



INSIGHTS ON FRESH-PRODUCE DISTRIBUTION IN D.C.'S WARDS 7 AND 8

Part 2 in a Series: How Much Food and How Is It Distributed?

*In 2018, the Bainum Family Foundation's Food Security team surveyed and convened organizations that distributed fresh, whole, take-home produce in Wards 7 and 8 through nongrocery sources in 2017 (e.g., farmers markets, food banks, corner stores) as a first step to address the existing data gap (see **Part 1 for more information**). In Part 2 of this multipart series, we will explain our approach and share what we learned in our rough data baseline.*

As we discussed in Part 1, grocery stores are just one option on a spectrum of food-distribution outlets available in the District of Columbia. Our Produce Distribution Baseline Survey, conducted in 2018 using 2017 data, helped us gain a better understanding of the other options on the spectrum that also distribute fresh, whole, take-home produce in Wards 7 and 8.

In all, 16 for-profit and nonprofit organizations¹ participated in our survey, while an additional two participated in the subsequent convening.² We learned that these organizations collectively distributed

approximately 2.18 million pounds of whole, take-home produce in Wards 7 and 8 in 2017. Of this, 1.94 million pounds (89%) were distributed at no cost through outlets such as food banks, food pantries, community-supported agriculture (CSA) programs and education/wellness

In 2017, 2.18 million pounds of whole, take-home produce was distributed through nongrocery outlets in Wards 7 and 8 in the District of Columbia. That sounds like a lot, but what does it actually look like?

If evenly distributed, each of the 165,000 residents would receive a daily distribution of about .04 pounds (or 16 grams). That's roughly **the weight of a medium to large strawberry.**



Availability of produce is not geographically restricted. Some residents in Wards 7 and 8 travel to other wards for produce given the limited retail options in their neighborhoods. Weights and per capita amounts are based on averages.

programs. The remaining 11% (248,000 pounds) was distributed through paid methods.

Unfortunately, this data doesn't reveal the actual reach of these participating distribution programs, such as how many residents used these programs in 2017 or how much produce program participants took home on average, and the survey data can't tell us how well produce supply is meeting demand (in terms of desires/preferences in the community). (See table on [page 2](#) for a description of "paid" and "free" models.)





However, if evenly distributed to each of the 165,000 residents in Wards 7 and 8, each resident would only receive about 0.04 pounds of produce a day.

Digging Into the Details

Participating Organizations

Most survey participants (94%) were nonprofits, and the one for-profit participant is a benefit corporation³ that collaborates closely with nonprofits; therefore, this survey primarily represents nonprofit distribution.⁴ Of the participating organizations, four (31%) distributed only in Ward 7, four (31%) distributed only in Ward 8, and five (38%) distributed in both wards. **Note:** Some organizations partner on distribution programs. In those cases, program data is only counted once to avoid duplication.

Reporting Metrics

In order to streamline data collection, we selected pounds as the metric to track the total amount of produce distributed and focused on four key distribution model types. (See table below.)

Food Metric Studied

We chose to focus the study on pounds of fresh, whole, take-home produce for two key reasons:

- It established a comparable metric across diverse survey participants, many of whom otherwise used different units to track produce (e.g., bunches, pints), per Part 1 of the series.

Whole, take-home produce includes fruits and vegetables that are fresh and have not been preserved or processed (e.g., frozen, dried, canned)

- On average across the United States, people consume about two-thirds of their daily calories and most of their produce at home, so we realized assessing available take-home produce was an important indicator of an equitable food landscape in Wards 7 and 8.⁵

Produce quality degrades anywhere between 10% to 90% as a result of processing or extended storage periods, so we prioritized fresh food as one of the healthiest and highest-quality options available.⁶ However, some of the produce distributed in this survey may have been stored for long periods of time or picked prematurely, especially if the produce was not sourced locally. While certain processing techniques, especially flash freezing, can preserve nutritional integrity, fresh produce was a best proxy for this survey to have a common denominator across diverse distribution methods (versus canned, dried, etc.).

This survey also didn't include produce that was incorporated into a meal/snack program at institutions (e.g., schools, hospitals, churches) or otherwise served as a prepared food (e.g., at a restaurant). While these provide an important source of healthy food in the community, we wanted to keep the baseline to a more widely offered produce category that was simpler for participants to track. We also did not include produce grown at home or in community gardens, as this is self-produced, not distributed (typically) and is highly fragmented.

Distribution Model

To ensure that data collected could be more easily analyzed across diverse distribution models and to avoid double-counting produce that may flow from one organization to another before reaching the

FOUR DISTRIBUTION MODEL TYPES IN THE SURVEY

Produce cost to end consumer	HOW THE ORGANIZATION DISTRIBUTES PRODUCE	
	Business to business ("B2B")	Business to consumer ("B2C")
No cost ("Free")	Model 1: Free B2B (e.g., a food bank supplying food pantries)	Model 2: Free B2C (e.g., a food education program distributing free food)
Cost >\$0 ("Paid"/Transacted, with cash, SNAP, etc.)	Model 3: Paid B2B (e.g., a program supplying corner stores)	Model 4: Paid B2C (e.g., a farmers market)

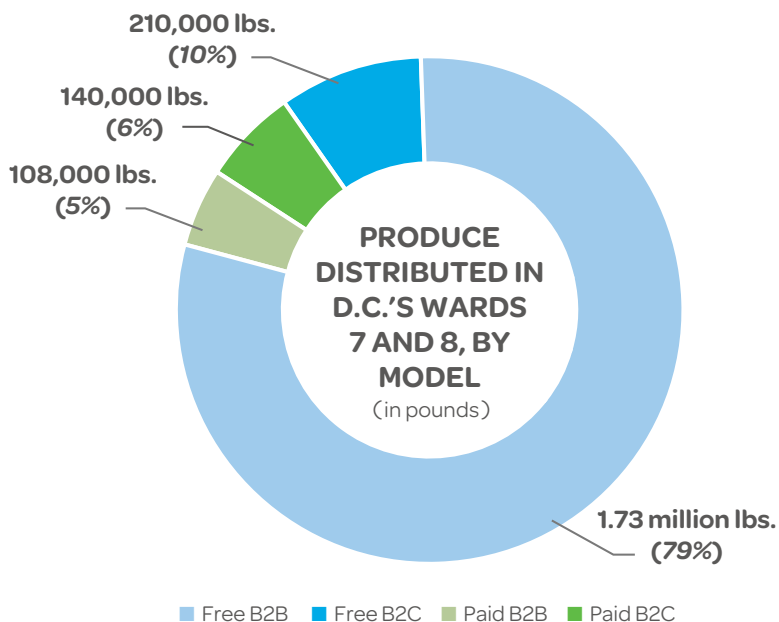
end consumer, we asked participating organizations to assign each of their distribution programs to one of the four distribution model types (see table on [page 2](#)).

For most of the findings, however, we will refer to distribution across “free” versus “paid” models. Within these models, customers were able to use several different payment tenders. (See table on [page 4](#) for more information about tender methods.)

Other Key Findings

The survey data and subsequent qualitative discussion at the participant convening revealed several other important findings related to the overall landscape of local food distribution efforts.

- **Most of the produce distributed by participating organizations moved through “free” models**, despite the diversity of distribution models and payment options available in other models.
- **The significant share of distribution through “free” models (89%) reflects that these programs play a critical role in making healthy food available to community members who may be priced out of the mainstream food system, including grocery stores.** This “free” share is in large part due to the significant number of pounds distributed by “Free B2B” models, such as food banks. As introduced in Part 1 of the series, this begins to indicate that there is customer demand served by free outlets.
- **Collective monthly produce distribution ranged from roughly 158,000 pounds in the lowest month (June 2017) to 216,000 pounds in the highest month (September 2017)**, a full 37% increase, indicating there may be additional demand for these models in parts of the year with lower monthly distribution. While this monthly fluctuation was not perfectly correlated to the local growing season, several organizations discussed how opportunities such as season



extension on local farms and gardens (e.g., greenhouse growing, winter-hardy crops) and light processing (e.g., flash freezing) could help them better extend availability of regionally produced items through all months of the year; but, many of these would take some level of additional investment, training and/or other capacity.

- **The top three produce categories (by weight) that were distributed were 1) leafy greens,⁷ 2) seeded salad vegetables⁸ and 3) orchard fruits⁹** – all produce categories that can largely be grown locally. Despite feasibility in our local production environment, organizations faced some challenges with local sourcing, as we will discuss further in the next part of the series. In addition to items that can be grown locally, supplemental regional sourcing can provide certain foods that can’t be grown in our climate, which is critical to balancing health with culturally appropriate food choices in the diverse area where we live and work and to making fresh food available year round.
- **Many survey participants face most significant/observable data-collection challenges in more nuanced or granular areas.** For example, for many models/programs, organizations were able to track the exact weight of the produce distributed each month (38%), while others tracked estimates (46%) or did not track monthly

METHODS OF TENDER

In the chart below, we outline some of the ways produce is distributed in Washington, D.C., along with some of the key tender types accepted at each outlet (including a comparison to grocery stores, in the bottom row).

Note: This is an illustrative graphic; actual tender accepted varies by program.

		TENDER TYPE						
		Cash, debit, credit or check	SNAP or WIC	Matching or loyalty programs	Produce Rx ^{1,2}	FMNP ^{2,3}	Senior FMNP ^{2,4}	Produce Plus ^{2,5}
Typically free ↑ ↓ Typically paid	Food bank or pantry							
	Education or wellness program	🍏						
	Community-based organizations/other ⁶	🍏						
	Farmers market or farm stand	🍏	🍏	🍏	🍏	🍏	🍏	🍏
	Community-supported agriculture (CSA) programs	🍏	🍏		🍏	🍏	🍏	
	Convenience store	🍎	🍎	🍎				
	Grocery store or delivery	🍎	🍎	🍎	🍎			

1. Produce Rx (FVRx) is a program administered by DC Greens that allows doctors to write prescriptions for fruit and vegetables at participating "farmacies" and now the Giant in Ward 8.
2. Eligibility in matching and other incentive programs is often based on participation in federal assistance programs, like SNAP and WIC.
3. The Farmers Market Nutrition Program (FMNP) provides coupons to participants of the Women, Infants and Children (WIC) assistance program to purchase eligible foods at participating farmers markets and stands.
4. The Senior Farmers' Market Nutrition Program (SFMNP) creates access for low-income seniors to locally grown produce.
5. The Produce Plus program provides customers who receive federal benefits \$10 twice a week to purchase produce at farmers markets.
6. Community-based organizations include churches, community centers, etc.

data at all (31%).¹⁰ Fortunately, those that didn't track monthly distribution at all represented only 1.6% of total distribution, and those that tracked estimates had estimated monthly data that roughly tracked with the actual annual figures they submitted. As we will discuss further in Part 3 of the series, procurement data was also a relative gap/challenge for participating organizations.

Conclusion

While this data is only a first step in understanding the landscape of produce distribution in Wards 7 and 8, we can glean that nongrocery outlets play an important role in the fresh produce landscape. The data shows the significant importance of free distribution through these models. Other affordable "paid" models are a smaller segment of the overall landscape. Many of these program convey that they are working to serve other community preferences

(such as for produce grown locally, sustainably and/or by farmers of color). Yet with varying levels of data capacity and community engagement across participating organizations, and often a broadly defined customer base, many organizations were hungry for additional insight into community needs and preferences, and the way individuals or households may be using different distribution models across the community or city.

Though some of the data to fully understand consumer needs and preferences is difficult to come by, we recognize that there is a long way to go to create a truly equitable and inclusive food system. Casey Dunajik is the Director of Grocery Operations at Good Food Markets, which is opening a 3,800-square-foot grocery store in early 2020 in Ward 8 to address the current grocery gap. She notes, "We're excited to be part of the solution in Ward 8, but even with the existing grocery and



OPPORTUNITIES TO IMPROVE DATA COLLECTION CAPACITY

As we discussed in the first part of the series, food distribution data is challenging to collect, and this survey was no exception.

In all but one instance,¹¹ survey participants were able to provide data for annual distribution totals across each of the models they offer, giving us a relative comfort in the accuracy of the total amounts by distribution model type (e.g., “Free B2B”). Yet it is important to keep in mind that this survey was a back-of-the-envelope exercise and should not be interpreted as an academically rigorous study of distribution efforts in Wards 7 and 8. The data gaps from this survey are just as valuable as the data we were able to collect, revealing opportunities to increase organizational data collection capacity and align on the following metrics:

- **Capacity.** In our survey and convening, organizations viewed these data collection challenges as an opportunity for cross-organization collaboration and funder investment. Several participants cited a lack of dedicated data/evaluation staff as barriers to data collection. Some of those with dedicated staff articulated that heavy reporting demands of funder organizations frequently consumed a major share of their bandwidth; they suggested that streamlined reporting or aligned reporting metrics across funders could reduce the burden on their staff, freeing up time to collect, aggregate and/or analyze more of this type of data.

- **Universal metrics.** Participants also cited the need for a better universal metric by which to track produce distribution. One critical challenge of tracking in pounds (or converting from other units tracked to pounds) is that is not a good indicator of nutritional quality in the aggregate. For example, a pound of iceberg lettuce doesn’t have the same nutritional density as a pound of broccoli. Participants discussed whether servings might be more powerful as an indicator, and what this would mean for data collection efforts, if so.¹²

- **Grocery store data.** You may be wondering, “How does the nongrocery distribution total of 2.18 million pounds of produce compare to what grocery stores distributed?” We are, too. Unfortunately, we were unable to obtain the necessary data to begin answering this question, despite reaching out to local Washington, D.C., grocery stores and a national data firm. Having this data would provide a more accurate picture of total produce availability/supply in Wards 7 and 8 in order to better identify opportunities to create a more equitable food system.¹³

This survey provided a valuable opportunity to gain an initial understanding of nongrocery distribution in Wards 7 and 8, as well as identify gaps – both explicit through challenges reported by survey participants and implicit through data gaps.

nongrocery distribution in Wards 7 and 8, our new store won’t fully bridge the produce supply and demand gap. There is still a huge need for community-driven and community-led food access solutions.”

As distributing organizations and other related stakeholders continue work toward building a more equitable food system, continued support of

community input and leadership will be critical to ensure solutions are both sufficient and relevant. In the remaining parts of this series, we will intertwine additional findings with perspectives in the regional food system. They will discuss topics such as challenges and opportunities in our regional supply chain and how various distribution models are working to respond to different community needs.

Participating Organizations

4P Foods

Arcadia Center for Sustainable Food and Agriculture

Bread for the City

Capital Area Food Bank

Martha's Table

Community Foodworks

DC Central Kitchen

DC Greens

DC Urban Greens

Dreaming Out Loud, Inc.*

Family and Medical Counseling Service

FRESHFARM

Good Food Markets*

THEARC Farm



University of the District of Columbia

Ward 8 Farmers Market

YMCA of Metropolitan Washington

Washington Nationals Youth Baseball Academy

*Participated in the convening but not the survey

Thank you to Lindsay Smith, Regional Food Systems Value Chain Coordinator at the Metropolitan Washington Council of Governments, and Beverley Wheeler, Director of D.C. Hunger Solutions, for their review and input on this series.

Endnotes

- 1 In all, 18 organizations participated in the original survey. The Foundation received permission from 16 of the 18 organizations to share their data externally. Additionally, data from three organizations was removed to avoid inflated totals based on their collaborative (overlapping) efforts with other organizations in the final group. Therefore, the data displayed here reflects the remaining 13 survey submissions, representing efforts of the total 16 organizations.
- 2 These organizations were relevant to the qualitative discussion because, while they were not distributing produce in Wards 7 and 8 in 2017, both were preparing to (re-)launch distribution programs in Ward 7 and/or 8 in the near future.
- 3 To learn more about Benefit Corporations, go [here](#).
- 4 While the convening did touch on food justice in addition to access, participating organizations had varying levels of connection to the community, in terms of community leadership, input and/or location. We also acknowledge that the organizations in the room may not be representative of the full set of solutions that exist in the community based on the limitations of our network.
- 5 [Food and Nutrient Intake Data: Taking a Look at the Nutritional Quality of Foods Eaten at Home and Away from Home](#)
- 6 <http://www.fruitandvegetable.ucdavis.edu/files/197179.pdf>
- 7 Examples of leafy greens include spinach, kale, lettuce, chard, etc.
- 8 Seeded salad vegetables include zucchini/summer squash, tomatoes, cucumbers, peppers, etc.
- 9 Orchard fruits include peaches, plums, apricots, apples, etc.
- 10 **Note:** These percentages do not add up to 100% because several organizations operated more than one model and may have tracked distribution differently for each model.
- 11 For one of the models they operate, one organization provided monthly distribution estimates but did not provide an annual total. However, we are able to glean the annual distribution estimate from the monthly estimates.
- 12 Other data considerations to note include the lack of information on food waste in the food supply chain and lack of information on how much of each produce item distributed is edible/inedible.
- 13 We reached out to Safeway and Giant, which operate the full-service grocery stores in Wards 7 and 8, but they declined to publicly share data. We also sought to purchase data from The Nielson Company, but they could not share data at the retailer level in D.C. and did not track D.C. grocery sales as a standard geography (it is a custom data product). We also conducted desk research, including review of USDA Economic Research Service data; however, sources we identified did not track distribution data in the same way or at the geographic level needed.