Lafayette College Technology Clinic

Knowing Your Neighbors

Understanding and Elevating the Easton Neighborhood Center's Impact

Mid-Project Report | Spring 2025

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Team Members

Charlotte Farrelly ‘26

| Government & Law/ Environmental Studies |

Charlotte is from Exton, Pennsylvania. Besides the Technology Clinic, she is involved with piano, dance, theater, and tour guiding on Lafayette’s campus. In her classes, she is most interested in urban food systems and has loved getting to work with the Neighborhood Center and their food pantry.

Lily Jenkins ‘28

| Anthropology & Sociology |

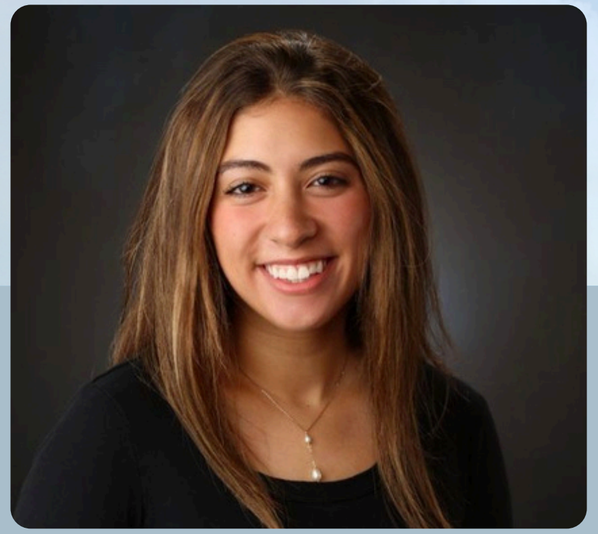
Lily is from Portsmouth, New Hampshire. In addition to her work on the Technology Clinic, she is a member of the Lafayette College winter and spring track and field team, holding a school record in the team’s 4x100 relay. She loves to bring a warm, welcoming smile full of positivity, along with a drive for success and is always willing to lend a helping hand.

Owen Paschke ‘26

| Mechanical Engineering |

Owen is a Lafayette College student in the class of 2026, studying Mechanical Engineering. He was born in Houston, Texas, and spent 6 years of his childhood living in Australia as an Ex-Patriot. He brings a solution-driven approach to the Tech Clinic team and has volunteered at Easton Urban Farm since his freshman year.

Team Members



Izzy Reber ‘27

| Psychology Major, A&S Minor |

Izzy is from Chicago, IL. In addition to her work with the Technology Clinic, she is a member of the Psi Chi Psychology Honors Society, an EXCEL Scholar in the Psychology Department contributing to research on child development, and a member of Alpha Phi. She brings an empathetic presence to every team, using her passion for psychology to understand diverse perspectives, foster meaningful collaboration, and support those around her.

Elisabeth Seidel ‘26

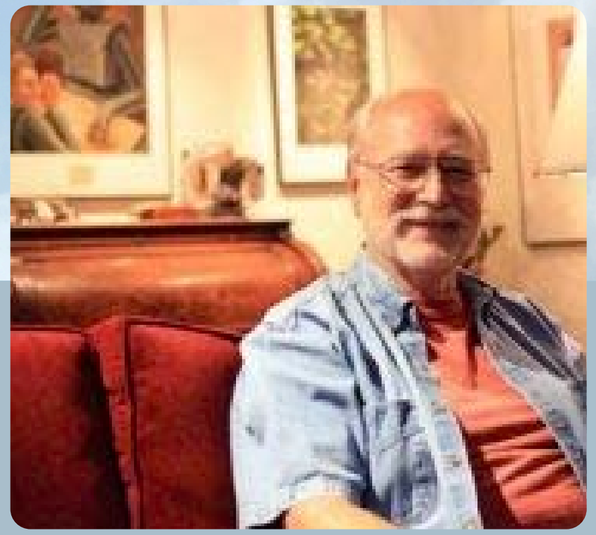
| Anthropology & Sociology |

Elisabeth is from Lower Merion, Pennsylvania. In addition to Technology Clinic, she is one of the managing editors of The Lafayette, a communications intern in the Office of Sustainability, and a digitization assistant in the library archives. She is passionate about knowledge preservation and community self-sufficiency.

Team Members

Lawrence Malinconico

Professor Malinconico is completing his 29th year as a faculty member in the Department of Geology and Environmental Geosciences at Lafayette and is the Director of the Technology Clinic. His research areas involve volcanology, tectonics and geophysics and this has taken him to over 20 different countries. With this project he will have mentored over 30 different Tech Clinic projects for clients ranging from individuals to billion-dollar corporations. An avid outdoors-man, he enjoys hiking, biking and is a private pilot.



Dan Bauer

Dan Bauer is founder of (and a longtime participant in) the Lafayette Technology Clinic Program. His educational background is in Engineering, Journalism (BA San José State University), and Social Anthropology (PhD University of Rochester). He served in community development in the Peace Corps in Perú. He has conducted long-term anthropological research on community level economics and politics in Ethiopia and rural Mexico. He is a photographer and has a passionate curiosity for problem solving.

Introduction

The students are nominated by professors and former Tech Clinic students and mentored by two faculty facilitators. Project teams are purposely multidisciplinary and include students and faculty mentors from the Humanities, Social Sciences, Sciences and Engineering. To encourage “out-of-the-box” thinking we have no requirements for prior experience, thus reducing incoming “prejudices” in order to encourage innovative solutions.

Important Note!

Our team wants to make it clear that privacy is of utmost importance throughout this project. Throughout our work with the Easton Area Neighborhood Center, we have ensured to remove as much personal information as possible when it comes to presenting our data. Especially in the current time where personal information can put certain individuals at risk, our work has ensured to stay within a designated circle of individuals to ensure privacy is held!

The Easton Area Neighborhood Center at a Glance

Its mission

“Combating Poverty, Hunger, and Homelessness”

Who it serves

The Easton Area Neighborhood Center is a private, non-profit organization that helps support those in need in the Easton area.

How it helps

The EANC proudly creates a welcoming environment where people are treated with respect and guided by staff members informed on all the center has to offer. The Center provides six main programs, including a transitional housing program, utility assistance, a Social Security payment assistance service, a mobile senior center, an urban farm, and a food pantry.

Tech Clinic Involvement

Helping to make the center more effective

The Lafayette College Tech Clinic has had a close relationship with the Easton Urban Farm since 2012, the result of a collaborative project on ways to improve access to fresh produce for residents in undererved neighborhoods in Easton. The Neighborhood Center has since absorbed the urban farm, and Tech Clinic was approached again; this time, with the objective of helping the Center better understand the clientele that make use of its services.

Problem solving skills

After consultation with the new executive director of the Center, the current Tech Clinic team has been tasked with working to transfer data on pantry use, currently stored in analog fashion, into a digital format. From there, the data can be used to better understand the nature of the clientele and determine how they might be better served.

Need for understanding

The team is working on ways the digital data might be used by the staff at the Center to help support their mission. This can be simply understanding the clientele, but also documenting the efficacy of the programs that the Center manages. Hopefully, this can then be helpful in allowing the Center to pursue sources of support.

Our Objectives

Our ultimate goal has been to benefit the Neighborhood Center in a way that would make their already outstanding food pantry and urban farm more responsive in serving their clientele. Finding exactly how to help became our first challenge as we searched for definitive action steps.

Personal interaction?

For multiple weeks at the beginning, our team was focused on planning personal interactions with the residents of Southside to listen to their needs. Our first idea was to learn where people were from because Allison told us she wanted to know more about exactly who she was serving.

Cultural relevance

Knowing where people are from could help the pantry serve more culturally relevant foods for certain groups with limited access to foods they identify with. We knew the information we were seeking would need to be anonymous to protect any residents at risk politically, so we brainstormed some ways to ask people while still protecting their privacy.

Initial Ideas

- A world map with pushpins located in the pantry
- Anonymous post-it notes on a poster board located in the pantry
- Asking clients relaxing at the picnic tables
- Asking clients while they participate in activities, such as playing basketball
- Completing an anonymous survey question at the end of the pantry route

Tracking our Ideas

Before moving forward with any of these ideas, we met with Allison to try and learn more about what she wanted to know about the Neighborhood Center clientele. We eventually settled on focusing on the people in charge of the pantry rather than the individual clientele, and finding out what they thought would be helpful to the Neighborhood Center.

After visiting the pantry and speaking with Paula, Allison, and the Merriam, the woman running the check-in table, we decided to create a **concept map** of all the different variables we were aware of, and all the possible ways we could benefit the center.

Process

Economics

Supplemental vs Necessity

2x Visits per month

Lower attendance around payday

Community involvement

Pay what you can model

*Unpacking days
Interpret census data

Culture

Larger hispanic pop

Herbs in the summer

Hot sauce

Demand for rice and beans

Sourcing donations from culturally relevant sources

Wawa vs others

*2 GOOD 2 GO

*sources w/ higher turnover rate

Mobility

how do people get to food bank

NO BUS

surrogate attendance

driving and walking split

transportation's influence on amount of food?

festivals/gatherings /celebrations

political turmoil

*LANTA FLEX

Access

what is stopping people from attending

public facing presence

physically

online

word-of-mouth

*Entrance survey to profile

*Volunteer transparancy

*get access to paperwork

Transportation Brainstorming

Within the concept map, one variable that stood out was transportation. How a person physically gets themselves to the Neighborhood Center can greatly affect how reliably they can use it.

Potential ideas

We discussed the **bus scheduling** on the Southside, the existing **surrogate program** at the pantry, and other innovative ways to share food like the mobile app "**Too Good to Go**," a program that allows for restaurants to list extra food they would normally throw out after closing to allow people to buy it for heavily discounted prices.

LANtaFlex

We found another program called LANtaFlex, which we thought could be a useful service for the clientele. According to its website, "LANtaFlex is a curb-to-curb, point deviation public transit service provided by LANTA which is designed to meet mobility needs."

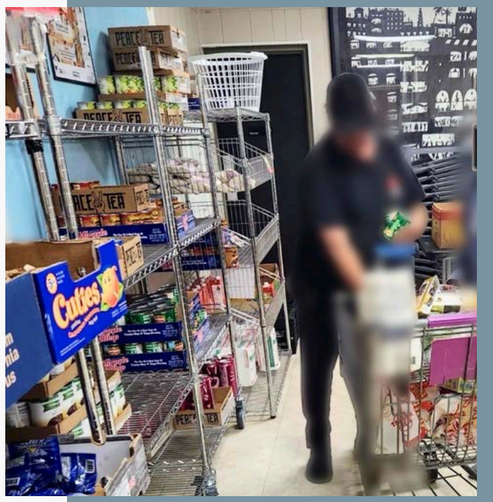
Pantry Visit

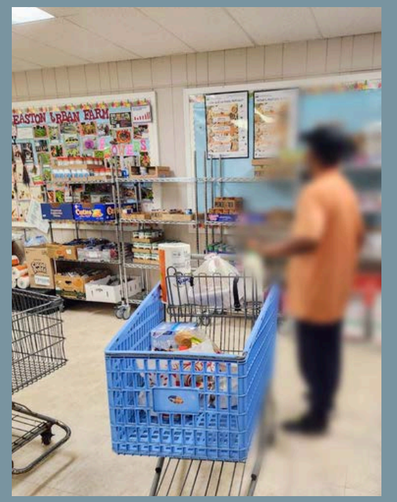
We visited and volunteered to better understand how the Neighborhood Center food pantry runs — how people sign up, where they wait, how they move through the space — and to meet more of the team.

While we initially considered improving the pickup system, we found it to be efficient, respectful, and community-centered.

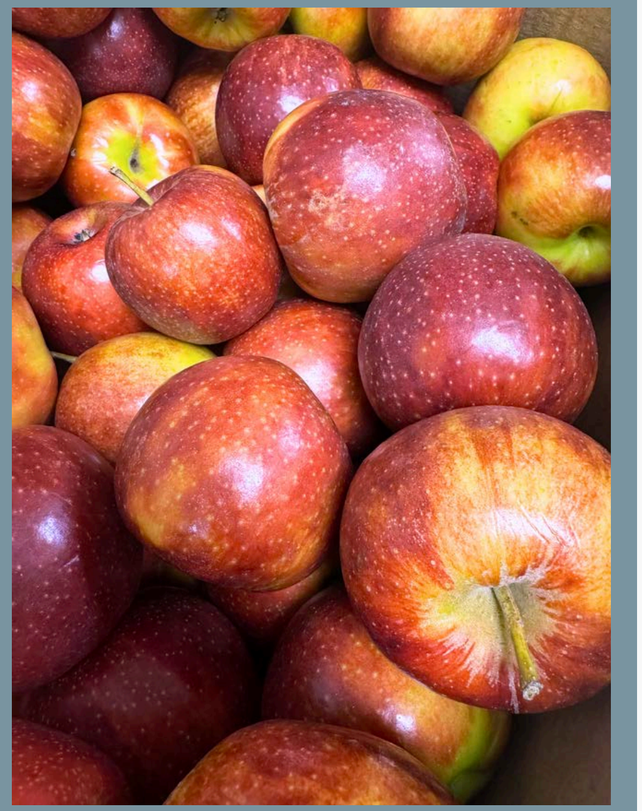
- **Key Insights:**
  - **Efficient System:** Smooth flow, organized stations, respectful process.
  - **Strong Leadership:** Paula and the volunteers create a welcoming, shame-free space with personal touches.
  - **Community Focused:** Portion sizes are based on family needs, partnerships with local businesses.

- We decided our project should support what's already working well and help fill existing gaps.





A Need for a Definition



No action steps

However, despite our brainstorming and researching, we still felt we lacked action steps to help the Neighborhood Center’s food pantry.

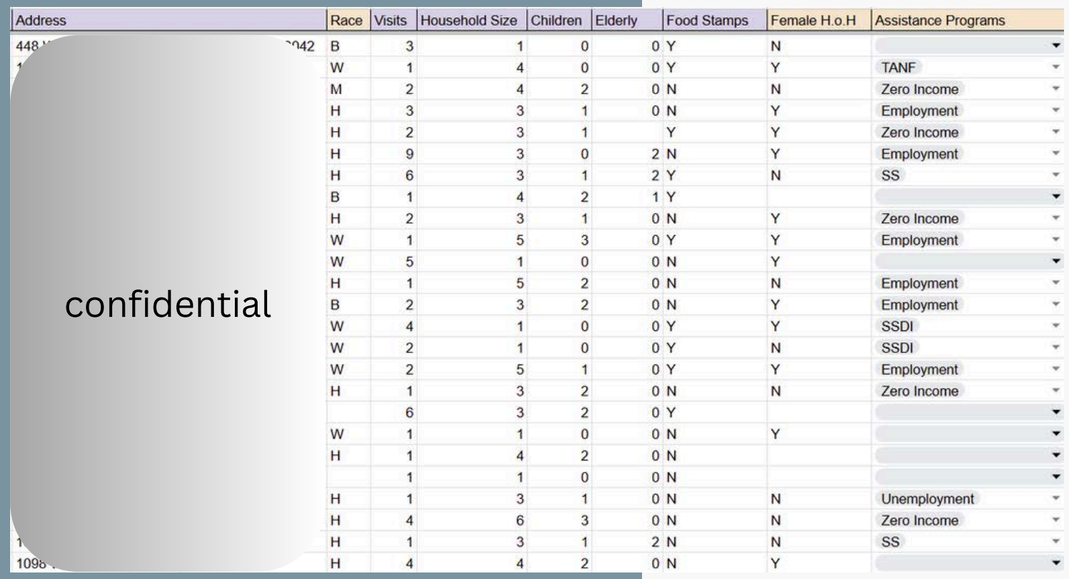
Paper records

We met with Allison one more time. While she was interested in our work with transportation, she also revealed to us that the data management system of the food pantry was entirely paper-based.

Digitization

Digitizing the intake and demographic forms and mapping the address data could help supplement the statistics and demographics of who was being served, and possibly identify areas of potential clientele who were not making use of the Center’s services.

Creating a Dataset



Address	Race	Visits	Household Size	Children	Elderly	Food Stamps	Female H.o.H	Assistance Programs
448 M [redacted] 042	B	3	1	0	0	Y	N	
[redacted]	W	1	4	0	0	Y	Y	TANF
	M	2	4	2	0	N	N	Zero Income
	H	3	3	1	0	N	Y	Employment
	H	2	3	1		Y	Y	Zero Income
	H	9	3	0	2	N	Y	Employment
	H	6	3	1	2	Y	N	SS
	B	1	4	2	1	Y		
	H	2	3	1	0	N	Y	Zero Income
	W	1	5	3	0	Y	Y	Employment
	W	5	1	0	0	N	Y	
	H	1	5	2	0	N	N	Employment
	B	2	3	2	0	N	Y	Employment
	W	4	1	0	0	Y	Y	SSDI
	W	2	1	0	0	Y	N	SSDI
	W	2	5	1	0	Y	Y	Employment
	H	1	3	2	0	N	N	Zero Income
		6	3	2	0	Y		
	W	1	1	0	0	N	Y	
	H	1	4	2	0	N		
		1	1	0	0	N		
	H	1	3	1	0	N	N	Unemployment
	H	4	6	3	0	N	N	Zero Income
[redacted]	H	1	3	1	2	N	N	SS
1098 [redacted]	H	4	4	2	0	N	Y	

Information sourcing

We collected data points from multiple different forms that clients interact with when visiting the Neighborhood Center

Data points

As a team, we decided on data points we felt were important to track. On top of address and number of visits, the household size, racial demographics, aid programs, and female head of household information were mapped to each visitor.

Privacy

Before porting our data set into ArcGIS a separate data set was created with all client names scrubbed, ensuring that any information uploaded to web-based servers was completely anonymous

Creating a Map

Lack of information was the major barrier to tackling questions of efficiency or efficacy.

Raw data on pantry usage existed, but it hadn’t been digitized, so it was not in a form that could be easily analyzed.

We quickly realized that one of the most valuable things we could do would be to **digitize this data** and integrate it into a system where it could be **analyzed and understood**.

What is ArcGIS?

ArcGIS is an online mapping tool that can be used to **visualize** and **analyze** data, especially in regards to geographic correlations.

The program allows the user to upload their own data sets and layer them with other existing data from sources like the U.S. Census. Through this, data can be organized and interpreted in **endless ways**.

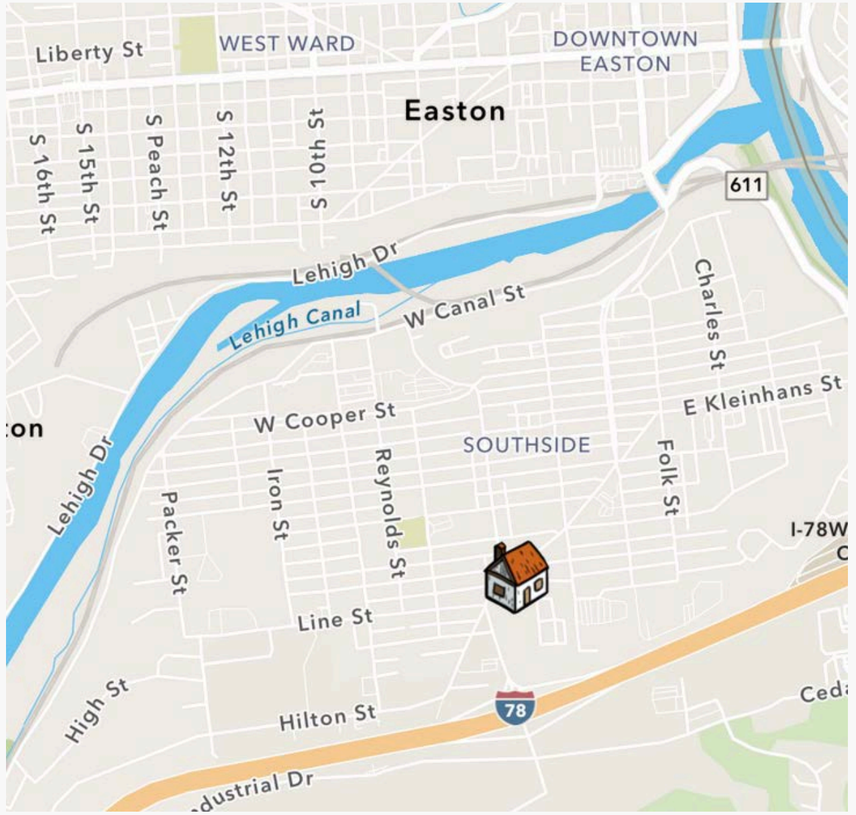
What Can be Done with a Map?

Visualization is valuable

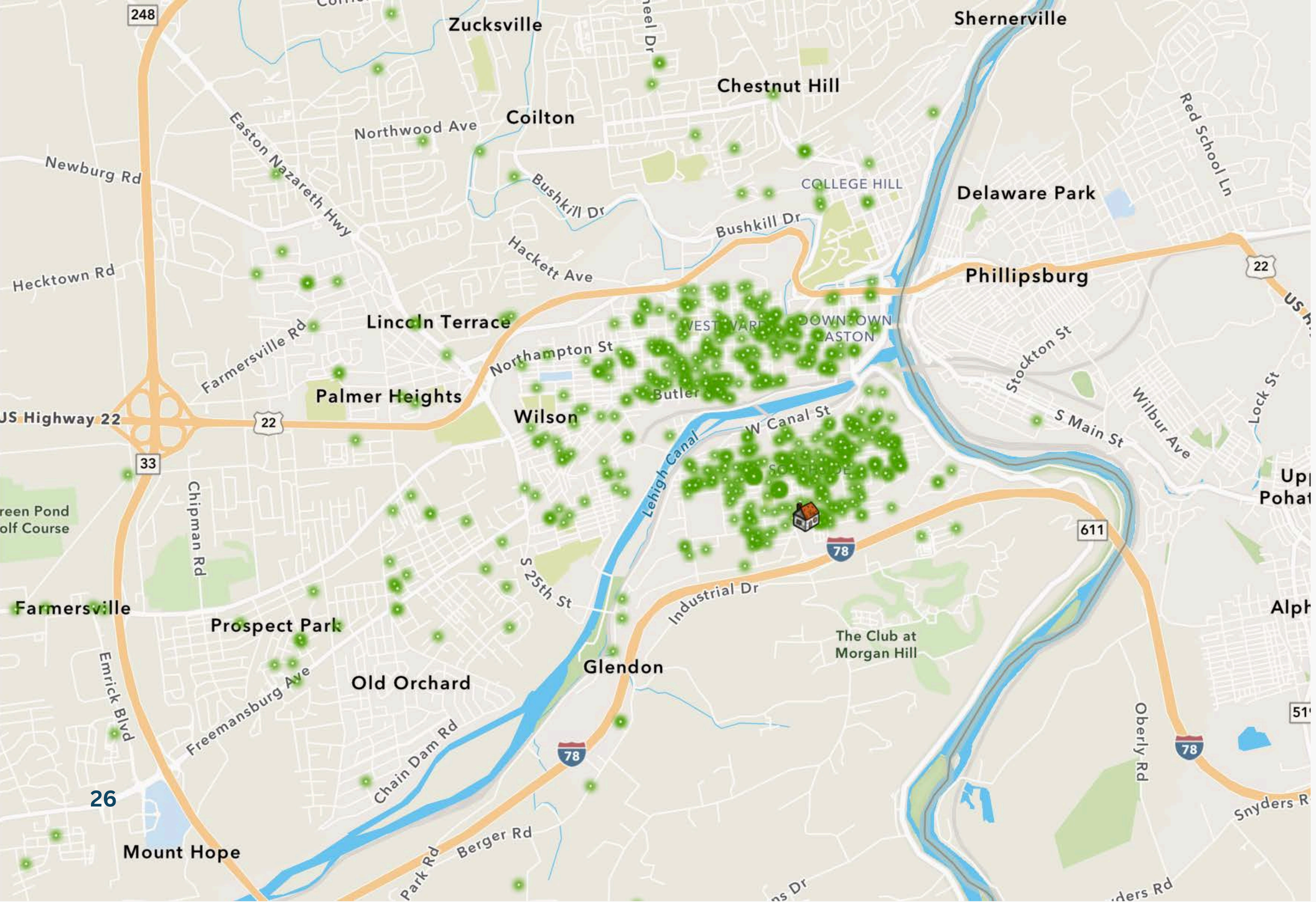
- Identify geographic patterns in pantry usage
- Highlights underserved communities that may benefit from targeted outreach
- Strengthens grant applications

"The Easton Area Neighborhood Center is in Easton, at 902 Philadelphia Road."

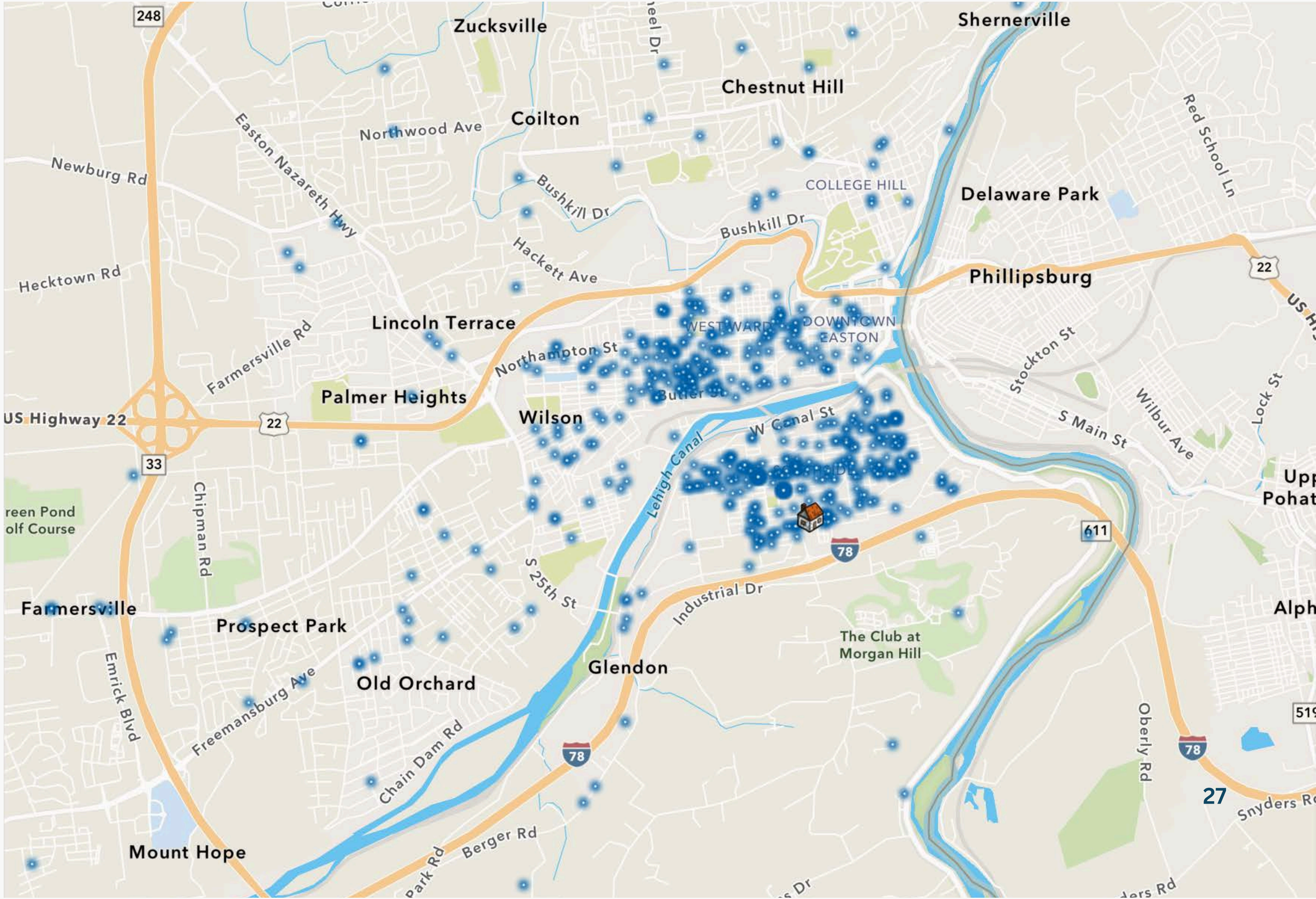
vs.



2023-24


Zucksville
Shernerville
Chestnut Hill
Coilton
Northwood Ave
Easton Nazareth Hwy
Newburg Rd
Bushkill Dr
COLLEGE HILL
Delaware Park
Red School Ln
Hackett Ave
Hecktown Rd
Phillipsburg
Lincoln Terrace
Farmersville Rd
Northampton St
DOWNTOWN EASTON
Stockton St
Palmer Heights
Butler
Wilson
W Canal St
S Main St
Wilbur Ave
Lock St
US Highway 22
Lehigh Canal
Chipman Rd
611
S 25th St
Industrial Dr
Farmersville
Prospect Park
The Club at Morgan Hill
Glendon
Old Orchard
Emrick Blvd
Freemansburg Ave
Chain Dam Rd
Oberly Rd
Mount Hope
Berger Rd
Park Rd
248
22
33
78

2024-25


Zucksville
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Red School Ln
Hackett Ave
Hecktown Rd
Phillipsburg
Lincoln Terrace
WESTWARD
DOWNTOWN EASTON
Farmersville Rd
Northampton St
Stockton St
Palmer Heights
Wilson
Butler St
W Canal St
S Main St
Wilbur Ave
Lock St
US Highway 22
Lehigh Canal
Chipman Rd
611
S 25th St
Industrial Dr
Farmersville
Prospect Park
The Club at Morgan Hill
Emrick Blvd
Glendon
Old Orchard
Freemansburg Ave
Chain Dam Rd
Oberly Rd
Mount Hope
Berger Rd
Snyders Rd
248
22
33
78

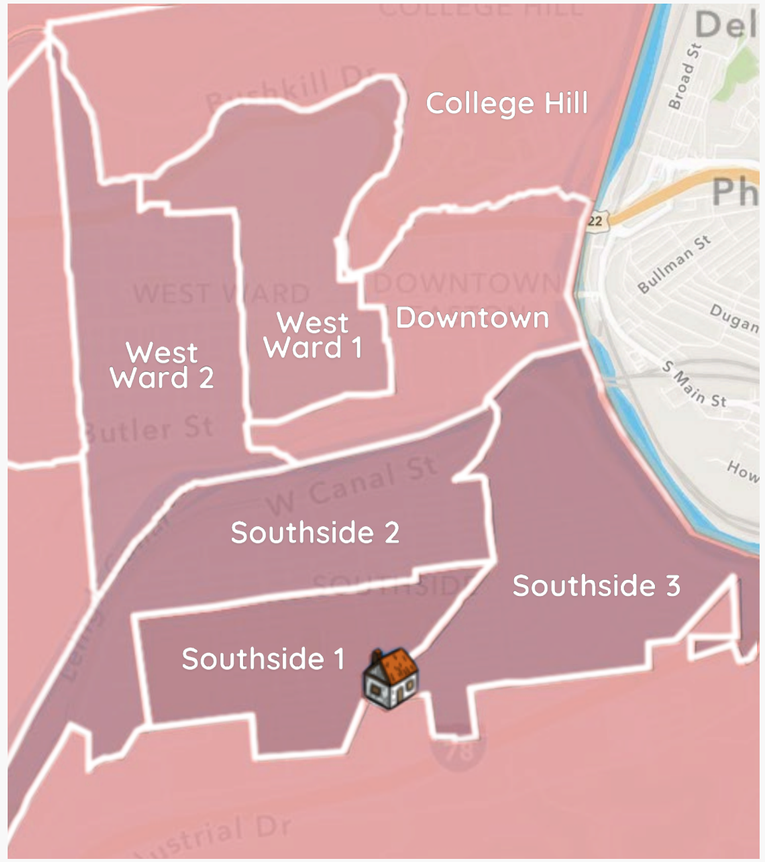
The Need for Aggregation

Our raw data allows users to pinpoint the exact addresses and households using the food pantry.

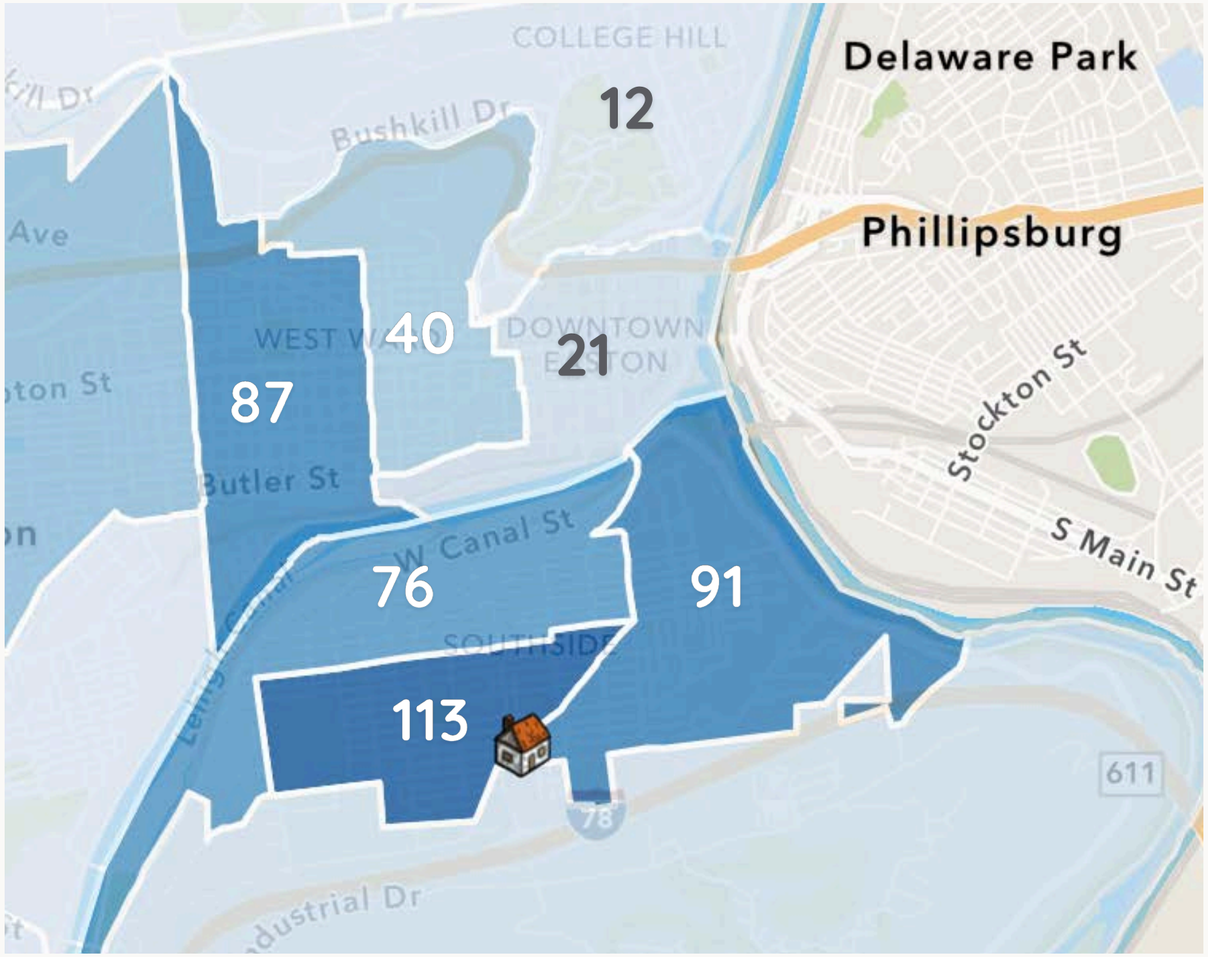
While this is helpful information to center itself, for broader consumption, it was necessary to **aggregate the data** into larger sections to ensure the safety and privacy of those included in the data.

To align with national standards, we organized our data into the smallest plots of land included in the U.S. census, called “tracts.”

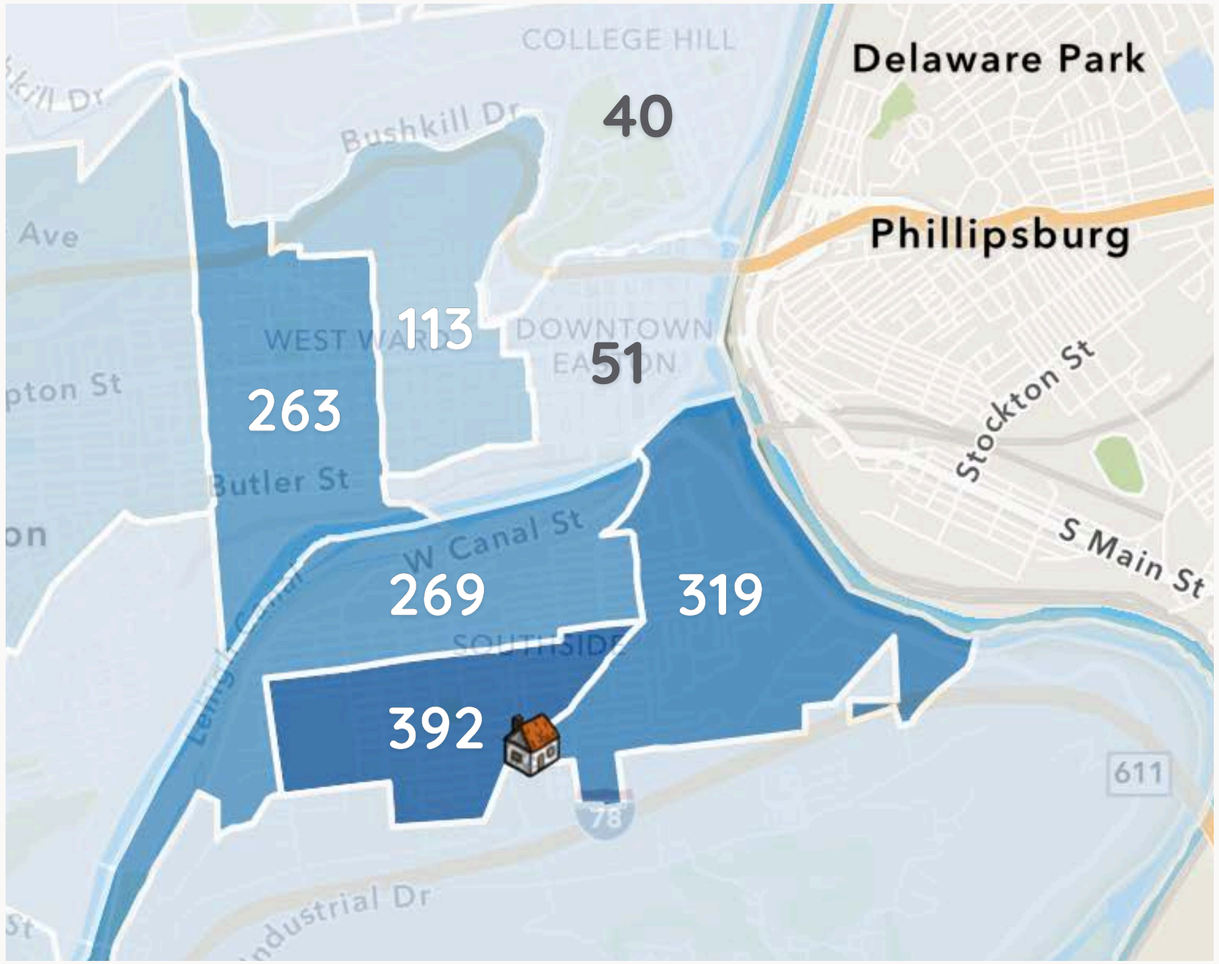
In Easton, these tracts roughly align with the neighborhoods you might be familiar with: College Hill, Downtown, West Ward, and the Southside.



Who Uses the Pantry the Most?



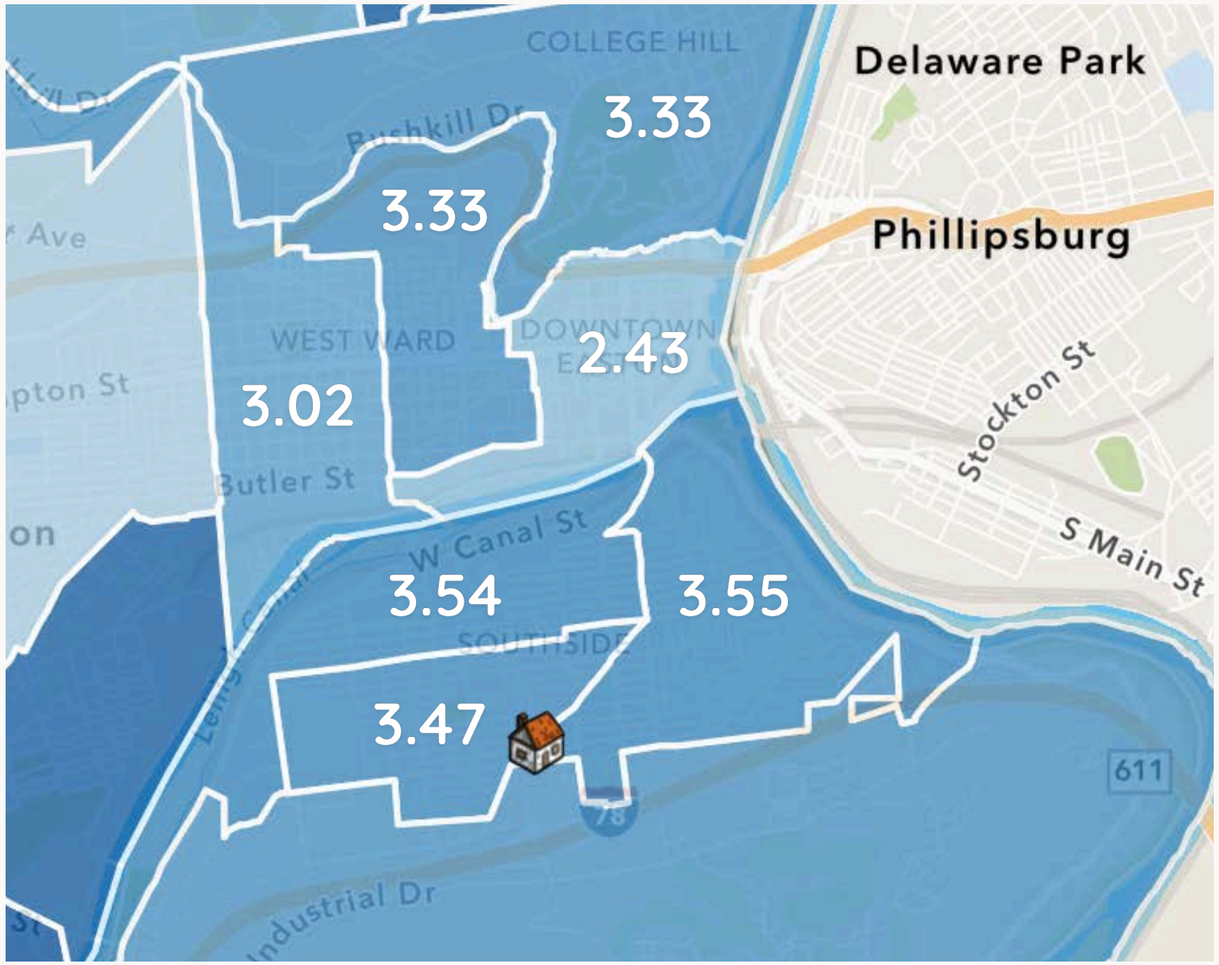
Individuals visiting pantry



Total visits

(July 2024–present)

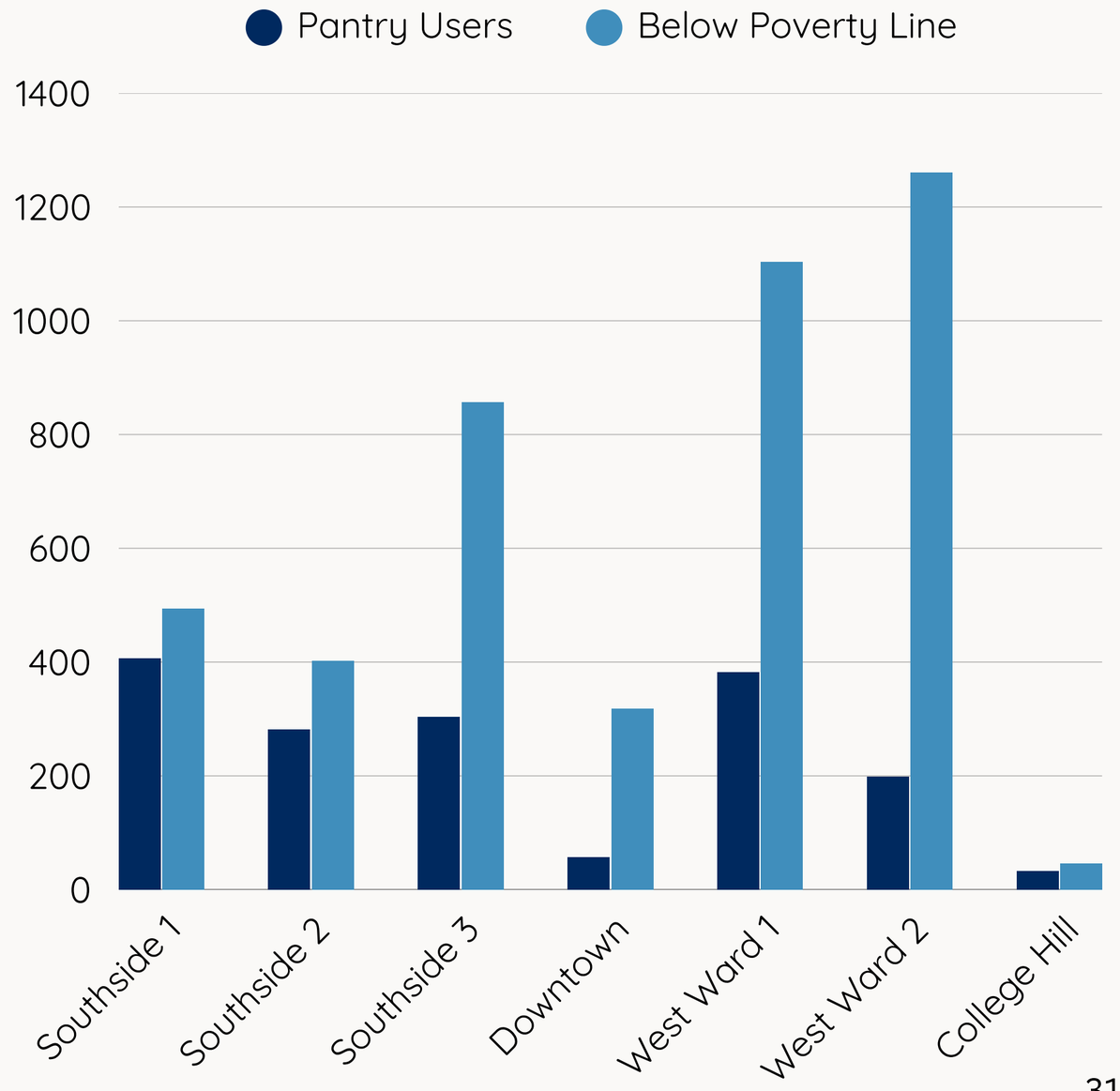
Who Uses the Pantry the Most?



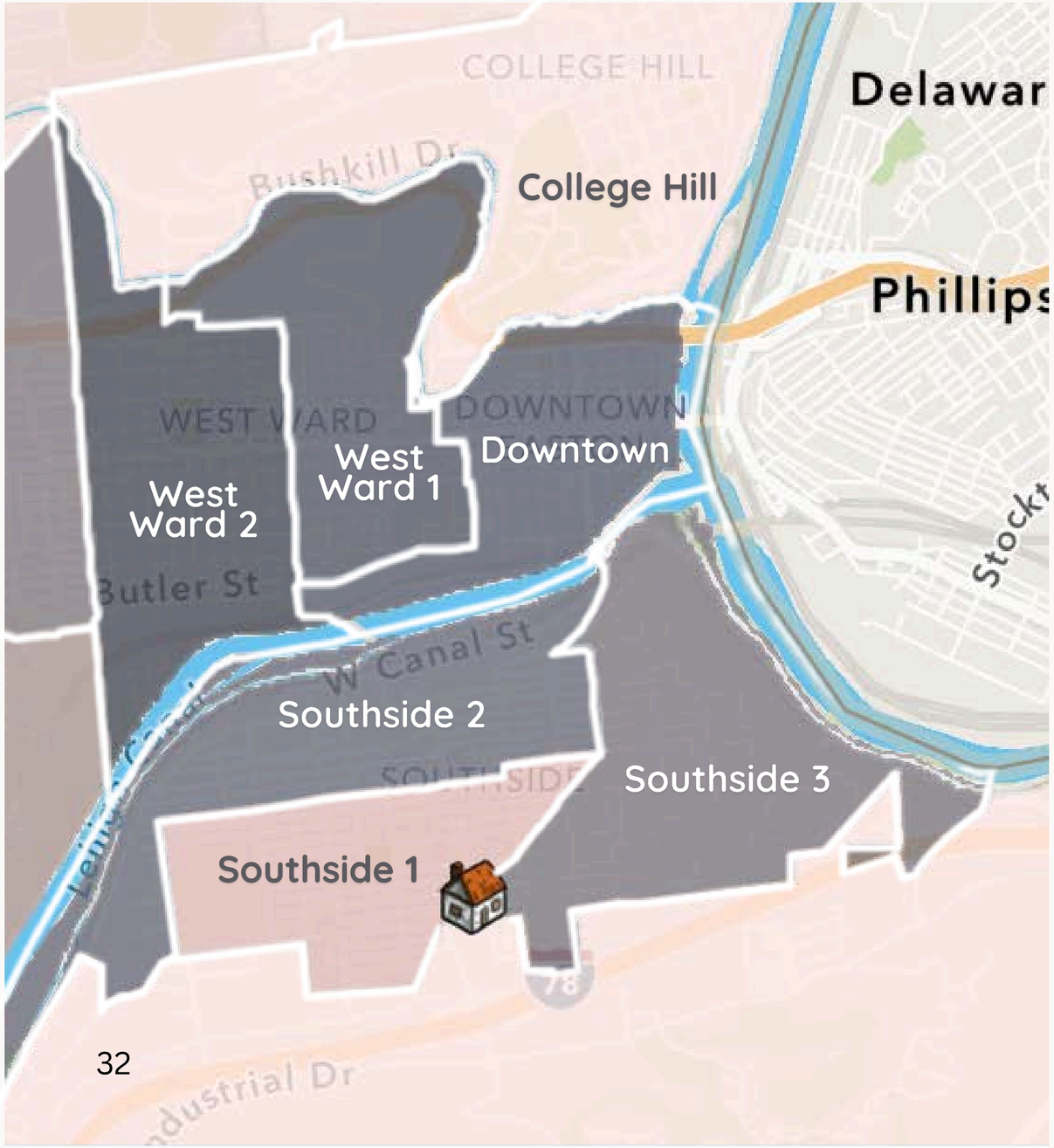
Average visits per pantry user

(July 2024–present)

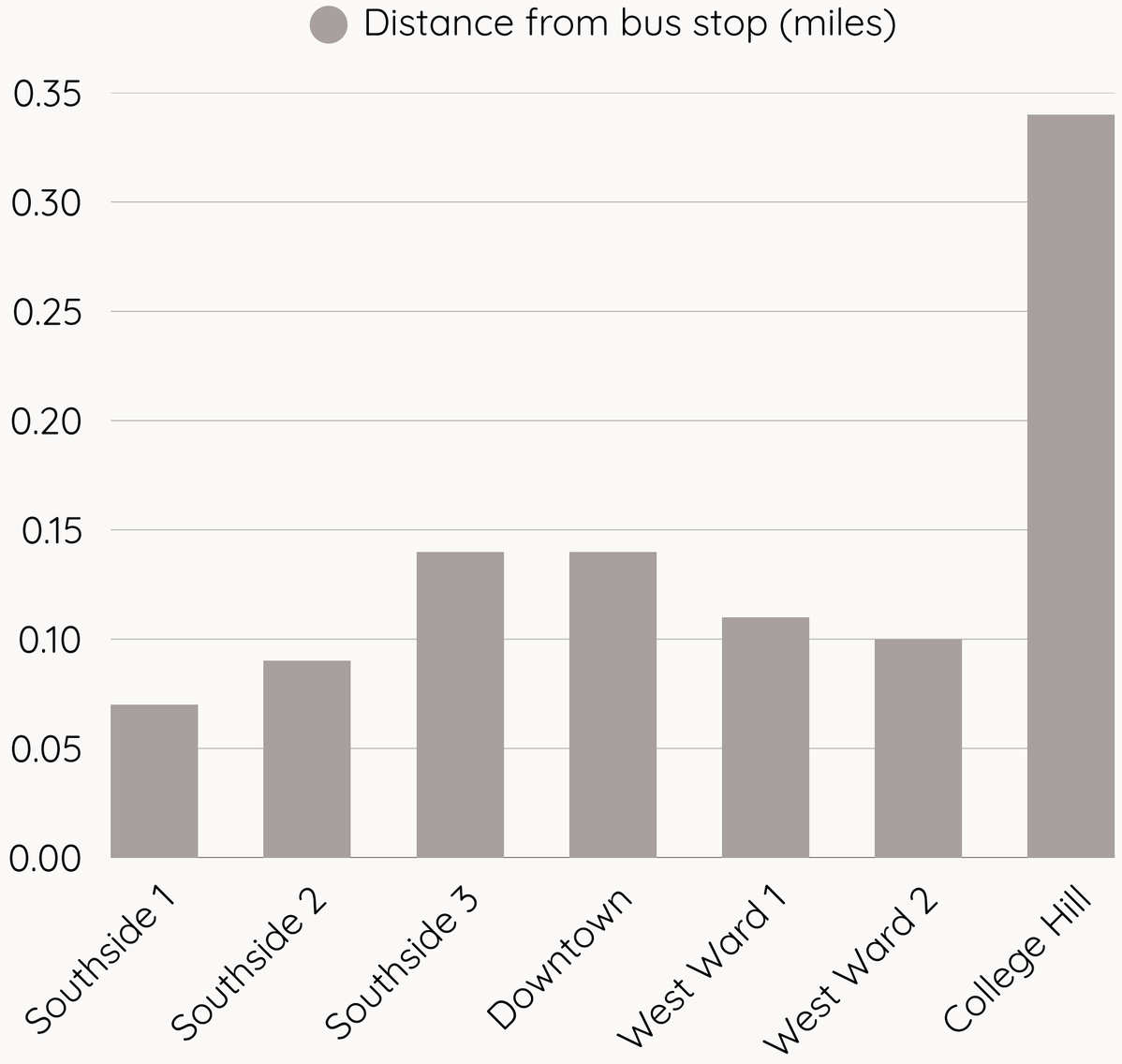
Pantry usage vs. potential need



(July 2024–present)



Pantry users' average distance from bus stop



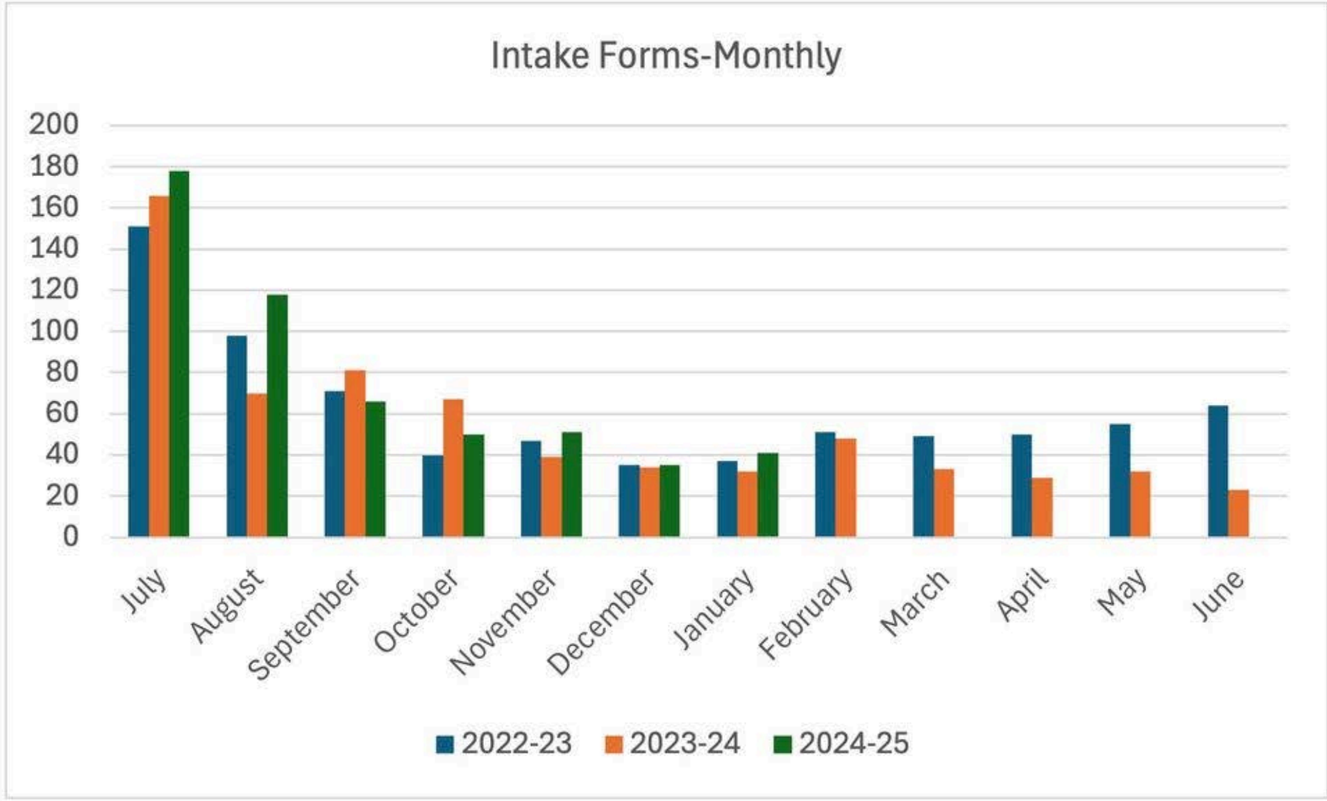
(July 2024–present)

Data Visualization

Communicating data sets over different scales (geographic, time, and more) allows for deeper insights regarding the behavior of clients and their interaction with the pantry.

Similarly to how geographical mapping can reveal “hot” and “cold” zones within the Easton area and highlight potential focus areas, histograms can illustrate visitation trends within the clientele that can help define and contextualize key changes.

The histogram on the right charts the month in which a client first visited the pantry, illustrating a peak in July and possibly indicating a large population of consistent, monthly visitors.

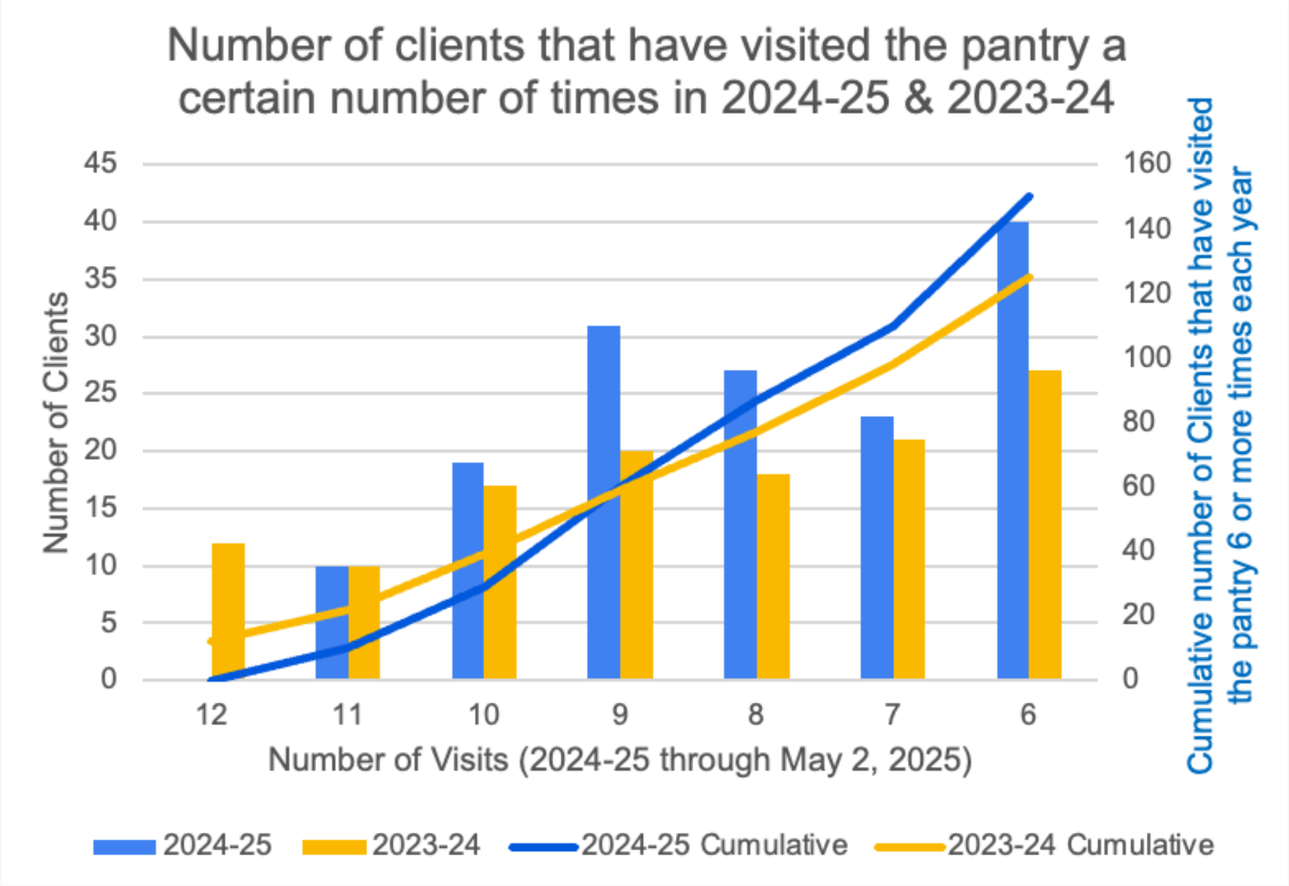


Data Visualization

Once a data set is generated, the possibilities for angles of insight are endless.

These insights can be directed by the Tech Clinic team, but also have the possibility of being drawn directly by the pantry organizers.

The chart to the right shows an example of insights that can be made by a pantry director, allowing them to chart the number of times different households have visited the pantry, as well as monitoring the cumulative number of “consistent” clients that the pantry is serving.



Looking Forward

The Tech Clinic team's second semester of partnership with the Neighborhood Center will be rooted in the analyses and evaluations accomplished thus far.

Based on initial discussions and early analyses, the Tech Clinic team developed a list of potential directions in which this second semester could head. However, this direction will ultimately be guided by the needs of the Neighborhood Center.

Possible directions include:

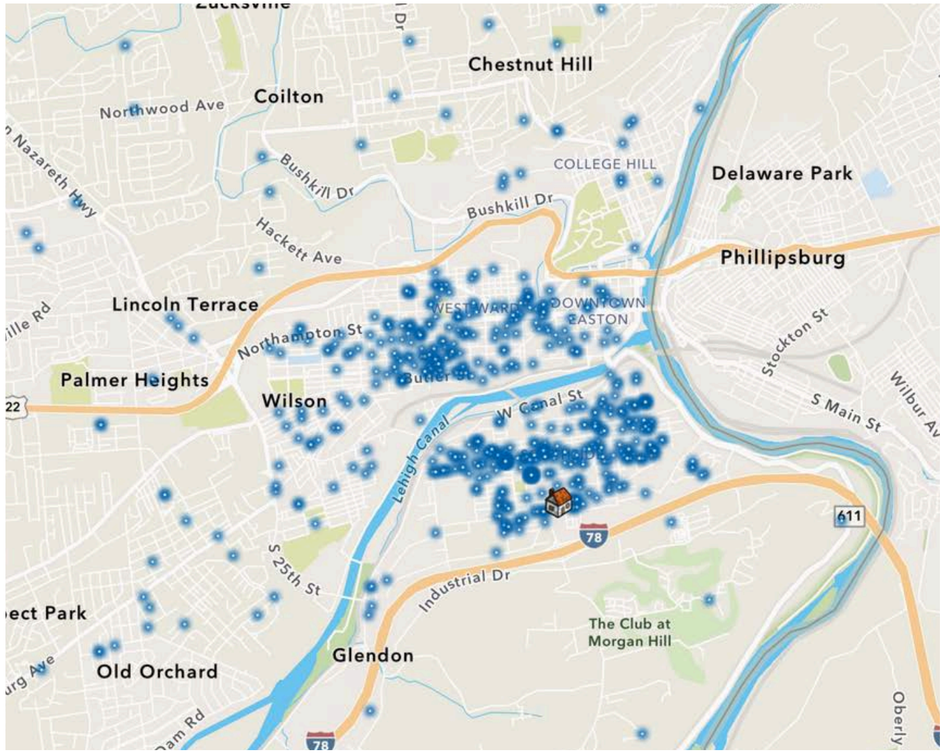
- Increased collaboration with other pantries
- Improved intake forms to bolster data sets
- Enhanced data insights,
- Supported grant requests
- Equipping the pantry with culturally-relevant foods

Collaboration With Other Pantries

Geographical data demonstrates that the Neighborhood Center serves clientele from an area far wider than Easton's Southside alone. Because of this, Tech Clinic considers it a reasonable assumption that this clientele is most likely being served by other pantries in addition to the Neighborhood Center.

Collaborating with other local pantries opens the door to generating more comprehensive data sets, tracking data over time as well as different pantries.

While "hot" and "cold" zones may present themselves for Neighborhood Center visitors, adding data from other local distribution centers would reinforce and/or negate these zones, facilitating targeted action.



Collaboration With Other Pantries

Digitization of food pantry user data and a growing initiative towards standardization within the community could open the doors to other expansion possibilities, especially if utilized in conjunction with improved donation sourcing and transportation assistance.

Existing third party services like MealConnect, LANtaFlex, and Lyft Up currently exist in the digital world, and creating a digital standard for the Lehigh Valley area opens up a multitude of collaboration opportunities, all with the common goal of enhancing both access and equity throughout the Lehigh Valley food pantry network.

MealConnect™ FEEDING AMERICA

LANta

lyft UP

Gathering Additional Pantry Data

The data currently available on the users of the pantry is limited to what is currently being collected, which consists of names, addresses, race, household make-up, and pantry eligibility.

To gain insight on any other variables, the Neighborhood Center must institute ways to collect data on them.

The most critical variables to collect data on include:

Transportation method of pantry users

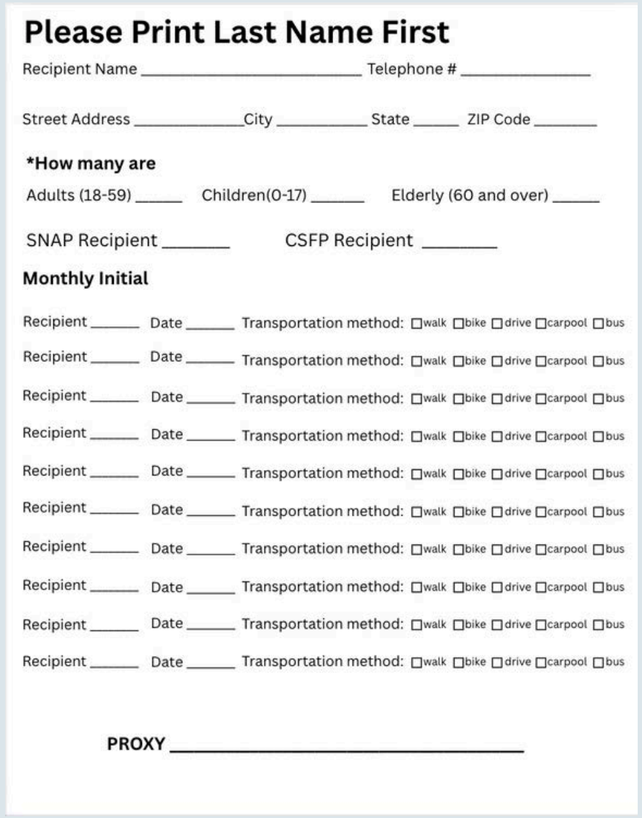
Gauging how pantry users get to the pantry could help the Neighborhood Center determine which populations, if any, are unable to access the center. This data could also open the door to new LANta routes or locations of drop-off freezer lockers.

Food preferences

There is currently no formal method of evaluating which foods are most desirable. The Neighborhood Center's urban farm gives it some degree of freedom in determining which food items to grow and have available. Allowing pantry users to specify which items ought to be prioritized could help guide the farm and future donation acquisitions.

Methods of Gathering Additional Data

AMENDING PANTRY INTAKE FORM



Please Print Last Name First

Recipient Name _____ Telephone # _____

Street Address _____City _____ State _____ ZIP Code _____

***How many are**

Adults (18-59) _____ Children(0-17) _____ Elderly (60 and over) _____

SNAP Recipient _____ CSFP Recipient _____

Monthly Initial

Recipient _____ Date _____ Transportation method: ☐walk ☐bike ☐drive ☐carpool ☐bus

Recipient _____ Date _____ Transportation method: ☐walk ☐bike ☐drive ☐carpool ☐bus

Recipient _____ Date _____ Transportation method: ☐walk ☐bike ☐drive ☐carpool ☐bus

Recipient _____ Date _____ Transportation method: ☐walk ☐bike ☐drive ☐carpool ☐bus

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Recipient _____ Date _____ Transportation method: ☐walk ☐bike ☐drive ☐carpool ☐bus

Recipient _____ Date _____ Transportation method: ☐walk ☐bike ☐drive ☐carpool ☐bus

PROXY _____

The current intake form does not collect much information. Including several more simple questions would increase the utility of the form without creating much additional labor for the user.

FOOD PANTRY EXIT TICKET

Your Phone Number: _____

(Only used for entering you in the raffle — no names needed)

By filling this out, you'll be entered for a chance to win a Wawa Gift Card!

1. What food items did you enjoy or find useful today?

_____

2. What would you like to see offered in the future?

_____

After going through the pantry line, clients would be invited to fill out a short form to share what they liked from the current offerings and suggest any new items they'd like to see.

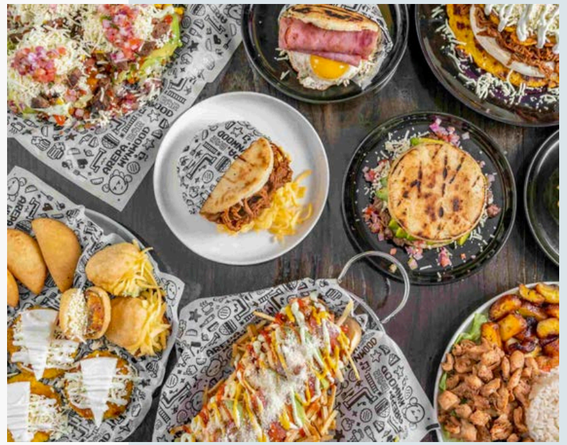
They can also include their phone number to enter a Wawa gift card raffle, encouraging participation and helping to gather more voices from the community.

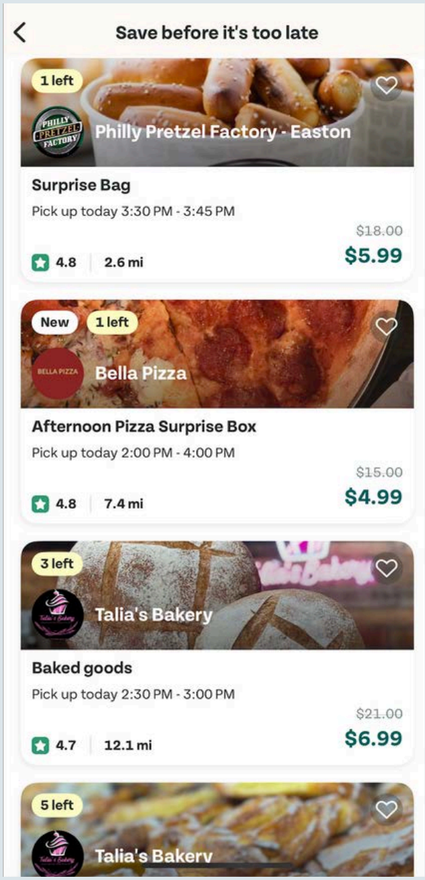
Cultural Connection: Donations

Pantry data shows a large Hispanic and Black client base, highlighting the need for culturally relevant foods. Wawa already donates regularly, and the Neighborhood Center could build on this by partnering with local restaurants for monthly rotating donations, offering familiar, comforting meals.

Next semester, donation options through Too Good To Go, an app connecting consumers with surplus meals, could be explored.
Potential partner: Little Cali Empanada & Arepa Bar (Latin cuisine).

This supports local businesses, cuts food waste, and fosters community care through culturally meaningful meals.





Supporting Grant Requests

Analysis of Neighborhood Center data could allow for stronger, more targeted grant applications.

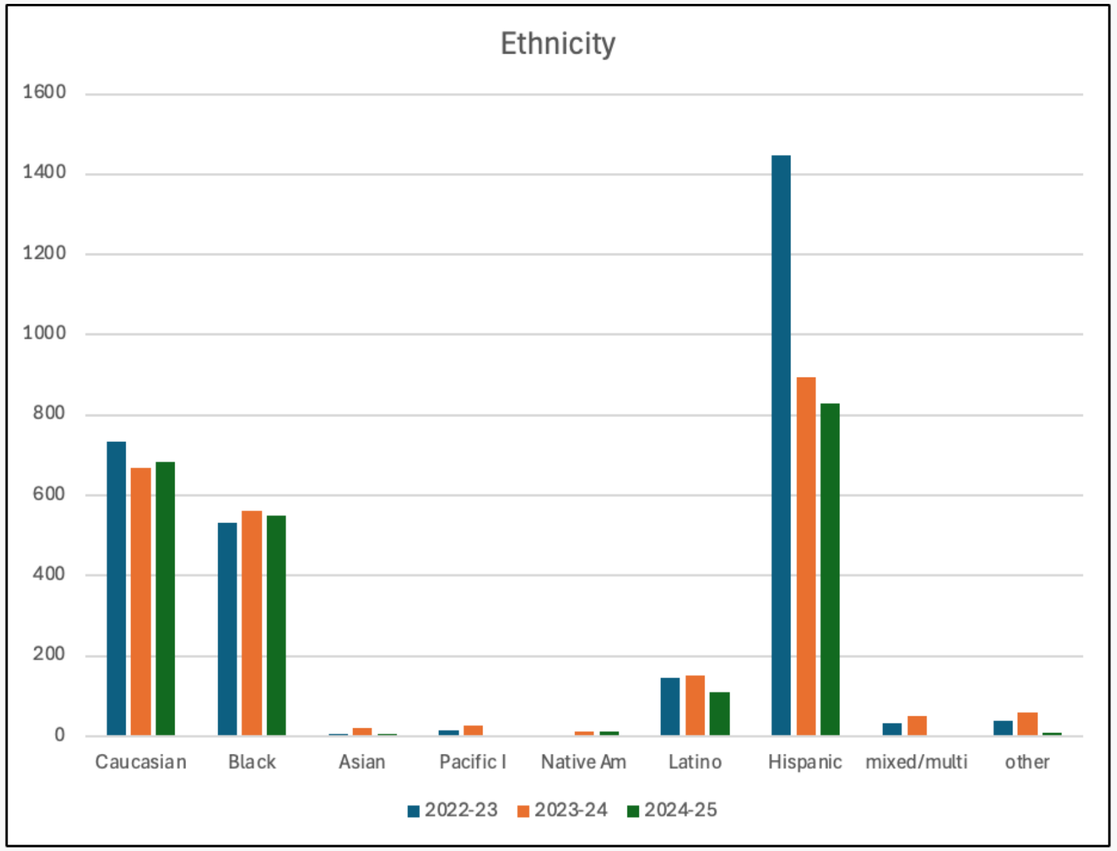
Mapping this data can reveal service gaps or underserved areas, an especially powerful tool when overlaid with data on poverty, housing instability, and other need indicators. Such visualizations provide powerful justification for why additional resources may be necessary.

More funding means greater reach within the Southside and Easton as a whole.

Data Analysis

While we have demonstrated one of the ways that the digitized data can be displayed graphically, this is an area that has significantly greater potential

For example, the chart on this page is a summary of the ethnic demographic distribution of clients served by the pantry. Data like this could help support some of the other proposed work, like envisioning a more ethnic-based variety of produce produced.



Digitization

The Tech Clinic team believes that. while the Center provides excellent support for the community, the data collection systems that the Easton Area Neighborhood Center uses would benefit from a digital overhaul.

Clients could be checked in, monitor their visit dates, inform the Neighborhood Center of changes to their assistance programs, and be informed of available produce and other foods, all through a digital portal, similar to that of a doctor's office.

Third-party digital platforms similar to the type ideal for the Neighborhood Center already exist and could be implemented relatively easily. The Tech Clinic team believes that, if deemed appropriate, digitization of the Neighborhood Center's bookkeeping process would be good to examine as part of the secon-semester work.

Summary and Ongoing Work

We’re excited about the progress we’ve made and the clearer understanding we now have of the Easton Area Neighborhood Center’s clientele. With this knowledge, we’re eager to move forward, tailoring our efforts to offer the most relevant and effective solutions for both the community and the center. As we continue to refine our approach, we welcome feedback and ideas to ensure we create an even more supportive, accessible, and responsive environment for all.

Thank you & Discussion