



Farms at NYCHA

Final Evaluation Report
June, 2019



CUNY
URBAN
FOOD POLICY
INSTITUTE

Acknowledgements

This evaluation was made possible through the generous support of the New York Community Trust and Laurie M. Tisch Illumination Fund. Special thanks to the staff at partner organizations, NYCHA residents, and Green City Force Corps Members who supported this evaluation by participating in and facilitating interviews, focus groups, surveys, and site visits.

Farms at NYCHA Initiative

NYC Office of the Mayor

Darren Bloch, Senior Advisor to the Mayor
Tamara Greenfield, Director of Building Healthy Communities

New York City Housing Authority

Andrea Mata, Director for Community Health Initiatives
Regina Ginyard, Urban Farm Project Coordinator

Mayor's Fund to Advance New York City

Toya Williford, Executive Director
Leah Prestamo, Director of Programs and Policy

Fund for Public Health NYC

Sara Gardner, Executive Director
Donna Fishman, Deputy Director

Green City Force

Lisbeth Shepherd, Chief Executive Officer
Tonya Gayle, Chief Development Officer
Jennifer Tirado, Chief Service Officer
Erin Johnson, Program Manager, Green City Force Service Corps

Evaluation

CUNY SPH: Urban Food Policy Institute

Nevin Cohen, Ph.D, Principal Investigator
Nick Freudenberg, Ph.D, Co-Investigator
Katherine Tomaino Fraser, MSPH, RD., Study Coordinator
CUNY SPH Research Assistants: Maggie Israel, Alessandro Ciari, Anna Larson, Faeth Sussman, Jing Ney Leong, Karen Kwan,

Kristine Momanyi, and Hannah Altman-Kurosaki.

Project Partners

Resident Associations

Cheryl Boyce, Resident Leader, Bayview Houses
Naomi Johnson, Resident Leader, Howard Houses
Frances Brown, Resident Leader, Red Hook East
Lillie Marshall, Resident Leader, Red Hook West
Katie Harris, Tenant Association President, Wagner Houses
Janet Seabrook, Acting Tenant Association President, Wagner Houses
Brenda Kiko Charles, Tenant Association President, Mariner's Harbor Houses
Erik Farmer, Tenant Association President, Forest Houses

Community Based Farm Partners

Saara Nafici, Director, Added Value
David Vigil, Director, East New York Farms!
Tony Hillery, Executive Director, Harlem Grown
Brenda Thompson-Duchene, Director, Isabahlia Ladies of Elegance Foundation
Tyrone Robinson, La Finca Del Sur

Cover Photo by Nevin Cohen

Table of Contents

Acknowledgements	2
Tables and Figures	5
EXECUTIVE SUMMARY	6
FARMS AT NYCHA OVERVIEW	8
FAN Partners and Design.....	9
Alignment with Municipal Plans	10
METHODS	12
Evaluation Process.....	12
Research Instruments	13
CUMULATIVE OUTCOMES – 2016 to 2019.....	15
Demographic and Health Characteristics of FAN Developments.....	15
Population	15
Employment and Income	15
Health Data.....	16
Youth Development and Workforce Training	16
Corps Member Recruitment.....	17
Training Outcomes	17
Corps Member Knowledge, Behaviors, and Self-Confidence.....	18
Landscape Transformation.....	20
Improved Safety	20
Environmental Benefits	24
Composting and Organic Waste Prevention	24
Stormwater Absorption	25
Community Engagement and Cohesion	25
Relationship Building and the Role of the CMs	27
Farms as a Catalyst for Community Building	28
Health and Diet	30
Farm Productivity.....	30
Dietary Changes.....	32
SUSTAINABILITY OF FARMS AT NYCHA	35
Project Goals.....	35
Fundraising for Ongoing Efforts.....	35
Emergent Stakeholder Dynamics	36

Questions to Guide Initiative Development.....	36
Organizational Questions.....	37
Fundraising Questions.....	37
Programmatic Questions	37
Evaluation Recommendations	38
Appendix A: Demographic Characteristics.....	40
Population	40
Age Distribution	41
Household Composition	41
Employment and Income.....	42
Appendix B: Survey Instruments	46
Sample Resident Survey	46
Sample Farmstand Participant Survey	52
Sample Corps Member Onboarding and Exit Surveys.....	53
Sample Focus Group Protocol	65

Tables and Figures

Table 1. FAN Evaluation Data Collection Methods and Metrics	13
Table 2. Average Annual Income by Development, 2019.....	15
Table 3. Projected and actual FAN Corp Members enrollment, 2016-2018.....	17
Table 4. Green City Force Service Corps cohort training outcomes, 2016-2018	18
Table 5. Percent change in total minor crimes from 2014 to 2018	21
Table 6. Community Members Engaged in FAN Activities, 2016-2018, per farm and total.....	25
Table 7. Estimated size of farms and raised beds, in square feet	30
Table 8. Younger and older residents of FAN developments, as % of dev. population, 2018	41
Table 9. FAN development vs. FAN census tract populations	42
Figure 1. Farms at NYCHA Locations.....	8
Figure 2. FAN Logic Model.....	9
Figure 3. Unemployment Rates of NYC Population Aged 18-24 by Race/Ethnicity, 2015	17
Figure 4. Corps Members (photo by GCF).....	19
Figure 5. Percent of responses to the Resident Survey statement.....	22
Figure 6. Harvest Festival (photo by GCF).....	22
Figure 7. Total weight of compost collected (13,816 lbs.), by year, 2016-2018.....	24
Figure 8. Total compost per apartment (avg. 1.54 lbs. /apt), by FAN site, 2016-2018.....	24
Figure 9. Bed Preparation (photo by GCF)	25
Figure 10. Total number (2490) of students engaged in farm-based learning, per year, 2016-2018	26
Figure 11. Total number (411) of farm events, per year, 2016-2018.....	26
Figure 12. Total number (14,143) of farm stand visitors, per year, 2016-2018	26
Figure 13. Resident Agreement That “The Farm Activities Have Inspired Me to Get Involved in Other Kinds of Activities in Development,” 2018.....	27
Figure 14. Total weight of produce distributed (56,715), in pounds, per year of FAN. 2016-2018	30
Figure 15. Average pounds of produce per month, per square feet of farm, 2016-2018.....	31
Figure 16. Monthly produce harvest, in pounds, per farm stand visitor, 2016-2018	32
Figure 17. Average produce harvested during farm operational months, by farm 2016-2018 ...	32
Figure 18. Farmstand (photo by GCF).....	33
Figure 19. Farm Infrastructure Measurements (photo by CUNY)	39
Figure 20. Number of apartments in FAN developments, by development, 2018.....	40
Figure 21. Total population of FAN developments, by development, 2018.....	41
Figure 22. Employment status of pop. in FAN development census tracts and NYC, 2017	43
Figure 23. Income distribution of FAN development census tracts	44
Figure 24. Median household income by FAN development census tracts, 2017	45
Figure 25. Percent of households whose income in the past 12 months is below the poverty line, by FAN development census tracts, 2017	45
Figure 26. Income sources by FAN development, 2018	46

EXECUTIVE SUMMARY

Farms at NYCHA (FAN) is a multi-site, multi-partner initiative to support the health and wellbeing of New Yorkers through an innovatively designed urban agriculture program. The initiative combines youth workforce development, healthy food production and distribution, resident engagement, and sustainable open space activation to contribute to positive community development.

The CUNY Urban Food Policy Institute has worked closely with the FAN implementing partners to evaluate the first three years of implementation (2016-2019), documenting and quantifying the many outcomes associated with the work, and assessing key elements of process and implementation that have been essential to sustaining the initiative and achieving its goals.

This evaluation summarizes the initiative's accomplishments in five domains core to its design: (1) youth development and workforce training; (2) landscape transformation; (3) environmental sustainability; (4) community engagement and cohesion; and (5) health and diet. The results demonstrate that FAN has produced substantial benefits to residents of public housing and to the greater New York City community, with measurable accomplishments in each domain.

As a result of having built and cultivated six large-scale urban farms at Mariner's Harbor in Staten Island, Forest Houses in the Bronx, Red Hook West, Bay View Houses and Howard Houses in Brooklyn, and Wagner Houses in East Harlem, the initiative has:

- Supported the recruitment and training of more than 111 young NYCHA residents as Service Corps Members (CMs). This is an innovative model of activating AmeriCorps service year requirements as a platform to address youth unemployment in public housing communities while enlisting young residents in improving the lives of public housing residents;
- Enabled Green City Force (GCF) CMs who have graduated from the program to attain educational opportunities or full-time employment in various sectors, including with FAN community-based partner organizations;
- Engaged residents of NYCHA housing in the FAN projects, involving 14,143 farm stand visitors, and 1,055 NYCHA resident volunteers in farm and food activities, as well as 2,490 young people in farm-based learning activities, generating a high level of interest and support within each development;
- Activated spaces within each development that residents perceived as significantly more pleasant and safer than prior to the construction of the farms;
- Cultivated and distributed 56,715 pounds of fresh, sustainably-grown produce, with a retail value of approximately \$118,975, to NYCHA residents, increasing self-reported consumption of fruits and vegetables and saving residents money;
- Created environmental benefits by diverting approximately 13,816 pounds of food scraps from landfills and preventing stormwater from inundating the city's sewer system, an estimated value of approximately \$300,000 in ecosystem services;

This final evaluation integrates and builds on two previous interim progress reports by providing cumulative metrics for FAN outcomes, and by identifying strategies and prompting questions for discussion to ensure the sustainability of the initiative in the coming years. Critical next steps for FAN include:

- Determining optimal roles and responsibilities of partners for sustainability and growth of the initiative;
- Codifying current FAN implementation strategies and plans for scale into an implementation plan that describes how and to what extent the farms should be scaled up, and outlines daily farm operations and responsible partners and their roles;
- Measuring the cost of service delivery and budgeting to adequately resource all aspects of the initiative;
- Considering a longer-term home for the initiative within the city administration, and pursuing partnerships with city agencies to secure additional resources;
- Rethinking the name and branding of the initiative so that it captures the goals and objectives of the work to build public support and potentially interest funders;
- Developing a plan for increasing resident engagement among current farms, including various options for activating the spaces for public use; and
- Developing an ongoing monitoring and evaluation plan for measuring initiative impact.

In 2017 GCF received the Project of the Year Award from The Corps Network, which serves over 35,000 young adults nationally.¹ This achievement is a notable credit to both FAN and GCF, and indicative of the broad potential of the FAN model as a public-private partnership that has invested in public housing at a time of federal government disinvestment. As FAN transitions from this first phase of implementation and considers its sustainability, this report highlights the success of the initiative in achieving a broad range of goals, including meeting ambitious targets for farm construction, workforce development, food production, and service to residents. This evaluation illustrates that beyond the specific accomplishments that we have tracked over three years, FAN's transformative power comes from its ability to challenge long-held expectations for what is possible for young people, for NYCHA communities, and for New York residents more broadly.

¹ <https://corpsnetwork.org/2017-project-of-the-year-green-city-force-farms-at-nycha/>

FARMS AT NYCHA OVERVIEW

FAN combines critical elements of youth workforce development, healthy food access, community engagement, and sustainable open space activation to make a positive contribution to NYCHA and surrounding communities. The FAN initiative is a public-private partnership composed of numerous city agencies, non-profit organizations, and community-based groups, supported by philanthropic and public funding. In addition to these partners, FAN depends on the active involvement of NYCHA residents and staff at each of the six developments, as well as the staff of FAN partner organizations, local police precincts, public libraries, schools, and other agencies and groups that support the FAN developments. We would like to acknowledge the contribution of time and effort by the many involved individuals and organizations who are not explicitly mentioned in this report.²

Farms at NYCHA is an important component of New York City's large and diverse urban agriculture system, which consists of approximately 900 food-producing community gardens, school gardens, institutional farms, and commercial farms. The first FAN site was established at Red Hook Houses in 2013 and builds on NYCHA's tradition of resident-based community gardens and recent urban farming developments. The current FAN initiative was launched in 2016 and added three farms in the first year and two additional farms in 2017-18, for a total of six farms across four boroughs: Red Hook Houses in Red Hook, Brooklyn; Bay View Houses in Canarsie, Brooklyn; Howard Houses in Brownsville, Brooklyn; Wagner Houses in East Harlem, NY; Forest Houses in The Bronx; and Mariner's Harbor in Staten Island. These farms not only produce fresh produce distributed free to NYCHA residents, but also serve as platforms for a wide range of community activities.

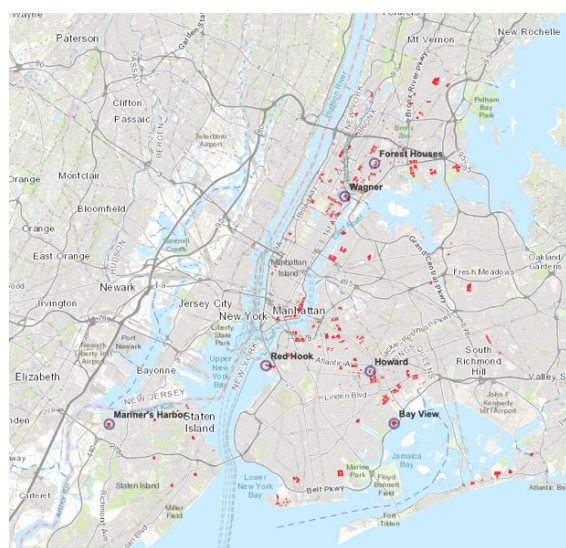


Figure 1. Farms at NYCHA Locations

FAN was conceptualized as helping to achieve four broad goals: (1) youth development and workforce training; (2) landscape transformation; (3) community engagement and cohesion; and (4) increasing access to healthy foods and nutrition education. Like many other urban agriculture projects, the benefits of FAN extend far beyond food production to include significant social, ecological, community development, and economic co-benefits, as illustrated by the logic model developed at the start of the initiative (Figure 2). These co-benefits are sometimes overlooked by those focused on the process of growing food, but they are typically more substantial than the value of the harvest.

² The FAN project has been previously described in detail in the first and second Farms at NYCHA Interim Progress Reports (September 2017, November 2018.) Certain details regarding project structure and evaluation findings that have been included in previous reports are incorporated in this report for context.

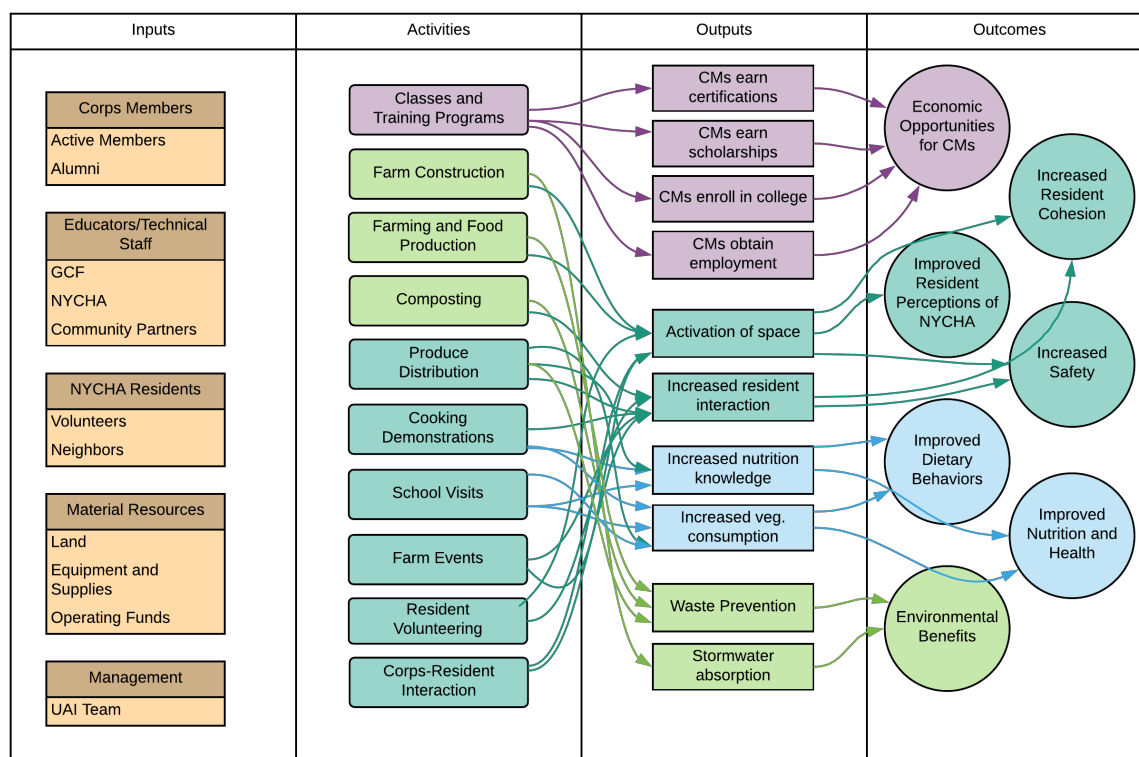


Figure 2. FAN Logic Model

FAN Partners and Design

FAN includes the following public agency, non-profit, and community-based partners:

- *Building Healthy Communities* (BHC), a citywide partnership started by the Mayor's Office of Strategic Partnerships and the Fund for Public Health in NYC (FPHNYC) to improve health outcomes in 12 neighborhoods in NYC, provides overall program support. Now administered by the Mayor's Office of Criminal Justice and the Mayor's Fund to Advance New York City;
- The *Mayor's Office of Strategic Partnerships* (OSP) provides oversight and fundraising for the overall BHC initiative with the Mayor's Fund to Advance New York City;
- *The Fund for Public Health in NYC* (FPHNY) originally partnered with OSP to raise funding for FAN and other BHC programs, and provided oversight including hiring and human resources, contracting, purchasing, and reporting for FAN grant funding. It also managed contracts for the CBOs at each farm site. They transitioned these roles to the Mayor's Fund in 2018-2019;
- The *New York City Housing Authority* (NYCHA) provides land for the initiative and is the lead city agency responsible for helping project partners navigate NYCHA systems, aligning the project with related NYCHA-led and supported initiatives, and contributing to strategy in areas such as Corps Member recruitment, community partnership, programming and expansion;
- *Mayor's Office for Criminal Justice* assumed lead oversight and program coordination for Building Healthy Communities in 2018;
- *Green City Force* (GCF), an AmeriCorps program, provides overall leadership for program

implementation, recruits, trains, and manages AmeriCorps young adults who are NYCHA residents who serve as Service Corps Members;

- Local Community Based Organizations (CBOs) provide urban agriculture support and community engagement at each farm, prioritize graduates of the GCF Service Corps for hire, bring school partnerships to bear for farm-based learning and share infrastructure like composting facilities: *East New York Farms!* at Bay View Houses; *Added Value Farms* at Red Hook West Houses; *Isabahlia Ladies of Elegance* at Howard Houses; and *Harlem Grown* at Wagner Houses;
- Local government, private, and corporate donors provide essential financial support to FAN; and
- The CUNY Urban Food Policy Institute provides project evaluation support.

In addition to these partners, the success of FAN relies on the involvement of NYCHA residents and staff at each development, as well as the community staff of other city agencies, from the local police precincts to the public libraries.

The organizational structure of the program is unique in several ways:

- FAN is designed to address some of the most challenging problems facing NYCHA residents: youth unemployment; the isolation of living in dense high-rise developments; malnourishment and poor health resulting from poverty; and underused, often unsafe public spaces;
- The GCF model of recruiting and training NYCHA residents and engaging resident volunteers in managing large farms and providing public programming for the benefit of residents has never before been attempted at NYCHA. GCF's Service Corps members are themselves NYCHA residents leading programming for fellow residents; and
- Green City Force is the only AmeriCorps and conservation corps program in the nation focused specifically on creating green workforce opportunities for young adults who reside in public housing, while enlisting their leadership in driving sustainability in public housing communities. GCF's Service Corps is particularly distinctive in its use of *urban agriculture* to expand economic opportunity for young adults in public housing while improving the lives of other public housing residents. The CMs are involved in all aspects of farm operation, from construction to planting, cultivating, harvesting, and distributing produce. They are responsible for reaching out to and interacting with residents, and managing resident volunteers. These experiences, along with professional development and training, enable the Corps Members to gain competencies in urban farming, environmental practices, food preparation and nutrition, teamwork and collaboration, and work and life skills.

Alignment with Municipal Plans

The FAN goals align closely with the goals of various municipal plans and programs to improve health, safety, quality of life, economic development, and the physical environment of NYC. These initiatives include: Building Healthy Communities (which FAN was officially launched under); the Mayor's Action Plan for Neighborhood Safety; the NextGeneration NYCHA

Sustainability Agenda; OneNYC; the Department of Sanitation's Zero Waste plan; and the Department of Environmental Protection's Green Infrastructure Plan.

More generally, FAN's aim to activate civic spaces within NYCHA developments is designed to create more livable, just, engaged communities within and beyond the six NYCHA communities. This aim is consistent with a much wider range of municipal plans and policies -- from NYCHA's Connected Communities Initiative and the Department of Health and Mental Hygiene's (DOHMH) health equity initiatives, to the city's climate change resilience plans -- even if the specific activities connected to urban agriculture are not explicitly described as strategies to achieve the objectives of these plans.

METHODS

This is the third and final evaluation report of the first phase of Farms at NYCHA. *Interim Report I* covered the start of the Initiative in 2016 through August 2017; *Interim Report II* detailed progress and impacts from September 2017 through November 2018. This report summarizes achievements of the initiative over the past three years and explores strategies to sustain FAN in the next several years. This report includes previously reported and new primary data, as well as updated secondary data that have been collected and analyzed by CUNY in partnership with GCF. The revised data include demographic, crime and health data for each development; farm activity and output data collected at all farms; survey data from GCF Corps Members (CMs); and interviews with implementing partners. CUNY has been awarded funding from the National Science Foundation that will enable continued measurement of FAN activities until July 2021, with a focus on assessing the food, energy, and water dimensions of the FAN farm sites.

Evaluation Process

The Fund for Public Health in New York City engaged the CUNY Urban Food Policy Institute to evaluate the impacts of FAN over a three-year period. Evaluation began in September 2016 after the first round of farms had been constructed (a project begun in 2014). As noted above, detailed interim reports were prepared in September 2017 and November 2018. GCF Service Corps Members and staff were integral to the evaluation as they contributed substantial time and effort gathering and sharing farm metrics, providing insights and assessments, and facilitating opportunities for CUNY data collection and assessment. Other FAN partners were involved in providing data and feedback throughout the evaluation process.

The evaluation involved collecting, organizing, and analyzing information on FAN implementation as it related to the program goals. The aim was to build an evidence base for project partners to identify effective program elements, make mid-course corrections, and quantify program impacts across multiple sites. This information may also contribute to the development of a model to replicate and scale the project to other NYCHA developments. The evaluation data are particularly relevant as project partners plan for ongoing implementation. Our aim has been to provide evidence about the project's progress and to recommend strategies to enable the project team to ensure financial, programmatic, and practical sustainability of FAN in the years to come.

We used a mixed methods approach to the evaluation process to provide the most reliable data within the evaluation budget. These methods included secondary data analysis, activity tracking, convenience sample surveys of residents, surveys of CMs, focus group interviews and in-depth interviews with key project stakeholders. The specific data collection methods and metrics are summarized in Table 1.

Table 1. FAN Evaluation Data Collection Methods and Metrics

Data Collection Methods	Metrics
<i>Secondary data aggregation, analysis</i> Data collection: CUNY; Analysis: CUNY Dates: Winter 2017 and 2018, Spring 2019	<ul style="list-style-type: none"> • Demographic, socioeconomic, health characteristics of residents • Crimes, misdemeanors, violations reported in/around developments • Healthy food access
<i>Farm activity tracking</i> Data collection: GCF ; Analysis: CUNY Dates: 2016, 2017, 2018 growing seasons	<ul style="list-style-type: none"> • Community engagement • Experiences of volunteers, visitors, farm stand customers • Production, harvest, distribution and compost production • Participation in special events
<i>Corps Member activity tracking</i> Data collection: GCF ; Analysis: CUNY Dates: 2016, 2017, 2018, 2019	<ul style="list-style-type: none"> • Number of recruits, attendance, graduation, certifications • Post program (employment, college enrollment)
<i>Corps Member onboarding/exit surveys</i> Survey Administration: GCF; Analysis: CUNY Dates: May 2017 & 2018/ Feb 2018 & 2019	<ul style="list-style-type: none"> • Self-assessed skills and leadership development • Self-reported food practices, diet/nutrition knowledge • Self-assessed program impacts
<i>Farm Stand Resident Surveys</i> Survey Administration: GCF ; Analysis: CUNY Dates: 2017, 2018 growing seasons	<ul style="list-style-type: none"> • Perception of improvement in outdoor spaces, perception of safety • Levels and types of engagement • Self-assessed diet and related behaviors
<i>Focus Groups</i> Data collection: CUNY; Analysis: CUNY Dates: Summer 2017, Fall 2018	<ul style="list-style-type: none"> • Perceived impacts of farms on development, CMs, residents • Levels of community engagement, resident support • Opportunities to improve farm activities
<i>Resident Surveys</i> Survey Administration: GCF with CUNY; Analysis: CUNY Dates: Summer/Fall 2017; Summer 2018	<ul style="list-style-type: none"> • Perceptions of farm and adjacent spaces, perception of food environment • Levels of community engagement and support for farms • Self-reported knowledge and behaviors: diet, food shopping, and eating
<i>Interviews</i> Data collection: CUNY; Analysis: CUNY Dates: Fall 2018, Spring 2019	<ul style="list-style-type: none"> • Roles and responsibilities of community partners • Interactions between CBOs and residents, GCF, FAN Team • Administrative issues and opportunities perceived by team

Research Instruments

For the final evaluation, CUNY (with the support of GCF) collected and analyzed recent surveys of GCF Corps Members (CMs) to measure self-assessed effects of the workforce development training. CUNY also conducted structured interviews with key FAN stakeholders, including GCF, the Mayor's Office of Criminal Justice, and the Director of Community Health at NYCHA to inform recommendations for future stewardship of the FAN. We aggregated, organized, and

analyzed previously reported farm metrics and workforce data to create a summary of the initiative's overall impacts to date, including:

- Demographic, crime, health, and food access data for each development;
- Farm activity tracking data collected from all six FAN sites from 2016-2019;
- Data from a survey administered periodically to 80 Corps Members across multiple cohorts. In 2017 and 2018, GCF administered onboarding surveys to CM cohorts 14 and 17. Later in 2018, GCF administered pre (n = 16) and post (n = 18) surveys with cohort 18, which allowed for analysis of reported changes in knowledge, attitudes, and behaviors among this subset of CMs; and
- Themes derived from structured interviews conducted with key stakeholders.

The first section of the report documents the major accomplishments of the 2016-2018 period. The second section addresses how to ensure FAN sustainability.

CUMULATIVE OUTCOMES – 2016 to 2019

We collected a rich body of evidence over the initial three years of FAN implementation using quantitative and qualitative methods. CUNY, with the support of GCF staff and CMs, collected and analyzed primary data from FAN activities. Additionally, CUNY has used publicly available data to provide contextual information about demographic, health, and crime indicators related to FAN’s goals and outcomes.

Demographic and Health Characteristics of FAN Developments

All six FAN developments are large, dense urban communities whose residents have very low incomes and therefore are at a disproportionate risk for poor health because they face numerous challenges caused by poverty and systemic social inequities. Key information about FAN development residents is provided below, with more detailed data on resident characteristics in Appendix A.

Population

The six FAN sites have 9,435 apartments that house approximately 18,185 residents. Population densities at each development range between 2.1 - 2.3 people per apartment. More than 30% of the entire FAN development population is younger than 19. Seniors (age 65 and older) also comprise a large percentage of the developments’ population.

Employment and Income

The average annual income of the FAN developments is \$23,073, as indicated in Table 2, compared to a per capita income citywide of \$35,761.³

Table 2. Average Annual Income by Development, 2019

Bay View	\$ 25,271
Forest	\$ 21,920
Howard	\$ 22,212
Mariners Harbor	\$ 22,002
Red Hook West	\$ 23,481
Wagner	\$ 23,553
Average	\$ 23,073

Source: U.S. Department of Housing and Urban Development. Resident Characteristics Report.

The developments are situated in low-income census tracts. Compared to households citywide, a larger percentage of households in the FAN development census tracts have incomes less than \$10,000 per year. Moreover, FAN developments are in census tracts with poverty rates that are more than twice as high as the citywide rate. The census tracts in which Red Hook and Mariner’s Harbor are located have poverty rates nearly four times as high as the citywide rate.

³ U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

All six of the FAN developments are in census tracts in which the percentage of the population employed is significantly lower than New York City as a whole. Unemployment rates within the census tracts of five of the six FAN sites are higher than citywide, with Mariner's Harbor the sole exception.⁴

Health Data

Although the city does not disaggregate health data by NYCHA development, the New York City Community Health Survey presents data for public housing residents overall. The 2017 New York City Community Health Survey shows that underlying health disparities, discussed in the previous evaluation reports, persist among NYCHA residents.⁵ Data from DOHMH on specific health conditions of public housing residents *overall* indicates consistently poorer health outcomes than those who do not live in public housing, with 19.0% of public housing residents reporting ever having had diabetes and 37.4% reporting ever having high blood pressure versus 11.8% and 27.2%, respectively, for NYC residents not residing in public housing. More than 65% of public housing residents report being overweight or obese, while the rate among residents not residing in public housing is 57.4%. In general, public housing residents report consuming fewer fruits and vegetables and more sugar-sweetened beverages than people not living in public housing. The rate of food insecurity is higher among public housing residents than NYC residents not residing in public housing, with NYCHA residents 3.9% more likely to report sometimes or often not having enough food. Health outcomes differ by housing development⁶, but we have insufficient data to know how and to what extent resident health outcomes at individual FAN developments differ from the mean outcomes for public housing residents.

Youth Development and Workforce Training

The FAN provides NYCHA youth with employment and job training so that they gain skills and experience to help them get good jobs or continue their education. FAN's engagement and training of NYCHA youth through the GCF Corps has been the primary objective of FAN implementation and a critical pillar for FAN

GCF recruited and trained more than 111 young NYCHA residents as Service Corps Members

success. In multiple interviews, stakeholders have reported how central the GCF workforce training has been, not only to the construction and operation of the FAN farms but to the ongoing overall success of the initiative. CMs have been particularly instrumental in engaging residents in FAN activities such as farm maintenance, farm stand operation, nutrition education programs, and cooking demonstrations. In addition to interacting with residents through formal

⁴ U.S. Census Bureau (2018). American Community Survey 2013-2017 ACS 5-year Estimates. Retrieved from <https://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2017/5-year.html>.

⁵ New York City Department of Health and Mental Hygiene. Community Health Survey 2017; public use dataset accessed on May 15, 2019.

⁶ Yim, B., Howland, R. E., Culp, G. M., Zhilkova, A., Barbot, O., & Tsao, T. Y. (2019). Disparities in Preventable Hospitalizations Among Public Housing Developments. *American journal of preventive medicine*, 56(2), 187-195.

programs, CMs have regularly interacted informally with volunteers and passersby. A central premise of the initiative is that the CMs will become activated members of their communities, educating their peers, families, and neighbors, and in the process receive important experience and training in leadership and workforce skills. This investment in young adult residents of NYCHA is critical because 71.5 percent of non-disabled NYCHA residents between the ages of 18 and 24 are unemployed.⁷ Citywide, Black and Latinx youth face disproportionate rates of unemployment, as Figure 4 illustrates.⁸

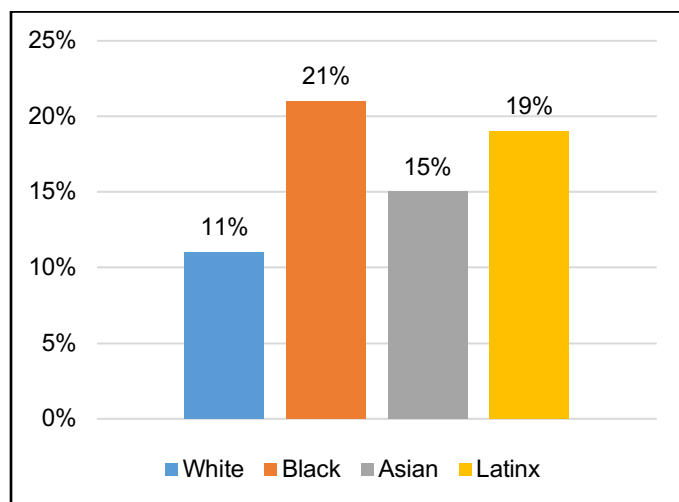


Figure 3. Unemployment Rates of NYC Population Aged 18-24 by Race/Ethnicity, 2015

Corps Member Recruitment

GCF exceeded its original recruitment goal by enrolling 111 Corps Members over four cohorts since the start of the project.

Table 3. Projected and actual FAN Corp Members enrollment, 2016-2018

Year/Cohort	Number of CMs Enrolled
2016 (Cohort 12)	24
2017 (Cohort 14)	40
2018 (Cohort 17)	31
2018 (Cohort 18)	16
Total	111

Source: Green City Force, 2019

Training Outcomes

Green City Force trains the Corps Members through weekly professional development sessions and four days per week of in-service learning at the farms. Key outcome measures include: graduation rates; completion of certificates in green building and culinary training; and

⁷ Youth unemployment data provided by NYCHA to GCF on 2/6/2018.

⁸ Treschan, L & Lew, I. (2018) Barriers to Entry: Fewer Out of School, Out of Work Young Adults, as Warning Signs Emerge. NYC: Community Service Society.

employment or college enrollment within 6 months of program completion. Since 2016 the outcomes have been quite positive.

- The graduation rate grew from 67% in 2016 to 97% in 2018, with an average retention rate of over 90%.
- Over the course of the initiative, CMs continued to participate actively in the Sylvia Center’s Culinary Program, which trains young people and their families cooking techniques to prepare a simple, healthy meal, and Green Professional Building Skills (GPRO) Certification Exams, which supports participants to integrate green building practices into their everyday work and to more fully understand and advocate for efficient and healthy buildings. These activities both extend CM training and skills acquisition and support future employment in food, agriculture, nutrition, and environmental fields.
- Of the 2017 graduates, 96% transitioned into full time work or school within 6 months, compared to a national rate of approximately two-thirds.⁹

96% of 2017 graduates transitioned into full time work or school

Table 4. Green City Force Service Corps cohort training outcomes, 2016-2018

Training Outcomes	2016	2017	2018
Graduation from GCF Service Corps	67% (16/24)	78% (28/36)	97% (35/36)
Completion of Sylvia Center’s GCF Culinary program	92% (22/24)	100% (10/10)	100% (10/10)
Completion of GPRO Certification Exam	64% (14/21)	57% (16/28)	64% (27/42)
Transition into full time work or school within 6 mo.	94% (15/16)	96% (27/28)	TBD*

Source: Green City Force, 2019.

*TBD: Service concluded early 2019; 6 months have not passed since close of term.

Corps Member Knowledge, Behaviors, and Self-Confidence

Based on the activities and outcomes posited in the FAN logic model, we surveyed CMs to measure their self-assessed changes in health-related knowledge, healthy behaviors, and self-confidence as the CMs move from start to completion of their GCF experience. The results suggest positive changes with respect to nutritional knowledge and in some self-reported dietary practices.

⁹ Friedman, E., et al. (2016). New Methods for Assessing AmeriCorps Alumni Outcomes: Final Survey Technical Report. (Prepared for the Corporation for National and Community Service, Office of Research and Evaluation). Cambridge, MA: Abt Associates Inc.

CMs reported increasing their knowledge (defined as being “moderately” to “very knowledgeable”) about: healthy eating practices (from 85.6% to 100%); growing fruits and vegetables (62.5% to 88.9%); and composting (86.6% to 94.1%) over their time as corps members. When asked about food shopping behavior, and how often they include vegetables in their food purchases, CMs reported an increase in “usually” or “always” buying vegetables, from 56.3% at baseline to 76.7% at program completion. CMs also reported an 11% increase in purchasing vegetables at fruit and vegetable markets and farmer’s markets (compared to bodegas or supermarkets.)

Positive changes in the shopping and dietary behaviors of CMS include: 20% increase in frequent purchase of vegetables; 26.4% increase in knowledge about growing fruits and vegetables



Figure 4. Corps Members (photo by GCF)

Additionally, CMs reported increased conversations with friends and family about healthy eating: 50.1% agreed or strongly agreed with the statement “I talk to my friends and family about healthy eating” at baseline compared to 61.1% at program completion. In contrast, the average number of fruits and vegetables reported consumed per day decreased from 2.1 to 1.9, and the average number of sugar sweetened beverages reported consumed per day increased from 3.5 to 4.7. The GCF curriculum is not specifically designed to

change personal dietary behavior, and many environmental variables influence the eating patterns of young urban adults. It is also possible that differences in self-assessed behaviors reflects increased awareness of eating habits rather than an actual change.

17.8% increase in self-reported ability to "rely on my strengths"; 9.9% increase in self-reported open mindedness; 9.8% increase in self-reported responsible attitude

When asked about the employment and leadership-related skills they developed, CMs reported a 12.2% increased intention to work in a field related to food. Further, CMs reported a 21.1% increase in their ability to “determine what the community needs” and a 17.8% increase in their ability to “rely on my strengths.” CMs also reported increases in their sensitivity to others (17.4%), open-mindedness (9.9%), and responsible attitude (9.9%).

Landscape Transformation

FAN has transformed the landscape of the six NYCHA developments by turning underused areas into working farms that serve as active community spaces for NYCHA residents. Benefits of this landscape transformation include decreased anti-social behavior, vandalism, and crime and perceived improvements in safety; perceived improvements in quality of life as a result of cultivated greenery; and tangible environmental co-benefits from the farming activities, particularly organic waste diversion through composting, and stormwater absorption as a result of adding landscaped soils atop concrete or less absorptive compacted soil.

Improved Safety

At NYCHA developments overall, the crime rate from 2016-2019 was consistently higher than the citywide rate. Environmental factors are not the only cause of crime, but the design and use of a space can contribute to crime, vandalism, and anti-social activities, and fear of crime. Many of NYCHA's open spaces have been under-maintained and/or fenced off to residents, and are thus relatively inactive, a challenge being addressed by a new urban design project NYCHA has initiated known as Connected Communities.¹⁰ Inactive spaces discourage use, and lack "eyes on the street," the presence of people and their surveillance of a space that deters crimes. Additionally, minimal landscaping can signal that spaces are not cared for, cues of disorder that, coupled with inactivity, create conditions ripe for crimes.¹¹

The farms at the six NYCHA developments have activated the landscape by: making the spaces more vibrant and cared for; increasing pedestrian traffic and informal surveillance; and serve as outdoor spaces for social gatherings that deter anti-social behaviors. The evaluation analyzed the number of minor crimes within or near the FAN developments to identify patterns or associations that suggest that activation of the space may have contributed to crime reductions. In addition to examining actual crime levels, we included in the resident survey questions about perceptions of crime, as we wanted to learn whether the farms have contributed to an improved sense of safety among residents.

Rates of Violations and Misdemeanors

To determine changes in crime rates, trends of violations and misdemeanors (i.e., minor crimes) at the four longest-running FAN developments were compared to the trends of nearby, comparable NYCHA developments and to the trends of the NYPD precincts surrounding the paired developments. Comparable developments were chosen primarily by proximity to a FAN site, and when there were several choices, by the closest match to FAN development characteristics and demographics. We focused on violations and misdemeanors because these types of anti-social behaviors are more likely to be influenced by environmental changes than crimes like homicides.

¹⁰ Cruz, HD. Active Density: Stimulating the Urban Domain in High-Rise Social Housing Developments. Architecture Thesis Prep. 2014; 243: 1-109.

¹¹ Kuo FE, Sullivan WC. Environment and Crime in the Inner City: Does Vegetation Reduce Crime? Environment and Behavior. 2001; 33(3): 343-367.

The minor crime rate was defined as total minor crimes per month per 1,000 people. Minor crime trends were analyzed only at sites with farms built in 2016 or earlier to ensure a sufficient number of crime data points for analysis. (There is insufficient data to determine if changes in crimes that occurred at Forest (2017) or Mariner’s Harbor (2018) are representative of a larger change in the trend or random fluctuations.) A difference-in-difference analysis was conducted to determine if the trend in minor crimes at each of the four FAN sites deviated significantly from the trend of its paired development and the precinct trend. Percent changes in total minor crimes per year from 2014 to 2018 were calculated for all FAN sites, as Table 5 indicates.

Table 5. Percent change in total minor crimes from 2014 to 2018

	Total Minor Crimes 2014	Total Minor Crimes 2018	Change 2014-2018	Percent Change
NYC	340,173	316,968	-23,205	-7%
NYCHA	17,830	16,164	-1,666	-9%
Bay View	130	148	18	14%
Forest	81	56	-25	-31%
Howard	134	104	-30	-22%
Mariners Harbor	142	102	-40	-28%
Red Hook	202	198	-4	-2%
Wagner	100	97	-3	-3%

Source: NYPD Historic Crime Data, 2018

All FAN sites except Bay View have experienced decreases in total minor crimes between 2014 and 2018. The reductions at Forest (-31%), Howard (-22%), and Mariner’s Harbor (-28%) were all greater than the change within NYCHA overall (-9%) and in New York City (-7%). According to the difference-in-difference analysis, there was a significant reduction in crime at Red Hook Houses, which started in 2013, compared to its control development after 2013 ($p = 0.00734$, $\alpha = 0.05$). Although there were no significant changes in the minor crime trends at the other three FAN sites, there were decreases in crime in 2017 and 2018 compared to pre-farm levels at Howard, and decreases overall from 2016 at Bay View.

Resident Perceptions of Safety

The residents we surveyed (n=158) at five of six FAN developments in September 2017 and October 2018 (Bay View, Forest, Howard, Red Hook West, and Wagner) were asked several questions about their perceptions of the development’s safety. Many

(44.2%) reported that safety in the development felt “about the same,” but 22.3% of respondents felt the development felt “more safe” in the previous 12 months. Additionally, the majority of residents at each development “agreed” or “strongly agreed” that the “farm makes the development feel safer,” as demonstrated in Figure 6. Surveys of farm stand visitors and CMs also indicate that the farms contribute to a sense of safety, with 70% of farm stand survey respondents agreeing that the farm makes their development feel safer, and more than 42% of

70% of farm stand survey respondents reported that the farm makes the development feel safer

CMs indicating they “agreed” or “strongly agreed” that the farms made the developments feel safer.

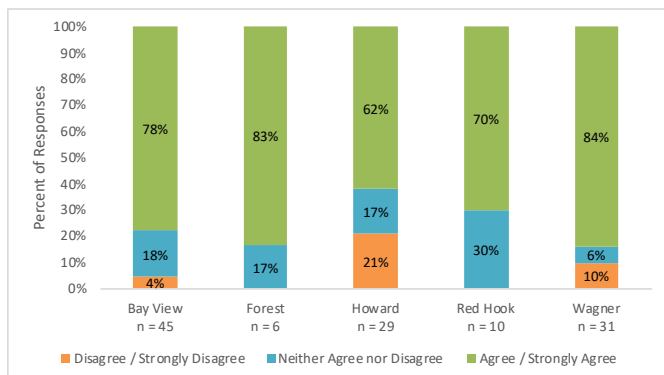


Figure 5. Percent of responses to the Resident Survey statement “the farm makes the development feel safer,” by development
Source: Resident Survey Data, 2017, 2018.

Interviews about perceptions of safety with CBO partners and NYCHA residents at the Bay View, Red Hook, and Wagner farms illustrate the relationships between farm activities and feelings of safety. For example, one interviewee from Wagner said:

“It was a dead area, from what I see, I saw kids playing and they would run through it, but it wasn’t being used. It was just being used to walk through. So now that the farm is there, they still walk through the farm the same way they would walk through as if the vacant space was there, but now there’s something there that’s contributing to the community, its beautifying.”



Figure 6. Harvest Festival (photo by GCF)

According to a Wagner resident, “[the space is] more social.” At Red Hook, an interviewee said that before the farm, the space was...

“...like a parking lot full of weeds and was not being used. There was high crime activity because it was a place that was forgotten about. It’s also in the center of the development, so people come but not the people you want; it’s easy to do things because nobody can see.”

One interviewee associated with Bay View noted that perceived

safety could be due to the space looking visibly cared for:

“I think, some folks who feel that investment is made in Bay View, therefore there’s more eyes and more care, the interest is put in.”

The interviewee added that a parent in the development considered the farm a safe space for her daughter to spend time, and that other children frequently use the farm as a play space as well:

“There was this one young girl, she actually came to the farm pretty often and then her mom really liked that. She was able to come, not just hang around on the street, so ... that was a very specific case of one person who feels that the farm does provide a safe environment.”

These results suggest that residents believe the farms contribute to their feeling safer in their developments, and that there may be an association between observed reductions in minor crime and the presence of the farms. However, our analysis does not show a causal association between the farms and crime reductions. Over time, tracking occurrences of crime and infractions (like property vandalism) might reveal stronger associations with the farms and levels of farm activity.

Quality of Life Improvements

Survey respondents overwhelmingly agreed that farms within their developments make the space around them more appealing. Furthermore, residents strongly agreed that the farms improve the look of the development and that other residents like the farm. Residents also reported that the farm is better than what was there before. Residents of the FAN

77.5% of residents reported that they believe the farm improves the look of their development

developments have reported positive perceptions about the overall effects of the farms on their community. A significant proportion (77.5%) of respondents to the 2017 Farm Stand Survey (N=158) reported that they believe the farm improves the look of their development. In addition, respondents reported improved feelings of safety over the previous 12 months.

A 2017 survey of CMs indicates that more than 75% “agreed” or “strongly agreed” that the farms provided benefits to all residents, 74% “agreed” or “strongly agreed” that the farms improve the look of the developments, and 61% of CMs “agreed” or “strongly agreed” that the farms are better than what was there before.

Environmental Benefits

Composting and Organic Waste Prevention

Between 2016 and 2018, the FAN farms turned 13,816 pounds of organic waste into compost (Figure 8). The extent of composting varied by FAN site over the course of the initiative, with Howard and Red Hook farms producing the most compost per apartment/household (Figure 9). This variation is largely due to the varied length of time that farms were operational, but may also be influenced by factors such as variations in resident engagement in the compost initiative.

FAN diverted 13,816 pounds of food scraps from landfills, saving more than \$3,000 in refuse collection and disposal costs

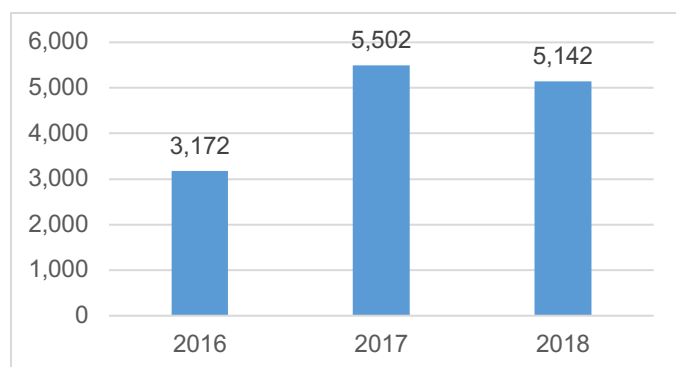


Figure 7. Total weight of compost collected (13,816 lbs.), by year, 2016-2018
Source: Green City Force, 2019.

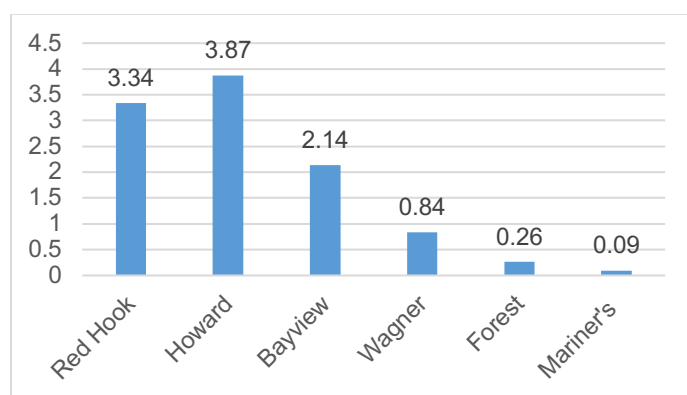


Figure 8. Total compost per apartment (avg. 1.54 lbs. /apt), by FAN site, 2016-2018
Source: Green City Force, 2019.

Stormwater Absorption

In 2016, we estimated that the four operational FAN farms were likely to absorb more than 480,000 gallons of stormwater each year (for details on this calculation, see Annex F). In 2018, with the addition of the two new farms at Mariner's Harbor and Forest Houses, the six FAN farms absorb an estimated 513,500 gallons of stormwater each year. We note that the 2018 figure is based on updated measurements for the area of raised beds at all farms, which were



Figure 9. Bed Preparation (photo by GCF)

only estimated in the 2016 analysis based on aerial images. We also note that the estimate of stormwater absorption is conservative in that it assumes a modest rate of absorption by the raised beds and does not account for stormwater absorbed by uncultivated farm area, such as pathways and storage areas. The value of keeping this volume of stormwater out of the sewer system is approximately \$303,000, based on funding provided by the NYC Department of Environmental Protection's Green Infrastructure Program to The Brooklyn Grange rooftop farm (\$0.59 per gallon of stormwater absorbed)

for the stormwater absorption services provided by the Brooklyn Grange.

Community Engagement and Cohesion

A prevailing theme in interviews with CBO staff and FAN development residents was the importance of the residents having a sense of ownership of the open space within their development. To achieve community engagement, over the course of the three-year initiative, the farms hosted over 14,143 farm stand visitors, 2490 students engaged in farm-based learning activities, and 411 community events, as Table 6 indicates. The number of people engaged in activities at the farms increased during each year of the initiative, as Figures 10-12 show.

Table 6. Community Members Engaged in FAN Activities, 2016-2018, per farm and total

Farm	Farm Stand Visitors	NYCHA Resident Volunteers	Number of Volunteer Hours	Students in Farm Based Learning	Number of Events Hosted
Red Hook	4413	427	539	1190	132
Howard	3265	230	345	61	74
Bayview	2781	153	611	321	91
Wagner	2389	223	649	794	74
Forest	963	21	160	124	24
Mariner's Harbor	332	1	44	0	16
Total 2016-2018	14,143	1,055	2,348	2,490	411

Source: Green City Force, 2019.

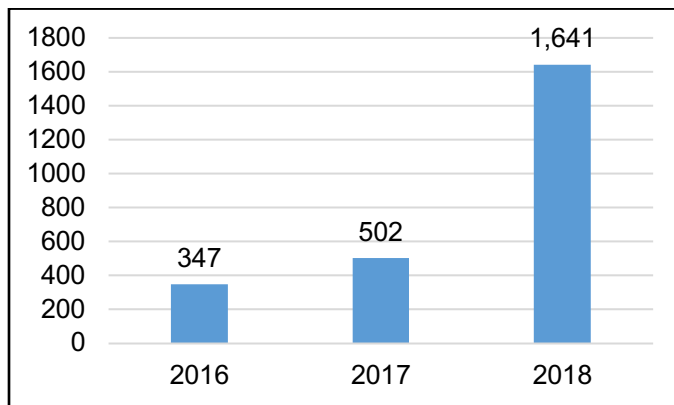


Figure 10. Total number (2490) of students engaged in farm-based learning, per year, 2016-2018
Source: Green City Force, 2019.

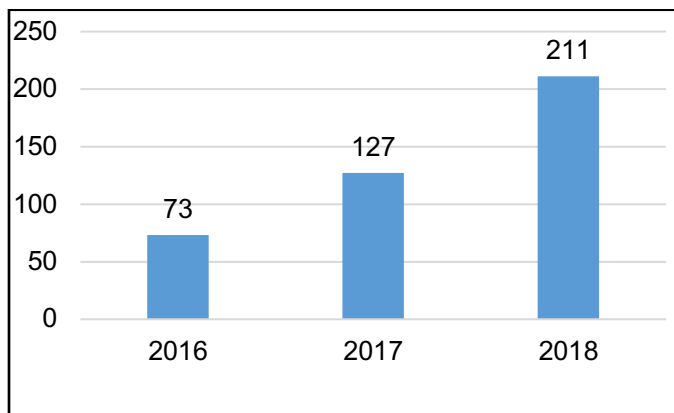


Figure 11. Total number (411) of farm events, per year, 2016-2018
Source: Green City Force, 2019.

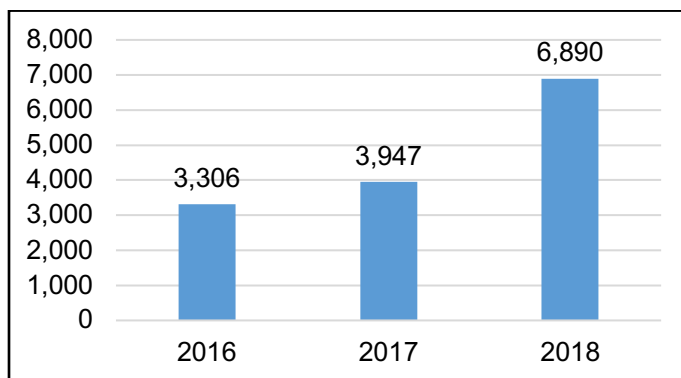


Figure 12. Total number (14,143) of farm stand visitors, per year, 2016-2018
Source: Green City Force, 2019.

Residents strongly agreed that FAN farm activities had inspired them to get involved in other kinds of activities in the development, providing a possible link for ongoing community engagement and cohesion.

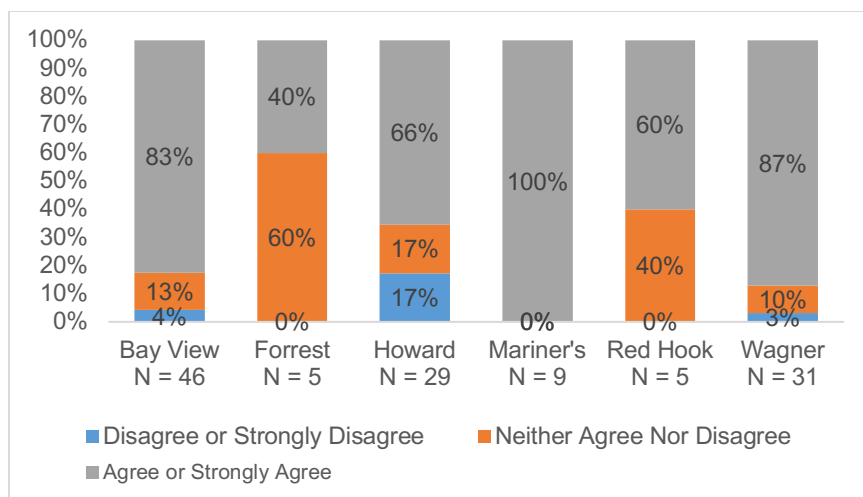


Figure 13. Resident Agreement That “The Farm Activities Have Inspired Me to Get Involved in Other Kinds of Activities in Development,” 2018

Source: Resident Survey, 2018

Relationship Building and the Role of the CMs

CMs reported that a primary focus of their work is engagement of residents in farm activities, and that this is the principal way residents of FAN developments have gotten involved to date. CMs conduct outreach by attending development events or by knocking on apartment doors to tell people about the farm activities. One CM said:

“We do a lot of outreach...our cohort ‘flyers’ the whole entire neighborhood... we go to social events, get the word out. . . TA meetings and things like that.”

The CMs noted that, aside from general persistence and friendliness, a key aspect of their messaging, and what piqued most resident interest, is that the farms are free to residents and that all produce is free for the residents themselves. Another CM shared that they encourage residents to pick their own produce from the farm:

“They see the garden and they say ‘I want some of that, I want some of that, but I tell them - well come and pick it yourself and don’t be bashful about coming out and participating because this is here for you.”

CM’s also noted that, once residents were involved, they tended to bring other residents along as well:

“Especially during our farm stands, there would be people who bring their friends. Or if it was the daycare center, they would come as a group. They won’t be just like one person come in. They will, literally, all show up.”

Though CM efforts to engage residents has been successful, CMs discussed how this process has been a slow and intentional one, and that building trust with residents has not always been easy:

“Some people are . . . hesitant for it, because they think (the farm) was an unnecessary thing for the development. But as time went on, they warmed up to it. They appreciated what GCF contributes to this neighborhood.”

Furthermore, CMs noted that although they know residents are active on the farm, residents often choose to be active when CMs are not working in the space by harvesting their own vegetables. CMs suggested that residents may not want to interfere with their farm work. Another possible explanation is that some residents prefer not to receive vegetables at the farm stand:

“Some people actually wait for us not to be there to go harvest. You know what it is? They’re scared that you might tell them ‘no.’ And see, that’s their own fault because they don’t come out and engage you and understand what this is about.”

All CMs agreed that their persistent engagement with residents at events such as Harvest Festivals and Community Days would be key for ongoing outreach and building towards sustainable engagement of residents on the farm. They also mentioned that all FAN sites should aim for increased engagement with the Tenant Association at each site, saying:

“If a tenant association is strong...the farmers will definitely be more successful. There’s no doubt about it.”

Participants in both Forest and Mariner’s focus groups noted that the strength of the CMs comes from having been raised in NYCHA developments. Participants agreed that this allows CMs to engage with residents and community members naturally, in an authentic way, that encourages communication.

Farms as a Catalyst for Community Building

Focus groups revealed that residents and CMs alike considered the farm as a hub for community building, and as a place to gather with neighbors and meet new people. There was also reference to the intergenerational aspect of the farm and how it was a place for different age groups to come together. One resident said:

FAN engaged 14,143 farm stand visitors and 1,055 NYCHA resident volunteers in farm and food activities, as well as 2,490 young people in farm-based learning activities

[The farm] “builds community...the familiarity that is lacking in developments like this. . . . And on top of that, it’s very important for kids to see people our age doing stuff like this. That kind of ‘paying it forward’ to what the kids assume you should be doing We’re involved with them.

We’re involved with their parents. We’re involved with their health. We’re giving them good food to eat. We’re kind of breaking a systematic chain that everybody seems to

think is normal, but this is very important work especially when you consider where it's at. There is not too much available in developments like this."

One focus group participant shared that the CMs and the active residents are changing perceptions among their community of what it means for people of color to participate in farming and work the land:

"We've had people yell out the window... 'that's slave work,' 'you looking like a slave' and we respond 'are you sure I'm a slave or am I learning how to grow my own food?' Then the next week, those same people are downstairs getting this produce - so a lot of people's minds change about when they think about what we're doing ... and then they get involved."

According to one interviewee from Wagner, residents were initially skeptical of the farm, but grew to appreciate it as their own space:

"Yes, they know it's part of the development. It's for you, it's not like someone came in and put something in the middle of where you live and you're not a part of it. You are part of it, and even if you're not from [the development] it's still NYCHA children being educated."

Another interviewee corroborates this reported sense of ownership, saying that at the beginning children would come to the farm, pull up plants, and throw tomatoes, but now they take tomatoes to eat; this indicates that they feel like it's their farm and their food. Additionally, the interviewee reported good resident participation with the farm:

"During events, a lot of people came out. Say one event, we did a workshop, there was like 12/13 people that came. It doesn't seem like a lot, but it's a lot from a community that didn't want anything to do with the space."

This sense of ownership was fostered through intentional communication with residents by GCF corps members and CBO farm managers:

"From being the farm manager, I saw from my eyes that people in the community were starting to appreciate the space more. Especially if you see them walking past and you greet them, they'll feel more welcome and open in the space. I did that every morning; they'd see me every morning."

Health and Diet

Farm Productivity

Farm productivity by season has been previously reported in the first and second interim reports. This report summarizes farm production over the course of the three-year initiative.

The estimated size of each farm, and estimated size of raised beds on each farm, is presented in square feet in Table 6.

Farms cultivated and distributed to residents 56,715 pounds of fresh, sustainably-grown produce with a retail value of approximately \$118,975

Table 7. Estimated size of farms and raised beds, in square feet

FAN Farm	Size of Farm (ft ²)	Size of Raised Beds (ft ²)
Red Hook West	43,560	9,121
Howard	26,572	6,117
Bay View	79,715	8,645
Mariner's Harbor	24,394	6,400
Forest House	52,272	9,467
Wagner	14,375	5,419
Total	240,888	45,169

Source: Green City Force, 2018.

Farms at NYCHA farms produced and distributed over 56,715 pounds of fresh produce from 2016-2018, with the support of over 1,055 NYCHA resident volunteers. Production has increased each year of the initiative, largely due to the additions of new farms in 2017 and 2018, as Figure 14 illustrates.

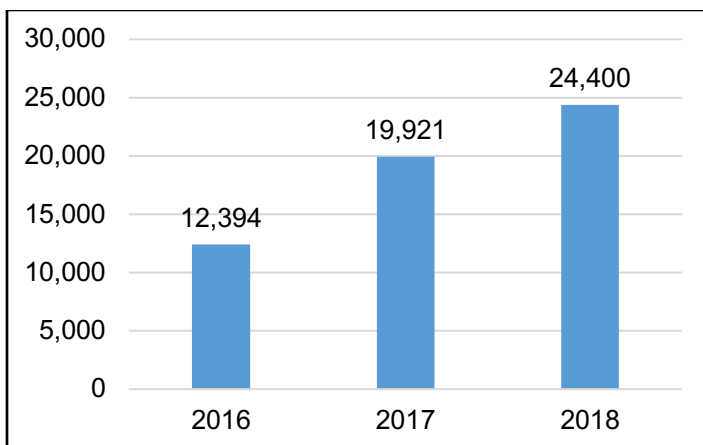


Figure 14. Total weight of produce distributed (56,715), in pounds, per year of FAN. 2016-2018

Source: Green City Force, 2019.

The amount of produce harvested varied by farm, which may be based on variations in cultivation methods, soil and soil amendments, sun, irrigation practices, and local temperature differences, as well as different crops and varieties, and variations in crop losses. Figure 16 shows pounds of produce harvested during the farms' operational months, per square foot of raised beds, allowing us to roughly compare farm productivity farm to farm. It is important to note that farm productivity cannot be compared accurately based on total pounds of produce grown, as the crop plans differ from farm to farm and certain vegetables (e.g., squash) weigh much more than others (e.g., kale). The detailed productivity per square foot will be analyzed over the next two growing seasons as part of the NSF-funded research project.

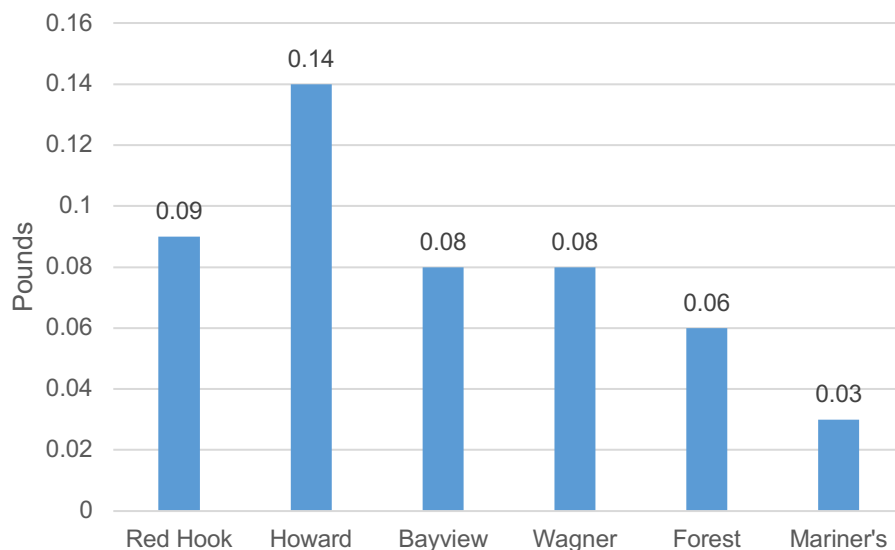


Figure 15. Average pounds of produce per month, per square feet of farm, 2016-2018
Source: Green City Force, 2019.

The production quantities are also likely to be underestimates, as some produce is harvested directly by residents (a practice that has not been discouraged) prior to being weighed by farm assessment teams, or may have been distributed without being weighed at the farm stand. We also do not have data on the number of seeds or seedlings planted, so it is not possible to estimate the productivity of individual vegetable/herb plantings or to estimate crop losses due to pests or other factors like irrigation or the effects of bad weather. The detailed growing conditions were not tracked by Green City Force but will be measured by GCF and CUNY over the next two growing seasons as part of a National Science Foundation-funded study of the food, energy, water “nexus” of urban agriculture.

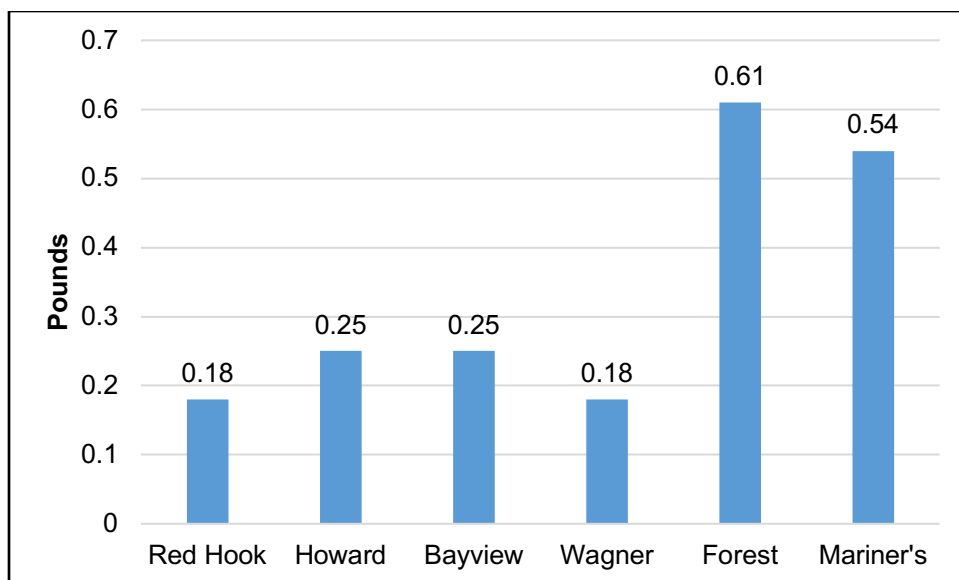


Figure 16. Monthly produce harvest, in pounds, per farm stand visitor, 2016-2018
Source: Green City Force, 2019

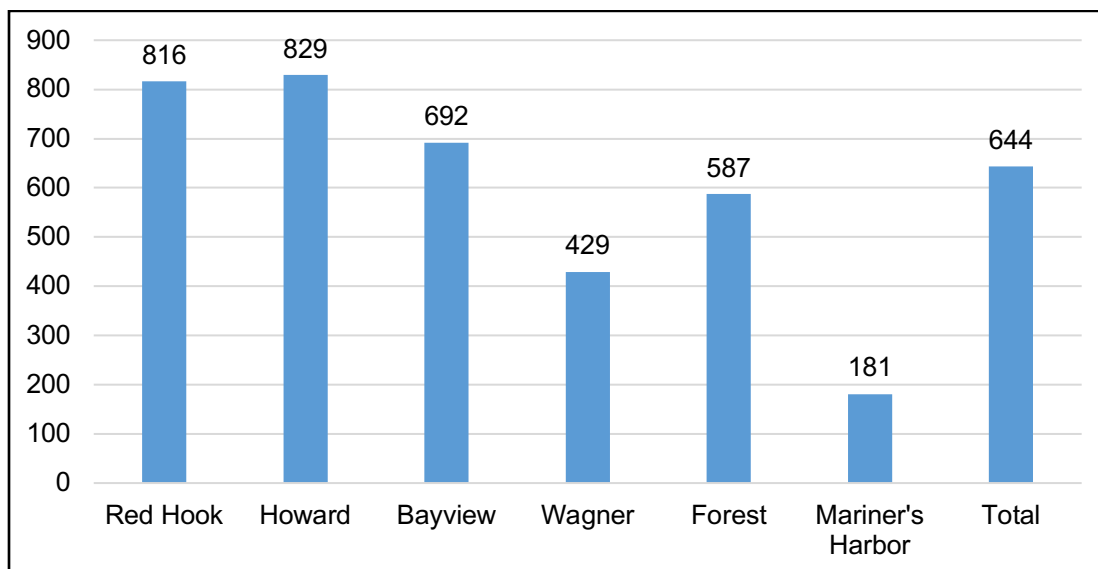


Figure 17. Average produce harvested during farm operational months, by farm 2016-2018
Source: Green City Force, 2019.

Dietary Changes

As noted in the interim reports, while the residents exposed to FAN programming have previously reported changes in diet-related behaviors, the farms still provide only a relatively small number of residents with vegetables and nutrition-related programming, and thus are unlikely to result in measurable population-scale reductions in health disparities as a result of this amount of exposure to programming over only three growing seasons.



Figure 18. Farmstand (photo by GCF)

Moreover, despite their productivity as urban farms, the spaces within developments are too small to grow more than a small amount of produce per capita. In the 2018 growing season, for example, farmstand visitors received, on average, 3.71 pounds of produce. The output in the 2018 season would be able to supply an average of 1.2% of the recommended daily vegetable servings to development residents if produce were distributed evenly among all residents. As noted above, it is not the FAN's goal to produce enough food to feed all

NYCHA residents all of their daily recommended vegetables, nor would it be physically feasible to do so unless significantly more land (and perhaps rooftops) were put into cultivation. But if distributed widely throughout the developments, the farms can produce enough produce to enable many residents to get a sampling of farm-fresh vegetables, potentially enticing them to incorporate more store-bought vegetables and fruits into their diets.

A more useful indicator of the potential reach of the farms, and exposure of residents to fresh vegetables, is the amount of produce harvested per development household. Using the number of apartments in each development as a proxy for numbers of households, Figure in 2018, the

Nearly half of residents surveyed reported that getting vegetables from the farm means they are eating more vegetables

average harvest per month per FAN site apartment was 0.61 pounds, ranging from 0.40 pounds per month per apartment at Wagner to 0.96 pounds per month per apartment at Howard. However, residents surveyed overwhelmingly agreed that the farm has encouraged them to buy more and different vegetables than they had previously, as well as to add more vegetables to the meals they prepare. Residents also reported that the FAN Farm has improved their ability to eat healthy food overall. Additionally, 45.8% of residents surveyed reported that getting vegetables from the farm means they are eating more vegetables.

Focus group data also confirmed that the FAN produce is an important food access point for many FAN development residents. Focus group participants noted that during winter months when farm production ceases for the season, residents and CMs alike eat less vegetables because of the cost of purchasing them at the supermarket. Residents and CMs report that they eat more fresh produce when it's available to them for free. Responses from the Farm Stand Survey corroborate these findings. More than 74% of Farm Stand Survey respondents reported that the farm encourages them to eat more vegetables.

Focus group participants frequently discussed how the FAN farms exposed residents and CMs alike to new varieties of vegetables, and that this was an exciting aspect of the farms. CMs vocalized that adding new farm vegetables to the vegetables the residents already consumed, and offering cooking demos and recipes to support their preparation, helps to diversify residents' diets.

"We [are not] just ... growing the central stuff like kale, Swiss chard. We're growing things that they haven't seen before or even heard of. And finding new ways to use the things that they are aware of."

Residents also discussed the financial and health benefits of FAN farm produce:

"I like vegetables, and I like to - make [them] different ways. So [the farm] helps us in terms of household income. And they help us in our health too, with avoiding eating all the food that I am not supposed to be eating."

One resident noted:

This is a "community that never really had much going for it. Now, it has one of the healthiest things a community can have."

SUSTAINABILITY OF FARMS AT NYCHA

Project Goals

The goals of healthy food access, education, workforce development, and sustainable and connected open space have remained core to the initiative over the past three years, according to the stakeholders we interviewed. Interviewees agreed that a major success of the project has been the construction and operation of six, large scale, urban farms on public housing property. These farms build on the long history of urban gardening on public housing property, but are distinct from the community garden model in scale and in their accessibility to all development residents rather than a select few.

The workforce development and youth leadership component has been an essential component of the initiative from its inception, and continues to be one of most important outcomes among the numerous positive impacts made by FAN, contributing to the initiative's success. At all six farms, CMs are integrated into the operating model, supported by farm managers, local CBOs, and development residents.

Fundraising for Ongoing Efforts

Stakeholders have shared that the largest costs of operating the project are the ongoing expenses related to the recruitment and training of GCF corps members, but that these costs are a sound long-term investment in the FAN communities as they provide economic enhancement and opportunity to young public housing residents, who graduate well-prepared to make a positive impact on the local workforce and economy and to engage in civic activities in their communities. GCF reports that many trainees have gone on to work in the energy, urban agriculture, and food justice fields, demonstrating that the program is a successful workforce strategy that supports achievement of additional goals related to FAN.

Funders of economic development and job readiness programs, like AmeriCorps, have been a stable base of funding for the FAN initiative. In contrast, it has been more challenging to secure long-term funding at this level from public health and food funders, who do not typically support workforce development costs. FAN, and particularly the workforce development efforts by GCF, is supported by public funds disbursed through the Mayor's Office of Criminal Justice and other city agencies. In the past year, the Mayor's Fund has secured a multi-year commitment from Unilever and two additional private funders to continue support of the farms. At the time of writing, FAN team members continue to seek additional funding to support ongoing implementation and growth of the work. There has also been discussion about novel funding models that could generate support for the farms, such as selling FAN produce, to individual consumers or at bulk scale, to generate revenue to support the farms, though it remains unclear whether this would be considered appropriate.

Emergent Stakeholder Dynamics

Over the past three years, each partner organization has maintained strong internal support for FAN and helped to champion the project. Partners noted that at certain points throughout the initiative, progress has been hindered by a lack of overall coordination and fundraising capacity. With each organization and agency facing competing priorities, and working with a limited capacity dedicated to the project, no one organization has been able to “do it all” for FAN. Despite this, partners agree that there has been a collective willingness to directly identify and address issues of coordination. This willingness to work together closely and to allocate time and energy to navigate challenges over the lifespan of a complex project has enabled the multi-faceted project to succeed.

GCF has served as a backbone organization in the implementation of FAN, and over the course of the initiative GCF has taken on additional functions in response to shifts in funding and relationships. For example, when NYCHA was not able to access capital funds, GCF took on the role of sourcing materials and contracting for building costs. Similarly, when farm management needs increased over time, GCF expanded its reach to support farm managers with CMs. While all partners have remained solidly invested in the initiative, GCF continues to serve as a lead partner, nimbly adapting to changes and needs as they emerge. Partners agreed that GCF’s ability to play a leading role in the initiative was a real strength and has contributed to its success.

FAN’s goals and objectives were well defined for the first phase of the work. Over the past year and a half, partners have actively engaged in reflection and have begun a transition period for the project, seeking to define its future. One aim of this transition phase has been to clarify what scale could and should look like, and to codify the day to day logistics of program implementation. As the partners continue to develop an implementation plan to scale the initiative, it will be important to allocate time and funding to document and codify the nuances and complexities of day-to-day FAN operations, and to account for the myriad needs for staff capacity to ensure continued operation. For example, a key challenge that emerged as the farms grew from one in 2016 to four in 2017, to six farms in 2018 was how thinly the GCF corps members were spread in building *and* managing each of the farms on competing timelines. Ensuring capacity is essential before additional farms are planned or constructed, as is considering transitioning the farms to other organizations.

Questions to Guide Initiative Development

The following questions were partly derived from the protocols we used to interview stakeholders about the future of the FAN initiative, and partly raised by the interviewees themselves. They are included in the evaluation report as a guide to discussion and decision-making among FAN partners about the initiative’s future structure and direction, because they cover fundamental issues of organizational and financial capacity and the relationships among capacity and programmatic decisions about the FAN.

Organizational Questions

- To what extent should the farms be scaled up?
- How can the initiative secure increased administrative and operational support to sustain current farms and potentially provide capacity for further expansion?
- How can partners produce a FAN implementation plan that outlines daily farm operations and responsible partners, and proposes strategies to “graduate” the farms (transition them to operation by residents or community organizations)? Are there resources available to help support staff time to prepare this kind of plan?
- Does FAN currently have the right set of partners? Who is missing? How could other community partners build and manage their own large-scale urban farms? Could those additional organizations be integrated into the larger initiative, and if so, how?
- What is GCF’s role beyond serving as farm builders, farm managers, and managing the workforce/youth development component of the initiative? As GCF’s role grows or changes, how will expanded responsibilities be funded?
- What are the roles of the CBOs? How can their responsibilities and the expected level of staffing, frequency of involvement, and specific needed contributions be better defined and supported?
- What is the right place for the initiative within the city administration? Should a single city agency administer FAN and be responsible for its future, and if so, which one? If not, which agency should the initiative span, and how responsibilities be divided?
- How can FAN incorporate more partnerships with other city agencies such as the Parks Department’s GreenThumb program, the Department of Sanitation, the Department of Health and Mental Hygiene, and the Department of Education?
- Is Farms at NYCHA the right name for the initiative moving forward? Could rebranding the initiative position it as something more aspirational, increase public support, and generate the interest of new funders?

Fundraising Questions

- How can FAN build a long-term funding plan for the initiative that includes an assessment of the full cost of FAN in its current structure and in future variants?
- What is needed to build out a five-year budget for planned growth, with go/no-go cutoffs for fundraising before continued expansion?
- Will the city remain committed to a FAN subsidy over the next several years, and if so, at what level? What is needed to establish such a commitment?
- To what extent should fundraising from philanthropic institutions be a priority? Which FAN partner(s) should lead future fundraising?

Programmatic Questions

- What is required to increase the scale of FAN, and how should scale be defined? Scale might mean growing more food per site (i.e., productivity), involving more residents per site more intensely (i.e., engagement), or increasing the number of farms at NYCHA

developments (i.e., size). These dimensions are not mutually exclusive, but require different approaches and resources, and may happen at different paces, so clarifying the project's scale is critical.

- How can FAN increase resident engagement efforts among current farms and make this engagement a priority if additional farms are developed?
- If safety is an apparent outcome of activating the spaces, should the farms be used to support other relevant non-agricultural public activities that would draw residents to the farms (e.g., shape up NYC exercise classes, summer films, etc.)? If diversifying site activities is desirable, who would be responsible for organizing and managing the programming?
- Youth development and workforce training are a prominent aspect of FAN. How do partners balance this function with other aspects, such as landscape transformation or food distribution and nutrition education?
- What is the role of activities such as composting, and how much emphasis does FAN place on this and other community “greening” efforts?
- To the extent the partners wish to increase the food- and health-focused benefits of the farms, what partners, resources, and programming need to be added to the initiative?

Evaluation Recommendations

Although the three-year CUNY evaluation has ended, the initiative should continue to be assessed so that benefits and challenges are tracked and incorporated into program management and planning. In 2017, CUNY secured a three-year grant from the National Science Foundation to track the resource flows of urban agriculture projects, such as water, energy, and materials, food production, and collect basic qualitative data on the impacts of the farms on program participants over the 2019 and 2020 growing seasons. The project, called the Food/Energy/Water Meter (FEW Meter), involves farms and gardens in four additional countries (Poland, Germany, France, the UK). The data from projects in the five countries will be aggregated and organized in a shared relational database (i.e., the FEW Meter), and analyses of farm productivity and outputs will be shared back with the farmers and farm organizations to enable each project to track efficiencies and improve operations. The research team will also use this data to model the impacts and resource needs of urban agriculture on cities as urban farming expands. CUNY will be analyzing the FAN farms as the project's New York City case study, and has begun working with GCF staff to track planting schedules, irrigation, farm inputs (e.g., compost), and other operational dimensions.



Figure 19. Farm Infrastructure Measurements (photo by CUNY)

The FEW Meter project is focused on resource flows, but continued evaluation of the five core goals of FAN is still important for tracking its impacts and facilitating mid-course improvements. The Farms at NYCHA initiative produces substantial benefits to residents of public housing and to the greater NYC community. This is an opportune moment for the partners to convene one or more planning meetings to discuss and resolve the programmatic, administrative, funding, and

operational questions outlined above as part of a new phase of project planning. Going forward, the partners should review each of the three evaluation reports to identify which formal evaluation metrics are most meaningful in communicating the initiative's impact, which outcomes would benefit from increased evaluation, which questions about the process and impact of the initiative are a priority to address, how would ongoing evaluation be funded, and whether internal staff at each FAN partner organization could conduct program evaluation in lieu of an external evaluator.

Appendix A: Demographic Characteristics

Tracking the characteristics of the resident populations of each FAN site facilitates identifying any changes and assessing if, how, or why population differences might lead to different program outcomes. We provide detailed analysis of 2019 data on the demographic characteristics of FAN developments below.

Population

The six FAN developments together have 9,435 apartments that house approximately 18,185 residents, as illustrated in Figures A1 and A2. Population densities at each development range between 2.1 - 2.3 people per apartment, with Mariner's Harbor an insignificant outlier at 2.6 people per apartment. Variations in development size and population have the potential to impact allocation of FAN project resources and outcomes at the resident level.

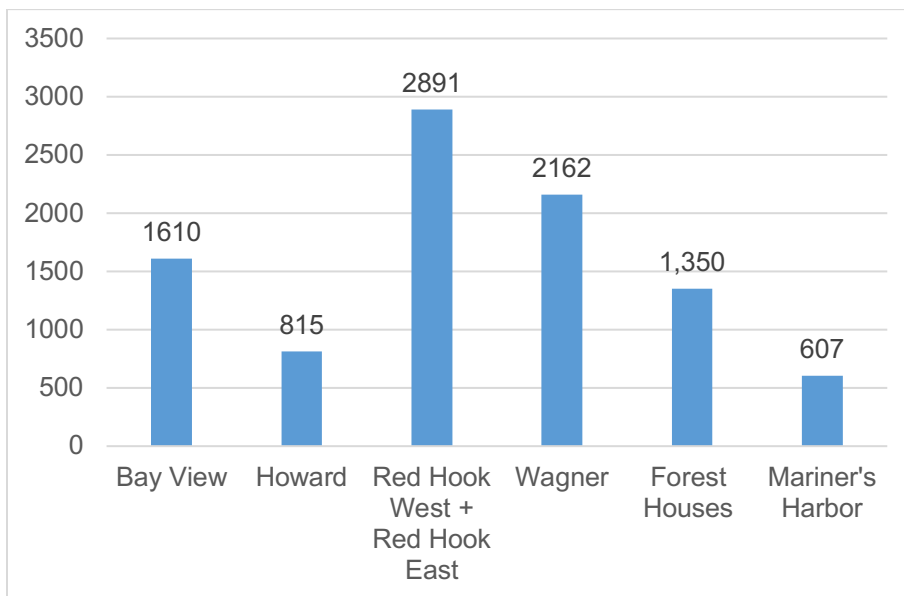


Figure 20. Number of apartments in FAN developments, by development, 2018.

Source: NYCHA Development Databook 2018.¹²

¹² NYCHA Development Databook, 2018; available at:
<https://www1.nyc.gov/assets/nycha/downloads/pdf/pdb2017.pdf>

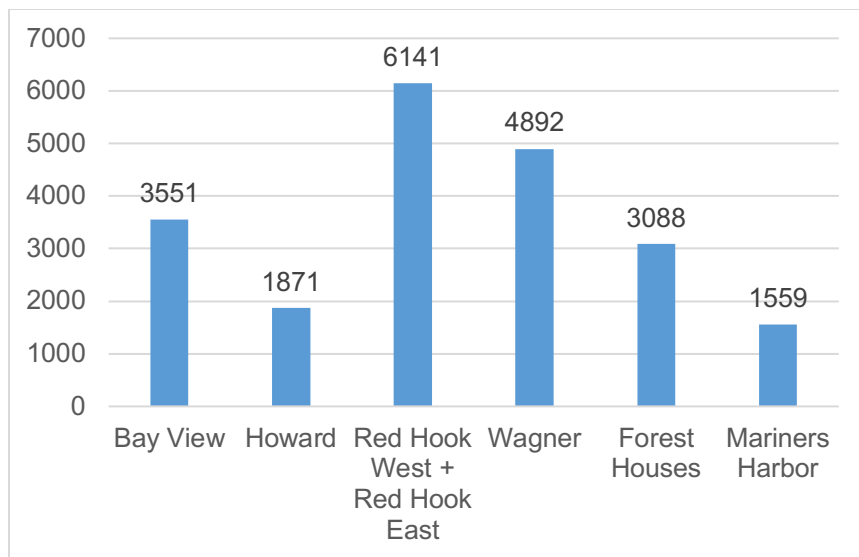


Figure 21. Total population of FAN developments, by development, 2018
Source: NYCHA Development Databook 2018

Age Distribution

More than one-third of the entire FAN development population is younger than 19. The large number of young residents has implications for targeted farm programming; our evaluation indicates that all FAN sites are engaged in some level of youth-focused work. Seniors (age 65 and older) also comprise a large percentage of the developments' population, and this older population has demonstrated high levels of engagement with FAN efforts. A notable gap is FAN programming targeted to the 53% of adults aged 20 to 64 who live at FAN development sites.

Table 8. Younger and older residents of FAN developments, as % of dev. population, 2018

Age Range	Bay View	Howard	Red Hook West + East	Wagner	Forest Houses	Mariner's Harbor
19 and under	35%	37%	32%	32%	34%	42%
65 and older	13%	9%	13%	15%	14%	4%

Source: MyNYCHA Development Portal, 2018.

Household Composition

The overwhelming majority of households (between 81-87%) are headed by single adults (single senior only, single non-senior, single parent and children, single grandparent and children.) As discussed previously, programming to specifically address the time constraints faced by single heads of households, such as advice about easy-to-prepare healthy cooking and time savings in food procurement, are key to reaching this group of residents.

Employment and Income

In 2018, only 5-10% of FAN development residents were categorized as “above low income,” while 57-65% of residents were determined to be “extremely low income” and 16-23% of residents were determined to be “very low income.”¹³ Below we provide the most recent Census tract level data for the tracts in which the developments are located to provide an approximation of the economic characteristics of FAN development residents (U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates).¹⁴

Table 9. FAN development vs. FAN census tract populations

	Bay View	Howard	Red Hook West + East	Wagner	Forest Houses	Mariner's Harbor
2018 Population of FAN Development ^A	3551	1871	6141	4892	3088	1559
2017 Population of Census Tract ^B	4046	3857	7559	3963	5934	2737
Development/Census Tract Population (%)	87.8%	48.5%	81.2%	123.4%	52%	57%

Source A: NYCHA Development Databook 2018.

Source B: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

All six of the FAN developments are in census tracts in which the percentage of the population employed is significantly lower than New York City as a whole. Unemployment rates at five out of six FAN sites are higher than citywide, with Mariner’s Harbor the sole exception. Notably, compared to data previously presented, unemployment at Wagner, Howard, and Mariner’s Harbor census tracts have increased (from 5.8% to 7%, from 5.9% to 9.4%, and 3% to 3.6%, respectively) while unemployment at Forest Houses and Bay View census tract declined (from 6.4% to 4.5% and 10.6% to 7.5%). This unemployment rate at Bay View shows a continuing decline in recent years, which reported a 15.5% unemployment rate in the 2014 census.

¹³ U.S. Department of Housing and Urban Development.

¹⁴ U.S. Census Bureau (2018). *American Community Survey 2013-2017 ACS 5-year Estimates*. Retrieved from <https://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2017/5-year.html>.

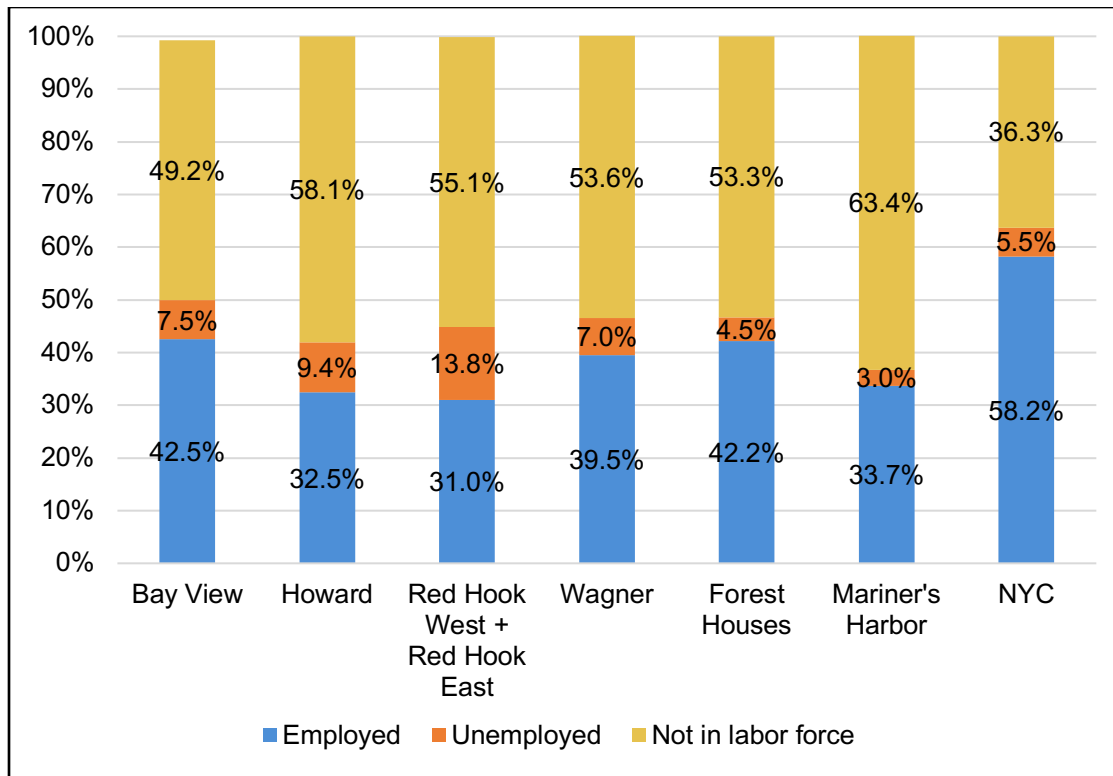


Figure 22. Employment status of pop. in FAN development census tracts and NYC, 2017

Source: 2013-2017 American Community Survey 5-Year Estimates.

We updated demographic data from the U.S. Census Bureau's 2014 American Community Survey (ACS) with 2013-2017 ACS 5-Year estimates. Compared to households citywide, a larger percentage of households in the FAN development census tracts have incomes less than \$10,000 per year, as illustrated in Figure A4. Moreover, recent data on median household income in the Census tracts in which developments are located remain far below the citywide median, as shown in Figure A5. We also note, in Figure A6, that FAN developments are in Census tracts with poverty rates that are more than twice as high as the citywide rate. Red Hook and Mariner's Harbor are both nearly four times as high as the citywide rate.

Each of the six FAN developments are characterized by low median household income. Besides Forest Houses and Mariner's Harbor, all of the FAN developments' unemployment rates are above the citywide rates. Households in all of the developments depend on public benefits to a significant extent. In addition to employment income, development level data in Figure A7 shows that the most common household income sources for residents are social security, SSI, and public assistance.

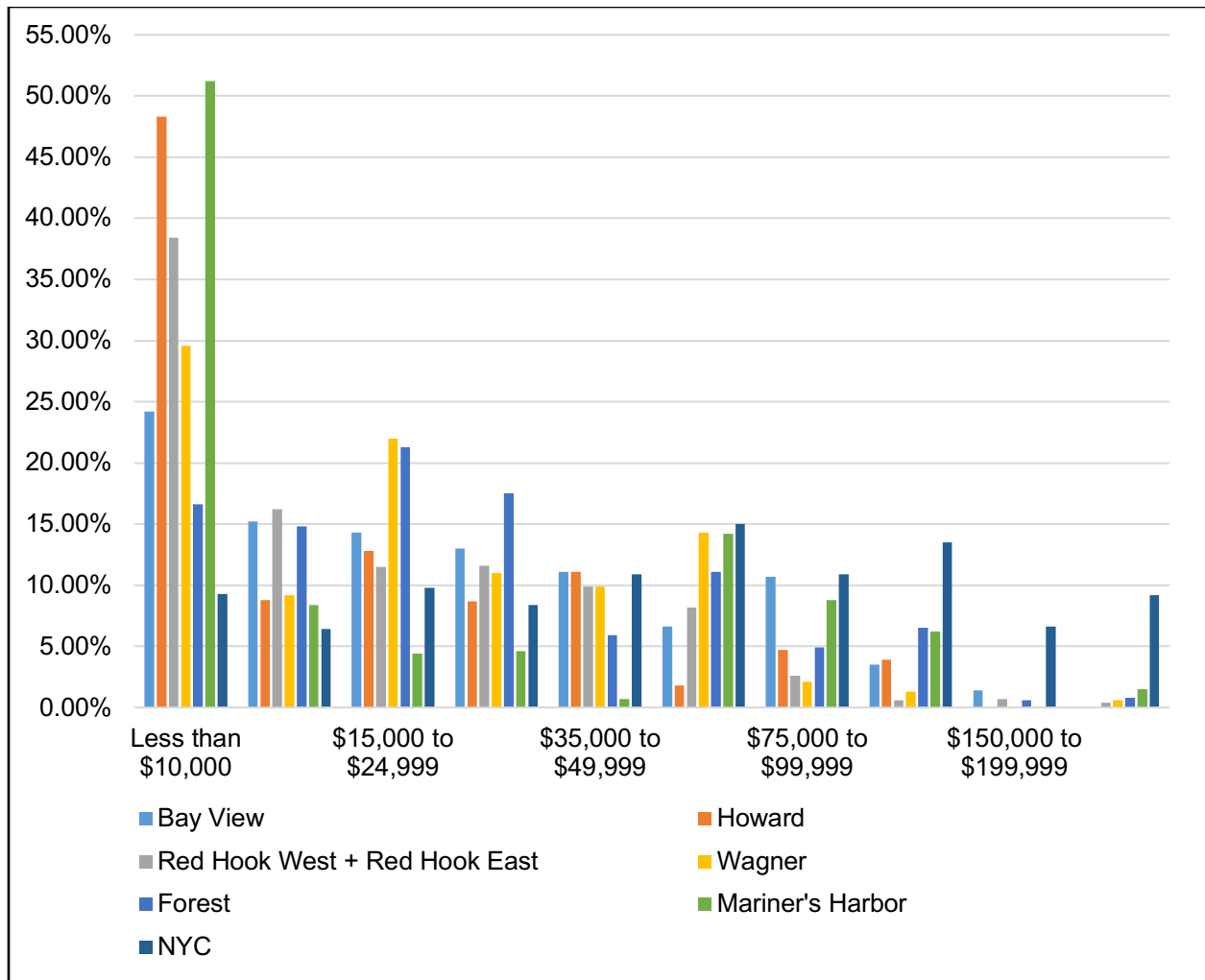


Figure 23. Income distribution of FAN development census tracts

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

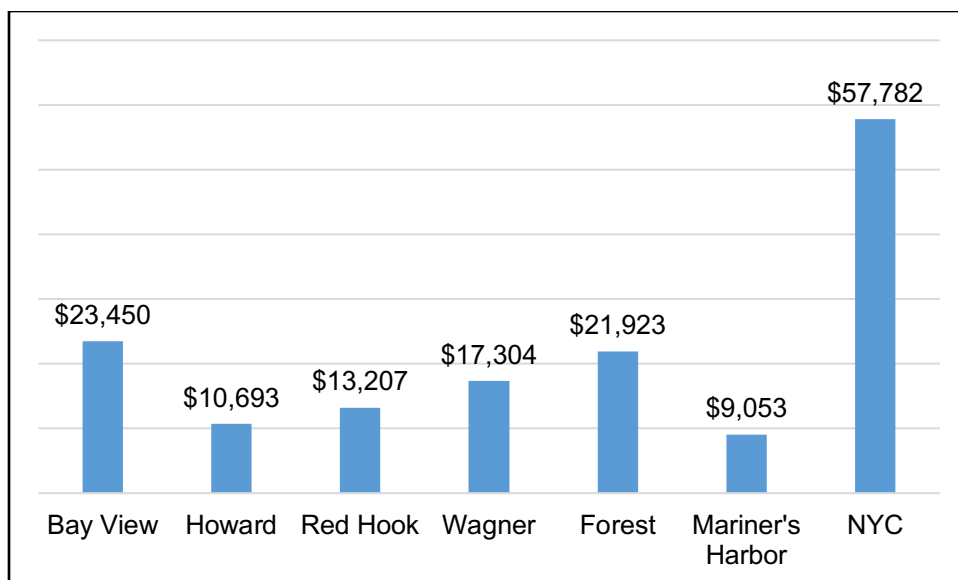


Figure 24. Median household income by FAN development census tracts, 2017
Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

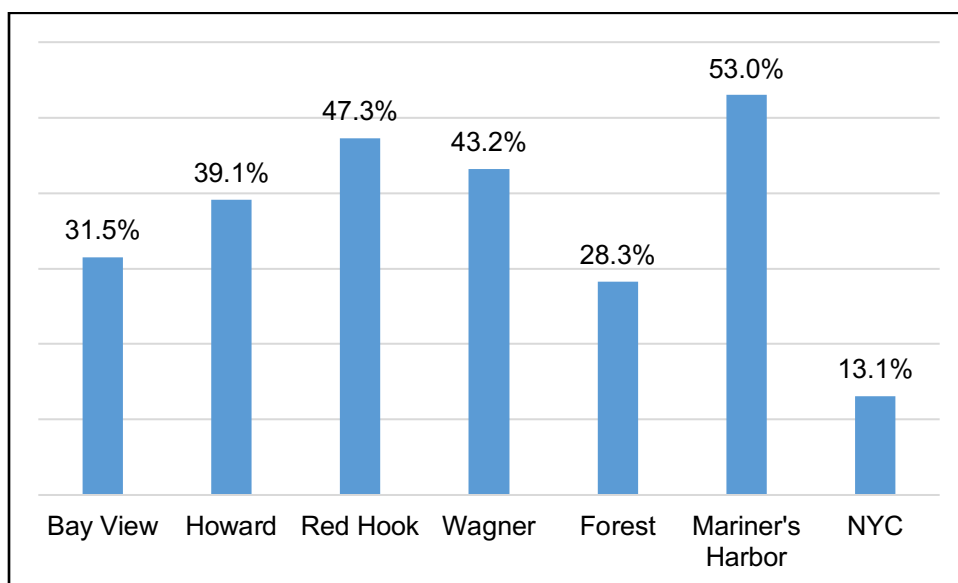


Figure 25. Percent of households whose income in the past 12 months is below the poverty line, by FAN development census tracts, 2017
Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

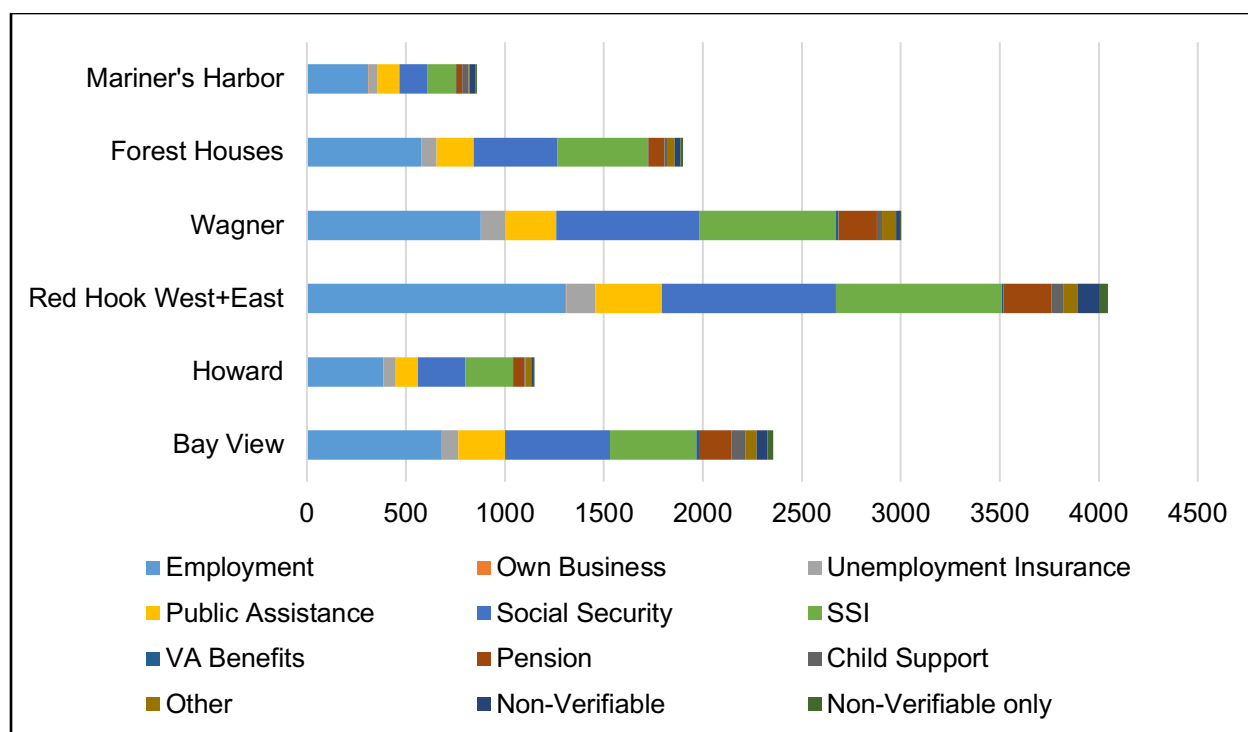


Figure 26. Income sources by FAN development, 2018
Source: NYCHA Development Databook, 2018

Appendix B: Survey Instruments

The following are the resident and CM survey protocols used in the evaluation. The formatting has been altered to fit the configuration of this report.

Sample Resident Survey

NYCHA Urban Agriculture Initiative Resident Survey Howard Houses

You are being asked to participate in this research study because you live in this development and/or visit the farm. The purpose is to measure the impact of the new farms on the community. If you agree to participate, we will ask you to complete the following survey for us to learn about how you feel about having a farm in your development. There are no anticipated risks involved with this research. We will not record any of your personal identifying information. All responses are anonymous, and responses will be kept confidential. Your participation in this research is voluntary. If you have any questions, you can contact the principal investigator, Nevin Cohen, at 646-364-9605 or nevin.cohen@sph.cuny.edu. If you have any questions about your rights as a research participant or if you would like to talk to someone other than the researchers, you can contact CUNY Research Compliance Administrator at 646-664-8918 or HRPP@cuny.edu.

You must be 18 and older to complete this survey. Are you 18 years of age or older?

☐ Yes

☐ No

You must be a Howard Houses resident to complete this survey. Do you live in this development?

☐ Yes

☐ No

If you answered “No” to either of these questions, thank you very much for your time, but you are not eligible to complete the survey. If you answered “Yes” to both questions above, please answer the questions below:

1. How many years have you lived in Howard Houses?	<input type="checkbox"/> Less than 1 year <input type="checkbox"/> 1 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> More than 20 years <input type="checkbox"/> Prefer not to answer
2. What is your gender?	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/> Prefer not to answer
3. What is your age group?	<input type="checkbox"/> 18-29 years <input type="checkbox"/> 30-39 years <input type="checkbox"/> 40-49 years <input type="checkbox"/> 50-59 years <input type="checkbox"/> 60-69 years <input type="checkbox"/> 70 years or older <input type="checkbox"/> Prefer not to answer
4. Please select one or more categories with which you identify	<input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Asian <input type="checkbox"/> Black or African American <input type="checkbox"/> Latino/a <input type="checkbox"/> Native Hawaiian / Pacific Islander <input type="checkbox"/> White <input type="checkbox"/> Prefer not to answer

5. How much time do you spend in the <u>outdoor areas</u> of Howard Houses?	<input type="checkbox"/> I never spend time in the outdoor areas <input type="checkbox"/> Very little time <input type="checkbox"/> Some of my time <input type="checkbox"/> A lot of time <input type="checkbox"/> Don't know/Prefer not to answer
6. How safe do you feel (Howard House's) outdoor areas (playgrounds, sitting areas) are for children?	<input type="checkbox"/> They are not safe <input type="checkbox"/> They are somewhat safe <input type="checkbox"/> They are safe <input type="checkbox"/> Don't know/Prefer not to answer

How safe do you feel in the following places in and around Howard Houses?

7. At a playground inside Howard Houses	Unsafe	Somewhat unsafe	Somewhat safe	Safe	Don't know
8. Walking through Howard Houses	Unsafe	Somewhat unsafe	Somewhat safe	Safe	Don't know
9. Walking in and around the Howard Houses Farm	Unsafe	Somewhat unsafe	Somewhat safe	Safe	Don't know
10. In the neighborhood outside of Howard Houses	Unsafe	Somewhat unsafe	Somewhat safe	Safe	Don't know

11. Over the last 12 months has the development felt safer, less safe, or about the same?	<input type="checkbox"/> Safer <input type="checkbox"/> About the same <input type="checkbox"/> Less safe <input type="checkbox"/> Don't know/Prefer not to answer
12. About how often do you use the outdoor space in your development to get together with neighbors or friends?	<input type="checkbox"/> Every day <input type="checkbox"/> Once a week <input type="checkbox"/> A few times a month <input type="checkbox"/> A few times a year <input type="checkbox"/> Not at all <input type="checkbox"/> Don't know/prefer not to answer

In the last 12 months, how many times have you or another household member participated in the following food-related activities?

13. A cooking demonstration	6 or more	3 to 5	Once or twice	Never	Don't know
-----------------------------	-----------	--------	---------------	-------	------------

14. A nutrition class	6 or more	3 to 5	Once or twice	Never	Don't know
15. A CSA or farm share pick up	6 or more	3 to 5	Once or twice	Never	Don't know
16. A farmer's market	6 or more	3 to 5	Once or twice	Never	Don't know

In the last 12 months, how many times have you or another household member participated in the following food-related activities?

17. How frequently have you walked through the Howard Houses farm?	<input type="checkbox"/> I have never visited the farm <input type="checkbox"/> A few times <input type="checkbox"/> I usually visit every day <input type="checkbox"/> Don't know/Prefer not to answer
18. If you have visited the farm, what was your main reason for doing so?	<input type="checkbox"/> I have never visited the farm <input type="checkbox"/> To talk to the farmers <input type="checkbox"/> To look at what is growing <input type="checkbox"/> To volunteer <input type="checkbox"/> To drop off food scraps <input type="checkbox"/> To pick up vegetables <input type="checkbox"/> Don't know/Prefer not to answer
19. In the past 12 months, which of the following farm activities did you participate in? (Please check all the activities you participated in.)	<input type="checkbox"/> I visited the farm <input type="checkbox"/> I brought children to the farm <input type="checkbox"/> I brought other adults to the farm <input type="checkbox"/> I did volunteer work on the farm <input type="checkbox"/> I brought food scraps to be composted <input type="checkbox"/> I talked with a Corps Member about their farming <input type="checkbox"/> I received produce from the farm <input type="checkbox"/> I participated in a cooking demonstration <input type="checkbox"/> I participated in a special event (other than a cooking demon) at the farm <input type="checkbox"/> I did not participate in ANY farm activity <input type="checkbox"/> Other (please specify)

Please indicate how much you agree or disagree with the following statements:

20. The farm has encouraged me to add more vegetables to the meals I prepare	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
21. The farm makes the space around it more appealing	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
22. The farm activities have inspired me to get involved in other kinds of activities in the development	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
23. The farm encourages me to buy different vegetables than I used to	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
24. The farm encourages me to buy more vegetables than I used to	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
25. The farm improves the look of Howard Houses	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
26. The farm makes Howard Houses feel safer	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
27. The farm is better than what was there before	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
28. The farm has improved my ability to eat healthy food	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
29. Other residents seem to like the farm	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response
30. The people working on the farm are friendly to residents	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Don't know / No response

31. Do you bring your food scraps to the farm for composting?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know/no response
---	--

32. How convenient is the composting program?	<input type="checkbox"/> Convenient <input type="checkbox"/> Somewhat convenient <input type="checkbox"/> Inconvenient <input type="checkbox"/> Don't know/no response
33. Have you received food from the farm?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know
34. Does receiving produce from the farm make a difference in how much you spend on groceries?	<input type="checkbox"/> I spend less money on groceries <input type="checkbox"/> I spend more money on groceries <input type="checkbox"/> I spend about the same amount on groceries <input type="checkbox"/> I haven't received food from the farm <input type="checkbox"/> Don't Know/Prefer not to answer
35. Does receiving produce from the farm make a difference in what you eat?	<input type="checkbox"/> I eat less vegetables <input type="checkbox"/> I eat more vegetables <input type="checkbox"/> I eat the same amount of vegetables <input type="checkbox"/> I haven't received food from the farm <input type="checkbox"/> Don't know/Prefer not to answer
36. How many people in your household eat the produce from the farm?	
37. How does the produce from the farm compare to the produce you buy in a store in terms of freshness?	<input type="checkbox"/> Much less fresh <input type="checkbox"/> Less fresh <input type="checkbox"/> About the same <input type="checkbox"/> More fresh <input type="checkbox"/> Much more fresh <input type="checkbox"/> Don't know
38. In the summer and fall, where do you buy MOST of the vegetables that you eat?	<input type="checkbox"/> A bodega in my neighborhood <input type="checkbox"/> A supermarket in my neighborhood <input type="checkbox"/> A supermarket in a different neighborhood <input type="checkbox"/> A market that sells mostly fruits and vegetables <input type="checkbox"/> A farmers' market or farm stand <input type="checkbox"/> The Howard Houses farm <input type="checkbox"/> Other (please specify) <input type="checkbox"/> Not applicable--I never buy vegetables <input type="checkbox"/> Don't know/Prefer not to answer

39. In the last 30 days, have you been concerned about having enough food for your family?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know/Prefer not to answer
40. In general, how healthy is your overall diet? Would you say your overall diet is...	<input type="checkbox"/> Very healthy <input type="checkbox"/> Healthy <input type="checkbox"/> Somewhat healthy <input type="checkbox"/> Unhealthy <input type="checkbox"/> Don't know/Prefer not to answer
41. How many total servings of fruit and/or vegetables did you eat yesterday? A serving would equal one medium apple or a handful of broccoli, or a cup of carrots.	<input type="checkbox"/> Number of servings I ate yesterday: _____ <input type="checkbox"/> None <input type="checkbox"/> Don't know/Prefer not to answer
42. Would you say that in general your health is excellent, very good, good, fair or poor?	<input type="checkbox"/> Excellent <input type="checkbox"/> Very good <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Don't know/Prefer not to answer

Sample Farmstand Participant Survey

1. What is your age? <input type="checkbox"/> Under 18 <input type="checkbox"/> 50-59 years <input type="checkbox"/> 18-29 years <input type="checkbox"/> 60-69 years <input type="checkbox"/> 30-39 years <input type="checkbox"/> 70 years or older <input type="checkbox"/> 40-49 years <input type="checkbox"/> Prefer not to answer	2. What is your gender? <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/> Prefer not to answer
3. Do you live in this development? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Prefer not to answer	4. About how frequently do you visit the farm? <input type="checkbox"/> This is my first visit <input type="checkbox"/> A few times a week <input type="checkbox"/> Once a month <input type="checkbox"/> Every day <input type="checkbox"/> Once a week
5. Which farm activities have you participated in? Check all that apply: <input type="checkbox"/> Volunteered <input type="checkbox"/> Brought food scraps <input type="checkbox"/> Learned about gardening <input type="checkbox"/> Learned about nutrition <input type="checkbox"/> Learned about cooking <input type="checkbox"/> Received vegetables or herbs <input type="checkbox"/> Participated in a special event other than cooking <input type="checkbox"/> None	6. What is the most important reason for picking up vegetables from the farm? <input type="checkbox"/> They are available for free <input type="checkbox"/> They are fresher than at the store <input type="checkbox"/> The farm stand is so convenient <input type="checkbox"/> They are tastier than at the store <input type="checkbox"/> They are different than what I usually eat

<p>7. What can we do to improve the farm? Check all that apply.</p> <p><input type="checkbox"/> Keep it cleaner and neater</p> <p><input type="checkbox"/> Make it easier for residents to volunteer</p> <p><input type="checkbox"/> Organize more events</p> <p><input type="checkbox"/> Grow different types of vegetables</p> <p><input type="checkbox"/> Increase the hours of the farm stand</p> <p><input type="checkbox"/> No improvements needed</p> <p><input type="checkbox"/> Other (please specify) _____</p>	<p>8. What usually brings you to the farm? Check one</p> <p><input type="checkbox"/> To talk to the farmers</p> <p><input type="checkbox"/> To talk with neighbors</p> <p><input type="checkbox"/> To volunteer</p> <p><input type="checkbox"/> To drop off food scraps for compost</p> <p><input type="checkbox"/> To pick up vegetables</p>
---	---

How much do you agree or disagree with the following statements:

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
9. I enjoy spending time in and around the farm	m	m	m	m	m
10. Visiting the farm makes me think about healthy eating	m	m	m	m	m
11. The farm has encouraged me to eat more vegetables	m	m	m	m	m
12. The farm improves the look of our development	m	m	m	m	m
13. The farm makes the development feel safer	m	m	m	m	m

Sample Corps Member Onboarding and Exit Surveys

THE CITY UNIVERSITY OF NEW YORK
Graduate School of Public Health and Health Policy
CUNY Urban Food Policy Institute

Title of Research Study: Evaluation of NYCHA Urban Agriculture Initiative

Principal Investigator: Nevin Cohen, PhD
Associate Professor and Research Director

Dear Corps Members,

You are being asked to participate in this research study because of your participation as a Green City Force Corps Member. The purpose of this study is to measure the impact of the NYCHA farms on the community. If you agree to participate, we will ask you to complete a survey and/or participate in a focus group for us to learn about how you feed yourself and your family, and how you feel about having a farm in your development. This survey also measures your sense of your own leadership skills and development. You will take this survey once now, and once again at the end of your service time as a Corps Member. There are no anticipated risks involved with this research beyond those you might encounter in daily life. We will not be recording any of your personal identifying information. All responses are anonymous, and responses will be kept confidential and locked in the Principle Investigator's office. Your participation in this research is voluntary. If you have any questions, you can contact the PI, Nevin Cohen, at 646-364-9605 or Nevin.cohen@sph.cuny.edu. If you have any questions about your rights as a research participant or if you would like to talk to someone other than the researchers, you can contact the CUNY Research Compliance Administrator at 646-664-8918 or HRPP@cuny.edu.

Q1 How much food shopping do you do for your household/family?

- ☐ None
- ☐ I shop for some of the food
- ☐ I shop for most of the food
- ☐ I shop for all of the food
- ☐ Don't know

Q2 If you shop for food, how often do you include vegetables in your purchases?

- ☐ I never buy vegetables when I shop for food
- ☐ I buy vegetables once in awhile
- ☐ I usually buy vegetables
- ☐ I always buy vegetables
- ☐ Not applicable - I never shop for food
- ☐ Don't know

Q3 When you purchase vegetables, are they usually frozen, canned, or fresh?

- ☐ Always frozen or canned
- ☐ A mix of frozen, canned, and fresh
- ☐ Always fresh
- ☐ Not applicable - I never buy vegetables
- ☐ Don't know

Q4 What is the source of most of the vegetables that you eat? (Select One)

- ☐ A bodega in my neighborhood
- ☐ A supermarket in my neighborhood
- ☐ A supermarket in a different neighborhood
- ☐ A market that sells mostly fruits and vegetables
- ☐ A farmers market or farm stand
- ☐ One of the NYCHA farms
- ☐ Other (Please specify) _____
- ☐ Not applicable - I never buy vegetables
- ☐ Don't know

Q5 In the last 30 days, have you been concerned about having enough food for you or your family?

- ☐ Yes
- ☐ No
- ☐ Don't know

Q6 In general, how healthy is your overall diet? Would you say your diet is...

- ☐ Very healthy
- ☐ Healthy
- ☐ Somewhat healthy
- ☐ Unhealthy
- ☐ Don't know

Q7 How many total servings of fruit and/or vegetables did you eat yesterday? (A serving would equal one medium apple, a handful of broccoli, or a cup of carrots.) If you ate none, enter 0.

- ☐ Number of servings yesterday _____
- ☐ Don't know

Q8 What is the average number of sweetened beverages (sodas, juice drinks, energy or sports drinks, or sweetened iced tea/coffee) you consume per day? If you don't drink any, enter 0.

- ☐ Average number per day: _____
- ☐ Don't know

Q9 In an average week, how many days do you eat the following meals at home?

	None	1-2 days	3-4 days	5-6 days	Every Day	Don't Know
Breakfast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lunch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dinner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Who usually prepares the food that you eat at home for dinner?

- ☐ Someone else in my household (parent, guardian, sibling, friend)
- ☐ I prepare it
- ☐ It is prepared by a restaurant, fast food chain, or grocery/bodega
- ☐ Don't know

Q11 On average, how many days per week do you prepare dinner at home?

- ☐ None
- ☐ 1-2 days
- ☐ 3-4 days
- ☐ 5-6 days
- ☐ Every day
- ☐ Don't know

Q12 How would you rate your own abilities to prepare a meal at home?

- ☐ Not at all able to prepare a meal at home
- ☐ Somewhat able to prepare a meal at home
- ☐ Able to prepare a meal at home
- ☐ Very able to prepare a meal at home
- ☐ Don't know

Q13 Is there anything that limits you from cooking at home as much as you would like? (Check all that apply)

- ☐ Lack of space
- ☐ Lack of cooking equipment
- ☐ Lack of gas or electricity
- ☐ Appliances not working
- ☐ Kitchen not sanitary
- ☐ Not confident about my ability to cook for myself or others
- ☐ Not enough time
- ☐ Not enough food/money
- ☐ Other _____
- ☐ No limitations
- ☐ Don't know

Q14 How knowledgeable would you say you are about the following?

	Very knowledgeable	Moderately knowledgeable	Somewhat knowledgeable	Not knowledgeable at all
Healthy eating practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Growing fruits and vegetables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Composting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 Please indicate how much you agree or disagree with the following statements:

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
I know what kinds of foods to eat to have a healthy diet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know how to prepare healthy meals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like trying vegetables that I've never eaten before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I talk to my friends and family about healthy eating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have encouraged others to eat healthier food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 Please indicate how much you agree or disagree with the following statements:

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	Don't Know
I feel safer in the development where I work than the development where I live.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People seem to know more of their neighbors at the development where I work than the development where I live.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The farms improve the look of the developments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The farms make the developments feel safer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The farms provide benefits to all residents of the developments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The farms are better than what was there before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The farms improve residents' ability to eat healthy food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The residents seem to like the farm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 Would you say that in general, your health is excellent, very good, good, fair, or poor?

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

Q18 In the last 12 months, has a doctor, nurse or other health professional asked or talked to you about your diet or eating habits?

- ☐ Yes
- ☐ No
- ☐ Don't know

Q19 In general, how physically active are you? Would you say very active, somewhat active, not very active or not active at all?

- ☐ Very active
- ☐ Somewhat active
- ☐ Not very active
- ☐ Not active at all
- ☐ Don't know

Q20 In the past year, has a doctor or other health provider told you that you have (or provided you with treatment for) any of the following conditions or health events? (Please check all that apply.)

- ☐ Overweight/obesity
- ☐ Diabetes
- ☐ High blood sugar
- ☐ Hypertension/high blood pressure
- ☐ High cholesterol
- ☐ Pre-diabetes
- ☐ Heart attack
- ☐ Stroke
- ☐ Angina or coronary heart disease
- ☐ Any type of cancer
- ☐ None of these
- ☐ Don't know

Q21 Do any members of your household (those living with you now) have any of the conditions listed above (in Q20)?

- ☐ Yes
- ☐ No
- ☐ Don't know

Q22 What is the name of the development you LIVE in?

Q23 Please indicate how much you agree or disagree with the following statements:

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
I feel this project will give me skills I need to find a job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel this project will get me closer to my desired career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to work in a field related to food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to work in a field related to the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident in finding a job that I feel good about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Extremely important	Very important	Moderately important	Slightly important	Not at all important
Learning how to grow food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning how to manage a farm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning basic business management skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meeting new people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helping a community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Getting help with a job or school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Getting money for school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q24 How important are each of the following to you?

Q25 Please indicate how strongly you agree or disagree that the following reflect your own characteristics:

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
I am able to determine what the community needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to rely on my strengths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respect what I am good at	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can set realistic goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can be honest with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can use information to solve problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the stress of being a leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can set priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am sensitive to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am open-minded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider the needs of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I show a responsible attitude	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to speak up for my ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider input from all group members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
I can listen effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can make alternative plans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I recognize the worth of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I create an atmosphere of acceptance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can think about alternatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respect others' feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can solve problems as a team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can handle mistakes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can be tactful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am flexible when making team decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get along with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can clarify my values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use rational thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand what it takes to be a leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have good manners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Sample Focus Group Protocol

Opening Questions

1. I'd like to ask each of you to say your name and what you see as your role with respect to the farm – are you a current or former Corps member, or a resident?
2. What is the first word that comes to your mind when you think about the [name of development] farm?
 - a. Please explain?
3. In your opinion, what's the most important thing that the farm does?
 - a. What is the most interesting feature of the farm to you?

Farm and Community

4. Who are the people most involved in the farm?
5. In what ways are they involved?
 - a. What is the most important way for people to get involved with the farm?
6. How would you describe the involvement of residents?
 - a. Are residents involved in a substantial or limited way?
 - b. What are some examples of how residents have been involved?
 - c. Are there many different people involved in the farm or is it a small group?
7. What would encourage more residents to be more involved with the farm?
8. What do you think is the most valuable function of the farm?
 - a. Why?
 - b. What other impacts does the farm have?
9. How would you compare the space where the farm is now to before it was created?
 - a. How does it make you feel now compared to before?
10. How do people use the space around the farm now compared to before the farm was built? Has the area around the farm changed?
 - a. In what ways?
11. Overall, what do you think about having the farm here?
 - a. Has it changed the community in any way?
 - b. How?
12. Is there anything you would like to see done differently at the farm?
13. Has your sense of the safety of the space changed since the farm opened?
 - a. In what ways?
 - b. Why do you think it changed?
14. In terms of safety, how do other parts of the development compare to the area where the farm is located?
15. Do you find the development to be an easy or difficult place to interact with other neighbors?
 - a. Why?
 - b. Are these interactions mostly positive or negative?
16. When you think about the people you speak to during the day, are these usually other [development name] residents, or are they people from outside the development?
 - a. Do your kids play more with other kids from the development or from outside the development?
17. There are lots of places in the development to meet and talk to other

residents, like the laundry, the playground, or the community center. How does the farm compare to these as a place to meet and talk to neighbors?

- a. In what ways is it similar to these other places?
- b. Different?

18. Have you met any new neighbors through the farm, the farm stand, or the farm events?

- a. How did you meet?

Food practices

19. How do the vegetables grown by the farm compare to vegetables available in the neighborhood?

- a. How do the vegetables grown by the farm compare to the vegetables you usually buy and eat?
 - i. More/less?
 - ii. Different types?
 - iii. Different quality?

20. If you have gotten produce from the farm stand to take home, what do you like about it?

- a. Dislike?

21. Have you gotten any vegetables from the farm stand that you never tried before?

- a. What did you think of them?

22. One of the goals of the farm is to enable and encourage people in the development to eat more healthy food.

- a. What do you think would enable the farm to do this?

23. Have you talked about the farm or the farm's vegetables with friends or neighbors or visitors to the farm?

- a. What do they think about the farm?
- b. What do they think about the vegetables?

24. Has access to the farm's vegetables influenced what you buy or cook?

- a. Has it influenced where and how you shop for other food?
- b. In what ways? Examples?

25. For those of you who have kids, what do they think about the farm?

- a. What do they think about the vegetables you've gotten from the farm?

26. If you could make one change in the food available in this neighborhood, what would it be?

Green City Force and NYCHA

27. What do you think the farm and its activities mean for the development?

- a. Has it changed your views of [development name] in any way?

28. What do you know about Green City Force, the organization managing the farm?

- a. Have you been to any of their programs or activities?

29. What do you know about the community partner (Isabahlia Ladies of Elegance Fnd; Harlem Grown, East NY Farms!, Added Value)?

Closing Questions

30. Is there anything else you would like to say about the farm?

31. Is there anything else you would like to share that we haven't asked about?