

Expanding Access to Emergency Food in NYC

Results of an Innovative Food Distribution Pilot Convened by the Mayor's Office of Food Policy in Partnership with:

CITY HARVEST THE CAMPAIGN AGAINST HUNGER FOOD BANK FOR NEW YORK CITY **MET COUNCIL**

NEW YORK COMMON PANTRY UNITED WAY OF NEW YORK CITY WEST SIDE CAMPAIGN AGAINST HUNGER

Table of Contents

Overview	3
Lessons learned	6
Recommendations	12
Conclusion	15
Appendix A: Model implementation by site	17
Appendix B: Research questions and methodology	18
Appendix C: Client survey on model components	21
Appendix D: CBO screening and onboarding flow	22

Overview

Prior to the COVID-19 pandemic, data from Robin Hood's NYC Poverty Tracker showed that three-quarters of New Yorkers facing persistent food hardship did not use the NYC emergency food system's free food resources.¹ While the pandemic drastically increased food hardship, it also ushered in a unique opportunity to close this access gap. The pandemic helped to de-stigmatize free food access, since many pantry clients during COVID were first-time users. It expanded food funding, including historic City investments in food. And it drove innovation, with organizations all over the City expanding emergency food services. In early 2021, the New York City Mayor's Office of Food Policy convened a group of leading emergency food stakeholders to seize this opportunity and develop a plan to close the access gap.

Throughout 2021, a Coordination Group with representatives from City Harvest, The Campaign Against Hunger (TCAH), Food Bank for New York City (Food Bank), Met Council, New York Common Pantry (NYCP), West Side Campaign Against Hunger (WSCAH), and United Way of New York City (United Way) met regularly to develop a detailed plan.

PARTNER ORGANIZATIONS



WITH GENEROUS SUPPORT FROM:















The group conducted a detailed literature review, carried out client focus groups and surveys, and contributed their expertise to identify the most common barriers preventing food insecure New Yorkers from accessing emergency food resources. Then, the group developed an innovative food distribution model designed to address these barriers, while allowing input and customization based on local community conditions. The resulting model is outlined in Figure 1.

The model uses trusted organizations in priority communities ("CBOs") such as churches, day-cares, and shelters) to reach food-insecure families in culturally appropriate ways and provide a convenient pickup spot for food. It pairs these CBOs with established, sophisticated food providers ("Fulfillment Partners") that receive orders, pack them, and deliver them to CBOs to distribute. It leverages existing technology tools to engage clients, including an SMS technology tool for client outreach (Plentiful) and Fulfillment Partners' food ordering platforms (e.g., Digital Choice Pantry). Food Sourcing Partners, including Food Bank, City Harvest, and the City's P-FRED and EFAP programs, provide additional food resources for Fulfillment Partners.

In addition to addressing client barriers, the model sought a few advantages over existing distribution models, including: cost-efficiency due to requiring less startup capital than establishing a full pantry at CBO sites; flexibility that makes it possible for a wider range of CBOs to serve as access points; customizability to tailor CBO distributions to community needs; and the dignity of meeting clients where they are.

After designing the model, the group drafted a detailed plan for testing the model and raised funds for a pilot. In January 2022, the group

launched distributions at 8 CBO sites in Soundview and Flatlands. From January to June, the group piloted the model at these 8 sites.ⁱⁱ It also engaged in an extensive formative evaluation of the work that included four site visits, 32 interviews and a survey of 264 pilot clients, 11 interviews with CBOs and Coordination Group members, and a detailed analysis of program and financial data.ⁱⁱⁱ It sought to assess whether the model successfully lowered access barriers for our priority population (food insecure individuals new to the emergency feeding system) and understand the operational requirements of the model.

Findings show that the model is far exceeding its primary goals. Overall, the pilot demonstrated enormous success in reaching new food-insecure clients, distributing food to them, and ensuring a high degree of satisfaction. Between January and April, more than 1,400 unique households received food at pilot sites. The majority were the intended audience for the pilot, with 95% reporting they were experiencing food insecurity and 57% new to the emergency food system (i.e., did not access free food prior to the COVID-19 pandemic). This success in delivering to new clients indicates a dedicated communications strategy to reach new people is not necessary: the model successfully addressed the barriers identified pre-pandemic.

In addition to reaching clients, the pilot successfully distributed the food they needed, exceeding its monthly distribution poundage targets. As of April 2022, the average monthly run rate was ~100,000 pounds, far exceeding the ~64,000 pound target. Variation in households served, package size, and distribution frequency across CBOs ultimately drove differences in actual poundage by site, with some CBOs far exceeding their targets.

And clients were highly satisfied with the program. When asked how likely they were to recommend the program to a friend or neighbor, 71% of clients said "very likely." The program earned a Net Promoter Score^{iv} of 64, demonstrating strong client value. One client said about the program: "Other organizations aren't organized, but this one is. The others have long lines where people cut, but this one gives you a number to go in order. At this site, I've felt welcome, respected, and like I belong. I don't feel that at other locations."

The evaluation also yields many rich lessons about the distribution model itself. This report summarizes lessons learned, illustrates how Fulfillment Partners will adjust their approach based on these learnings, and highlights opportunities for the City and other partners to support key investments that can help expand the model's reach. The aim of this report is to inform stakeholders in the NYC emergency food system about this innovation and generate support for Coordination Group and City efforts to expand the model in the coming months and years.

Lessons learned

The evaluation surfaced numerous lessons, including keys to success and opportunities to improve.

The CBO is at the heart of the model's success

The model leverages CBO partners in communities to facilitate community engagement and provide a location for food distribution. Input from clients illustrates that convenience and positive pick-up experiences are the most important elements of the model and garner the highest satisfaction (see Figure 2). CBOs that can play this role effectively are essential to the model's success.

> Location is the most important element.

Most clients live near CBO partners: the majority walk or drive short distances, though some carpool or take the bus or train. In interviews, many described the advantages of pick-ups near homes (e.g., the ability to walk with a

shopping cart). Location is also crucial for outreach: many clients discovered the program while walking around their neighborhood.

> Pick-up experience drives satisfaction.

Positive interactions with volunteers, engaging with a trusted community group, and convenient pick-up times garnered the highest satisfaction scores across all model components. In interviews, clients described how positive interactions and extra efforts from CBO volunteers and staff make big differences. Clients appreciated when volunteers helped load packages into cars or sent reminder texts and calls prior to a distribution. Many clients also relied on volunteers for assistance with technology (e.g., enrollment, ordering). Notably, the positive pick-up experience extends beyond CBO members (e.g., church congregants) to community members at large. One client said: "Even as a non-churchgoer, I felt comfortable walking in. As long as the organization seems like it's legit, I'll go."

Model component	Importance	Satisfaction	Feasibility	Initial priority*	Access barrier
Convenient pickup sites: CBOs are near clients' homes or are locations they already frequent		•		нідн	
Flexible pickup hours: Selected with input from clients (e.g., weekends, nights)			•	нідн	
Positive interactions: Community members run distributions and understand local context				нідн	
Food quality and selection: Tailored product inventory based on client input and preferences	•	•		MEDIUM	
Trusted community groups: Familiarity with CBO	O			MEDIUM	\bigcirc
Reservations: Pre-scheduled pickup slots eliminate wait time	•			MED-LOW	
Digital ordering: Allow clients to customize bags		•	٠	LOW	

ICIDE 2. Model components and wetters

*Survey results for component ratings can be found in Appendix C **Lighter portion of circles indicates ratings from clients who used reservations and digital ordering tools.

Experience BARRIER TYPE: () Intent to engage

CBO selection and onboarding require significant coordination

Given the importance of CBOs to the model's success, the system for selecting and onboarding CBOs is essential. And the group invested heavily in creating a process to do so that was comprehensive, efficient, and replicable (the process is illustrated in Appendix D). In interviews, Fulfillment Partners and CBO partners highlighted a few areas for improvement.

First, Fulfillment Partners emphasized a need for additional screening of CBO capacities related to technology skills (e.g., data entry), volunteer capacity (e.g., consistent presence) and leadership buy-in and flexibility (e.g., responsiveness, coordinating ability), which were important for CBO success.

Second, partners highlighted the importance of alignment between Fulfillment Partners and CBOs on key distribution parameters. They described instances of misaligned expectations between Fulfillment Partners and CBOs (e.g., number of packages, frequency, time), which resulted in confusion early in the pilot. This misalignment may be attributable to the prolonged wait prior to initial onboarding and/or pre-existing distribution expectations. Specifically, uncertainty about funding and start dates resulted in finalizing distribution parameters later in the CBO relationship than expected, sometimes after CBO coordinators had begun sharing information to volunteers and clients. Some CBOs operating pre-existing distributions also felt a strong community need and wanted to quickly scale ICB support to higherthan-anticipated levels. This created an outsize pressure for Fulfillment Partners to meet food, delivery, packaging, and frequency expectations.

Technology drives greater engagement, but uptake is somewhat limited

Leveraging technology to offer increased choice and dignity was a key aspiration of the ICB model. The group assessed client engagement with technology at each stage of the distribution process (see Figure 3). While client uptake



FIGURE 3: Rates of client engagement across key interactions (Interactions in blue, usage rates in green)

*Data displayed reflect distributions across all sites and may vary by site; usage figures are calculated based on percentage of clients for whom a given technology option was available

*Reservation and pickup conversions estimated from Plentiful data, ordering rates estimates from WSCAH and Met Council data (validated against Plentiful data)

of these features was limited, technology use was highly correlated with client success. For example, ~60% of clients that make a reservation show up, but ~90% of clients that make an order show up. In addition, clients that used technology rate its importance significantly higher than clients who do not. These findings suggest that improving technology uptake at CBOs can have a strong positive impact on client retention and satisfaction.

Data-related challenges further limit the impact of technology

The pilot also illuminated data-related challenges that complicated technology providers' ability to support clients. (Figure 4)

First, CBO volunteers did not reliably collect, upload, and transfer client data, with some sites using paper forms that led to errors and difficulty enrolling clients in ordering systems. Second, data sharing between reservation technology (i.e., Plentiful) and ordering technology (i.e., Fulfillment Partner ordering platforms) was entirely manual, which made it difficult to maintain client lists. This led to reduced efficiency (due to manual double-entry) as well as pilot sites choosing not to offer both reservations and ordering (e.g., Met Council sites, which used one-time enrollment to enable a closed cohort of visitors, tended not to use Plentiful check-ins).

Reliable sources of high-value, non-produce food items are an important success factor

The food sourcing plans agreed upon by the Group designated 60% of total poundage to be distributed by City programs, 20% by City Harvest and Food Bank, and 10% by the Fulfillment Partners. These poundage targets were met by each organization in aggregate, but the delivered food was not always used in pilot packages due



to food type or delivery constraints. The group analyzed food sourcing data and spoke with key stakeholders to understand these dynamics.

First, the food provided was mostly fresh produce. While fresh produce is valuable to clients (who in fact expressed a need for *more* produce and diabetic-friendly food vs. canned goods), there was a relative dearth of other high-value items like meat, non-animal protein (e.g., nuts, lentils), and dairy that are required for a more balanced pantry bag.

This sourcing challenge can be attributed to a few factors. Food Bank and City Harvest are best equipped to distribute fresh produce, which they receive through food rescue, and 95% of the food they provided to Fulfillment Partners was fresh produce, with 56% and 76% (respectively) being the "Hard 7."^v

The City's Pandemic Food Reserve Distribution (P-FRED) and EFAP programs are better able

to provide high-value, non-produce food items. However, due to restrictions on ordering for food distributors implemented in early 2022 due to budget concerns, P-FRED offered reduced utility (see Figure 5).

Second, Fulfillment Partners also require advance notice to plan menus, especially when ordering is enabled. However, due to the relatively small poundage demanded by the pilot phase, it was logistically infeasible for Sourcing Partners to distribute that poundage evenly in frequent increments. Instead, deliveries came infrequently or all at once.

As a result, Fulfillment Partners report procuring the majority of the food for their programs independently from third-party vendors. In addition to sufficient resourcing overall, a reliable source of high-value non-produce items is likely to be essential to distribution success moving forward, especially in a "pull" model where clients are ordering specific items.



FIGURE 5: Pre-winddown, P-FRED sourced large quantities of most high-value items P-FRED – sourced poundage, high-value items (except fresh produce)

Offering ordering requires additional time, mostly from Fulfillment Partners

Food ordering was well-received by clients, allowing them to select desired items based on cultural needs (e.g., dates, lentils, and rice for the halal community at Parkchester Islamic Center) and other preferences. However, feedback from clients, CBOs, and Fulfillment Partners surfaced several operational challenges with ordering features that required additional time to manage, including:

> Technology training. Ordering systems can be difficult to use, particularly for clients who are older, do not speak English, or are less familiar with technology. Onboarding and training these clients can require time-intensive, one-on-one assistance from a CBO or Fulfillment Partner staff member.

FIGURE 6: Per distribution costs for a distribution serving ~100 households



*Individual cost categories do not equal total cost due to rounding

- > Menu management. Offering ordering requires Fulfillment Partners to set menus. Since a large portion of poundage is donated or rescued, knowing what items are available to offer and maintaining a balanced offering can be difficult.
- > Packing. A ~50-pound package can take a single staff member up to 10 minutes to assemble, and the setup time for packing can be even more costly. Analysis of Fulfillment Partner costs found that packing was the largest cost driver in terms of staff time.

The model requires ~\$0.30 per pound of staff time

The group estimated the average labor costs of fulfilling orders through this model. Assuming a standardized distribution of 100 clients at 35 pounds per package (which roughly align with the median parameters across all 8 sites), labor costs average out to roughly \$0.28 per pound (more detail on methodology can be found in Appendix A). The breakdown of this total can be seen in Figure 6 across categories including:

- Packing (\$0.05-0.19 per pound, depending on model): Setup costs are a relatively higher share of total packing costs, making less frequent (e.g., monthly) and larger distributions more efficient.
- > Admin (\$0.04 per pound): Activities include participating in pre-launch conversations, providing on-site support, and more. These costs are relatively steady across distributions.

- > Menu / food planning (\$0.04 per pound): Activities include ordering food, logging inventory, setting balanced menus, publishing menus to the platform (where relevant), and more. These costs are relatively steady across distributions.
- > Driving (\$0.02 per pound): This figure is calculated from staff time, rather than gas and mileage. While it is the lowest cost category, costs incurred are highly variable; crossborough routes between warehouses and distribution sites can create unpredictable and long hours, resulting in higher costs.

The group explored the sensitivity of this analysis to various factors, including package size. As shown in Figure 7, a less intensive client ordering module would likely be \$0.05-0.10 less expensive per pound, while a smaller distribution with more overhead would likely have a higher cost per pound.

While cost-efficiency is just one goal of the program, this data provides a valuable input into how the operating model can be made more sustainable long-term. These data are crucial for Fulfillment Partners because they typically have a finite budget to invest in higher-touch efforts like this model. Validated cost estimates can inform decision-making on future support from stakeholders like the City or philanthropic funders.

These lessons learned yield important insights. The following section outlines recommendations for how Fulfillment Partners might adjust their implementation of the model moving forward and highlights investments that the City and philanthropic partners can make to improve the scalability of this model.



FIGURE 7: Sensitivity analysis: Fulfillment cost per pound vs. pounds per package (for a hypothetical 100-household distribution)

Recommendations

Refine criteria that Fulfillment Partners use for CBO selection to include crucial CBO capacities.

Situational, experiential, and behavioral questions can be incorporated into CBO applications and screening calls to bolster the existing selection process and ensure CBOs selected demonstrate the capacities Fulfillment Partners find most important. Some examples include:

- Have you gathered and maintained any data in your community previously? (Technology skills)
- > How many hours is the project coordinator able to commit to this project, and are they being compensated? (Leadership buy-in and flexibility)
- A scenario-based, behavioral exercise (Leadership buy-in and flexibility)
- > What other experience do you have running community events? (Volunteer capacity)

Manage drivers of cost-efficiency in CBO selection and model implementation.

An analysis of the major cost categories incurred by Fulfillment Partners suggests opportunity for a few rules of thumb to guide CBO selection and model implementation:

A. Prioritize distribution sizes of 50 clients or more. While it may not always be possible to start distributions of this size at new CBO sites, larger distributions create cost efficiencies for categories like staff time, food and menu planning, and setup.

- B. Aim for a package size of at least ~35
 Ibs. The average package size of 35 pounds (serving an average of ~3 individuals per package) already exceeds the initial target of 17 pounds. Fulfillment Partners can also adjust package sizes upwards if a site serves larger households. Although efficiency gains are diminished after the 35-pound figure, analysis indicates larger package sizes are more efficient due to reduced packing costs overall.
- C. Reduce frequency of distributions to bi-weekly or monthly. With larger package sizes, poundage targets can be met in fewer deliveries. Reducing distributions from 2-4 deliveries per month to 1-2 deliveries per month would maintain overall impact (e.g., clients reached, pounds distributed) while lowering costs.
- D. Pair Fulfillment Partners with CBOs based on proximity to packing sites. Location can play a larger role when matching CBOs to Fulfillment Partners. Reducing the distance between Fulfillment Partner packing sites and CBO distribution sites can minimize driving costs, a significant staff time burden.

Elevate Fulfillment Partners in CBO selection and onboarding

A. Transfer CBO relationships to Fulfillment Partners earlier in the process. Empowering Fulfillment Partners to act as the primary CBO contact immediately after the selection site visit can increase clarity and coordination between Fulfillment Partners and CBOs. Building in an additional meeting between Fulfillment Partner and CBO at this time to discuss distribution parameters can help ensure expectations are aligned between partners prior to the MOU. Fulfillment Partners can then continue to lead the MOU process and relationship moving forward.

B. Allow flexibility in model implementation.

The model was intentionally designed by the Coordination Group to combine attributes or interventions into a streamlined operation. However, Fulfillment Partners' inherent differences (e.g., core competencies, technology systems, staff capacity, etc.) mean that flexibility in timing, use of technology tools, or other implementation decisions can improve the long-term sustainability of the distribution for CBO and Fulfillment Partners alike.

C. Increase tech support during CBO onboarding. Identifying a technology point person at each CBO can help streamline several processes: pantry profile set-up with Plentiful, client enrollment and training, data exports to Fulfillment Partners, and ongoing troubleshooting. CBOs can also train multiple staff for enrollment and reservations to shorten wait times and ensure all clients get enrolled. Understanding volunteers need more than a one-time technical training, Plentiful and/or Fulfillment Partners can provide a staff member during the first 2-3 distributions to assist volunteers with enrollment. Finally, where possible, providing translation services via Google Translate or multilingual

volunteers can help clients with technology who require support in other languages (e.g., Creole, Mandarin). These added tech supports can improve technology take-up (i.e. "sticky activities") and increase client engagement through the pipeline.

Invest in technology and data sharing

One of the pilot's most powerful takeaways was the effect of technology on client behavior and pilot participation. Yet operational issues prevent Fulfillment Partners from realizing these tools' full potential. Investments in two areas can mitigate this:

- A. Introduce common data standards. Addressing incompatibilities between Plentiful and Fulfillment Partner systems (e.g., Salesforce, Unicentric CRM systems), as well as between these systems and the City's FeedNYC database, are crucial for the scalability of this model. Investing to develop shared standards for common data elements (e.g., unique client IDs, household characteristics) will enable technology systems to interact with one another.
- **B. Invest in automated data sharing.** This will facilitate use of both Plentiful (e.g., client check-ins) and Fulfillment Partner-generated data (e.g., client orders) while minimizing manual data exporting and importing. While the uncertainty surrounding Plentiful's future may prevent immediate opportunities for automated data sharing, ensuring that any investment in other systems (e.g., Met Council and WSCAH's investments in their respective ordering tools) include data exchange capabilities (e.g., API) improves opportunities for future sharing. In addition, automated data

sharing to FeedNYC will increase the potential of technology tools to expand their client reach using City funding.

C. Advance a "modified choice" ordering

tool. Facilitating "modified choice" ordering (vs. "item-by-item") can significantly reduce packing costs, while still providing a level of dignity and choice clients find satisfactory. When surveyed, clients did not express a clear preference for ordering item-by-item versus modified choice. To assist Fulfillment Partners currently providing standard packages, the Coordination Group can explore development of a modified choice ordering tool that can be leveraged across Fulfillment Partners.

Strengthen efforts to source high-value foods

When given the choice to order specific items, clients select high-value items like meat, dairy, and non-animal protein. However, these items are difficult for private sourcing partners to provide reliably (e.g., City Harvest, Food Bank, United Way). Two opportunities exist to expand availability of high-value items:

A. Leverage public food programs. The City's new Emergency Food Assistance Program (EFAP) integrates P-FRED's resourcing and ordering flexibility and presents an opportunity to meet client needs. Increased grant sizes and a new provider may provide Fulfillment Partners a greater ability to purchase high-value items that align with their distribution sites' needs. Furthermore, sources like the Nourish New York program, which allocates funding for food banks to purchase surplus product directly from producers can be leveraged for difficult-to-source categories like dairy.

B. Monitor food type through the system.

Clients place a premium on high-value items. The City, in its role as both a funder and a convener of the emergency food system, can continue to ensure that food type is being monitored at a system-wide level. This might take two forms. First, a Citywide poundage analysis in partnership with NYC Opportunity and FeedNYC (similar to that of the Supply Gap or more recent produce-specific analyses) to unpack the dollar cost of sourced food by neighborhood would yield enormous insight into the need for high-value food. On a more ongoing basis, ordering data from clients using this model provide a novel input. These behavioral data on client preferences can help identify how to prioritize between available products based on client interest.

Use grant programs to expand the model to additional CBOs

- A. Align on parameters for using philanthropic funds to expand the model. The group has raised philanthropic funds for future growth of the model. To effectively leverage these funds as the model transitions from pilot to expansion, the Coordination Group might develop parameters for accessing these funds that can create accountability for members and guide successful future expansion.
- **B. Leverage public funding to scale the model.** The City's EFAP budget for FY23 contains additional funds that can be allocated to

non-food expenses, such as for capacity-building for programs and technology investments. To further support expansion of the model in a more sustainable way, the City can consider designating funds for additional CBO outreach. Findings from this pilot could also inform the design of a grant or reimbursement program, which could support this work with additional criteria such as priority neighborhoods.

Conclusion

Over 1.5 years, this pilot and the Coordination Group leveraged the collective experience of leading organizations to design a novel model that successfully reached emergency food users. Not only did the collaboration succeed in its initial goal of reaching these clients, but it did so with exceptional client satisfaction, sizable scale, and a learning and improvementbased approach.

Combining interventions in a community-forward way illuminated what matters to clients and how a combination of food sourcers, redistributors, and CBOs can meet these needs better as a group than as individual organizations. This approach also revealed one of the model's biggest strengths; the ICB model's modularity is an important feature to the Coordination Group because it allows any organization the flexibility to adapt and implement discrete components that have proven success in reaching new clients. In our conversations, we have been energized by the potential for food providers, distributors, CBOs, funders, and other stakeholders to take forward different parts of this work. We also learned a great deal: the Group identified several major opportunities for the model (and the system) to improve and evolve. Issues of food sourcing, coordination, and technology are just some of the remaining gaps to be addressed before turning this "model" into practice across the City – but we are optimistic that this report can encourage more stakeholders to carry the torch forward.

The priorities we lay out above will require even greater innovation, coordination, investment, and flexibility among City emergency feeding stakeholders. Yet we are convinced that such changes reflect the evolving nature of the system at large and will meaningfully improve the experience of food-insecure clients *and* the organizations that serve them. We are energized by the impact and learning we have seen in this pilot, and remain excited about the potential opportunity and progress the members of the Coordination Group and others in the City can create in the future.

Appendix A: Model implementation by site

As of April 2022

СВО	Neighborhood	Fulfillment partner	Time and day of distribution	Initial distribution frequency	Pre- packed vs. packed onsite	Level of custom ordering	Food preferences
Ebenezer International Church of God	Flatlands	ТСАН	Saturday afternoon	Weekly	Pre- packed	ltem-by- item and standard bags	Caribbean foods (e.g., chicken, sausage, rice)
Essen Health Clinic	Soundview	NYCP	Wednesday mornings	Biweekly	Pre- packed	Standard bags	Halal foods
Flatlands Reformed Church	Flatlands	ТСАН	Saturday mornings	Weekly	Pre- packed	ltem-by- item and standard bags	Fresh produce, milk, meat
Glory of Christ Church	Soundview	NYCP	Saturday afternoon	Biweekly	Pre- packed	Standard bags	Fresh produce
Grace and Peace Church	Soundview	WSCAH	Wednesday afternoon	Weekly	Pre- packed bags or pallets of high-value foods	Modified choice	Fresh produce, milk, meat
JCC of Marine Park	Flatlands	Met Council	Wednesday mornings	Monthly	Pre- packed	ltem-by- item	Kosher foods
Parkchester Islamic Center	Soundview	Met Council	Wednesday afternoon	Monthly	Packed onsite	ltem-by- item	Halal foods; no canned goods
The Learning Ladder	Flatlands	Met Council	Wednesday afternoon	Monthly	Pre- packed	ltem-by- item	Milk, meat

Appendix B: Research questions and methodology

This section describes the evaluation's two learning objectives and methods used.

1. Understand whether the model successfully lowered access barriers for our priority population

Questions the evaluation sought to address include:

- > Overall model success: Was the pilot successful in reaching our priority population of food insecure individuals who did not previously access emergency food?
- > Model components analysis: Which access barriers were most salient for these clients before participating in the pilot? Which elements of the model were most successful in lowering access barriers (e.g., food choice, connection to CBOs)? Which were least successful?
- Future changes: How should we adapt the model in future phases to emphasize model components that are most effective in driving client behavior?

2. Understand the operational requirements of the model

The pilot evaluation also sought to understand the model's operations. Given significant investment and participation required from stakeholders to operate the model, the Group strongly felt that it was important to understand the model's long-term sustainability to avoid overextending any partners' capacity. Questions we sought to address included:

- CBO onboarding: What are the key steps in onboarding CBO partners to the program, how long do they take, and what kinds of coordination are required between stakeholders?
- > Technology: How did clients experience different ordering platforms (e.g., Plentiful, SMS, web app) and models (e.g., no-choice, modified choice, item-by-item choice)? What are the implications for Fulfillment Partners making enhancements to their ordering platforms?
- Food sourcing: Is the Coordination Group collectively able to source ample, balanced product to provide clients? Are Fulfillment Partners receiving deliveries in a manner conducive to being able to set menus and provide choice to clients?
- > Order fulfillment: What unique capacity do Fulfillment Partners need to effectively receive, pack, and distribute orders using this model? Where might future capacity-building efforts be focused?
- Financial costs: What are the key costs to Fulfillment Partners of distributing food via this model and what are the most important drivers of these costs? What implications does this have for program budgets?

Methodology

Site visits, interviews, and focus groups: We conducted four site visits with clients, totaling 32 clients interviewed. To provide a balanced cohort representing different client populations and iterations of the model, we visited JCC of Marine Park, Parkchester Islamic Center, Grace and Peace Church, and Ebenezer International Church of God.

Client survey: We drafted and disseminated a survey to 1,200+ clients to capture the overall impact of the model and understand clients' views of the distribution model. Survey questions included:

- Food insecurity screeners: Using a standard prompt aligned with USDA and Feeding America protocol, we assessed the level of food insecurity of clients and their previous experience with emergency food.
- > Overall satisfaction: Clients were asked how likely they would be to recommend the program to a friend or neighbor on a 0-10 scale to elicit a Net Promoter Score.

> Model component-specific questions:

Clients shared their use of various components and features by answering a yes/no prompt. Then, clients scored their satisfaction with a component, which was converted to a 5-point scale. Finally, clients were asked to prioritize components of the model that were most and least important to their participation. **Data analysis:** We cleaned, analyzed, and visualized the following data provided by the Coordination Group to understand program-wide trends, benchmark pilot metrics against projected targets in the CAP, and compare sites against each other. Specifically, we looked at:

- Custom ordering data (using order history data from Fulfillment Partners)
- Food deliveries received by Fulfillment Partners from Sourcing Partners
- Estimates of staff time incurred by running a distribution

Financial modeling: Drawing on Fulfillment Partner-submitted data, we developed a financial model that provides a dynamic view of the model's costs by activity, along with variables for key assumptions, which can be used to estimate the cost of supporting the model for Fulfillment Partners. We then used this model to estimate the sensitivity of the model's cost to different design features of the model (e.g., box size, ordering format) to inform future decisions.

Interviews: We spoke with each Coordination Group member and 5 CBO coordinators to reach operational learnings. Specifically, we asked each stakeholder about the following topics:

CBO coordinators: Approach to client recruitment and onboarding (including successes and challenges), elements of the model found most essential (and not essential), and their observations of the pilot impact and experience for their clients

- > Fulfillment Partners: CBO onboarding experience, their experience coordinating with Plentiful's technology and use of their ordering platforms for the pilot, as well as their experience with the food provided by Food Sourcing Partners for the pilot. We also discussed financial costs with two Fulfillment Partners (one operating with item-by-item ordering, and one operating with modified choice.)
- Sourcing Partners: Balance of food categories delivered, overall poundage contributions, potential future sources of high-value items, and Fulfillment Partner utilization of deliveries provided.

Appendix C: Client survey on model components

*n = 221 respondents

Which TWO of the following factors were MOST/LEAST important in your decision to access food at this site?	Most important (#)	Least important (#)	Net (#)	% Most important	% Least important	Net (%)	Satisfaction (out of 5)
The location is convenient to me	100	47	53	45%	21%	24%	4.45
Food is high-quality and there is an adequate selection of items	83	45	38	38%	20%	17%	4.24 - selection; 4.28 - quality
Interactions with staff and volunteers are positive	68	52	16	31%	24%	7%	4.54
The distribution time is convenient to me	62	48	14	28%	22%	6%	4.51
l am able to make pickup time reservations in advance using technology	59	58	1	27%	26%	0%	4.38
l am able to place orders for food in advance using technology	37	55	-18	17%	25%	-8%	4.08
l am familiar with the organization	33	67	-34	15%	30%	-15%	N/A

Appendix D: CBO screening and onboarding flow



i. Robin Hood Poverty Tracker project, "Food Hardship Across New York City Neighborhoods," 2019.

ii. For more information on the pilot CBO sites and distributions, see Appendix A.

iii. For detailed methodology information, see Appendix B.

iv. Net Promoter Score, or NPS, is a widely used metric that assumes a subdivision of respondents into "promoters" who provide ratings of 9 or 10, "passives" who provide ratings of 7 or 8, and "detractors" who provide ratings of 6 or lower. NPS is calculated by subtracting the percentage of detractors from the percentage of promoters collected.

v. "Hard 7" produce items include potatoes, sweet potatoes, onions, carrots, cabbage, apples, and squash