The relationship between race, income and food (in)security in the District

Across the District of Columbia, an estimated 11.2% of households experienced food insecurity in 2017, with even higher rates (23.3%) among households with children. While many factors — including limited transportation access, poverty, and lack of affordable, stable housing — contribute to food insecurity, there is a strong correlation between the presence of grocery stores and the food insecurity rate across different wards in the District.

There is one full-service grocery store for every 55,000 residents in the predominately black/African American and low-income communities of Wards 7 and 8. Compare that to Ward 3, a predominately affluent and white community roughly 10 miles away, which has one full-size grocery store for every 8,400 residents. (See figure on page 2.) These statistics highlight the significant grocery gap across the District — and while grocery stores are not the only source of healthy food in a neighborhood or

EXAMINING LANGUAGE

Increasingly, the term “food apartheid” is used in lieu of “food desert” to convey that gaps in food access do not occur naturally but instead are a direct result of the policies and structures tied to a long history of systemic inequalities. Structural racism is inherent in the mainstream food system, with people of color disproportionately experiencing limited access to healthy food, higher prevalence of diet-related diseases (e.g., diabetes, hypertension) and fewer economic opportunities.
community, their absence is frequently used to indicate “food deserts,” defined as areas lacking access to fresh fruit, vegetables and other healthy whole foods.

**Healthy food distribution through grocery and nongrocery sources**

Physical access to grocery stores is a useful indicator of food access, but the presence and number of grocery stores does not convey the actual amount of food distributed, nor does it reflect the full spectrum of existing outlets for healthy foods in a community. While grocery stores are a year-round option for the purchase of healthy foods, they are just one option on the food-access and -affordability spectrum.⁷ Residents may also (or alternatively) frequent other for-profit and nonprofit outlets (e.g., corner stores, farmers markets, food banks/pantries, small independent grocers), especially in neighborhoods underserved by mainstream grocers. These outlets are often smaller in scale than a traditional grocery store, but may meet otherwise unfulfilled needs in a community, given elements like the cost to consumers, distribution location, products offered, etc.

**Food distribution data: challenges and small steps to fill the gap**

Unfortunately, there is no comprehensive picture of how much healthy food, such as fresh produce, grocery and nongrocery outlets distribute⁸ at any given time, on a total or relative basis. For those working to ensure equitable access to healthy food for all District residents — including governmental entities, philanthropists, community members, nonprofits and more — the presence of grocery stores has been the best proxy for what’s currently available in any given neighborhood.

More beneficial, however, would be a picture of availability that reflects the amount of food available across the diverse distribution outlets that exist in a community — especially in communities experiencing a grocery gap.
Our hypothesis was that nongrocery outlets are a meaningful source of produce — but just how meaningful (i.e., total distribution amounts), to our knowledge, has not been examined. With this in mind, we started by asking: **What healthy food distribution models are currently active in Wards 7 and 8 and at what collective scale?**

As an initial step to answer this question, the Foundation team collaborated with nongrocery organizations distributing food in Wards 7 and 8 to better understand their efforts in produce distribution, knowing that they were a critical but understudied part of the food landscape. We created the “2017 Produce Distribution Baseline Survey” with the primary goals of:

- Understanding the amount and sources of fresh fruit and vegetable distribution in the District’s Wards 7 and 8 from nongrocery-store outlets
- Identifying key challenges and opportunities related to produce procurement, distribution and outreach/sales across these models

As we learned through this process, there are multiple and complex challenges to tracking and aggregating quality data, creating barriers to the creation of a comprehensive distribution assessment. These data challenges are a result of several factors, including:

- **Limited capacity of nongrocery distribution outlets.** Whether farmers or nonprofits, many nongrocery outlets lack data systems, staff capacity or time to track this information comprehensively. In some cases, they rely on estimates instead of actuals, and what little capacity they have is typically devoted to the reporting requirements of their funders.
- **Limited public access to private-sector grocery store data.** We contacted both for-profit major grocery store chains operating in Wards 7 and 8 to inquire about produce distribution (sales) data, but both stated this data was private. This may be due to competitive risk in an industry with thin profit margins. While various types of grocery sales data are available for purchase from third-party data providers, this data is not widely accessible and may not provide the level of detail needed.
- **Lack of uniform/universal distribution units across organizations and types of healthy foods.** There is no universally shared unit for tracking the scale of food distribution, especially when it comes to produce. Organizations may use one or more units — including pounds, servings, bunches, crates, pints, etc. — depending on the item, source and/or destination. And none of these units specifically reflects servings or nutritional content.

Despite these challenges, survey and convening participants helped create a rough baseline that participating organizations and related entities can use to inform future data-collection efforts and programming. Our hope is that this data can be a resource for funders and policymakers as well as for community members and activists as they work to co-create community-centered food solutions that continue to build access and deepen equity. In the next part of this series — **How Much Food and How Is It Distributed?** — we will dig deeper into the findings on food distribution in Wards 7 and 8.

**THE IMPORTANCE AND CHALLENGES OF CONSUMER-DEMAND DATA**

We did not specifically gather or examine consumer feedback or demand in this survey/convening, as the intent and design was to get a picture of the amount of food available through surveyed distribution outlets and examine the logistical challenges these organizations face along the supply chain. However, we recognize that consumer-demand data is vital to ensuring that food solutions are designed for and by the community in order to authentically reflect diverse preferences.

For additional reflections on consumer demand, see page 4.
In a traditional economics sense, demand refers to the amount of a good (or service) that consumers are willing to buy at a given price. To understand potential customer demand for a food distribution site, for example, mainstream groceries will often rely on economic indicators such as the area median income (AMI) to estimate expected sales when evaluating a potential new store location. Or food retailers will examine historical sales data to understand consumer priorities. But the problem with this approach to assessing consumer demand relative to ensuring equitable access to healthy food is twofold. First, these assessments may overlook and underserve existing demand present in lower income areas of a location if retailers conclude there is not enough income and/or density for them to turn a profit in that location. Secondly, assessing demand based on income and/or transactions overlooks what customers would purchase if they had the option, either through increased purchasing power or a different availability of goods. From an equity perspective, these limitations inhibit creating a food system that meets the food needs of every community, regardless of income, cultural diversity, dietary preferences/needs and other factors.

The result is that our food economy often underserves many communities. This inequity often disproportionately affects low-income communities and people of color, especially in areas of lower density and/or transportation access. For example, participants in the 2018 Grocery Walk in D.C. — which showed the average distance residents in Wards 7 and 8 must travel to reach a full-service grocery store — demonstrated that communities where many grocers see insufficient (economic) demand are actively calling for more healthy food. In our food system — where healthy food is comparatively and often prohibitively expensive for many Americans, and junk food is a more affordable source of calories per dollar — income and estimates of economic demand cannot suffice as our guide for where healthy food distribution outlets are sited.

Some entities in the region are trying to better reflect the needs and wants of individual communities. For example, Dreaming Out Loud uses qualitative feedback from the community to determine what food attributes are important to customers. Arcadia Center for Sustainable Food and Agriculture uses a point-of-sale system at their mobile farmers market to track individual purchases from customers (using cash/equivalent, food assistance programs, etc.) in a seamless and noninvasive way. This anonymous and aggregated data can spotlight consumer-purchasing behaviors and food preferences as well as use of payment methods, including the Supplemental Nutrition Assistance Program (SNAP) or incentive programs — beginning to shed light on the efficacy of existing food programs and/or the need for increased resources.

While there are some great examples from our region about steps food distribution organizations are taking to more holistically and equitably gain insight into demand for products, there are just as many challenges to doing so. For nongrocery outlets looking to serve the unmet needs of marginalized consumers, tracking customer demand can be time- and labor-intensive, often requiring customers to self-report through household surveys or in-person polls/focus groups. Data accuracy and completeness can be compromised by limited access to technology by nonprofits and/or their customers. In an attempt to look beyond traditional economic-demand indicators, low-income or otherwise underserved communities are often survey extensively. This is not only invasive and can lead to survey fatigue, it also makes the inequitable presumption that low-income customers should have to prove that they want healthy food in their communities.

While we did not explore consumer feedback or demand as part of this survey and convening, we thought it was critical to acknowledge that greater insight into consumer needs and preferences requires the involvement and feedback of community residents. We can infer by the total amount of food distributed by nongrocery distribution models in Wards 7 and 8 that grocery stores are not meeting the needs of the entire community. Additionally, it is important to re-emphasize that limits in purchasing power should not be misinterpreted as a lack of desire for healthy foods, and existing distribution options, while diverse, may not necessarily reflect what (or the entirety of what) the community actually wants and needs.

Achieving equity in the food system more than likely involves a tapestry of food access solutions, including traditional grocers as well as nontraditional distribution models. And while some opportunities exist for residents to lead, own or otherwise inform the design, siting and execution of food solutions, more and diversified opportunities would help move beyond food access to food sovereignty, which denotes greater degrees of both control and choice.

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1 Both Dreaming Out Loud and Arcadia Center for Sustainable Food and Agriculture are partners of the Food Security Initiative and receive direct funding from our Foundation.
Endnotes

1   All data collected came from organizations that distribute food via nongrocery methods; however one organization that participated in the convening, but not the survey, operates a grocery store.

2   Food security is achieved when all people at all times have physical, social and economic access to sufficient, safe and nutritious foods that meet their dietary needs and food preferences for an active and healthy life. [http://www.fao.org/3/y4671e/y4671e06.htm](http://www.fao.org/3/y4671e/y4671e06.htm)


4   [https://censusreporter.org/profiles/61000US11007-ward-7-dc/](https://censusreporter.org/profiles/61000US11007-ward-7-dc/)


6   [https://censusreporter.org/profiles/61000US11003-ward-3-dc/](https://censusreporter.org/profiles/61000US11003-ward-3-dc/)


8   For the purposes of this series, we will focus on food distribution as the activity of selling or providing produce directly to customers and/or consumers, or directly to a third party (i.e., a food pantry or corner store) to indicate the total volume of food available.

9   We contacted The Nielsen Company about sales data in the District, however, we learned that the District (or any of its sub-geographies, like wards) are not pre-established datasets and would require custom data analysis to identify. Additionally, the dataset, while expansive, is not inclusive of all food retailers in the area.


Citations for “Examining Language” on page 1


Citations for “By the Numbers” infographic on page 2

• 2013–2017 ACS 5-Year Ward Data [https://planning.dc.gov/node/1128597](https://planning.dc.gov/node/1128597)


• 2013–2017 ACS 5-Year Ward Data [https://planning.dc.gov/node/1128597](https://planning.dc.gov/node/1128597)


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