

1:00 pm Pacific Time  
October 3, 2024

**Track C**

The logo for the National Zero Waste Conference is a blue circle containing the text "NATIONAL ZERO WASTE CONFERENCE" in white. The word "ZERO" is significantly larger than "WASTE" and "CONFERENCE". To the right of "ZERO" is a circular icon with a green arrow forming a loop.

NATIONAL  
**ZERO**  
WASTE  
CONFERENCE

**Concurrent PM**

# Food Waste Reduction and Surplus Food Recovery

**Speakers:**

**Jenna Deane**  
**Zach Shaben**  
**Jenn Harrman**

**Simone Chhut**

**Moderator: Nora Goldstein**

Day 2 • Zero Waste Communities

Hosted by:



**1:00 pm Pacific Time**  
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**Track C**



# **Nora Goldstein**

**Editor**  
**BioCycle**  
**(Moderator)**

**Food Waste Reduction and**  
**Surplus Food Recovery**



**National Zero Waste Conference 2024**

**Day 2 • Zero Waste Communities**

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**Jenna Deane**

**Program Director**

**Sustainable Connections**

**Food Waste Reduction and  
Surplus Food Recovery**



**National Zero Waste Conference 2024**

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**Hosted by:**





# IMPLEMENTATION TIPS AND LESSONS LEARNED

NATIONAL ZERO WASTE CONFERENCE

OCTOBER 3, 2024





# FOOD RECOVERY PROGRAM

We aim to reduce food insecurity and address climate change by redistributing nutritious surplus food to neighbors experiencing hunger.



# WHY FREEDGES?

INCREASE ACCESS TO RESCUED FOOD

INCREASE COLD STORAGE FOR SURPLUS FOOD



# THE RE STORE FREEDGE

FREEDGE  
#1



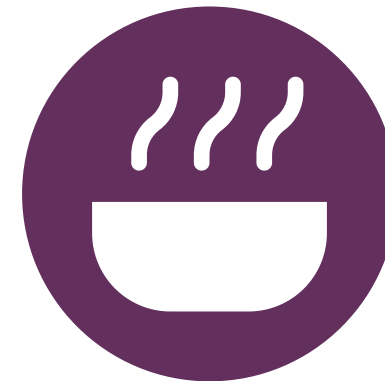
This work is funded through a Public Participation Grant from the Washington State Department of Ecology.

# 2023 IMPACTS



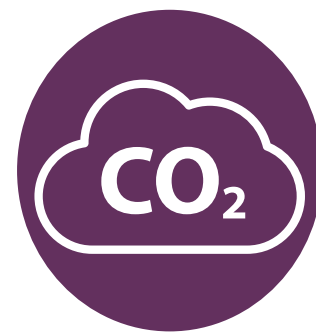
**18,074 LBS**

Food redistributed



**15,062**

Meals provided



**34.63 METRIC TONS**

CO2 avoided

EQUIVALENT TO



**2.2 MILLION**

Gallons of water saved.



# THE FREEDGE @ THE UPPER SKAGIT LIBRARY



This work is funded through a Public Participation Grant from the Washington State Department of Ecology.

**COMING SOON**

# THE NORTH FORK LIBRARY FREEDGE



This work is funded through a Public Participation Grant from the Washington State Department of Ecology.



HAVE YOU HEARD OF A FREEDGE?



COMMERCIAL UNIT



COMMERCIAL DONORS\*



SUPERVISION WHEN OPEN

# THE FREEDGE IS ALIVE!

But currently in repair



The Freedge will reopen tomorrow 3/22



HAVE YOU HEARD OF A FREEDGE?

# STOP WASTING.



- ✓ EARN TAX DEDUCTIONS
- ✓ CONTRIBUTE TO YOUR COMMUNITY
- ✓ SAVE MONEY ON YOUR WASTE BILL
- ✓ GET PROMOTED FOR BEING AWESOME



# START DONATING.

# FOOD RECOVERY PROGRAM VOLUNTEER OF THE MONTH!



**SHENANDOAH  
MYRICK**

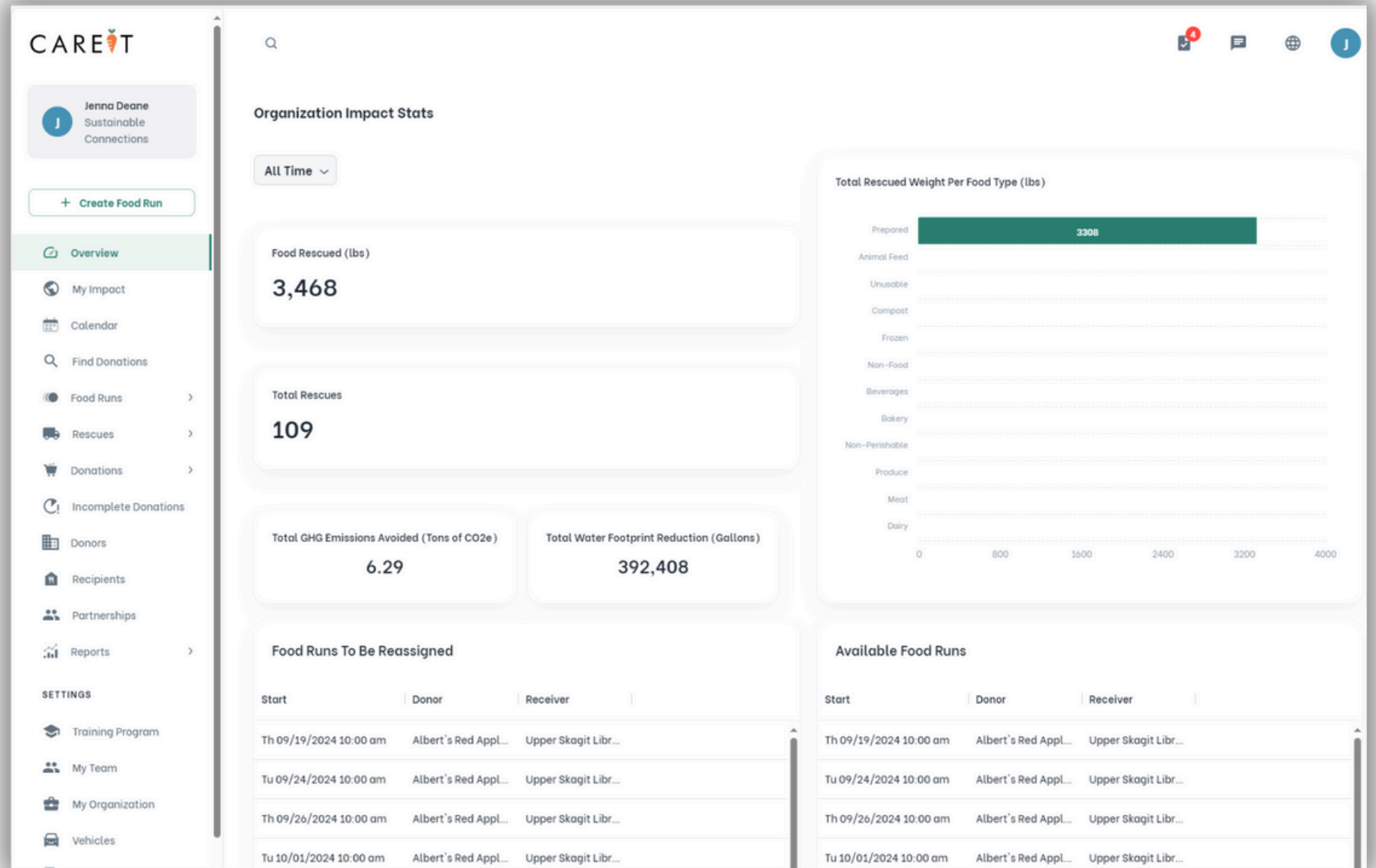
**DATE JOINED:  
JAN, 2018**



**30,159 MEALS  
DELIVERED**



**500 LIFETIME  
HOURS**





**NORTH FORK LIBRARY**  
**FREEDGE**  
**VISITOR GUIDELINES**

**NORTH FORK LIBRARY**  
**whatcom county library system**

- All welcome! This food is for everyone in our community.
- Please do not visit the Freedge if you are sick.
- Please take only what you will eat!
- Please look with your eyes and read labels first. Do not touch what you don't plan to take.
- It takes a community! Feel free to clean out any spoiled items and put them in the appropriate waste bin.
- Wipe up any spills or messes you create.

**OPEN / ABIERTO**      **CLOSED**

Tue	Ma	10:00 AM-8:00 PM	Sunday
Wed	Mi	10:00 AM-6:00 PM	Monday
Thur	Ju	10:00 AM-8:00 PM	<b>CERRADO</b>
Fri	Vi	10:00 AM-6:00 PM	Domingo
Sat	Sa	10:00 AM-5:00 PM	Lunes

**PAUTAS PARA VISITANTES DEL FREEDGE DE LA BIBLIOTECA BIFURCACIÓN NORTE**

- ¡Todos bienvenidos! Esta comida es para todos en nuestra comunidad.
- Por favor, no visite el Freedge si está enfermo.
- ¡Por favor, tome solo lo que va a comer!
- Por favor, mire con los ojos y lea primero las etiquetas. No toque lo que no planea tomar.
- Necesitamos trabajar juntos. Le invitamos sacar cualquier cosa que puede estar echado a perder y ponerlo en la basura.
- Si se te callo algo o ensucias algo, por favor límpialo. ¡Gracias por mantener el lugar limpio!

This material is funded through a Public Participation Grant from the Washington State Department of Ecology. Ecology reserved the content for grant continuity but does not necessarily endorse it.

**FOOD RECOVERY PROGRAM**

**ALLERGENS:**

<input type="checkbox"/> MILK	<input type="checkbox"/> NUTS	<input type="checkbox"/> CRUSTACEANS
<input type="checkbox"/> EGGS	<input type="checkbox"/> WHEAT	<input type="checkbox"/> SHELLFISH
<input type="checkbox"/> FISH	<input type="checkbox"/> SOY	<input type="checkbox"/> SESAME

DATE PREPARED:

ITEM DESCRIPTION:



HAVE YOU HEARD OF A FREEDGE?

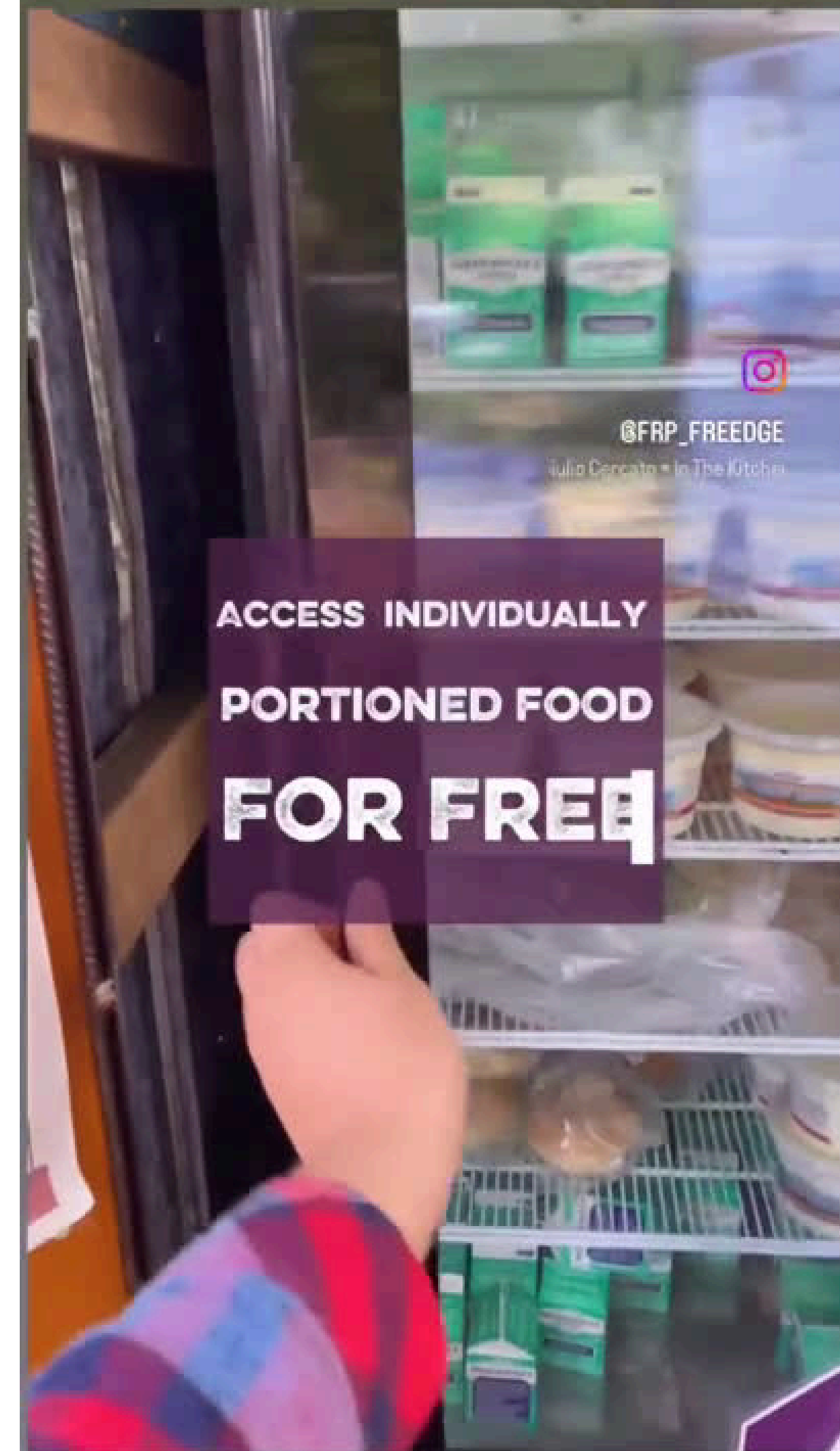


@frp\_freedge

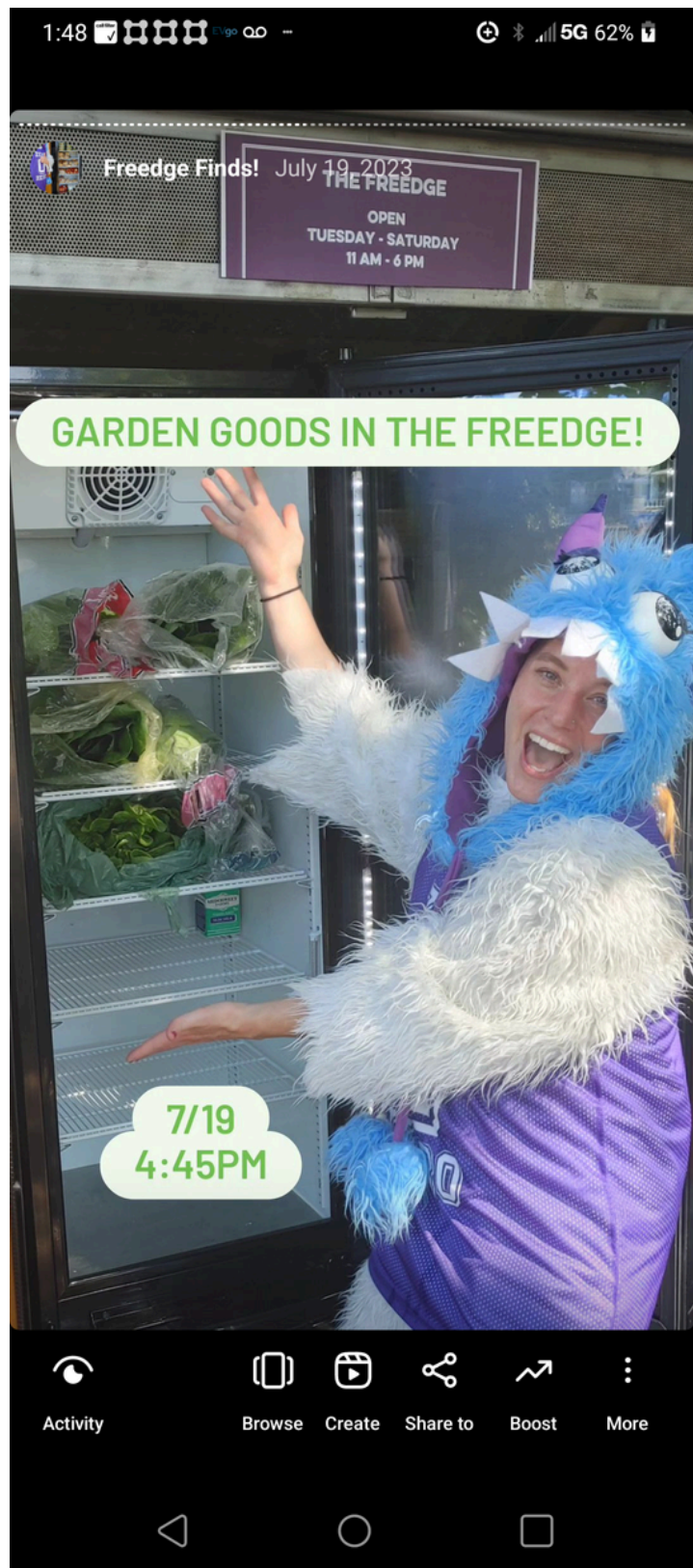


The Freedge  
from

Sustainable Connections

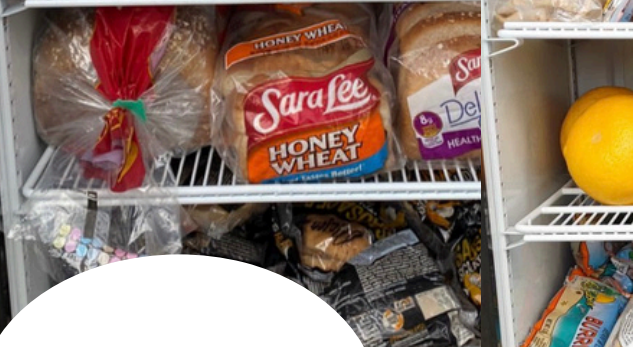


ACCESS INDIVIDUALLY  
PORTIONED FOOD  
**FOR FREE**





Jenna Deane  
 (360) 647-7093 x 108  
 jennad@sustainableconnections.org



**1:00 pm Pacific Time  
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**Zach Shaben**

**Public Affairs Manager - US & Canada**

**Too Good To Go**

**Food Waste Reduction and  
Surplus Food Recovery**



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# How We Fight Food Waste



By Zach Shaben, Global Public Affairs Manager - US

OUR VISION

WE DREAM OF  
A PLANET WITH  
**no food  
waste** 





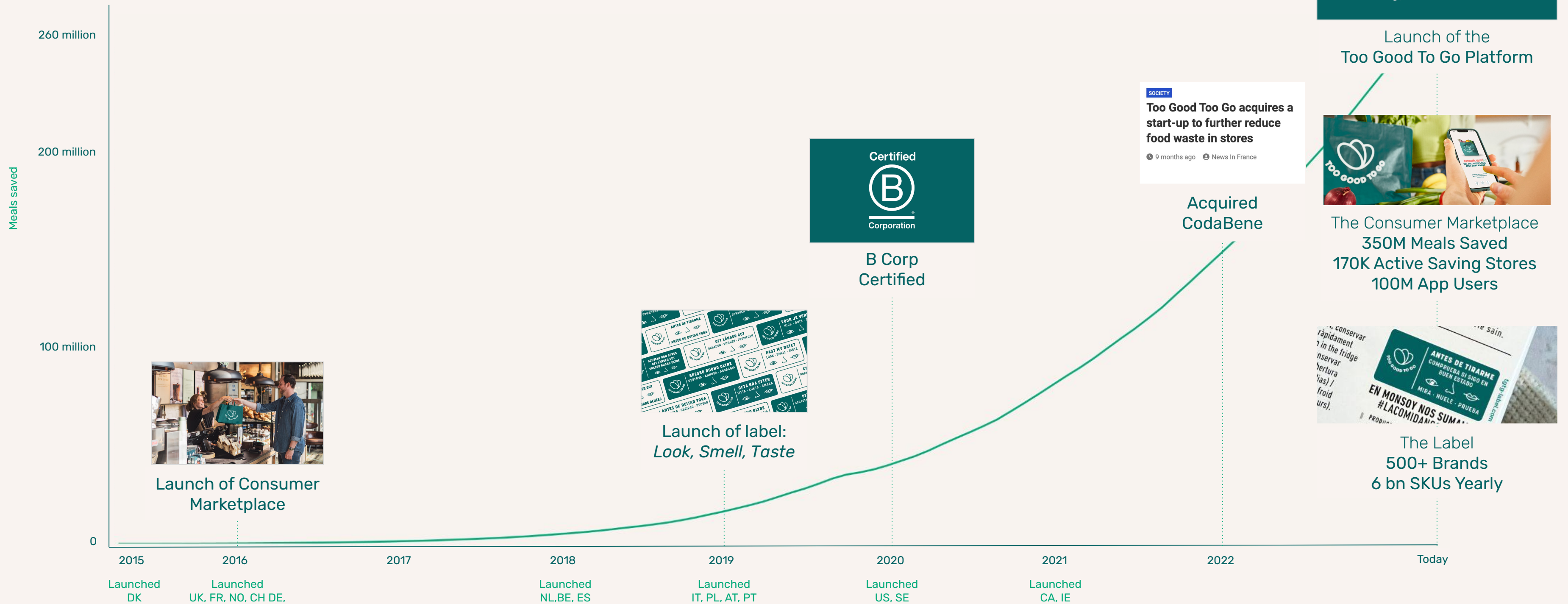
OUR MISSION

INSPIRE AND  
EMPOWER  
**everyone**   
TO FIGHT  
FOOD WASTE  
**together**





# WE SCALED TO HELP PARTNERS SAVE MORE FOOD FROM GOING TO WASTE



Launch of the Too Good To Go Platform



The Consumer Marketplace  
350M Meals Saved  
170K Active Saving Stores  
100M App Users



The Label  
500+ Brands  
6 bn SKUs Yearly





# THE WORLD'S LARGEST B2C MARKETPLACE FOR SURPLUS FOOD

Saving food from going to waste in 19 markets

## SOME OF OUR PARTNERS



## OUR GLOBAL IMPACT OVERALL

MEALS SAVED  
**+300 M**

REGISTERED USERS  
**+90 M**

ACTIVE SAVING STORES  
**+155,000**

## US IMPACT

MEALS SAVED  
**+15 M**

REGISTERED USERS  
**+7.3 M**



SAVING STORES  
**+22,000**

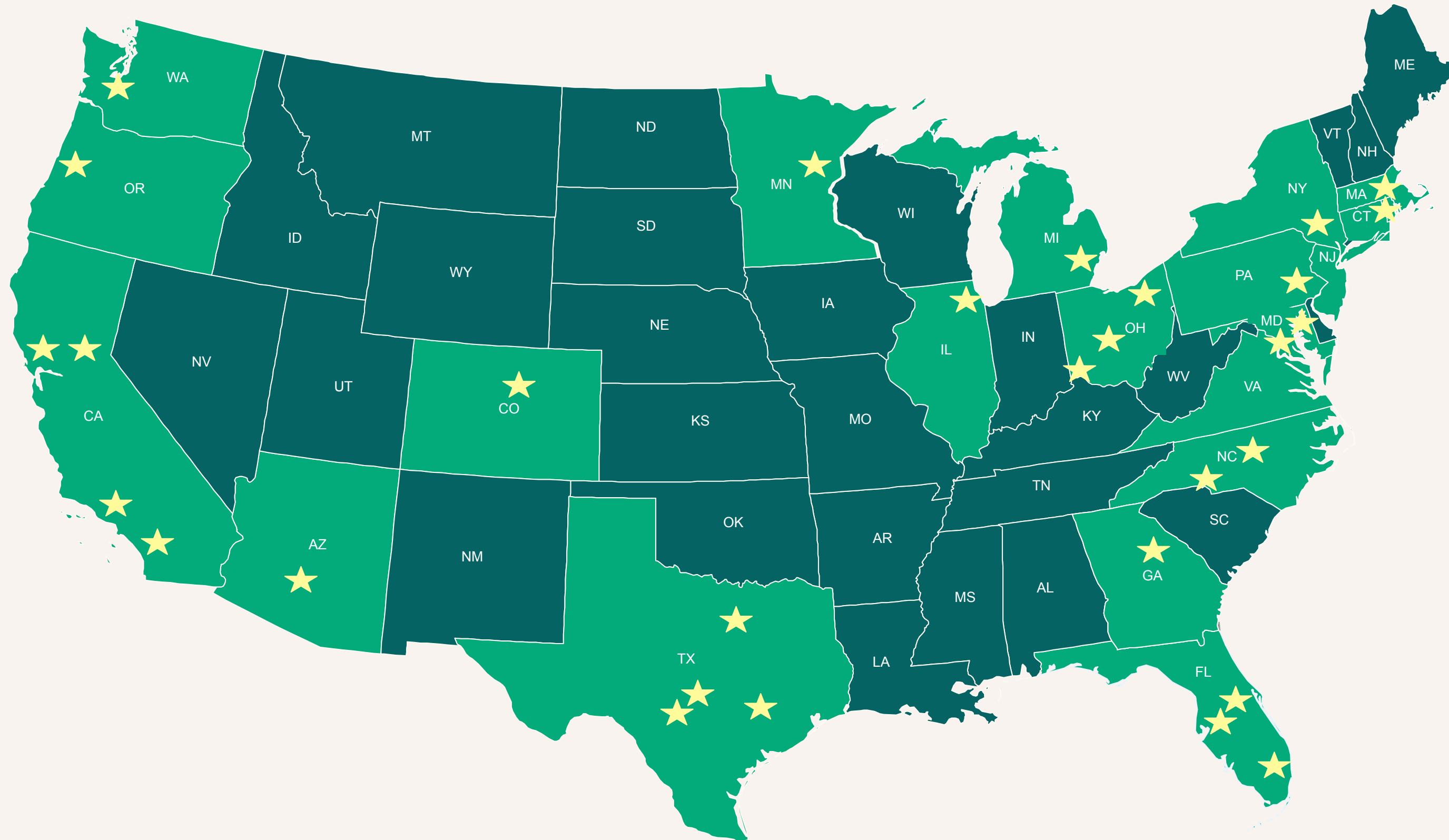
Saving 4 meals every second



# US FOOTPRINT

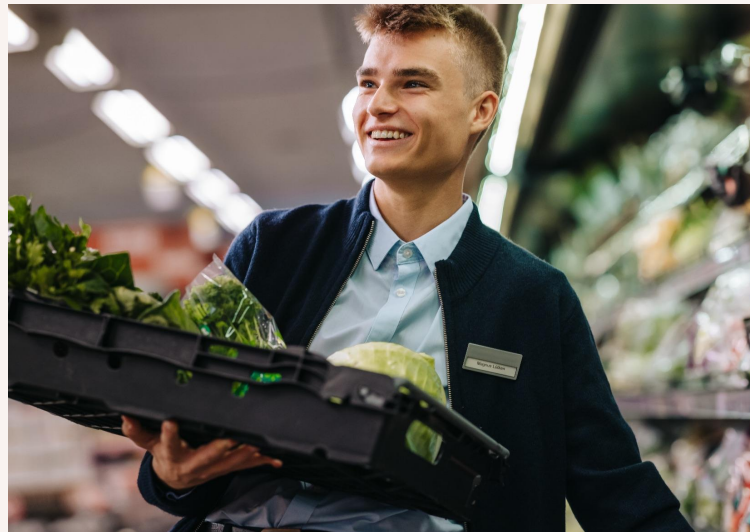
TGTG is active across **30** major cities, covering a population of **155M+**

	Launched City
	Launched State





# WE WORK WITH THE WORLD'S LEADING FOOD DISTRIBUTORS ACROSS 4 VERTICALS



**>87K STORES**

Food Retail  
(Grocery, Gas Stations,  
Rapid Delivery)



**>109K OUTLETS**

Food Service  
(Quick Service Restaurants,  
Bakeries, Coffeehouses, á la Carte,  
Buffet)



**>8K LOCATIONS**

Catering  
(Hotels, Canteens, Events)



**>3K BUSINESSES**

Wholesale and  
Manufacturing





# LET US SHOW YOU THE SURPRISE BAG

Too Good To Go users purchase Surprise Bags filled with a mix of surplus food items.

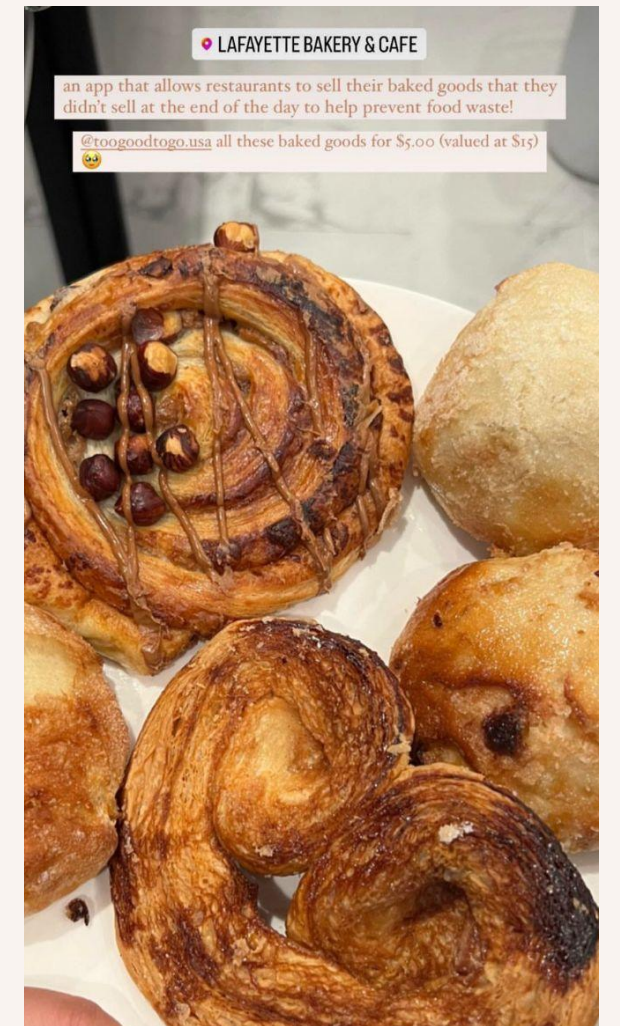
We know that food waste varies on a day-to-day basis, so this is our way of making sure retailers have the flexibility to sell genuine surplus - whatever that ends up being.

**Surprise Bags are sold at a reduced price** of the contents' original retail value, determined by the bag's sales performance.

On average, these bags are typically priced at approximately 25 to 50% of the original retail value.



# THE SURPRISE BAG IN ACTION



Thousands of users rescue Surprise Bags through our marketplace app every day. Many share their experiences on social media, helping to spread awareness of brands who are making a positive impact.



# BY SAVING ONE SURPRISE BAG

At an average weight of 2.2 lbs of food

We avoid



**5.95 lbs**  
CO<sub>2</sub>e



**30 ft<sup>2</sup>**  
of land use per year

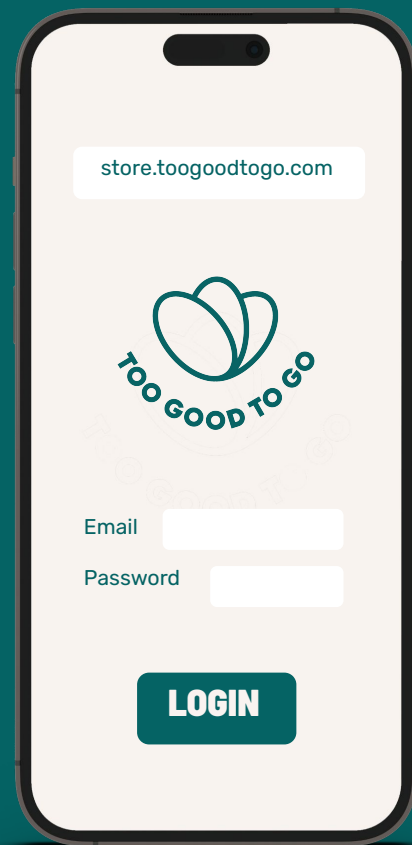


**214 g**  
of unnecessary water use



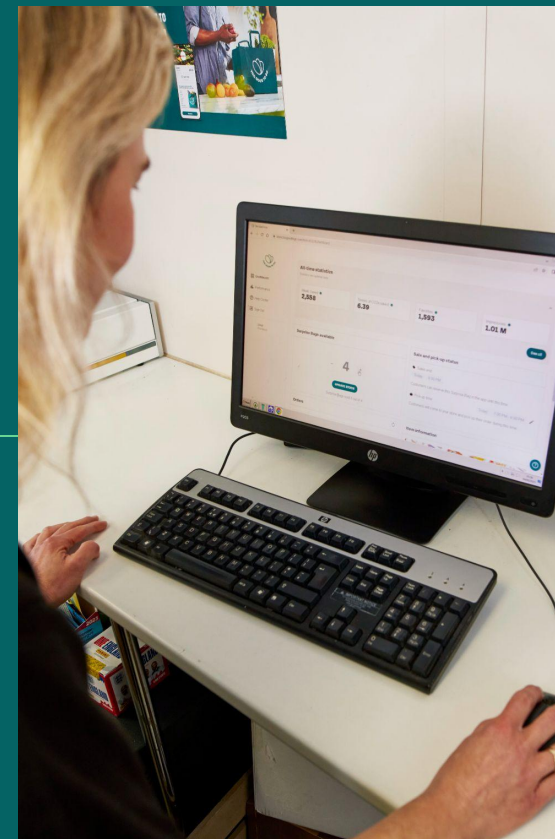
How Too Good To Go works

# THE STORE JOURNEY



## 1. LOGIN TO MYSTORE

We set each store up with their own online account. It's easy for partners to access from mobile, tablet or desktop.



## 2. SET SUPPLY

Typical supply is put up for sale as default. The store can adjust it up or down according to the daily leftovers.



## 3. PREPARE THE BAGS

At the end of the day, the store reviews the surplus food and packs the Surprise Bag.



## 4. GET READY FOR PICKUP

At the store, the user shows the receipt on the app and receives a Surprise Bag of surplus food.

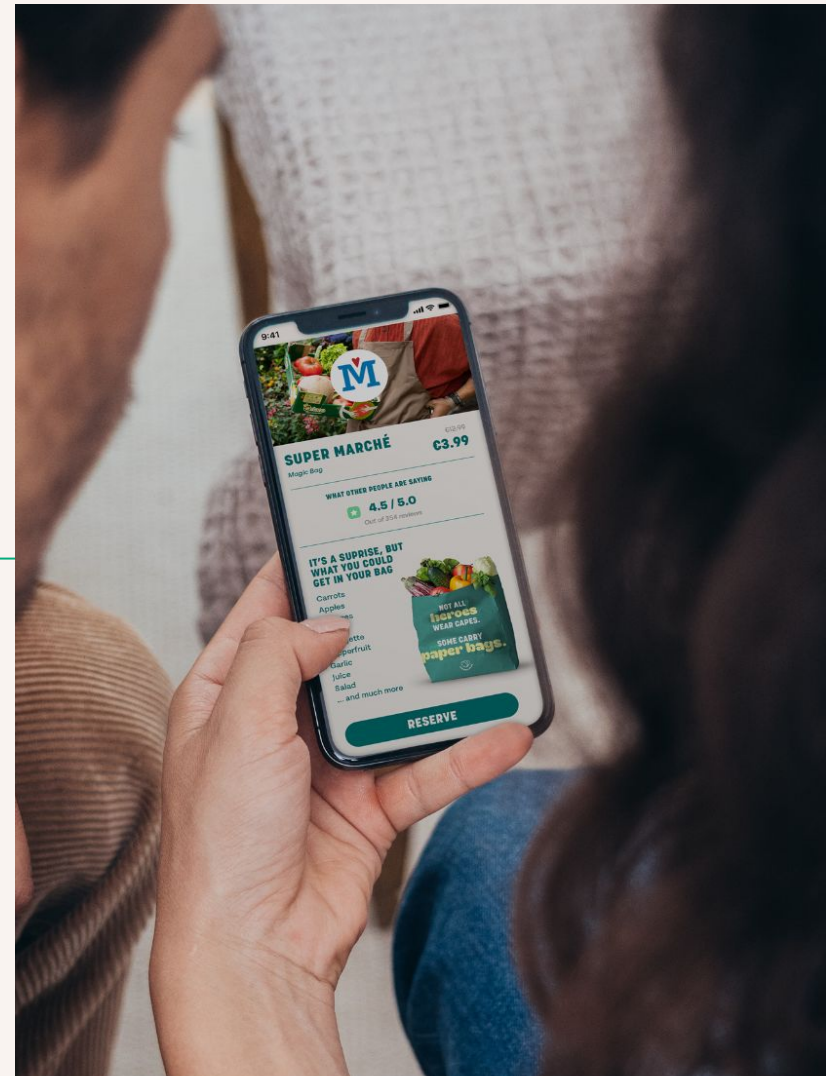
The partner receives payment automatically at the end of each payment cycle.



# WE'VE MADE IT EASY FOR USERS TO BUY A SURPRISE BAG



They search our Consumer Marketplace app for stores nearby that have surplus food available



Users select a store, reserve a Surprise Bag, and pre-pay within the app



Customer arrives within the pick-up window the store sets, shows their in-app receipt and receives their Surprise Bag







**How**  
**Policy**  
**Makes a difference**

# MORE THAN 40% OF ALL FOOD IS BEING WASTED

We can work together to change this



## Environmental

Food waste accounts for 10% of all human-caused greenhouse gas emissions worldwide



## Social

828 million people are affected by hunger every day



## Economic

Globally, the cost of food waste is about \$1.1 trillion dollars each year



**CITIZENS CELEBRATE  
POLICIES THAT  
SAVE FOOD**

## **PUBLIC RELEVANCE**

**86%** of US adults **find it important to  
food waste at the household level**

## **INCREASED SENTIMENT**

**71%** of US adults **feel guilty when throwing  
food away**

## **MOTIVATION FOR GOOD**

**53%** of US adults **believe they can take action  
when trying to minimize food waste**



# State Policy Leads the Way



## 10 states have organic waste bans

Vermont has seen a 15% reduction in residential food waste since 2020



## State budgets can scale solutions

Municipal governments depend on favorable policies at the state level



## Reduce your waste

Organic waste bans encourage food waste reduction efforts, like increased food donations





# STANDARD DATE LABELS IS GOOD FOR EVERYONE

## PEOPLE



The average American spent \$759 on food that went uneaten. This cost US consumers a total of \$252 billion

## PLANET



32.7 million tons of surplus food were sent to landfill in 2019, translating to nearly 23 million tons of CO2e produced from landfill

## BUSINESS



In retail, date label concerns account for more than 50% of food waste

Standardizing date labels—and educating the public on their meaning—could **prevent 772,000 tons of food waste each year**. This reduction would decrease CO2e emissions by 4.84 million metric tons and save approximately 266 billion gallons of water. Additionally, it would generate a net financial benefit of \$3.87 billion for consumers, retailers, manufacturers, and the foodservice industry.



**DO YOU HAVE**  
**ANY**  **questions?**

Ask away and we shall do our best to answer!



**thank you** 

**Zach Shaben**

Global Public Affairs Manager - US

[zshaben@toogoodtogo.com](mailto:zshaben@toogoodtogo.com)

248-229-7212

[toogoodtogo.com](http://toogoodtogo.com)

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**Jenn Harrman**

**Zero Waste Program Manager**

**Metro Nashville Waste Services**

**Food Waste Reduction and  
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**Simone Chhut**  
**Zero Waste Specialist**  
**Nashville Waste Services**

**Food Waste Reduction and  
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Nashville Waste Services

# Making the Case for Food Waste: Nashville's Food Scraps Pickup Pilot



Jenn Harrman, Zero Waste Program Manager  
Simone Chhut, Zero Waste Specialist



# About Metro Nashville Waste Services



# Nashville Waste Services Collection

**Population 715,844**

## Urban Services

143K curbside trash

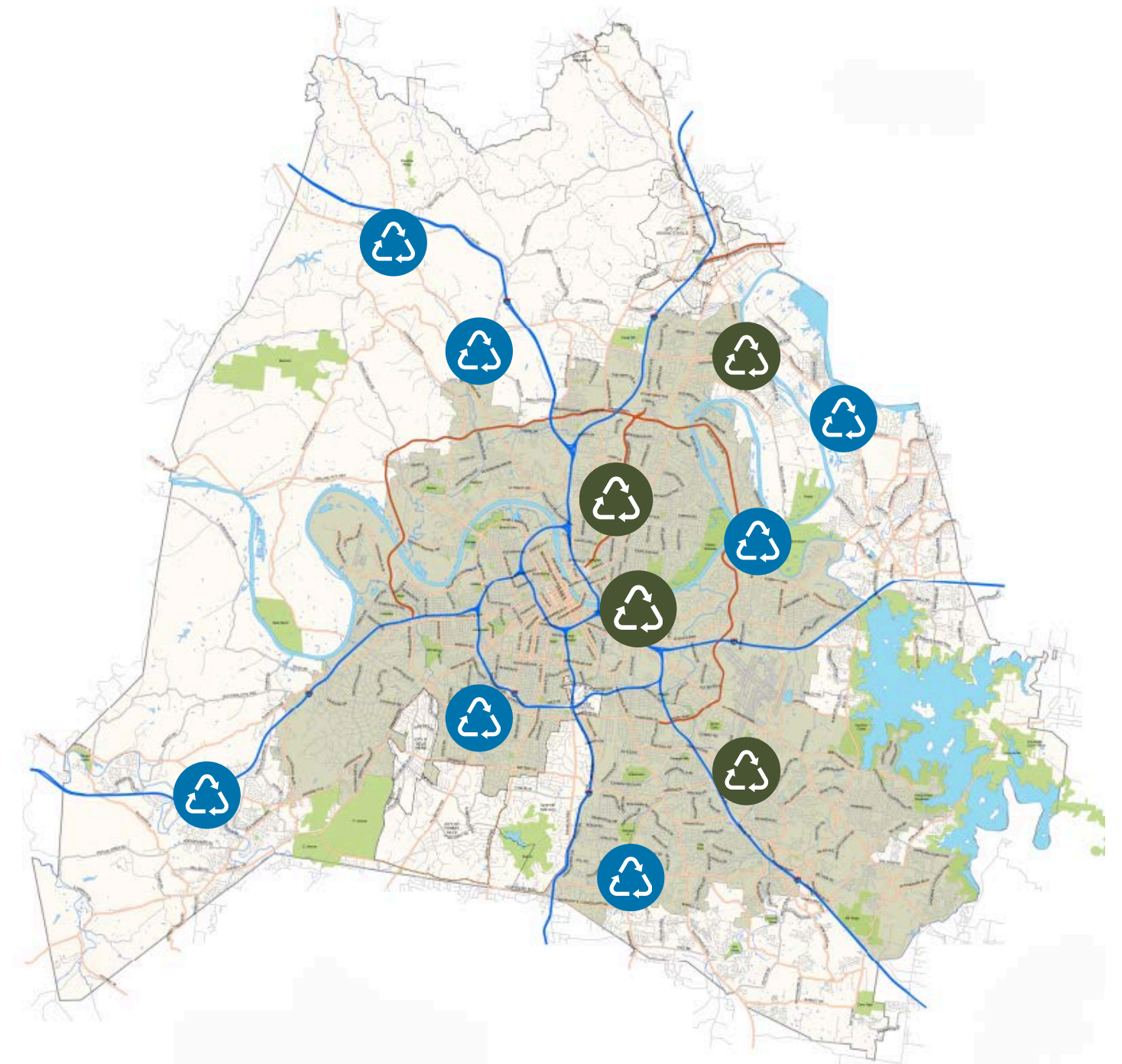
111K curbside recycling

## County-wide Services

4 Convenience Centers  
(includes drop-off food scraps collection)

7 Drop-Off Recycling Sites

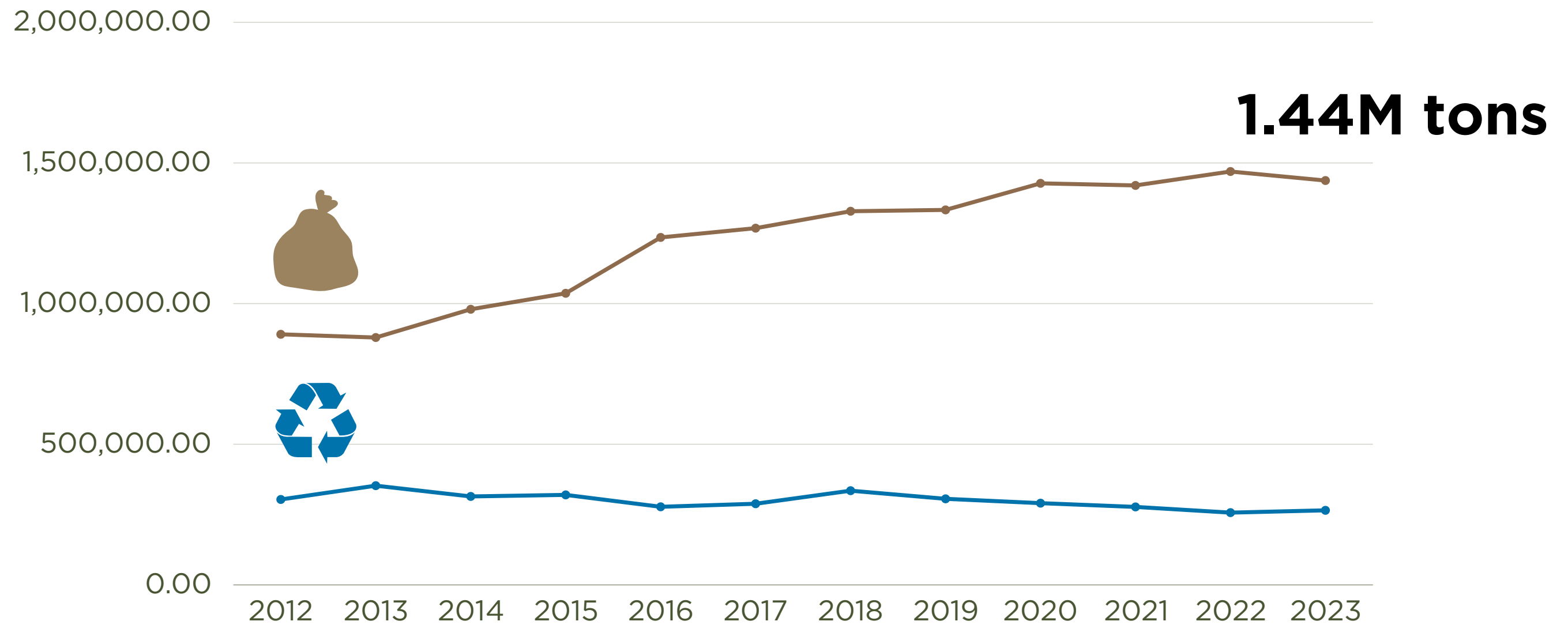
Quarterly brush collection (NDOT)





# Nashville Needs Sustainable Waste Solutions

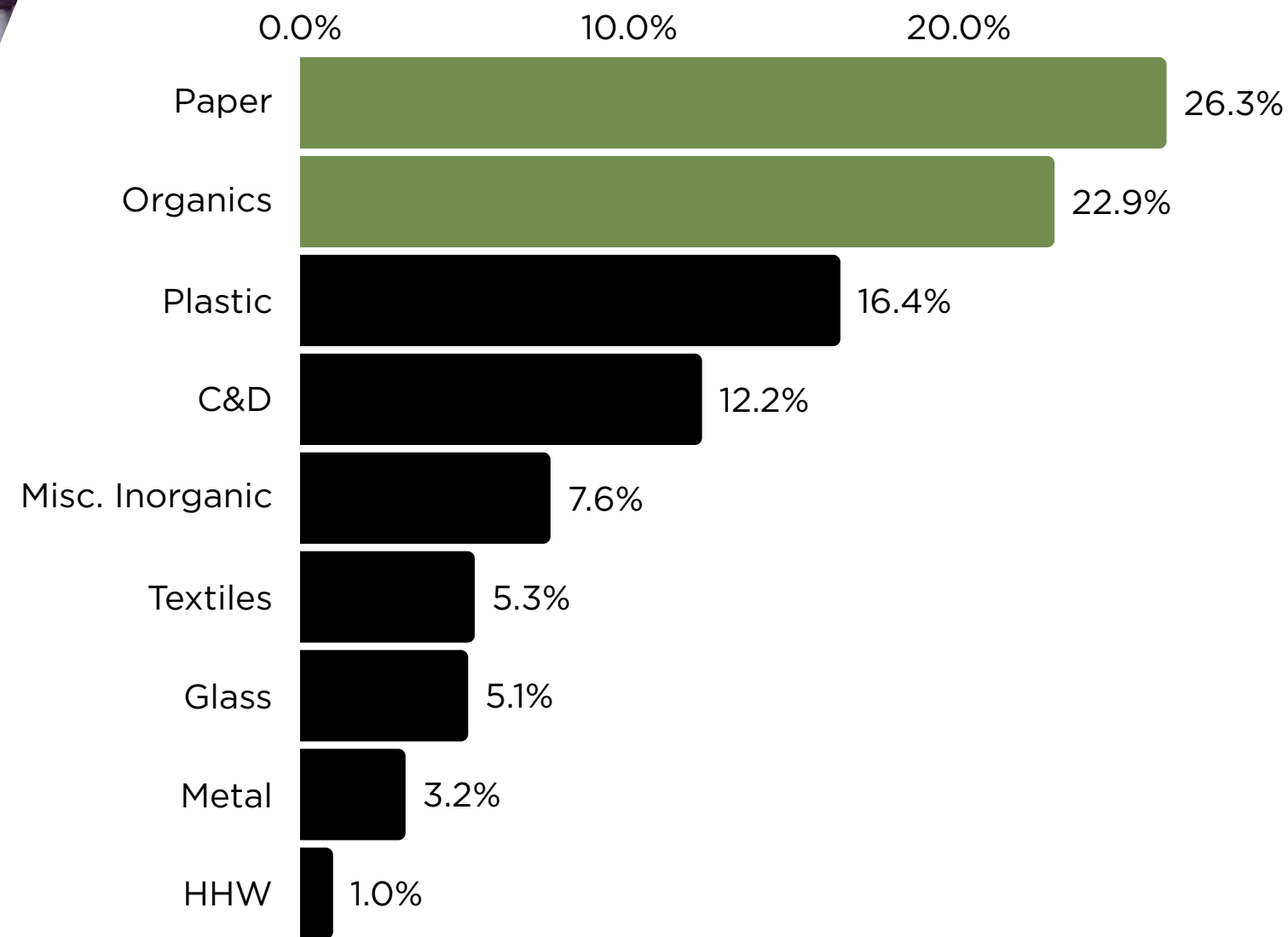
Davidson County Waste Generation and Disposal





# Nashville Aims to Go Zero Waste

2017 Composition of Landfilled MSW



**50%**  
of landfilled MSW  
could be composted



**1/3**  
of what residents  
throw away is organic

# Implementing Nashville's Food Scraps Pickup Pilot



COMPOST

# Piloting Collection Will Inform Future Possibilities



**What:** Weekly curbside collection of food scraps for one full year for 750 households



**Who:** Single-family\* households in Nashville's Urban Services District who currently receive Metro collection and do not already pay for compost collection



**Why:** Gather data that will inform needs to scale program for future collection

\*This includes households that live in a duplex, triplex, or townhome, but not in a multifamily building with five or more units.





# How Does It Work?



## COLLECT

Collect food scraps and compostable products in your countertop container throughout the week.

## TAKE IT TO THE CURB

Place compostables in the lined Compost Nashville curbside bin on your pick up day and leave at the curb.

## WEEKLY PICK UP

Compost Nashville picks up your compostables and leaves a clean and empty bin each week.

# Goals for Selection

APPLICATION FOR  
GENERAL INFORMATION

Name First Name

Address City

Phone Err



**Average Nashvillian**

52% Female	34.5 Median Age
60% White	\$43,500 Average Income
26% Undergrad Degree	54% Homeowner

Source: World Population Review



**Average Applicant**

78% Female	38% 35-44 Years Old
84% White	52% >\$100k Household Income
48% Postgrad Degree	84% Homeowner

# Participant Summary

*putting the graphs together*

## APPLICATION FOR

### AL INFORMATION

Name First Name

Address City

Phone Err

76% Female

36% Ages 35-44

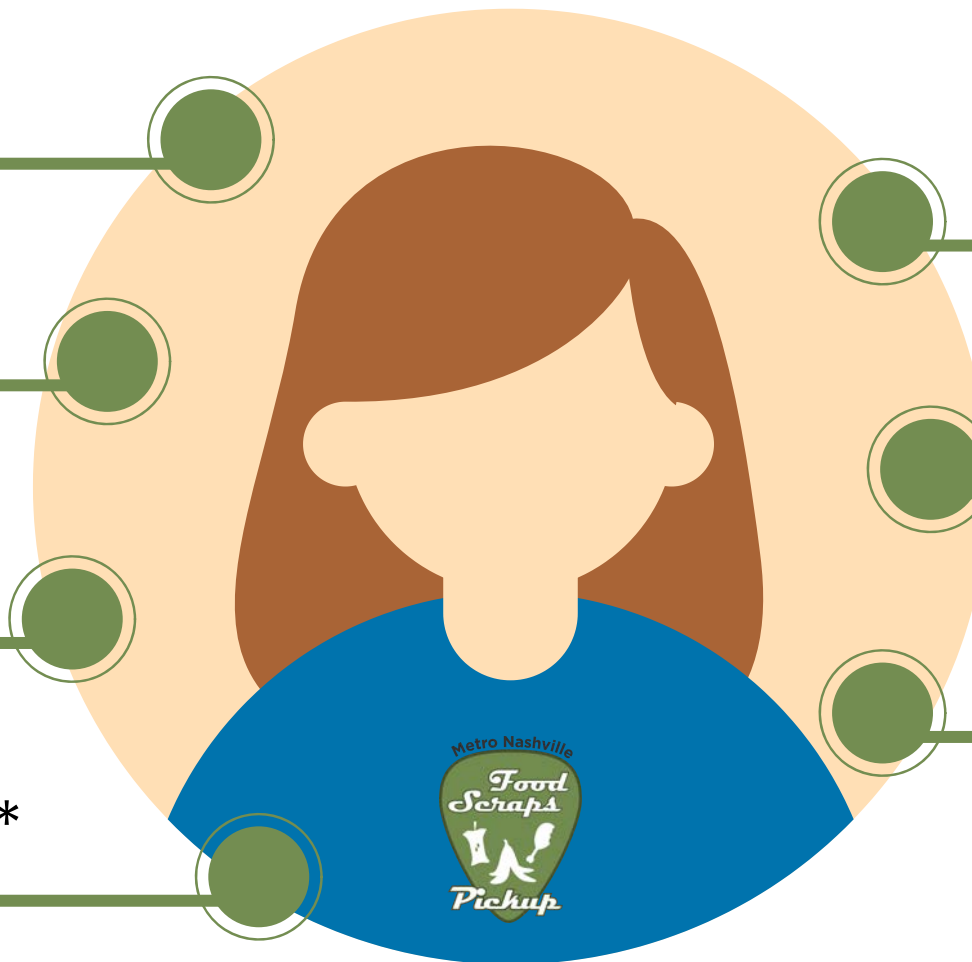
84% Homeowners

39% >\$100K\*

68% White

45% Postgraduate

63% Non-Composters



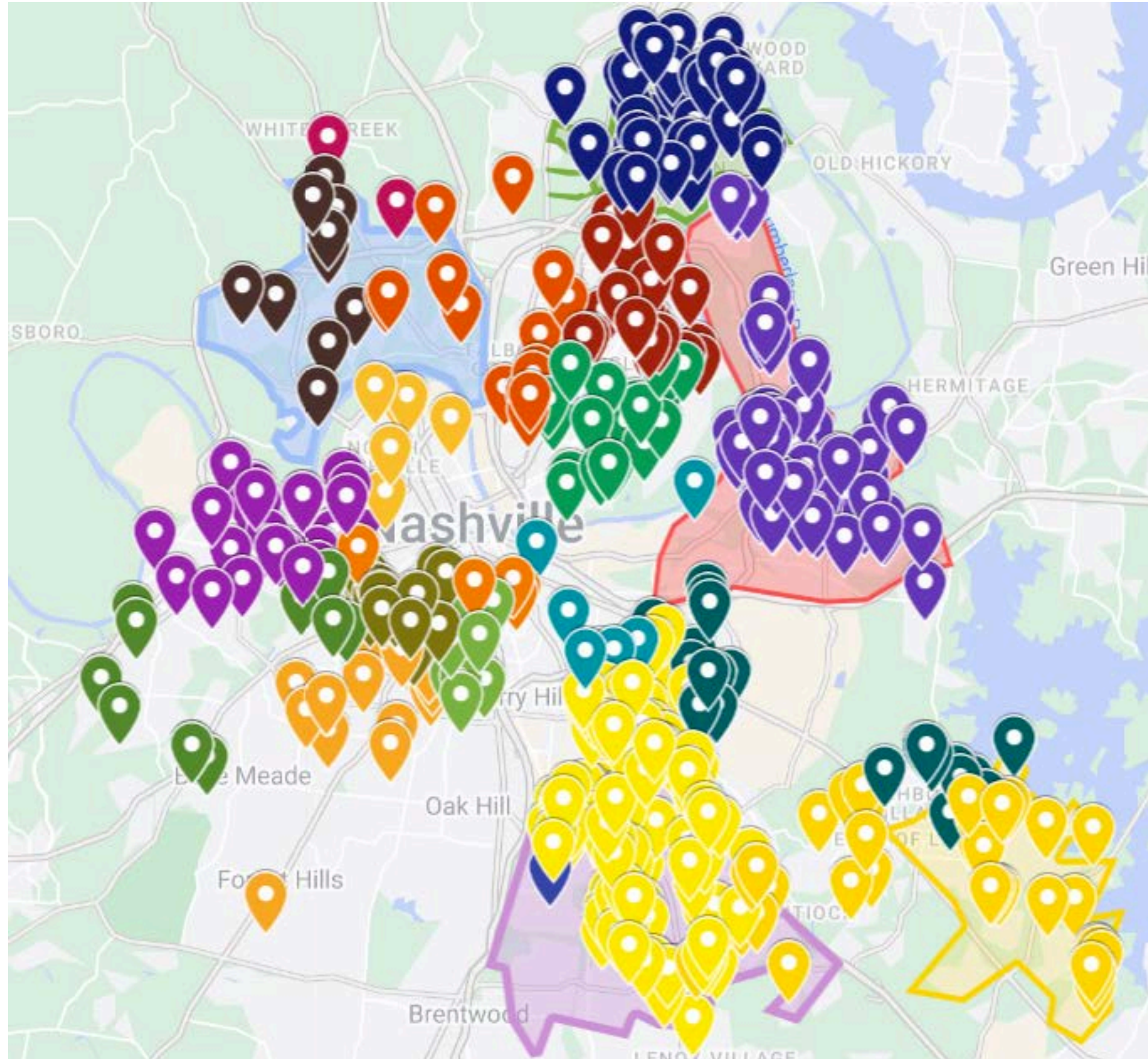
\*household income

# Project Area - Participant Locations



## APPLICATION FOR GENERAL INFORMATION

Name	First Name
Address	City
Phone	Err



### Priority communities

- Donelson
- Bordeaux
- Antioch
- Crieve Hall
- Madison

# Reasons People Applied

APPLICATION FOR

PERSONAL INFORMATION

Name First Name

Address City

Phone Err

Phone

I feed 8 feral cats and currently go through 16 paper plates a day with them. I love the idea of being able to compost them!!

I drink a LOT of coffee and eat a LOT of hard-boiled eggs, so I REALLY HATE for that good stuff to go to waste!

We have so many squirrels that litter the entire neighborhood since we are so close to Kroger.

I know food scraps cause big issues in landfills. They also make my trash can stinky.

Germans have been doing this for decades. Why not us?

Because having a metro composting service would make me very very happy.



# Launching the program

October 23, 2023



Mayor O'Connell announces program launch

**5 Easy Steps to the FOOD SCRAPS PICKUP PILOT**

- 1 COLLECT YOUR FOOD SCRAPS**  
Collect food scraps and compostable products in your small countertop container throughout the week.
- 2 TAKE THEM TO THE CURB**  
Place your materials in the green curbside compost bin, bring the bin to the curb by 8am on your pickup day.
- 3 GET WEEKLY PICK UP**  
Compost Nashville picks up your green curbside bin and leaves a clean and empty bin each week on your pickup day.
- 4 YOUR SCRAPS MAKE SOIL**  
Your food scraps go to the Compost Co. to be turned into a nutrient-rich compost that improves local soils.
- 5 GET YOUR COMPOST**  
At any time during the Food Scraps Pickup Pilot, request your free bag of compost for your plants or garden.

**WHAT TO PUT IN YOUR BIN / QUÉ PONER EN SU PAPELER**

- Food-Solled Paper / Papel Sucio con Comida
- Fruit & Veggie / Desechos de Fr
- Baked Goods / Productos Horneados
- Cooked Food / Comida Cocinada
- Dairy Products / Productos Lácteos
- Egg Shells / Cáscaras de Huevo
- Meat, Fish, & Bones / Carne, Pescado y Huesos
- Coffee, Tea, & Filters / Café, Té y Filtros

Still not sure? Contact ZeroWaste@Nashville.gov / ¿Todavía no está seguro? Contáctanos a ZeroWaste@Nashville.gov

For service issues contact info@CompostNashville.org / Para problemas de servicio, contáctanos a info@CompostNashville.org

**MY PICKUP DAY IS MI DÍA DE RECOGIDA ES MONDAY · LUNES**

**SET OUT MY BIN BY COLOCAR MI CONTENEDOR ANTES DE 8:00 am**

**ZERO WASTE**  
METROPOLITAN GOVERNMENT OF NASHVILLE & DAVIDSON COUNTY

**COMPOST nashville**

Welcome Kits delivered to participants

# Collecting Data



## Contractor Collected Data

- Pounds per participant per week
- Bins contaminated
- Set out rate



## Surveys and Focus Groups

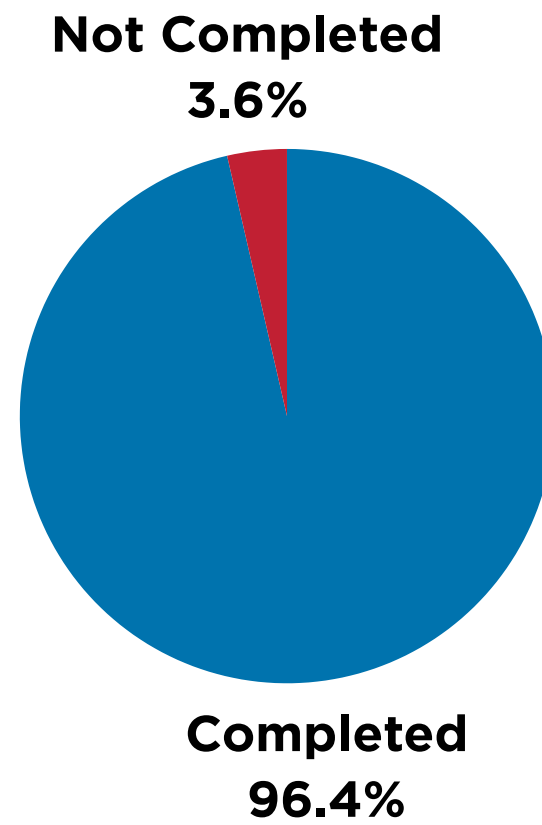
- Difficulty of program
- Understanding of program
- Bin capacity needs
- Trash set out rate
- Trash fullness rate
- Value of program
- Customer service satisfaction



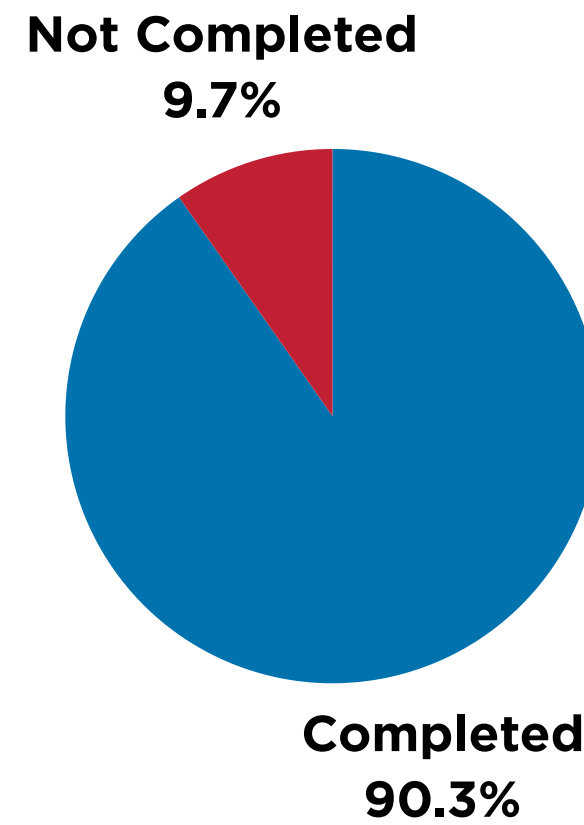
# Survey and Focus Group Participation



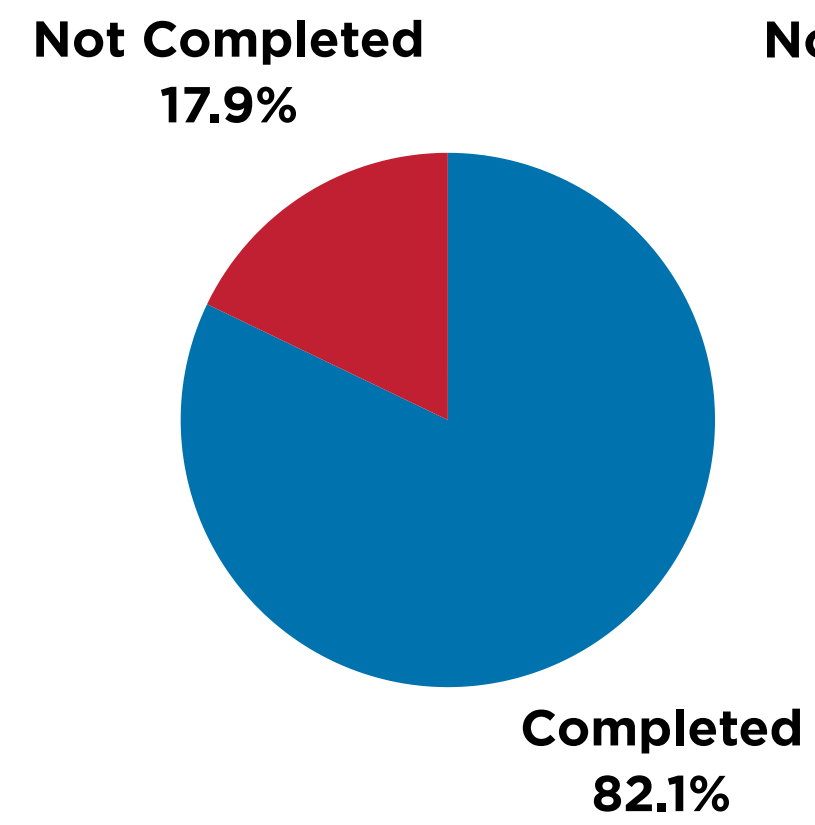
## Survey 1



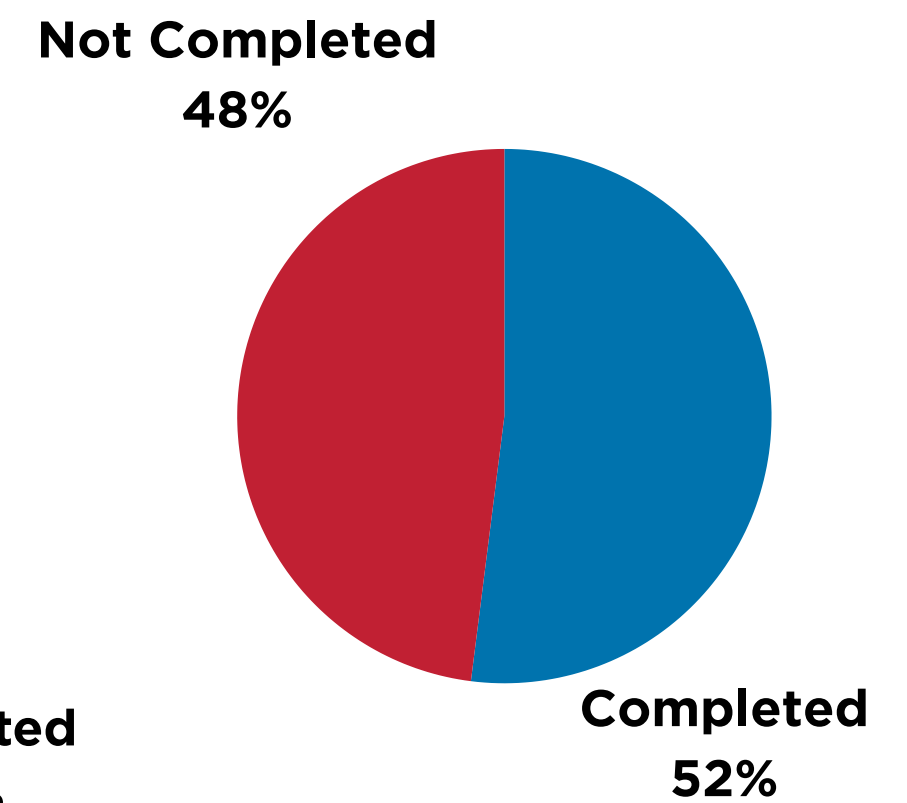
## Survey 2



## Survey 3



## Focus Groups





# Quantitative Data

**102 Tons**

Collected in  
47 weeks

**86%**

Average set out  
rate

**0.34%**

1st Qtr. average  
contamination  
rate

**0.12%**

4th Qtr. average  
contamination  
rate

**6.8 Lbs.**

Per household →  
per week

**132 Tons**

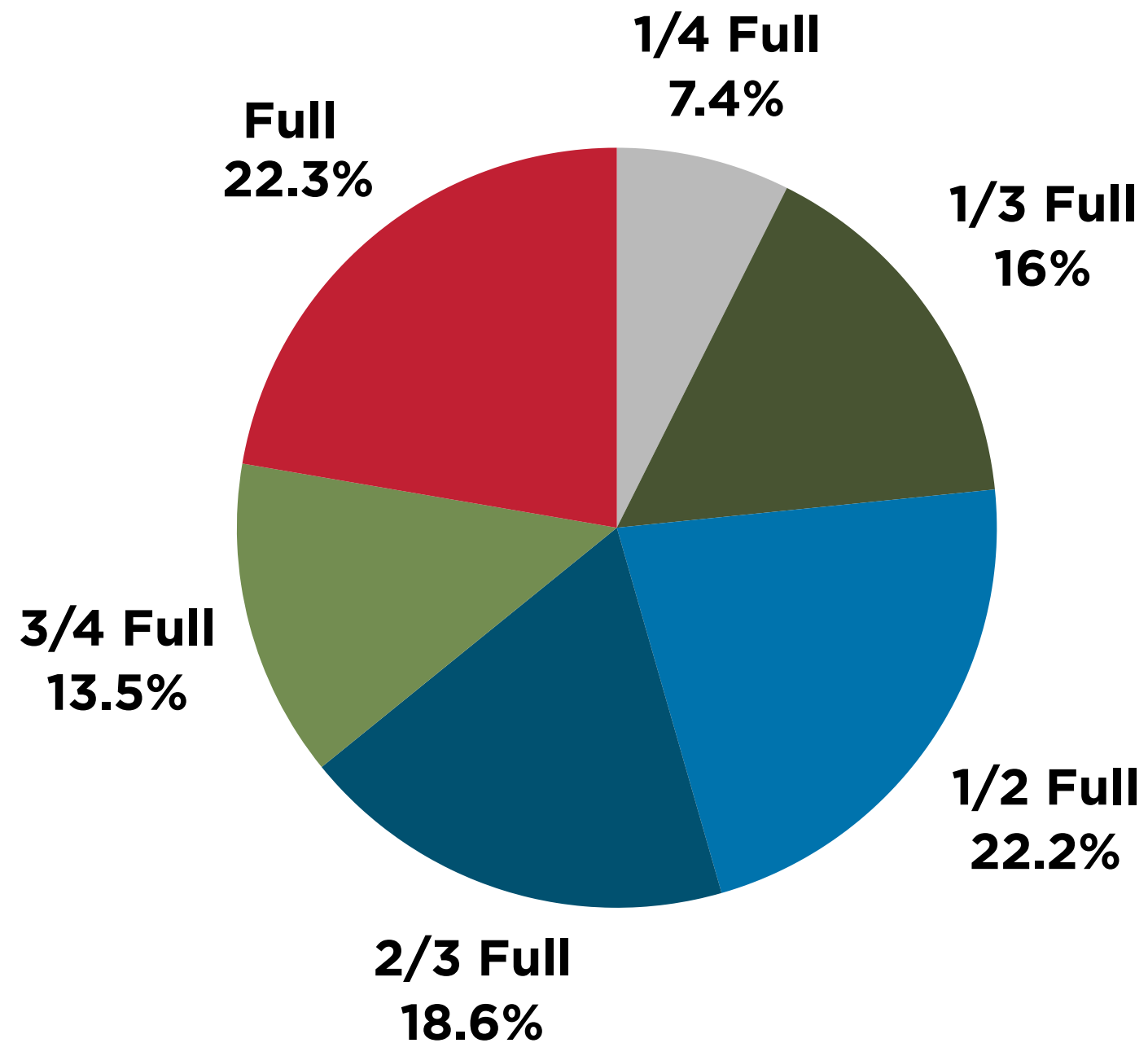
Estimated →  
collection in  
1 year

**17K Tons**

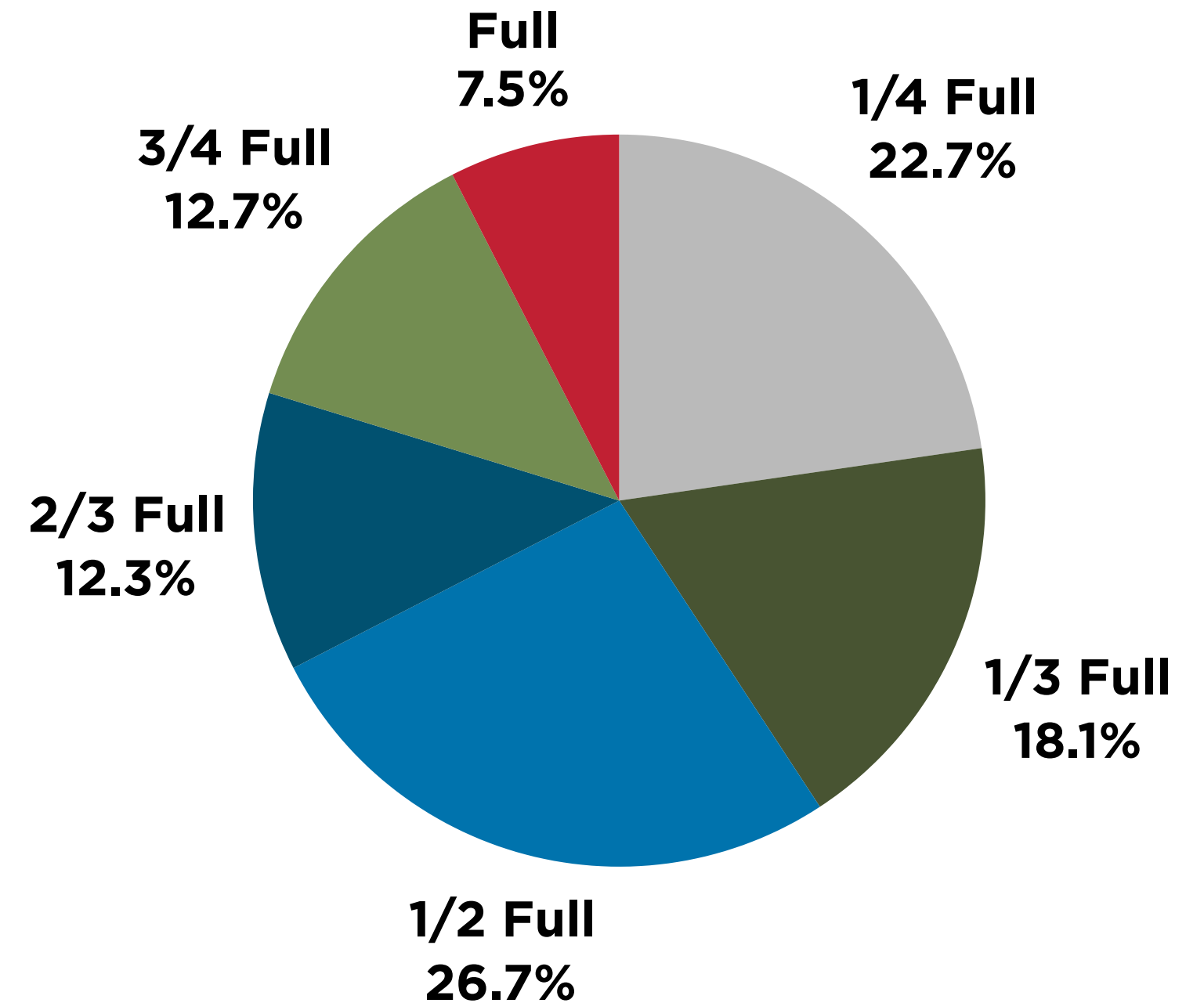
Estimated  
potential  
collection for  
service area-wide  
program in 1 year

# How Full Was Your Trash Cart?

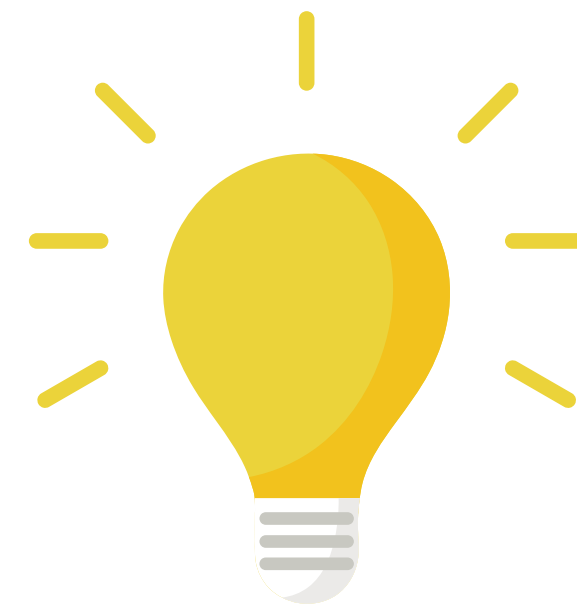
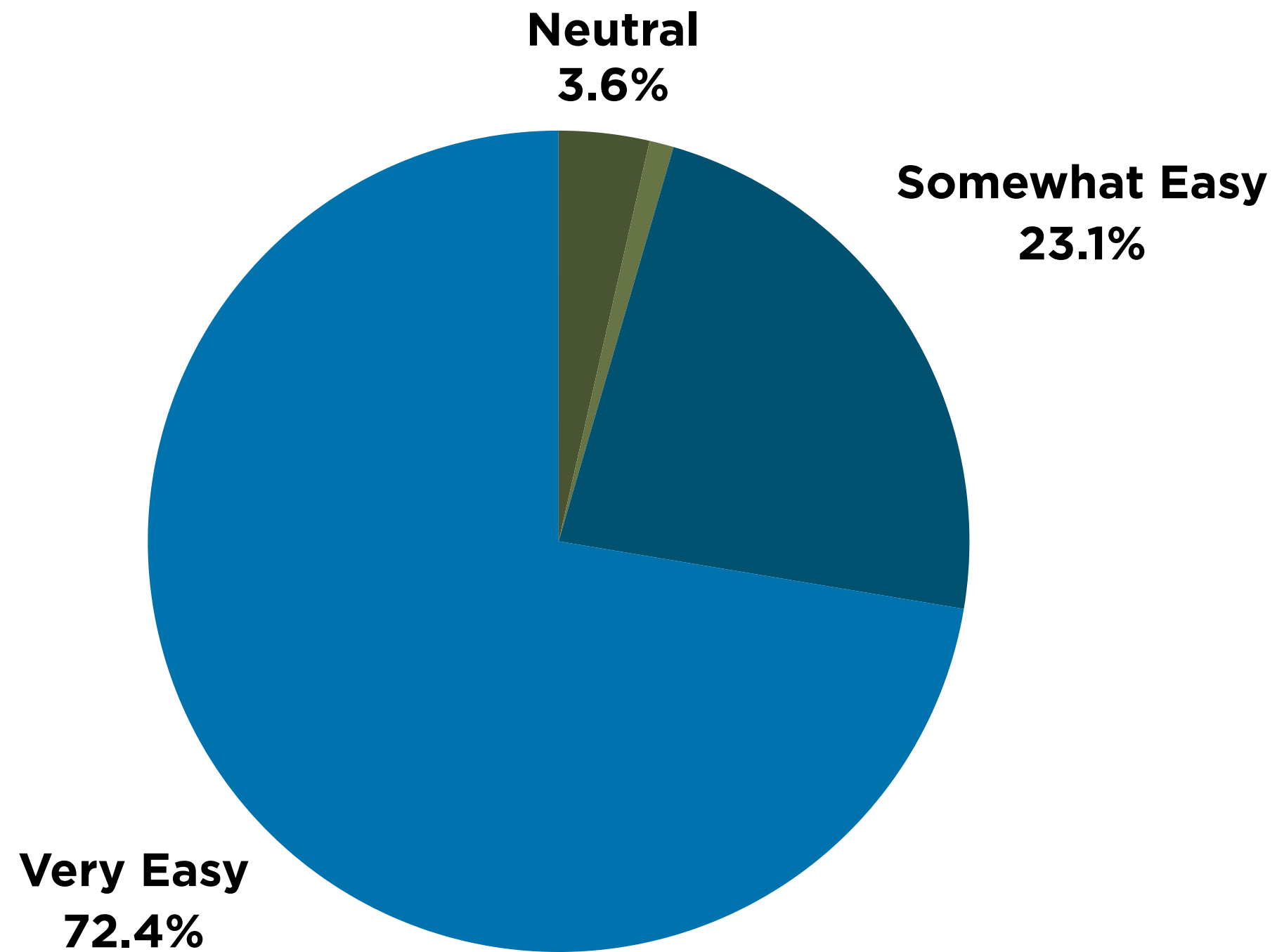
Before Pilot



During Pilot



# Rate the Level of Difficulty in Understanding What to Compost

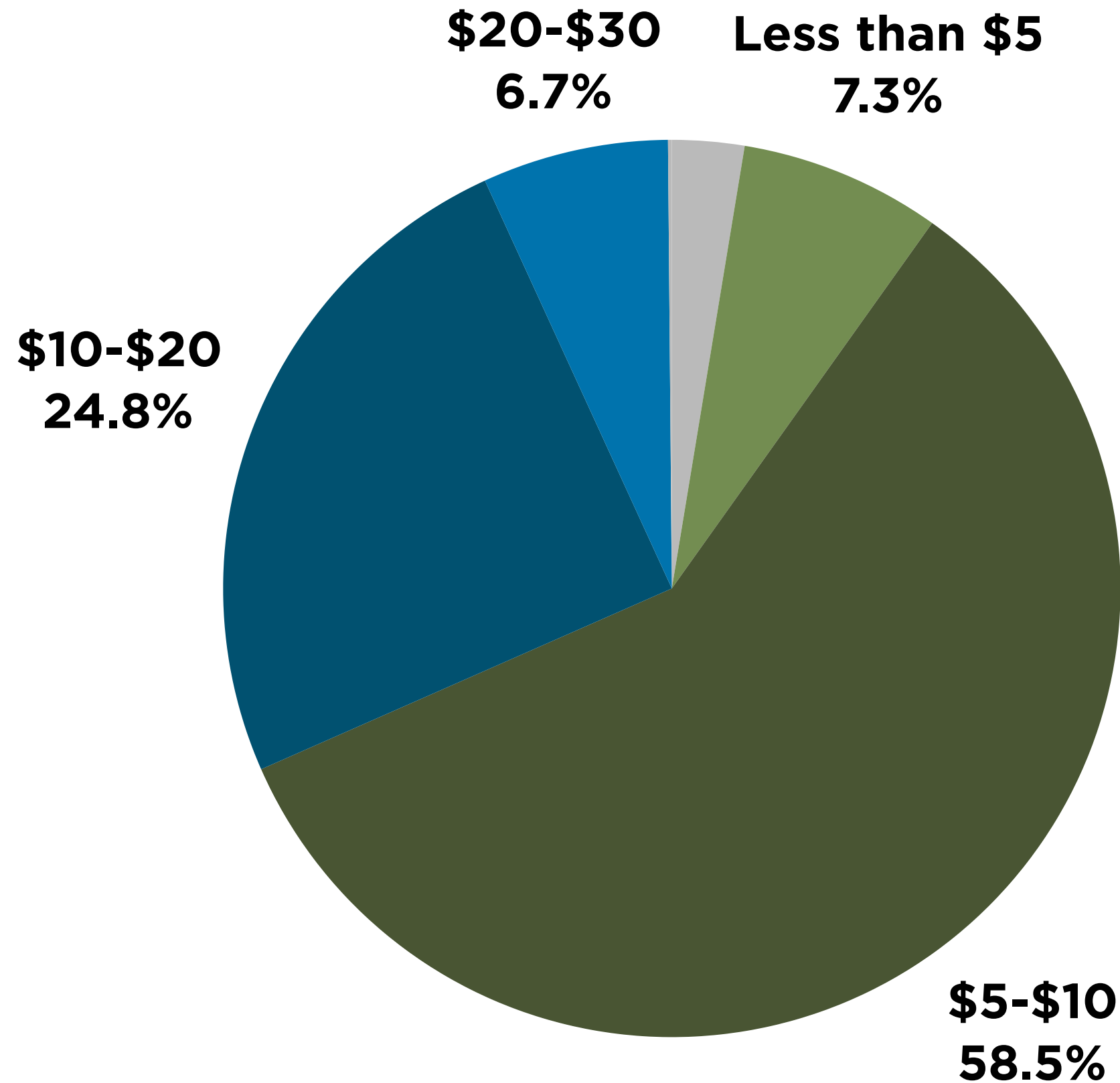


***“Composting is easier than I thought.”***

***“It’s easier than backyard composting.”***



# How Much Would You Pay to Opt In?



*The average cost participants would pay per month is \$10.50*



# Testimonials

“The curbside bin and collection bucket don’t work together well. What I mean is, the shape of each is so different that transferring material into the curbside bin from the bucket is challenging and things easily spill.”

“My husband cares a lot less about the environment than I do, but he’s participating without complaining and thinks it’s a neat program”

“Never composted before or paid attention to how much food we throw away. Now I’m much more aware and have been better about using leftovers and not wasting food.”



# Next Steps



# Analyze Large Scale Feasibility

- Develop cost study for large scale service
- Analyze quantitative and qualitative data gathered to create a case study for a curbside organics program
- Identify potential scenarios for expansion
- Present recommendations to leadership



# Keep in touch!

## Jenn Harrman

Zero Waste Program Manager  
Jenn.Harrman@nashville.gov  
615-880-2419

## Simone Chhut

Zero Waste Specialist  
Simone.Chhut@nashville.gov  
615-917-7132



Learn more at  
[ZeroWaste.nashville.gov](http://ZeroWaste.nashville.gov)

