

Farmers Feeding Baltimore



A Study of the Impact of the Farm Alliance of Baltimore

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with support from Mariya Strauss, Executive Director of the Farm Alliance of Baltimore

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FARM ALLIANCE
OF BALTIMORE



“It’s here
it’s real
it’s what I need

IT’S WHAT THE
CITY NEEDS.”
FARM ALLIANCE CUSTOMER

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Executive Summary

An expanding body of research has identified the sociocultural, health, and economic developments associated with growing food in cities (i.e., urban agriculture). However, little research has focused on the impact of urban farms in Baltimore, specifically—an important consideration given how many studies' results are tied to specific places.

This report summarizes the results of a six-month effort to systematically evaluate the social, health, and economic impacts of the Farm Alliance of Baltimore's work within the Baltimore community. The main focus of these efforts included administering surveys to participants of Farm Alliance's cooking/nutrition demonstrations and to customers of their 32ND Street Farmers Market in the Waverly neighborhood.

In general, there's a positive perception of the Farm Alliance's initiatives to support urban farming and increase food security in Baltimore. Nearly all participants of the cooking/nutrition demonstrations agreed that these sessions were clear and helpful in teaching them usable skills to incorporate more fresh produce into their diets. The majority of Farm Alliance Farmers Market customers, furthermore, valued supporting fair returns for farmers, fair treatment of farm workers, local farmland preservation, and local businesses over getting a great price prices when purchasing their produce.

In addition to providing collective support for its member farmers, the Farm Alliance clearly provides residents with programs and services that align with their values and needs.



Introduction

WHO IS THE FARM ALLIANCE OF BALTIMORE?

Growing concerns of diet-related illness, economic instability, and climate change threaten people, our communities, and our entire planet. While these are global challenges, local actions present unique solutions. The Farm Alliance of Baltimore sees urban farming as a means to support health and well-being, stabilize communities, and begin a just transition toward sustaining our city's ecology.

United by practices and principles that are socially, economically, and environmentally just, [THE FARM ALLIANCE OF BALTIMORE](#) is a network of producers working to increase the viability of urban farming and improve access to urban grown foods.

In Baltimore, urban farming is as timeworn as the City is old. Food cultivated in backyards, in community spaces, parkland, and vacant lots have



fed residents for years. Only relatively recently, however, have growers and farmers joined forces in support of a citywide network of urban farming operations.

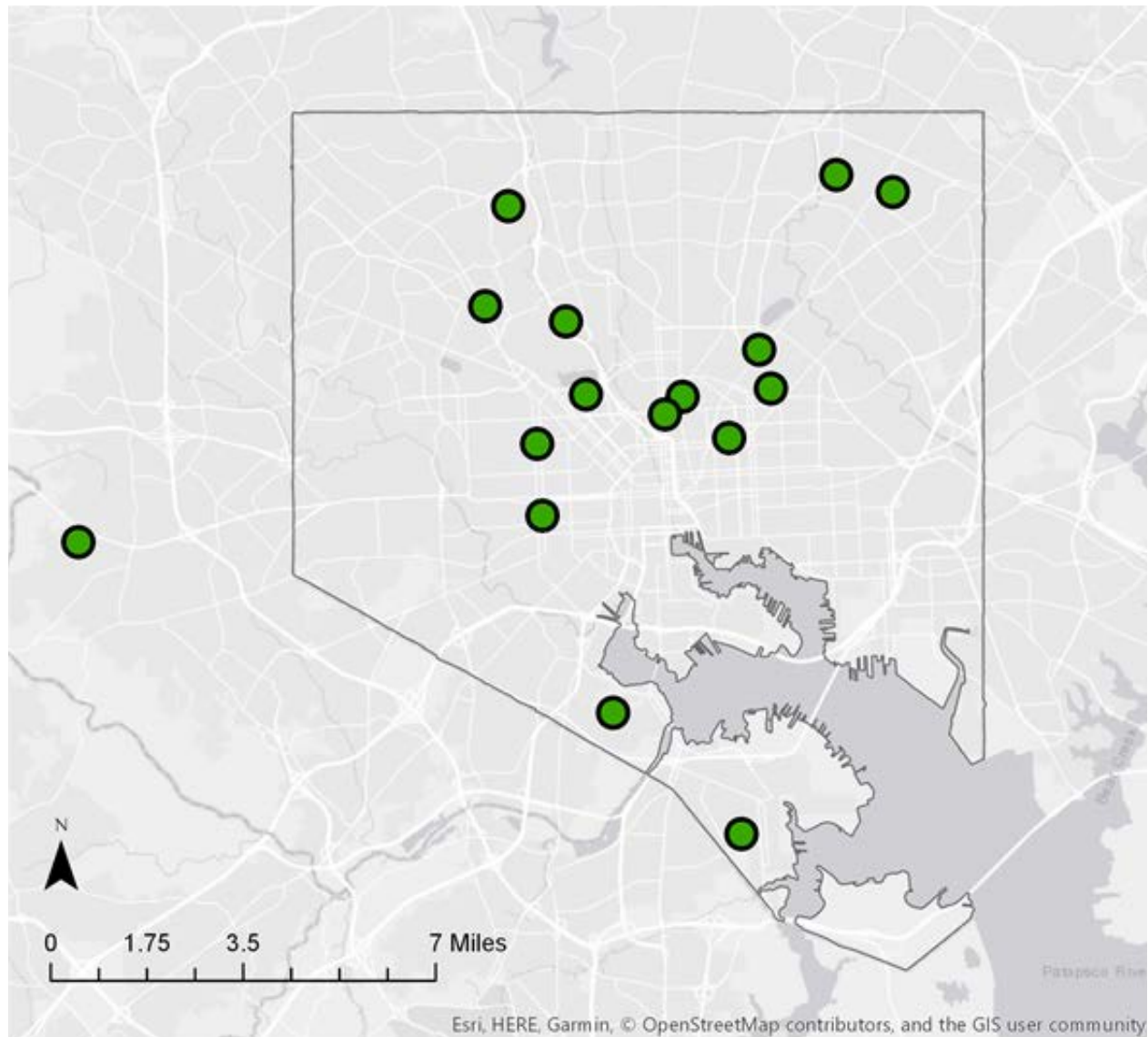
It began with a series of informal gatherings and existing collaborations among Baltimore farmers. Then, in 2011, with support from an Open Society Institute Community Fellowship and United States Department of Agriculture (USDA) Sustainable Agriculture Research and Education grant, the Farm Alliance of Baltimore was formed.

At its core, the Farm Alliance of Baltimore (the Farm Alliance) is guided by five strategic values. The values of Sustainable Agriculture, Solidarity, Collective Power, Equity, and Education serve a robust foundation for the organization's work.

Since its inception, Farm Alliance membership has grown to what is now a network of 16 production-oriented farms in the Baltimore area. The locations of the Farm Alliance member farms are illustrated in the Map 1 (page 4).

2018 Farm Alliance of Baltimore Member Farms

- ▶ [Baltimore Free Farm](#)
- ▶ [Bearfoot Farm](#)
- ▶ [Bon Secours Community Works](#)
- ▶ [Boone Street Farm](#)
- ▶ [Cherry Hill Urban Garden](#)
- ▶ [Filbert Street Garden](#)
- ▶ [Food System Lab](#)
- ▶ [GreatKids Farms](#)
- ▶ [The Greener Garden](#)
- ▶ [Hidden Harvest Farm](#)
- ▶ [Hillen Homestead](#)
- ▶ [Oliver Community Farm](#)
- ▶ [The Plantation – Park Heights Urban Garden](#)
- ▶ [Real Food Farm](#)
- ▶ [Strength To Love 2](#)
- ▶ [Whitelock Community Farm](#)



Map 1. Locations of Farm Alliance of Baltimore Member Farms

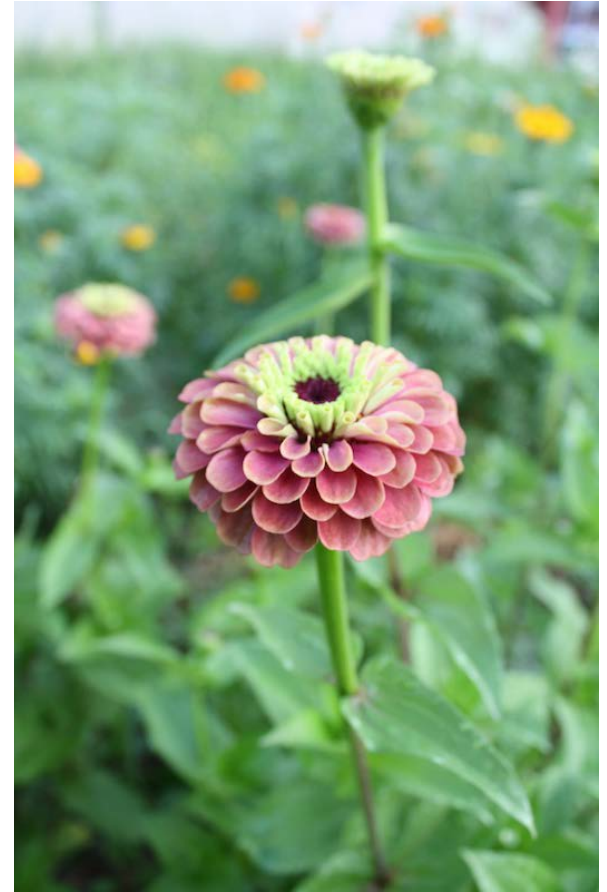


FARM ALLIANCE
BALTIMORE CITY

EQUITY
SOLIDARITY
SUSTAINABLE
AGRICULTURE
EDUCATION

POWER

COLLECTIVE



Farm Alliance Programs & Services

PRODUCE AGGREGATION AND SALES

Every Saturday morning during the growing season, Farm Alliance members combine and sell their produce collectively at a produce stand at the [32nd Street Farmers Market](#) in Waverly. This one market stand typically provides revenue for the member farms exceeding \$45,000 annually. In addition to the market, some members sell their harvest through their own produce stands at their farms, community supported agriculture (CSA) programs, mobile markets, and/or to local restaurants.

BEGINNER FARMER TRAINING

In partnership with [Future Harvest CASA](#) and [University of Maryland Extension](#), the Farm Alliance organizes workshops and educational trainings throughout the year. These programs are intended for beginner farmers interested in starting their own urban farms or to enter into

fields like horticulture, landscaping, design, or food service and processing. Beyond offering this direct training, the Farm Alliance also provides scholarships for farmers to attend conferences.

HEALTHY FOOD ACCESS

The Farm Alliance's signature [Double Dollars](#) program brings local, healthy, farm fresh produce to Baltimore City residents. This program, which began in 2013, offers financial incentives to purchase fresh fruits and vegetables to people who are eligible to receive Supplemental Nutrition Assistance Program (SNAP) benefits. Each time a customer spends \$5 on produce using SNAP benefits, the Farm Alliance provides a matching \$5 so the customer can double their purchasing ability.

COMMUNITY EDUCATION

In 2018, with the [Abell Foundation](#) as a supporting partner, the Farm Alliance significantly grew its popular cooking/nutrition demonstrations. These demonstrations are the outreach and education portion of the Double Dollars program. In 2015, Farm Alliance held 2 nutrition/food promotion events. In 2016, they hosted 29 such events; and that number increased further to 36 demonstrations in 2018. The Farm Alliance plans to continue to grow this side of the program in 2019.

Member farms supplement the Farm Alliance's citywide training programs. Individual farms offer paid internships to high school students and young adults, additional cooking demonstrations and nutrition workshops, community gatherings, and gardening tips and seedlings to neighbors—just to list a few of their smaller-scale initiatives.

ESTABLISHING FARM STANDARDS

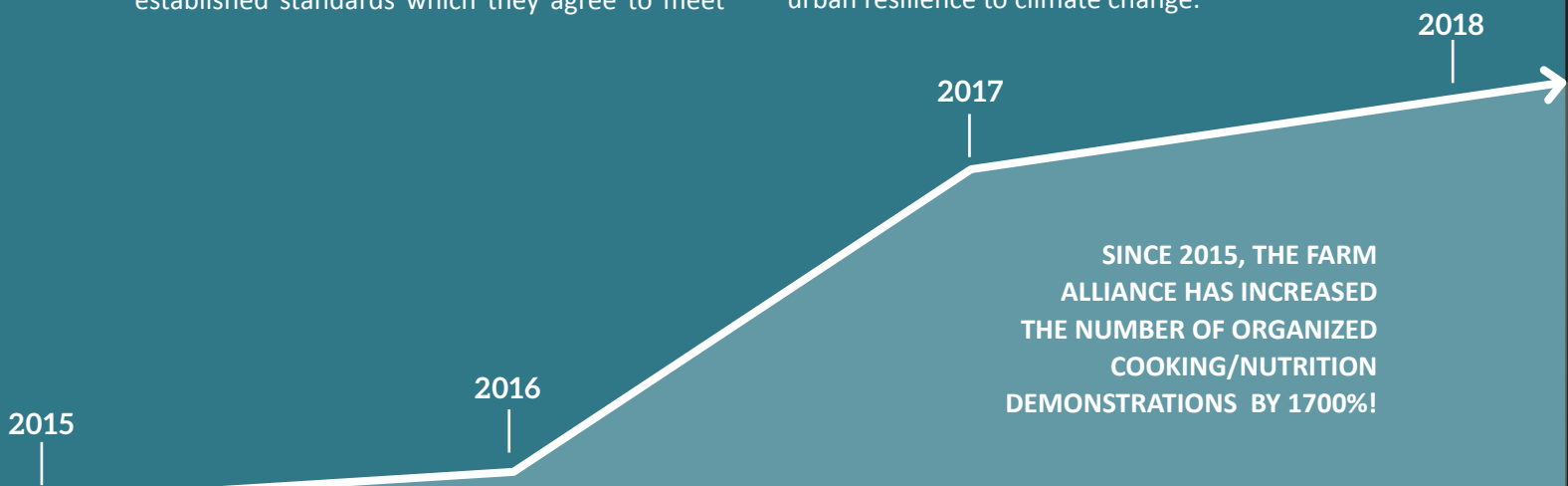
Farm Alliance members have collectively established standards which they agree to meet



to ensure the safety, attractiveness, and nutrient density of their products. The Farm Alliance, in support of the quality standards, maintains a shared greenhouse where farms can grow seedlings during the winter months. Member farms are in their eighth season of growing seedlings together in the Farm Alliance greenhouse in Clifton Park.

ADVOCACY

Recognizing that many of the barriers in Baltimore are influenced by much larger conversations, the Farm Alliance advocates at the city, state, regional, and national levels for government policies and programs that support urban farms as critical infrastructure for food security, equitable distribution of nutritious food, soil health, and urban resilience to climate change.



Urban Farming

WHY GROW FOOD IN THE CITY?

Small scale agriculture is a time-old practice that's gained rapid momentum and support in recent years for its role in fostering more sustainable food systems. In fact, a growing body of research has identified several sociocultural, health, environmental, and economic development benefits associated with growing food in cities.¹

These benefits include:

- ⊕ Growing household, community, and municipal food security;
- ⊕ Supporting the physical and psychosocial health of people;
- ⊕ Increasing social capital, community well-being, and civic engagement with food systems;
- ⊕ Providing food system and nutrition education, as well as youth development opportunities;

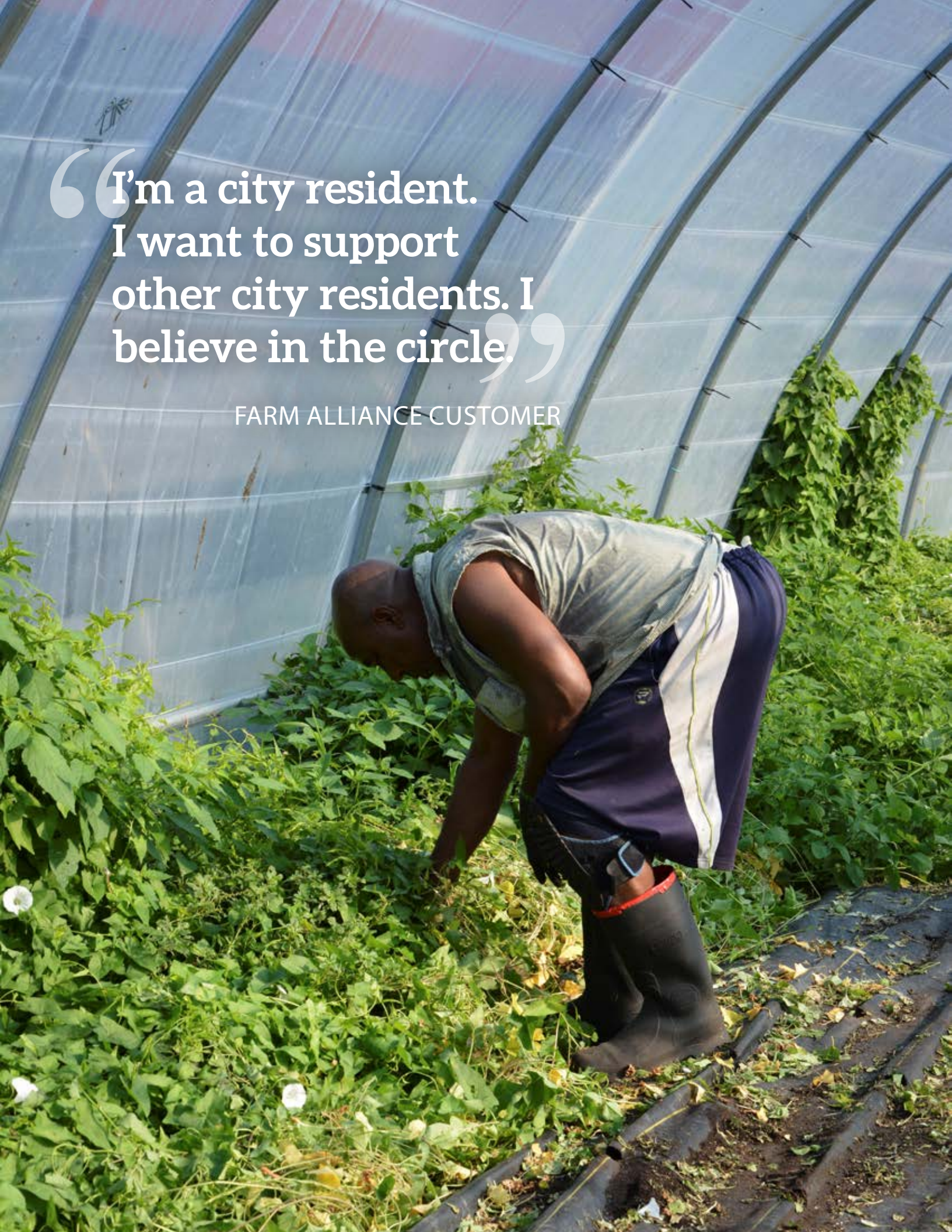
- ⊕ Improving biodiversity, micro-climate regulation, rainwater drainage, and air quality in urban areas; and
- ⊕ Providing workforce training and opportunities for supplemental income generation.

Most existing research on urban agriculture, however, has concentrated on the impacts of individual non-profit community gardens. Little research has focused on the sociocultural outcomes, changes to food access, and other public health impacts of mission-driven urban farms.

1 Santo, R., Palmer, A., & Kim, B. (2016). Vacant lots to vibrant plots: A review of the benefits and limitations of urban agriculture. Baltimore, MD: CLF.

“I’m a city resident.
I want to support
other city residents. I
believe in the circle.”

FARM ALLIANCE CUSTOMER



The objective of this six-month study was to quantitatively and qualitatively evaluate the impact of the Farm Alliance and its members on the local Baltimore community.

“Having a local economy is creating opportunities for people, creating food access, food sovereignty.”

FARM ALLIANCE CUSTOMER



FIGHTING INJUSTICE IN THE BALTIMORE FOOD SYSTEM

Baltimore's food system, in many ways, is a reflection of the City's historic and systemic inequities related in wealth-distribution, health, and wellbeing across races and neighborhoods. Nearly one-quarter of the 621,000 Baltimore City residents live with food insecurity, which means they have limited or uncertain access to nutritionally adequate food as means to support an active and healthy life.² Baltimore's population is 63% African American, and African American residents in Baltimore struggle disproportionately with poverty, structural racism, diet-related disease, food insecurity, and low healthy food access. Moreover, 31.5% of African American residents—compared to just 8.9% of white residents—live in neighborhoods that have limited availability of affordable, high-quality and nutritious food.³

Neighborhoods in such areas, previously called “food deserts,” are now referred to as “Healthy Food Priority Areas” by Baltimore City government.⁴ In solidarity with the grassroots organizations highlighting the historical and political context that has created these disparities, the Farm Alliance of Baltimore refers to these racial inequities in food access as “food apartheid.”⁵

The Farm Alliance uses direct interventions, political activism, and data collection to improve the Baltimore food system. At the same time as the Farm Alliance is promoting ecologically sustainable farming practices, it's also advancing equity and collective power among residents and farmers. Their focus echoes broader food justice and food sovereignty goals of advancing collective control and ownership over local land, economies, policies, and development as it's related to food.

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- 2 Gundersen, C., Dewey, A., Crumbaugh, A., Kato, M., Engelhard, E. (2017). Map the Meal Gap 2017: Food Insecurity and Child Food Insecurity Estimates at the County Level. Feeding America: Chicago, IL.
 - 3 Misiasek, C., Buzogany, S., Freishtat, H. (2018). Baltimore City's Food Environment: 2018 Report. Johns Hopkins Center for a Livable Future, City of Baltimore Department of Planning: Baltimore, MD.
 - 4 In Baltimore, healthy food priority areas are defined as those 1) further than ¼ of a mile from a supermarket, 2) median household income is at or below 185 percent of the Federal Poverty Level, 3) with over 30% of households lacking vehicle access, and 4) relatively little healthy foods are available within existing retail options. See Misiasek et al. (2018).
 - 5 Many concerns had been raised over the years about the term “food desert,” because it could imply that communities are lifeless and that scarcity of nutritious food is natural (as opposed to human-made) and thus inevitable. By using the term “food apartheid,” food justice activists seek to highlight the historical and political context that has created these food access disparities, particularly the “systematic destruction of Black self-determination to control all elements of the food system that results in Black communities suffering (Black Yield Institute, 2017).

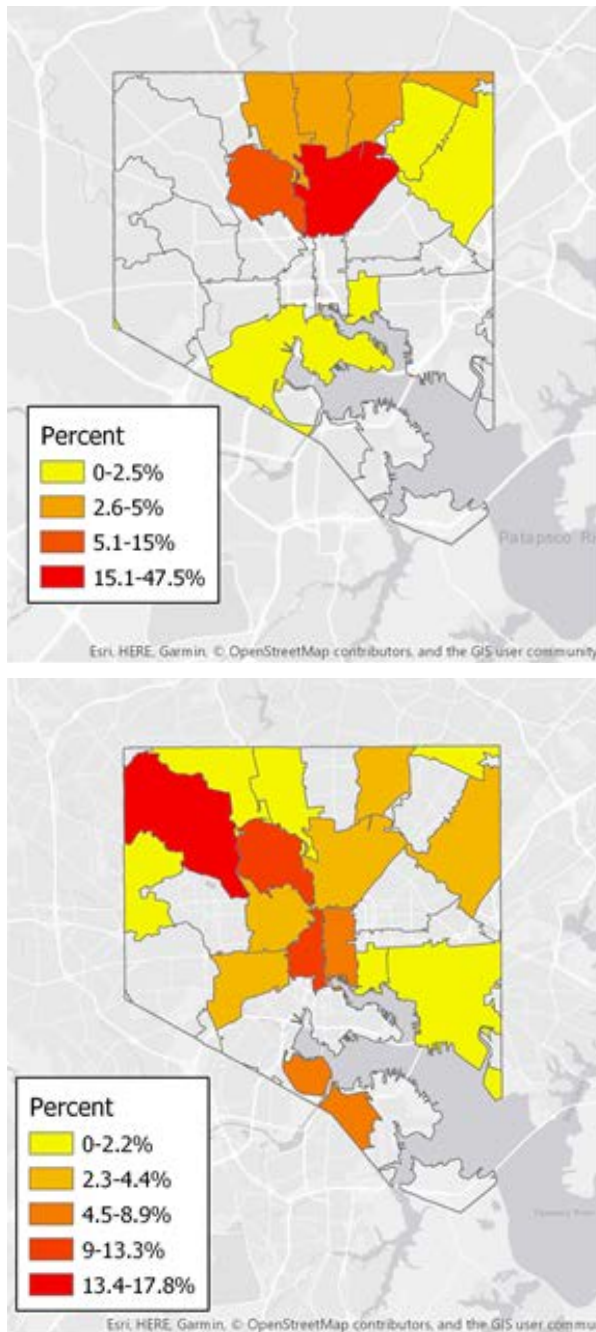
Methods for Understanding Farm Alliance's Impact

To understand the impact of Farm Alliance's initiatives, this study conducted surveys with two of the organization's primary audiences: participants of the cooking/nutrition demonstrations and customers who shop at the 32nd Street Farmers Market Stand.

Map 2 (page 13) shows the geographic distribution of ZIP codes of survey respondents for Waverly Farms Market customers (top) and cooking/nutrition demonstrations participants (bottom) who were surveyed.

COOKING DEMONSTRATIONS

In partnership with the Farm Alliance and its health and wellness education contractor, [Holistic Wellness and Health](#), we surveyed 53 participants at six cooking/nutrition demonstrations in spring 2018. Directly following each demonstration, participants were asked to complete a written 15-question survey. These surveys were intended to evaluate participant feedback on the usefulness and impact of Farm Alliance cooking/nutrition demonstrations. Additionally, the surveys asked for opinions of the impact of local farms on social cohesion and the safety of surrounding neighborhoods, educational and workforce



Map 2. ZIP codes of farmers market customers and cooking demonstration attendees

This series shows the geographic distribution of ZIP codes of survey respondents for (top) Waverly Farms Market customers and (bottom) cooking/nutrition demonstrations.

training opportunities, access to green space, and mental wellbeing. Participants were also asked about their preferences for Baltimore-city grown produce.

FARM STAND SURVEYS

In summer 2018, 41 customers were surveyed in-person at the Farm Alliance's 32nd Street Farmers Market stand. The survey asked customers about their produce shopping habits, their preferences and frequency when purchasing produce from the Farm Alliance, and their general perceptions of urban produce. Included in the survey were questions asking customers to rate their opinions on various statements and factors using a Likert scale.

Findings



WHY DO FARM ALLIANCE CUSTOMERS CHOOSE LOCALLY-GROWN PRODUCE?

Farm Alliance customers—a small segment of the overall produce-purchasing market in Baltimore—are inclined to make purchases that align with their social values. When asked about the most important factors considered when buying produce of any kind, over three quarters of respondents cited fair returns for farmers (85%), fair treatment of farm labor (85%), local farmland preservation (83%), and local business support (78%) as very important (Figure 1, page 15). Conversely, fewer than 20% cited price as a “very important” factor in their purchasing considerations.

Comparing Apples to Apples

Farm Alliance customers also believe that Baltimore-grown produce is, in many ways, superior to the produce available in conventional supermarkets. Participants were asked if they thought urban produce grown in Baltimore City

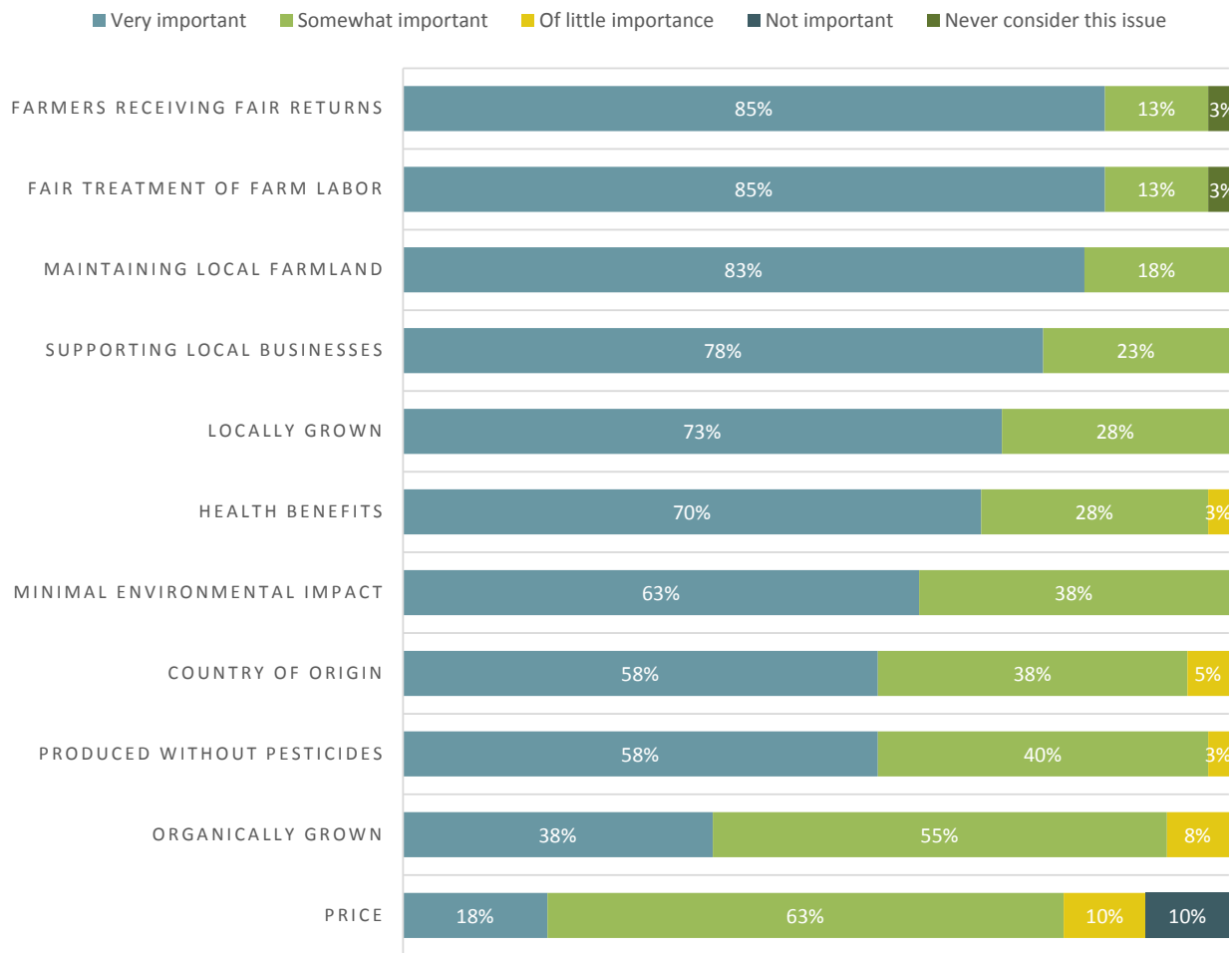


Figure 1. Importance of different factors for customers when choosing from where to buy fruits and vegetables—of any kind

The percentages indicate the percent of customers who agree with the respective (color-coded) response in the legend.

differed from conventional supermarket produce on a number of different factors. As shown in Figure 2 (page 17), over three quarters of surveyed customers believed Baltimore-grown produce was better for the environment, for local businesses, and for farmers and farmworkers, and was fresher than supermarket produce. The only factors for

which a significant share of customers thought Baltimore-grown produce was merely comparable to or perhaps inferior to conventional produce were food safety, produce variety, and price (i.e., urban grown produce was more expensive).

Given market forces that favor large-scale farming operations and devalue the work of food production as a whole (and especially of small-scale, pesticide-free, and low-input urban food production operations), this study did not expect urban grown produce from the Farm Alliance to be more affordable to consumers. While Farm Alliance has programs that subsidize the price of produce for low-income customers (i.e., the Double Dollars program), in order for farms to be economically viable, the price of produce at the Farm Alliance's 32nd Street Farmers Market stand reflects the economic costs of operating small-scale farms. This ensures fair treatment of farm labor and ecologically sustainable practices



At the same time, 88% of surveyed Farm Alliance customers knew that the fruits, vegetables, and herbs sold at the Farm Alliance stand came from urban farms in Baltimore, yet customers still purchased from the Farm Alliance. This suggests that most Farm Alliance customers prioritize the myriad other benefits of urban-grown produce over price when choosing whether and how much to buy from the Farm Alliance.

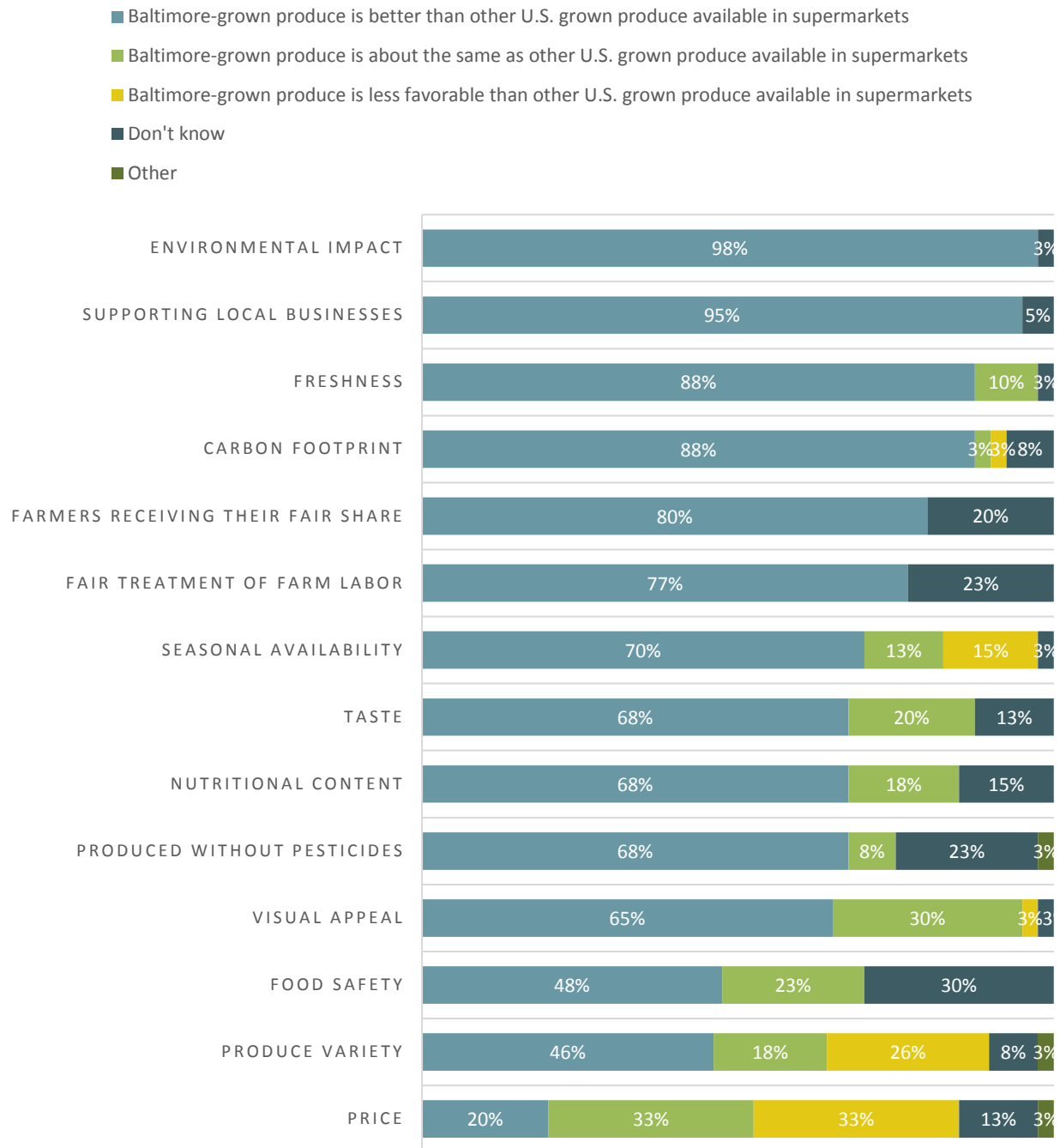


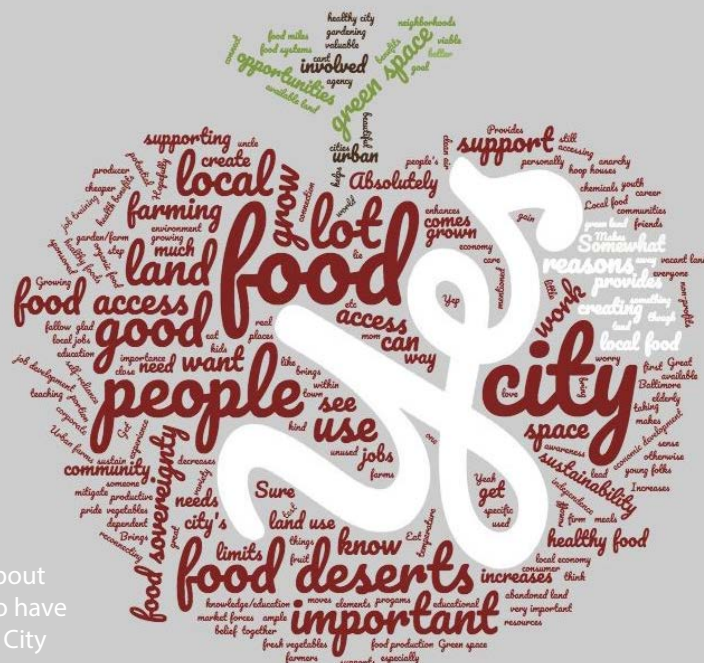
Figure 2. Customer attitudes on differences between Baltimore urban grown and supermarket produce
The percentages indicate the percent of customers who agree with the respective (color-coded) response in the legend.

PERCEIVED VALUE OF URBAN FARMS IN BALTIMORE

Is it important for cities to have urban farms? Farm Alliance customers were asked to consider and explain the importance of urban farms in Baltimore City. Responses were resoundingly positive, and followed several key themes. People see value in Baltimore's urban farms for the roles they play in re-purposing vacant land and increasing green space. Urban farms are also a critical strategy for improving healthy food access and mitigating food deserts. Farms like the 16 members of the Farm Alliance foster food sovereignty. And furthermore, urban farms help people (especially young people) learn about food production and nutritious foods.

Figure 3 (below) emphasizes the most common phrases in responses. The larger a word, the more frequently it was used by survey respondents.

And while food production was considered important, so too were food education programs. Farm Alliance programming received positive feedback from cooking/nutrition demonstration participants. Nearly all participants found the teacher to be clear. Additionally, the demonstrations increased desires to incorporate more fresh vegetables into cooking, to buy more fresh vegetables, and to prepare or cook foods at home more regularly. Participants felt they gained usable skills to facilitate eating and cooking healthier meals with greater ease and efficiency.



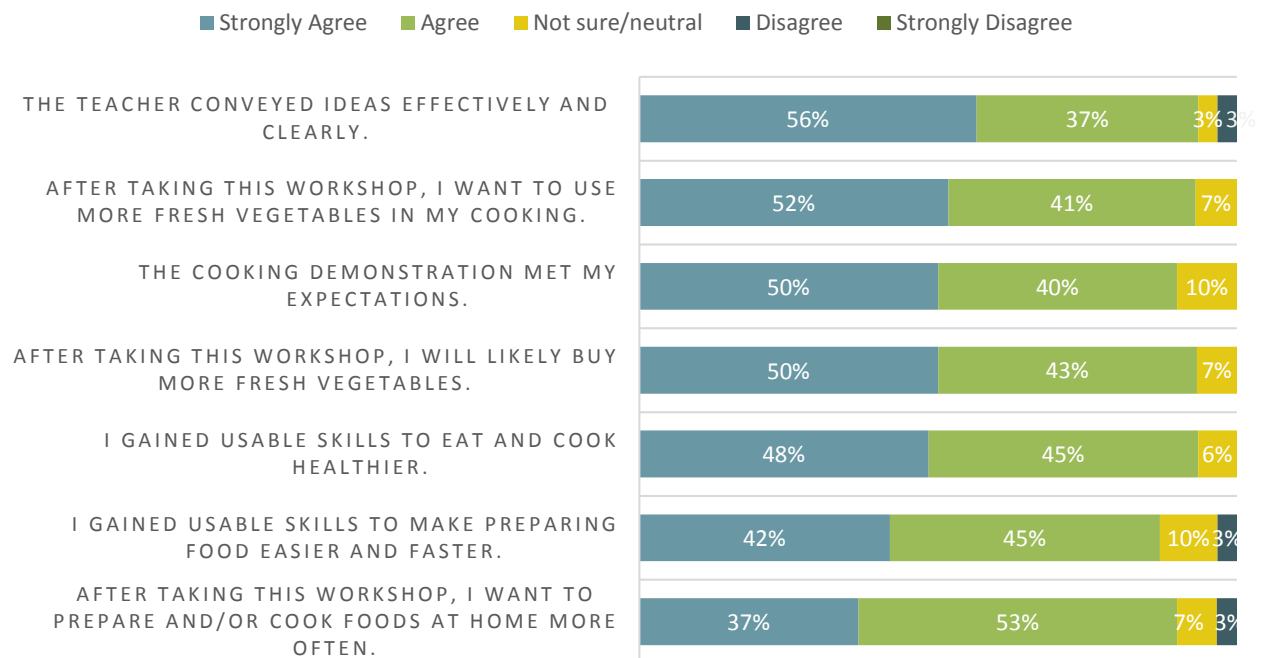
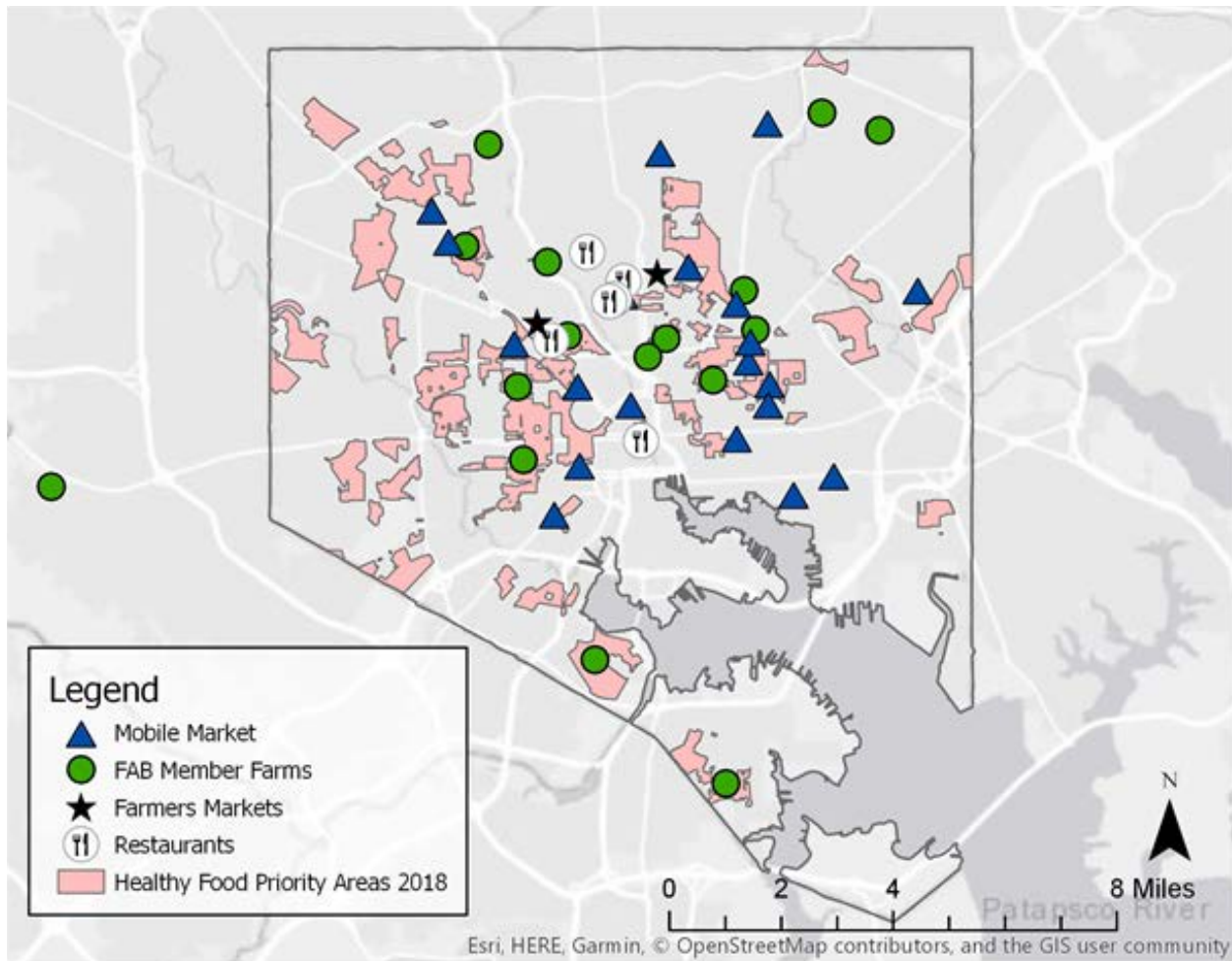


Figure 4. Attendee feedback of Farm Alliance cooking/nutrition demonstration



Map 3. Healthy Food Priority Areas, Farm Alliance Member Locations, and Locations of Produce Sales

This map shows geographic distribution of Healthy Food Priority Areas (HFPA), locations of Farm Alliance member farms, and the locations where these farms sell their produce. The HFPAs were retrieved from the Johns Hopkins MD Food System Map Open Data platform.

IMPROVING FOOD ACCESS

Most Farm Alliance member farms are situated in or near areas lacking other healthy food options. These farms make intentional efforts to improve neighborhood food access by hosting on-site market stands, mobile markets, CSA shares, and cooking/nutrition demonstrations. Many of them offer discounted prices in their neighborhood sales locations, and many also participate in the Double Dollars incentive program to double the value of purchases made by low-income residents.

Map 3 (page 20) shows the geographic distribution of Healthy Food Priority Areas (HFPAs), locations of Farm Alliance member farms, and the locations where these farms sell produce. The HFPAs were retrieved from the Johns Hopkins MD Food System Map Open Data platform.

The 2018 cooking/nutrition demonstrations concentrated on improving awareness of the Double Dollar program among attendees. Survey responses from demonstration participants indicate that the Farm Alliance is successful at raising awareness of the Double Dollar program. While nearly half of participants had never heard of the program prior to the demonstration, most were eager to use the program in the future. Only



17% of participants had utilized the Double Dollar incentive in the past.

The demonstrations also fostered interest among potential users of the Double Dollar program—35% of participants said they had heard of the program before but never utilized it. These results reinforce the importance of Farm Alliance’s educational programs, which effectively improve the accessibility of healthy, affordable foods for low-income residents.

Gaps to Be Filled

While the surveys highlighted some of the Farm Alliance’s most valuable work, respondents also provided feedback about personal food preferences as well as purchasing barriers which, if removed, could enhance the Farm Alliance’s farm planning and sales strategies.

In general, customers appreciated the variety of produce available through the Farm Alliance. Particularly, customers enjoyed seeing and buying crop varieties and specialties that are unlike what is found in conventional stores. These included (listed in order of frequency of mention):

- ❖ Shishito peppers;
- ❖ Ground cherries;
- ❖ Spicy salad greens and other interesting greens (e.g., sorrel, mustard);
- ❖ Turmeric;
- ❖ Wineberries; and
- ❖ Cardoons.

Farm Alliance customers also mentioned some traditional produce among their favorites, including leafy greens, heirloom tomatoes, carrots, green onions, cucumbers, squash, and herbs.

Among both customers at the market and participants at the cooking/nutrition demonstrations, the most common request—*by far*—was for more fruit to be grown and sold through the Farm Alliance. Suggestions included persimmons, berries, melons, plums, and peaches. Other requests included fava beans, eggs, and more “sustenance food,” such as grains and heirloom corn.

Participants at the cooking/nutrition demonstrations were also asked about any barriers that kept them from buying produce at nearby farms. Among the most commonly identified barriers were limited or inconvenient farm retail hours, difficulty accessing farm market location(s) due to distance or lack of transportation, and lack of desired fruits or vegetables for sale.



“You all have different varieties available than [what] you find in stores.”

FARM ALLIANCE CUSTOMER

Conclusions

Though Baltimore City's food system is rooted in historical inequities that disproportionately affect African American residents, a vibrant, environmentally-conscious urban farming movement is an important measure of a community's resiliency. Embedded within communities, the member farms of the Farm Alliance of Baltimore are demonstrating how the

power of growing food using collective effort can help to toughen communities against inequities and the shocks of displacement, climate change, and a lack of jobs.

By removing barriers to healthy food access, and by harnessing the collective power of Baltimore's urban farm network, Farm Alliance is bolstering



“It's a way to create the kind of world I'd like to see.”

FARM ALLIANCE CUSTOMER



Baltimore’s urban farming movement and confronting inequities. The Farm Alliance has implemented programs to increase accessibility of healthy foods, particularly through mobile markets, farm stands, educational programs, and the Double Dollars program.

Indeed, participants agree that the Farm Alliance plays an integral role in the local, regional, and national food system by joining and actively supporting ongoing coalition-based advocacy work around food justice.

As demonstrated by survey respondents, Farm Alliance customers understand the importance of urban grown produce and share many of the values of Farm Alliance’s mission.

It is clear that Farm Alliance is a substantive force in Baltimore City’s food system: it continues to address deep-seeded inequities while providing ecological, economic, and social benefits to the community. The Farm Alliance is making it so that locally sourced food is accessible for farmers to grow and Baltimoreans to eat.

CALL TO ACTION!

While outside the scope of this project, more research is still needed in the field of urban agriculture data collection and analysis to properly assess the practice's impact on food security, community and social determinants of health, and climate resiliency (including reduction of stormwater runoff, mitigation of the urban heat island effect, and resiliency to flooding events and wildfires).





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and climate change. Raychel earned her Master's degree in Food, Space & Society from Cardiff University School of Geography & Planning and her BA in Public Health and Environmental Change & Sustainability from Johns Hopkins University. Her previous publications ([full list here](#)) include:

Swartz H, **Santo R** & Neff, R. (in press). Promoting Sustainable Food System Change Amidst Inequity: A Case Study of Baltimore, Maryland s. In Fanzo J & Barling D (eds.). Advances in Food Security and Sustainability, volume 3. Oxford: Elsevier.

Palmer A, **Santo R**, Berlin L, Bonanno A, Clancy K, , ... & Rucker S (2017). Between global and local: Exploring regional food systems from the perspectives of four communities in the US

Northeast. Journal of Agriculture, Food Systems, and Community Development, 7(4), 187-205.

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Santo R, Yong R, & Palmer A (2014). Collaboration meets opportunity: The Baltimore Food Policy Initiative. Journal of Agriculture, Food Systems, and Community Development, 4(3), 193-208.



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