

From the Outside Looking In Reflecting on Detroit's Food System

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ABSTRACT

The Detroit Food Policy Council (DFPC) encourages the development of a sustainable and equitable food system in Detroit. The University of Michigan's Public Health Action Support Team partnered with DFPC in 2018 to help achieve this vision. This partnership aimed to develop descriptions of the local food system in each City Council district to help DFPC understand local food environments and stakeholder communication strategies. To create these profiles, the research team used quantitative and qualitative methods such as geographic information system (GIS) mapping, stakeholder interviews, food system tours, and secondary data analysis. As outsiders to the City of Detroit, the team sought to respect Detroit's communities by embracing an asset-based approach that emphasized the principle of food sovereignty and reflecting community-identified priorities gleaned through stakeholder interviews and food system tours. This report does not contain policy recommendations so that communities can utilize the information in ways that best align with their priorities.

Food justice involves “addressing historic and systemic disparities around power that manifest [themselves] in the food system,” according to Shane Bernardo, a Detroit activist and organizer.¹ As a movement, food justice addresses economic injustice and inequities in affordability and access to quality and healthy food. In Detroit specifically, this movement focuses on local communities, farms, and food businesses to create a more just and sustainable food system. Working within the food justice movement requires an examination of local economies and analysis of inequitable food access to identify priorities for future food sovereignty and security policies. We carried out this project to help stakeholders better understand their local food systems to craft such policies.

METHODOLOGY

Beginning in fall 2018, students from the University of Michigan School of Public Health’s Public Health Action Support Team (PHAST) partnered with the Detroit Food Policy Council (DFPC) to develop tools that help stakeholders in each Detroit City Council district better understand their local food environments. By conducting literature reviews to understand the historical context shaping each district, we developed profiles of the local food environment for Detroit’s seven City Council districts. This research process helped the research team identify retail food resources and community organizations working in each district’s food system. Power mapping enabled us to identify influencers, implementers, and decision-makers in each Council district. This provides DFPC with a better idea of whom to reach out to with any policy recommendations developed based on the data presented in this report. We also conducted in-depth interviews with key stakeholders to identify the food-related assets and challenges experienced in their respective districts and to help us understand the process of developing

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effective messaging strategies.

In addition to Council District profiles, the team developed spatial maps of Detroit’s food environment. Such maps identified retail food locations like grocery stores, dollar stores, and farmers’ markets, as well as food pantries and community gardens. These elements of the food environment were then compared to other layers illustrating food access in Detroit. Using data from PolicyMaps, Detroit Food Map Initiative, and Detroit Community Markets, we identified areas designated as having limited supermarket access and retail food leakage. Retail food leakage is the amount of money being spent outside of the community on food because the community cannot fulfill its inhabitants’ needs.² We then identified neighborhoods that could present effective opportunities for intervention using these metrics.^{3, 4, 5, 6} We have since presented the completed report to the DFPC and the Grocery Initiative, and we are working with them on developing future projects that examine the food retail environment in Detroit more closely. This future work could include conducting workshops that train others on using the mapping technology or examining other places – such as schools – where community members access food.

MAPPING THE LOCAL FOOD ENVIRONMENT

To present a snapshot of Detroit’s Food System, we utilized a set of tools developed by the Reinvestment Fund, a national

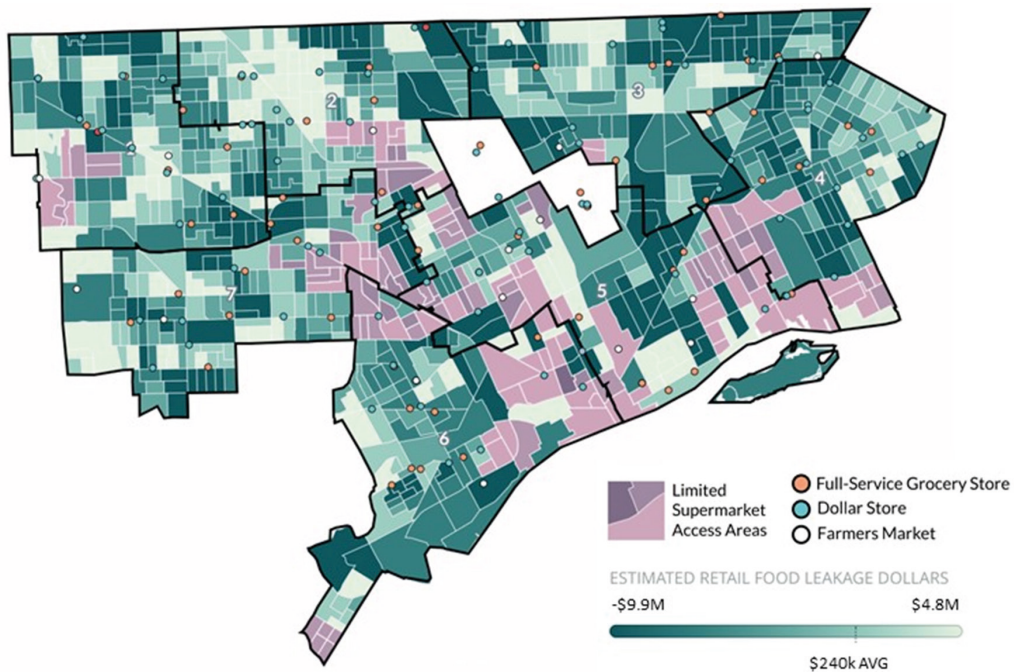


Figure 1. Retail food leakage overlaid with limited supermarket access (LSA) areas, denoted by shades of pink, and full-service grocery stores, dollar stores, and farmers' markets. See America's Healthy Food Financing Initiative resource page at investinginfood.com/resources for additional information (America's Healthy Food Financing Initiative, 2020; Malcolm Cunningham et al., 2019).

organization that brings together a variety of stakeholders to invest in projects that impact the health, wellbeing, and financial security of communities. Using the Reinvestment Fund's tools, we assessed equity in food access at a granular level, including measures of retail food leakage and Limited Supermarket Access (LSA).⁷ Using data about these indicators from Policy Maps, we developed snapshots of the local food environment in each Council district. We examined the food environment at the City Council district level because each district has an inherent and dedicated decision maker (the Councilperson representing that district) that DFPC can collaborate with to fulfill its advocacy work and priorities. Although this research focuses on food environments at the Council district level, available data were often

accessible only at the zip code and census tract levels. The data we found that most closely corresponded with the Council district boundaries were at the census block group level. As a result, we compiled information by census block groups and manually mapped it onto each Council district to map data at the Council district level.

The Reinvestment Fund designates LSA areas based on the affordability of food in relation to the local median income, distance to grocery stores, and car ownership rates. Low-access scores are calculated from limited-access data; this score is an indicator of disparity, demonstrating how much farther a block group's population must travel to the nearest supermarket compared to

benchmark distances established for non-low-income communities.⁸ We developed a map presenting these indicators per census block group in each City Council district overlaid with the location of full-line grocery stores, dollar stores, and farmers' markets. A full-line grocery store is one that sells a line of dry groceries, canned goods, or nonfood items as well as perishable items such as fresh produce, meat, and dairy products.⁹ This map serves as the primary visual for the quantitative data we collected for this project, enabling a better visualization of food access and availability in Detroit.

OUR ROLE AS OUTSIDERS

As we gathered information for this study, we were challenged with the best way to present and disseminate our findings as outsiders to the Detroit community. One of the DFPC's goals is developing and maintaining a city in which the residents are educated about healthy food choices and understand their relationships to the food system.¹⁰ Our team sought to achieve this goal but struggled with navigating the tensions associated with being outsiders to the community in which we were working. The DFPC strives to contribute to a city where everyone is treated with respect, justice, and dignity – especially in the food space – and it was important to us that we entered into these spaces with the same values. We therefore focused on an asset-based (rather than deficit-based) approach centered on our partner's needs.

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Figure 2. A community garden located at the Detroit Artisan's Collective in Brightmoor, District 1 (DeMarco, 2019).

We made this decision to avoid feeding into negative stereotypes. Utilizing an asset-based approach demonstrates respect and empowers our community partners to capitalize on their strengths. We also made a conscious decision not to offer any conclusions or policy suggestions based on the data in our final products. We felt the most appropriate solution was to collect and summarize the data so that community members and stakeholders could use it to make their own conclusions based on their values and priorities.

The DFPC emphasizes the importance of choice when it comes to food and nutrition. This plays into the concept of “food sovereignty,” which Detroit Food Justice defines as not just people's right to healthy and culturally appropriate food, but also the right to choose and define their own food and food systems.¹¹ Taken together, these ideas underscore the importance of a community's access to food and food choice. Such an approach is often at odds with many other common assessments of food availability and security that measure the availability of food in a binary way. These binary assessments only evaluate whether or not food access exists within a community, neglecting the ability of community members to choose healthy or culturally appropriate foods.

We embraced this narrative of choice and food sovereignty in our data collection and presentation processes by leaning into the many different sources of food and nutrition in Detroit. This included tracking not only what kinds of food retail and production spaces exist in the city, but also where they exist. Focusing on these local food communities in the context of LSA scores and retail food leakage gives our audiences a better picture of the realities of the food system in Detroit by indicating how geographically, financially, and culturally accessible these resources are to community members.¹² Additionally, this method identifies in-need areas that might be otherwise overlooked, such as communities with a high concentration of dollar stores and few to no full-line grocers, areas lacking urban agriculture, or regions not covered by food assistance or advocacy organizations.

To emphasize the above principles, we made a concerted effort to ensure that our research process was informed by DFPC and other community members. Although we could not use a full community-based participatory research (CBPR) approach for this project because of resource and logistical constraints, we did try maximizing community involvement throughout the process by regularly communicating with and incorporating feedback from DFPC. From the beginning, DFPC was closely involved with the planning of this project. We had many conversations about tailoring the project and its content based on DFPC's self-identified needs and priorities, and we continued seeking feedback about other components, such as preferred dissemination format. Further, we incorporated the views of community members and key stakeholders involved in Detroit's food system into the project. We conducted a variety of interviews with stakeholders representing diverse identities within Detroit's food system. Additionally, we talked to multiple community members during mini food system tours to understand



Figure 3. Eastern Market, District 5 (Malcolm Cunningham, 2019).

their perspectives on the assets and challenges facing Detroit's food system. The information gleaned from these conversations informed the Council District profiles we created, as it enabled us to include information that better reflected each community's vision and priorities.

KEY FINDINGS

This project provided insight into where residents of Detroit are getting their food. Through our data collection process, we determined that there are currently seven fewer full-line grocery stores in Detroit than there were in 2010.¹³ Interestingly, the number of dollar stores in the city has doubled in this same time period.¹⁴ This provides insight into the economic and nutritional realities facing Detroit. Dollar stores, especially chains, can utilize economies of scale and various subsidies to purchase shelf-stable food products, which enables them to sell goods at lower prices than local grocers.^{15, 16} As a result, dollar stores are a more attractive option economically for community members, many of whom are living paycheck to paycheck.¹⁷ However, this disrupts the local food system as dollar stores take customers from local grocers; offer fewer options for fresh produce, dairy, and meat; and employ fewer people than local grocers, reducing

job opportunities for community members.^{18, 19}

We found that indicators of the local retail food environment such as LSA and food retail leakage are useful for identifying these types of geographic inequities at a district-wide and neighborhood level. Our results show that dollar stores are most prevalent in areas experiencing the highest rates of food retail leakage. For example, nearly one-third of all dollar stores in Detroit are located in regions experiencing food retail leakage.²⁰ This finding indicates that there is still a need for food retail in these regions, and dollar stores are filling those gaps instead of local grocers or full-line grocery stores. Given its implications for the equity and livelihood of Detroiters, it is vital to see how this shifting landscape continues affecting local markets, or if Detroit's fight to achieve food sovereignty reverses this trend.

Finally, we discovered the importance of considering community context. Throughout our data collection process, we constantly encountered instances where the stories told by the data were quite different than the lived experiences of community members with whom we conducted stakeholder interviews. For example, despite the prevalence of terminology such as 'food desert' in the literature, many of the community members we spoke with actually found the food desert label problematic and not representative of their lived experiences. They identified better indicators such as undercounted food resources and lack of opportunity. These findings highlighted the importance of taking a CBPR-inspired approach and involving community members and stakeholders in research.

LIMITATIONS

Developing and maintaining a sustainable food system in Detroit has enormous health, financial, and urban planning implications for the city. Utilizing a variety of mapping tools such as PolicyMaps, LSA scores, and

food retail leakage measurements as well as qualitative interviews and conducting a literature review enabled us to come up with individual profiles of the food systems within each City Council district. However, some limitations to this approach do exist. For example, based on the data available to us, we could only look at full-line grocery and dollar stores in our analysis. This approach excludes other businesses such as small corner stores; although these types of stores may not sell fresh produce, many people rely on them for food purchases. Additionally, our analysis excludes Hamtramck and Highland Park, which have grocery stores, and other places through which Detroiters may access food. However, we excluded these two locations from our analysis because they are independent cities not incorporated into Detroit. Beyond calculating food retail leakage and LSA scores, we could not account for the fact that people do not shop for food solely within their City Council district's borders. Finally, because we could only speak with a small group of community stakeholders, we could not fully represent the community's experience of food accessibility, the acceptability of the local options, or other barriers to access not captured by these measures in their entirety.

CONCLUSION

We hope that the key components of our partnership with DFPC, such as embracing an asset-based approach, emphasizing food sovereignty, and reflecting community-identified priorities, serve as a model for other projects that involve collecting data from and disseminating results to unfamiliar spaces in a humble and respectful way. These components were instrumental in the success of our project and in fostering sustainable community partnerships. In terms of the project's next steps, disseminating our findings to our community partners will provide them with the additional resources necessary to make

policy decisions that would increase access and availability to healthy and culturally appropriate foods for community members. Since presenting the completed report to the DFPC and the Grocery Initiative, we have continued our work with them by developing future projects that more closely examine the food retail environment in Detroit. Additionally, the American Indian Health and Family Services of Southeastern Michigan

has received a grant to continue its work addressing inequities in the food system and will also develop policy solutions based on the data provided in our report for its district. We hope this is just one of many examples of how other stakeholders can use this report as a tool for making decisions that address inequitable food access in their community.

ADDITIONAL TEAM MEMBERS

This piece was published with permission from the following team members who also contributed to this research:

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ENDNOTES

1. Detroit Food Policy Council, "Detroit Food Metrics Report 2017," Detroit Health Department, last modified December 2019, <https://www.ecocenter.org/sites/default/files/01.%20Detroit%20Food%20Metrics%20Report%20%26%20Food%20Policy.pdf>.
2. Buxton, "Retail Leakage and Surplus Analysis," EDC of Wayne County, last modified February 18, 2020, whywaynecounty.com/wp-content/uploads/migrated/documents/RetailGapAnalysis_Site1_Secondary.pdf.
3. Reinvestment Fund, "Assessing Place-Based Access to Healthy Food: The Limited Supermarket Access (LSA) Analysis," last modified July 2018, https://www.reinvestment.com/wp-content/uploads/2018/08/LSA_2018_Report_web.pdf.
4. "Reinvestment Fund Estimated Retail Food Leakage in Dollars as of 2016," Policymap, last modified April 2, 2019, <https://umich.policymap.com/maps?p=141880&i=9966790&btd=15&period=2016&cx=-83.09954293498805&cy=42.35278709590449&cz=12>.
5. Alex Hill, "Detroit Food Map," last modified June 16, 2019, <https://detroitfoodmap.com/>.
6. "Detroit Community Markets," Detroit Community Markets, last modified April 19, 2019, <https://www.detroitmarkets.org/>.
7. Julia Koprak, Bill Schrecker, and Morgan Robinson, "Access to Healthy Food: Leveraging Data for Community Results," presented November 9, 2015 at the Community Indicators Consortium 2015 Impact Summit, Austin, TX, https://communityindicators.net/wpcontent/uploads/2017/12/2015_Koprak_Schrecker_Robinson_Access_to_Healthy_Food.pdf.
8. Reinvestment Fund, "Assessing Place-Based Access."
9. Detroit Food Policy Council, "A City of Detroit Policy on Food Security: Creating a Food Secure Detroit," last modified February 7, 2020, https://detroitfoodpolicycouncil.net/sites/default/files/pdfs/Detroit_Food_Security_Policy.pdf.
10. "Food Sovereignty," Detroit Food Justice, last modified June 11, 2019, <https://www.detroitfoodjustice.org/category/food-sovereignty/>.
11. "Grocery Stores Full-Line," Data Driven Detroit, last modified May 1, 2015, https://portal.datadrivendetroit.org/datasets/194bc647287f4e6b91c6401443845cce_0.
12. Joe Eskenazi, "Dollar Stores Are Thriving – But Are They Ripping Off Poor People?" *The Guardian*, last modified June 28, 2018, <https://www.theguardian.com/us-news/2018/jun/28/dollar-store-ripping-people-off-poverty-inequality>.
13. Cunningham et al., "A Snapshot of Detroit's Food System," 9.
14. Cunningham et al., "A Snapshot of Detroit's Food System," 9.
15. Noel King and Sarah Gonzalez, "Planet Money Episode 909: Dollar Stores vs Lettuce," *NPR*, last modified April 26, 2019, <https://www.npr.org/templates/transcript/transcript.php?storyId=717664332>.
16. Dollar General, "2018 Dollar General Annual Report," last modified June 26, 2019, <https://investor.dollargeneral.com/static-files/3a775a9d-4291-424c-8bbe-3ae948d06da4>.
17. United Way, "ALICE: The Consequences of Insufficient Household Income," last modified December 17, 2017, 4, http://ouw.org/wp-content/uploads/2018/17UWALICE%20Report_NCR_11.27.17_Lowres.pdf.
18. National Grocers Association, "2017 Independent Grocers Survey Released" last modified May 15, 2017, National Grocers Association. <https://www.nationalgrocers.org/news/2017-independent-grocers-survey-released/>.
19. "Reinvestment Fund Estimated Retail Food Leakage in Dollars as of 2016," Policymap, last modified April 2, 2019, <https://umich.policymap.com> <https://umich.policymap.com/maps?p=141880&i=9966790&btd=15&period=2016&cx=-83.09954293498805&cy=42.35278709590449&cz=12>.
20. Renee Walker, Christopher Keane, and Jessica Burke, "Disparities and Access to Healthy Food in the United States: A Review of Food Deserts Literature," *Health and Place* 16, no. 5 (2010): 876-884, <https://doi.org/10.1016/j.healthplace.2010.04.013.f>.