Healthy Corner Stores for East Central Ogden:
Exploring barriers and opportunities to increase food diversity

Prepared for
Ogden Food Council

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The SPARC Environmental Justice Lab at the University of Utah (sparc.utah.edu) is a collaborative of engaged faculty, students, community members, and scholars who are committed to enacting principles of community-based participatory research to understand issues of social and environmental health and co-create strategies to achieve justice. The **SPARC** Environmental Justice (EJ) Lab engages in projects that include **S**tudent **P**athways, **A**ction **R**esearch, and **C**ritical Community Engagement. This work was supported by a student research team including Ali Capener, Colby Goins, Emma Olsen, Sammy Paredes, Lauren Swidnicki, & Alexis Tovar.

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EXECUTIVE SUMMARY

Noting access to healthy food as a key driver of food insecurity, Ogden Food Council (OFC) looked to develop a healthy corner store initiative that could increase corner stores' capacity to profitably sell fresh produce and healthy culturally appropriate foods in East Central Ogden, Utah. Research to further understand the context of relationships and feasibility of this idea was conducted by the SPARC Environmental Justice Lab. In this report, we describe findings regarding connections between corner stores, distributors, and wholesale producers via interviews with corner store owners and managers across the study area. Specifically, we share information regarding differences among corner stores, identified challenges, food suppliers, 'healthy' food supply, connections between corner stores, community roles, and corner store manager ideas for increasing health.

Key Findings:

- Interviewed corner stores identified that most of their products are sourced from national or regional distributors and that there is a very limited number of suppliers that are sourced from within the state of Utah.
- Most of the stores had very limited 'healthy' and whole foods available. This is primarily due to the limited storage capacity of corner stores and the risk associated with product expiration and high costs of purchasing small quantities of products.
- Corner stores do not have relationships with other stores or local suppliers unless the stores had the same owner.
- Corner stores often recognized their strong roles in the community – as places for gathering and points of connection for community members. With this, some corner store owners and managers expressed interest in further engaging with food system improvements.
- Corner store owners and managers provided their own recommendations on improving the local food system – highlighting the interest in a local subsidized meal program and education around food.

From this research, we provide recommendations for overcoming barriers and increasing opportunities to work with corner store managers and owners towards food security and equity.

1. **Continue to Build Relationships** to foster future research and engagement.
2. **Pilot Healthy Corner Store Improvements and Engagement** via investing in expressed infrastructure needs and consulting.
3. **Expand Study Area for Future Research** to better contextualize how healthy food interventions can be most successful.

Depending on the capacity of the OFC and partners, some combination of the discussed recommendations would likely be an effective strategy moving forward. Continued relationship building across the corner store community is critical and provides an exciting opportunity to build interconnections across the food system.

OVERVIEW

Recognizing that 14.5% of adults and 19.5% of children in Weber County, Utah experienced food insecurity in 2020 (Feeding America, 2020), the first Community Food Security Assessment for Weber County, Utah was conducted in 2021. The goal of this assessment was to better understand what infrastructure, policy, and systemic barriers impede residents from being food secure, and what interventions might support and drive food security (Backman et al., 2021). Noting access to healthy food as a key driver of food insecurity, researchers looked to develop a healthy corner store initiative that could increase corner stores' capacity to profitably sell fresh produce and healthy culturally appropriate foods. Our report, Healthy Corner Stores for East Central Ogden: Exploring barriers and opportunities to increase food diversity, describes research findings regarding connections between corner stores, distributors, and wholesale producers. Specifically, we share information regarding differences among corner stores, identified challenges, food suppliers, 'healthy' food supply, connections between corner stores, community roles, and corner store manager ideas for increasing health. From this research, we provide recommendations for overcoming barriers and increasing opportunities to work with corner store managers and owners towards food security and equity.

INTRODUCTION

Corner stores can play and important role in food access and health (Dannefer et al., 2012; Hawkins et al., 2022; Joassart-Marcelli et al., 2017; Martin et al., 2012; O'Malley et al., 2013; Ruff et al., 2016) yet many barriers exist to theses stores' ability to acquire, stock, and promote fresh and nutritional food options. Preliminary data collected by the Ogden Food Council (OFC) suggest that this national pattern plays out locally. Given recommendations from the Community Food Assessment for Weber County and subsequently the OFC, our research team worked to determine how corner stores procure the nutritional and culturally appropriate food options, what distribution channels are available in Ogden for these food options, and what relationships exist between corner stores that might facilitate the development of a network or hub.

For the purpose of our study, corner stores are defined as any retail establishment offering for sale prepackaged food products, household items, and other goods, may be in conjunction with gasoline sales, and having a gross floor area of less than 5,000 square feet. And, while the term corner store may connote small independent businesses, our study area included a large majority of franchised or corporately-owned convenience stores.

The research adapted a community-based research approach to this work in that we recognize that community knowledges have equal weight with academic knowledges, that all participants must be compensated for their time, and that established relationships with research participants is a pre-requisite to comprehensive knowledge co-creation (Community Research Collaborative, 2021). As such, relationship-building became a major element of this project.

METHODS

The study area (see Figure 1) was determined by the OFC and the United Way of Northern Utah. Criteria for inclusion was based on the East Central Ogden neighborhood boundary with an additional one-block buffer zone outside the neighborhood's edge. Bordering stores were included given the likeliness of visits from community members living within the boundary focus. Corner stores were locations where food was sold, but not structured as a restaurant, café, or full grocery store. The roles each of those business types is typically different from corner stores.

Figure 1: Corner store study area and corner store locations

Thirteen corner stores in the East Central Ogden area (Figure 1; see Appendix 1 for store list) were included in the study. Two additional stores, categorized as grocery stores because they are over the 5,000 square feet gross floor area, were included due to their independent ownership and relationship to the community (Kim's Market and Anaya's Market). Only managers or owners were interviewed for this project as they were most likely to have authority to share detailed information about suppliers, budgets, and relationships between corner stores and other entities.

Interviews were collaboratively designed between the SPARC research team and OFC and informed by literature gathered by the research team. Questions were designed to ascertain how corner stores supply different types of food, their relationships with suppliers and other corner stores, their role in the community, and their thoughts on the food system (see Appendix 2 for full interview questions).

We visited the fifteen stores on 10+ visits starting in September 2022, often accompanied by student researchers, to learn about the stores and begin relationship building. These students were enrolled in the University of Utah's Food Justice Senior Capstone course, a course intertwined with the SPARC lab. Store visits were organized on different days of the week and at varying times in hopes of speaking with managers or owners to facilitate the interview process. In the event that in-person outreach was unsuccessful, phone calls were made in an attempt to reach owners and managers.

Ultimately, six of the fifteen stores agreed to be interviewed by Talula Pontuti and Rossi Vicente between September 2022 and April 2023. Each interview lasted approximately 45 minutes and interviewees were compensated with a $100 Visa gift card. The other nine stores in the study area declined to be interviewed.

During data collection, it became apparent that the original target of conducting a network analysis of relationships among stores and suppliers would be inappropriate due to the low numbers of participants and a hesitancy to share information regarding suppliers. We determined that a series of descriptive statistical tests may help reveal basic patterning in differences between stores. The Fisher's Exact Test produces a statistic that measures whether the difference between the observed and expected frequencies (counts) of an outcome for a set of variables determines whether they are independent of one another (Agresti, 2012; R. A. Fisher, 1935, 1992; S. R. A. Fisher, 1962; Mehta & Patel, 1983). Essentially, the test evaluates two hypotheses. The null hypothesis (which describes the findings if the test results are non-significant, p-value > 0.05) is that there is no meaningful difference between categories, in this case, store ownership. The alternative hypothesis (which describes the findings if the test results are significant, p-value < 0.05) is that there are meaningful statistical differences between categories. It is important to note that a better test of independence exists: the Chi-square test. However, Chi-square requires that there be counts >5 for assessed categories. The size of the corner store dataset precludes the use of Chi-square, so we instead perform the Fisher-exact Test, which gives a true statistical result for small sample sizes. This is important to note because it is possible, given a larger data set, that some of the results reported below would change. As relationships build and more data can be attained, different analyses may be warranted.

To conduct this analysis, we compiled store characteristics into tables using Excel, then performed analysis in the R programming environment (R Core Team, 2022). We detail the specific tests and their results below.

RESULTS AND ANALYSIS

Six out of the fifteen corner stores completed interviews from September 2022 – February 2023 (see table in Appendix 3). Five of these stores were corner stores that would be categorized as a convenience store, primarily service snacks and non-perishable items. Anaya's Market was the only store interviewed that is structured as a small grocery store, providing fresh produce, meats, and additional perishable and non-perishable items. Below are the summarized findings across these interviews including quantitative analyses on differences between stores, reported challenges, supplier information, connections between corner stores, healthy food supply, perceptions about role in the community, and participant recommendations for the OFC.

Exploring Differences Among Stores:
Some stores were part of corporate structures (7-Elevens, Maverick), while some were franchised (Chevron), but many of the stores are privately owned but sell branded gas, etc. To explore whether store ownership type made them more or less amenable as conduits for carry healthy food, we performed a series of analyses using the Fisher-Exact Test.

Supplier Networks. It was assumed that privately owned stores would have a higher diversity of suppliers, including more regional ones. Of the stores that provided supplier information, we categorized whether those suppliers were national or regional (there were no truly local suppliers). However, we found that privately-owned stores were not statistically more likely to utilize regional suppliers than stores with a corporate or franchised ownership model (p-value = 0.067). An important caveat here, relating to sample size, is that even though the analysis is non-significant, all the privately-owned stores that provided this information engaged with regional supplier networks. Ultimately, we cannot conclude whether there is a relationship between store ownership and the scale of food suppliers, but we suspect that a larger dataset would reveal that privately owned stores are more likely to use regional or local suppliers overall. However, the same stores may be limited in their capacity to utilize these suppliers in ways that might facilitate increased access to healthy foods not usually carried in those stores.

Taking requests. Stores were asked whether they entertain requests from patrons about what to carry in the store. Our initial assumption was that privately-owned stores would be more willing to take requests since they didn't have to abide by top-level structures. However, we found there was no meaningful difference in whether a store was willing to take requests, based on store ownership (p-value = 0.47).

Food assistance. We collected information about whether or not a store accepted EBT food assistance to assess whether the store was able to facilitate community food access through assistance programs. Again, we assumed that private stores would have a more difficult time engaging with food assistance programs. However, we find that there is not meaningful difference in whether a store accepts EBT based on store ownership models (p-value = 1).

Gas. We collected information about whether a store is located next to gas pumps. We collected this information in case there were relationships between the likelihood of patrons to visit such stores because of access to gas and other goods at the same location. While we were not able to assess this since stores did not provide patron count data, we still explored whether there was a relationship between store ownership models and gas availability. We found there is no relationship (p-value = 1).

Willingness to participate. We assessed whether store leadership was willing to participate in this study based on store ownership. Our original hypothesis was that private owners might be more willing to participate; however, we find no meaningful relationship between store ownership and participation (p-value = 0.57).

In summary, the findings of the Fisher's Exact Test analyses suggest that there is no relationship between the type of ownership model a store operates under and any of the variables explored. However, with a larger dataset, some patterns may emerge. It is also important to note that this analysis only pertains to store characteristics as they were during the interviews. It is possible that interventions to resolve reported challenges (below) might impact the relationships analyzed here.

Reported Challenges:

Corner stores owners and managers identified the following challenges. It is likely that supporting these needs may increase capacity to address food system inequities.

- **Acquiring and retaining employees:** Stores often had quick turnover and challenges facing consistency in employees, with stores understanding the challenges of this while supplying low wages.
- **Storage space and refrigeration:** This has been a consistent barrier for corner stores wishing to supply more 'healthy' food and produce. Due to space and cost limitations, additional refrigeration space has been unattainable and without it, food spoils quickly. This makes having perishable food a challenge.
- **Lack of space and capacity for cooking:** One store mentioned that zoning and building issues led to challenges in having the full kitchen they had been planning for cooking fresh food. They would need to have additional space to store products separate from their cooking space and this capacity to build limited their fresh food plans. Another store who was not interviewed, mentioned in passing that they wanted to have a grill for cooking but have yet to be able to make it happen for unknown reasons.

Food Suppliers:

The corner store managers and owners that were interviewed primarily use national suppliers. Some products must be purchased directly from the company. Other products can be purchased from multiple suppliers allowing for some flexibility in choice, but the variety of these product types end up being nearly the same across companies. Corner stores utilize a few regional suppliers from neighboring states, primarily from Idaho, however regional distributors are not supplying the majority of food products available in the corner stores. Local (within Utah) sourcing of food is very limited. One store sources its meat from a couple of businesses within Utah, but was not comfortable sharing supplier specifics. Similarly, another store noted that they source pastries locally, but was also uncomfortable sharing additional information. Since we could not confirm local production, we did not code these suppliers as local. Interestingly, the most common local product purchasing across multiple stores is beer from Wasatch Brewing. Figure 2 shows all supplier names that were willing to be shared during the interviews, highlighting overlapping companies across stores. An important note here is that this is likely not an exhaustive list of suppliers because these interviews were limited in time and level of detail store owners and managers were able to offer.

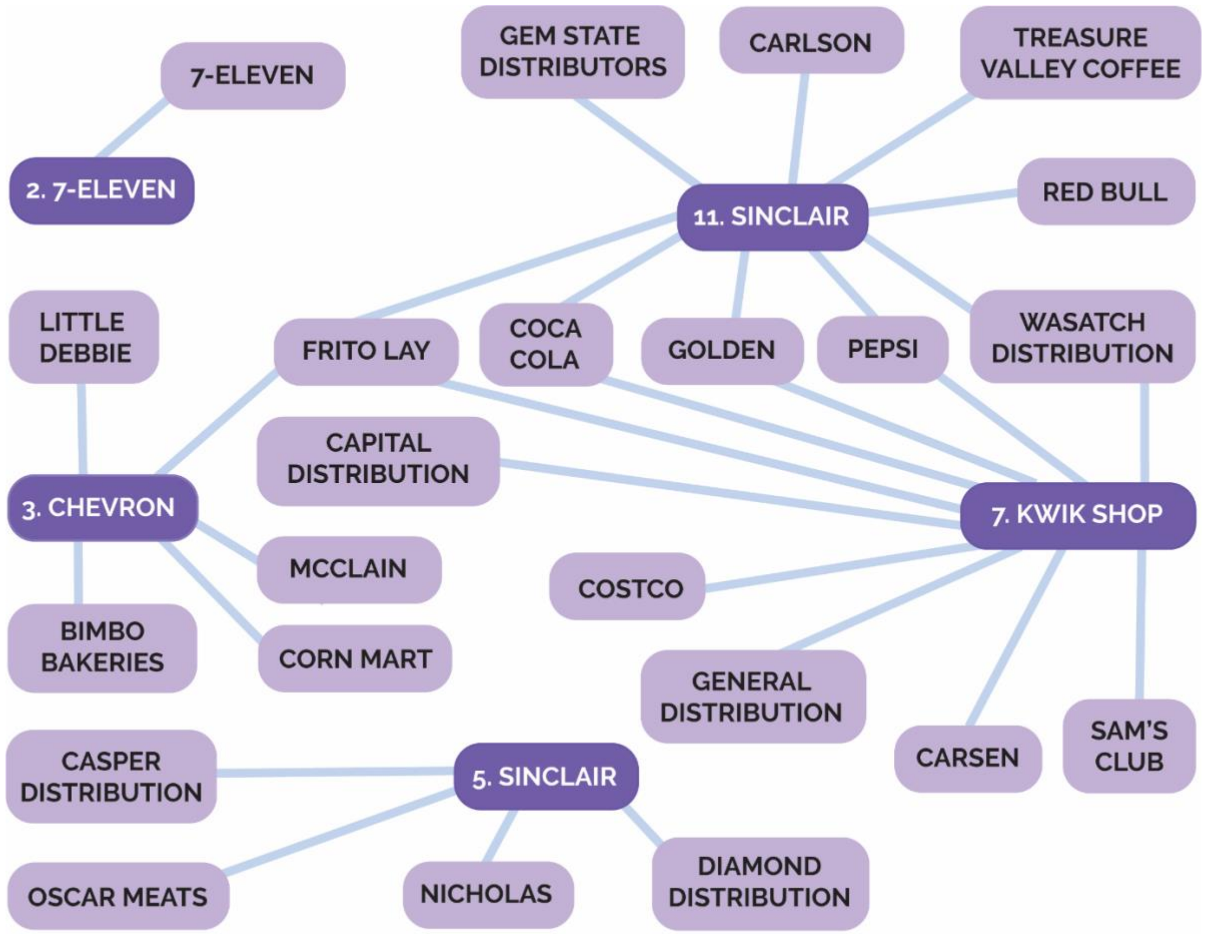

Figure 2: Corner stores (dark purple) and their suppliers (light purple).

Interviewed store managers and owners had a range of flexibility in the food they purchase. In the case of the store operating within a corporate structure, most products had to be purchased directly from their corporate-branded product line. If their product line did not supply the wanted product, then the store could utilize other suppliers for those goods. Similarly, in the store structured as a franchise, there is flexibility in suppliers technically, but suppliers contracted through their franchise have significantly lower prices. Regardless of ownership structure, most stores feel their options are limited due to what the community expects them to carry and the economical and logistical constraints that the stores must work under.

When there is supplier choice, decisions often come down to price, flexibility, and customer service. Products of course need to be both economically and culturally appropriate. For example, one store noted the importance of being able to supply Hispanic products for their Hispanic community members. Corner store managers often look for suppliers that can deliver their products quickly and professionally, and that have the best customer service – such as providing reminder calls to the stores to place their weekly order and providing alternative suggestions when products run out.

‘Healthy’ Food Supply:
Part of this research is focused on understanding corner stores’ experiences with selling healthy food options and throughout the interview process, common scenarios came to light. We define healthy food here quite broadly as we want to emphasize that healthy eating looks different for everyone; peoples’ needs are quite different. When we discuss healthy food items in this context, we are including produce, minimally processed foods, meals and snacks such as sandwiches, nuts, and yogurt, and other nutrient dense foods. Some stores have had unique experiences with supplying healthier food:

- The only market that sells a lot of produce and raw ingredients discussed the buying habits they see among customers: Overall, they sell quite a bit of produce – but the quantity varies with the seasons. They find that bread and meat sell better in the winter, but fresh produce sells better in the summer.
- Another store had a good experience with produce in the past: A small nearby grocery store would bring them fruit each week and would reimburse them for any produce that didn’t sell. This was a great relationship for this corner store but then the neighboring store shut down. Now, they sell much less produce since there is not the flexibility and security like before. This store also sees big fluctuations in the buying trends with customers – they say that they often get people buying healthier food options right at the beginning of the year after the holidays but that that often decreases throughout the year.
- Another store strongly encourages customers to consider buying the fresh sandwiches they make every day. The assistant manager said they're not the healthiest but finds them better than a lot of the snacks as a whole meal. Like other stores, they also primarily sell fruits, like apples and oranges. This manager makes a point to provide recommendations for customers and suggests healthier options when possible.
- A manager discussed that while they do not provide a ton of healthy food options, they do see positive changes occurring in what they have access to supply for customers.

Connections Between Corner Stores:
Among the stores interviewed, relationships between stores seem to mostly be between stores that are owned by the same person or company. For example, members discussed how the only times they work with other stores is if it is another store of the same owner and when one of them is running low on a product and needs a little bit extra. Similarly, another store provides support at their other locations or helps a neighboring corner store with trades in small amounts of stock as needed. The rest of the stores do not have any relationships whatsoever with other corner stores.

Community Roles:
Often, the interviewed corner stores see themselves as important members of the community – whether as a place for people to connect or as a place of reliability for folks to get what they need. Many of the people coming into these shops are regulars from all walks of life, so friendly relationships are built between the community members and employees. Multiple corner stores noted that they try to create a positive, welcoming environment for their customers, through high quality customer service and offering I.O.U.s when regulars are short on money and are waiting to get paid. One store

mentioned that they try to support the community in other ways as well, via donations to the Boys and Girls Club and the Rescue Mission when possible. See the following quotes of their thoughts:

"I would say 75% of our business is people that come in every day, right? So, I mean there's people that are passing through or just stop because they need something right then. But most of the people, I would say 75% of people come here every day or at least three times a week, right? Like this is a habit. And it's a hangout spot for the community."
"Families will call and tell them their kids are coming and so they watch out for them. Or older folks come in sometimes and just ask for help with miscellaneous talks since they're a closest resource and the people know them there. So, it's a little community hub."
"I just feel like we're just like a little really friendly (store). Still try to keep that like – just community based. Just like a small little corner store. Even though we're franchised; I still try to keep it super friendly and super personal."
"It's a franchise, but we still try to keep it like the ma and pa – like loan people a pack of whatever – some milk – until Friday until they get paid."
"We sell Mexican food for Mexican people. For Mexican people, we are good. We speak Spanish and people are more comfortable here and there is a sense of community."

Corner Store Manager Recommendations for Increasing Health:
The following ideas are recommendations and improvements that corner store managers and owners shared. These center around healthy food access and general food safety and policy.

1. **More nutrition education:** Multiple owners noted that they often witness customers purchasing snacks and unhealthy options and would like to see expansion on healthy eating education.

2. **Improved food safety enforcement:** Another store manager would like to see an improvement in food safety requirements and check-ins with stores. They feel they have seen quite unsatisfactory cleanliness requirements and believes corner stores should be held to a higher standard.

3. **Local subsidized food program:** One store owner discussed how it would be great to have a local supplier that gets them fresh lunches or bagged meals that could potentially be supported by SNAP or WIC or some other subsidized program that would allow businesses to opt into supplying these meals. It would be a way to bring in more wholesome foods at the low cost that is necessary for folks. This owner also discussed how this could even be a section for children who come in to be able to buy wholesome food for a dollar in a discounted section. They know that they can purchase some of these sorts of things from far away, but the quality and variety is quite limited, so they think it would be helpful to have something more local and fresher, but still stay at a cheap price – just a couple dollars.

Finally, these stores are interested in further communications and the results of this work:

- 7-Eleven (2012 Harrison Blvd, Ogden, UT)
- Sinclair (2991 Monroe Blvd, Ogden, UT)
- Sinclair (2388 Harrison Blvd, Ogden, UT)
- Chevron (2098 S Harrison Blvd, Ogden, UT)

DISCUSSION

This project provided insight into how multiple corner store managers and owners in the East Central neighborhood of Ogden, Utah acquire their products, how they think about healthy foods, how they operate their businesses, and how they view their role in the community. We found that many folks operate on tight profit margins and feel limited in supplier options, often working under constraints of bigger companies and catering to the needs and interests of the community. Faced with these limitations, corner store operators often do not have the capacity to expand their offerings to include varieties of food or other products that align with supplying healthy, affordable, and convenient foods, especially ones that are community-specific. However, despite this limited capacity in the current dynamics of corner store operations, some corner store operators are interested in serving community interests as they are able.

Although many stores declined interviews, we gathered publicly available information regarding the structure and environments of these stores to create a clearer picture of the neighborhood's food environment. Maverick Adventure's First Stop and the 7-Eleven at 803 24th St were not comfortable interviewing without corporate approval – which we were not able to receive. Five other stores provided clear disinterest in being interviewed. A handful of studies around the United States explore the roles of corner stores or similar businesses in efforts related to increasing food equity (Dannefer et al., 2012; Hawkins et al., 2022; Joassart-Marcelli et al., 2017; Martin et al., 2012; O'Malley et al., 2013; Ruff et al., 2016). One such study, Mui et al. 2015, provided part of the basis for the project undertaken and reported on here. In October 2022, we met with Dr. Yeeli Mui, lead author of the study conducted on corner stores in Baltimore, Maryland, to discuss the context that allowed for broad participation in their study. Below we detail the major relevant points from that discussion:

- Corner stores engaged by Dr. Mui's team were already involved within the B'More Healthy: Retail Rewards (BHRR) network, the result of a year-long study, with existing relationships firmly established. The BHRR network study assessed different methods of promoting healthy food in corner stores by testing different methods and their effectiveness:

1. The researchers and the BHRR gave discounts to corner stores in the purchasing of healthy foods. These discounts would then be passed on to the consumer.
2. Corner stores were given visual and interactive promotional materials to promote healthier products.
3. A combination of the first two methods.

- The results of this work have not yet been published, but it illustrates the need for long-term relationship building and reciprocity as the basis for successful data collection and advanced analyses, such as a network analysis.

- The principal investigator for the paper had 10-15 years of relationships working with the corner stores in the area and another author on the paper had been working with wholesaler relationships in the area for multiple years before starting this analysis. These provided more avenues to forming long-term relationships of trust that allowed for later information-sharing.

- Another notable piece about Dr. Mui's work is that none of the corner stores partnered with in Baltimore were part of any corporations. All the stores that were reached out to for interviews (over 80) were locally owned corner stores. That may have made it easier to promote changes within the stores than our corporate owned or franchised stores, although our analysis above and other work indicates corporately-owned stores may have higher capacity to explore potentially risky changes (Caspi et al., 2020).

- Finally, likely because of the existing relationships and the fact that they were local stores and not within a larger corporation, participants in Dr. Mui's study freely shared detailed supplier information.

The value of connecting with folks in corner stores and starting to better understand their experiences, needs, and interests are extremely helpful in engaging with corner stores as community food access points. With multiple participants expressing interest in improved food quality and community connections, it is not unreasonable to think that they could be willing to co-create solutions to the issues – given the right support from partners.

Challenges

Overall, it was challenging to begin the interview process without previous relationships having been built with the stores. This impacted our ability to have meaningful conversations with folks and be seen as a trusted partner. Often, corner store managers were not interested in speaking with us at all or would be hesitant to share information regarding their suppliers and more detailed store information that would have been helpful for the network analysis. However, when we were able to get to the interview phase with owners and managers, we often had great conversations. The owners and managers had insights and hopes around their stores and their community.

While providing compensation to interviewees is important and necessary as they are sharing their time and knowledge with us, it was interesting to see how most participants were hesitant to be compensated or say that the money wasn't necessary. A few of them mostly cared about the work and wanted to be helpful. The research team wondered if there was discomfort in accepting money during work hours for work that is not necessarily sanctioned by supervisors, or if there is a conflict in accepting extra money while already working. This was interesting to note and would be helpful to learn more about.

Towards the end of the research period, we learned that Kim's Market will soon be shutting down permanently and be replaced with a store that is less focused on selling raw ingredients. We have heard that this new store will likely be more of a convenience store, selling snacks and drinks.

RECOMMENDATIONS

As a result of these interviews and supplementary research, there are various potential pathways forward to increase access to 'healthy', culturally preferred foods in the East Central neighborhood of Ogden:

1. **Pilot Healthy Corner Store Improvements/Engagement**

One pathway forward in working with corner stores as access points to healthy and affordable foods is via a 'Healthy Corner Store" program, which is becoming more commonly adopted by the public sector. Based on the discussions with interviewees, there are likely stores that would be interested in further engaging with healthy food in their stores, but need additional support to do that work.

We see two ways that have had success in this path. The first is an intensive pathway offering full consulting opportunities to corner stores to become a 'healthy corner store'. This support can be offered in different capacities depending on identified need and interest by the corner stores. For some stores, this may look like marketing and educational support. For others, this may be funding support to purchase new equipment or help subsidize healthy product purchases for an initial funding period. Other stores may need more substantial support – via store remodels and business infrastructure support. Regardless of the scale of interventions, these stores can then be promoted by OFC and other partners, along with being provided with networking opportunities to grow their businesses. This sort of methodology has been successfully implemented in different locations, most notably via the Los Angeles Food Policy Council's Healthy Neighborhood Market Network (Los Angeles Food Policy Council, 2022). This first option of having a full program investing in neighborhood corner stores can be started as a pilot program with a few initial stores to identify interest and scalability. This primarily depends on capacity and funding access to the OFC and buy in from partners.

The other option to support corner stores in increasing capacity and interest in supplying healthy, affordable corner stores is to provide refrigerators, new shelving, or other infrastructure to corner stores in exchange for requiring they provide a certain amount of healthy food items in their stores for purchase. Versions of this have been implemented in multiple cities across the United States and can be a lower-capacity option to engage with corner stores with more flexibility – along with low input opportunity to gauge interest in further interventions or support for corner stores (for example, see Austintexas.gov, 2023).

2. **Expanding Study Area and Continue Research**

To generate more robust analyses about the relationship among stores and suppliers, the study area could be expanded to Ogden neighborhoods that have similar food accessibility levels, demographics, and socioeconomic statuses. For example, in the map shown in Figure 2, there are numerous areas across the city that are low income and have a large minority population (Hispanic/Latino folks just being one example shown below) and may have similar foodscapes as East Central Ogden (Backman et al., 2021).

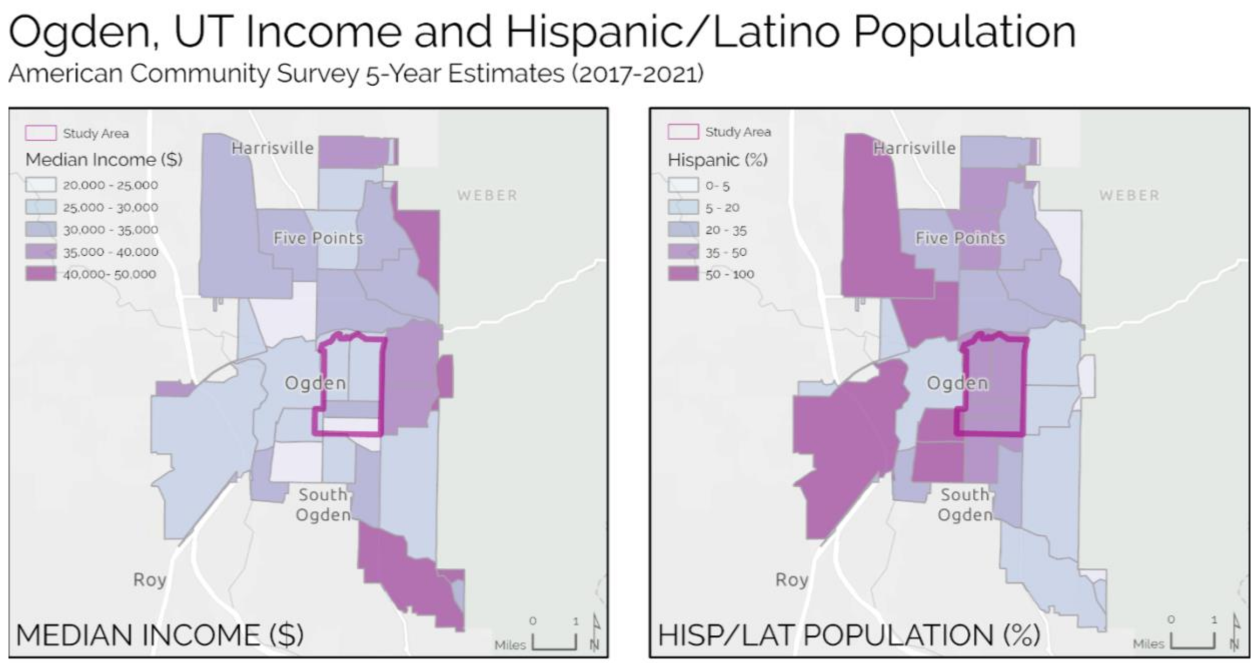

Figure 3: Socioeconomic and Demographic Visualizations Across Ogden, UT.

A UWNU Corner Store Organizer is currently dedicating time to building relationships with store operators. This may create opportunities for future information sharing with corner stores that will facilitate additional insights. Such work is imperative to understanding the experiences of corner stores before moving on to a robust food system intervention. One reason for expanding future work beyond a single neighborhood is because a larger dataset (especially given limited likely participation) will be more appropriate for identifying trends and relationships among stores such as those in the East Central Ogden neighborhood. For example, it is likely that corporate stores, or those branded as national companies, have similar operating parameters as others with the same ownership condition. Ultimately, continued outreach and relationship building with these community members is still strongly recommended.

Depending on the capacity of the OFC and partners, some combination of the discussed recommendations would likely be an effective strategy moving forward. Continued relationship building across the corner store community is critical and provides an exciting opportunity to build interconnections across the food system.

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APPENDIX 1: FULL CORNER STORE LIST

1. Sinclair: 2080 Washington Blvd, Ogden, UT 84401
2. 7-Eleven: 2012 Harrison Blvd, Ogden, UT 84401
3. Chevron: 2098 S Harrison Blvd, Ogden, UT 84401
4. Kwick Stop: 630 E 21st St, Ogden, UT 84401
5. Sinclair: 2388 Harrison Blvd, Ogden, UT 84401
6. 7-Eleven: 803 24th St, Ogden, UT 84401
7. Kwick Shop: 803 25th St, Ogden, UT 84401
8. Kwick Stop: 506 26th St, Ogden, UT 84401
9. Stop and Go Market: 809 28th St, Ogden, UT 84403
10. Maverik Adventure's First Stop: 2810 Washington Blvd, Ogden, UT 84401
11. Sinclair: 2991 Monroe Blvd, Ogden, UT 84403
12. Chevron: 2983 Washington Blvd, Ogden, UT 84401
13. Sunshine Stores: 2688 Washington Blvd, Ogden, UT 84401
14. Kim's Market: 730 28th St, Ogden, UT 84403
15. Anaya's Market: 346 30th St, Ogden, UT 84401

APPENDIX 2: INTERVIEW QUESTIONS

Background Information:

1. How and why did you get into this work?
2. What is your role in this business?
3. What year did this store open and are you the original owner?
4. What is the ownership structure of this business?
5. What food items sell the best in your store?
6. How many suppliers do you have?

Sourcing and store relations:

7. Are you comfortable sharing who your suppliers are? And a rough percentage of how much of your stock they provide as well as the types of foods they provide?
    - If not, do you know if any of your suppliers source food locally– such as within the state of Utah?
8. How much choice do you (or the store owner) have in selecting suppliers?
9. For the suppliers you get to select, why have you selected them?
10. Do you have any relationships or cooperative agreements with other corner stores?
    - If so, describe.
    - If not, is this something you might be interested in (i.e. cooperative buying)?
11. Do you ever get any of your stock from big box stores or other grocery stores when you run out of products?
12. Are there any aspects of the relationships you have with your suppliers or other corner stores that work well?

Context questions:

13. What do you see as your store's role in this community?
14. Does your store accept assistance programs for purchasing food (eg., SNAP, WIC)?
15. Are there things you wish you could stock but cannot? Why not?
16. Do shoppers request products or have any influence in what you stock and acquire?
17. Do you carry any food items specifically catered to the surrounding community?
18. We've gotten feedback that folks in this area want more nutritious food but for me, I always want to eat healthier and cook more but don't always follow through. We were wondering if you have tried stocking more fruits and vegetables. Has it worked?
19. What recommendations do you have for city or state policymakers around food or supporting your business?
20. Do you have any other information you'd like to share about how you choose and supply food in your store?

APPENDIX 3: SUMMARY TABLE OF CORNER STORES

#	Name	Address	Participation	Ownership Model	Suppliers	Supplier Types	"Healthy" Food Options	Takes Requests	EBT	Gas
1	Sinclair	2080 Washington Blvd Ogden, UT 84401	No	Private (Likely)	Unknown	Unknown	Limited	Unknown	Unknown	Yes
2	7-Eleven	2012 Harrison Blvd Ogden, UT 84401	Yes	Corporate	7-Eleven brand, otherwise not comfortable sharing.	National	Limited	Yes	Yes	Yes
3	Chevron	2098 S Harrison Blvd, Ogden, UT 84401	Yes	Franchise	McClain, Frito Lay, Corn Mart, Little Debbie, Bimbos.	National	Limited	Yes	Yes	Yes
4	Kwick Stop	630 E 21st St Ogden, UT 84401	No	Private (Likely)	Unknown	Unknown	Limited	Unknown	No	No
5	Sinclair	2388 Harrison Blvd Ogden, UT 84401	Yes	Private	Corn Mart, Oscar Meats, Nicholas, Diamond Distribution, Casper Distribution.	National, Regional, Local	Limited	Yes	No	Yes
6	7-Eleven	803 24th St Ogden, UT 84401	No	Corporate	Unknown	Unknown	Limited	Unknown	Yes	No

#	Name	Address	Participation	Ownership Model	Suppliers	Supplier Types	"Healthy" Food Options	Takes Requests	EBT	Gas
7	Kwick Shop	803 25th St Ogden, UT 84401	Yes	Private	Capital Distribution, Pepsi, Coca Cola, Frito Lay, Wasatch Distribution, Carsen, Golden, General Distribution, Sam's Club, Costco.	National, Regional, Local	Limited	No	Yes	No
8	Kwick Stop	506 26th St Ogden, UT 84401	No	Private (Likely)	Unknown	Unknown	Limited	Unknown	Yes	No
9	Stop and Go Market	809 28th St Ogden, UT 84403	No	Private (Likely)	Unknown	Unknown	Limited	Unknown	Unknown	No
10	Maverick Adventure's First Stop	2810 Washington Blvd Ogden, UT 84401	No	Corporate	Unknown	Unknown	Yes	Unknown	Yes	Yes
11	Sinclair	2991 Monroe Blvd Ogden, UT 84403	Yes	Private	Wasatch, Golden, Carlson, Gem State Distributors, Frito Lay, Pepsi, Coke, Redbull, Treasure Valley Coffee.	National, Regional, Local	Limited	No	No	Yes

#	Name	Address	Participation	Ownership Model	Suppliers	Supplier Types	"Healthy" Food Options	Takes Requests	EBT	Gas
12	Chevron	2983 Washington Blvd Ogden, UT 84401	No	Corporate (Likely)	Unknown	Unknown	Limited	Unknown	Unknown	Yes
13	Sunshine Stores	2688 Washington Blvd Ogden, UT 84401	No	Private (Likely)	Unknown	Unknown	Limited	Unknown	Yes	No
14	Kim's Market	730 28th St Ogden, UT 84403	No	Private	Unknown	Unknown	Yes, full grocery store but limited produce.	Unknown	Unknown	No
15	Anaya's Market	346 30th St Ogden, UT 84401	Yes	Private	Not comfortable sharing. However, meat suppliers are from Utah.	National and Regional	Yes, full grocery store.	No	Yes	No