Food Recovery in Easton

Addressing Local Food Security and Waste

Technology Clinic Final Report
Fall 2021

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Acknowledgements

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Ellen and Dennis Potter, St. Vincent de Paul, Pantry

Mark Reid, Easton Urban Farm, Farm Manager

Marcia Young, Shiloh Church, Pantry

Lois Prytherch, Easton Food Recovery, Data Manager

Jan Schwartz, Easton Food Recovery

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Adele Germanio, Easton Food Recovery, Logistic Coordinator

Technology Clinic

The Technology Clinic is a two-semester course in which students work together to develop imaginative solutions for clients facing real-world problems. Because students come from various academic backgrounds, the approach is interdisciplinary.

Our Focus

Last semester our Technology Clinic team worked to document how perishable produce moved between sources and distributors of donated produce in Easton. This semester our team focused on increasing produce access by improving connectivity among pantry coordinators, while also decreasing food waste.

Why Produce and Perishable Items?

Produce has been identified as an item most desired in pantries for nutritional value, but high retail costs and short shelf life limit its availability in pantries.

Background

In the spring of 2021 our Technology Clinic team began working on a project addressing food access in Easton, Pennsylvania. Areas of Easton, specifically the West Ward, have been identified as neighborhoods experiencing increased difficulty accessing food, specifically fresh produce. The West Ward is designated by the USDA as a "food desert[1]". This lack of food equity results in an increased need for supplementary food for stressed households. The Easton pantry system serves about 4,200 people monthly[2]. Across Easton there are many pantries, organizations, and projects working to address food insecurity in the region, which our team documented in our previous report [3] However, these agencies are not alway able to work in tandem due to communication and time constraints.

1. A food desert is an area where people have limited access to a variety of healthy and affordable food

2. Easton Hunger Coalition's "Truth and Facts about Hunger", 2019

3.https://techclinic.lafayette.edu/2021/02/18/food-agency-in-easton-pa-documenting-food-flow-and-recommending-efficiencies/

Mission Statement and Methods

Mission Statement -

The Technology Clinic at Lafayette has completed a number of projects working with various agencies focused on increasing produce flow in the West Ward of Easton. This project, over the course of two semesters (Spring - Fall 2021), maps the flow of produce within and through the City of Easton with a focus on increasing the amount of fresh produce to households in need in the West Ward.

Our efforts, with the resources Lafayette offers, will focus on finding means to build upon the existing work to increase efficiencies in the food acquisition and distribution systems around fresh, local produce. We have identified common challenges Easton pantries face by speaking with members of various organizations and others.

The spring semester work indicated that a stepping stone towards achieving these long term goals is creating a system for shared data and improved communication. *We would like to help develop a system to log and track incoming produce at each location to facilitate communication and standardization of information.*

Method-

During the spring semester we worked to identify the many generous actors in Easton's food network. We met with various community members to "sort" actors into producers and distributors. Using this information, we mapped out production/distribution sites and the various relationships between these actors. We concluded that the Easton food recovery network is complex and that there is a significant amount of surplus food to be distributed. In the fall semester, we were determined to facilitate more cooperation between these actors to impact the efficiency of food distribution throughout the West Ward and Easton in general, potentially reducing wasted food.

Fall Semester Focus -

At the beginning of the semester, we identified four tracks:
1. Uniform logging
2. shared transportation/refrigeration,
3. An advisory board between community farms/gardens, and
4. Increasing flow to the West Ward.

These four tracks all indicated a need for... (to avoid contradictions with next slide)

Review of Spring 2021 Takeaways

After interviewing community stakeholders we created a diagram to record how produce moves between pantries and farms in the community. These interviews provided us with insights into the current inhibitors of produce reaching pantries. From these we identified opportunities for increasing access and flow of produce:

1. Shared transportation

2. Shared refrigeration

3. Shared and uniform data logging

4. A community garden and pantry advisory board
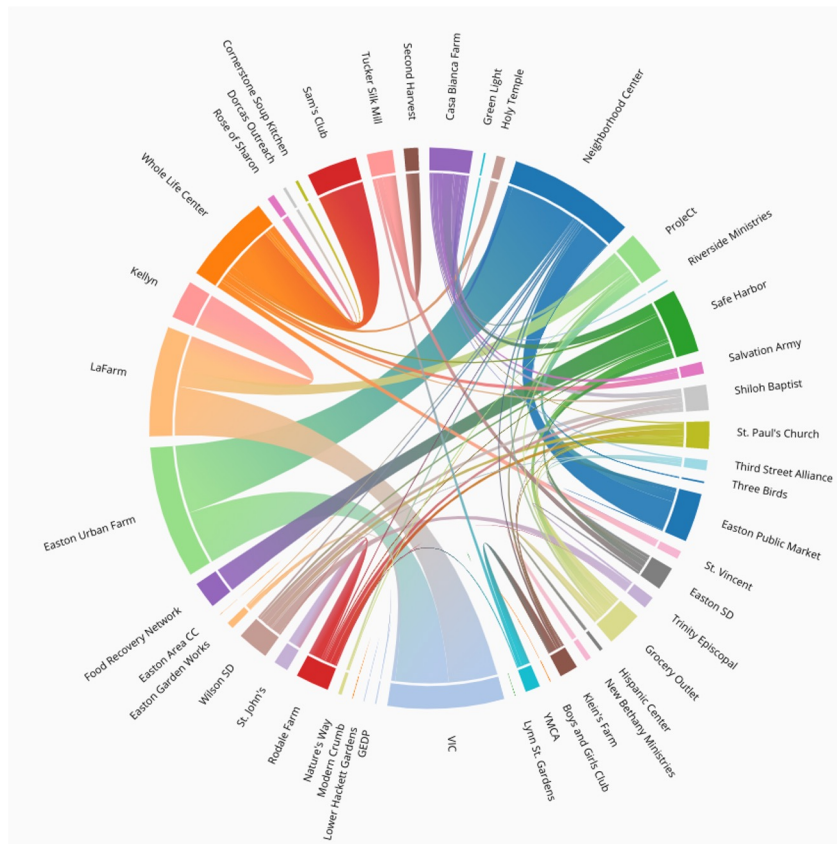
Goals for the Fall Semester

Based on the opportunities identified, our team used this semester to work towards increasing communication and connectivity among local pantries to share fresh produce and reduce the amount of perishable items wasted. We identified a common desire for enhanced communication efficiency, which we sought to do through a app. Inspired by food recovery and gleaning programs, we set out to find a platform to connect local pantry leaders and urban farmers.

Goals:

- Primary goal: getting nutritious, perishable food into the hands of those who really need it.
- Secondary goal: reducing food waste

To do this, we piloted a group chat intended for the sharing of produce and perishable food items between pantry coordinators and community stakeholders. This platform facilitates communication between volunteers, pantry leaders, and urban farmers to identify extra produce, a need to share produce, and available drivers to transport it.

Food recovery:Food Recovery is rescuing surplus food that would otherwise be wasted and giving it to hunger-fighting partner agencies. (food recovery network.org)

Gleaning:Gleaning is simply the act of collecting excess fresh foods from farms, gardens, farmers markets, grocers, restaurants, state/county fairs, or any other sources (USDA)

Methodology

General Methods

- Preliminary interviews and meetings
- The pilot trial (getting people on board, using extra produce from Easton Urban Farm and Lafayette College)
- Follow up interviews with individuals once the pilot started
- Joint pantry zoom call - to evaluate success of the pilot and the GroupMe

Initial meeting with Donna Lavin- Whole Life Center

- A more simple system of communication is desirable, rather than emails and phone calls while recognizing various pantry's preferences

On site meeting with Mark Reid - Easton Urban Farm

- Looking for something that can connect the already-existing systems, without overwhelming with something completely new.
- The Easton Urban Farm could benefit from more connections – for example, pantries that have space for extra produce so as to reduce waste
- Sharing driving responsibilities could reduce burden on one individual and increase ability to share produce

On site meetings with Panty Leaders

Donna - Whole Life Center (10/21/21)

Ellen Potter - St. Vincent de Paul Pantry (10/5/21)

- Insight into pantry infrastructure and operations
- Insight into how data is logged

Questions used for initial meetings:

- Could you make use of a system that keeps track of/shares pantries' produce needs and excesses with other Easton pantries?
- What would that system need to look like and perform in order for you to be able to get use out of it –
  - Thoughts on using Google sheets? A form? A shared folder? Are there any systems you've used in the past?
- Could you make use of a system that allows patrons to share what their needs and preferences are? Do you have a system that performs this function?
- Do you weigh incoming or outgoing produce? What are your thoughts on recording that? How about an option of "not enough, enough, or too much"?
- We are aware that you are quite busy – how frequently would you be able to update this information? When deliveries occur? Daily? Weekly?
- As we consider systems, we want to be mindful of the technology available to your organization and the availability of technology and level of comfort your volunteers have with computers/technology. What technology do you already have in place?
- If this system could allow for produce to be shared between Easton pantries, do you have volunteers available to deliver produce?

GroupMe Pilot Program

Inspired by apps like 412 Recovery, which have created an "Uber"-like request app to connect volunteer drivers and donors to recover leftover food, we hope to use technology to increase connectivity. Our interviews led us to believe using 412 or a similar app would be difficult to implement and require initial capital.

We selected GroupMe as our medium to communication because it was accessible, user-friendly, and a platform that we were all familiar with due to its use by Lafayette students and faculty.

Why it works

- Ease of use
- Good for local scale
- Replicable
- Instant notification of excess food and instant response
- Ability to reply and quote specific messages
- Direct messaging capability
- Free to use
- Simple to manage

Organizations Included

Our pilot program included three organizations: the St. Vincent de Paul Pantry, the Whole Life Center (WLC), and the Easton Area Neighborhood Center (EANC). These organizations were chosen due to our established contacts with each group and their pre-existing networks of connections with other pantries in the area.

Another considered factor was the times that each organization held their distributions - with the inclusion of the three pantries, we covered at least two distribution times per week, increasing the chance that available produce may be desired by an involved group. A calendar showing the distribution dates for each group is shown below.

October						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
17	18	19 St. Vincent	20	21	22 EANC	23
24	25	26	27 WLC EANC	28	29 EANC	30
31						
November						
	1	2 St. Vincent	3	4	5 EANC	6
7	8	9	10 WLC EANC	11	12 EANC	13

Food Flow Transactions

Successful Transactions	4
Missed Transactions	3
Unclear Transactions	2

Visualized Food Flow
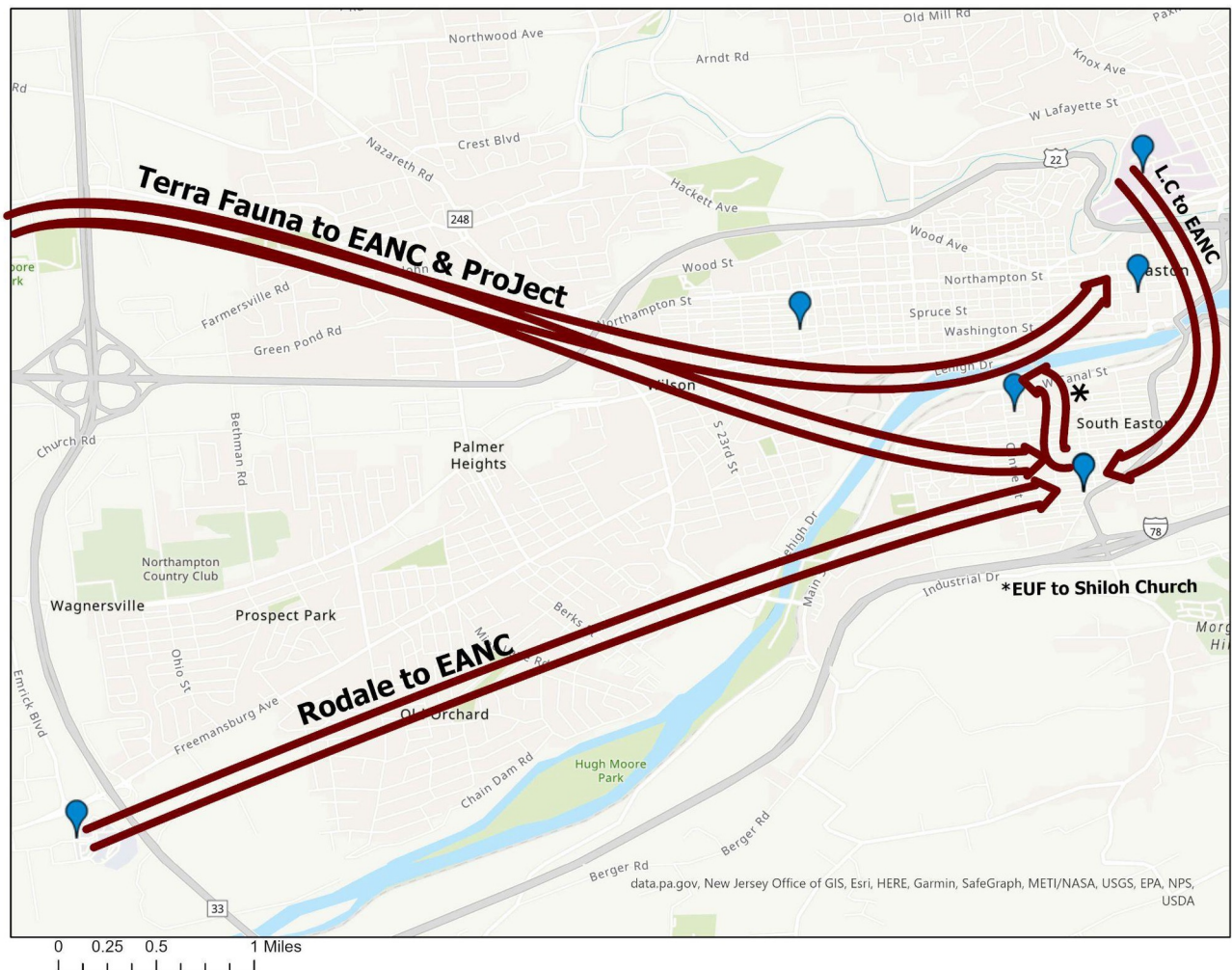
Map of produce transfers during the pilot program

Abbreviations Used:

L.C- Lafayette College
EANC- Easton Area Neighborhood Center
EUF- Easton Urban Farm
Rodale- Rodale Institute Organic Farm
Terra Fauna- Terra Fauna Farm
ProJect- ProJect Easton

Examples from GroupMe Pilot

Easton Food Recovery

Lois Prytherch
I am going to Rodale Organic Farm to pick up produce. Can deliver Friday. Who can use it (will send another text when know what and how much)

Oct 21, 2021 at 3:48 PM

Nancy Walters
Easton Neighborhood Center distributes Friday morning. They put fresh produce out on table for clients to pick. This would be good location. They distribute 9-12   They open the office at 8 am.

Lois Prytherch
Got it

Lois Prytherch
I can't get it there till 9:30, would that be a problem

Mark Reid
Lois hi I'll be at the farm outback find me and I'll help you unload and I can take it in to pantry from there. Thanks

Lois Prytherch
Great. There's butternut sq, carrots, potato, onions and peppers

---

Easton Food Recovery

Mon, 10:52 AM

Marcia Young
Goodmorning Everyone,

Mark if there are any collards close to Friday. I'll send Dennis to pick them up.

8:15 AM

Mark Reid
Hi Marcia I'll pick em Tomorrow so anytime Thursday or early Friday will be good. Just text me an time and I'll have them. Thanks.

8:34 AM

Marcia Young
Thank you Friday morning is great 👍

Mark Reid
Sounds good.

9:20 AM

Marcia Young
What time is good for pickup?

Mark Reid
Anytime between 8.30 and 11 works. If those hours don't suit I can always pop out when Denis is available for pick up.

Image on left shows an example which was completed within 15 minutes. Image on right shows a request organized over the course of 23 hours.

Feedback from Participants

In mid-November we joined a call with several pantry leaders to gauge their opinions about the pilot program and how the GroupMe app was enhancing communication and distribution efforts, presenting the questions shown below:

- How did the group chat impact ability to connect with other pantry leaders?
- What worked well while using this system (speed, ease of exchanges, increased connectivity, ability to reach multiple sources at once…)
- What caused challenges when using the app?
- Could you use a shared excel doc to log produce after an exchange?
- Do you have a scale for weighing incoming produce?
- Any other feedback regarding the app? `
- Barriers for using the app?
- Do you have access to the technology needed to communicate with the app?

When discussing the use of the application with **Mark Reid**, Farm Manager at Easton Urban Farm, he shared praise for the application's user-friendly platform and ability to quickly connect multiple pantry leaders in the Easton area. He felt this connection filled a niche among the many existing pantries already accomplishing so much, including the Easton Area Neighborhood Center, which is connected to the Easton Urban Farm. Specifically, he sees potential for a reduction of waste at the farm. Mark gave the example of tomato and kale beds that were cleared in October that could have been donated as produce instead, had he had the proper platform.

Donna Lavin of the Whole Life Center Pantry expressed that the groupme eases the efficiency of planning. Logging is already a really big burden so this helps. Communicating ahead of time is crucial.

Adele Germanio of Easton Food Recovery expressed that she is looking forward to having more people on GroupMe, especially recipients. The Excel spreadsheet has also proven helpful.

Moving forward

We plan to continue with the use of this group chat after the program pilot this semester.

Future operations:

The fall of 2021 completes this Technology Clinic class. The group communication can continue without the presence of any technology clinic members, but monitoring of the chat is necessary in order to facilitate the produce transactions. Nancy Walters, co-advisor to the project has volunteered to monitor the chat after the completion of the course.

The shared data is currently logged by Lois Prytherch. A shared logging site would facilitate the sharing of knowledge and information; this must be implemented without adding undue burden to current administrators. We suggest that this can be achieved through a shared google sheet in which data is logged by the recipient of food after a transaction.

Future participants:

Add all pantries in the Easton community to GroupMe.

Add likely donors to GroupMe.

Add additional volunteers for transportation purposes.

During the pilot program we saw successful transfers directly from farm to pantry, demonstrating there's opportunity to connect donors, pantry leaders, and drivers to increase produce access. This list includes but is not limited to local grocers (Sam's club, Wegmans, Giant), Terra Fauna Farm, Rodale Organic Institute Farms, Easton Garden Works Gardens. Another opportunity identified here is the potential for local restaurants to identify available produce from local farms. Since GroupMe is a platform that can host multiple group chats there is space to grow and create iterations of important connections without needing to make major infrastructural changes or learn complicated systems.

Discussion & Impact

This small pilot project, despite the strong signs of success, does not represent the total impact this system can have on the pantry system in Easton.

The pilot project included just a few pantries and only a couple boxes of food. If more pantries get involved, the system can extend its benefit to more and more families. A rough estimate of some of the positive effects the system could have, based on data from the Joint Pantries, indicates that if it is applied to all 10 pantries for whom we have data, the project could impact as many as 456 new households and 2,068 individuals visits in a six month period.*

We are excited about how much impact the group chat may be able to have on the Easton pantry system. We encourage your participation and welcome your feedback.

An secondary result of the sharing of produce is working towards the a 50% reduction of food waste in the Lehigh Valley by 2030, a national goal set by the EPA[1].

*Potential numbers are based off monthly data from the Joint Pantries and serve only as estimates

1.https://www.epa.gov/sustainable-management-food/united-states-2030-food-loss-and-waste-reduction-goal

Recommendations

Based on our research and community forum we've created this list of potential actions to address food insecurity moving forward. Heavily influenced by feedback, which can be found in the appendix.

1. Money would well spent supporting Fresh Food Bucks, which doubles SNAP purchases.
   - EBT spending at farmers markets increase by 100% since 2017 and we have seen Fresh Food Bucks redemption increase over 70%.
   - Most of that redemption is at farmers markets and corner stores, which means more money in our local economy.
   - According to the 2021 PA Economic Impact report, every dollar spent generates an additional $0.63 in additional economic activity. (Sue Daladan, community forum)

1. Implementing a shared data logging across Easton pantries
2. Purchasing a shared walk in cooler or refrigerator for pantries across Easton can share

Appendices

- Tips for using GroupMe
- Contacts
- Drop off calendar
- Pantries
- Presentation feedback

GroupMe User Guide

Tips for Using GroupMe Efficiently

To begin the chat someone will send out a message about extra produce to be donated. Ideally, this message will include an address for pick up location, a timeframe available, produce expiration (some cases will be estimated), and quantity for the food item.

To anyone that sees the message, use the heart icon next to the text to acknowledge receipt of the message. This does not equate to accepting the request. A pantry affiliate will reply with a message if able to receive the food. This message should include an address for drop off, a timeframe for availability to receive, and any other information you feel necessary. A volunteer driver will then reply if they are available to transport food. This message should include a response confirming that you are available and an estimated time of arrival at the pick up location. With this being a group messaging app, feel free to ask others for clarification in the chat for ease of transactions.

How to Reply
There are two easy ways to reply to a message! The first is to simply click in the "Send Message" box and use the "@" symbol on your keyboard and select the name of the person you want to send a message to and then reply with your message. The second way is only available on the phone and that is to find the specific message in the chat, press on it with your finger and click on the reply. The second way will highlight the entire message you are replying to, making it easy to reference what you are replying to!

How to Like
To like a message, simply find the message you would like to like, and then click on the heart silhouette (or whichever silhouette you decide on) on the right hand side of the message. When done successfully, the silhouette will light up and the number of likes the message has will show.

How to Change your Name
To change your name on GroupMe, while in a specific group chat, hit the three vertical dots on the top right hand corner of the screen, then select the "Change Nickname" button and proceed to change your nickname. To change your nickname in general for all group chats (and not a specific one), go to the exit out of the current group chat, click on the three horizontal lines at the top left hand corner, then click on your profile, hit the big blue button with the pencil, and now you can change your name and any other important personal information.

How to Add Members
To add members to a group chat, while in a specific group chat, hit the three vertical dots on the top right hand corner of the screen, then select the "Add Members" button and proceed to add the selected members to the group chat (this can be done by either adding a phone number, an email, or selecting their name).

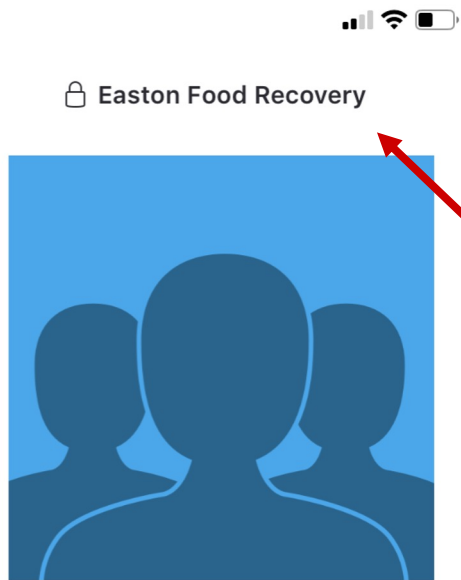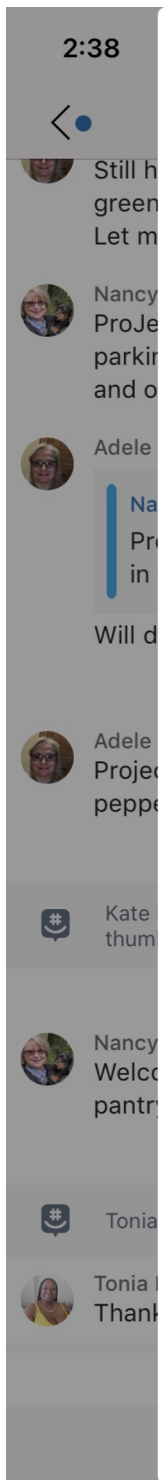**Importance of Understanding the App for Communication**
GroupMe is an easy way to connect and share information with other members! It has a simply user interface that allows easy set up and easier communication to each other. It is a nice tool to help with communication and allow for less wasteful flow of foods and produce throughout our community!

Getting Started
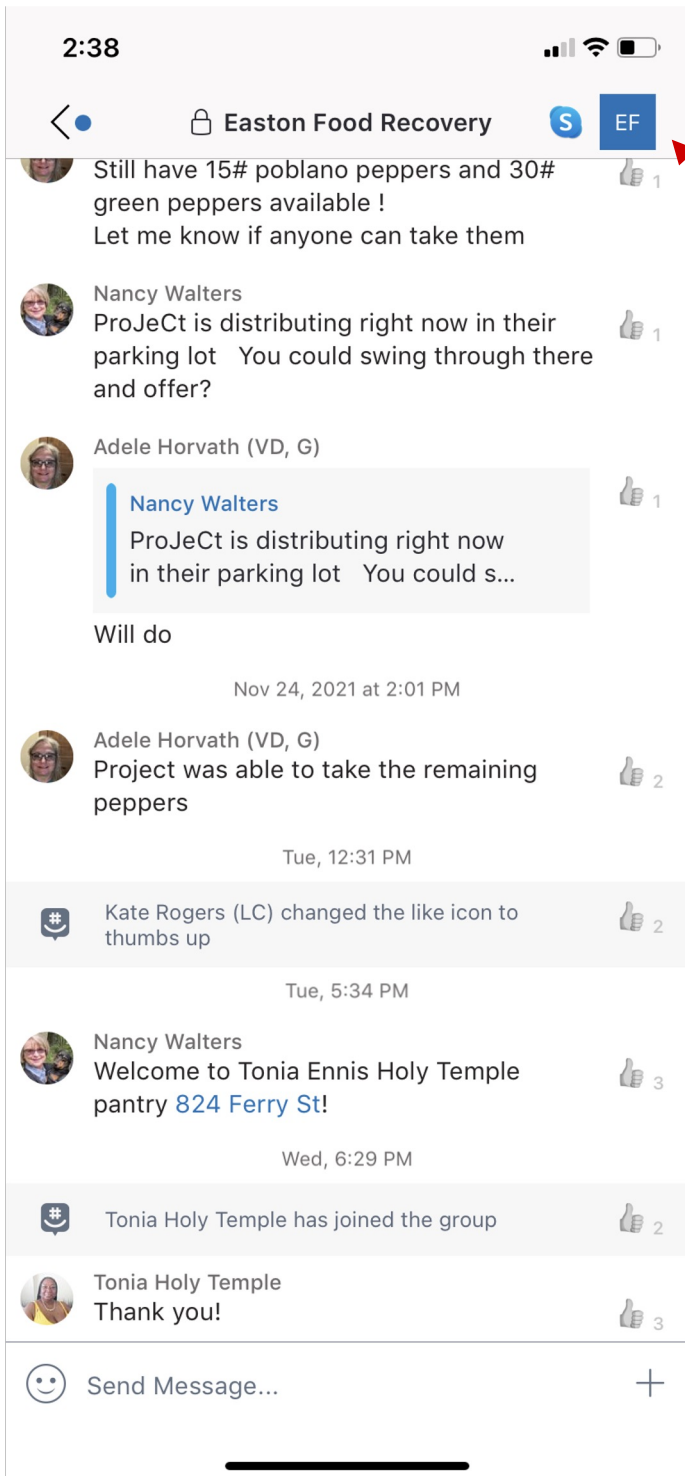
Upon joining a group chat, this is an example of what the screen that will appear may look like

Chat Overview

2:38

🔒 Easton Food Recovery

St. Vincent : 1st and 3rd Tuesdays, 6 pm
EANC: Friday mornings, 9 am - Noon, and
2nd and 4th Wednesdays, 4:00 pm
Whole Life Center: 2nd and 4th
Wednesdays, 11 am - 2 pm https://
forms.gle/G6KvYS7yeDuFRX5d6

Mute

16 Members

Search messages

Gallery

Calendar

Polls

Popular

Settings

Upon clicking on the icon at the top right hand corner of the screen, this screen will appear

This is where you can find access the following things:

The group name

The group description

The ability to mute chat notifications

The members of the group

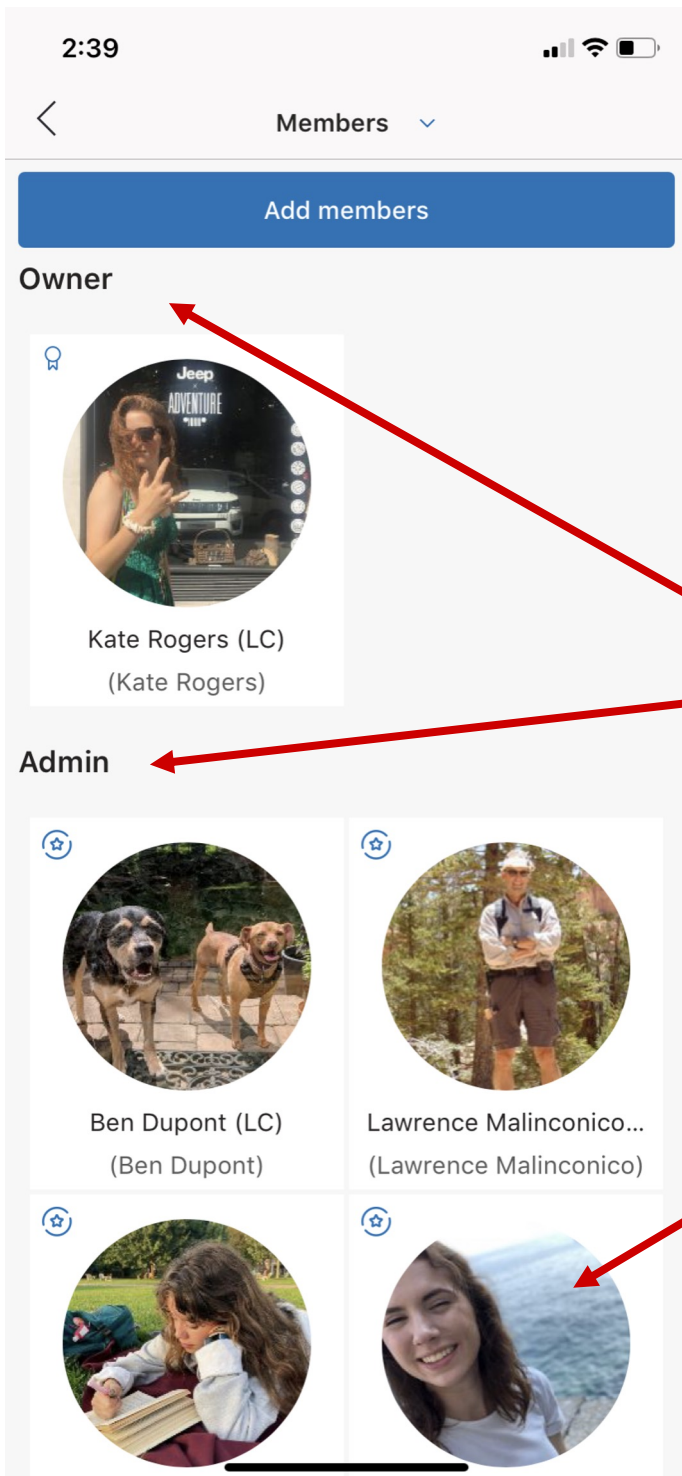The ability to search messages

A gallery of any pictures sent in the chat

Settings, where you can modify your profile or find the link to share group access
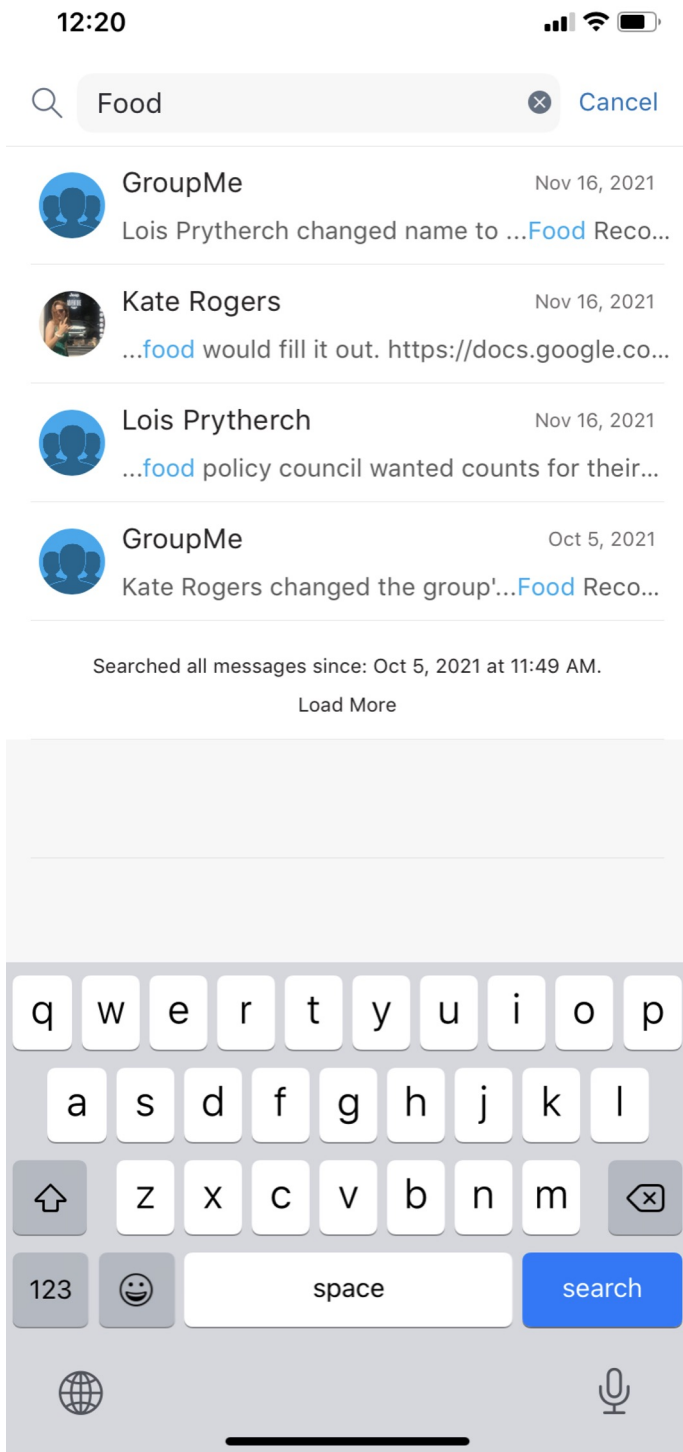
Group Members

This is where you can view the members of the group (by scrolling down all members can be seen)

This is also where you can identify the owner and administrators of the chat

If you need to contact someone directly (outside of the group as a whole) you can tap on their profile here and a private messaging page will open up
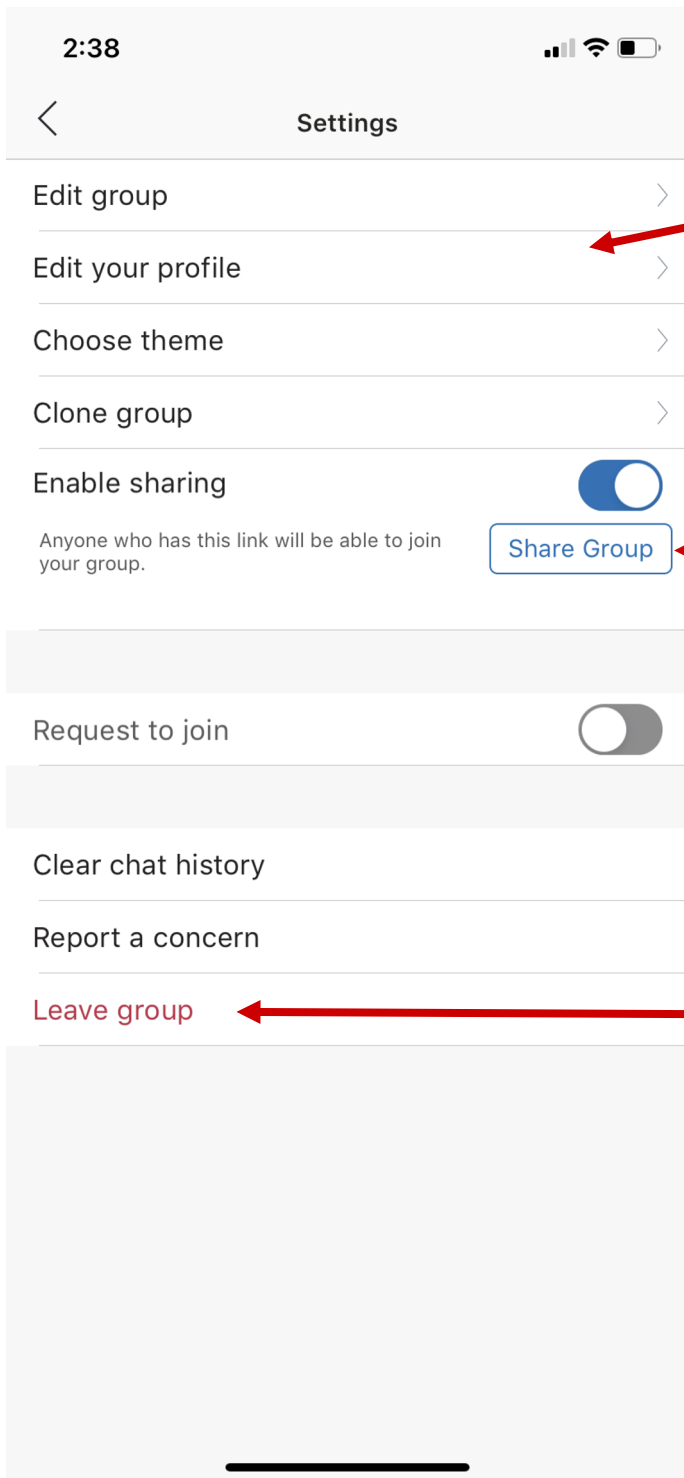
Message Search

Upon clicking on "Search messages" on the chat overview page, this is the screen that will appear

If you are trying to search for a specific message, or a message with a certain keyword, this is where you can do so

Typing in the search bar at the top of the page will pull up all messages in the chat that meet the search criteria

Settings Overview

2:38

< **Settings**

Edit group >

Edit your profile >

Choose theme >

Clone group >

Enable sharing ⬤

Anyone who has this link will be able to join your group.

Share Group

Request to join ⬤

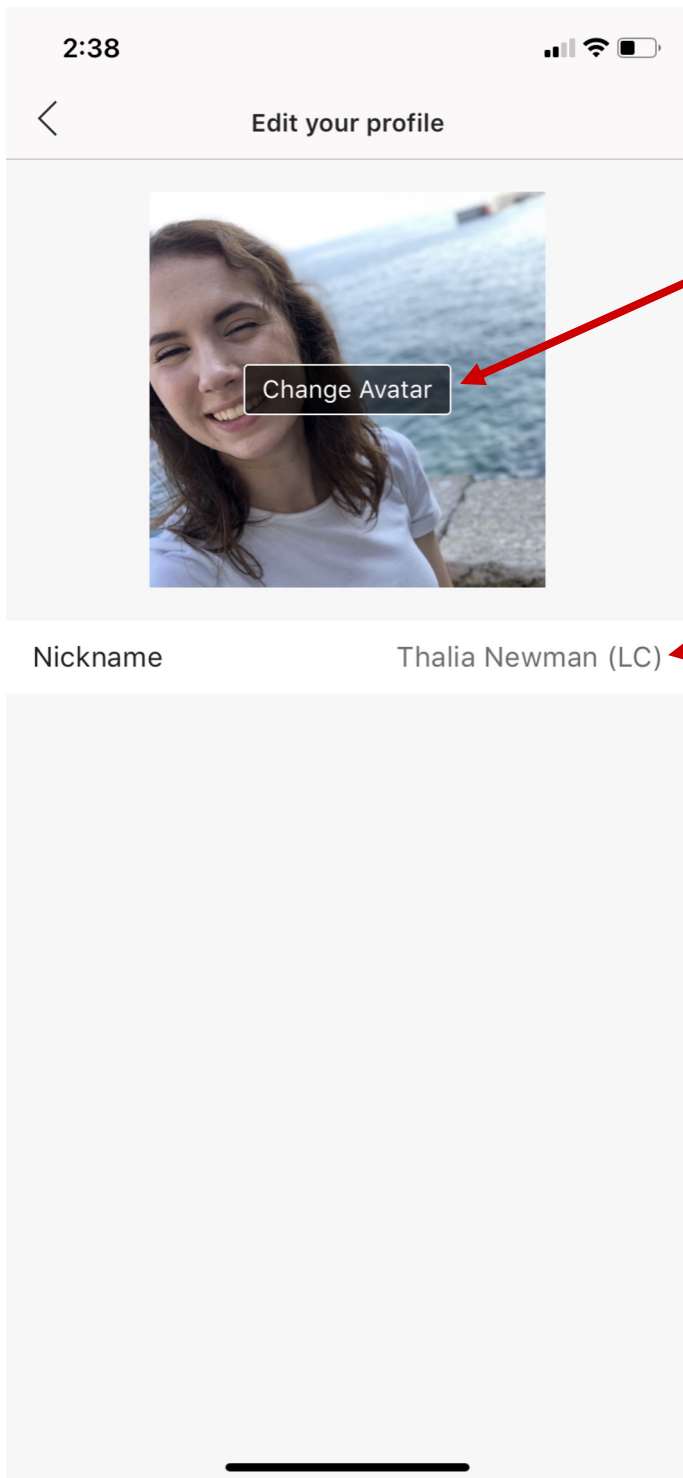Clear chat history

Report a concern

Leave group

This is the settings panel

Click on "Edit your profile" to change your name in the chat and your profile picture

If you are trying to share the link to join the chat with someone else, click on "Share Group"

If for whatever reason you wish to leave the group chat, you can do so by clicking here

Profile Editing

This is what shows up when you click on "Edit your profile"

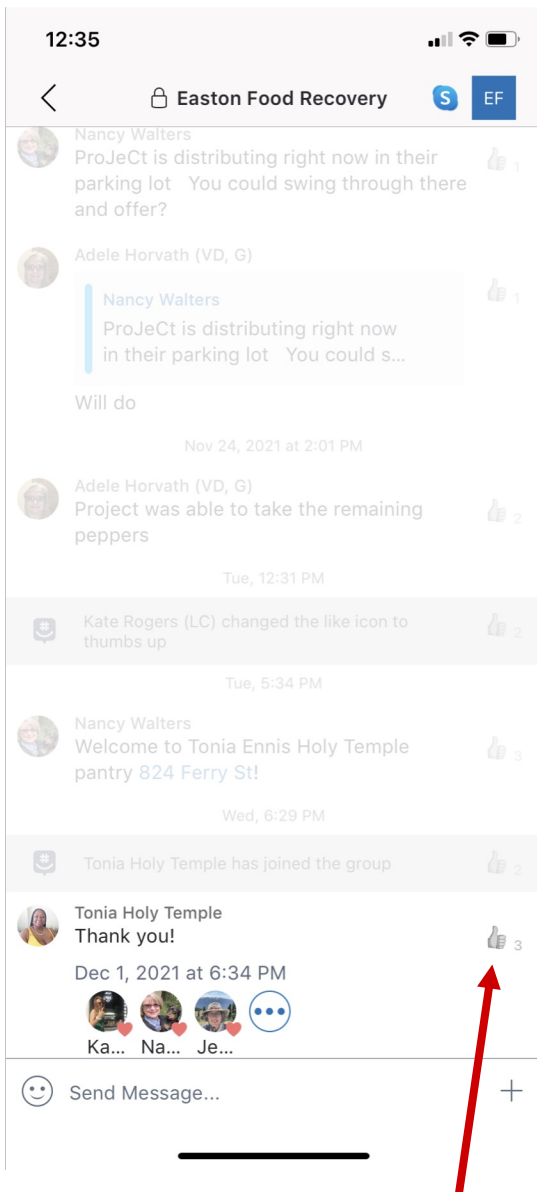To add/change your profile picture, tap here

To change how your name appears in the group, click here

Upon doing so a keyboard will come up on the screen and you can type in what you would like your name to appear as
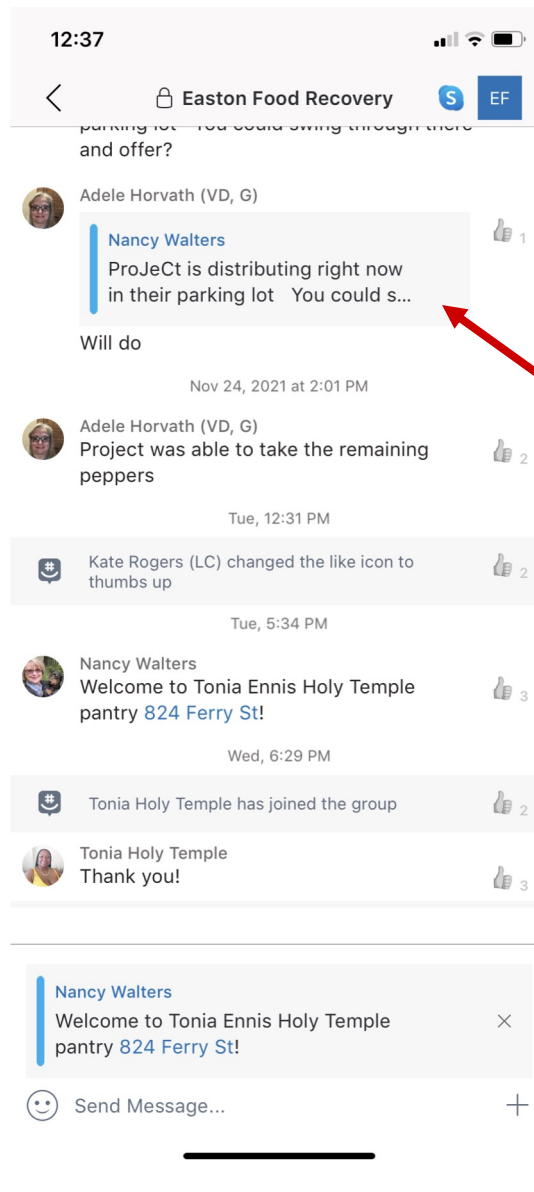
Liking & Replying to Messages

Back at the message homepage, this is where all group messages can be sent and received

There are 2 key functions to be aware of on this page other than sending messages: Liking messages, and replying to messages

Example of a new message sent in reply to a previous message

To like a message, tap the icon on the right side of the message

Tao on the message to view who has liked it

To reply to a message, swipe left on the desired message and it will show up as shown above

Sending Private Messages

12:21

Done   **Shiloh Harrill (she/her)**

No messages yet.
Send a message to start the conversation.
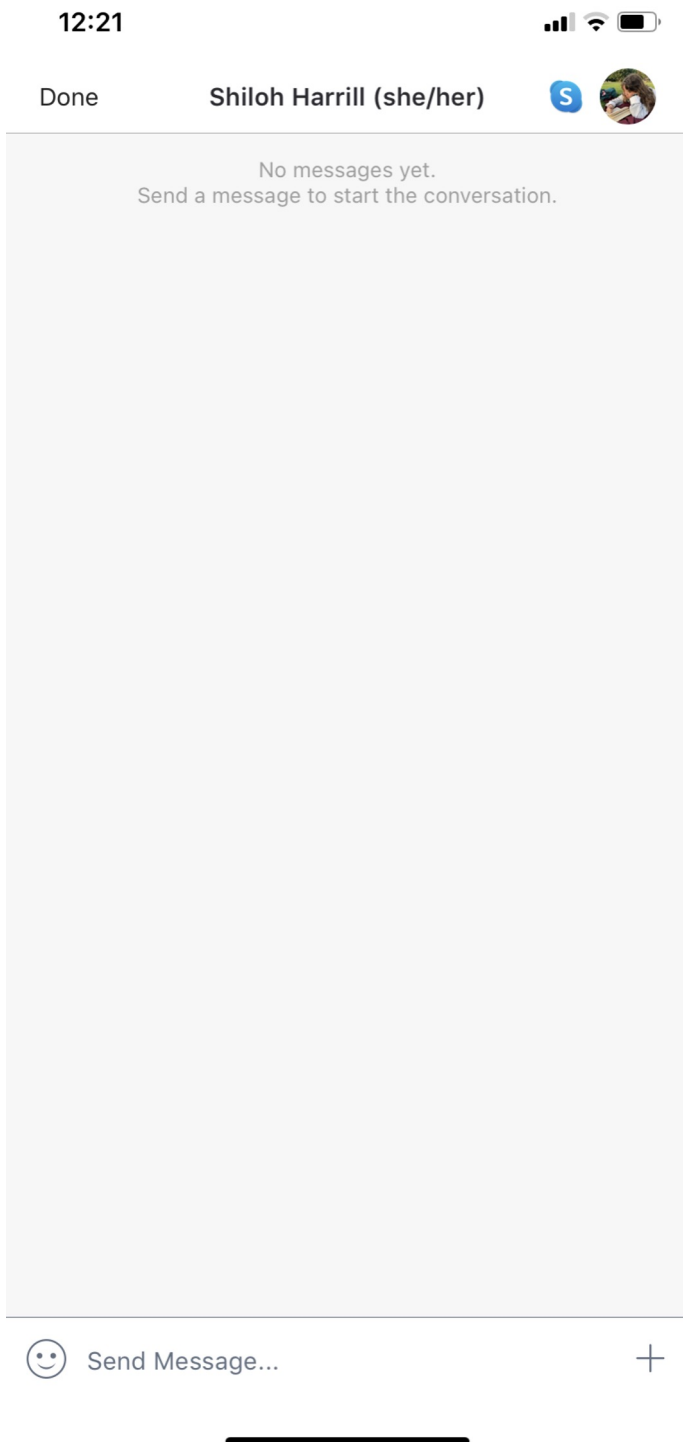
Send Message...   +

If you wish to send a message to someone privately, you can send a private message in one of two ways:

1. Tap on their profile in the list of members
2. Tap on their profile picture on a message they have sent in the chat homepage

This can be helpful if you have to contact one person in the chat, but this message does not directly involve anyone else in the group

The resulting private message screen will appear like this, with any previous private messages shown as well as in the full chat

Contacts

Easton Area Neighborhood Center	Deborah Brown	dbrown@eastonanc.org
Easton Area Neighborhood Center	Ross Marcus	rmarcus@eastonanc.org
Easton Urban Farm	Mark Reid	marjam24@hotmail.com
Forks YMCA	Julie Novick	julienovick@gv-ymca.or
Holy Temple	Tonia Ennis	toniaennis71@gmail.com
Lehigh Valley Food Policy Council	Sue Daladan	sdalandan@lvfpc.org
LINCS Easton	Lisa Breidinger	lhoney63@gmail.com
ProJect Easton	Antoinette Cavaliere	acavaliere@projecteaston.org
ProJect Easton	Jacqueline Aravena-Robson	jaravena@projecteaston.org
Project Easton	Michael Banas	mbanas@projecteaston.org
Safe Harbor	Jeff Poch	jpoch@safeharboreaston.org
Safe Harbor	Sarah Massaro	smassaro@safeharboreaston.org
Salvation Army	Maryanne West	ywest@rcn.com
Salvation Army	Isabel Mino	isabel.mino@use.salvationarmy.org
Shiloh Church	Marcia Young	sowyourseed7@yahoo.com
Soul Winners	Anglore Barclay	anglorebarclay@gmail.com
St. Paul Lutheral Church	Jim Marra (jimar555@aol.com)	jimar555@aol.com
St. Paul Lutheral Church	Leslie Schuch	mommal02@rcn.com

Sample Drop off Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Holy Temple Pantry 10 – 10:30 am		St Vincent 12:30- 2:30 pm		EANC 9am - 4pm	EANC 9am Shiloh Church 10 am - 12pm	
Holy Temple Pantry 10 – 10:30 am			WLC 11am-12; EANC 4pm	EANC 9am - 4pm		
Holy Temple Pantry 10 – 10:30 am		St Vincent 12:30- 2:30 pm		EANC 9am - 4pm	EANC 9-12 Shiloh Church 10 am - 12 pm	
Holy Temple Pantry 10 – 10:30 am			WLC 11am-12; EANC 4pm	EANC 9am - 4pm		

This calendar contains some current pantries partaking in the food recovery group. Red boxes indicate second consecutive days with no available drop off. As additional pantries are added, their drop off times would be added to reflect the drop off times of pantries involved in the GroupMe.

Feedback:

Community Forum/Presentation Feedback:

- Sue Dalandan –
  - Pilot was easy to use; any way to interact with pantries in Bethlehem and Allentown as well? Perhaps within the entire Lehigh Valley?
    - Since GroupMe is very easy to use on a larger scale
- Dave Hopkins –
  - We need to get an idea of how large the issue really is.
    - How much tracking since COVID began?
    - Add other potential clients
- Ross Markus –
  - Storage is still an issue; still very pressing even given improved communication through GroupMe
- Mayor Panto –
  - Brainstorm some high-end priorities so he can perhaps organize something relating to shared refrigeration

Mark Reid, Email Correspondence

Potential issues with shared cooler:
- Ensuring food safety with multiple parties moving through the space frequently
- Management of the space to ensure food does not go bad or grow disease
- Quality standards to ensure that food put in the cooler is high in nutritional value and desired by the community, not just what the store want to unload.

Sue Daladan, Email Correspondence

Money would best be spent by supporting Fresh Food Bucks, which doubles SNAP purchases.
- EBT spending at farmers markets increase by 100% since 2017 and we have seen Fresh Food Bucks redemption increase over 70%.
- Most of that redemption is at farmers markets and corner stores, which means more money in our local economy.
- According to the 2021 PA Economic Impact report, every dollar spent generates an additional $0.63 in additional economic activity.

    Potential issues with a shared cooler:
- Quality standards (similar to Marks comments)

Solutions and other opportunities:
- Determine a standard for the shared cooler, this could be set by pantry directors across the town
- The addition of value added products and composting to go to local gardens or animal feed (addressing the EPA solutions where food goes to (1) humans (2) animals (3) back to earth