SHOPPING HABITS AMONG COMMUNITY MEMBERS OF THE NORTH SHORE OF STATEN ISLAND

A Report from City Harvest's
Staten Island Action Learning Group

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Executive Summary

Since 2000, City Harvest has worked to increase access to fresh produce and quality nutrition education in communities across New York City through our evolving community-based programs. We have been active partners on the North Shore of Staten Island since 2010, and our efforts now reach over 57,000 people in Stapleton and Mariners Harbor.

Through this work, we've learned that City Harvest will best engage community members of the North Shore of Staten Island when we are fully informed about where and how often people buy food, as well as how they get to these venues. In the summer of 2017, a cross-functional City Harvest team representing Healthy Retail, Community Engagement, Nutrition Education, and Corporate and Foundation Relations developed an "action learning project" to update our understanding of this important area of our neighbors' lives.

The team began by developing a 13-question survey, in English, after which City Harvest staff and Wagner College students translated the survey into four additional languages. City Harvest staff and trained community volunteers then administered this survey orally during nine survey sessions held between September 9th and October 4th, 2017. Survey respondents ultimately included 340 Staten Island Mobile Market participants, clients at several emergency food providers, and patients at health clinics. Key findings from completed surveys —discussed in more depth throughout this report — include:

- ❖ Nearly all participants purchase most of their groceries from supermarkets where they do a "big shop" once or twice a month.
- ❖ Respondents shop both "inside" and "outside" of their neighborhood, although primarily remain on the North Shore, and get to the venue through various modes of transportation.[1]
- ❖ Engaging long-term community volunteers in participatory research has the potential to expand understanding of who City Harvest serves.
- ❖ Mobile Market participants can serve as a proxy for understanding the shopping behaviors of other low-income residents receiving emergency food on the North Shore of Staten Island.

Recommendations arising from this survey include finding ways to lower produce prices at the most popular supermarkets, developing strategies to reduce delivery and transportation costs, and exploring alternative transportation options. Additionally, we suggest working with corner stores to promote healthy snacks and beverages. A next step in further understanding purchasing habits of Staten Island residents would be to conduct focus groups probing deeper into areas where we raised more questions than we answered.

[1] For the purpose of this project, "outside" the neighborhood is defined as any location existing more than 10 minutes away from respondents, whether by walking or driving.

Background and Purpose

Recent research indicates that people in areas with limited healthy food options do *not* shop only at local supermarkets and bodegas. Proximity to a supermarket was considered helpful, but most of those studied left their neighborhoods to shop at supermarkets because they prioritized price over convenience (Alkon, 2013).

City Harvest has a strong Healthy Retail program that promotes fresh produce in both corner stores and supermarkets across the five boroughs. This year, to better understand how North Shore, Staten Island community members access food both within and outside their neighborhood, City Harvest staff undertook a 100-day action learning project as part of our ongoing *Healthy Neighborhoods* strategic planning process. The project detailed here is an outgrowth of that effort.

For this particular project, we decided to find out where people on the North Shore of Staten Island did most of their grocery shopping—large supermarkets, corner stores, both, or other venues—and whether price and quality seemed to be more important than proximity.

Our hypothesis. We believe City Harvest will better engage community members of the North Shore of Staten Island when we are fully informed about where and how often they buy food and how they get to these venues.

Our desired learnings. Through this project, the team seeks to identify food shopping habits of our *Healthy Neighborhood*s residents; determine whether we can engage community members in participatory research; and discover if Mobile Market participants are a good proxy for the shopping behaviors of other neighborhood community members.

City Harvest Mobile Markets are open-air distributions, held in all five boroughs, during which fresh produce is distributed for free to registered households. The markets ensure access to healthy food and nutrition education in communities with high rates of food insecurity. Previous Mobile Market program evaluations have found that 90% of participants eat more fresh produce and 70% eat fruits and vegetables daily after they start attending City Harvest's Mobile Markets.

Methodology

Survey. The team developed a survey, designed to be administered orally, of 12 multiple choice questions and one open-ended question, focusing on shopping habits in Staten Island (see *Appendix A*). To ease data collection and entry, the group decided to implement the surveys through portable Amazon Kindles and computers located at specific sites. We also made paper copies available as backup—for example, in case of technical failures.

Following a survey pretest for usability with three people, the team finalized the survey format and entered the English-language version into Survey Monkey. This version was then translated into Spanish, Russian, Chinese, and Arabic.[2] On-site, volunteers accessed surveys through Kindles at Mobile

[2] A member of City Harvest's staff provided the Spanish translation, while students from Wagner College (engaged through the Staten Island Community Engagement Manager) provided translation into the other three languages.

Markets and emergency food providers, and via a desktop computer at the health centers. As mentioned above, we used paper forms when Kindles or computers were not available.

Survey respondents. Staten Island Mobile Market participants, at both Stapleton and Mariners Harbor, were the largest number of respondents to the survey.

As City Harvest affiliates with food pantries and health clinics, we surveyed clients at the Trinity Lutheran food pantry and soup kitchen, Project Hospitality's food pantry, Community Health Action of Staten Island's food pantry, Beacon Christian Community Health Center, the Community Health Center of Richmond in Stapleton, and the Community Health Center of Richmond in Port Richmond.

We felt that by receiving feedback from these outside groups, the team would have a broader sense of the shopping habits of low-income residents of the North Shore.

City Harvest aimed to survey 340 of approximately 2,000 Mobile Market, food pantry, and health center clients, for a confidence level of 95%. This total assumes each registered household in these locations averages three members per family (see *Tables 1 and 2* below). The total population of the North Shore of Staten Island is 178,698, with 20% (35,739) living in low-income households.

Table 1. EFPs and Mobile Markets

Location	Number of Families Served per Distribution
Trinity Lutheran	50-70 families
Project Hospitality	100-150 families
Community Health Action of Staten Island	100 families
Stapleton Mobile Market	350 families
Mariners Harbor Mobile Market	200 families

Table 2. Health Clinics

Location	Number of Patients Served
Beacon Christian Community Health Center	1,627 patients on average per month (may include duplicates). Dietitian sees 25 patients per month.
Community Health Center of Richmond, 135 Canal Street	450- 500 participants per month. Dietitian sees approximately 40 participants per month.
Community Health Center of Richmond, 439 Richmond Avenue	Dietitian sees 20 patients per week.

Volunteers. City Harvest recruited community volunteers at both Staten Island Mobile Market locations and food pantries to help administer the surveys. At least one City Harvest staff member was present at each of these locations, and staff at the health clinics administered their own surveys. Volunteers received a $10 gift card to either Food Universe (closest to Stapleton) or ShopRite (closest to Port Richmond and Mariners Harbor) for each session where they administered surveys.

Training. City Harvest staff provided a brief training for volunteers before they started data collection. This required the volunteers to fill out the surveys themselves and to ask the staff member any questions they had while doing so.

We also provided a training protocol document that explained how to administer the surveys and how to respond to problems that might arise. For example, if the participants did not volunteer the name of a supermarket on their own, it was suggested that the surveyors prompt them from the list of supermarkets. See *Appendix A* for the list of questions and training information.

We completed the training in the half hour prior to survey administration at our two Mobile Markets and the three food pantry locations. The health clinics were provided with the training document and shared it with staff administering the surveys.

Administration. A schedule for administering the surveys that accommodated staff availability also ensured that the surveyors would not interview people more than once. For example, most food pantries allow clients to pick up food only once a month. By surveying at the beginning of the month and again in the middle, we hoped to reach new groups of clients for each survey administration.

A total of nine survey sessions were held between September 9th and October 4th, 2017. In addition, site staff at the three clinics interviewed patients during scheduled visits and, if a paper form was used, transferred the data to Survey Monkey. Each week, the team gathered to discuss the ongoing process and to reevaluate the survey procedure.

Data analysis. Survey data were analyzed using SPSS —first with a univariate analysis on all the variables of interest to summarize the data, followed by logistic regression models to look at associations between different categorical variables (survey sites, supermarkets, and means of transportation).

Dalia Makarem, a clinical research coordinator from the Department of Genetics and Genomic Sciences, Icahn School of Medicine at Mount Sinai, was recruited at the beginning of the project as a volunteer to do the data reporting and analysis. This allowed the team to focus on developing the survey, getting it translated, and working out the logistics for survey implementation.

Results

Of the 409 surveys we collected, City Harvest excluded 50 from our analysis, either because the surveys were incomplete or because the respondent indicated that s/he did not handle household grocery shopping. We therefore analyzed the remaining 359 surveys. Our summary of findings can be found below.

Supermarkets. Nearly all participants (95.5%) purchase most of their groceries from supermarkets (see *Figure 1*), where they do a “big shop” either once (45.1%) or twice (30.4%) a month (*see Figure 2*). Respondents shop both “inside” (57.9%) and “outside” (41.8%) their neighborhoods. To get to these stores, 30.9% walk, 30.1% take a bus, and 28.7% take their own car (see *Figure 3*).

The four most frequented supermarkets were ShopRite on Forest Avenue (43.1%), Western Beef on Bay Street (30.6%), Stop & Shop on Forest Avenue (25.9%), and Western Beef on Forest Avenue (25.4%) (see *Figure 4*).

Although most respondents traveled within the North Shore of Staten Island, some went much farther afield to retrieve their groceries:

- Chinese-speaking respondents shopped in New York City's Chinatown (three of nine respondents) or Brooklyn (two of nine respondents).

- Russian-speaking respondents shopped at NetCost Market, which is a Mid-Island Russian supermarket (three of five respondents).

- English-speaking respondents mentioned traveling to New Jersey for groceries: Walmart (two), Aldi (one), and Acme (one). One respondent went to Whole Foods in Manhattan.

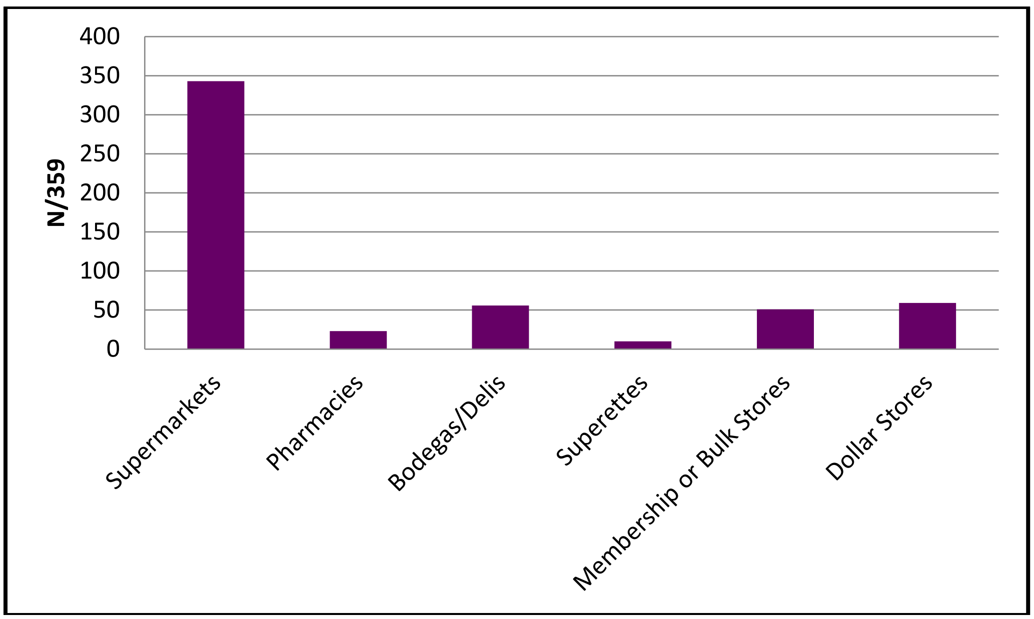

Figure 1. Where do you buy most of your groceries?

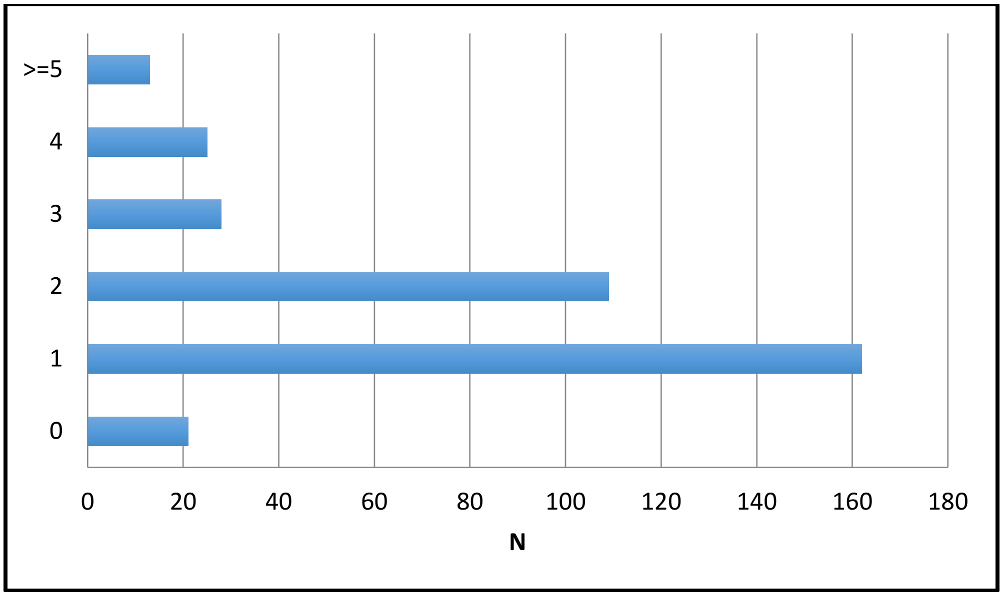

Figure 2. How many times do you do your big grocery trips in a month?

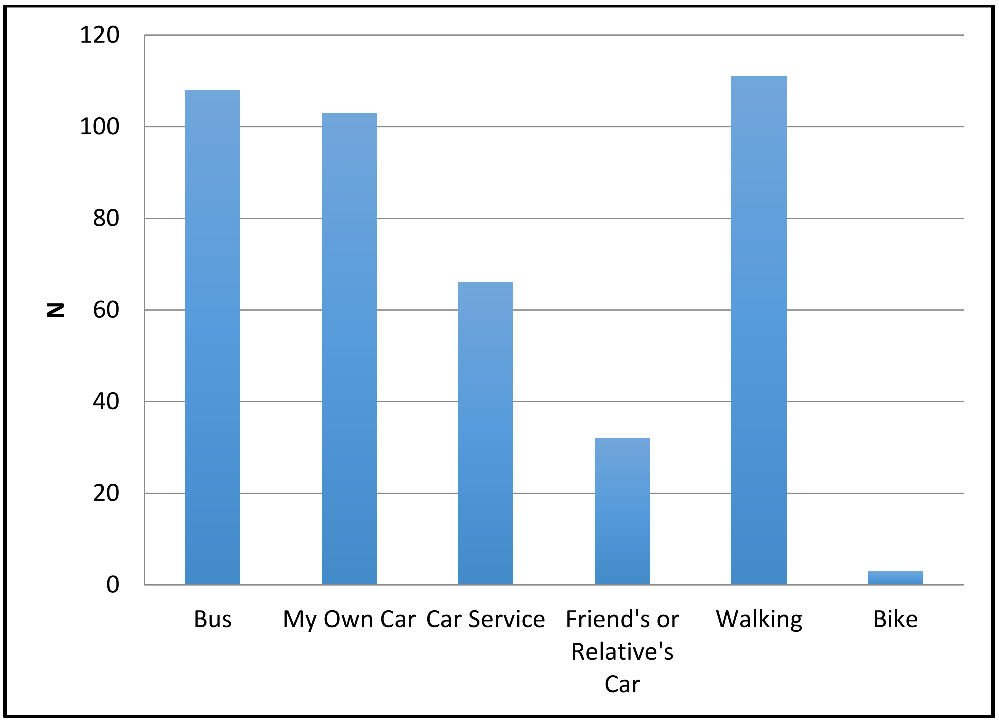

Figure 3. What is your means of transportation for big grocery shopping?

Bodegas. 62.7% of respondents said they purchase food at a bodega. However, only 15.5% of respondents indicated they buy most of their groceries from bodegas.

When asked what they purchase, respondents were able to select more than one answer: 39.1% purchase staples such as milk, eggs, and bread, 35.5% purchase a wide array of items, 31.6% purchase breakfast, and 28.9% purchase lunch (see *Figure 5*). 30.4% of respondents do not go to a bodega during any given week, while 15.3% go to a bodega more than 5 times a week.

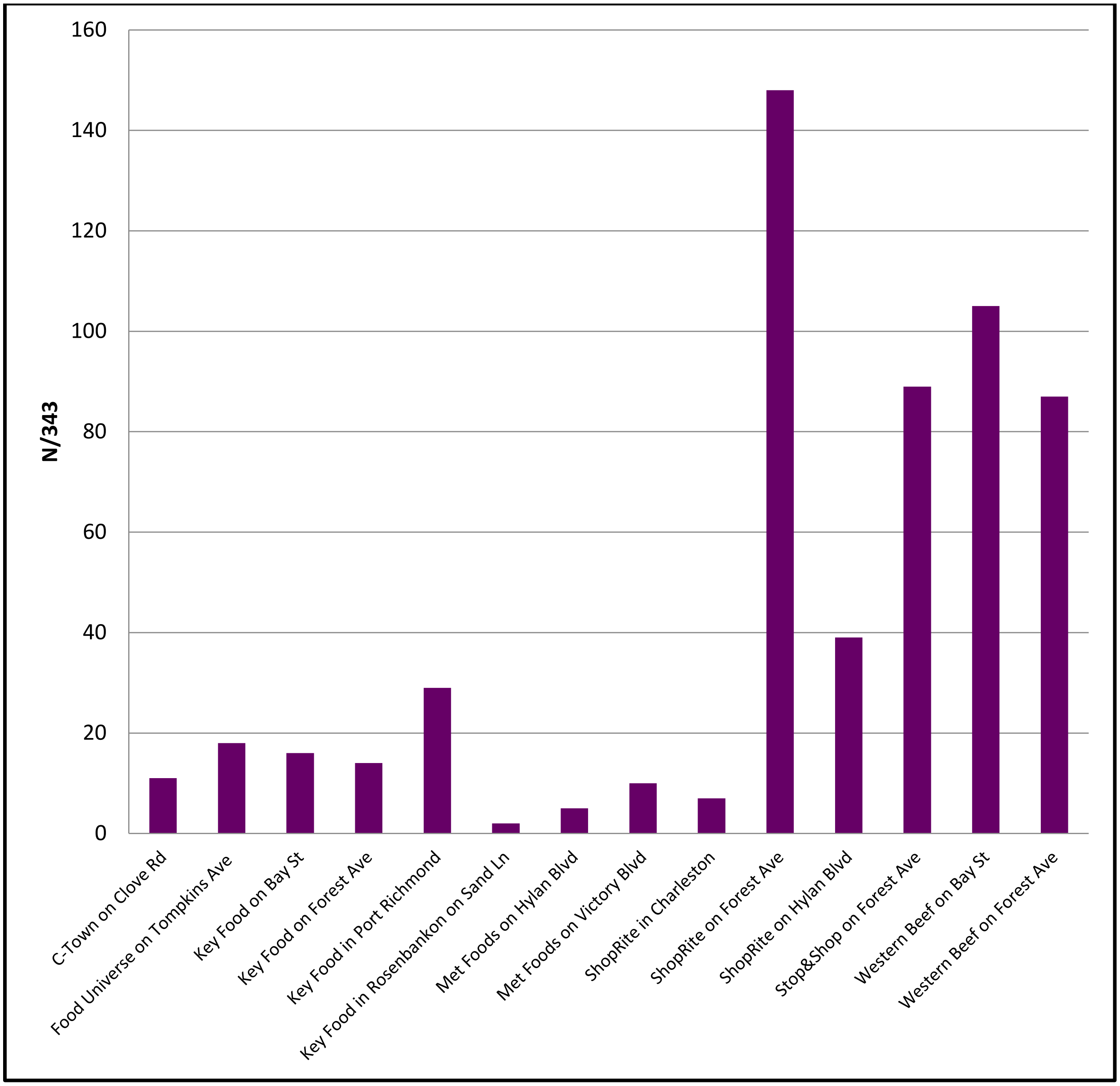

Figure 4. Which supermarkets do you go to?

Delivery service. Most respondents (92.2%) do not use a food delivery service. Of those who do (6.4%), the preponderance use local stores' services—ShopRite (52.2%), PeaPod/Stop & Shop (5.2%) and Key Food (39.1%)—rather than a national enterprise such as Amazon Fresh, Blue Apron, Hello Fresh, or Fresh Direct.

Statistical significance. When analyzed, the following showed statistically significant associations.

- The people shopping at the ShopRite on Forest Avenue are 2.95 times more likely to get there using a friend's or relative's car than those who do not shop there. In addition, they are 47% less likely to walk to the grocery store.

- Those shopping at the ShopRite on Hylan Boulevard are 79% less likely to walk to the grocery store than those who do not shop there.

- Shoppers at the Stop & Shop on Forest Avenue are nearly twice as likely to use their own car to get there as those who do not shop there.

- People shopping at the Western Beef on Bay Street are 2.36 times more likely to use a car service than those who do not shop there.

Improving food shopping. At the completion of the survey, we asked respondents to share ideas on how to make their food shopping easier or better. Only a small percentage of respondents provided feedback, which clustered into three categories: transportation, cost, and other.

Transportation ideas included having access to a car or closer stores (N=30), or a delivery system (N=22). Cost-related ideas included cheaper prices (N=17) and coupons (N=21). Other suggestions included preparing a shopping list (N=9), farmers' markets on days other than Saturdays, and shorter lines.

Discussion

Most sales occur at supermarkets. The survey results indicate that respondents are purchasing their groceries at a few main supermarkets on Staten Island. Over 50% of those surveyed shop at one of two ShopRite supermarkets, with the ShopRite on Forest Avenue being the most popular. Two Western Beef supermarkets and Stop & Shop are among the other most frequented locations.

No matter whether these supermarkets are "inside" or "outside" people's neighborhoods, participants travel to them via a variety of means, including walking, bus, car, and car service.
Staten Island residents appear to go to the stores where they feel they get the best value, and they find the means to get there as a result.

Although survey respondents did not indicate why they were going to these specific stores, related research shows that low-income individuals travel to supermarkets that they prefer because of price, quality and quantity, often bypassing supermarkets and grocers in their own neighborhoods (Alkon et al., 2013).

This data is consistent with other research—for example, disadvantaged consumers living on the lower east side of Detroit, Michigan, bypassed their neighborhood food environments for perceived better prices and quality (LeDoux, 2013).

Those surveyed also reported doing a large grocery trip one (45.1%) or two times (30.4%) a month. It would be helpful to know how often shoppers frequent other stores between large shopping trips. Perhaps future data collection efforts can explore that further.

Many participants also buy food from delis and corner stores. Over 60% of those surveyed said that they buy food from a deli, corner store, superette, or bodega, and about 15% of those who responded said they buy most of their groceries from the bodega. The majority of those surveyed buy staple items like milk and eggs or "lots of things" (see *Figure 5*). Breakfast, lunch and snack items also seemed to be popular purchases at bodegas.

This data is consistent with a recent study of 171 NYC bodegas, which showed that people primarily utilized bodegas to purchase non-food items, sugar sweetened beverages, snacks and foods other than produce (7% reported purchasing produce at bodegas) (Ruff et al., 2016). This information may have implications for programs like City Harvest's Healthy Corner Store program, which promotes fresh produce in corner stores. These programs might consider promoting healthy snacks, beverages, breakfast, and lunch items in addition to fresh produce.

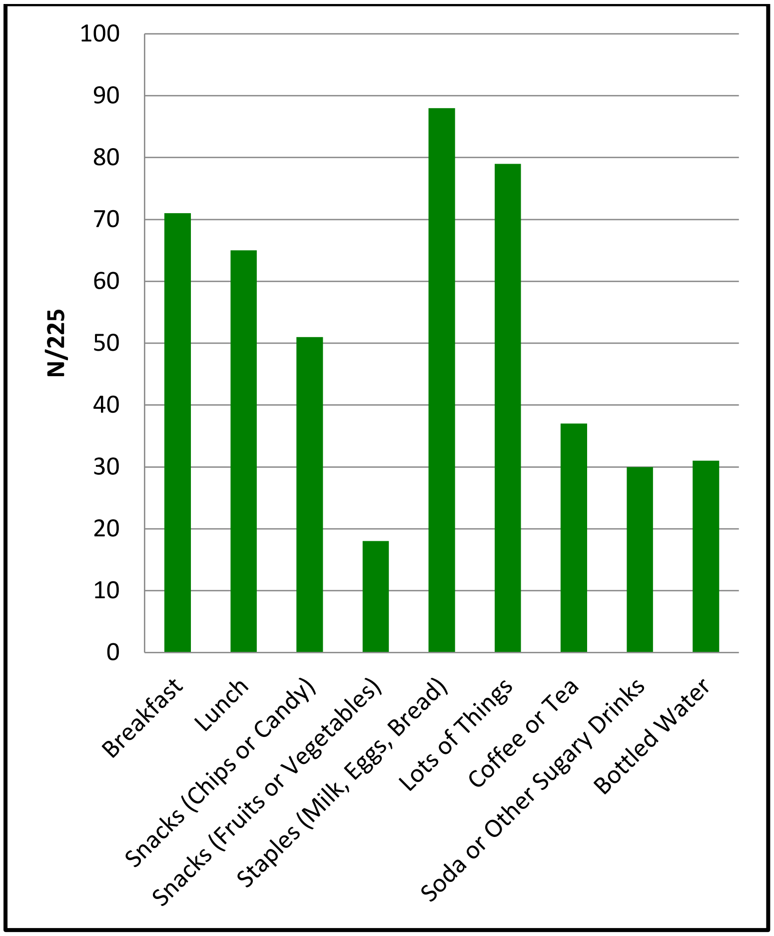

Figure 5. What do you buy when you shop at a bodega?

Delivery services are not widely used. According to the data, very few of those surveyed use grocery delivery services (6.4%), and the delivery services they use are from local supermarkets like ShopRite, Stop & Shop, and Key Food. At the time we conducted this research, Amazon Fresh had just begun delivering groceries on Staten Island. With this new access point and the growing popularity of grocery delivery services, we may get different answers to this question in future years.

Mobile Market participants as proxies for other neighborhood residents. One of the research questions the group tried to answer was whether shopping behaviors of City Harvest Mobile Market participants can serve as a proxy for other low-income community members on the North Shore of Staten Island.[3] Given that there were few statistically significant differences between survey responses received from the Mobile Market and those received from clients of emergency food providers and

[3] The small sample size (n=12) of surveys from health clinics does not permit us to confirm Mobile Market participants as a proxy for this group in the same way we were able to do so for emergency food providers.

the small sample of individuals from health clinics, the Mobile Markets may serve as useful locations for future data collection efforts.

Engaging community members in participatory research. The team also explored whether we could engage community residents in researching their communities for this project. We found mixed results —while we were able to recruit *volunteers* on-site to lead data collection efforts, we were not able to successfully recruit from among location *clients*. Those recruited were "community volunteers," people who volunteer regularly at the Mobile Markets or food pantries (at Community Health Action, staff helped a few times). From this experience, we gleaned that while City Harvest can engage community members in participatory research, we must acknowledge that these volunteers may already be deeply involved at their sites, rather than attributing their participation to City Harvest efforts alone.

Transportation and store choice. The data show that people who go to the Forest Avenue ShopRite store and Stop & Shop are less likely to walk and more likely to use their own car, or borrow a friend's or relative's vehicle. This may be because bus trips to these locations can take as long as an hour each way and may require transfers. On the other hand, those shopping at Western Beef on Bay Street are 2.36 times more likely to use a car service than those who do not shop there, perhaps because it is close to the Stapleton locations and the fare is more affordable than if the shopper were going to ShopRite or Stop & Shop, both of which are miles away from Stapleton. To find out exactly why people go to one store over another will require further study.

Limitations and Considerations

Survey development. Students at Wagner College provided rapid translation of the survey into multiple languages, which was invaluable for reaching a wider variety of participants since the North Shore is a very diverse area of Staten Island. Based on attire, the Staten Island Community Engagement Manager has assumed some Mobile Market participants were Middle Eastern and spoke Arabic. However, during survey administration, she learned they spoke Urdu or other Indian languages. We highly recommend finding out (not assuming) which languages would be most useful in which to survey participants for future studies of this nature.

Another translation-related realization was that several (at least two) of the Russian speakers did not know what a deli, corner store, or bodega was. We cannot be certain whether the translator understood these terms himself, as he did not translate them, as shown in this question:

> Вы покупаете продукты в магазинах по-соседству - deli, corner store, superette, или bodega?

In retrospect, we should have reviewed the translated surveys for untranslated terms and, if any were found, worked with the translator to determine reasonable equivalents before starting to survey the participants. For example, we might have used the word "delicatessen" instead of the abbreviated "deli" in the source file to arrive at a more complete translation.

Survey administration—technological limitations. The team created the survey in Survey Monkey, which must be accessed live via the Internet. This presented a number of challenges, including a staff learning curve, as well as screen display and device connectivity issues.

To address Wi-Fi challenges, we were able to secure Internet access devices, called “hotspots,” from our IT department. These allowed us to administer the survey in places outside of existing Wi-Fi range. However, hotspots themselves have a limited range, meaning multiple surveyors need to stay within 10 yards of the hotspot. Alternatively, we found that personal cell phones could be used as hotspots. From this experience, we learned that multiple hotspots are helpful when there are multiple active surveyors in a given area.

Relative to screen display, available Kindle font sizes challenged those respondents who entered their own answers when a surveyor speaking their language was not available. While Kindles can also be used horizontally, making the page wider and font larger, this is not an ideal solution. Apple iPads, which are larger, could potentially provide a stronger user experience in the field.

Survey administration—implementation. Personal connections to potential respondents helped get surveys completed. While we were interested in engaging community members (for example, people in a Mobile Market line) to administer the survey, we were more successful with City Harvest staff or long-term community volunteers as survey administrators. The personal connection between volunteers and potential respondents helped increase participation.

Dietitians at clinics were unable to reach as many people as planned within the time allotted for data gathering. Only 12 participants from three sites were surveyed. However, their responses were similar to those from the other locations.

Data gathered. We did not gather ZIP codes for where people live, limiting our ability to correlate shopping venue choices, as well as modes of transport, to place of residence. However, 39% of people who shopped “inside” their neighborhoods walked, whereas 22% who shopped “outside”[4] walked. Buses were used by 23% of people shopping “inside” their neighborhoods and by 37% of people shopping “outside” their neighborhoods. Differences in car usage or driving with friends or relatives while shopping either “inside” or “outside” the neighborhood were not significant.

Conclusions and Recommendations

The degree of food accessibility for Staten Island residents is important to several departments within City Harvest: Healthy Retail offers produce marketing help to corner stores and supermarkets; Mobile Markets deliver fresh produce to two New York City Housing Authority (NYCHA) developments twice a month; and the Staten Island Neighborhood Food Initiative, a community action network supported by City Harvest, publicizes corner stores with good produce departments to their neighborhoods.

City Harvest has been following the research and recommendations from the Department of Health and Mental Hygiene’s Shop Healthy initiative since 2005, and has had success with the program on Staten Island and in the other four boroughs. However, both the NYC and City Harvest programs have assumed that significant numbers of people in low-income neighborhoods shop at their local bodegas for groceries, including fresh produce.

Instead, as researchers elsewhere have discovered, cost tends to be the primary barrier to fresh produce purchases for low-income shoppers, rather than their lack of knowledge of shopping alternatives or their distance from supermarkets (Alkon, 2013). In addition, the NYC Mayor's Office found that, although low-income and middle- or high-income shoppers used about the same percentage of their retail food dollars on fresh produce (12% and 14% respectively), the difference is buying power—12 percent ($288) of a low-income family's grocery bill is a much smaller number than 14 percent ($923) of a high-income family's grocery bill (NYC Food Policy, undated).

Our data agree with these findings. Based on these results, possible programming recommendations include:

1. Find ways to lower fresh produce prices at the most popular supermarkets (for example, through retail incentive programs or by making "ugly" produce available at lower prices).

2. Work with the most popular supermarkets to reduce delivery costs, allow EBT payment for delivery sales, and improve online delivery ordering options for people without computer access (Dalton, 2017). Shoppers could also combine their orders to share one delivery fee among multiple shoppers.

3. Find ways to lower transportation costs, allowing shoppers to get to popular supermarkets or bulk stores more affordably. Some as-yet untapped transportation options on Staten Island include organizing a commuter van to run weekly shuttle trips from a residential center like Stapleton's NYCHA houses to a low cost supermarket like Costco; using Zip Car, which offers a special membership option for NYCHA residents[5]; sharing car services or Uber or Lyft rides; and creating new bus routes with a private commuter carrier such as Chariot.[6]

At the same time, there are continued opportunities for programmatic growth in helping corner stores develop and promote healthy snacks and beverages. A significant number of people shop in corner stores daily or weekly. Although we did not survey children, City Harvest staff working in stores have observed children buying snacks and drinks before and after school, and the stores with whom we partner report the same. Our research supports the notion that people aren't necessarily going to their corner stores for produce, and efforts should be made to improve the breakfast, lunch and snack options in these stores.

The survey did not clearly ask about produce as its own category, but rather as a subcategory of snack purchases, and as an option included in "lots of things." If conducting a similar survey, one should consider asking about fresh fruits and vegetables as a standalone category to better gauge whether people use their corner stores to buy fresh produce.

It would also be interesting to explore the role of smaller grocery stores in food shopping practices. We asked for the number of times people do their big grocery shopping a month, concentrating on the Staten Island supermarkets, but it would also be good to know how many times people frequent either smaller grocery stores or supermarkets. Future research could explore the role that smaller stores play.

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[5] For additional information about Zip Car's NYCHA membership options, please see http://www.zipcar.com/nychousingauthority1.
[6] Information about Chariot's private commuter carrier route can be found at http://chariot.com/commuter/nyc.

Future of the Project

The data we collected were intriguing, but created almost as many questions as they answered. It was important to keep the survey short so that people would be willing to participate, but we did not ask some questions that would have been helpful. For example, we didn't ask for participants' ZIP codes, which would have made it possible to find out how far individual participants traveled from their neighborhoods to shop. We also did not ask about children's visits to corner stores.

Another useful follow-up discussion might revolve around *why* people visited various stores, as we did not ask this question in our original survey. New questions could include: What are other types of shopping trips are made throughout the week? *and* Do participants buy their produce items from corner stores as well as larger grocers? These types of in-depth explorations are better completed using focus groups, one of our potential next steps.

Reproducing this Study

We intend to make this report available to each organization that helped conduct the surveys, to the New York City departments involved with healthy retail programs, to university professors with an interest in retail, and to collective-impact initiatives on Staten Island working on the relationships between food and health. We invite other organizations to repeat our study in their communities and we are happy to share our surveys with them.

For organizations that might want to reproduce our study, we suggest the following:

Project Planning & Staff. It is important to determine the structure of your team before beginning a project. For our project, two staff members, including a dietitian and community engagement manager, resided on Staten Island and had strong partnerships on the North Shore of the island. In addition, community volunteers were helpful with surveying participants.

It was also helpful to have a team member organize weekly meetings at which the team regrouped and discussed project management updates, as well as overall process feedback. This allowed every person to stay on top of her individual responsibilities and created space for brainstorming and problem solving.

Finally, we recommend involving IT departments early in the process. After deciding to use Kindles with SurveyMonkey, the team discovered that SurveyMonkey would not work without a constant connection to the Internet. The IT department provided two battery-operated hotspots for us and also helped debug other technical problems throughout the project.

Data Analysis. To complete this project, the team fortuitously connected with a volunteer who was eager to provide her data analysis skills. This skill set, and her rapid response time, was invaluable to our success. Without her, our data analysis would have been harder to achieve and less streamlined. We highly recommend including a person with this capacity on any similar project team.

Appendices

Appendix A: Annotated Trainer's Survey
Appendix B: References

Appendix A: Annotated Trainer's Survey

Food Shopping Habits in Staten Island

Survey site:
Surveyor's initials:

Welcome to My Survey

Thank you for participating in our survey. Your feedback is important.

Q1: Pick your language

- ❑ English
- ❑ Español
- ❑ 中国
- ❑ العربية
- ❑ русский

SURVEYORS: If you're working with someone speaking a language you don't speak and we have a translated version, you can give her (or him) the Kindle or computer and let her fill in the survey on her own.

Q2: Do you ever do the food shopping for your household?

○ Yes

○ No

SURVEYORS: Click No if they don't do the shopping (that way, we'll get a count of non-shoppers) and thank them for being willing to take the survey but explain that you can only talk to people who shop for groceries. The survey ends automatically. Reasons that he or she may not buy groceries are: take-out only, restaurants only, don't do the shopping because someone else does.

Q3: Think about all of the food shopping you do in a month. Where do you buy most of your groceries? (Pick all the stores you normally visit.)

☐ Supermarkets **SURVEYORS: The survey will go to Q4 if the participant says he shops at supermarkets. Otherwise, it goes to Q5.**

☐ Pharmacies (Walgreens, CVS, etc.)

☐ Bodegas or delis

☐ Superettes

☐ Membership or bulk stores like Costco and BJs

☐ Dollar stores (Family Dollar, 99 Cents Store, etc.)

☐ Other types of stores: ___________________

SURVEYORS: You might want to give some examples to the participant before she starts giving you particular stores.

Q4. Which supermarket?

- [ ] C-Town on Clove Rd.
- [ ] Food Universe, Tompkins Ave.
- [ ] Key Food on Bay St.
- [ ] Key Food on Forest Ave.
- [ ] Key Food on Port Richmond Ave.
- [ ] Key Food in Rosebank on Sand Lane
- [ ] Met Foods on Hylan Blvd.
- [ ] Met Foods on Victory Blvd.
- [ ] ShopRite in Charleston.
- [ ] ShopRite on Forest Ave.
- [ ] ShopRite on Hylan Blvd.
- [ ] Stop & Shop, Forest Ave.
- [ ] Western Beef, Bay St.
- [ ] Western Beef, Forest Ave.

SURVEYORS: If the participant hesitates, you can read some of the names off the list.

Q5. Do you buy food at a deli, corner store, superette, or bodega?

○ Yes

○ No

SURVEYORS: If the participant answers No, the survey skips question 6.

Q6. What food do you buy there?

- [ ] Breakfast (bagels, egg sandwich, etc.)
- [ ] Lunch (sandwich, salad, etc.)
- [ ] Snacks like potato chips or candy
- [ ] Snacks like cut-up fruit or vegetables (carrots, celery)
- [ ] Staples (milk, eggs, bread)
- [ ] Lots of things: fruit, vegetables, bread, milk, snacks, etc.
- [ ] Coffee or tea only
- [ ] Soda or other sugary drinks
- [ ] Bottled water

Q7. Do you do your big grocery shopping inside or outside your neighborhood (within 10 minutes of your home)?

○ Inside

- [ ] Outside

Q8. How many times do you do big grocery shopping trips in a month?

- [ ] 0
- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5 or more

Q9. How do you get to and from where you buy food? Select all that you use:

- [ ] Bus
- [ ] My own car
- [ ] Car service
- [ ] Go in a friend's or relative's car
- [ ] Walk
- [ ] Bike
- [ ] Other method:

SURVEYORS: People may use multiple forms of transportation—they may take a bus to the supermarket and car service home, for example, or a bus to a local supermarket but go with a relative with a car to Costco.

Q10. How many times do you go to a deli or bodega in a week?

- [ ] 0
- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5 or more

Q11. Do you use a grocery delivery service?

- [x] Yes
- [ ] No

SURVEYORS: If No, the survey skips to the end.

Q12. Select all that you use.

- [ ] Amazon Fresh
- [ ] Blue Apron

- [ ] Fresh Direct
- [ ] Hello Fresh
- [ ] Key Food
- [ ] Peapod (Stop & Shop)
- [ ] ShopRite
- [ ] Other service:

Q13: Do you have any ideas about how to make your food shopping easier or better?
SURVEYORS: You may want to write these ideas on a pad and enter them later on the Kindle (or just give us your handwritten notes).

Appendix B: References

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