additional investment in, and access to, produce centric value-adding production and co-packing opportunities for local producers. Finally, market expansion programming should be bolstered by targeted advocacy, managed by MCFC, focused specifically on removing policy barriers currently limiting farm-level income diversification beyond production. All programming must have long-term financial sustainability and viability as core requirements.

MOCO producers — regardless of size, sophistication or product — operate in a highly competitive market environment that demands high quality product delivered on a consistent basis. This marketplace provides challenges and increases barriers to entry, but it also results in a marketplace that currently has unmet demand for local product. Moving forward, informed by the extensive resources and knowledge provided with this report, Montgomery County government, its Food Council, and a wide variety of other stakeholder partners can concentrate resources on developing and expanding market linkages that will allow smaller, emerging farms to capitalize on these diverse market opportunities,



Community Food Access Assessment

MONTGOMERY COUNTY, MARYLAND

2013 - 2015



**MONTGOMERY COUNTY FOOD COUNCIL
FOOD ACCESS WORKING GROUP**





The Montgomery County Food Council (MCFC) was launched in 2012, and is an independent council formed and led by professionals, private businesses, government officials, individual members, community organizations, and educational institutions that broadly represent the food system both substantively and geographically. The MCFC is made up of 15 selected volunteer members who represent a broad range of stakeholders, and supported by a part time coordinator. The work of the MCFC is accomplished via administrative committees (Development, Communication, Monitoring and Evaluation and a Steering Committee), and working groups (Food Literacy, Food Economy, Food Access, and Environmental Impact).

The mission of the Montgomery County Food Council (MCFC) is to bring together a diverse representation of stakeholders in a public and private partnership to improve the environmental, economic, social and nutritional health of Montgomery County, Maryland through the creation of a robust, local, sustainable food system. The goals of the MCFC are:



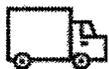
Food Economy - To develop and sustain an economically viable local food system in Montgomery County that supports producers,

Food Access - To increase access to locally produced, healthy food among Montgomery County residents, especially communities with limited access.



Food Literacy - To increase Montgomery County residents' understanding of the importance of local, healthy food through education opportunities that lead to healthier food choices by residents.

Environmental Impact - To improve agricultural soils and reduce the environmental impacts of local land and water use and the environmental footprint from non-local food in Montgomery County.



Food Recovery - To advise the development and implementation of, as well as to facilitate partner participation in, Community Food Rescue, a collaborative system in Montgomery County to increase the recovery and appropriate distribution of surplus food from local farmers, local businesses, and local organizations.

Food Access Working Group (FAWG)



The goal of the Montgomery County Food Council's Food Access Working Group (FAWG) is to increase access to locally produced, healthy food among county residents, especially in communities with limited access. The working group began its work with a community food access assessment that was conducted in two phases. This report describes the methods and findings of the community food access assessment.

Phase I of the Community Food Access Assessment – Mapping the County

In 2013, the FAWG partnered with Amanda (Behrens) Buczynski and her colleagues at the Johns Hopkins Center for a Livable Future (CLF) to explore and map healthy food access, specifically food deserts, within Montgomery County to understand where access issues exist and which communities are affected. Food deserts are defined by the USDA as "...urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food" ¹. CLF first examined the USDA map of food deserts for Montgomery County, which identifies only a very small area of the county as food deserts, specifically portions of Gaithersburg, Aspen Hill and Colesville. CLF has conducted their own analysis of food deserts in Baltimore City and found that there are significant limitations with the USDA definition. Additionally, FAWG members, who work with communities facing limited access to healthy foods, confirmed that the true size of the problem is larger than the USDA had defined. Since CLF does not have their own food desert measure for counties with both urban and rural areas, they proposed to analyze healthy food access in Montgomery County through a series of maps to visualize indicators that impact access, specifically income, access to vehicles, food store locations and emergency food resources.

Household income is a key indicator of an individual or family's ability to access healthy food, as it impacts the ability to afford healthy food, but also the ability to physically get to food stores if transportation is required. Household income was mapped in gradients, to identify the lowest income neighborhoods and towns (Figure 1). The FAWG chose to use the Maryland Self-Sufficiency Standard ² to identify "low income," which is a study by the Center for Women's

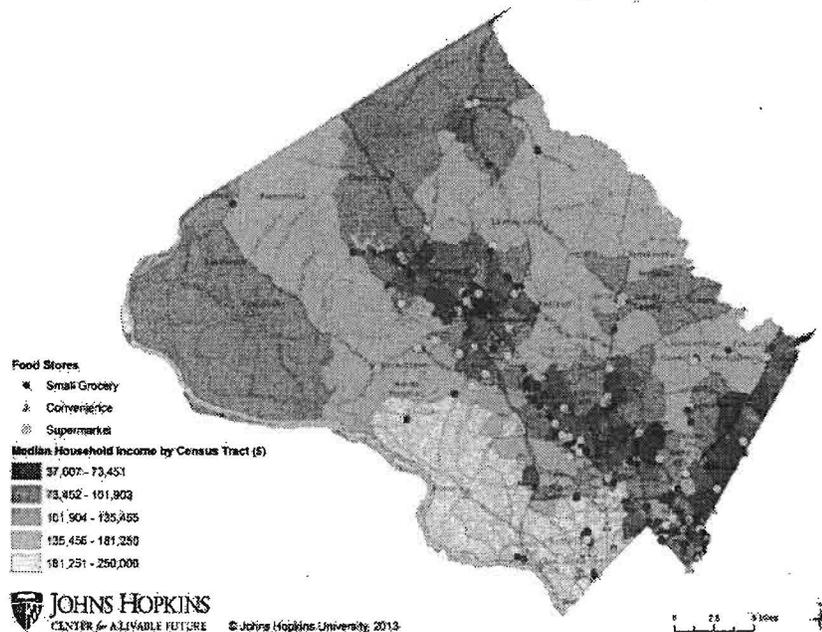


Figure 1. Food stores and median household income, Montgomery County

Welfare that “defines the amount of income necessary to meet basic needs... without public subsidies... and without private/informal assistance.” For Montgomery County, the Self-Sufficiency Standard is \$73,451, and any census tracts with household income at or below this level were considered low income.

Personal transportation also affects an individual or family’s ability to access healthy food, as a recent study found that most Americans use their own vehicle to get to a grocery store, specifically 95% of non-SNAP households use their own vehicle. The study was examining the importance of personal transportation for SNAP households in accessing groceries, and they found that even a large percentage of SNAP households use their own vehicles, 65%³. But for those households without vehicles, getting to a grocery store may involve walking long distances, navigating public transportation or paying for a taxi. In order to understand whether specific communities in Montgomery County had access to vehicles, data from the American Community Survey was mapped by census tract (*maps provided in the Appendices*). On average, 8% of households in Montgomery County do not have access to a vehicle⁴.

Both of these indicators were mapped in conjunction with food store locations. These maps were then analyzed to identify the communities most at risk for limited access to healthy food – where there were households with low income, a significant percentage of the population did not have access to vehicles, *and* there were limited food stores. The communities identified were: portions of Wheaton, Silver Spring, Aspen Hill/Bel Pre and parts of Gaithersburg, all of which FAWG labeled as “**Communities of Low Access**” (COLAs).

These COLAs were then mapped individually to better understand access to healthy food on a community level (*maps provided in the Appendices*). Again, the maps were analyzed to visually identify those areas of the most limited access to healthy food, or “areas of identified need.” These specific neighborhoods were then chosen for community food access assessments, as described in Phase II.

Phase II of the Community Food Access Assessment – Collecting data from the community

The second step of the community food access assessment was to collect data directly from residents and food retail establishments in the COLAs of Montgomery County. The FAWG used two well-defined and widely utilized approaches to evaluating community food access issues, listening sessions and the Healthy Food Availability Index (HFAI) scoring. The specific methods used are described below.

Listening sessions. Listening sessions are meetings that were open to the general public where facilitators prompt a discussion around various aspects of an issue in order to better understand the community’s resources and needs. The FAWG held eight listening sessions between September 2014 and May 2015 in areas identified as having low access to food according to our mapping efforts. These sessions were held in public meeting spaces that were easily accessible to the communities identified as having low access to food (Table 1). Members of the working group received training from Anne Palmer (Program Director at CLF) to facilitate the sessions. Six of the eight listening sessions were facilitated by Ivonne Rivera, MPH and/or her employees at Rivera Group, Inc. in order to accommodate the Spanish-language needs of the majority of listening session participants. To incentivize attendance at the listening sessions, participants were given \$10 Target gift cards at the end of the listening session. Complimentary

childcare and refreshments were also provided at each session.

The FAWG developed a set of questions relating to food access that were posed to each of the listening groups (*session script provided in the Appendices*). The sessions were recorded (with participants' permission), and then transcribed by the Rivera Group or by FAWG members. Common themes and issues were identified from the transcribed discussions, and will serve as potential action items for the FAWG's future plan of work.

Table 1. Listening session dates, locations, number of participants

Date	Location	Participants	Language
9/23/14	Long Branch Community Center 8700 Piney Branch Rd, Silver Spring, MD 20912	10	Spanish
10/2/14	Mid-County Regional Services Center 2424 Reedie Drive, Wheaton, MD 20902	6	Spanish
10/10/14	CASA de Maryland 734 University Blvd. E, Silver Spring, MD 20902	14	Spanish
10/15/14	Casey Community Center 810 S Frederick Ave, Gaithersburg, MD 20877	21	Spanish and English
10/23/14	Clifton Park Baptist Church 8818 Piney Branch Rd, Silver Spring, MD 20903	10	Spanish
10/23/14	Liberty Grove United Methodist Church 15225 Old Columbia Pike, Burtonsville, MD 20866	2	English
1/27/15	Caribbean Help Center 10140 Sutherland Rd, Silver Spring, MD 20901	6	Haitian Creole
5/21/15	Mid-County Community Recreation Center 2004 Queensguard Rd, Silver Spring, MD 20906	11	English

Web survey. Although communities of low food access were our primary concern for the listening sessions, we were also interested in hearing about healthy food access issues that any Montgomery County resident (regardless of income or area of residence) may be encountering. In order to broaden the reach of our listening sessions, we also created a web survey version of the listening session script using FluidSurveys Online Survey Software. The survey link was emailed to the FAWG's member organization networks and to the Food Council's contact list. Additionally the link was tweeted via Manna Food Center and the Food Council's twitter account.

Healthy Food Availability Index scoring. The Healthy Food Availability Index (HFAI) was developed by researchers at Johns Hopkins University, an adaptation of the Nutrition Environment Measurement Survey (NEMS). The HFAI evaluates the presence (i.e. availability) and cost of healthy foods in eight food groups (milk, fruits, vegetables, meat, frozen foods, low sodium canned goods, bread, and breakfast cereals) in individual stores, and allows for comparison within and between store types. The resulting data is converted to a numeric score, which ranges from 0 to 27 points, with a higher score indicating a greater availability of healthy foods. The HFAI data collection form is provided in the Appendices.

Two food stores in each of the COLAs (specifically in areas within 2 miles of each of the listening sessions) were selected at random for HFAI surveying. Additionally, 12 food stores in areas of the county that were determined to have the highest average incomes (Bethesda, Potomac and portions of Gaithersburg) were selected as controls. In some communities, there were no or only one store of a given type, which limited our ability to choose stores at random. Otherwise, stores were chosen at random using an online random number generator. A map showing the HFAI scores by location is provided in the Appendices.

On April 11, 2015, 17 volunteers (FAWG members, MCFC members, students from the Milken Institute School of Public Health at George Washington University, and several community volunteers) received a half-hour instruction by Amanda Buczynski on how to complete the HFAI

store surveys. Following the training session, the volunteers went to a nearby Safeway grocery store, where each volunteer completed the HFAI survey. The group then reconvened to discuss their experiences and discuss any questions that they surveyors encountered over lunch. Volunteers then received their assignments of 3 -6 stores, and went out in groups of two to conduct their independent assessment.

RESULTS

Listening sessions

A total of 80 Montgomery County residents participated in the eight listening sessions. The majority of participants were: Hispanic (68%), reported a household income of less than \$25,000 (71%), and reported spending \$575 or less on groceries on a monthly basis (90%). The demographic characteristics of the listening session participants are described in Table 2.

Table 2. Demographics of listening session participants

Characteristic	N (%)	Characteristic	N (%)
Hispanic/Latino		Household composition	
Yes	54 (68%)	Adults, <i>average (range)</i>	2.7 (1-6)
No/No answer	26 (32%)	Children, <i>average (range)</i>	1.2 (0-5)
Country of origin		Annual income	
United States	10 (14%)	< \$25,000	51 (71%)
El Salvador	24 (32%)	\$25,000 - \$50,000	17 (24%)
Mexico	7 (9%)	\$50,000 - \$90,000	2 (2.5%)
Haiti	6 (8%)	> \$90,000	2 (2.5%)
Columbia	5 (7%)	Monthly food spending	
Guatemala	4 (5%)	<\$300	28 (37%)
Honduras	4 (5%)	\$300 - \$575	40 (53%)
Peru	4 (5%)	\$576 - \$725	6 (8%)
Bolivia	2 (3%)	\$726 - \$900	1 (1%)
Panama	2 (3%)	> \$900	0
Dominican Republic	1 (1%)	Use of food assistance programs	
Ecuador	1 (1%)	SNAP	11
Nicaragua	1 (1%)	WIC	4
Nigeria	1 (1%)	School Breakfast Program	11
Puerto Rico	1 (1%)	National School Lunch Program	4
Somalia	1 (1%)	Summer Nutrition Program	2
Use a smart phone		Child and Adult Food Care Program	1
Yes	36 (50%)	Fresh Fruit and Vegetable Program	3
No	36 (50%)	Senior Farmers Market Nutrition Program	1
Have internet access			
Yes	43 (58%)		
No	31 (42%)		

In an effort to promote the utilization of a common conceptual model for the analysis of healthy food access, the factors identified in this community food assessment were categorized by the five domains and associated dimensions described by Freedman *et al*⁵: (1) Economic Access includes the financial resources of a household available for food purchase; the perceived costs of nutritious foods; coupon or other incentives available at food stores and the perception of whether foods available in a store are worth the price. (2) Service Delivery is related to the

quality and variety of items sold, the customer service provided by store staff, and the overall presentation of the store's products. (3) Spatial-temporal access includes the geographic boundaries of the local food environment, the balance of the food access sites in an area between the various store types, the time needed to travel to stores and the availability of reliable transportation, as well as the time a household has for food procurement and preparation. (4) Social access includes familial, racial and/or ethnic food ways and food-related traditions that influence food access as well as the differential access often correlated with socioeconomic composition of a community. Also an aspect of social access is the importance of personal relationships with growers, providers, and other customers as influential to food access. (5) Personal access refers to the effects of individual health status, food and nutrition knowledge, and food related identities and preferences on food access. The listening session findings by domains are summarized below.

Economic access: Lack of affordability is a main obstacle to accessing healthy food. The high cost of living in Montgomery County and low work wages places a strain on community members to choose between paying rent and buying food. Among listening session participants, price is the strongest determinant of where people shop and what they buy. They described being constantly challenged by the cost of fresh perishables compared to that of processed foods with longer shelf lives and the need to make food last across several meals. The average grocery spending per week reported by listening session participants (\$250-\$350) is on the higher end of the USDA Food Plans.

Service Delivery: There's a desire for store staff, signs, and nutrition labels to be in languages other than English to encourage consumer rights, educated choices and request for specific products. Participants expressed a strong preference for products that are fresh and of high quality but also indicated a lack of these items at affordable prices. In particular, there is a perception that Latino grocery stores sell lower quality products than major chains, especially in the meat and produce departments. There is an appreciation and understanding of the correlation between freshness and nutrition. The observed limited availability of healthy options extended to emergency food providers, i.e. pantries and hot meal programs.

Spatial/Temporal access: Transportation is crucial. The form of transportation (and cost) to a location with healthy food available determines if fruits and vegetables are worth the trip and if so, how many will be purchased. Participants without vehicle access described shopping at convenience stores where nutritious food is not sold. Burtonsville was highlighted as a location in which it is difficult to reach a grocery store without access to a vehicle. Time (to shop and cook) and the availability of kitchen utilities are other main obstacles to accessing healthy food. Due to the high cost of rent, participants stated they live in spaces with no access to kitchen or are not allowed to cook because they live in someone else's home. Holding multiple jobs or jobs that require long hours contributed to a lack of time available to prepare food.

Social access: Foods must reflect the diet (and palate) of the household. There was a clear preference among listening session participants for stores that sold and pantries that provided foods from Latin America. Participants described produce quality as lower in their communities compared to more affluent neighborhoods. Many stated that they often travel outside of their communities to find supermarkets and farmer's markets with good quality produce.

Personal access: Community meeting attendees admitted suffering from various health problems such as gastritis, high cholesterol, high blood pressure, and diabetes.

Web survey

A total of 51 Montgomery County residents completed the survey in May 2015. The majority of respondents to the web survey reported being white (76%), with 5% reporting being Black, 5% being Asian and 14% of "other" ethnicity. Just over half of the web survey participants reported an annual household income of \$90,000 or more, and only 5% reported an annual household income of less than \$25,000. Forty two percent of web survey participants reported spending between \$300 and \$575 per month on groceries, and 5% reported spending more than \$900 per month.

A majority (68%) of survey respondents indicated they had no barriers to getting the food they want or need. The 32% that did have barriers cited the lack of a nearby food store (spatial-temporal), transportation issues (spatial-temporal), and a lack of availability of the types of foods (service delivery) they want to buy as the three main barriers to access. Twenty four percent said they have run out of food by the end of the month. Suggested changes to overcome these barriers included building a local store in Poolesville and having more money. The primary reason survey respondents shopped at the stores they did was related to spatial-temporal access (proximity/convenience), followed by service delivery (quality and types of food), and lastly, economic access (price of food).

Similarly, the vast majority of web survey respondents (86%) indicated they do not have barriers to *preparing* the food they want. The small percentage of participants who reported having barriers to preparing food cited time (spatial-temporal) as the main barrier, followed by cost (economic). When asked for additional comments about food access in the community, the most frequent comment was related to the lack of a grocery store in the most rural parts of the county, in particular, Poolesville. Additional comments included a mention of the value of increased education on how to prepare healthy and affordable meals (personal), a desire for increased frequency of food assistance pickup, increased advertisement of healthier food and decreased promotion of unhealthy foods, more local produce and a desire for a farmers market near home address. Selected comments from the web survey included:

"We are fortunate to have resources to allow ample food access. For people with limited incomes or lack of transportation, food access must be a challenge."

"We are both over 70 and can foresee the lack of a grocery store in town will cause problems as our mobility decreases."

"We need a grocery store in Poolesville."

"Limited option in our town (Poolesville). There is no one stop shopping for groceries."

Healthy Food Availability Index (HFAI)

Data was collected from 43 stores in COLA communities, specifically in those neighborhoods within a 2 mile radius of each listening session, as well as data from 12 control stores in the county's highest income areas. HFAI scores by general store type and community type are presented in Table 3. Stores were categorized according to CLF's food store standards. The definitions and sub-categories are outlined in the text box. As expected based on reports from other parts of the country⁶⁻⁹, supermarkets were found to be more likely to carry the full

selection of healthy food items (have higher HFAI scores) compared to small groceries and convenience stores. Our survey found no statistically significant differences between HFAI scores for food retail outlets in COLAs compared to control (high income areas) when stratified by store type, with the exception of pharmacies. Pharmacies in COLAs had significantly *higher* HFAI scores compared to pharmacies in the control areas.

Food prices were also evaluated to determine whether differences existed between COLAs and the highest income areas of the county. Prices were collected for certain healthy food items (low fat milk, bananas, carrots, dried black beans, chicken legs, fresh tilapia, ground beef and whole wheat bread) when available at each store. The average price of each good by general store type in COLAs is presented in Table 4. Overall, supermarkets offered healthy food items at cheaper prices than did convenience stores and small groceries for the items that were sold by all three store types. Most strikingly, bananas were sold at convenience stores for \$1 more a pound than they were sold in supermarkets. Bananas tend to be sold individually in convenience stores as a snack food item, whereas they are sold in bunches by the pound in supermarkets. Similarly, low fat milk was \$0.0106 more per ounce in convenience stores than in supermarkets, which translates to \$1.36 more a gallon.

Supermarkets are defined as large-format grocery stores with all food departments present, including produce, meats, seafood, canned goods and packaged goods. These stores have annual sales of \$2 million or more and have 3 or more cash registers. This category includes: traditional supermarkets such as Giant, limited assortment supermarkets such as Aldi, supercenters such as Target, and international supermarkets.

Small Grocery stores are small-format grocery stores that are typically independently owned and operated. They have annual sales of less than \$2 million and have limited food departments. This category includes: "mom and pop" grocery stores, sometimes referred to as "corner stores" in urban areas, and international small food stores.

Convenience stores include a variety of stores that sell food products, but food is not their main business. They are typically chain operated. This category includes: chain convenience stores such as 7-11, pharmacies and discount stores such as Family Dollar.

Table 3. Summary of HFAI scores by store type

Store type	Communities of low food access		Highest income areas		p-value
	n	Mean HFAI score (range)	n	Mean HFAI score (range)	
Supermarket	17	25.3 (16.5-27.5)	3	26.8 (25.5-27.5)	0.38
Traditional	7	27.4 (26.5-27.5)	3	26.8 (25.5-27.5)	0.29
Supercenter	2	26.0 (25.5-26.5)	-	-	-
International	7	23.2 (16.5-25.5)	-	-	-
Limited assortment	1	24.5	-	-	-
Small Grocery	10	10.0 (2.5-19.5)	3	5.7 (4.0-7.5)	0.24
International small grocery	4	7.2 (2.5-11.5)	3	5.7 (4.0-7.5)	0.59
"Corner store"	6	11.8 (4.0-19.5)	-	-	-
Convenience Store	16	9.2 (4.0-11.5)	6	8.8 (6.5-11.5)	0.66
Chain convenience store	7	9.1 (4.0-11.5)	2	9.0 (8.5-9.5)	0.94
Pharmacy	6	9.9 (9.0-11.0)	3	7.7 (6.5-8.5)	0.007
Discount convenience store	3	7.7 (6.5-10.0)	1	11.5	0.24

Table 4. Average Prices by Store Type in Communities of Low Food Access

Store type	Low fat milk		Bananas		Carrots		Black beans (dried)	
	n	ave. price per oz	n	ave. price per lb	n	ave. price per lb	n	ave. price per lb
Supermarket	16	0.0308	17	0.66	17	0.86	13	1.47
Convenience Store	12	0.0414*	7	1.66***	0	.	0	.
Small Grocery	1	0.0327	3	1.06***	1	0.89	3	1.70

Store type	Chicken legs		Tilapia (fresh)		Ground beef		Whole wheat bread	
	n	ave. price per lb	n	ave. price per lb	n	ave. price per lb	n	ave. price per loaf
Supermarket	16	1.39	4	4.14	15	4.79	16	2.51
Convenience Store	0	.	0	.	0	.	7	2.88
Small Grocery	1	2.72	0	.	0	.	1	3.59

Note: *, ** and *** indicate that a given store type has an average price that is significantly different from the average supermarket price at the 10, 5 and 1 percent level. Statistical significance cannot be calculated if the number of observations for a given store type is less than 2.

Table 5 presents prices stratified by store type subcategories. The data indicate that convenience store chains, such as 7-11, consistently charge more than traditional supermarkets for the food products they stock (\$0.05/ounce vs. \$0.03/ounce for low fat milk, \$1.66/pound vs. \$0.54/pound for bananas and \$3.56/loaf vs. \$2.05/loaf for whole wheat bread). Supercenters, such as Target, charge more than traditional supermarkets for the sampled produce (\$0.87/pound vs. \$0.54/pound for bananas and \$1.45/pound vs. \$0.82/pound for carrots), but offer low fat milk at a comparable price to traditional supermarkets. Finally, international supermarkets sold low fat milk, bananas and whole wheat bread at higher prices than did traditional supermarkets but sold meats for considerably lower prices than traditional supermarkets (\$1.05/pound vs. \$1.55/pound for chicken and \$3.09/pound vs. \$5.70/pound for beef).

Table 5. Average Prices by Store Subcategory in Communities of Low Food Access

Store type	Low fat milk		Bananas		Carrots		Black beans (dried)	
	n	ave. price per oz	n	ave. price per lb	n	ave. price per lb	n	ave. price per lb
Supermarket: Traditional	7	0.0275	7	0.54	7	0.82	4	1.47
Supermarket: International	6	0.0358***	7	0.70**	7	0.75	7	1.50
Supermarket: Supercenter	2	0.0269	2	0.87***	2	1.45**	1	1.59
Supermarket: Limited Assortment	1	0.0311	1	0.69	1	0.64	1	1.15
Grocery: "Corner Store"	1	0.0327	3	1.06***	1	0.89	2	1.36
Grocery: International	0	.	0	.	0	.	1	2.39
Convenience: Chain	6	0.0515*	7	1.66***	0	.	0	.
Convenience: Pharmacy	6	0.0313	0	.	0	.	0	.

Store type	Chicken legs		Tilapia (fresh)		Ground beef		Whole wheat bread	
	n	ave. price per lb	n	ave. price per lb	n	ave. price per lb	n	ave. price per loaf
Supermarket: Traditional	7	1.55	1	7.99	7	5.70	7	2.05
Supermarket: International	6	1.05***	3	2.86	5	3.09***	6	3.27***
Supermarket: Supercenter	2	1.99**	0	.	2	5.74	2	2.39
Supermarket: Limited Assortment	1	1.19	0	.	1	4.99	1	1.39
Grocery: "Corner Store"	1	2.72	0	.	0	.	1	3.59
Grocery: International	0	.	0	.	0	.	0	.
Convenience: Chain	0	.	0	.	0	.	3	3.56***
Convenience: Pharmacy	0	.	0	.	0	.	2	2.74
Convenience: Discount	0	.	0	.	0	.	2	2.00

Note: *, ** and *** indicate that a given store subcategory has an average price that is significantly different from the average supermarket price at the 10, 5 and 1 percent level. Statistical significance cannot be calculated if the number of observations for a given store subcategory is less than 2.

As shown in Table 6, traditional supermarkets in COLAs tend to offer similar prices as their high-income area counterparts. The only clear exception to this was ground beef, which was sold for \$0.88 per pound more in traditional supermarkets in COLAs than in traditional supermarkets in high income areas. Also there are signs that fresh tilapia is more expensive in traditional supermarkets in COLAs than in their high-income counterparts (although only two sampled traditional supermarkets carried fresh tilapia). As noted above, despite some meats being offered at higher prices in traditional supermarkets, COLA residents can still find lower meat prices at the international supermarkets in their area.

Table 6. Average prices in traditional supermarkets by food access area

Product	Communities of low food access		Highest income areas		difference
	n	average price	n	average price	
Low fat milk: price per oz	7	0.0275	3	0.0272	0.0003
Bananas: price per lb	7	0.54	3	0.49	0.05
Carrots: price per lb	7	0.82	3	0.98	-0.16
Black beans (dried): price per lb	4	1.47	3	1.18	0.29
Ground beef: price per lb	7	5.70	3	4.82	0.88**
Chicken legs: price per lb	7	1.55	3	1.66	-0.11
Tilapia (fresh): price per lb	1	7.99	1	5.99	2.00
Whole wheat bread: price per loaf	7	2.05	3	2.16	-0.11

Note: *, ** and *** indicate that the difference between the average price offered for a given product in traditional supermarkets in COLAs and in high income areas is significantly different at the 10, 5 and 1 percent level. Statistical significance cannot be calculated if the number of observations for either geographic location for a given product is less than 2.

DISCUSSION

The findings of this community food assessment indicates that while there are communities struggling with food insecurity in the County, in most cases, this is not due to a lack of physical access to healthy food as indicated by information provided by the listening session and web survey participants, and by the HFAI scores. The cost of food, transportation issues, and limited availability of culturally relevant foods were highlighted as key concerns in the listening sessions and the web survey.

With regard to the mapping efforts completed in Phase I of the community food access assessment, it is important to consider income and vehicle availability, but at the census tract level, pockets of poverty or limited resources are often missed. This is especially true in a county like Montgomery County, where there are a significant number of people earning high incomes which may mask areas of poverty when incomes are averaged across a census tract. These maps, however, helped the workgroup narrow our focus on the neighborhoods with the potential for the largest number of residents with limited economic resources to access healthy food, and are simply a means to identify areas where further study is warranted.

Data from the listening sessions and web survey indicate that the economic access is the primary issue when it comes to accessing healthy food. Listening session participants, the majority of whom reported annual household incomes of less than \$25,000, stated that price was the strongest determinant of where they shopped and highlighted the lack of high quality food items at affordable prices. Conversely, the majority of web survey participants, of whom only 5% reported annual household income of less than \$25,000, indicated that they had no barriers to food access. Both groups did, however, mention transportation to food retail outlets as potential barriers.

As has been reported elsewhere across the country⁶⁻⁹, data from the Montgomery County HFAI

surveys indicate that supermarkets are still the best source for the most variety of healthy foods, even among COLAs. No statistically significant differences in HFAI scores were observed between supermarkets or small groceries within COLAs compared with higher income areas. Small groceries and convenience stores had substantially lower HFAI scores compared to supermarkets, with the lowest scores found in international small groceries.

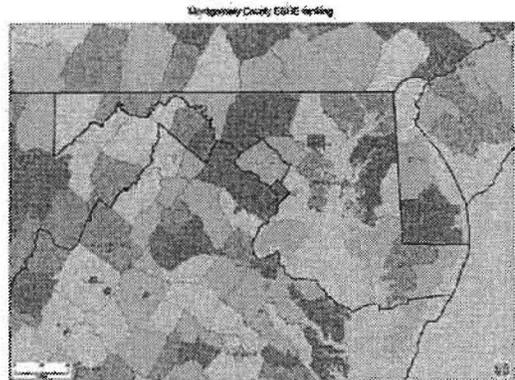
Pharmacies were one food retail category in which statistically significant differences were observed between COLAs and areas of higher income. Statistically significantly higher HFAI scores among COLA pharmacies compared to non-COLA pharmacies suggests that pharmacies (especially chains such as Rite-Aid and CVS that were surveyed in the Montgomery County assessment) may view their roles differently in different communities, and thus provide more healthy food options in areas that have few other food retail options. This may also reflect a national trend to increase healthy food items in convenience stores in general. The National Association of Convenience Stores (NACS) and United Fresh Produce Association partnered in June 2014 to identify ways to boost sales of fresh fruits and vegetables in convenience stores ¹⁰. Large chain pharmacies may be better positioned with resources and store space to install the refrigeration cases necessary to stock perishable healthy foods like fruits, vegetables, and low fat dairy products, even compared to some small grocery stores. However, it is unclear whether consumers will come to view pharmacies and convenience stores as a place to do their food shopping, or whether they continue to only view pharmacies and convenience stores as places to purchase snack and convenience foods.

The fact that the COLAs in Montgomery County are primarily suburban areas is different from food access assessments that have been conducted in many other parts of the country, primarily in more urban settings. Compared to urban areas, supermarkets tend to be more prevalent in the suburbs, and of similar quality. Our findings indicate the need for further research on suburban food environments, and how the barriers to food access differ from those of more urban areas.

Our assessment confirmed that in addition to providing the greatest variety of healthy food items, supermarkets also tend to provide the most affordable healthy food items. However, while prices did not vary significantly between COLA and non-COLA supermarkets for most items, affordability (ability to pay the given price) is still a concern for many residents of COLAs. In COLAs, international supermarkets offer an option for affordable meats and seafood but these markets are not always easily accessible. Bananas may be higher priced in convenience stores and small groceries because they are sold individually as snack food, which reinforces that these stores are not the main sources of grocery items, but rather places to get a quick snack or something you need in a pinch.

Environments Supporting Healthy Eating (ESHE) Index Report. In June 2015, while the FAWG was concluding the Montgomery County community food access assessment, the Environments Supporting Healthy Eating (ESHE) Index (<http://www.communitycommons.org/groups/childhood-obesity-gis/eshe/>) was released. The ESHE Index was designed to evaluate environmental influences on access to affordable and healthful foods. The ESHE Index indicators come from publicly available data, and serves as a way to rank communities, counties and states on factors related to healthy eating.

On a scale of 0 (least supportive) to 1 (most supportive), Montgomery County has an overall ESHE Score of 0.61, and was ranked 7th out of the 24 counties in the State of Maryland (Kent County was the highest ranked Maryland county, and Allegany County was the lowest ranked). While overall food insecurity in Montgomery County (8.3%) was noted to be lower than state (13.1%) and national (15.9%) averages, the report did note that 29.24% of Montgomery County residents live in census tracts with Low Healthy Food Access (as defined by the Modified Retail Food Environment Index Score (mRFEI ¹¹), 51% live in census tracts with Moderate Healthy Food Access, and only 7.24% live in census tracts with High Healthy Food Access. The mRFEI is a metric that considers both the number of healthy stores (defined as supermarkets, larger grocery stores, supercenters, and produce stores) and less healthy food retailers (defined as convenience stores, fast food restaurants, and small grocery stores with three or fewer employees) within census tracts across each state.



ESHE Index, Within-State Rank by County, ESHE 2015

- 1st Quartile (Most Supportive)
- 2nd Quartile
- 3rd Quartile
- 4th Quartile (Least Supportive)

The rate of SNAP- and WIC-Authorized Food Store Access per 1,000 residents below 200% of the federal poverty limit was significantly below the state and national average. However, the report also noted that the percentage of low-income Montgomery County residents with low food access (1.35%) was significantly lower than the state (3.24%) and national (6.27%) averages. The number of fast food restaurants per 100,000 residents was lower in Montgomery County (81.6) compared to the state average (86.6), although higher than the national average (72.7). The percentage of adult Montgomery County residents with inadequate fruit and vegetable intake (66.7%) was lower than both the state (72.4%) and national (75.7%) averages.

FUTURE DIRECTIONS

The activities and data outlined in this report will serve as baseline data for the FAWG's monitoring and evaluation activities going forward. The FAWG plans to continue conducting the Healthy Food Availability Index (HFAI) every one to two years, depending on funding and volunteer capacity, in order to monitor healthy food availability in the county.

The FAWG may consider interviewing or working with store owners to better understand how to increase their capacity to carry more healthy foods. Data from the listening sessions have provided important information on barriers to healthy food access in the County which the Working Group will use this information to establish a plan of work to alleviate barriers to healthy food access.

While the primary target population for this project was the residents of communities identified as having low food access in our mapping efforts (the COLAs), this project will ultimately benefit all Montgomery County residents by improving overall access to healthy foods. The listening sessions allowed the Food Access Working Group to hear directly from residents about their issues and barriers in accessing healthy foods.

The multi-dimensional model of food access first suggested by Freedman *et al*⁵ can provide guidance for policy and programmatic interventions to improve nutritious food access. It also emphasizes the need for efforts that address multiple levels of access. Based on the findings of this community food assessment survey, the following potential interventions and the corresponding access domain have been identified.

Economic Access:

- Advocate for minimum wage increase in Maryland.
- Advocate for rent-controlled housing (either to help families balance budgets or to increase access to kitchens at home)
- Provide information on government assistance eligibility.
- Educate or work with grocery stores to offer healthier incentives to the "free soda" deals when spending more.
- Offer education on how to cook and shop on a SNAP budget.
- Increase subsidization of healthy foods, such as the County's farmers market incentive program and other healthy food incentive programs
- Investigate the prices for healthy foods and the shopping habits of community members to determine exactly what factors are bringing up the total bill for groceries.

Service Delivery

- Advising smaller markets how to maintain freshness of produce/meat.

Spatial-temporal

- Encourage grocery stores, and/or faith-based groups and community centers to provide transportation to grocery stores.
- Advocate for establishment of grocery store in Poolesville, MD. Add farmers market and additional food access sites in East County.
- Evaluate the location of community gardens and increase awareness of and/or presence of community gardens in COLAs.

Social Access

- Use Asian and Latino markets which are succeeding in diverse, lower income metropolitan areas, as models for what types of produce to provide in areas with demographically similar populations.
- Encourage grocery stores to hire within the community so that the staff reflects the community it serves.
- Increase the amount of Latin American foods at emergency food sites serving those communities.

Personal Access

- Offer education that promotes preparing food in healthful ways, making unhealthy meals healthier, and planning meals ahead (to resist convenience options).

Montgomery County Food Council – Food Access Working Group

Co-chairs

Kim Robien, PhD, RD
Associate Professor
Milken Institute School of Public Health
George Washington University
krobien@gwu.edu

Jenna Umbriac, MS, RD
Director of Nutrition Programs
Manna Food Center
jenna@mannafood.org

Working group members

Linda Ashburn, RN, MPH
Coordinator and EFNEP County Supervisor,
Montgomery County

Jihan Asher
formerly: Wheaton Community Organizer
IMPACT Silver Spring

Susan Augusty
Info Montgomery

Christie Balch, MPH
Executive Director
Crossroads Community Food Network

Amanda Behrens Buczynski, MPH, MS
Senior Program Officer, Food System Mapping
Johns Hopkins Center for a Livable Future

Cheryl Kollin
Program Director, Community Food Rescue

Karina Mendoza
Program Manager,
Microenterprise Training Program
Crossroads Community Food Network

Laura Otolski, MS, RDN, LD

Christine Paukstis
formerly: Capital Area Food Bank

Susan Topping
Interim Senior Director of Partners and Programs,
Capital Area Food Bank

Summer Whitford
Food, Drink and Travel Writer

Mary Zaki, PhD
Assistant Professor
Department of Agricultural and Resource Economics
College of Agriculture and Natural Resources
University of Maryland Extension

ACKNOWLEDGMENTS

This project was made possible through funding from the Kaiser Foundation Health Plan of the Mid-Atlantic States, Inc.

The community food access assessment would not have been possible without the support of a large group of volunteers who assisted with various aspects of the project. The FAWG members thank:

- Anne Palmer, MAIA, Program Director for the Food Communities and Public Health Program with the Johns Hopkins Center for a Livable Future, for her expert guidance and training for the listening sessions.
- The Ivonne Rivera Group, especially Ivonne Rivera, Beatriz Perez-Gomez, and Karen Vanegas, for their expert facilitation of the Spanish language listening sessions.
- The volunteers who collected the Healthy Food Availability Index (HFAI) data: Carolina Arango, Juliana Buadu, Katie Baker, Julia Eddy, Jalisa Holt, Laura Howard, Jo-Ann Jolly, Sara Lupolt, Jamie Mayer, Katie Merritt, Michele Muise, Camille Paul, Allison Rubinoff, and Hilary Smith.
- Katie Baker and Sara Lupolt for their work on the HFAI data entry.

We are also incredibly grateful to the listening session and web survey participants who provided their insights on food access issues in the county.

REFERENCES

1. US Department of Agriculture. Food Deserts. <http://apps.ams.usda.gov/fooddeserts/fooddeserts.aspx> Accessed September 8, 2015.
2. Pearce DM. The Self-Sufficiency Standard for Maryland 2012. Maryland Community Action Partnership: <http://www.selfsufficiencystandard.org/docs/Maryland2012.pdf>
3. Ver Ploeg M, Mancino L, Todd JE, Clay DM, Scharadin B. *Where do Americans usually shop for food and how do they travel to get there? Initial findings from the National Household Food Acquisition and Purchase Survey*. U.S. Department of Agriculture, Economic Research Service; March 2015. EIB-138.
4. US Census Bureau. American Community Survey 5-Year Estimates, Table DP03, Using American Community Survey. *American Community Survey, 2008-2012* April 13, 2013.
5. Freedman DA, Blake CE, Liese AD. Developing a Multicomponent Model of Nutritious Food Access and Related Implications for Community and Policy Practice. *Journal of community practice*. 2013;21(4):379-409.
6. Larson NI, Story MT, Nelson MC. Neighborhood environments: disparities in access to healthy foods in the U.S. *Am J Prev Med*. Jan 2009;36(1):74-81.
7. Franco M, Diez Roux AV, Glass TA, Caballero B, Brancati FL. Neighborhood characteristics and availability of healthy foods in Baltimore. *Am J Prev Med*. Dec 2008;35(6):561-567.
8. Gustafson A, Christian JW, Lewis S, Moore K, Jilcott S. Food venue choice, consumer food environment, but not food venue availability within daily travel patterns are associated with dietary intake among adults, Lexington Kentucky 2011. *Nutr J*. 2013;12:17.
9. Andreyeva T, Blumenthal DM, Schwartz MB, Long MW, Brownell KD. Availability and prices of foods across stores and neighborhoods: the case of New Haven, Connecticut. *Health Aff (Millwood)*. Sep-Oct 2008;27(5):1381-1388.
10. Pape P. The case for fresh: selling fruits and veggies in the fast lane. *NASC Online*. (April 2015). http://www.nacsonline.com/magazine/PastIssues/2015/April2015/Pages/Cover_Story.aspx.
11. Centers for Disease Control and Prevention, Division of Nutrition Physical Activity and Obesity, Department of Health and Human Services. Children's food environment state indicator report. 2011; <http://www.cdc.gov/obesity/downloads/childrensfoodenvironment.pdf>. Accessed October 3, 2015.

APPENDICES

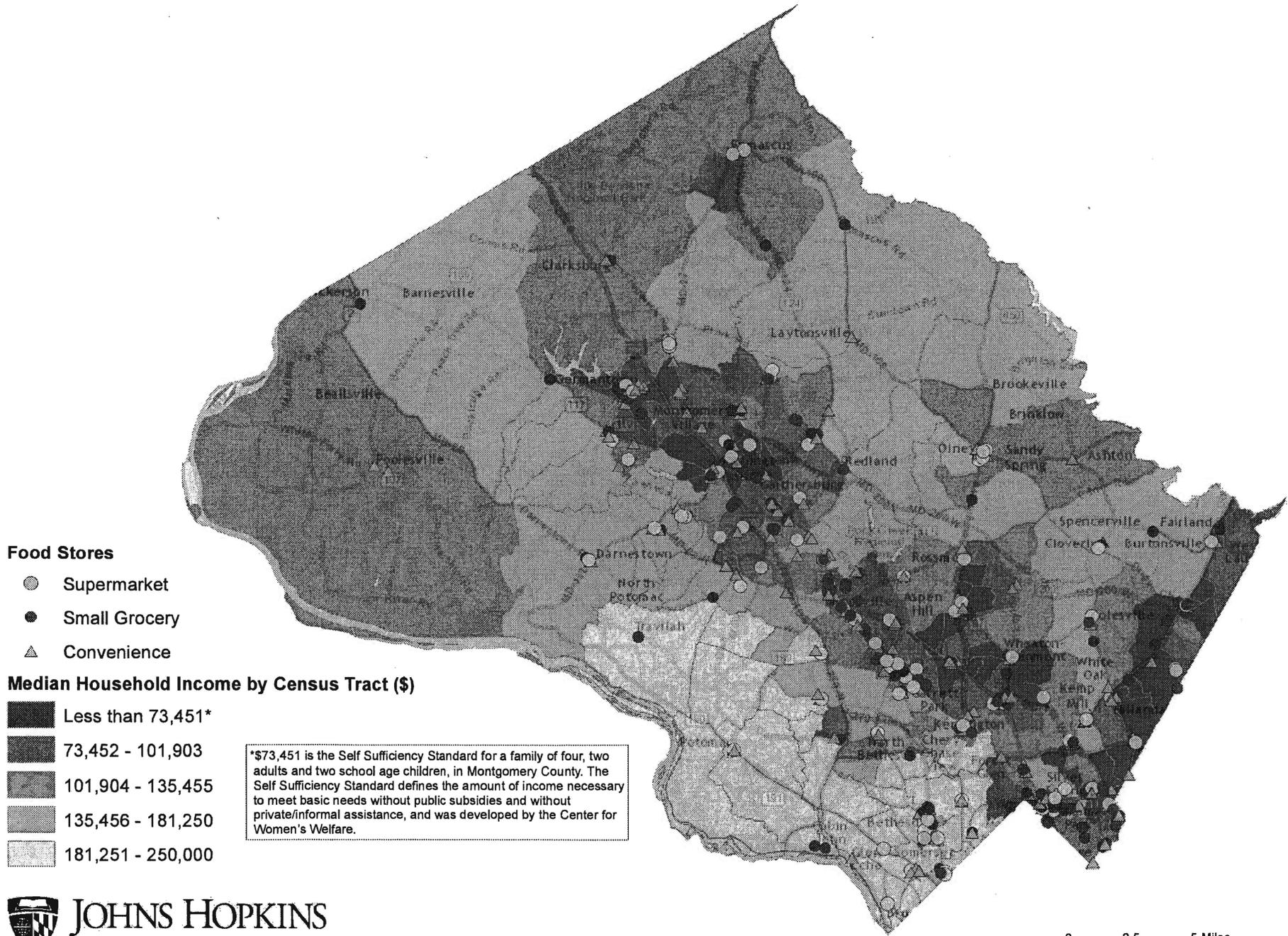
Section 1 – Maps

- Food stores and median household income
- Food stores and vehicle availability
- Supermarkets and buffers – Wheaton-Glenmont
- Healthy Food Availability Index (HFAI) scores for Wheaton-Glenmont stores
- Supermarkets and buffers – Silver Spring
- Healthy Food Availability Index (HFAI) scores for Silver Spring stores
- Supermarkets and buffers – Fairland
- Healthy Food Availability Index (HFAI) scores for Fairland stores
- Supermarkets and buffers – Gaithersburg
- Healthy Food Availability Index (HFAI) scores for Gaithersburg stores
- Supermarkets and buffers – Aspen Hill/Bell Pre

Section 2 – Materials used to conduct the community food access assessment

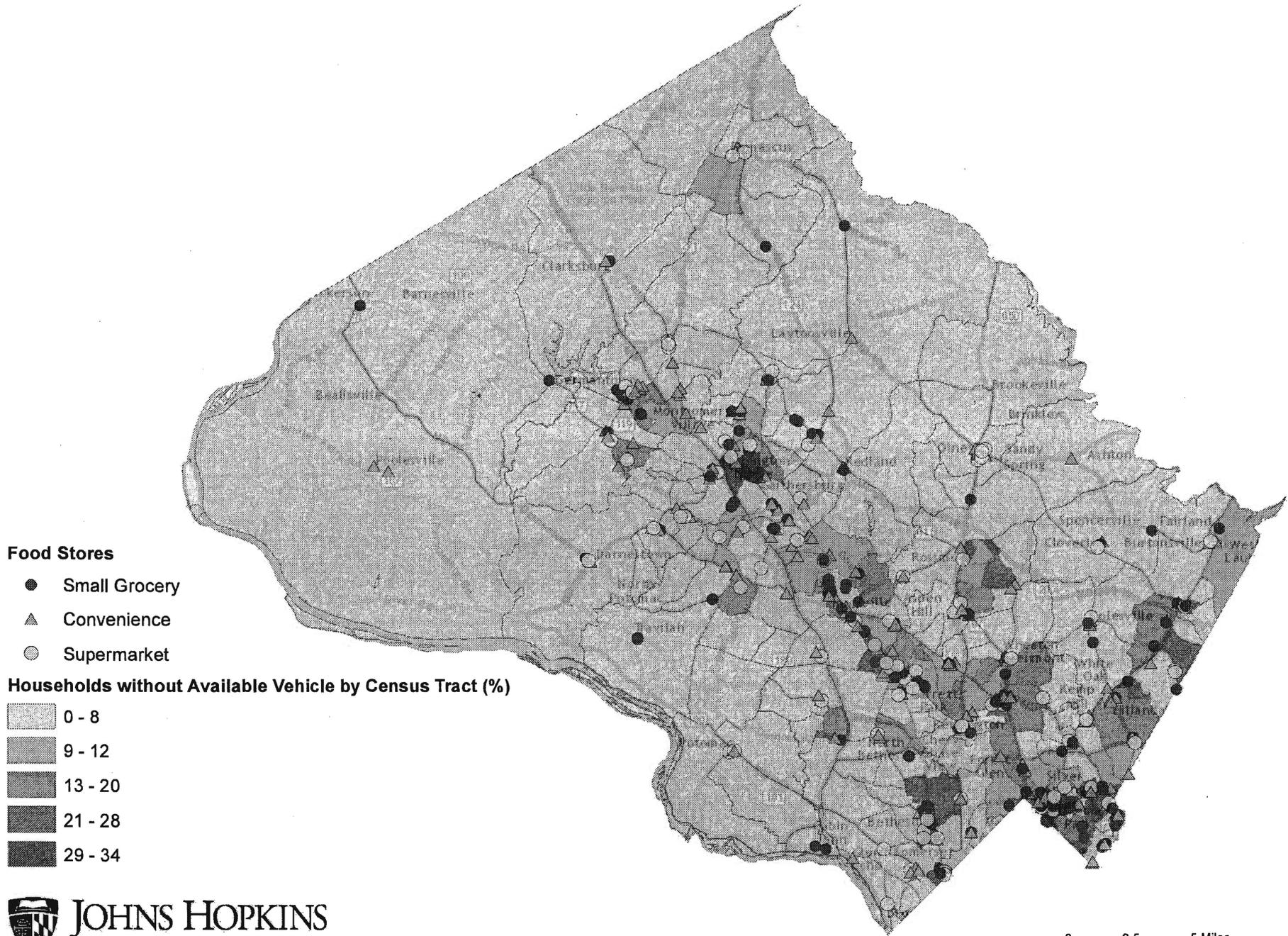
- Listening session script
- Listening session consent form
- Listening session demographic survey
- Web survey text
- Healthy Food Availability Index (HFAI) data collection form
- Letter to store owners regarding the HFAI data collection

Food Stores and Median Household Income in Montgomery County



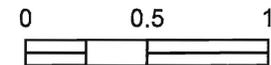
ee

Food Stores and Vehicle Availability in Montgomery County



23

Wheaton-Glenmont



Miles

-  Supermarket
-  1/4 Mile Buffer
-  1/2 Mile Buffer
-  1 Mile Buffer
-  Low Income Census Tract

Population Density

by Census Tract

-  0 - 100
-  101 - 1,000
-  1,001 - 2,000
-  2,001 - 4,000
-  4,001 - 10,000
-  10,001+

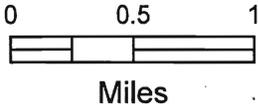
May, 2014



JOHNS HOPKINS
CENTER for A LIVABLE FUTURE

20

Wheaton-Glenmont



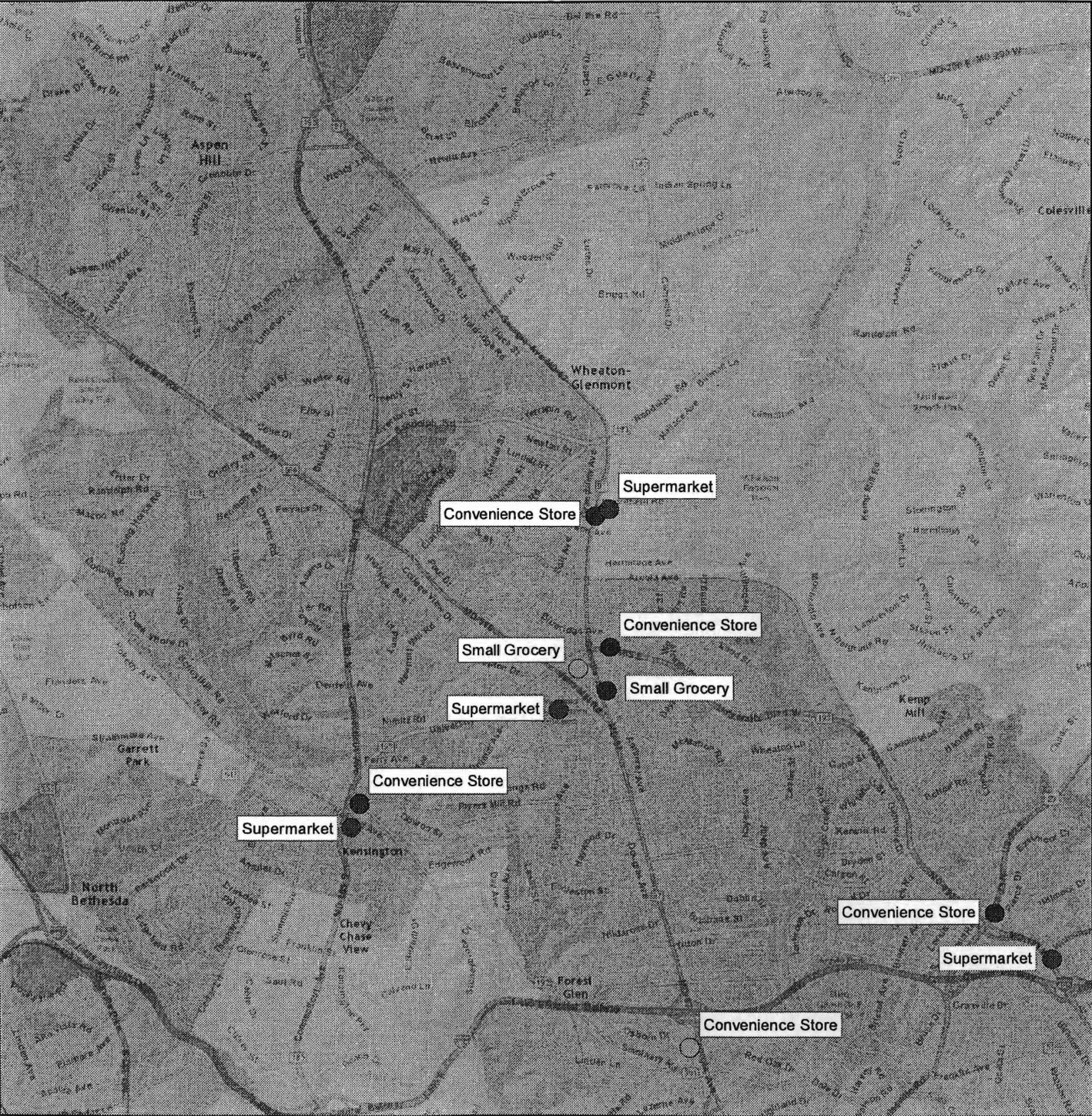
HFAI Scores

- 0.0 - 9.5
- 9.6 - 19.0
- 19.1 - 27.5

Population Density by Census Tract

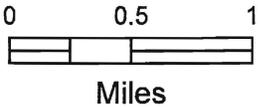
- 0 - 100
- 101 - 1,000
- 1,001 - 2,000
- 2,001 - 4,000
- 4,001 - 10,000
- 10,001+

October, 2015



95

Silver Spring



-  1/4 Mile Buffer
-  1/2 Mile Buffer
-  1 Mile Buffer
-  Supermarket
-  Low Income Census Tract
-  Low Vehicle Availability

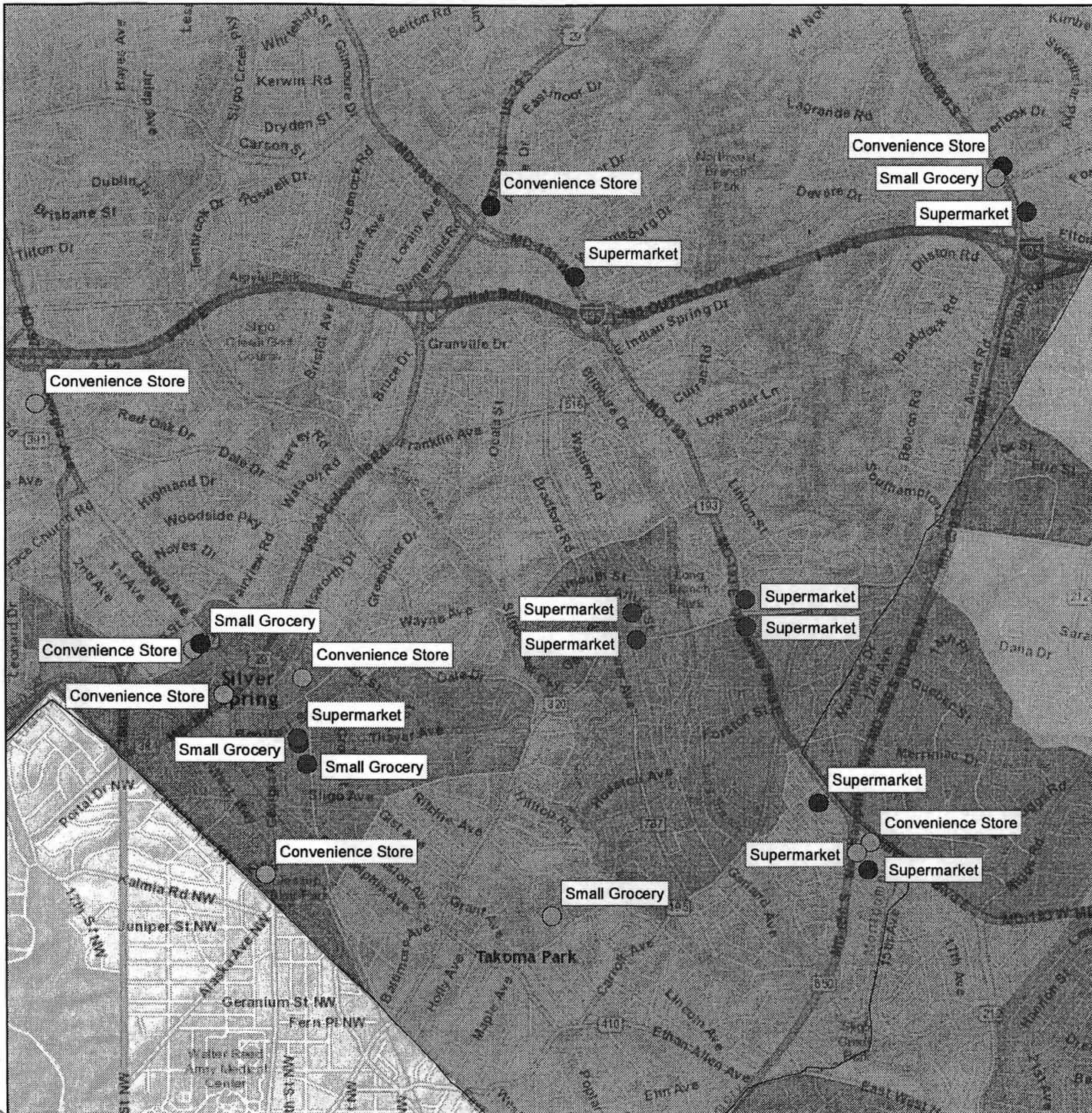
Population Density by Census Tract

-  0 - 100
-  101 - 1,000
-  1,001 - 2,000
-  2,001 - 4,000
-  4,001 - 10,000
-  10,001+

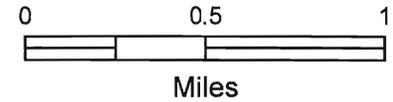
May, 2014



96



Silver Spring



HFAI Scores

- 0.0 - 9.5
- 9.6 - 19.0
- 19.1 - 27.5

Population Density by Census Tract

- 0 - 100
- 101 - 1,000
- 1,001 - 2,000
- 2,001 - 4,000
- 4,001 - 10,000
- 10,001+

October, 2015

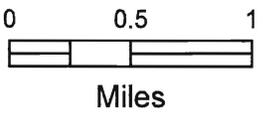


JOHNS HOPKINS
CENTER for a LIVABLE FUTURE

69



Fairland



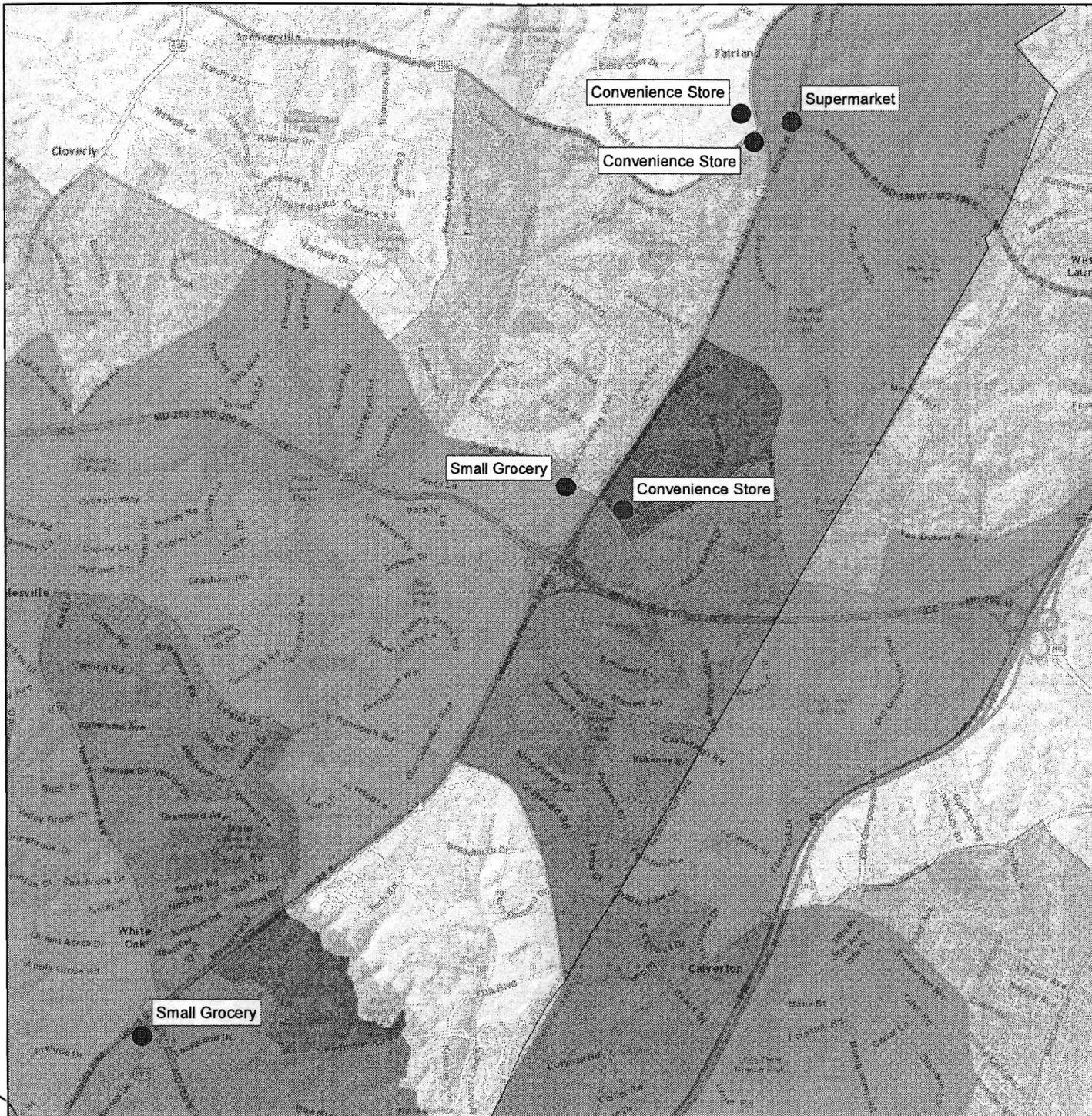
- Supermarket
- 1/4 Mile Buffer
- 1/2 Mile Buffer
- 1 Mile Buffer
- ▨ Low Income Census Tract

Population Density by Census Tract

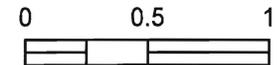
- 0 - 100
- 101 - 1,000
- 1,001 - 2,000
- 2,001 - 4,000
- 4,001 - 10,000
- 10,001+

May, 2014





Fairland



Miles

HFAI Scores

- 0.0 - 9.5
- 9.6 - 19.0
- 19.1 - 27.5

Population Density by Census Tract

- 0 - 100
- 101 - 1,000
- 1,001 - 2,000
- 2,001 - 4,000
- 4,001 - 10,000
- 10,001+

October, 2015

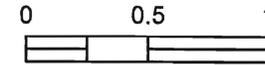


JOHNS HOPKINS
CENTER for a LIVABLE FUTURE

20



Gaithersburg



Miles

-  Supermarket
-  1/4 Mile Buffer
-  1/2 Mile Buffer
-  1 Mile Buffer
-  Low Income Census Tract

Population Density

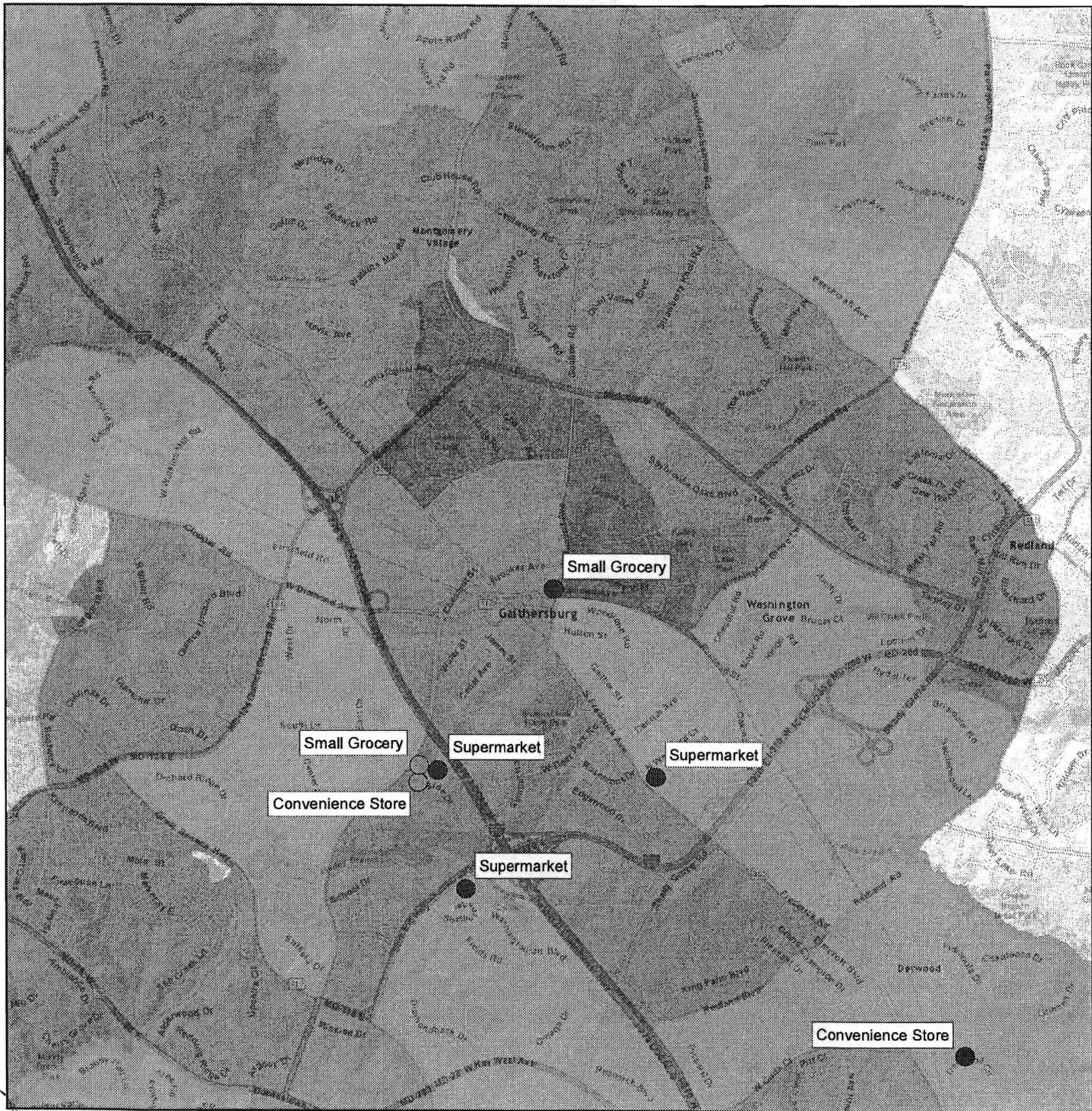
by Census Tract

-  0 - 100
-  101 - 1,000
-  1,001 - 2,000
-  2,001 - 4,000
-  4,001 - 10,000
-  10,001+

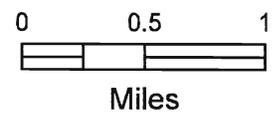
May, 2014



JOHNS HOPKINS
CENTER for a LIVABLE FUTURE



Gaithersburg



HFAI Scores

- 0.0 - 9.5
- 9.6 - 19.0
- 19.1 - 27.5

Population Density by Census Tract

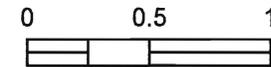
- 0 - 100
- 101 - 1,000
- 1,001 - 2,000
- 2,001 - 4,000
- 4,001 - 10,000
- 10,001+

October, 2015



31

Aspen Hill/ Bel Pre



Miles

-  Supermarket
-  1/4 Mile Buffer
-  1/2 Mile Buffer
-  1 Mile Buffer
-  Low Income Census Tract

Population Density by Census Tract

-  0 - 100
-  101 - 1,000
-  1,001 - 2,000
-  2,001 - 4,000
-  4,001 - 10,000
-  10,001+

May, 2014



JOHNS HOPKINS
CENTER for a LIVABLE FUTURE



33

Montgomery County Food Council
Food Access Working Group



Listening Session Script

Hello everyone! Thank you so much for coming tonight!

My name is _____ and I am a member of the Montgomery County Food Council's Food Access Working Group.

[Introduce other Food Access Working Group members who are present]

The Food Access Working Group has been charged with increasing access to healthy foods for all Montgomery County residents.

So, we are conducting a series of these listening sessions to talk with Montgomery County residents to hear from all of you what is working well for you and what is not working so well in terms of your ability to find and purchase the types of foods you want to eat.

While you talk, our job will be to listen. We will be recording this session so that we don't miss anything important that is said. We would like to ask that you sign this form saying that we have your permission to record your comments. The information that you provide will be kept confidential, and we will never identify you by name when we summarize all the comments.

Additionally, the survey that you were given when you came in will help us gather general information about who is in the room. We do not want you to put your name of the form to protect your privacy. All information that you are willing to provide will be kept confidential.

The information that you share in the discussion tonight will be combined with comments from participants in other listening sessions that we will be conducting. We will use the information you provide to identify the barriers to obtaining healthy food in your community, and develop a plan to eliminate those barriers with the goal of making it easier for you to find affordable, healthy food items in your community. Once we have completed all the listening sessions and compiled all of the comments, we will hold a public meeting to report the findings.

So, we would like to start by just finding out how you currently shop, and then we will ask you for your suggestions for improving food access in Montgomery County.

CURRENT SHOPPING HABITS

- Where do you choose to shop for food? Why? Where else?

- On average, what is your monthly budget for groceries?
- How often do you buy groceries, daily, weekly, bi-weekly, monthly?
- How do you travel to the supermarket? How long to get there?
- What foods do you typically shop for?
- Are you able to find every food item you are looking for? Which food items do you have trouble finding?

PERCEPTIONS OF FOOD RETAIL OPTIONS

- What do you like/dislike about the big supermarket chains' produce and other food selections (price, quality, variety)?

COOKING KNOWLEDGE/ABILITY

- Do you have any barriers that prevent you from cooking?

FOOD ACCESS

- What other food sources do you use to meet your needs?
- Do you have any other barriers to getting the food you want and need?
- Do you have the tools you need to use/prepare the food you need?

PERCEPTIONS OF ORGANIC

- What is your impression of organic foods?
- If you had a choice would you buy organic and/or local?

LOCAL FOOD

- Have you ever shopped at the farmers market?
- Have you ever gone to a "pick your own" farm?

"Healthy foods"

- What types of foods do you think are "healthy"?
- Do you try to buy "healthy" foods, or is that not a concern for you?
- Do you or your family members have health concerns that require you to choose special foods? [If yes] Can you tell us more about these dietary issues? Has this been easy to do or hard to do?

We want to thank you for participating in this listening session! Your comments have been extremely helpful. As a thank you for your participation, we have gift cards from Target for each of you.



**Montgomery County Food Council
Food Access Working Group**

Consent for recording of community listening sessions

PURPOSE

The Food Access Working Group is working to increase access to healthy foods for all Montgomery County residents.

We are conducting a series of these listening sessions to gather information from Montgomery County residents about what is working well for you and what is not working so well in terms of your ability to find and purchase the types of foods you want to eat.

PROCEDURES

During the listening session, you will be asked questions about your thoughts and experiences related to the food that you can buy in your community. We expect that the listening session will take no more than 90 minutes of your time. You do not have to answer any question that you feel uncomfortable with.

With your permission, we will record the interview with a digital recorder to help us take better notes. The recording will be destroyed once the transcription is completed. The information that you provide will be kept confidential, and we will never identify you by name when we summarize all the comments.

You will receive a \$10 Target gift card for your time.

Signature

Print your name

Montgomery County Food Council - Food Access Working Group
Listening session survey

Thank you for agreeing to participate in tonight's Food Access Listening Session. We ask that you please answer the following questions to the best of your ability. This information will be used in combination with the comments you provide during the discussion to help us determine what improvements need to be made to improve access to healthy foods in Montgomery County. The information that you provide will be kept confidential. Please do not write your name, address or telephone number on this survey.

Are you of Hispanic, Latino, or Spanish origin? Please mark one of the boxes below with an X.

Yes No

What is your country of origin?

What race best describes how you identify yourself? Please mark one or more boxes

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaii or Other Pacific Islander

What zip code do you live in?

Number of adults over age 18 living in household.

Number of children 18 and younger currently living in household.

What is your annual household income?

- Less than \$25,000
- \$25,000 to \$50,000
- \$50,000 to \$90,000
- \$90,000 or more

How much money do you spend each month on food for the members of your household?

Less than \$300

\$300 to \$575

\$576 to \$725

\$726 to \$900

\$900 or more

What, if any, federal food assistance programs do you use?

Supplemental Nutrition Assistance Program (SNAP, also known as Food Stamps)

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

School Breakfast Program

National School Lunch Program

After School Nutrition Program

Summer Nutrition Program

Child and Adult Food Care Program

Fresh Fruit and Vegetable Program

The Emergency Food Assistance Program (TEFAP)/Commodity Food

Senior Farmers Market Nutrition Program

Other, please write in the name of the federal program if not listed above.

Do you own a smart phone (a phone that can run applications (apps))?

Yes

No

Do you have regular access to the internet?

Yes

No

Thank you for completing this survey, and for participating in the listening session!



Food Access Web Survey Text

The Food Access Working Group has been charged with increasing access to healthy foods for all Montgomery County residents. So, we are conducting a survey in order to hear from you, Montgomery County residents, about what is working well and what is not working so well in terms of the ability to find and purchase the types of foods you want to eat. Additionally, the survey will help us gather general information about who is responding. All information that you are willing to provide will be kept confidential.

The Food Access Working Group will use the information provided on this survey to identify the barriers to obtaining healthy food in Montgomery County communities and develop a plan to eliminate those barriers with the goal of making it easier to find affordable, healthy food items. Once we have compiled all of the survey responses we will hold a public meeting to report the findings.

Your answers to the following questions will help us address challenges that residents may have to acquiring healthy, safe, and affordable food. We appreciate your honest responses. Please be assured that all of your answers will be anonymous. Thank you.

1. Are you a Montgomery County resident?
2. Where do you shop for food?
3. Why do you shop at the location(s) you listed above?
4. How often do you travel to the supermarket?
5. How long does it take you to get there?
6. Do you have any barriers to GETTING the food you want or need?
7. What are these barriers?
8. What could help you overcome these barriers?
9. Do you have any barriers that keep you from PREPARING the food you want or need?
10. Tell us more about what keeps you from preparing the food you want.
11. What could help you overcome these barriers?
12. Do you ever run out of food by the end of the month?
13. What else do you want to say about food access in your community?

Demographic Questions

14. What is your country of origin?
15. What race best describes how you identify yourself?
 - White/Blanco
 - Black/Negro or African American/afroamericano
 - American Indian/Indio americano or Alaska Native/nativo de Alaska
 - Asian/Asiatico
 - Native Hawaiian/Nativo de Hawaii or Pacific Islander/otra isla del Pacifico
 - Other, please specify.../Otros, especificar...

16. What zip code do you live in?
17. How many adults over age 18 live in your household?
18. How many children age 18 and younger live in your household?
19. What is your annual household income?
 - Less than \$25,000
 - \$25,000 to \$50,000
 - \$50,000 to \$90,000
 - \$90,000 or more
20. How much money do you spend each month on food for the members of your household?
 - Less than \$300
 - \$300 to \$575
 - \$576 to \$725
 - \$726 to \$900
 - \$900 or more
21. What, if any, food assistance programs do you use? (Check all that apply.)
 - Supplemental Nutrition Assistance Program (SNAP, also known as Food Stamps)
 - Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
 - School Breakfast Program
 - National School Lunch Program
 - After School Nutrition Program
 - Summer Nutrition Program
 - Child and Adult Food Care Program
 - Fresh Fruit and Vegetable Program
 - The Emergency Food Assistance Program (TEFAP)
 - Senior Farmers Market Nutrition Program
 - Other, please specify...

22. Do you own a smart phone (a phone that can run applications (apps))?

If you would like to be entered into a drawing for a \$50 Target gift card, please provide an e-mail address, below:



**Montgomery County
Food Council**
www.mcofoodcouncil.org

**Healthy Food Availability Index Survey
Dates: April 11 & 12, 2015**

Dear Market Owner/Manager:

As part of the Montgomery County Food Council's Food Access Working Group, volunteers will be surveying randomly selected food stores across Montgomery County on April 11th and 12th. These surveys will measure the presence of whole and healthy food products in food stores of all types – supermarkets, small groceries, international stores, convenience stores.

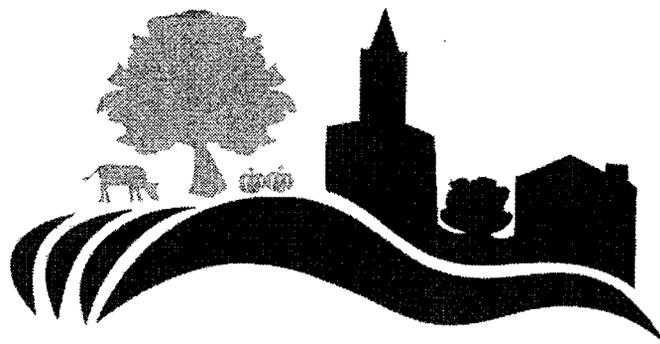
The survey requires volunteers to walk through the store and record a selection of products for sale. The volunteers have been trained to do this quickly and discreetly, so as not to interfere with customers in the store. We hope this has been the case in your store.

The surveys will also be used as part of food environment research being conducted at the Center for a Livable Future (CLF) at the Johns Hopkins Bloomberg School of Public Health. CLF developed the Healthy Food Availability Index using proven methods for measuring the nutritional environment. If you have any questions about this survey and/or the research, please contact Amanda Behrens Buczynski at CLF at 410-502-7578 or abehren4@jhu.edu.

Thank you,

Kim Robien, PhD, RD
Co-chair, Food Access Working Group, Montgomery County Food Council
Associate Professor, Milken Institute School of Public Health at George Washington University
krobien@gwu.edu

Jenna Umbriac, MS, RD
Co-chair, Food Access Working Group, Montgomery County Food Council
Director of Nutrition Programs, Manna Food Center



MONTGOMERY COUNTY
FOOD COUNCIL

4825 Cordell Avenue, Suite 204

Bethesda, MD 20814

www.mocofoodcouncil.org

Follow us on Facebook, Twitter, and Instagram: [mocofoodcouncil](https://www.facebook.com/mocofoodcouncil)



Highlights of the Community Food Rescue Network

Community Food Rescue (CFR), a program of Manna Food Center, fulfills the need to coordinate and build the capacity of our community to rescue and redistribute unsold, surplus food to people experiencing hunger. With generous County and private support, Community Food Rescue has achieved these milestones since its public launch in March 2015 thanks to the participation of 26 food assistance organizations and 96 food donors. **In 2015, CFR Network agencies* reported receiving 2,802,265 lbs. (2,335,221 meals) of rescued food valued at \$4,935,613.**

- 1. Food Safety Education and Resources:** CFR worked closely with DHHS to publish Food Safety Guidelines, so that all CFR participants—food donors, food recipients, and volunteers—have uniform protocols for handling and transporting rescued food. This information is packaged as short videos, brochures, in-person classes and webinars for all CFR Network users can have easy access to the information. Food Safety protocols have been woven into the entire food rescue process and information about how to reduce household food waste is also shared with the community.
- 2. Capacity Building Mini-grants:** CFR makes competitive grants of between \$500-20,000 available to non-profit organizations so that agencies can better distribute rescued food to their clients. County funding has been leveraged with private funding. In FY2016 \$20,000 of County funds were matched by private donors so that \$60,000 has been distributed for the purchase of infrastructure such as refrigerators, freezers, storage space, and trucks and job creation for food runners. A multi-stakeholder committee of food system leaders makes the award decisions.
- 3. On-Line Information:** The CFR website: www.communityfoodrescue.org serves as a local clearing house of information on topics related to food recovery including: how to participate, enhanced tax deductions, the Good Samaritan Act, and food safety information. This information is shared via blog posts, a Quarterly E-newsletter, videos, and social media. CFR has its own Facebook page and twitter feed, which also allows our network to share resources and multiply outreach efforts.
- 4. Matching Tools:** CFR's licensed software called, Chow Match, developed by the non-profit Peninsula Food Runners, makes it easy for food donors to match with food assistance organizations and volunteer food runners that transport food. The web-based application was launched in September 2015 and the companion mobile-app. was launched in March 2016. The app. collects and aggregates data about each food run. A unique element of the technology and the CFR network is our involvement of volunteer food runners who help transport food when staff is unavailable. County funding has been leveraged with private funding.

5. **Recognition:** CFR recognizes and celebrates all CFR Network participants on the CFR website and through social media raising public awareness about food recovery. CFR also partners with the Food Recovery Network's third party donor certification program, raising the visibility of food donors in our community. CFR has also been recognized as a featured presenter at local and national conferences, including Santa Clara County's Food Recovery Summit and Harvard Law and Policy Center's Reuse and Recovery. Other communities look to CFR as a model to replicate.

***CFR Network agencies reporting their rescued food in 2015:**

(for a complete listing of all CFR Network Members, visit www.communityfoodrescue.org)

Adventist Community Services of Greater Washington
DC Central Kitchen
Family Services Inc.
Gaithersburg HELP
Germantown HELP
Glen Haven Elementary School
growingSOUL
Interfaith Works-Becky's House
Interfaith Works-Carroll House
Interfaith Works-Community Vision
Interfaith Works Wilkins House
Liberty Grove UMC Food Pantry
Manna Food Center
Meals on Wheels of Takoma Park
Meals on Wheels of Wheaton
Montgomery County Coalition for the Homeless
New Creation Church
Rainbow Community Development Center
Shepherd's Table
St. Peter's Just Lunch
WUMCO HELP, Inc.

Submitted by Cheryl Kollin, Program Director
Community Food Rescue
Cheryl@communityfoodrescue.org
240.491.1958

