Scaling Food Recovery and Hunger Relief:

Learnings from ReFED's Nonprofit Food Recovery Accelerator



CONTENTS

Acknowledgements	2
Introduction	3
Executive Summary	4
The Big Picture: Setting the Stage for the Accelerator	6
The ReFED Nonprofit Food Recovery Accelerator	9
Overview	10
Unique Features	11
The Cohort	12
Insights on Scaling Food Recovery	17
Recommended Best Practices	18
#1: Clearly define a mission and vision to guide prioritization of initiatives that will grow impact	18
#2: Build the right team at the right time to ensure staff longevity and delivery of services	19
#3: Explore earned revenue models	20
#4: Expand the value proposition	23
#5: Ensure efficiency and consistency in logistics, transportation, and distribution	24
#6: Establish strategic partnerships and collaborations	26
#7: Define appropriate metrics and build efficient tracking methods	29
#8: Develop robust food safety procedures and educate donors about liability protection	31
Cross-Cutting Tools	33
Technology	34
Human-Centered Design	35
System-Level Changes	37
ReFED's Continued Support for the Cohort	38
Key Actions Stakeholders Can Pursue to Drive Impact	39
Addendum: Food Recovery and the Impacts of COVID-19	41

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Report Authors

Alexandria Coari, Capital & Innovation Director, ReFED Angel Veza, Capital & Innovation Specialist, ReFED

Contributing Staff

Jeffrey Costantino, Communications Director, ReFED Dana Gunders, Executive Director, ReFED

Designer

Ocupop

The views expressed herein do not necessarily represent those of the organizations listed throughout, unless explicitly noted.

INTRODUCTION

When we launched ReFED's Nonprofit Food Recovery Accelerator in the Fall of 2019, we had no idea that many of the challenges we were helping our cohort solve would become even more prevalent due to the onset of COVID-19 just a few months later. Sadly, 40 million Americans face hunger at any given time, and nearly 40% of all food is wasted. But in the wake of the devastation wrought by the coronavirus pandemic, those figures have skyrocketed. The growing number of people swelling the unemployment rolls, combined with the closure of restaurants and other foodservice businesses, as well as a drying up of food donation availability and distribution capabilities have resulted in a massive spike in need for greater food access and food security. In the face of this new reality, the need for food recovery organizations and their counterparts across the broader food waste ecosystem to be innovative and scale has never been more urgent.

Hunger and food insecurity are deeply complex and interconnected. While "food insecurity" is often used interchangeably with "hunger," it more accurately describes a household's lack of resources to provide enough nutritious food for every person – possibly the result of challenging situations like lay-offs at work or unexpected health problems that force a family to choose between buying food or paying bills.

Fighting both food insecurity and hunger are critically important, and individuals and institutions are stepping up to the challenge. We've seen the number of food recovery organizations grow year after year, and it's exciting to us at ReFED to know that so many organizations with passionate teams are working on rescuing, coordinating, processing, transporting, and delivering perfectly good food to those who need it most - but there is still more room for innovation.

That's why we felt an urgent need to design an intervention program to spark innovation throughout the current food recovery system and advance the fight against hunger, prompting the idea for the Nonprofit Food Recovery Accelerator. With the convergence of a growing number of food recovery organizations, emerging technology, and a focus on sustainability and social good, there was, and still remains, a tremendous opportunity to make a significant impact in alleviating hunger through the next generation of food waste reduction efforts.

ReFED's Accelerator was designed specifically to equip food recovery organizations with the knowledge, network, and capital they need to scale their impact. While the Accelerator was launched before any of us had heard of or been affected by COVID-19, we hope that the insights, best practices, and tools detailed in this report will empower all efforts at the intersection of food waste and hunger relief – during this tumultuous period and beyond.

Sincerely.

Alexandra Coari

Capital & Innovation Director

ReFED



EXECUTIVE SUMMARY

Page 7

OPPORTUNITY

In a country where so much perfectly good food is wasted, yet millions of Americans face food insecurity and hunger, an opportunity exists to empower innovative food recovery organizations, improve distribution at scale, and continue to enhance operational sustainability – simultaneously increasing the amount of food provided annually to those in need and helping reduce U.S. food waste overall.

ReFED saw this opportunity and in the Fall of 2019 launched its Nonprofit Food Recovery Accelerator with support from the Walmart Foundation and in partnership with +Acumen.

The Accelerator immersed ten nonprofit food recovery organizations in a combination of virtual curriculum and in-person ReFED Learning Labs. Its focus was on leveraging earned revenue models, technology solutions, and human-centered design to catalyze ideas and inspire actions that could help the organizations overcome challenges that have limited their ability to scale solutions to increase the amount of healthy food available to food insecure Americans.

Page 18

THE BEST PRACTICES

Nonprofit food recovery organizations typically face unique time and resource constraints that can impact their growth and impact potential. Through the Accelerator, ReFED identified best practices that could help scale food recovery solutions across the nation:

- Clearly define a mission and vision to guide prioritization of initiatives that will grow impact
- Build the right team at the right time to ensure staff longevity and delivery of services
- 3 Explore earned revenue models
- 4 Expand the value proposition
- Ensure efficiency and consistency in logistics, transportation, and distribution
- 6 Establish strategic partnerships and collaborations
- Define appropriate metrics and build efficient tracking methods
- 8 Develop robust food safety procedures and educate donors about liability protection



Page 34

CROSS-CUTTING TOOLS

Technology and **human-centered design** can be key enablers for a food recovery organization's ability to scale.

Technology can be a tool to drive the efficiency that is critical to helping organizations grow their reach and impact. It has proven to be a value-add when it is intentional and flexible, takes into account the end user, is designed with outcomes in mind, and gathers data.

Issues can arise when assumptions are made about why people may be facing hunger and what end recipients need or want.
Incorporating human-centered design into all aspects of a food recovery program enables organizations to consistently keep the perspectives, needs, and experiences of the end recipient front and center, which will make their work more effective and ensure it is delivered in a dignified manner.

Page 40

KEY ACTIONS

Food Recovery Organizations can assess their work and activities within the eight recommended best practices, examine how they have been leveraging cross-cutting tools, and identify opportunities to improve, as well as the right best practice(s) to implement.

Food Businesses can assess how food recovery fits within their overall food waste reduction strategy and explore how their existing assets and in-house knowledge, such as data, backhauling, and technology, could be leveraged and shared to further reduce food waste.

Funders could explore how the investment types available at their disposal can help grow the impact of food recovery. Philanthropy, in particular, can help fund system gaps, address system failures, encourage long-term behavior change, and underwrite the costs of an initiative that might be deemed too risky. As a result, funders can play an initial catalytic role in support of next generation food recovery efforts.

Potential Enablers like Fortune 500 technology and logistics companies could determine how their existing products, infrastructure, knowledge, and other assets could be leveraged within this space.

Page 42

FOOD RECOVERY AND THE IMPACTS OF COVID-19

As the coronavirus pandemic spread across the U.S., food recovery organizations experienced a dramatic increase in demand for food, while simultaneously dealing with significant volunteer shortages, unpredictable food supply, and a decrease in funding and revenue.

In response to these new obstacles, food recovery organizations leveraged many of the exact tools and best practices this very Report aims to highlight, including humancentered design, technology, and strategic partnerships - confirming the potential power of the insights gleaned from the Accelerator.



THE BIG PICTURE

Setting the Stage for the Accelerator

Throughout history, basic needs such as shelter, water, and food have not been equally accessible to everyone. In regard to food, an entire food recovery system has evolved in the past century to support food insecure individuals.

Over time, as the food recovery system changed and the number of food insecure individuals continued to rise along with the need for supplemental and emergency food, the number of food banks proliferated, and a national organization, Feeding America, was established to support the efforts of more than 200 member food banks and 60,000 food pantries, meal programs, and distribution agencies. Food banks have since largely expanded beyond non-perishable, shelf-stable food and have increased access to healthier options like fresh fruits and vegetables. Simultaneously, there has been a proliferation of other stakeholders working to fight food waste and hunger such as The Kroger Co. Zero Hunger | Zero Waste Foundation, which committed to establishing a \$10 million Innovation Fund to support new ideas that will help create communities free of hunger and waste; technology companies like DoorDash, which provides logistics and distribution support through its Project Dash program; as well as other food recovery organizations that offer new and innovative ways to drive a more effective food recovery system.



At the time of the Accelerator, nearly 40 million Americans (1 in 9 people) struggled with hunger. Since the onset of the COVID-19 pandemic, that number has risen to 54 million.¹

¹ Feeding America. May 2020. Feeding America Study Projects Local Food Insecurity Rates Amid Pandemic Could Reach Up To 1 in 3 Adults and 1 in 2 Children. Web. https:// www.feedingamerica.org/about-us/press-room/feedingamerica-study-projects-local-food-insecurity-rates-amidpandemic-could.

Despite these efforts, there is still a gap in recovering otherwise wasted food from across the entire food supply chain and distributing it to those that need it most.



Many of the food recovery organizations working in this space are still highly localized nonprofits, dependent on philanthropic funding and reliant on physical infrastructure and volunteer labor. While these organizations are having an impact on a local level, it has been challenging for these efforts to scale regionally and nationally. Some of the barriers to scaling up a more efficient, effective, and dignified food system include:

- · Limitations in access to balanced, nutritious, culturally appropriate, and desirable meals
- A historic focus on food donors and receiving agencies as the primary recovery clients, rather than designing food access and distribution solutions informed primarily by the inherent wants, needs, and desires of ultimate end recipients
- The necessity for food recovery organizations to spend a significant portion of time and energy fundraising to sustain the organization's activities rather than designing operational growth and impact strategies
- Resource constraints related to physical infrastructure and transportation, as well as a lack of control over volunteer consistency and availability, which can result in paper- and labor-intensive operations that are not as resilient as needed in the face of environmental and economic disruptions
- Varying measurement and tracking methods for food donations, as well as differing food safety procedures across the food recovery space











Food Recovery Ecosystem Map

This Food Recovery Ecosystem Map provides a high-level overview of where donated food comes from and how it reaches end recipients. It also lists the ten Accelerator cohort members. (See pg. 14 to learn more about these nonprofit organizations.) *Please note that this Map is illustrative and not exhaustive.*

MAP LEGEND

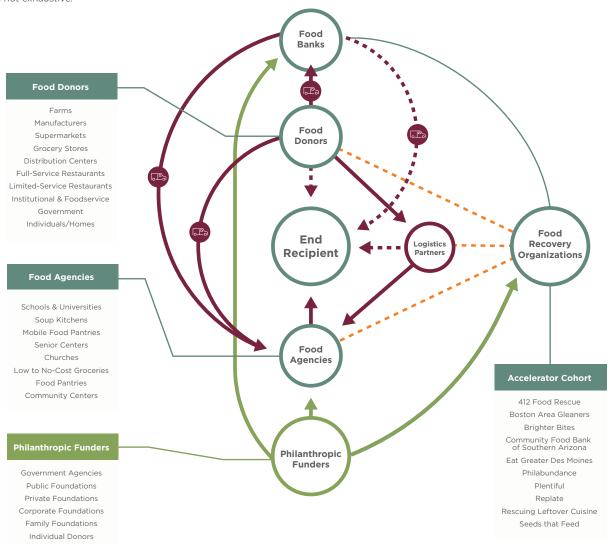
Typical flow of donated surplus food (transported by volunteers, staff, or logistics partners)

Less common flow of donated surplus food (transported by volunteers, staff, or logistics partners)

Coordination of transporting surplus food from the food donors to end recipients $% \left(1\right) =\left(1\right) \left(1\right)$

Flow of Philanthropic Funds

Food along these pathways are usually transported by Food Recovery Organizations' volunteers and/or staff



INFLUENTIAL FACTORS ON THE ECOSYSTEM

RESEARCH & ADVOCACY

Data and analytics that provide deep insights into the state of the food recovery system and opportunities for growth and scale.

POLICY & LEGISLATION

System-level factors like policy and legislation on food safety and tax incentives can impact the relationships between food donors, food banks, food recovery organizations, food agencies, and other partners as well as the amount of surplus food getting to end recipients.

TECH & HUMAN-CENTERED DESIGN

Emerging cross-cutting tools like technology and human-centered design can help drive a more efficient and dignified food recovery system as well as help give nonprofit organizations a specific fundable initiative or revenue generating program.

THE ReFED NONPROFIT FOOD RECOVERY ACCELERATOR

The dichotomy of so many Americans facing food insecurity and hunger, while tons of perfectly good food goes to waste costing nearly \$218 billion each year is hard to comprehend. To address this, ReFED launched the 2019 Nonprofit Food Recovery Accelerator with support from the Walmart Foundation and in partnership with +Acumen. By immersing a cohort of nonprofit food recovery organizations in a combination of virtual curriculum and inperson ReFED Learning Labs focused on leveraging earned revenue models, technology solutions, and human-centered design, the Accelerator was designed to catalyze ideas and inspire actions that could help these and other organizations overcome the challenges that have limited their ability to scale solutions that increase the amount of healthy food available to millions of Americans in need.



"The education platform, the relationships built, plus the exposure gained from this Accelerator have been invaluable. I would recommend this to any organization - not just food recovery leaders."

Jennifer Boone | *Brighter Bites*

Accelerator Overview

ReFED selected ten U.S.-based nonprofits out of more than 125 applicants that met the following criteria to make up its cohort:

- A new and innovative approach to food recovery and hunger relief
- Interest in designing solutions using a humancentered approach to ensure that food is delivered in a dignified and convenient way
- A belief that earned revenue models and technology solutions could help drive scale
- A willingness to share best practices and partner with others across the nation to drive more impact

During the three-month program, participants prototyped new products and services in order to drive mission-aligned revenue, learned how to incorporate principles of human-centered design that can create a more dignified experience for end beneficiaries, and adopted the use of innovative technologies to increase capacity. A total of \$400,000 in equity-free, unrestricted funding was provided (each participating organization received \$30,000, plus an additional \$100,000 was awarded to the selected winner).

Participants also received mentorship from and gained access to ReFED's Accelerator Expert Network, a world-class group of 50 food businesses, technology executives, capital providers, government agencies, and subject matter experts. Collectively, this Expert Network connected the cohort with potential strategic partners, clients, and additional sources of capital.

	ACCELERATOR EXPERT NETWORK								
∅ AFRESH	Albertsons	aramark	Baldor	Blue Apron	BON APPETIT	Cal Recycle 🥏	OWNERS OF ECOTECHNOLOGY	Chick fil: &	cisco
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Tay Trick Franty SCONDACHIN	FDC	Food for Soul	∍ FoodMaven	General Mills Haby Peat Paylot Lans	G⊗DR	FOOD LAW ANYOLOCYCLING	Hello FRESH	IMPERFECT produce	Nestle
Next Course	e OVIO	Pisces Foundation	Posner Foundation	Rabobank	SODEXO QUALITY OF LIFE SERVICES	Spoiler Alert	RBUCK COFFEE	Taylor	The Ajana Foundation
ZERO ER HUNGER ZERSTE FOUNDATION	LEDNASTICON POLINIBATION	ROCKEFELLER FOUNDATION	the Wonderful company.	Tyson	USDA	🛣 VillageCapital	WELLS FARGO	WHÔLE	World Wildlife Fund

Unique Features of the Accelerator

ReFED's Accelerator presented a rare opportunity for nonprofit innovators to access the same types of resources and support for-profit companies receive in traditional accelerators - mentorship, curriculum, access to potential food donors and clients, and funding opportunities.

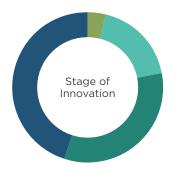
- Programming developed in partnership with top-level experts | +Acumen's expertise running online learning experiences that leverage its insights from being a nonprofit impact investing fund, combined with IDEO's work in human-centered design and Feeding America's expertise in hunger relief, helped ReFED deliver a high-quality curriculum and experience for the cohort. The curriculum was tailored to the food recovery sector and built with the help of the Accelerator Expert Network, which manifested in the Accelerator Expert Network Knowledge Series.
- In-person ReFED Learning Labs at key points of the Accelerator | Bringing the cohort together at IDEO's design studio in San Francisco at the beginning of the Accelerator built rapport between the members, which led to more open conversations and faster ideation. The cohort also came together in the middle of the Accelerator at ReFED's 2019 Food Waste Summit, which gave them a chance to demo their earned revenue, minimum viable products and network with the Accelerator Expert Network, along with 400 other conference attendees, during a curated speed dating and mentorship session. At the end of the Accelerator, the cohort met for a final time at the Accelerator Showcase in Chicago, IL and co-hosted with Feeding America. This gave the cohort the opportunity to network with and learn from other experts in the field and provided them with exposure to new stakeholders.
- Access to a network of experts | Another key success factor was the Accelerator Expert Network, which played an important role through all phases of the Accelerator. This group of food business and technology executives, capital providers, and subject matter experts participated in the selection of the cohort, provided mentorship, actively engaged in the ReFED Learning Labs, helped select the winner, and shared insights with the cohort and overall food recovery space.
- Use of human-centered design to put end recipients at the center of the food recovery system | The cohort was able to speak directly with end recipients during a unique ReFED Learning Lab "Voices from the Field" workshop, which was designed in partnership with IDEO and leveraged the power of human-centered design. Speaking directly and candidly with the ultimate end recipients of supplemental and emergency food services is a rarer occurrence than one might think, as many roles within the larger food recovery system do not directly engage with the individuals being supported. The workshop gave food recovery leaders the chance to understand the daily lives of individuals experiencing food insecurity, and it widened the cohort's perspective on what they can do to make food access and distribution process a more dignified experience for end recipients.
- A pre-competitive, collaborative environment | Given the complexity of the current food recovery and donation system, as well as the vast number of stakeholders and considerations involved in ultimately delivering food to the hands of those in need, the cohort was expected to engage in precompetitive collaboration, to share best practices, and to collectively ideate on the ideal future state of the system.

The Cohort

The ten nonprofit cohort members were selected from over 125 applications. The total applicant pool represents a diverse group of food recovery organizations across the nation - from localized nonprofits with two full-time employees and a fee-for-service model to national organizations with hundreds of volunteers dependent on grant funding - all with the shared mission of fighting food waste, hunger, and food insecurity in innovative ways.

COHORT APPLICANT POOL

- The applicants came from **32** different states
- 65% of applicants had only been in existence for less than 5 years
- Collectively, the applicants employed over 5,000 full-time staff members and mobilized more than 190,000 volunteers
- 60% donated food either to food banks, food pantries, or directly to the end recipient
- The applicants have an average annual budget of ~\$1.7 million
- 63% of senior leadership came from an underrepresented minority group (90% of ReFED's selected cohort are from an underrepresented minority group)
- 83% of applicants indicated that they needed funding over the next 12 months, and the average funding needed was approximately \$285,000



- **4%** had a market-ready product or service to offer or sell
- 18% had a new idea to test
- **33%** had a service offering, prototype, or simple version to display and wanted to achieve proof of concept
- 45% already had a marketready product or service being offered or sold



"The opportunity to work alongside nine other like-minded organizations and in conjunction with an Expert Network of more than 50 leaders in the field is an absolute game-changer. Improving the lives of our neighbors through food is what drives us forward, and the opportunities ReFED is creating are literally providing the fuel that we've so desperately needed."

Alyssa Snyder | Seeds that Feed

Cohort Participants

The organizations ultimately selected from the applicant pool cohort came from eight different states; employed more than 300 full-time staff members; mobilized 49,000+ volunteers; served 2,100,000 end recipients; worked with 4,500+ food donors; and recovered more than 40,000,000 pounds of food the year prior. They represented a wide variety of trailblazing solutions, such as an on-demand donation pick-up model; an OpenTable-inspired reservation app for end recipients; the only gleaning model in the U.S. that compensates farmers for making timely donations; and an innovation that works with healthcare providers to administer door-to-door access to healthy food for homebound and at-risk populations with chronic illness.



412 Food Rescue

Recipient of The Savviest Tech Award for utilizing the most innovative, groundbreaking technology

412 Food Rescue's mission is to prevent perfectly good food from entering the waste stream by redirecting it to nonprofit and community organizations serving those who are in poverty and food insecure. Building upon their experience and impact in Pittsburgh, they seek to expand their partnership model, best practices, and technology platform - the Food Rescue Hero app, a simple, intuitive tool that matches food donations to the appropriate nonprofits, coordinates a last-mile transportation network of volunteers, trains the volunteers on food safety, as well as measures the impact on hunger and the environment. They aim to broaden the use of these tools in cities throughout the U.S. to significantly reduce food waste and fight hunger on a national scale.

During the Accelerator, 412 Food Rescue explored a fee-for-service model to their food donor partners. Since launching in Pittsburgh, they had not charged food donors for their service, despite these donors receiving tax benefits and reduced waste disposal costs.

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Boston Area Gleaners

Recipient of The Get it Done Award for demonstrating resilience in the face of obstacles and hardships, and consistently becoming a stronger organization by turning challenges into opportunities

Boston Area Gleaners' (BAG) organizes volunteer trips to local farms to harvest high-quality fruits and vegetables that would otherwise go to waste and distributes the produce to agencies serving families facing food insecurity. Their Surplus Commodity Crop Program (SCCP) provides an innovative solution to both farm-scale food waste and pervasive regional food insecurity. The SCCP provides an effective alternative to the gleaning model particularly for large Class 4 farms. Since these farms have the largest crop planting and the most financial loss at stake, they are most subject to market fluctuations and food loss. Through the SCCP, farmers can be incentivized to invest their own labor when commodity level crops are in surplus and to store the crops in large bins for a mechanical pickup by BAG drivers. These drivers transport the produce back to BAG headquarters, where groups of volunteers are supervised to pack product into standardized produce boxes for distribution.

Through the Accelerator, BAG explored an earned revenue model, in which BAG would establish a market floor for crop prices with partner farms prior to the harvest season to give farmers some negotiating leverage and outlet before crops are no longer edible. The crops would then be distributed into the hunger relief pipeline at below market rates by leveraging BAG's contributions - packaging costs, food safety handling, cold storage infrastructure, tracking systems, and trucking.

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Brighter Bites

Recipient of The Master Presenter Award for their work as skillful public speakers and storytellers, as well as role models in clearly articulating the importance and value of the work they do

Brighter Bites delivers fresh fruits and vegetables directly into families' hands. They source fresh, seasonal, and primarily donated produce and systematically distribute it to underserved communities with evidence-based nutrition education and fun food experiences. Brighter Bites also teaches families how to use the fresh produce and track their behavior change.

During the Accelerator, Brighter Bites examined the feasibility of collaborating with their corporate partners on joint marketing and distribution campaigns, where Brighter Bites provides produce organizations with a direct channel to reach a new customer base with product samples, recipe demonstrations, and co-branded materials. Through their work, Brighter Bites found that there is a high demand for fresh fruits and vegetables among the people they serve, but produce companies and marketing associations have traditionally overlooked them. Brighter Bites sees themselves as an ideal charitable partner that can help produce industry suppliers and retailers create a new and reliable customer base.

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Community Food Bank of Southern Arizona

Recipient of The Food Systems Expert Award for their work as a subject matter expert in the complex workings of the food system and navigating the often competing interests within the food industry

Community Food Bank of Southern Arizona (CFBSA) distributes fresh produce and non-perishable foods to a vast network of community partners throughout the state and across the country. They collaborate with local agencies, health institutions, and governments to revitalize neighborhoods and build a stronger food economy.

Because produce distributors are faced with time-sensitive decisions to dump or donate produce that cannot be sold, CFBSA used the Accelerator to explore a real-time and semi-automated communication system that would enable data flow from donors to food bank recipients across the country. The system could provide the transparency needed to drive a reduction in food waste and fight food insecurity and enable a cross-sector shared revenue stream.

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Eat Greater Des Moines

Recipient of The Coalition Builder Award for fearlessly seeking out new partnerships and constantly building new relationships to further support their mission

Eat Greater Des Moines (EGDM) is a central lowa-based organization that facilitates and builds connections to strengthen the area's food system. Their mission is to unite the community by providing quality food access for all through initiatives like food rescue, in which EGDM connects businesses like restaurants, caterers, and foodservice providers that have excess, edible food to nonprofit organizations that will give it to end recipients. EGDM has other initiatives such as Fresh Food. Friendly Neighbors, which seeks to connect lowans to locally grown healthy food through various farmers markets, as well as Double Up Food bucks, lowa's statewide healthy food incentive program.

One of EGDM's initiatives combines software, shared-use refrigerated vans, and a paid-driver program to make their food rescue network more dynamic, effective, and equitable, while providing support to organizations throughout the food system. Through the Accelerator, EGDM identified a food donor segment that they did not typically target - convenience stores.

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Philabundance

Recipient of The Collaborator Award for their work in providing thoughtful feedback to colleagues, being a terrific thought partner, and approaching everything with a team- and solution-oriented mindset

Philabundance is the Delaware Valley's largest hunger relief organization, acquiring, rescuing, and distributing food to 90,000 people weekly in nine counties in PA and NJ. Of the people Philabundance serves, 30% are children and 16% are seniors. Others who seek food assistance include people with disabilities, single parents, veterans, students, and working-class families.

During the Accelerator, Philabundance delved into an earned revenue model, through which they plan to transform the food banking system so that it prioritizes the needs of agencies by leveraging the scale of food banks and the flexibility of tech startups. Agencies would pay through an existing annual membership fee, which gives them access to food safety training, capacity grants, and consistent donors. Food donors will pay through a tiered fee-for-service model that can be offset by tax credits. As part of their offering, Philabundance will provide donors a personalized rescue plan, monthly reporting, reduced hauling costs, positive branding, donor protection through their quality control system, and access to their network of approved agencies. The revenue will then be used to contract technology start-ups and agencies on a cost-per-pick-up plan to rescue small-scale, perishable food.

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Replate

Recipient of The Avid Learner Award for seeking the lesson learned from any situation in an effort to continuously improve

Replate's mission is to reduce food waste and food insecurity. They manage food donations from caterers, offices with meal services, brands with overrun product, restaurants, and other surplus food generators. Every food donation is taken to local nonprofits serving neighbors experiencing food insecurity. Their technology platform enables businesses to schedule on-demand pickups for their surplus food, and their food rescuers bring the food directly to those experiencing food insecurity in the community.

Through the Accelerator, Replate identified an opportunity to leverage their proven food rescue platform and license their technology to other nonprofit organizations, with the aim of increasing collaboration, improving relationships, and increasing the number of meals rescued. Replate sees this prospective revenue stream as a way to create a "powered by" technology that can enable other food rescue initiatives to streamline operations, improve revenue, and increase data collection, in turn scaling food recovery.

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Rescuing Leftover Cuisine

Recipient of The Fearless Pivotor Award for evolving their ideas significantly using the insights and expertise gleaned during the Accelerator

Rescuing Leftover Cuisine (RLC) is a national nonprofit organization that rescues and donates food that would otherwise be wasted. Volunteers are engaged to be the transportation solution through a proprietary web application. They aim to become the world's most widely used solution for companies and individuals to eliminate food waste in their communities, making food rescue sustainable and universal, and hunger a thing of the past.

RLC currently has an earned revenue model where RLC charges a fee of \$20/pickup for regular recurring food rescue services. This model offsets the costs of pickups while allowing the food donor to receive enhanced tax deductions, reduce their food disposal costs, and receive marketing. Moreover, RLC has an earned revenue stream for non-recurring food rescue services, charging \$400/pickup for festivals, events, weddings, etc. However, this stream is far less frequent, and through the Accelerator, RLC aimed to identify strategies to engage and grow this target market.

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Seeds That Feed

Recipient of The Audacious Visionary Award for always asking the hard - but right - questions, coming up with bold ideas, and never being afraid to test and learn

Seeds that Feed collects and distributes fresh produce to those in need, calling it "CareCropping." Leveraging relationships with farms and healthcare providers, Seeds That Feed's 'pHed' initiative provides direct-to-door access to free produce and healthy foods for homebound and at-risk populations experiencing chronic illness.

Providing access to in-home delivery of fresh produce for selected patients of healthcare providers, the pHed initiative utilizes funding available through health insurers' value-based programming (VBP) and pay-for-performance (P4P) programs. It is ultimately designed to incentivize measurable, quantifiable progress in patient outcomes. Based on Seeds That Feed's research, the U.S. healthcare spent \$1.1 trillion in 2015 on treating chronic diseases. Their pHed initiative aims to utilize monetary incentives to decrease hospital stays and dependence on medication, while keeping the primary care physician/patient relations close. They view this initiative as a prospective earned revenue model, which they built upon during the Accelerator.

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2019 ReFED ACCELERATOR WINNER



Plentiful

Plentiful

Recipient of The Equity & Inclusion Award for their work as a tireless advocate for lifting up the voices of those that are often underrepresented

Plentiful is a free, easy-to-use reservation system for food pantries and the people they serve. It was created by the NYC Food Assistance collaborative to improve dignity and efficiency at food pantries. Across the US, more than 40 million people visit a charitable food program each year, often waiting in long lines for service. Plentiful eliminates lines and increases agency for families in need, while providing better information for service providers.

Through the Accelerator, Plentiful saw an opportunity to generate revenue through licensing, data sharing, and surveys. They would offer a premium version of the platform and a free basic license. An estimated 16,000 food pantries would make up the target market, in addition to healthcare providers and social service providers who could also benefit from Plentfiul's services. Plentiful also saw a market for its warehoused data, which can be packaged and customized. They identified a way to sell survey opportunities to build revenue given the several types of mission-aligned institutions that currently pay for access to data from Plentiful's audience.

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INSIGHTS FROM THE ACCELERATOR ON SCALING FOOD RECOVERY

Recommended Best Practices

Nonprofit food recovery organizations typically face unique time and resource constraints that can hinder their growth and impact. While the following recommended best practices are not prescribed exclusively for food recovery organizations, through the Accelerator, ReFED and the cohort demonstrated how these best practices could help scale food recovery solutions across the nation.

BEST PRACTICE CHECKLIST
#1 Clearly define a mission and vision to guide prioritization of initiatives that will grow impact
#2 Build the right team at the right time to ensure staff longevity and delivery of services
#3 Explore earned revenue models
#4 Expand the value proposition
#5 Ensure efficiency and consistency in logistics, transportation, and distribution
#6 Establish strategic partnerships and collaboration
#7 Define appropriate metrics and build efficient tracking methods
#8 Develop robust food safety procedures and educate donors about liability protection

CLEARLY DEFINE A MISSION AND VISION TO GUIDE PRIORITIZATION OF INITIATIVES THAT WILL GROW IMPACT

An organization's mission and vision serve as a north star when making strategic decisions and aligning teams, partners, and clients to drive impact. It is critical for nonprofit food recovery organizations to clearly delineate a mission and vision that captures the work they are realistically capable of accomplishing and allocating resources to those activities that will lead to "success."

A mission generally explains what an organization does - the reason it exists and its specific focus. A vision describes what an organization aspires to accomplish. Determining a mission and vision requires both an internal exploration of an organization's unique capabilities, as well as an assessment of where it fits into the broader competitive landscape.

Once a mission and vision have been defined, a framework such as the Theory of Change, which details the specific strategies and activities required to reach an organization's goals, can be implemented to ensure that its activities are best aligned to support these outcomes. The Accelerator stressed the importance of an analysis of this type. To accomplish this, an organization should first identify the desired long-term goals that align with its mission and vision and then work backwards, specifying the conditions and outcomes that must be in place to achieve its goals. More than just a thought exercise, the completed framework acts as a guide to ensure that organizational resources are focused on the activities that directly impact its mission and that mission creep is prevented. A well developed, robust Theory of Change can also act as a useful tool for conversations with prospective funders; giving them a clear, concise, and easy to understand roadmap for how an organization will deliver the impacts and outcomes it seeks.

Activities Outputs Short Town Outcomes Long Town Outcomes Impacts	THEORY OF CHANGE								
Activities Outputs Short-lefth Outcomes Long-term Outcomes Impacts	Activities	Outputs	Short-Term Outcomes	Long-Term Outcomes	Impacts				



"One of the things City Harvest and Plentiful do really well is focus on our expertise and strengths and build from that. It can be really easy to get distracted and go down many different paths and try to solve everything at the same time, but if organizations keep their core mission at the center of everything they're doing, and incrementally build on that in ways that make the most sense for them, it will work out better."

Rebeckah Piotrowski | *Plentiful*, 2019 *Nonprofit Food Recovery Accelerator Winner*

BUILD THE RIGHT TEAM AT THE RIGHT TIME TO ENSURE STAFF EFFECTIVENESS AND DELIVERY OF SERVICES

Once an organization has a deep understanding of what it is trying to achieve and can clearly articulate its objectives, it is important to identify the skill sets needed to execute its initiatives and programs and to assemble the right people who can deliver results effectively.

This has often been challenging for food recovery organizations and is commonly due to a lack of time to conduct a comprehensive search, as well as lack of budget to hire staff or to offer competitive salaries to the best candidates. This difficulty in growing staff can lead to burnout of the current team and low retention rates. As a result, organizations will often rely on pro bono work, contractors, interns, or volunteers, and the leadership team will remain heavily involved in the day-to-day operations.

To overcome these challenges, organizations could consider developing a hiring collective that shares surplus applicants with other partners in the field. If an excellent candidate was not ultimately hired at one partner organization, that organization could share the candidate's credentials with its partners. Additionally, with the increase of new online platforms that streamline workflows and support differing lifestyles and ways of working, organizations can increase their applicant pool by having remote teams or more flexible working hours beyond the traditional 9-to-5.



EXPLORE EARNED REVENUE MODELS

Nonprofit food recovery organizations are typically dependent on philanthropic funding. In fact, 83% of Accelerator applicants indicated that they would require funding over the next 12 months, and 60% indicated that the majority of their funding comes from foundations, individual donations, or government institutions. This dependency has often resulted in leadership spending a majority of its time and effort on fundraising, rather than solving problems and developing strategies to grow the organization's impact. Additionally, because most food recovery organizations share a similar mission and vision, it creates a degree of competition because grant funding and donor dollars are limited. These similarities also result in confusion among funders, who struggle to remember the unique differences between potential grantees.

While many nonprofits thrive from philanthropic funding alone, it may not be the most effective and sustainable funding model in the long term. The Accelerator focused on piloting earned revenue models as one approach to enhance financial stability and growth, and it identified recommendations to make this model successful, such as defining customer segments, creating a compelling "pitch" based on a unique target audience, and establishing a clear value proposition for the services provided and as a point of differentiation. Based on what is most important to the customer (often considered the food donor, in the case of food recovery), the nonprofit can then tailor the design of their service offerings in a way that appeals to the customer's interests and needs. Once an initial customer has been secured and the model has been tested and validated, it can signal to other prospective paying customers that the organization's services and/or products are meeting a true market need in a way no one else can.

Expanding its financial base to include a mix of charitable dollars and earned revenue could also help an organization weather periods when the greater economic outlook is uncertain, ideally reducing uncertainty in the business and avoiding the need to make tough program and headcount decisions.

"When it comes to monetizing sustainability, regardless of the way your business is incorporated, the first thing you need to do is land a customer. Do not create the financial structure and fee requirements before knowing your donor. You might need to search for financing in order to reach critical mass so that your fee structure can better reflect what the donor wants. From there, if you spend money smartly you have a better chance of reaching that critical mass and getting customers what they need."

Bill Reighard | Founder of Food Donation Connection



Case Study: Daily Table



Daily Table, a nonprofit grocery retailer with two locations in the Greater Boston Area (Roxbury and Dorchester, neighborhoods with large low-income populations), offers fresh produce and packaged items that would have otherwise been wasted, as well as prepared meals at affordable prices to all customers that sign up for a free membership. This idea came about when Daily Table founder Doug Rauch learned that nearly 40% of individuals eligible for food stamps were not using them because they feel ashamed or embarrassed. What this meant for Rauch was that any solution that aims to tackle the issue of hunger and shortage of nutrients must be a dignified experience for people. In turn, Rauch decided that his food recovery solution would be a grocery retail model, because it places the power in the hands of the end recipients, whereas most food recovery models are typically centered on food donors as the main customer.

This business model not only provides end recipients with the dignity of buying affordable, high-quality food and the opportunity to make purchasing decisions based on their individual food preferences, but it also reduces Daily Table's reliance on philanthropic funding. Both Daily Table locations cover approximately 70% of their expenses through revenue and/or in-kind donations and only need philanthropic dollars for the remaining 30%. They plan to open a third location and have the potential to cover up to 90%-100% of their expenses by adding topline revenue. In doing so, Daily Table's retail model is an example of a model that could potentially scale and be replicated in different communities across the country.²

² ReFED. 2019. Accelerator Expert Network Knowledge Series. Daily Table: How a Former Trader Joe's Executive is Creating a New Grocery Store Model that Offers Healthy Food – and a Dignified Experience – to Combat Hunger. Web. https://www.refed.com/downloads/accelerator-expert-network-knowledge-series/Doug-Rauch-Daily-Table.pdf.



"Step back and look at where there are problems. What can we do to democratize access to nutrition? It shouldn't just be the economic higher classes that get to eat a healthy diet. It's going to take commitment on the part of social entrepreneurs to get out there and learn and be willing to make mistakes. Take the risk and do the hard stuff."

Doug Rauch | Former President of Trader Joe's and Founder of Daily Table

Case Study: L.A. Kitchen



L.A. Kitchen opened in 2013 and was structured as a hybrid nonprofit/for-profit, two-income stream model targeting hunger and poverty. The nonprofit portion of the business would operate on philanthropic dollars, while its social enterprise, Strong Food, would generate revenue through foodservice contracts.

A replication of its sister, DC Central Kitchen - which has been successful in Washington D.C. - L.A. Kitchen was centered around a culinary job training program designed to empower young people emancipating from foster care and individuals returning home after decades of incarceration, with the ultimate goal of preventing homelessness. While learning new skills, participants would also train volunteers, and together, they would earn revenue by producing thousands of healthy snacks, meals, juices, and broths for client contracts. The food would also be provided to those in-need, with an emphasis on senior citizens, through L.A. Kitchen's nonprofit operations.

However, for the model to work, L.A. Kitchen needed to secure an anchor contract with the Los Angeles Department of Aging to produce healthy food for meal sites serving senior citizens throughout the city. They were confident that they would secure the contract given L.A.'s Good Food Purchasing Act, which mandated that any city agency that spends more than \$10,000 on food annually should buy locally and support local food businesses. Unfortunately, L.A. Kitchen did not secure the contract with the Department of Aging. Because their success depended on this one opportunity, they had to immediately pivot and search for new income streams. They secured a contract to provide sandwiches and snacks for Los Angeles International Airport, but it was not enough to close their funding gap and as a result had to shut down operations in 2018. ³

Although the earned revenue model was successful in Washington, D.C., it was not a guarantee that it would be successful in Los Angeles. When an organization seeks to replicate their operations and scale their impact, there is still significant upfront work that is required before launching like landscape analysis and relationship-building to ensure that the value proposition can win multiple customers in a new city.

³ Egger, Robert. My Nonprofit Did So Much Right, But We Still Couldn't Raise Enough Money to Survive. Inside Philanthropy. Web. https://www.insidephilanthropy.com/home/2019/6/19/my-nonprofit-did-so-much-right-but-we-still-couldn't-raise-enough-money-to-survive.

EXPAND THE VALUE PROPOSITION

Donating food has historically been viewed as a charitable act, despite the food donor receiving a valuable service from the recovery organization. This historical reality has often been an impediment for organizations exploring earned revenue models with their donors, who often feel that their donation of food is enough of a contribution in and of itself and sometimes view fees as a cost burden.

Food recovery organizations are becoming more direct in highlighting the range of benefits as part of their overall outreach; they are also instituting procedures and services, like donation-alert apps, in an effort to make donating food easier. In many cases though, food recovery organizations struggle to gain buy-in from prospective food donors, who feel as though the recovery organization is putting additional work on them and their employees because of the additional steps required to set the surplus food aside and/or use an app. Moreover, even with the number of benefits donors could receive, they often have concerns about food safety and liability protection and still perceive food donation as a risk. (See pg. 32 for more details on food safety and liability protection.)

However, there are a number of ways to reframe these services as value generators so that food recovery organizations are seen by donors as true service providers rather than simply as "charities." By donating their food, donors receive a number of benefits, including tax deductions, excess and waste tracking for their operations, social and environmental benefits, stronger relationships with their surrounding community, and improved brand image. Additionally, when businesses donate food, they reduce the costs associated with waste disposal, including fees for hauling and the labor required to properly dispose of food.

Addressing this challenge requires an understanding of the food donor, which allows the recovery organization to identify a specific problem they face that the food donation could solve. This enables the recovery organization to present a solution for the food donor rather than providing a general list of benefits.

"The one thing I have said to entrepreneurs and app developers all along is that we cannot create an extra step for our stores. Our stores are built on efficiency. If you're building something that you want to integrate into a retail store, make it seamless for the associate."

Kari Armbruster | *Zero Hunger* | *Zero Waste Project Manager, The Kroger Co.*



ENSURE EFFICIENCY AND FLEXIBILITY IN LOGISTICS, TRANSPORTATION, AND DISTRIBUTION

Commonly, food recovery organizations rely on volunteers to pick-up surplus food from donors and then distribute it to local hunger relief and social service agencies. While many organizations have been able to grow a dependable base of volunteers who are committed to the mission, the volunteer nature of the business brings with it inherent challenges, such as inconsistent pick-ups, which can be perceived as poor customer service by donors, or a lack of human resources altogether as experienced during the COVID-19 pandemic. Moreover, scheduling and physical infrastructure have often been barriers when it comes to logistics and distribution. For example, a restaurant that has surplus food to donate at the end of its dinner service at 10:00 p.m. may not be able to find a volunteer to pick up the food at that specific hour or an agency that is open to accept the food. In other instances, when offered a large amount of surplus food, some food agencies may not be able to accept it due to large packaging sizes (e.g., a 5 gallon bag of yogurt versus individual 5 oz. containers), as well as limited or no refrigerator space. In other instances, farmers may find themselves with a surplus of perfectly edible and nutritious produce, but no way to economically pack and transport that food to the local food bank.

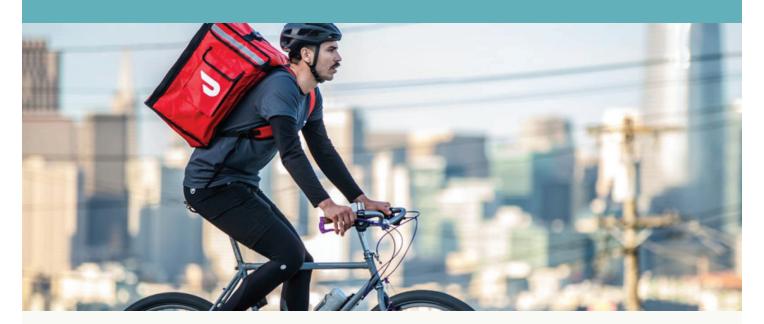
There is also a continued opportunity for innovative, cost-effective last-mile delivery solutions to get the food directly from food donors to end recipients. For most food businesses (i.e. food manufacturers, grocery retailers, restaurants), transportation has been one of the most common barriers to donating more food, illustrating the need for last-mile logistics solutions.⁴ Additionally, as organizations start to recover smaller amounts of highly perishable food more frequently, last-mile delivery solutions will be key in ensuring that the donated food is delivered efficiently and safely in order to preserve its quality.

To improve the flexibility and consistency of picking-up and dropping-off donated food, some organizations have hired their own fleet of drivers or offered reimbursement of transportation costs to volunteers (e.g. cost of fuel or public transportation). While this may seem challenging for food recovery organizations due to their often limited budgets, having dedicated staff members who are committed to the mission and are also being compensated for their work can result in higher quality and reliable service, increased donations, as well as resilience during challenging times.

Another practice that has helped food recovery organizations enter new markets is partnering with other companies and leveraging their existing logistics platform or infrastructure to fill resource constraints. Partnerships have also been particularly helpful to organizations seeking innovative last-mile delivery solutions that will get food directly to end recipients. (See pg. 27 for more details on strategic partnerships and collaboration).

⁴ Business for Social Responsibility. 2014. Analysis of U.S. Food Waste Among Food Manufacturers, Retailers, and Restaurants. Web. http://www.foodwastealliance.org/wp-content/uploads/2014/11/FWRA_BSR_Tier3_FINAL.pdf

Case Study: DoorDash



DoorDash is a technology company that connects customers with local and national businesses in more than 4,000 cities across the U.S. and Canada. Through Project Dash, food recovery organizations across the nation can leverage DoorDash's last-mile logistics technology and Dasher (driver) network to increase the number of meals served to end recipients. Since the launch of Project Dash in 2018, DoorDash has delivered over 1.7 million pounds of food from businesses directly to food agencies. In 2020, DoorDash partnered with ReFED to launch an open call to provide in-kind logistics support to food recovery organizations. During the coronavirus pandemic, DoorDash partnered with United Way to meet the need for last-mile deliveries of food supplies to the most vulnerable community members, particularly seniors, the immunocompromised, and low-income families.

5 DoorDash. 2020. Totally not Wasted! Web. https://deliveringgood.doordash.com/



ESTABLISH STRATEGIC PARTNERSHIPS AND COLLABORATIONS

As the old proverb states, "If you want to go fast, go alone. If you want to go far, go together." Mutually beneficial partnerships with like-minded organizations can help drive scale - expanding networks, physical capacity, and expertise. For example, building a strong relationship with funders can often result in more than just capital such as brand exposure and new connections to food donors, technologists, and peer organizations.

When exploring a potential partnership or collaboration, it is best to have a thoughtful, open dialogue from day one, to ensure everyone is aligned on what they hope to achieve. That means being explicit and clear on expectations and establishing what each party will bring to the relationship. It is also helpful to acknowledge that any joint project or initiative will have ebbs and flows or other challenges upfront, and in those instances, being specific about what the partners are facing and deciding together about how to move forward are vital. ⁶

Even when partners have aligned values and goals, the relationship may not be successful if the partners have different approaches to achieving their goals. Finding partners that have similar methods of working and ensuring that there is a strong culture of transparency and trust are key to thriving partnerships. An important part of that transparency and trust is not overpromising. All parties need to be honest about their capacity and what they can and cannot do. Overpromising can be tempting, especially if there is a big opportunity, but it often hurts the relationship in the long run.

Additionally, it is beneficial for partners to understand each other's business. In a food donor and food recovery organization relationship, it helps when the food donor understands that its recovery partner is not simply someone who shows up at the back door to pick up food, but rather an organization with a larger strategic mission. Similarly, recovery organizations should understand how the food donor's business works and how decisions are made. This mutual understanding helps ground the work in a way that makes strategic sense for both parties. Timing is also a key factor in partnerships. There are instances when prospective partners have good alignment, but a partnership is not feasible because they are in different stages of organizational development and growth. In those cases, it can be beneficial to keep an open conversation because, even if the timing is not right at that moment, there could be a chance that the partnership will work at a later time.

⁶ ReFED. 2019. Accelerator Expert Network Knowledge Series. City Harvest: How to Build Mission-Aligned Partnerships to Scale Food Rescue. Web. https://www.refed.com/downloads/accelerator-expert-network-knowledge-series/Rebeckah-Piotrowski-City-Harvest.pdf.

"We should be seeing ourselves as collaborators trying to solve a problem. I think that's the biggest opportunity. When you look at how big of an issue food waste is, even when Goodr scales, we are not going to be able to rescue all the food. We're going to have to learn how to work with each other and share best practices."

Jasmine Crowe | *Founder of Goodr*

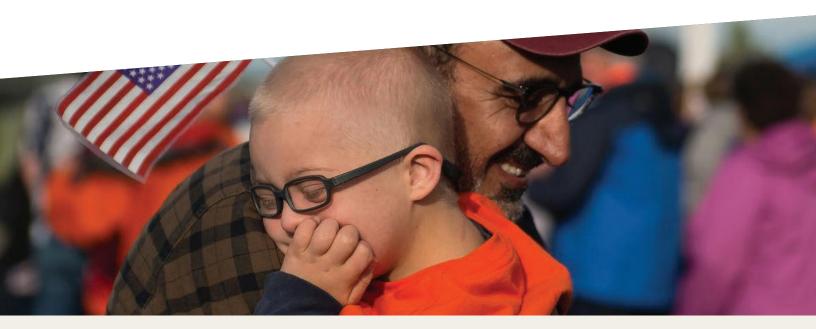


Case Study: Wholesome Wave and Chobani

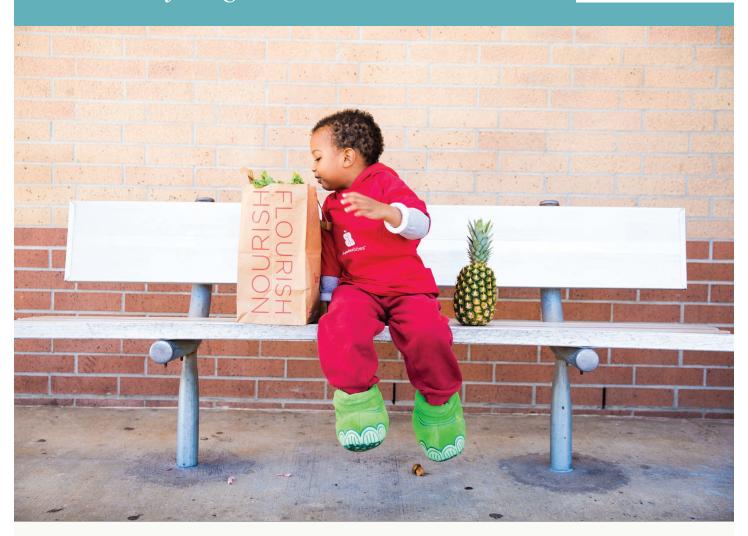


In partnership with food manufacturer, Chobani, Wholesome Wave, a food access and hunger relief organization, collaborated with Family Health Services in Twin Falls, Idaho and Chenago Memorial Hospital in Chenago County, NY (where Chobani manufacturing plants are based) to give healthcare providers the ability to prescribe fruits and vegetables to children ages 2-18 and their families. Only children that are food insecure and may be at risk or have a diet-related disease were eligible for the program. The partnership provides families with a monthly credit of \$60 to purchase fresh fruits and vegetables. Families also receive education on cooking techniques, how to get essential nutrients, and how to maximize trips to the grocery store, as well as free yogurt to support healthful eating. Since the start of the program, not only are the families eating healthier, but also 90% of parents reported feeling happier about their child's health following the program and pediatric patients decreased their BMI (body mass index) percentile by an average of 5%.⁷

⁷ Wholesome Wave. August 2019. Food As Medicine: Chobani and Wholesome Wave. Web. https://www.wholesomewave.org/news/food-medicine-chobani-and-wholesome-wave



Case Study: Brighter Bites and Chelan Fresh



Chelan Fresh, one of the largest marketers and shippers of fruit from Washington, and Brighter Bites started working together in December 2019, when Chelan Fresh began donating apples to Brighter Bites Austin and made a financial contribution, as well as sponsored the printing of co-branded, bilingual materials that provided information about where to buy the apples. Chelan Fresh ultimately decided that a formal partnership with Brighter Bites was an opportunity to give back to the community and introduce more families to a variety of healthy fruit. In February 2020, Chelan Fresh made a commitment to provide their proprietary Rockit apples nearly every week of Brighter Bites programming to approximately 7,000 families in Austin and Dallas. Through this partnership, families and teachers in underserved communities received fresh fruits and vegetables, as well as a nutrition education.⁸

⁸ AndNowUKnow - Produce Industry News. February 2020. Chelan Fresh Pledes Apple Donations to Brighter Bites in Texas Through Spring 2020. Web. https://www.andnowuknow.com/behind-greens/chelan-fresh-pledges-apple-donations-brighter-bites-texas-through-spring-rich-dachman-mac-riggan-jennifer-boone/kayla-webb/66818

DEFINE APPROPRIATE METRICS AND BUILD EFFICIENT TRACKING METHODS

When it comes to metrics and tracking food donations, using relatively simple methods to capture macro-level data, such as the general category of the donated food and the total pounds donated isn't enough. There is a different value in donating 100 pounds of bread compared to 100 pounds of smoked salmon or 100 pounds of broccoli. The limitation with generic metrics is that, while important, they are not always insightful or informative in a way that helps organizations make strategic decisions and better serves their customers. However, more granular data, such as the dollar or nutritional value of food donated, would be far more insightful and informative. Tracking more specific data can give recovery organizations an opportunity to help their food donors optimize tax deductions, as well as reduce surplus food in their operations. Moreover, it is helpful for food agencies to know what types and quantities of food they will be receiving in advance, in order to properly manage their inventory and determine if value-added processing is needed.

Identifying which metrics are most important to an organization is critical, so that they have the ability to understand and convey the true impacts of their work and identify areas for improvement and optimization. This is tied to having a clearly defined mission and vision because - whatever the metrics are - they should be intentional and accurately align an organization's activities to its desired outcomes. For example, if an organization's mission is to increase access to healthy, culturally appropriate food, then its metrics may be tied to nutritional value and end recipient satisfaction. An analysis of these metrics will highlight service gaps, donation deficits, and other areas for improvement. Metrics help an organization objectively assess and evaluate if they are making progress, if that progress is still relevant to their overall mission and vision, and if there is the potential to grow their impact.

Additionally, it is equally important for organizations to determine the most effective way to track metrics and which tools they may need. To this day, organizations keep a lot of critical data on paper or in disparate places across a computer network, which can make analyzing data and reporting impact challenging. There are multiple technology platforms and other tools available to enable guick and accurate tracking of metrics.



Case Study: Food Donation Connection



Food Donation Connection (FDC) supports foodservice companies and restaurants - such as Olive Garden and The Capital Grille - across the globe with the development and implementation of food donation programs. Having started in the early nineties before SaaS companies, cloud storage, and ubiquitous digital communication (the period when eSignatures for donations were not accepted by the IRS), FDC needed to transition from spreadsheets, paper documents, and physical signatures to continue safely and efficiently tracking donors' tax data and report on tax savings. They decided to implement a customer relationship management system that is now the backbone of their operations. It tracks food donors, food agencies, and information on donations. FDC also hired a team of 26 full-time employees to provide customer support to food donors on a range of topics, from donation status to tax-saving information.⁹

⁹ReFED. 2019. Accelerator Expert Network Knowledge Series. Food Donation Connection: How a Pioneering Entrepreneur Built a Food Recovery Business Model Based on Tax Donation Incentives and the Guarantee of Safe Food. Web. https://www.refed.com/downloads/accelerator-expert-network-knowledge-series/Bill-Reighard-Food-Donation-Connection.pdf.

DEVELOP ROBUST FOOD SAFETY PROCEDURES AND EDUCATE DONORS ABOUT LIABILITY PROTECTION

Across the broader food industry, food safety - specifically food quality and safe handling - has always been of the utmost importance. In the case of food donation, donors have consistently expressed concern around legal liability. However, while there are laws and regulations that businesses must follow to ensure food safety, food donations are generally exempt from liability, as food donors are protected by the Bill Emerson Good Samaritan Donation Act. The Act, which has been in place for more than 20 years, provides liability protection for food donors when food is donated to a nonprofit organization. (See pg. 39 for more details on food safety laws and liability protection policies.)

Nonetheless, to allay any hesitancies, some food recovery organizations set up agreements that clearly establish that the food recovery organization will own all legal liability once they accept the donated food. They are also prioritizing the health and safety of end recipients by implementing food safety procedures into their operations.

The most successful food safety procedures are typically robust, logical, and transparent and accompanied by a culture that values food safety. Key food safety factors that should be taken into consideration when developing procedures are sanitation, temperature, and the regulatory landscape. Additionally, food recovery organizations have an opportunity to work with food donors and agencies to put controls in place to prevent contamination of food and spoilage. By actively managing specific operational risk factors, organizations can make it far less likely that foodborne illness will impact end recipients. This includes accepting donated food from safe sources that have implemented proper time and temperature control procedures; ensuring that equipment, contact surfaces, and packaging meet or exceed acceptable sanitary standards; and working with employees to make sure they do not become a source of contamination by emphasizing the importance of hand-washing and minimizing bare hand contact with unpackaged ready-to-eat foods. Designating a specific individual to be in charge of overseeing food safety procedures and incentivizing food safety in employees' performance evaluations are also recommended to demonstrate that it is taken seriously. Upon developing stringent food safety procedures, implementing training sessions and clear communication with partners on those procedures are key to executing them properly.



"Food, and the environment in which it is produced and prepared, is not sterile. While food systems are not perfect, individuals and organizations can make them safer. If we embrace a culture where doing the right thing is routine, it doesn't have to be difficult to keep food safe and abundant."

Kevin Smith | Senior Advisor for Food Safety, Center for Food Safety and Applied Nutrition, U.S. Food and Drug Administration

Case Study: Three Square and Peravan



Three Square is a food bank in Southern Nevada with a mission to provide wholesome food to hungry people, while pursuing a hunger-free community. As part of a partnership with MGM Resorts, Three Square has been collaborating with Peravan, a Las Vegas-based fabricator of refrigerated vans, to design a first-of-its-kind Mobile Blast Chiller. This vehicle rapidly cools hot prepared food while in transit, which efficiently and effectively improves the food safety for donated foods.

Helpful Resources

Here are recommended resources on food safety and liability protection:

- Harvard Food Law & Policy Clinic's <u>Food Safety Regulation & Guidance for Food Donations:</u>

 <u>A Fifty-State Survey of State Practices</u>
- Feeding America's <u>Donating Unsold Food</u> –
 A Primer on Liability, Food Safety & the Good Samaritan Act
- Feeding America's <u>ServSafe Food Handler Guide for Food Banking</u> made in partnership with the National Restaurant Association
- National Restaurant Association's ServSafe Food Handler Online Resources

CROSS-CUTTING TOOLS

ReFED supports the use of technology and human-centered design as key enablers for food recovery organizations' ability to scale.

Technology

Through the Accelerator, technology, such as software and web-based applications, was identified as a tool to drive the efficiency that is critical to helping organizations scale and grow impact, but it should not be considered a "silver bullet" solution. Regardless of an organization's use of technology or their stage of development, the work always starts and ends with people.









"I'm constantly reminded that technology is not a solution. It's the people doing the work. The technology just makes it easier. We shouldn't lose sight of the people doing the work."

Justin Block | Managing Director of MealConnect, Feeding America



Many organizations have found technology incredibly helpful, but only when the design and use is intentional and thoughtful. Intentionality is a key factor, because the technology that is incorporated will have implications today, as well as five or ten years from now. Technology that has been proven to be a value-add for organizations often has the following aspects:

- It is flexible. Ideally, the technology can grow and adapt alongside an organization's processes. It is designed with an iterative approach that constantly checks in with the end user and product developer to make sure that the technology is performing according to the organization's needs.
- It drives efficiency. The technology should remove non value-added time and activities in the long-term. To ensure this, it is helpful to build a baseline of what the technology must be able to do to replicate current labor- and paper-intensive systems that are essential to operations, as well as accomplish any identified future use cases.
- It takes into account the end user. When considering technology, it is beneficial to have the systems tested by the individuals that will be using them and have them identify glitches and potential issues in order to determine ways for the technology to be improved. It is also beneficial to have an onboarding methodology that incorporates change management principles, as sometimes new systems are faced with resistance by those who will be using them.
- It is designed with outcomes in mind. When developing or choosing a technology to use, it is helpful for organizations to think through what it is they are trying to achieve with the technology, how it advances what they are currently doing, and how it will be operationalized.
- It gathers data. When data collection based on the organization's metrics is a byproduct of technology usage, the information gleaned could be used to recalibrate how resources are being allocated and used. On a larger scale, it would ideally help determine what surplus food is available, identify organizations to pick it up, and determine to whom it could be donated in order to drive better coordination and communication across the food recovery sector.

There are tremendous opportunities to be realized through technology. For example, food donors do not usually know where donated food ultimately goes, but blockchain technology could contribute to better traceability. This would document a chain of custody detailing where the food has been by securing data and information from customers. Cold chain technology could also help ensure that food is handled safely during distribution, preserving perishable foods at the appropriate food safety temperatures.

Case Study: Boston Area Gleaners



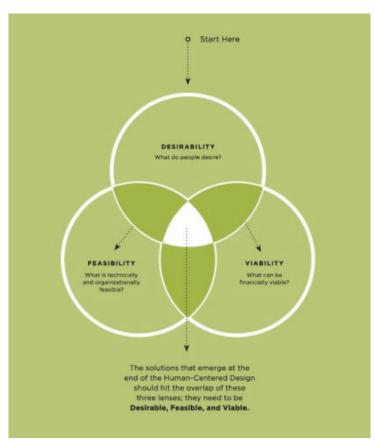
In response to COVID-19, Boston Area Gleaners (BAG) partnered with Forager, and together, the organizations launched and successfully completed a pilot for a technology solution that connects farms to BAG's network of hunger relief organizations. This technology solution has opened new avenues for farmers to sell surplus, providing more incentive for planting and harvesting. Through the platform, BAG is creating an alternative wholesale market allowing them to sell fresh produce in low-income neighborhoods at low prices.

Human-Centered Design

Any given individual, family, or community may be facing hunger for a variety of reasons, and it can be challenging to pinpoint the exact root causes. Issues can arise when assumptions are made about what those driving factor(s) might be and what end recipients need or want. Incorporating human-centered design into all aspects of their programs and services can help recovery organizations consistently keep the perspectives, needs, and experiences of the end recipient front and center.

Incorporating human-centered design into an organization will likely require a mindset shift, as well as a new set of questions to consider when making decisions. For recovery organizations, this means viewing their service and/or products as both a way to get nutritious and delicious food into the hands of those in need, as well as a solution to a problem that a food donor is facing. It also pushes organizations to determine whether or not they are offering the variety of options that the end recipient needs, how they can take into account dietary restrictions or preferences, and what they can do to ensure that they are not sacrificing dignity and choice for pure logistical ease.

One tangible way to incorporate human-centered design in an organization's operations is to have direct conversations with end recipients, similar to the Accelerator's "Voices from the Field" workshop, where the cohort spoke directly to individuals facing food insecurity. Similar outcomes could be realized through a community council composed of individuals who are or have experienced food insecurity. Hiring people who have been part of a community fighting hunger is also beneficial, because as part of the broader team, they can help bring that unique perspective and lens to the work. Additionally, conducting a demographic analysis of the communities being served is a useful way to help determine if there are more culturally appropriate foods that could be provided.



Source: IDEO's Human-Centered Design Toolkit

Helpful Resources

IDEO developed <u>The Field Guide to</u> <u>Human-Centered Design</u>, which offers 57 design methods and case studies of human-centered design in action. The Field Guide is one of IDEO's teaching tools on human-centered design with the social sector. Learn more at <u>Designkit.org</u>.

¹⁰ J. Valkevich. 2020. Scaling Food Recovery Efforts through Sustainable Business Models: Lesson learned from 10 innovative nonprofit teams participating in +Acumen-ReFED Food Recovery Accelerator. Web.

Case Study: Plentiful



Plentiful is a collaborative initiative between City Harvest and United Way of New York City, with food insecure New Yorkers as the focus. Instead of showing up and waiting in line at a food pantry, people facing food insecurity can use the Plentiful app to make reservations to pick up food, as well as receive communications to stay aware of changing conditions at pantries. As hundreds of food programs across New York City have adopted Plentiful, they have eliminated lines, reduced data redundancies, and created access to real-time service information so more food can be recovered and delivered effectively; helping millions of individuals and their families access food in a convenient and dignified way. Since the completion of the Accelerator, Plentiful is expanding their operations and moving to a new, larger location. They have also started working with their first pilot site outside of New York City in Bellingham, WA, and are aiming to have three additional pilots by the end of June, 2020.

During COVID-19, Plentiful saw a 62% in client SMS interactions as well as a 474% growth in pantry Mass Messages between March 26th and April 2nd. They also received urgent outreach from food banks across the country, including Seattle and Chicago, and from the Feeding America Network. As an immediate response, they added additional database capacity, server capacity, and Twilio phone number capacity, as well as explored direct delivery components.



"The focus has to be on the end user and how this food product creates nutritional value for them. That changes the model that exists today for a lot of nonprofit organizations, because they frame it in terms of helping corporations deal with the excess food they have. That's not how to frame the solution. The framing should be: how do we get nutritious and delicious food into the hands of the food insecure?"

Thomas McQuillan | Vice President of Corporate Strategy, Culture and Sustainability at Baldor Specialty Foods, Inc.

SYSTEM-LEVEL CHANGES

Fully realizing the opportunity to increase the amount of food rescued annually also requires system-level changes, especially in terms of food safety rules and policy changes.

Currently, the regulatory system for food, and retail food in particular, is patchwork. The U.S. Food and Drug Administration maintains and manages a site about adoption of its food code, but there are differences in every state. In some locations, state agency employees conduct inspections, and in some states, food safety rules are enforced by county jurisdictions. For example, in California, the county agencies are central to the oversight of food safety for grocery retailers and foodservice. In the state of Washington, state agencies are actively engaged with each of the counties that provide direct oversight of food safety. For food recovery, the decisions around food safety and enforcement strategies that may impact food donation are often made at the state level but are frequently administered at the local level. For organizations, it may be useful to speak with the city or county health department where they are operating to better understand what is required. ¹¹

In the future, there could be value to setting goals for national uniformity, so that all organizations have the same food safety standards and can understand them better. Additionally, with the emergence of multi-state players like DoorDash and UberEats, there will likely be pressure to acknowledge their role in food recovery in many places around the country. The extent to which such operations adopt sound food safety practices could influence the degree to which regulation is necessary.

Many policy changes have emerged over recent years. For example, in the last Farm Bill, there were many food waste provisions for the first time. One is the creation of a liaison position within the U.S. Department of Agriculture to work on food waste and food recovery and be a central point of knowledge and outreach for businesses and nonprofits. Another is the creation of a local compost and food waste reduction pilot, which would essentially be a grant program to fund localities in ten states to develop and launch compost planning or food waste reduction plans. An emerging opportunity for food recovery organizations is the increase in organic waste bans and waste recycling laws across the country. When these go into effect, there is usually a grace period before enforcement begins, so organizations can leverage that as a way to engage with businesses that are developing plans to manage their surplus food.

¹¹ ReFED. 2019. Accelerator Expert Network Knowledge Series. Interview with Kevin Smith, U.S. Food and Drug Administration. Unpublished.

Helpful Resources

To stay up to date on policy changes, see <u>ReFED's U.S. Food Waste Policy Finder</u> as well as the Global Food Donation Policy Atlas developed by the Harvard Law School Food Law and Policy Clinic and the Global FoodBanking Network.

ReFED'S CONTINUED SUPPORT FOR THE COHORT

ReFED Capital & Innovation Team continues to provide ongoing support the cohort, as well as the broader food recovery sector, through the following activities:

• Funding and Pilot Opportunities

Connecting cohort members to funders that have an aligned mission and approach and initiating conversations between cohort members and prospective partners where there is a high potential for a pilot or partnership

Mentorship

Speaking with individual cohort members to understand their progress, as well as where they need support, and to provide any feedback or insights. Introducing cohort members to appropriate subject matter experts, funders, and other leaders in the food waste space based on the organization's needs

• Brand Exposure

Continuing to promote the impact of cohort members through ReFED's physical presence (e.g., conferences, events), virtual presence (e.g., social media channels and webinars), and thought leadership (e.g., blogs, reports)

Moreover, with the upcoming release of its Insights Engine, ReFED will offer best-in-class data, insights, and analyses to support cohort members in refining their metrics and identifying future funding streams, partnership opportunities, and other ways to grow impact and drive a dignified food recovery system. These pieces of information will be critical as the food waste space continues to evolve and impact food recovery and donation.









KEY ACTIONS FOR STAKEHOLDERS TO PURSUE NOW TO DRIVE IMPACT



Food Recovery Organizations

Food recovery organizations can begin to assess their work and activities within each of the eight recommended best practices highlighted in the Report and examine how they have been leveraging the cross-cutting tools. From there, organizations can identify opportunities to improve and the right best practices to implement. Additionally, if a food recovery organization is not currently in ReFED's Solution Provider Database, they can join in order to stay up-to-date on potential growth and networking opportunities.



Food Businesses

Food businesses like manufacturers, grocery retailers, foodservice companies, and restaurants can assess how food recovery fits within their overall food waste reduction strategy and what their non-negotiables would be to engage in food donation. This could be done internally or by a third-party diagnostic partner which assesses the costs and benefits of implementing a food donation program. As part of the assessment process, food businesses could consider paying for food recovery services, which have traditionally been offered for free, as a way to help food recovery organizations become financially stable and in recognition of the valuable service being provided to food donors. Collectively, food businesses can also shift the framing of food donation to be an opportunity to support the communities in which they operate from the commonly held perspective that food donation is a liability.

Additionally, food businesses could explore how their existing assets and in-house knowledge, like data, backhauling, and technology, could be leveraged and shared to further reduce food waste and scale food recovery.



Funders

Public, private, and philanthropic funders could explore how the investment types available at their disposal can help grow the impact of food recovery.

Philanthropy specifically can be used to fund system gaps, address system failures, and encourage long-term behavior change among key groups. It can also help to underwrite the costs of an initiative that might be deemed too risky. As such, funders have an opportunity to potentially play an initial catalytic role to support earlier stage or emerging food recovery organizations and projects to get off the ground.



Potential Enablers

Currently, there are several potential stakeholders that could further enable the food recovery sector, like those in the technology and logistics industries. Companies in industries such as these could explore how their existing products, infrastructure, knowledge, and other assets could be applied to this space.



ADDENDUM: THE IMPACT OF COVID-19 ON THE FUTURE OF FOOD RECOVERY

On January 21, Washington State reported the first case of COVID-19 in the U.S. Later that week, several other states reported initial cases. By March 15, all 50 states had declared a state of emergency; more than half had closed public schools; and several states placed restrictions on restaurants, bars, and "non-essential" businesses like theaters, gyms, and malls. In the following week, the U.S. came to a near standstill.

The coronavirus pandemic has caused extensive changes to the entire food system, creating new barriers as well as highlighting challenges and disparities that were already there. During the outbreak, food recovery organizations, including the Accelerator cohort, have played a critical role, as demand for food assistance skyrocketed. School closings across the nation meant that many families who relied on free or subsidized school meals to feed their children were in greater need of food donations, and the millions of Americans who lost their jobs due to economic disruptions began turning to food agencies for emergency food relief.

At the exact moment that more Americans started turning to food recovery organizations and food agencies, the food recovery organizations themselves were dealing with significant volunteer shortages, unpredictable food supply, and a decrease in funding and revenue.

Initially, there was a much higher amount of food being donated due to the sudden closure of food businesses in the hospitality industry. On March 16, City Harvest in New York City – which would typically receive 10,000 lb of food from restaurants weekly – collected nearly 36,000 lb of food from 50 restaurants over the course of four days. In other instances, food recovery organizations, especially those that depend on grocery retailers as their primary food donor, were seeing a dramatic decrease in donated food. With consumers stocking up on toilet paper, bread, frozen food, protein, and any other essentials that were available, grocery retailers no longer had excess food, nor the time to donate it.²

In response to these new obstacles, coupled with the need to increase safety measures, food recovery organizations began hiring full-time staff members and purchasing food, as well as masks, hand sanitizers, and other essentials to serve those impacted by COVID-19. These new costs, combined with the need to ramp up operations, the cancellations of fundraising events, and/or a decrease in revenue, meant that organizations were depleting their resources at an accelerated rate, shortening their runway and resulting in an immediate need for funding. Even with the emergence of relief funds and \$3 billion in the federal relief package for the USDA to buy and distribute food to food banks, the enormous need for emergency food supplies was insufficient as recipient lines grew longer and longer. To help address remaining needs across the ecosystem, ReFED launched the COVID-19 Food Waste Solutions Fund to quickly deliver vital funding to mid-sized organizations across the U.S. that could rapidly scale food waste reduction and hunger relief efforts, with a particular focus on the rescue of fresh, healthy food from farms and dignified, convenient last-mile delivery to the increased number of Americans facing food insecurity.

¹² Kulish, N. New York Times. April 2020. Web. https://www-nytimes-com.cdn.ampproject.org/c/s/www.nytimes.com/2020/04/08/business/economy/coronavirus-food-banks.amp.html

The new challenges resulting from COVID-19 have provided additional examples of how the tools and best practices covered during the Accelerator and in this Report – including human-centered design, technology, and strategic partnerships – can be deployed and leveraged to increase organizational resilience. For example, organizations like Replate focused on human-centered design when they instituted contactless deliveries to prioritize the health and safety of end recipients. Others have developed new programs to serve those impacted by COVID-19, like Rethink Food NYC, which partnered with Chef Daniel Humm of Eleven Madison Park to transform their establishment into a community kitchen that creates 3,000 meals daily to feed those affected by the pandemic. In other instances, food recovery organizations started their own relief fund. Brighter Bites created the COVID-19 Emergency Response Fund in an effort to ensure that families are able to access healthy, nutritious food. They have partnered with retail and online grocers and have provided \$25 in grocery vouchers to families in their network to redeem on fruit and vegetable purchases.

Technology has also been critical during the pandemic, especially for last-mile deliveries. For example, Postmates, which provides on-demand logistics services, rolled out a nonprofit delivery fulfillment resource, enabling nonprofits to use Postmates's fleet of drivers to deliver supplies and food. Additionally, Postmates joined the "Feed Hero Nurses" campaign, completing free delivery to hospitals in Santa Monica. Additionally, the technology of Accelerator winner Plentiful has proven to be transformational for its partners during the pandemic and has been in high demand. Specifically, the online reservation system helped agencies adjust their service modalities to ensure safety for all staff and clients, and the messaging function was critical in enabling partners to communicate service changes, safety protocols, resources, and health guidance to end recipients.

Although the impacts of COVID-19 on the food system continue to unfold, the best practices and tools highlighted in this report can be used to evolve operations that reflect our new reality and ultimately serve those facing food insecurity and hunger with efficiency and compassion.









