The Food Recovery Landscape in Washington, DC

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I. Summary

The goal of this study is to understand the food recovery and distribution landscape in urban Washington, DC. The study determines the range of food recovery and distribution organizations operating in the city, their partnerships, and the specific strategies they are using to be successful, as well as challenges they face. Public education, outreach and government policies play important roles in this environment and were included as well. While the long-term goal of the study is to document and assess in detail each ward of the city, this initial sampling is a snapshot of the landscape. As with many research projects, the research revealed a more complex landscape than was anticipated, which, in turn, implies a system that deserves further study and scrutiny.

II. Research Methods

Determining the extent of food recovery in a city is a geographic *and* quantitative *and* organizational problem, dependent on locations and numbers but also on partnerships, technology, and personalities. It required a multi-faceted type of research that involved, primarily, the following methods:

- Arc-GIS mapping allowed for layering of geographic areas, income averages, food distribution locations, food recovery sources.

- Data sheets were utilized to track organizations recovering and distributing food, their locations, amount of food recovered, number of people served, partnerships, directors and contact information.

- Interviews proved to be a valuable and appropriate method of research for the details of determining organizations partnerships, challenges and their particular strategies for success. Leaders of organizations and initiatives were most often the ones interviewed; the interviews were 30-60 minutes in length. The goals of various organizations, as well as the motivations and personalities of their leaders, shape food recovery in Washington, DC. Of particular interest were the organizations' partnerships and the limitations, challenges and benefits of those partnerships.

- Oral Histories: Interviews were structured similar to oral histories and broken down into different sections: introductory questions, personal history and goals, partnerships, general quantities recovered and distributed, policy, food safety. Questions changed depending on the organization–its size, whether it was involved in recovery, redistribution, education or some combination. Interviews were transcribed and interviewees' responses categorized to create research sections, allowing preliminary deductions and conclusions to be made. Particular quotes were helpful to illuminate specific problems of certain organizations and directors' focuses.

III. The Food Recovery Landscape–an Overview

Figure 1 - ("EPA Wasted Food Scale," 2023)

Food recovery, which aims to prevent excess food from being discarded, encompasses various approaches and offers diverse advantages to society, the economy, and the environment (University of Arkansas School of Law, accessed, December 25, 2023). The most effective approach to food recovery entails gathering nutritious yet *unused* or *unsellable* food items for distribution to those who need it. The EPA's new Wasted Food Scale (Figure. 1) highlights what the EPA assessed to be the most important aspects of limiting food waste. Donating food is highlighted as the second most effective method of preventing food waste. "Wholesome food that goes unsold or uneaten can be rescued, donated, or redistributed to feed people. Donating food is one of the most preferred pathways because it ensures that food and the resources used to produce it are not wasted" and that it is used for its intended purpose, "to nourish people" ("Wasted Food Scale," 2023). The EPA's insightful analysis communicated through the Wasted Food Scale emphasizes the critical role of donation as a key strategy in minimizing food waste. By prioritizing the redistribution of wholesome food to nourish those in need, waste is mitigated, and food sustains individuals and communities.

Food recovery organizations encompass a range of different entities, including food pantries, food banks, educational organizations, policy-focused organizations, restaurants and grocery stores. Local governments and universities/schools can also be included in this list, as they can promote food recovery within particular jurisdictions. While food recovery in Washington, DC is largely interconnected, many of the organizations operate with distinct missions and strategies, tailored to their specific roles in the community. This diversity in approach allows for a more

comprehensive and effective response to food waste and hunger, ensuring that surplus food reaches those in need through various channels.

I want to begin this section with a note about my personal experience in food recovery. In 2020, as a sophomore at American University, I worked with two other students and started a chapter of the Food Recovery Network, a national organization of 200 chapters that brings together college students, farmers, food suppliers and local businesses. The organization fights "against climate change and hunger by recovering surplus food from across the supply chain and donating it to local nonprofit organizations that feed people experiencing hunger" ("Food Recovery Network," n.d., accessed September 21, 2024). As President of the AU chapter in 2021, I established it as an on-campus organization, recruited volunteers and recovered food from on-campus coffee shops and markets. Recovered food was, and continues to be, distributed to off-campus partner organizations such as Northwest Community Food, a food pantry on Connecticut Avenue, as well as American University on-campus food pantry. I facilitated partnerships with diverse groups such as the American University Police Department and the Capital Police Department, who worked with us to bring food to organizations like Northwest Community Food. In the fall of 2022, the AU Food Recovery Network chapter collected an average of 36 pounds of food a month. This is one example of the many grassroots' food recovery efforts in DC.

Initiatives, such as the one described above, whether large or small, part of a national organization or local, are all interdependent components of the city-wide food recovery/distribution system. The landscape relies on hard working volunteers and staff members of organizations in order to make food recovery possible. The organizations have different origins and different missions. For example, some of them want to combat food waste and food insecurity through food recovery; others aim to solve hunger in the city through providing meals, training, education, and better access with a social enterprise approach. Other organizations educate food consumers about food safety or advocate for shifts in food policies.

Partnerships, often built through personal relationships, are one of the major factors that make the food recovery system in Washington DC, particularly effective. Partnerships exist between nonprofits and businesses, and between institutions and nonprofits. These are supported by local policies to limit food waste and expand food recovery.

Evident from the research is the importance of communication between those involved in food recovery and distribution in DC. One of the most valuable ways this is happening is the Food Recovery Working Group (FRWG), an informal group started by Josh Singer in late 2015. To date, the group has 40 members and has proved to be an important way for organizations working to accomplish similar or complementary goals to connect with each other and discuss food recovery and waste efforts ("DC Food Recovery Working Group," 2018). I was invited by Rachael Jackson, founder of Eat or Toss, to attend several of these meetings and present this project, as well as see, first-hand, the variety of voices and organizations represented. The group includes nonprofit directors and members of governmental entities such as the Department of Energy and Environment, Department of Public Works and the Environmental Protection Agency. The group also plans city-wide education and awareness events such as "Food Waste Prevention Week 2023."

IV. Demographics and Food Access in Washington, DC

"Washington, DC is a city of 678,972 people ("U.S. Census Bureau QuickFacts: District of Columbia," n.d., 2023), and between 2018 and 2022, the median household income was $101,722 ("U.S. Census Bureau QuickFacts: District of Columbia," n.d., 2023). The population is 46.2% White, 45% Black or African American, 11.7% Hispanic or Latino, 4.7% Asian, 0.7% American Indian and Alaska Native, and 0.2% Native Hawaiian and Other Pacific Islander ("U.S. Census Bureau QuickFacts: District of Columbia," n.d., 2023. It is important to note that these percentages add up to more than 100% due to overlapping categories, as individuals can identify with more than one racial or ethnic group. The majority of the population is employed in professional, scientific, and technical services, as well as public administration. 13.3% of people in the city are living in poverty ("U.S. Census Bureau QuickFacts: District of Columbia," n.d., 2023).

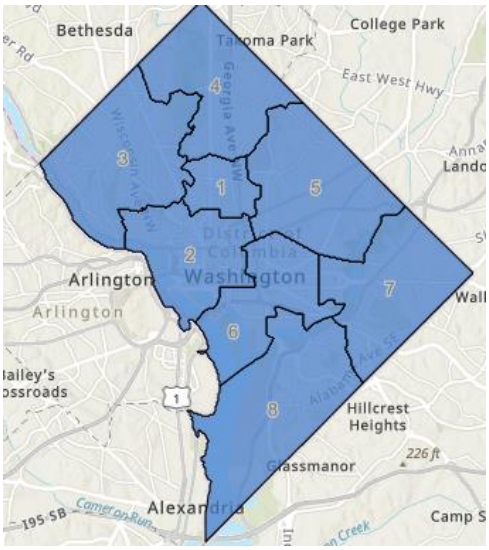

Figure 2 - ("Washington, DC Ward Map, 2022")

Administratively, the city is divided into eight districts, known as Wards. They range in size, with Ward 1 being the smallest and Ward 8 the largest. Pockets of poverty exist throughout the city but are concentrated in Ward 7 and 8 (Jensen et al. 2021, 4).

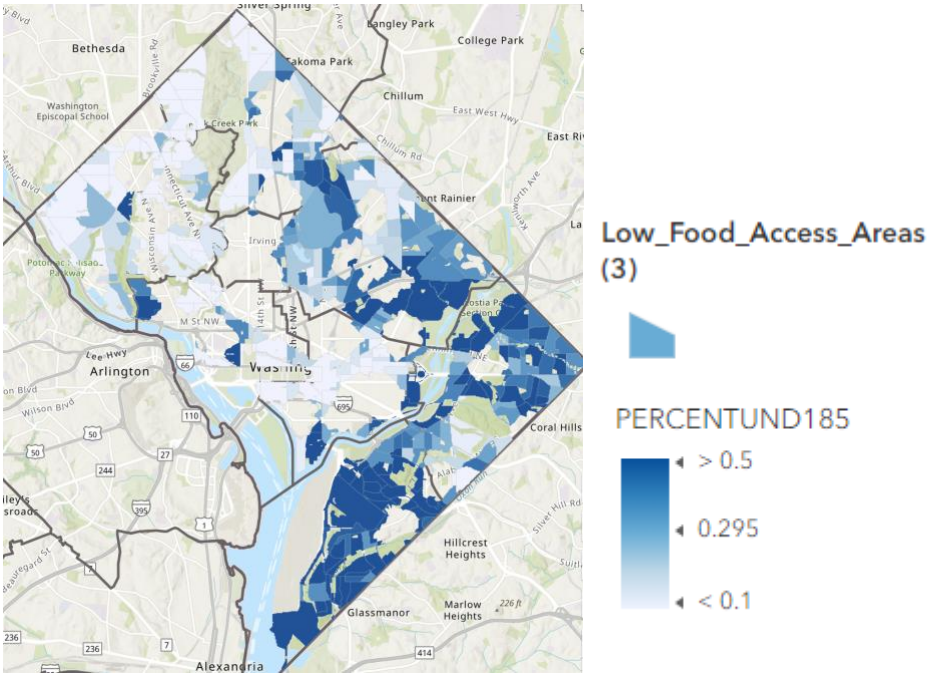

Figure 3 - Low-food access areas. ("Low Food Access Areas," 2018)

This map is used for planning and managing the city and shows the percentage of the population in each area that is food insecure, meaning they live in low-food access areas and are below 185% of the federal poverty line. In figure three the polygons represent areas in D.C. that are more than a 10-minute walk from a full-service grocery store, merged with Census poverty data. The process involved transit analysis, removing non-residential areas, and dividing Census tracts to estimate population and poverty rates within the polygons. This map shows the individuals below 185% of the federal poverty line in addition to living in a low food access area and highlights the most concentrated of this population are in Southeast DC.

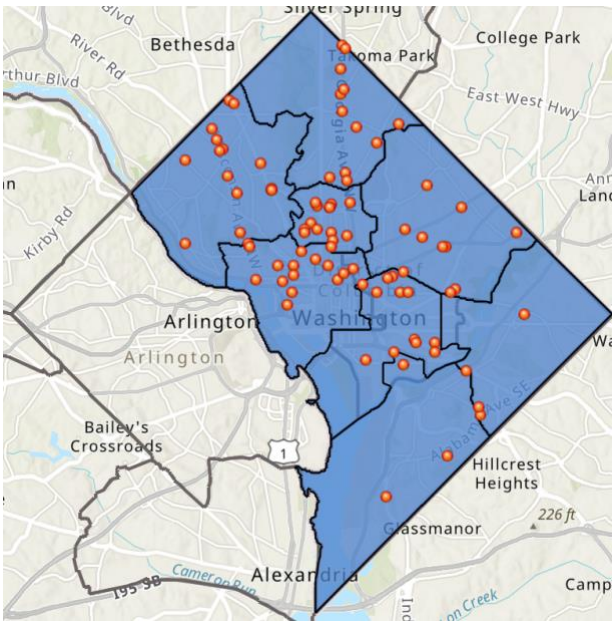

Figure 4 - ("Low Food Access Areas," 2018)

The selection criteria for identifying full-service grocery stores was based on ABRA's definition and compared to the Office of Planning's Food System Assessment list. The methodology involved analyzing business licenses, applying ABRA's definition, and distinguishing between small and large grocery stores based on square footage ("Grocery Store Locations," 2024). Additional examples meeting, or closely meeting, the criteria were included. The final list may differ slightly from other reports due to differences in methodology and exclusion of closed stores. Visual analysis and personal visits were also used to determine inclusion in the list. Additionally, figure 4 does not fully represent the impact of the COVID-19 pandemic because some of the places listed on this map are no longer in service.

The contrast in access to grocery stores between affluent areas, such as Ward 3, and underserved areas, such as Ward 8, underscores the persistent disparities in food access. It highlights the need for community involvement and collaborative efforts with local officials to address issues such as theft and violence, ensuring equitable access to essential resources for all residents of Washington, DC. As per a report by DC Hunger Solutions about grocery store access and demographics of Washington, DC, one major finding was that "Wards 5, 7, and 8 do not have significant disparities in the number of community-based food programs, such as Healthy Corner stores, farmers' markets, and community gardens, when compared with the other wards, *but still lack sufficient and reliable access to healthy and affordable food*" (Jensen et al. 2021, 4). This report shows that in Ward 8 there is only one active full retail grocery store *and* 34.2% of people in Ward 8 are living below the poverty line as of 2020.

Consider the following: In Ward 3, one of DC's richest wards, people have access to at least six full-service grocery stores, including Whole Foods, Trader Joe's, Target and Giant. By contrast, people living in Ward 8, specifically residents who live east of the Anacostia River, have access to one grocery store, Giant, on Alabama Avenue SE. The next closest grocery store is the Safeway on Alabama Avenue, 13-15 minutes by bus or a 32-minute walk. In the summer of 2023, there were rumors that Ward 8's Giant grocery store was going to shut down, citing "revenue loss from consumer theft as a major factor in the decision (Collins, Vilakazi, 2023). "The reality is that theft and violence at this store is significant, and getting worse, not better… We have invested in a host of measures to mitigate the issue at this store, and across many stores, but we also need the help and partnership from the community and local officials to truly combat the theft and violence that continues to escalate" (Gomez and Dwyer 2023). As of 2024, according to a Giant spokesperson, there are no plans to close the Ward 8 store (Gomez and Dwyer 2023).

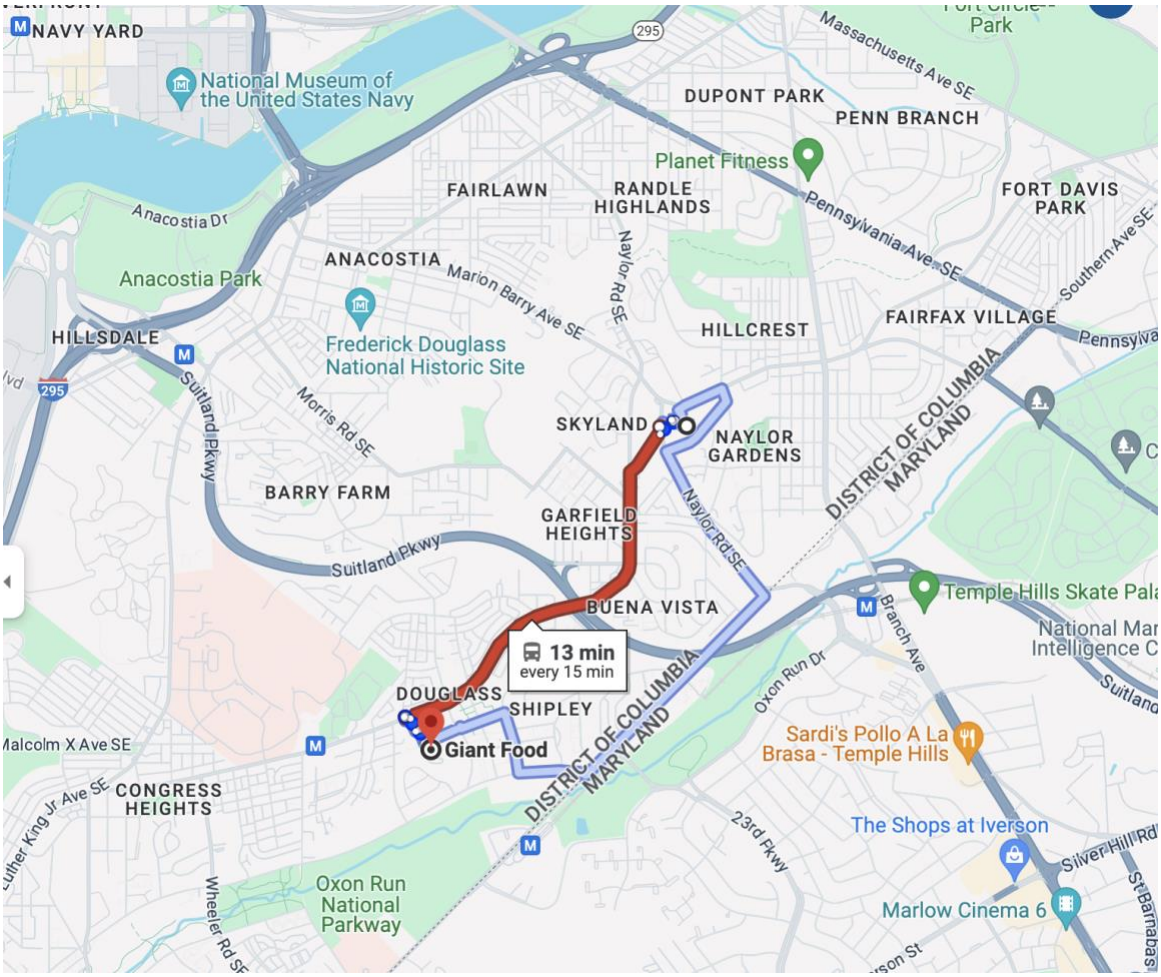

Figure. 5 - Map of neighborhood in Ward 8 where the red line depicts the bus route from the LIDL 2224 Town Ctr Dr SE, Washington, DC 20020 to 1535 Alabama Ave SE, Washington, DC 20032 to Giant Food, the nearest grocery. Source: ("Google Maps," accessed February 25, 2024).

In *Black Food Geographies: Race, Self Reliance, and Food Access in Washington, DC,* Ashante M. Reese explores Black residents' unequal access to food and the unequal food distribution system that exists throughout the United States. She discusses the history of the Deanwood neighborhood in Washington, DC., located in Ward 7. This neighborhood has the second lowest median household income of all the wards; 26.6% of individuals live below the poverty line. Reese described how she saw people, predominantly women, getting “on and off buses with plastic Safeway bags as they traveled to and from the closest supermarket, on Minnesota Avenue” (Reese 2019, p. 19). Reese's observations highlight the challenges faced by low-income residents in accessing essential groceries, emphasizing the broader implications of unequal food distribution systems in underserved communities like Deanwood.

Change in Number of Full-Service Grocery Stores and Poverty Rates in D.C. Overall and by Ward, 2021–2023

Ward	Population	Number of Full-Service Grocery Stores, 2021	Number of Full-Service Grocery Stores, 2023*	Number of Full-Service Grocery Stores in Pipeline, 2021	Number of Full-Service Grocery Stores in Pipeline, 2023	Median Household Income, 2021	Median Household Income, 2023	Percentage of Individuals Below the Poverty Line, 2021	Percentage of Individuals Below the Poverty Line, 2023
D.C.	**679,031**	**75**	**76**	**7**	**3**	**$91,414**	**$104,110**	**12.05%**	**10.06%**
1	83,885	12	13	0	0	$110,339	$126,433	11.90%	7.88%
2	83,162	12	13	0	0	$112,244	$124,728	5.88%	4.80%
3	77,813	13	16	1	2	$143,339	$157,057	2.27%	2.04%
4	83,103	11	11	1	0	$94,163	$106,634	6.78%	6.62%
5	88,965	9	6	1	1	$91,189	$102,744	7.65%	7.45%
6	106,206	15	10	1	0	$113,922	$125,555	7.89%	7.14%
7	74,561	2	4	2	0	$42,201	$49,509	23.26%	20.54%
8	73,200	1	3	1	0	$39,473	$47,421	26.61%	20.53%

*Four full-service grocery stores have opened and closed in the period between 2021–2023.

Figure. 6 - (Jensen et al. 2021, 4)

This graphic is from D.C. Hunger Solutions' report, *Still Minding the Grocery Gap in D.C. A 2023 Update,* by LaMonika Jones and Anna Simpson. The chart shows the disproportionate number of grocery stores in Ward 7 and 8, as well as the differences in median household income and individuals below the poverty line. "For purposes of this report, full-service grocery stores are defined as business establishments with a minimum of 50 percent of the store's total square footage, or 6,000 square feet, primarily engaged in retailing designated food products for home consumption and preparation" (Jones and Simpson 2023, 4). Along with grocery stores, D.C. Hunger Solutions identified other factors such as income, race, education, availability of transportation, health outcomes, ethnicity, and COVID-19 outcomes. The report offers proof of the need for support for these communities, and particularly, the need for recovery and redistribution organizations to support these communities as much as possible.

IV. Typologies of Organizations Researched

This section presents a typology of the food recovery/redistribution system, describing the various organizations involved, researched and interviewed in Washington, DC.

A. Food Pantry

A food pantry consists of a bricks and mortar distribution-based nonprofit where prepared meals or grocery-style bulk items (e.g. fresh produce, canned goods) are distributed to people or organizations that need them most ("What Is the Difference Between a Food Bank and a Food Pantry?" 2023). It is one of the oldest forms of food charity in the U.S.

1. Northwest Community Food (NWCF, formerly known as Feed the Family)

Founded in 2020, NWCF is “a volunteer-led, community-based program that grew out of the founder’s volunteer work with the Ward 3 Mutual Aid network,” (Judith Ingram, interview by Rafer Friedman, November 25, 2023). In 2021, Northwest Community Food served the needs of approximately 50 families per week; as of 2024, it serves 200 to 270 families per week. NWCF’s offerings have evolved to encompass a wide array of resources, including fresh produce, shelf-stable foods, prepared foods, bakery items, as well as cleaning supplies, essential personal and feminine hygiene products. (Judith Ingram, interview by Rafer Friedman, November 25, 2023). NWCF's core mission is to act as a support system for local residents of Ward 3 and beyond who are grappling with challenges stemming from inadequate government programs and the ongoing repercussions of the pandemic, such as rising food costs, loss of employment and income, and cuts to essential services ("Who We Are," n.d., accessed September 21, 2024). NWCF is an inclusive, volunteer-run organization. Unlike many assistance programs, it does not require individuals to provide identification or demonstrate their eligibility. Respect and dignity are fundamental values upheld by the pantry, which serves not only as a food resource but also as a communal space for neighbors to support one another, exchange advice, share networking resources, and build a sense of community. NWCF’s vision centers around a strengthened community achieved through collective efforts to advance social justice.

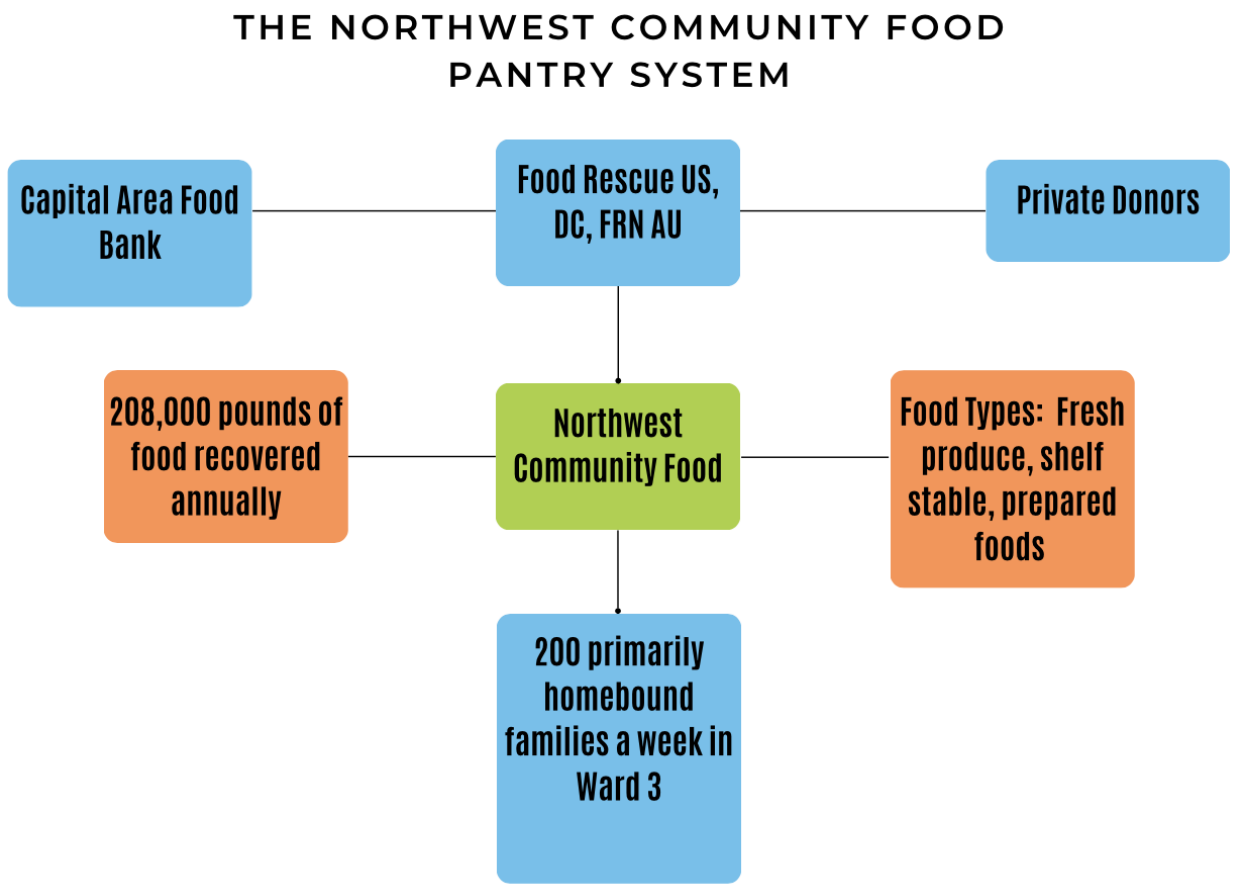

Figure. 7 - Northwest Community Food’s distribution system. (Rafer Friedman 2024)

2. DC Central Kitchen

Known as a “community kitchen” and founded in 1989 by Robert Egger as a way to fight hunger and poverty, DC Central Kitchen recovers 2000 pounds of fresh food such as bagels, chicken and vegetables per week (250,000 pounds annually) which it prepares and donates. (Amy Bachman, interview by Rafer Friedman, August 25, 2023). At its peak, it recovered one million pounds annually. DC Central Kitchen recovers food from farmers markets and restaurants, such as Bethesda Bagels, Capital Grill, and Bon Chon Chicken. These places are all weekly donors. (Amy Bachman, interview by Rafer Friedman, August 25, 2023). They also receive many one-time donations from large manufacturers looking to periodically donate products. The organization provides 2000-3000 healthy meals to community nonprofits such as Capital Area Food Bank, and 7,000-8,000 meals to DC schools. (Amy Bachman, interview by Rafer Friedman, August 25, 2023). As well as recovering food and providing meals, DC Central Kitchen provides culinary job training to individuals who have encountered obstacles in obtaining employment. This add-on is the foundation for the concept of ‘social enterprise.’ In 2001, DC Central Kitchen began the Campus Kitchens project to help get college students to become partners in the food rescue and community meal preparation initiative. (Amy Bachman, interview by Rafer Friedman, August 25, 2023). In 2008, they brought the Healthy School Food initiative which more than doubled their impact and in 2011, they pioneered the Healthy Corners project which addressed food deserts and the challenges associated with them. ("Mission & History," 2024).

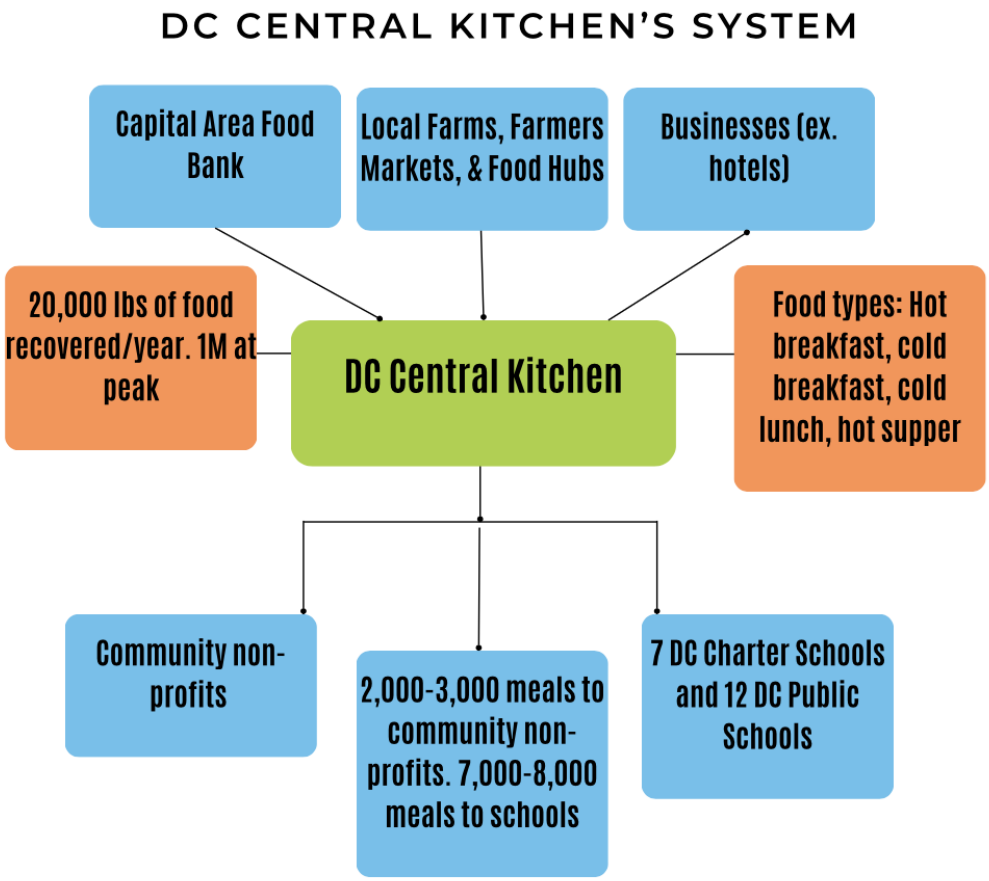

Figure. 8 - DC Central Kitchen’s distribution system. (Rafer Friedman 2024)

B. Food Bank

Food banks often operate on a larger scale than food pantries and collect and distribute bulk donations to a network of agencies, including food pantries. Food banks range in size but "regardless of size, the food they store is donated from local neighbors, retailers, grocery stores, and restaurants" (Waite 2019, 1). Food banks both big and small exist here in Washington, DC but notably the Capital Area Food Bank serves a wide array of Wards in Washington, DC. ("CAFB Hunger Heat Map," 2023).

1. Capital Area Food Bank (CAFB)

Considered to be the largest food bank in the DC area, CAFB partners with over 800 other nonprofits and over 1000 programs. CAFB employs close to 200 full time staff members and has a 21-person board of directors. They distribute enough food to create 58.3 million meals (~70.0 million pounds) of food each year, serving 53,000 individuals per week. While CAFB does solicit and accept donations of bulk food from various sources, including farms and groceries, the majority of the food they distribute is purchased. This approach ensures that they can provide the right balance of food types with the proper nutritional content to their partner agencies, such as food pantries that distribute directly to food-insecure households. The food is then distributed to food pantries and shelters, rather than being used to prepare ready-to-eat meals, with the exception of one program operated by CAFB. CAFB's recovered food primarily consists of produce, along with a variety of pantry staples such as rice, pasta, peanut butter, canned protein, frozen protein, some fresh protein, dairy goods, canned vegetables, canned fruits, and cereal" (Jake Erlich, interview by Rafer Friedman, October 20, 2023). However, the majority of the food CAFB distributes is purchased from wholesalers to ensure a balanced pantry of items with proper nutritional content. The recovered (or donated) product does not represent a fully balanced pantry. Erlich, Senior Director of Insights and Analytics for CAFB, also noted that the organization refuses donations like candy, full-calorie soda, and baked goods because they do not adhere to the nutritional wellness policy of the food bank. CAFB wants to ensure that community members who are reliant on the organization for assistance "get something that enables them to fill their pantry with dignity and respect and make sure that they can offer their families a well-balanced nutritious meal" (Jake Erlich, interview by Rafer Friedman, October 20, 2023). CAFB has used their data to support major research initiatives to measure food insecurity at the local level. Erlich maintains that "this data is essential to understanding the level of hunger that exists in the area and helps to explain the complexity of food insecurity, and what it will take to make some real headway in combating the challenges that the greater DMV region is facing" (Jake Erlich, interview by Rafer Friedman, October 20, 2023). He describes CAFB's work as "always, always, always keeping our clients, the people we serve at the center of our design" (Jake Erlich, interview by Rafer Friedman, October 20, 2023). The Capital Area Food Bank aims to serve their clients and the community.

C. Food Recovery Organization

Food recovery organizations act as intermediaries, in the sense that they are not preparing food, but sourcing and redistributing food. Through formal partnerships, a good recovery organization picks up prepared and unprepared food and brings it to a food pantry or food bank. The food they recover is often highly perishable and time-sensitive, which means that the food they redistribute is likely to be more nutrient-dense (e.g. fresh fruits and vegetables, dairy products, etc.) and often complements the efforts of traditional food pantries and banks in addressing food insecurity.

1. Food Rescue US DC

Food Rescue US is a national organization that engages volunteers to help transfer food surpluses from local businesses and distribute them to agencies that distribute food to individuals who are food insecure. Food Rescue US DC partners with over 20 organizations such as DC Central Kitchen and Sodexo around Washington, DC. Food Rescue US utilizes an app to engage volunteers and allows them to respond to the immediate needs of picking up food that would otherwise be discarded, *according to their schedules*. The Food Rescue US app is available to download for people who volunteer with the organization. The app allows volunteers to sign up to rescue food at different locations. As shown in the image below, the app "creates a schedule of local food rescues that volunteers can claim and complete" ("Food Rescue US - DC About," 2023). Apps like this make donating food much more accessible and influence volunteers to sign up.

Figure. 9 - The Food Rescue US DC app allows volunteers to sign up for food recoveries when it is convenient for them. Kate Urbank, Site Director of Food Rescue US DC, using one of Food Rescue US DC's sustainable modes of transporting recovered food. (Food Rescue US, "Food Rescue US - DC About," November 10, 2023)

2. Food Recovery Network (FRN)

Allied with, or embedded in, a university, Food Recovery Network is the largest student-led movement fighting food waste and hunger in the U.S. It began in 2011 and now has over 230 chapters across the country. In Washington, DC, there are chapters at American University (which I myself worked with), George Washington University and Georgetown University. FRN Washington DC recovers roughly 420 pounds of food per week and last year served approximately 18,000 meals to people in need ("Food Recovery Network," n.d., accessed September 21, 2024). Each FRN chapter relies on student-volunteers developing partnerships with university dining facilities, on-campus groceries and delis, and campus events from which food (prepared or near expiration) is procured

Figure 10 Food Recovery Network members donating food. (Food Recovery Network, 2024).

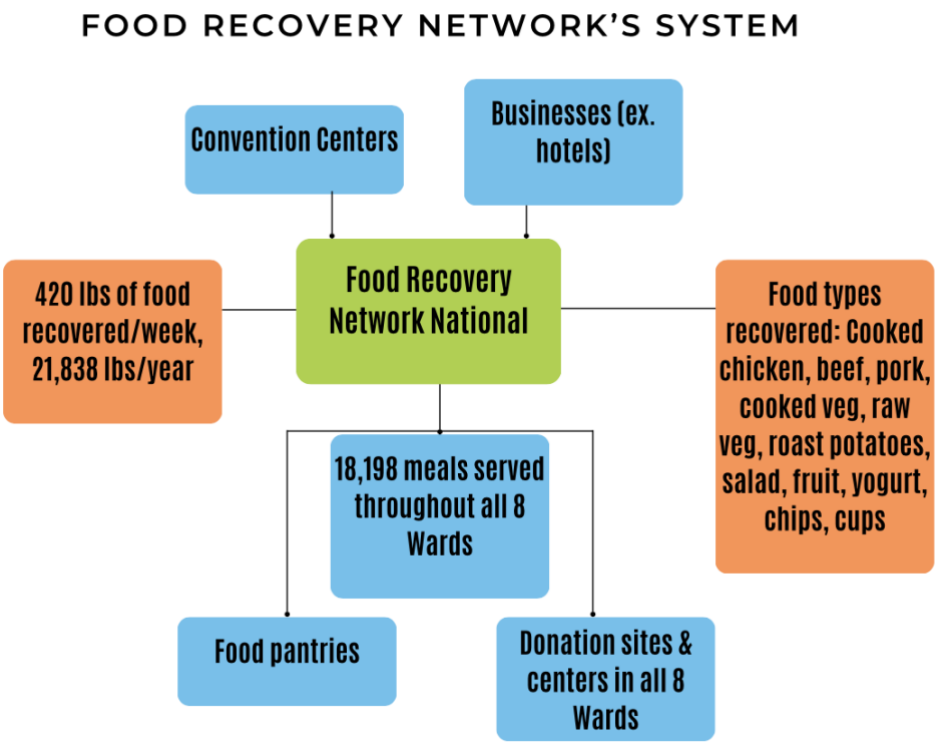

Figure. 10 - Food Recovery Network's recovery and distribution path in Washington, DC. (Rafer Friedman 2024)

3. The Farmlink Project

With the onset of the COVID-19 pandemic and the subsequent closure of college campuses in March 2020, many college students were drawn to assist those facing hardships. ("About Us: The Farmlink Project," 2024). Founded in 2020, as a student-led response to the pandemic, The Farmlink Project is composed of over 100 students from various colleges and universities nationwide, and functions as a "link" between ineffective supply chains in the agricultural and food accessibility sectors. ("About Us: The Farmlink Project," 2024). By January 2023, Farmlink rescued a total of 100,000,000 pounds of food across the US, primarily produce. Moving forward, The Farmlink Project would like to become a durable and sustainable entity dedicated to combating food insecurity and reducing food waste in the long term.

Figure. 11 - Farmlink Project's beginning in California in 2020. (Farmlink Project 2024)

4. Food Donation Connection

Food Donation Connection is a for-profit organization that manages food donation programs for food service companies. Food Donation Connection has been operational since 1992 and has facilitated the donation of more than 750 million pounds of prepared food in the U.S., Canada, Spain and Poland. ("About FDC," 2024) The organization coordinates recoveries with Harvest Programs for restaurants like Pizza Hut, KFC, Taco Bell, Whole Foods, NPC International, Olive Garden, Red Lobster, LongHorn Steakhouse and The Capital Grille. ("About FDC," 2024). Funding is sourced through the incremental tax savings that donors receive for donating their excess food, so as not to compete with nonprofits for government and private sources of funding.

D. Education and/or Policy-Based Organization

Consumer education/awareness and policy implementation are crucial for the long-term success of food recovery and, ultimately, eradicating food apartheid in Washington, DC. Education and/or policy-based organizations include a range, from small, consumer- directed, website-based organizations to large, policy-focused ones; however, the goal of education remains central to their missions.

1. Food Recovery Working Group (FRWG)

FRWG is an informal think tank for those involved in directing food recovery organizations who are working to eliminate food waste and food insecurity in Washington, DC. The group convenes

regularly and members network and share information with one another. The FRWG is made up of diverse stakeholders, including representatives from food banks, non-profits, for-profits engaged in food recovery, DC government agencies, local environmental and sustainability groups, and advocates for food recovery ("DC Food Recovery Working Group," 2018). Kate Urbank, Director of Food Rescue U.S. DC believes that the FRWG is part of what makes DC food recovery and redistribution efforts so successful. “I don't know if other cities have something as genius. I credit Josh Singer, who is a Community Garden Specialist for the DC Department of Public Works. He founded the DC Food Recovery Working Group in 2015 to convene and network people concerned about food waste in the public and private sectors. He has worked so hard to run these monthly meetings” (Kate Urbank, interview by Rafer Friedman, August 28, 2023). The purpose of FRWG is to further food recovery efforts in Washington, DC. The Working Group endorses recuperation across all tiers outlined in the EPA Food Recovery Hierarchy; this encompasses strategies like minimizing waste at its source, donating excess food, and composting. FRWG has two main goals: “Promoting food recovery programs, organizations and resources already happening” ("DC Food Recovery Working Group," 2018). Additionally, establishing new programs, partnerships and resources for Washington, DC. Urbank expressed the importance of having one large network that brought them together. Along with Urbank, others who are a part of the Food Recovery Working Group in Washington, DC such as Rachael Jackson from Eat or Toss who described the working group as “a wonderful network of people who are all working on some dimension of food recovery and reducing food waste” (Rachel Jackson, interview by Rafer Friedman, August 9, 2023). Other people like LaMonika Jones, the Director for DC Hunger Solutions, an anti-hunger organization working to end hunger in Washington, DC was not familiar with the Food Recovery Working Group but was very interested in joining. (LaMonika Jones, Interview by Rafer Friedman, September 15, 2023). While the group is quite substantial there are still more that either don't know about it or are not involved.

2. DC Hunger Solutions

DC Hunger Solutions is a policy-focused nonprofit founded in 2002 that approaches food scarcity through the advancement and improvement of public policies to end hunger. ("Our Mission," 2023). It began as an initiative of the non-profit organization, Food Research & Action Center and works to improve “the nutrition, health, economic security, and well-being of low-income District residents” (DC Hunger Solutions, 2023). Additionally, through a combination of outreach and close partnerships with social service agencies, DC Hunger Solutions promotes nutrition to decrease obesity and increase access to healthy food in low-income area and works to increase participation in SNAP and other federal nutrition programs, including school meals, early childhood nutrition programs, WIC (a supplemental nutrition program for infants, women and children), and summer meals ("Supplemental Nutrition Assistance Program (SNAP)," n.d., accessed September 21, 2024).

3. Feeding America

Feeding America is a public advocacy organization that facilitates food distributions in collaboration with local organizations but does not directly provide food to individuals ("Our History,"n.d., accessed September 21, 2024). Feeding America’s focus is to help organizations

who are fighting hunger get funding and to advocate for tax policies that incentivize nonprofit giving. ("Advocate for a Hunger-Free America," 2024). Feeding America also advocates for the Child Nutrition Reauthorization Act, which is legislation aimed at securing federal funding for programs benefiting children facing the greatest need, guaranteeing they receive the nourishment necessary for growth and education. ("Advocate for a Hunger-Free America," 2024). In 2022, the whole Feeding America network rescued roughly 4 billion pounds of food and groceries. ("Advocate for a Hunger-Free America," 2024).

4. Eat or Toss

Eat or Toss is a research-based nonprofit with a mission to educate consumers about food safety. It is a virtual place for "answering those really scary questions, like–is that white stuff on grapes going to make me sick?" ("Eat or Toss? Is It OK to Eat?" 2023). Founded in 2016 by Rachael Jackson, who is also the principal writer, the website is easy to use and answers many questions about food and if it is still safe to eat. In one of her most popular articles, "What if just one berry is moldy?" Jackson discusses in plain language the science behind mold on berries. Jackson's dedication to educating people about food safety is based on hard science and not only empowers them to make informed decisions but also contributes to reducing food waste and saving money. Jackson, a journalist who also writes about food for the *Washington Post*, works with scientists, researchers and professors. She sends out a free monthly newsletter to all of her subscribers and regularly speaks about food waste use science. Additionally, she started the RescueDish campaign, a movement to highlight the work brands and chefs do to limit food waste. ("About Rescue Dish," 2024) RescueDish bridges "foodie-ism and food waste reduction via work with restaurants" ("Eat or Toss? Is It OK to Eat?" 2023). Jackson's work is based on educating the public on food waste and she uses different website mediums to do that.

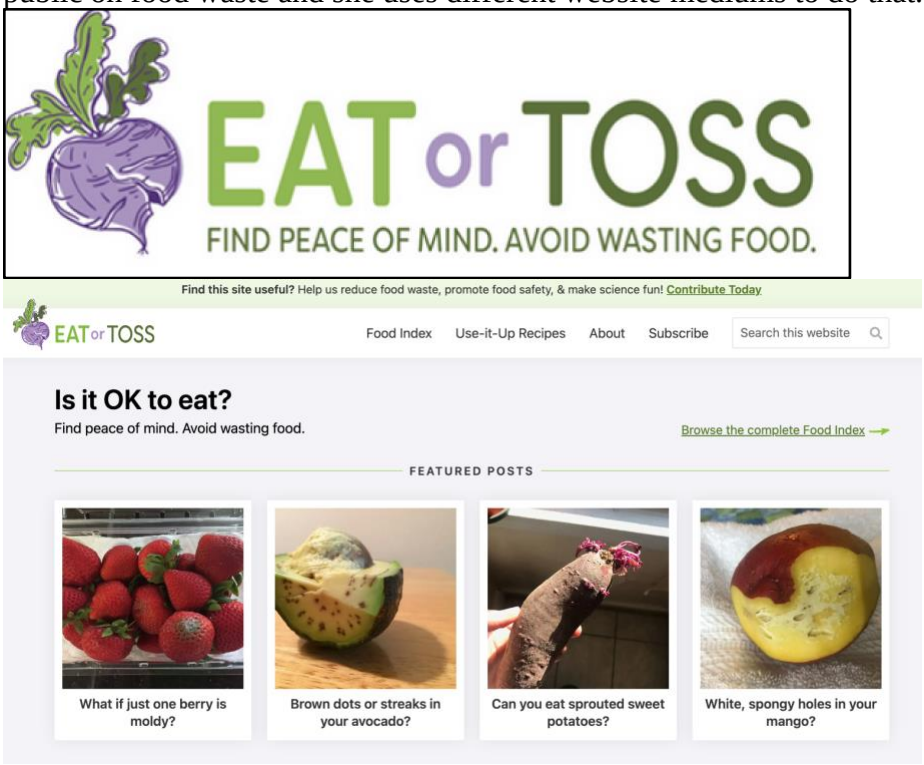

Figure. 12 - Eat or Toss's user-friendly and eye-catching website. ("Eat or Toss? Is It OK to Eat?" 2023)

5. Friendship Place

A housing service provider "for people experiencing homelessness in the DC region" ("Friendship Place," 2024). Friendship Place has customized, individually focused programs that help people to find jobs, homes and rebuild their lives. Its mission is "to empower people experiencing or at risk of homelessness to attain stable housing and rebuild their lives." (Friendship Place, 2024). While Friendship Place is not a food pantry typology, one of the core elements of its mission is empowering people who are homeless or at risk of homelessness and one of the ways this is done is by providing people with food. Their goal is "to end homelessness in Washington, DC, and to establish a sustainable model which can be replicated across the nation" (Friendship Place, 2024). According to Friendship Place's Scarlet Levy, who runs the youth development Before 30 Program, they "have the ability to fill a lot of gaps that other programs don't because we aren't restricted to HUD limits. And we support participants between the ages of 17 to 29" (Scarlet Levy, interview by Rafer Friedman, September 28, 2023). Levy's program has experienced success in different ways; for example, Levy explained that "once you turn 25, you enter into the adult homeless system, and chaos ensues, basically" (Scarlet Levy, interview by Rafer Friedman, September 28, 2023). Levy's program includes different ways to support people such as the LGBTQ work group which she is the co-chair of and said it has experienced many successes.

VI. Food Recovery Challenges I: The Practical

Depending on the type of organization, its mission, scope and size, the challenges it faces differ; however, the following areas were repeatedly highlighted by the directors of food recovery/distribution organizations.

A. Transportation

One of the most pressing challenges that exists in DC's food recovery and redistribution space is the logistics that go into recovering food, i.e. getting food that is already prepared or highly perishable to places that need it most. DC Central Kitchen's Director of Procurement and Sustainability Amy Bachman, said, "for us, as with many nonprofits, logistics and storage space have always been one of our biggest challenges. We did just move into a beautiful new building, so we've alleviated some of those challenges, but I would say logistics and the process is still always a challenge" (Amy Bachman, interview by Rafer Friedman, August 25, 2023). Bachman stressed the difficulty of "getting product from one place to the next and getting it to places that can really utilize it right away and serve it" (Amy Bachman, interview by Rafer Friedman, August 25, 2023). While Amy Bachman acknowledges the recent improvement in logistics and

storage space with their move to a new building, she highlights that the challenges of managing logistics and ensuring efficient distribution processes persist within many nonprofit organizations.

B. Storage

Storing the food before and after it is transported is a problem of space and refrigeration. According to DC Central Kitchen's Bachman, who has also heard from other groups that DC Central Kitchen partners with, "[refrigerated storage] has been a clear need that I've heard time and time again from different groups that are doing food recovery, to have space to store the food before they can find a home for it, as well as the need for refrigerated vehicles when pickups happen late at night." (Amy Bachman, interview by Rafer Friedman, August 25, 2023). Organizations like DC Central Kitchen and others have continuously expressed their desire for more food storage.

C. Food Quality

Northwest Community Food's Judy Ingram believes that donated food quality is dependent on the personnel who are donating it. Ingram explained that there are food recovery efforts that fail because food spoils due to lack of caution or too much time taken to check the food. "The fact is that some of the stuff we receive, we do throw out" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). This is due to the food not being acceptable, according to safe standards to serve. Ingram believes this could be related to a broader issue of lack of food safety knowledge on the part of donor personnel. Larger still, according to Ingram, problems with food quality may be related to lack of awareness about the importance of food recovery and the prevalence of hunger.

D. Funding

Money is an essential part of what makes food recovery function in Washington, DC or, for that matter, anywhere, and organizations' problems often stem from a lack of financial resources. When Kate Urbank, Director of Food Rescue US - DC, says that she does not have "enough personnel to be able to source all the food that's here" (Kate Urbank, interview by Rafer Friedman, August 28, 2023), demonstrating the challenges of securing a workforce with minimal funding, that is a financial problem. Volunteers are a mainstay of many of these organizations and they are relied upon to pick up time-sensitive prepared food and deliver it to pantries, but volunteers cannot be at an organization from 9 to 5, Monday through Friday. When DC Central Kitchen's Amy Bachman voices a need for refrigerated vehicles and storage for transporting and keeping perishable food, that is a problem that could be alleviated by increased funding. Jake Erlich of Capital Area Food Bank describes funding as a significant challenge faced by the Food Bank, similar to most non-profit organizations. As Erlich states, they are "Making sure we have the money we need to distribute as much food and offering the most robust suite of services" (Jake Erlich, interview by Rafer Friedman, October 20, 2023). For Erlich's analytics team, an additional challenge is gathering data and information that can be indicators of food insecurity, data that could potentially help eliminate hunger for many people. To gather that information and data, most likely, requires paid staff, again, money.

E. Bureaucracy

Capital Area Food Bank works with 11 different county governments across DC, Maryland, and Virginia and operates under the jurisdiction of three different government bodies (Jake Erlich, interview by Rafer Friedman, October 20, 2023). This differs from most other food banks across the country because the scale and complexity of Capital Area Food Bank's operations are unique. Navigating the requirements of multiple local and state governments adds a layer of difficulty to their work compared to food banks that operate within a single state.

VII. Food Recovery Challenges II: Volunteers

Partnering with other organizations, whether nonprofit, institutions for business, broadens the reach of food recovery efforts. When it comes to food recovery, partnerships function in a number of different ways, some well and others poorly.

A. Partnerships with Other Nonprofit Organizations

Managing food recovery can be complex and resource intensive. Collaboration between organizations dedicated to food recovery, such as food banks, food rescue programs and nonprofits, allows for the efficient and systematic collection and distribution of surplus food. Partnering with organizations that specialize in this work can help to simplify logistics, as they are more likely to have the experience and capacity to handle transportation, storage, and distribution.

DC Central Kitchen, Food Rescue US - DC and Food Recovery Network DC all rely on close-knit partnerships and communication with one another in order to recover the most food and feed the most people. American University utilizes a partnership with the American University Campus Police in order to deliver food to Northwest Community Food. For Urbank and Food Rescue US - DC, partnerships are especially important. Urbank discussed Central Union Mission, a social service agency that has served the district since 1884. Her partnership with them runs deep, and they have a system where they help each other obtain and distribute the food. “Sometimes we go there to pick up food that they have gotten too much of. That’s called rescuing the rescue” (Kate Urbank, interview by Rafer Friedman, August 28, 2023). Urbank explained that she has also received calls from businesses, such as law firms, that would like to donate three days a week, but for a variety of reasons, she cannot always take that food. DC Central Kitchen’s Amy Bachman explains that because DC Central Kitchen does not accept prepared food anymore, “we work with some other partners such as Food Rescue US. If it's something we can't take, we can send it to another partner who can” (Amy Bachman, interview by Rafer Friedman, August 25, 2023) Nothing goes to waste.

Northwest Community Food’s Ingram, like others, believes that partnerships are essential and said that NWCF mainly partners with Food Rescue US - DC because they “have a pretty efficient process of matching donors and recipients” (Judith Ingram, interview by Rafer

Friedman, November 25, 2023). One of Ingram's biggest challenges is finding enough drivers, and she uses Food Rescue US DC's app to do that. The app also gives donors a pathway to transfer their excess food to different social service agencies. In terms of partnerships with other organizations, Ingram believes that Northwest Community Food is fairly well connected and "has a pretty close partnership with Food For All" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). Ingram explained how they work well together, and they bring them extra food and Food For All brings them extra food as well. Ingram also discussed how organizations generally do not have excess food distribute between shelters. Northwest Community Food does deliver food and is a full partner with the Capital Area Food Bank. According to Ingram, "that gives us the opportunity to order cost-free produce, and it tends to come in really large quantities like pallets" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). In addressing operational challenges and creating partnerships, Judy Ingram of Northwest Community Food emphasizes the significance of collaborative efforts in tackling food waste. NWCF relies on its key collaboration with Food Rescue US - DC, leveraging their efficient donor-recipient matching process. However, the primary obstacle of securing sufficient drivers remains. It is a challenge mitigated through the use of Food Rescue US - DC's app, which streamlines food pickups and facilitates surplus food transfers to social service agencies.

Similar to other organizations, the Capital Area Food Bank utilizes GIS and geo-coded mapping as a tool since they partner with 750 different organizations across the DMV region. These kinds of tools help execute complex logistics. According to Jake Erlich of Capital Area Food Bank, "those 750 organizations operate more than a thousand programs" (Jake Erlich, interview by Rafer Friedman, October 20, 2023). The Capital Area Food Bank has partnerships with a wide variety of organizations, therefore, it is challenging to get data from all of them.

B. Corporate Partnerships

Another challenge that is often felt with organizations working on food recovery and redistribution is the interface with corporate cafeteria providers such as Flickr, Aramark, Sodexo and Restaurant Associates. These groups often have budgets set far in advance, and, according to Urbank at Food Rescue US - DC, even something as simple as the cost of the necessary containers for food storage is not always a part of the budget and may not be able to be added as needed. "They aren't necessarily in a position to have somebody slide up to them in the middle of the year and saying, 'Hey, would you donate?'" (Kate Urbank, interview by Rafer Friedman, August 28, 2023). A budget for food recovery may need to be included in corporate budgets. However, sometimes what seems to match up—a business wants to get rid of and therefore donate "x" food and a food recovery organization is looking for donations—is not complementary. Northwest Community Food receives donations from GoPuff, a food and drink delivery service. While NCF's guests think the food GoPuff donates is fun and interesting, there are health challenges. "Some of it we probably should not pass on, like the [stuff] with 50 million times as much sugar as anybody should have in a day" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). The issue of unhealthy food donations is not a new problem. The Center for Science in the Public Interest (CSPI), a science-based consumer advocacy organization in Washington, DC that works "to improve how the nation eats...and hold government and corporations accountable" ("Healthy Food Banking," 2023) reports that up to 42 million individuals, including 13 million children, may depend on charitable food assistance to

meet their nutritional needs. However, 25% of the food distributed by food banks consists of unhealthy foods and beverages. Many food banks in Washington, DC have put policies in place for items that they will and won't accept. In the article, "Healthy Food Banking," CSPI concluded that the "charitable food system does not align with client preferences for healthy, culturally relevant items" ("Healthy Food Banking," 2023). People who rely more heavily on the charitable food system - Black, Indigenous, People of Color (BIPOC) and people with low incomes - are at an increased risk of preventable diseases related to diet such as Type 2 diabetes and hypertension ("Healthy Food Banking," 2023). The charitable food system is a final option for those facing food insecurity.

C. Institutional Partnerships

Institutional partnerships can be helpful for nonprofit food recovery organizations, especially smaller ones, in that a large institution may provide physical space and the support of volunteer labor, such as students. The donation of such a space is difficult for a small organization to turn down. There can, however, be unforeseen problems. Priorities of a large institution and a small food-recovery organization can be very different and the future less secure than is hoped for. Northwest Community Food uses space owned by the University of the District of Columbia. "...we're hoping to negotiate further occupancy, but under the name Northwest Community Foods since we're the ones managing it…There will be a new president of UDC beginning August 1st. We'll have to see what his priorities are….So there are lots of unknowns. What's not unknown is that the need is growing. Last weekend, we had our highest number of people served yet at 251 households and it shows no sign of slowing down" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). While NCF's location in the UDC's student pantry, for the most part, works well for the operation that they are doing now, there are some drawbacks, including not having working air conditioning. "Food that we used to be able to stow for a day or two goes bad. I'm not talking about just protein like chicken or something. It's vegetables and fruit, too…it's just too darn hot in there and we don't have enough refrigerator space" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). The environment that some organizations work in is challenging, but they can distribute food and feed the community because of their strong volunteer commitment and support.

Food insecurity and low-income individuals are especially vulnerable to obesity and poor nutrition because of risk factors that are related to inadequate household resources. "This might include lack of access to healthy and affordable foods; cycles of food deprivation and overeating; high levels of stress, anxiety, and depression; fewer opportunities for physical activity; greater exposure to marketing of obesity-promoting products; and limited access to health care" ("Hunger and Health: The Impact of Poverty, Food Insecurity, and Poor Nutrition on Health and Well-Being," 2018, 6). Additionally, poverty, food insecurity and poor nutrition have dire effects for adults, children and older adults, leading to an increased risk of chronic disease and poor mental health.

D. Barriers to Partnerships

While many successful partnerships exist because of connections and developed relationships, there is still room for improvement. Food Rescue US - DC's Kate Urbank would like to see

“more synergy between the food bank system and the food rescues” (Kate Urbank, interview by Rafer Friedman, August 28, 2023). Urbank believes that more understanding around the fact that there is “a place for both of us” would be helpful (Kate Urbank, interview by Rafer Friedman, August 28, 2023). Judy Ingram from Northwest Community Food emphasized the importance of a network, “once you're in a network, it's not too hard to establish relationships and see the possibilities” (Judith Ingram, interview by Rafer Friedman, November 25, 2023). This means that establishing connections across organizations and regularly discussing what is happening within the recovery space is very important.

Food Rescue US - DC’s Urbank describes a long-term, now lapsed partnership that she had with the US Senate’s chef. “Then COVID hit, and it dwindled. I need to go back and renew that” (Kate Urbank, interview by Rafer Friedman, August 28, 2023). Urbank stressed the importance of maintaining these relationships but acknowledged the time and effort required. Maintaining strong personal connections with various stakeholders is not necessarily something that time, and money, are allocated for in a resource-constrained sector like food recovery.

VIII. Challenges III: Volunteers

Whether it is the AU police who are voluntarily transporting food from American University to nearby food pantries or individual volunteers picking up prepared food from a restaurant and driving it to a pantry or college students taking time to pick up food after an on-campus event and bring it to refrigerated storage for pick up the following day, unpaid volunteers are a crucial part of the food recovery equation. Food Rescue US - DC’s Urbank explained how her volunteers help for different reasons. “Sometimes volunteers are more driven by the waste piece and sometimes more by the hunger piece” (Kate Urbank, interview by Rafer Friedman, August 28, 2023). She believes that those two elements are interconnected. “People who appreciate that we need to do something about waste also see the extreme need for people who are hungry” (Kate Urbank, interview by Rafer Friedman, August 28, 2023). Additionally, Urbank explained how the work often serves as education because “people who didn't really realize that there was so much waste in the world are shocked by it” (Kate Urbank, interview by Rafer Friedman, August 28, 2023). Importantly, volunteer efforts can connect people and build community.

Volunteer retention in any organization can be challenging, but Urbank has seen the direct impact that her work has on people. “Whenever I get discouraged, I remember how much it matters to people. I think about people who've written in or said, ‘this has made such a difference’ and ‘you're changing lives–you and your volunteers and the work that this national nonprofit is doing’” (Kate Urbank, interview by Rafer Friedman, August 28, 2023). Volunteers are an integral part of the work of Food Rescue US - DC and, as a result, the organization has become one of the most successful local and national food recovery organizations.

Judith Ingram at Northwest Community Food said that they have about 240 volunteers on their roster, but recruiting was challenging. “We started out by me going through my “friend list” and recruiting some people from mutual aid, as well as, continually, over the couple of years that

we've been in operation, putting out calls for volunteers on local listservs" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). Ingram explained that there have been "surges" of volunteers from different DC council members' offices. "Mary Che, former Councilwoman for Ward 3, put out a couple of announcements that generated a lot of interest" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). But finding the right volunteers is not easy. Ingram said that people are not always strong enough to lift large amounts of food, therefore limiting the amount that can be recovered. Finding volunteers and retaining them are not uncommon struggles for most nonprofits and cooperation and support from political entities are essential. Volunteering for food recovery is often time sensitive which adds an additional layer of complication (Amy Bachman, interview by Rafer Friedman, August 25, 2023). The time sensitivity of food recovery and the different organizational players involved make consistency a challenge.

IX. What Is Working: Government Initiatives Involving Food Recovery/Distribution

Washington, DC has strong policies with respect to food recovery and redistribution relative to other US cities. Each year, the DC Food Policy Council identifies priorities across five themes to strengthen the District's food systems. For example, this year the themes are: Food Access & Equity, Entrepreneurship & Food Jobs, Nutrition & Food System Education, Urban Agriculture and the Sustainable Supply Chain. ReFED, a national nonprofit that works throughout the food system in order to reduce food loss and waste, suggests that it would be helpful if the DC Food Policy Council prioritized these different themes. Below are the most significant policies and programs related to food recovery and redistribution.

A. Food Safety Policies in Washington, DC

The DC government has put in place guidelines for food that is being recovered. According to the Commercial Food Donation Guide, the DC government requires prepared foods to be at a controlled temperature 41F or below for foods that are cold and 135F or above for foods that are hot. ("Commercial Food Donation Guide," 2021, 2). Frozen foods must be kept frozen solid. These types of food have a seven-day shelf life from the day that the food was made.

1. The Good Samaritan Food Donation Act of 1996

The Good Samaritan Food Donation Act provides safeguards for both donors and recipients of food donations ("United States Department of Agriculture - USDA," n.d., accessed September 21, 2024). It is important to understand that this is federal legislation and not state legislation. The legislation means that donors acting in good faith are generally protected from liability, unless their actions involve gross negligence or intentional misconduct. Similarly, nonprofit organizations that receive and distribute food, as long as it is not knowingly unfit for human consumption, are protected from liability under this law. The law does not override any state or local laws or health regulations. It also does not "apply to acts or omissions constituting gross negligence or intentional misconduct" (Buzby, 2020, 1). As per the USDA, the act covers donations by school food professionals and higher education institutions. According to the USDA, "these entities are expressly included in the definition of "qualified direct donors" in the

Emergency Food Assistance Act of 1983, as amended by the 2018 Farm Bill" (Buzby, 2020, 2). Additionally, the act covers gleaners, farmers and donations by food distributors and nonprofits, as well as restaurants, manufacturers and retail grocers.

2. The Save Good Food Act of 2018 (updated in 2019)

The Save Good Food Act establishes federal liability protections for both donors and recipients in Washington, DC. This legislation allows food to be donated, whether free or for a fee, that covers handling and preparation costs. The lack of federal consistency in food safety labeling has pushed states to regulate their own. For consumers, this means confusion and an increase in food waste. The dates on food packaging, which include “use by,” “best before,” “enjoy by,” “sell by,” and “expires on” are largely unregulated by federal law according to ReFED US Food Waste Policy Finder, with the exception of infant formula and sometimes egg products and poultry, which are more often federally regulated. Due to the inconsistency in label regulation, states differ in how they label their foods. (ReFED, 2023). According to ReED “the inconsistency in date label laws leads to food waste because consumers may discard food after the date on the package” (ReFED, 2023). This also applies to retailers and restaurants who throw out food, often earlier than necessary.

3. Food Safety Policies for Share Tables

The Food Safety Policies for Share Tables, as evaluated by ReFED, are robust and deemed effective. Share Tables, according to the DC government, are stations “for collecting and redistributing unwanted food items that are unopened and uneaten, rather than throwing them away” ("Share Tables: Guidance for DC Schools," 2018). If a student has a food item that they do not want to eat or don’t end up eating, the item can be put on the Share Table for another student to eat. Washington, DC has instituted comprehensive guidelines pertaining to the retrieval of surplus food within school environments. These guidelines encompass stringent food safety prerequisites specifically designed for Share Tables situated in school cafeterias. ("Share Tables: Guidance for DC Schools," 2018). The implementation of such measures is expected to foster increased prospects for schools to engage in food rescue initiatives, through the utilization of Share Tables as well as other methods.

4. The Food Donation Improvement Act of 2023

The Food Donation Improvement Act (FDIA) permits businesses and organizations to contribute food and limits charges to recipients to handling, administration, and distribution costs. The FDIA also facilitates direct donations to individuals in need and urges the USDA to provide enhanced clarity regarding quality and labeling standards. The foundation for this act is the earlier Bill Emerson Good Samaritan Food Donation Act of 1996. However, the act did not address donations given directly to individuals in need. According to Marissa Sheldon, writer for Hunter College of New York City’s Food Policy Center, the FDIA amends the Good Samaritan Food Donation Act by “allowing businesses and organizations to donate foods that are safe for consumption to recipients who are charged a price that is no more than the cost of handling, administering, and distributing the food, and directly to hungry individuals by a retail grocer, wholesaler, agricultural producer, restaurant, caterer, school-food authority, or institution of

higher education" (Sheldon 2023, 1). The FDIA also pushes the USDA to give further clarification around labeling and quality requirements for donated foods as this is essential to meet liability protections.

States such as New Jersey provide enhanced liability protection, according to ReFED U.S. Food Waste Policy Finder, "against state law claims by explicitly protecting food donated past a quality date label and regardless of compliance with regulations on the labeling or quality of food that are not required for safety" ("Rethink Food Waste," 2023). Additionally, the New Jersey law specifies that donors are protected when they give directly to individuals in need, rather than solely through nonprofit intermediaries ("Rethink Food Waste," accessed September 21, 2024). State laws, such as the New Jersey law, extend beyond the protections outlined in federal legislation (such as the Emerson Act). Washington, DC does offer protection, but it could benefit from expansion.

B. Financial Incentivizing for Food Recovery/Distribution

In an effort to expand food recovery and redistribution and limit food waste, as well as offset some of the costs of donating food, Washington, DC created a tax credit for food donations in 2022: D.C. CODE § 48-1806.14. (ReFED, 2023). This established a tax credit system to incentivize the contribution of food cultivated in urban farms and community gardens to local food banks. The legislation ensures that individuals and businesses in the district receive a tax credit amounting to 50% of the donated food's value, with limits set at $2,500 for individuals and $5,000 for businesses. (ReFED, 2023). This local law aligns with the broader federal strategy to promote food donations through tax incentives. Starting in December 2015, a range of businesses, including C-corporations, S-corporations, LLCs, partnerships, and sole proprietorships, qualified for a tax deduction greater than the donated food's original value, contingent upon meeting specific criteria. (ReFED, 2023). In cases where businesses fail to meet these criteria, they can still claim a standard tax deduction equivalent to the donated food's original value. Washington, DC repealed the credit in 2021.

In 2018, the DC Council sanctioned novel tax credits targeting food donations by taxpayers residing within Washington, DC. ReFED's evaluation concluded that this policy lacks efficacy due to the lack of funds allocated for the associated tax credits. ReFED's recommendations include: allocation of financial resources to the tax credit incentive program; increasing the appeal of the initiative by expanding tax deductions or credits for individuals who participate in food donation or waste diversion, therefore decreasing the financial burdens linked to donation, including transportation costs; and finally, the introduction of a tax credit geared to farmers engaged in food donation.

C. Beyond Food Recovery: Minimizing Food Waste

Organic waste reduction is a priority of the DC government, which already allows residents to take their compost to one of ten drop-off sites in the city. Recently, the city launched an optional curbside organics collection pilot program for over 9,000 households. (Quinn 2023). Residents with DC recycling and trash services may sign up for the program. The one-year pilot program,

awarded to Compost Crew, was initiated in September 2023. Grants and incentive programs that are related to food waste reduction are initiatives that promote small scale composting as well as new financing approaches. These approaches ultimately can be used to further the Washington DC's waste reduction efforts. ReFED recommends creating a free technical assistance program to assist businesses in adhering to the organic waste ban. ReFED also urges an expansion of the grant programs to offer more funding, specifically for food waste reduction initiatives and efforts.

Food Waste Innovation Grants in Washington, DC have provided support for food manufacturers, restaurants, shared commercial kitchens and commercial corridors, such as main streets and business development districts. This is all to help limit the food waste headed to landfills and decrease urban rat populations. According to the DC government website, "this will help businesses meet the goals of Sustainable DC and the future requirements of the Zero Waste Omnibus Act while reducing costs in both food purchasing and waste disposal expenses" ("Food Waste Innovation Grants," accessed February 28, 2024). Businesses eligible for these grants must be licensed and have less than 25 full-time employees. Some nonprofits have also been eligible for the grants, but they need to be supporting multiple businesses that are eligible. The District planned to give out between 10 and 25 grants from the $300,000 available for direct grants.

Northwest Community Food's Judy Ingram hopes that the DC Council will make it more challenging for businesses to throw out food. Ingram recounted driving through the alley behind Target in Cleveland Park late on a Saturday afternoon and said, "you're likely to find perfectly good stuff that's been thrown out to make space on shelves" (Judith Ingram, interview by Rafer Friedman, November 25, 2023). Ingram also said that if you look at dumpsters on the weekend behind businesses, "it is very upsetting and shocking how much food is thrown out." (Judith Ingram, interview by Rafer Friedman, November 25, 2023). This has been an ongoing issue Ingram has seen at large retailers. Her observations underscore the urgency for the DC Council to enact measures that discourage businesses from discarding edible food.

X. Conclusion

In conclusion, this study provides an overview of the food recovery and distribution landscape in urban Washington, DC. Through an examination of existing organizations, partnerships, specific strategies, and challenges faced in food recovery and redistribution efforts, the research sheds light on a complicated system that warrants further scrutiny. While the ultimate goal is an in-depth assessment of each ward in the city, this initial sampling serves as a valuable snapshot of the current state.

Washington, DC stands out among US cities because of its robust policies around food recovery and redistribution. These findings highlight the significance of public education, outreach, and government policies in shaping the food recovery environment. The annual identification of priorities by the DC Food Policy Council, focusing on themes such as food access and equity, underscores the city's commitment to strengthening its food systems. What makes food recovery organizations, such as Food Rescue US - DC, successful, is multifaceted. Keys to success include: committed, energetic leadership; embracing technology when possible; cultivating and

valuing partner relationships with other organizations and volunteers; and being part of, and contributing to, the community of food recovery and distribution organizations in the city. Overall, this study lays the groundwork for continued exploration and improvement of food recovery and distribution initiatives in Washington, DC, offering insights that can potentially inform similar endeavors in other urban settings.

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