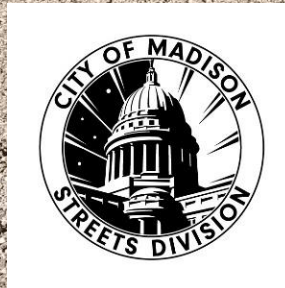




# FOOD SCRAPS RECYCLING UPDATE





# Who volunteered?

## Volunteer totals:

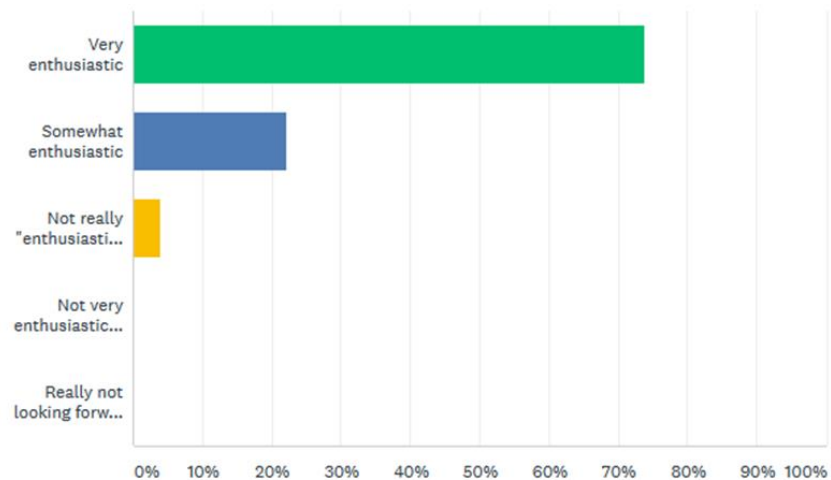
- ▶ Total: 165
- ▶ Total number of single-family homes invited: 691
- ▶ That's a 23.8% volunteer rate.
  - ▶ Slightly better turnout than expected

## Initial survey results:

- ▶ 153 of the 165 volunteers answered the survey questions (with some questions skipped).

## How would you describe your enthusiasm for participating in this pilot?

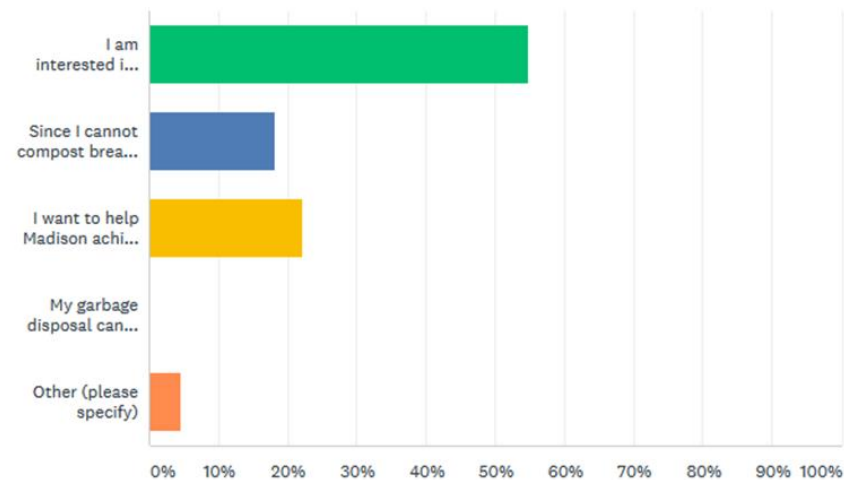
Answered: 153 Skipped: 0



ANSWER CHOICES	RESPONSES
Very enthusiastic	73.86% 113
Somewhat enthusiastic	22.22% 34
Not really "enthusiastic" but not disinterested either - so something close to average	3.92% 6
Not very enthusiastic at all	0.00% 0
Really not looking forward to this experience	0.00% 0
<b>TOTAL</b>	<b>153</b>

## Why did you volunteer for the food scraps recycling pilot?

Answered: 153 Skipped: 0



ANSWER CHOICES	RESPONSES
I am interested in keeping food scraps from going to the landfill	54.90% 84
Since I cannot compost breads, grease, and dairy products at home, I want to be able to find a way to use this waste material rather than them going to the landfill	18.30% 28
I want to help Madison achieve its sustainability goals	22.22% 34
My garbage disposal cannot handle all of the food scraps I generate and this program will supplement my disposer	0.00% 0
Other (please specify)	4.58% 7

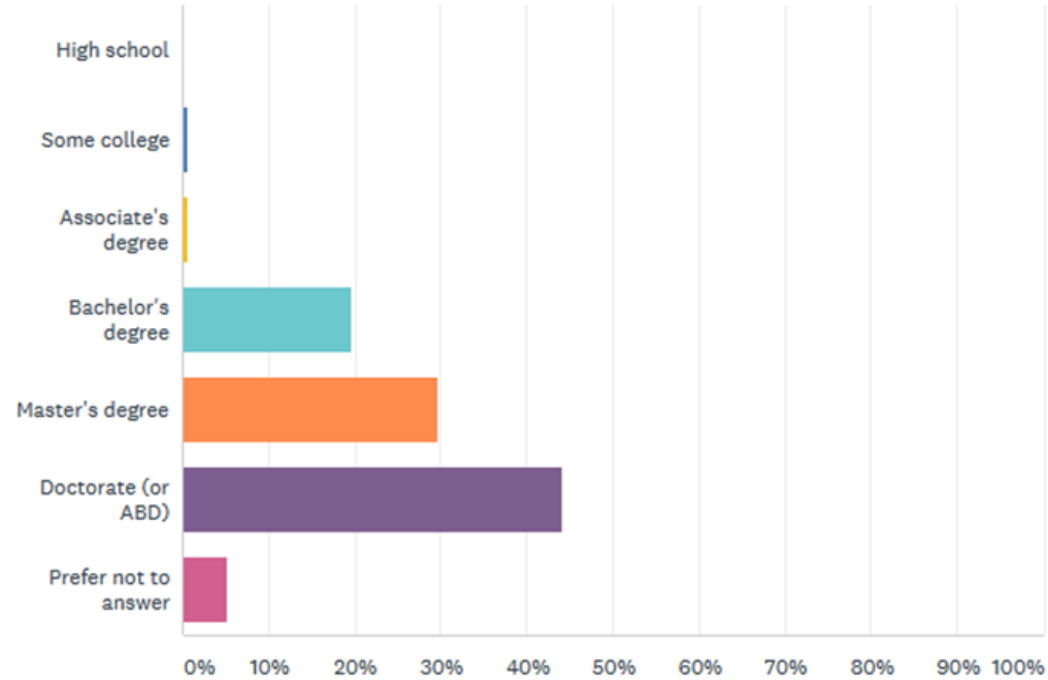
Very enthusiastic people eager to keep food scraps out of the landfill.

# What is the highest education level of your household?

Answered: 152 Skipped: 1

93.4% of the volunteers that responded to this survey question have at least a bachelor's degree.

(ABD means "All but dissertation")

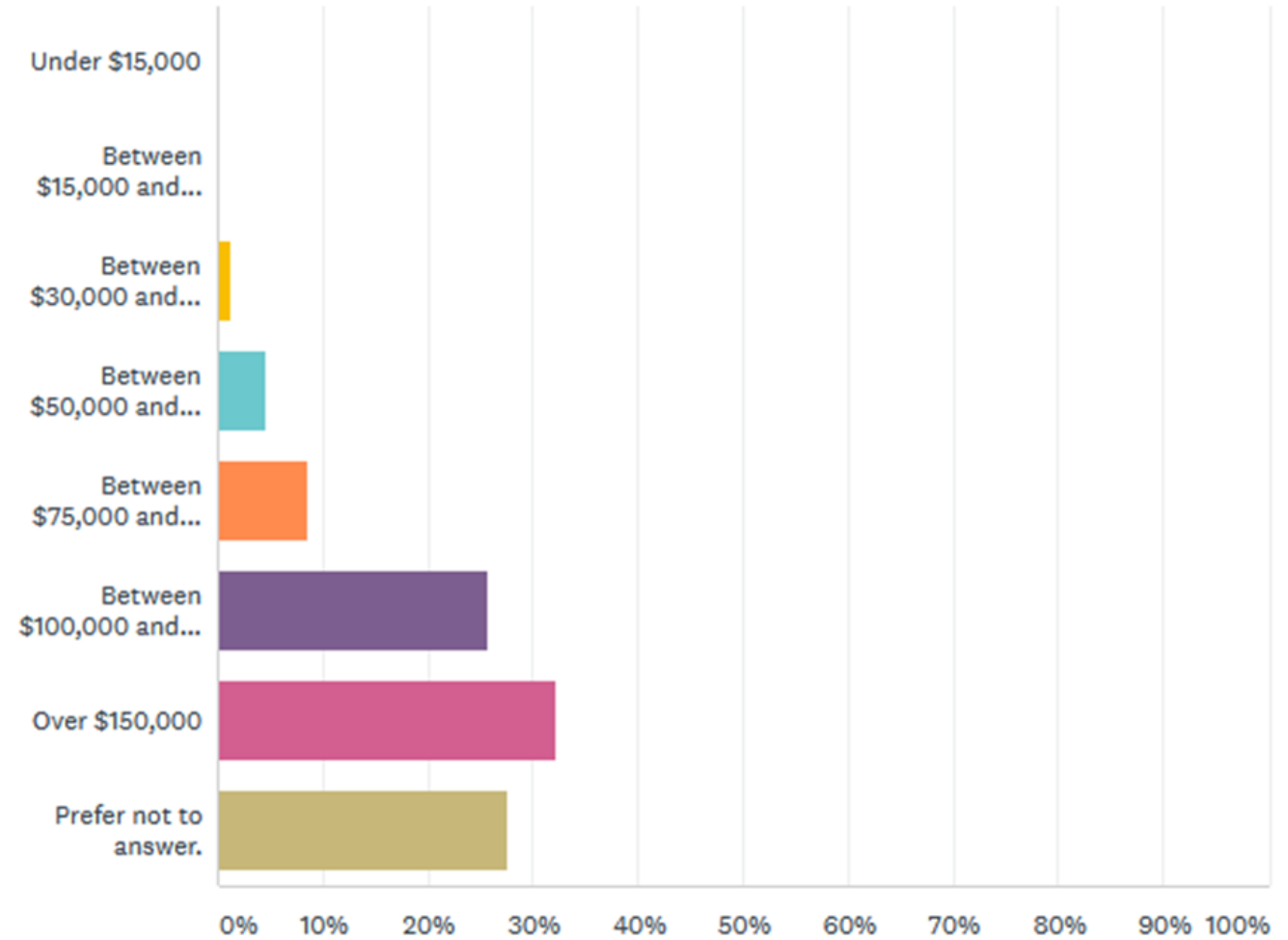


ANSWER CHOICES	RESPONSES
High school	0.00% 0
Some college	0.66% 1
Associate's degree	0.66% 1
Bachelor's degree	19.74% 30
Master's degree	29.61% 45
Doctorate (or ABD)	44.08% 67
Prefer not to answer	5.26% 8
<b>TOTAL</b>	<b>152</b>

# What is your average household income?

Answered: 152 Skipped: 1

Over 50% of survey respondents earn more than \$100K a year.



# Describe the racial identity of your household.

Answered: 141 Skipped: 12

RESPONSES (141) **WORD CLOUD** TAGS (0)

Cloud View List View

Search responses

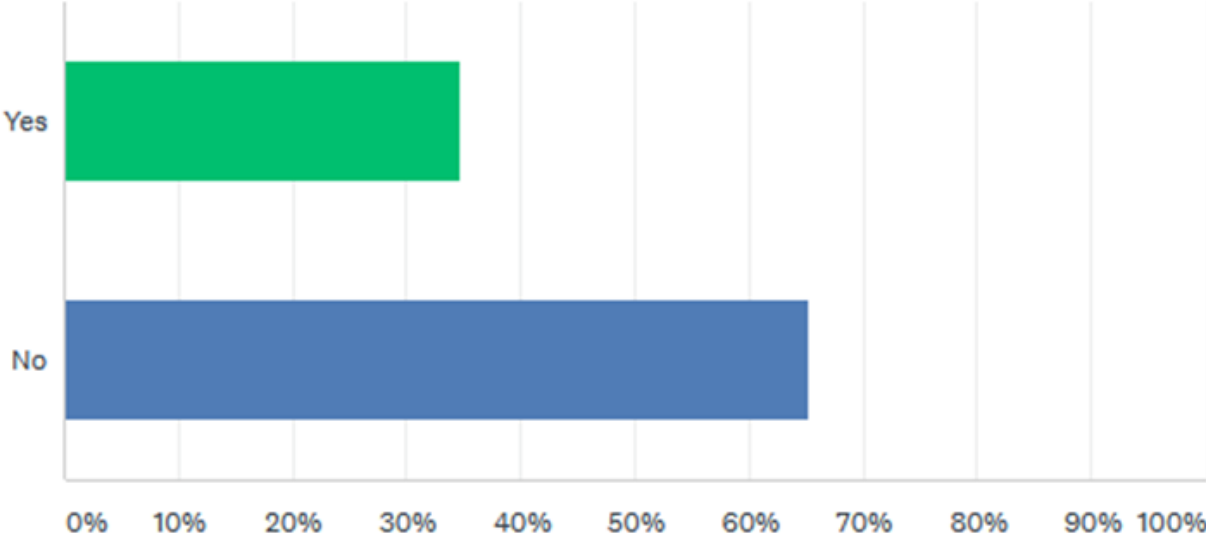


▼ White		51.06%	72
▼ Caucasian		32.62%	46
▼ Asian		4.26%	6
▼ Caucasion		4.26%	6
▼ American		2.84%	4
▼ mixed		2.13%	3
▼ Hispanic		2.13%	3

87.94% of survey respondents described their households as white/Caucasian.

# Do you compost at home?

Answered: 153 Skipped: 0

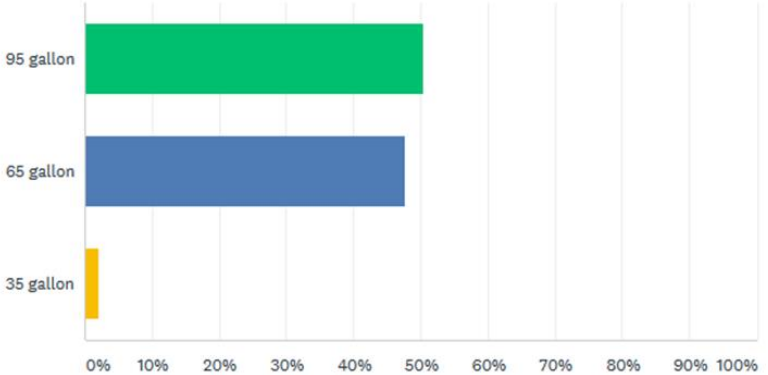


ANSWER CHOICES	RESPONSES
▼ Yes	34.64% 53
▼ No	65.36% 100
<b>TOTAL</b>	<b>153</b>



What is the size of your green recycling collection cart? If you are unsure, check your cart. On the front, you will see 8 digits. The first two are the year the cart was manufactured. The third digit will be a 9, 6, or 3. If the third digit is a 9, you have a 95 gallon cart. If the third digit is a 6, you have a 65 gallon cart. If the third digit is a 3, you have a 35 gallon cart.

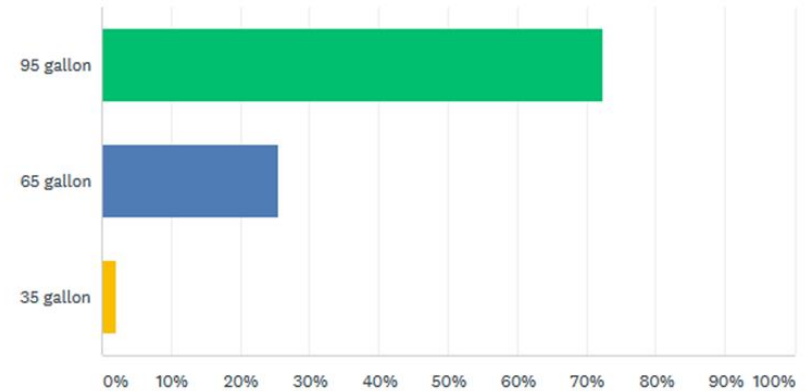
Answered: 149 Skipped: 4



ANSWER CHOICES	RESPONSES
95 gallon	50.34% 75
65 gallon	47.65% 71
35 gallon	2.01% 3
<b>TOTAL</b>	<b>149</b>

What is the size of your tan trash collection cart? If you are unsure, check your cart. On the front, you will see 8 digits. The first two are the year the cart was manufactured. The third digit will be a 9, 6, or 3. If the third digit is a 9, you have a 95 gallon cart. If the third digit is a 6, you have a 65 gallon cart. If the third digit is a 3, you have a 35 gallon cart.

Answered: 149 Skipped: 4



ANSWER CHOICES	RESPONSES
95 gallon	72.48% 108
65 gallon	25.50% 38
35 gallon	2.01% 3
<b>TOTAL</b>	<b>149</b>

Of the respondents: Over 70% have the largest refuse cart, but just short of 50% have the largest recycling cart. Multiple possible reasons as to why this could be true, but it is interesting.

## In summary our volunteers were...

- ▶ Predominantly white, educated, and middle/upper-middle class people who care about sustainability goals – and for the most part, do not compost at home and seems like they need more cart capacity for trash than their recycling



# Cart Distribution July 22 to July 24

No problems in distribution.

Food scraps pail was inside cart  
left at the curb.



# An outlier

Two residents of a cluster of homes on a private court enrolled.

This situation points to one of the ways multi-family situations would be hard to police with cart peeking.





August 2  
Collections  
Begin!



How many pounds were collected?



In general – in the ballpark of anticipated weight.

- ▶ August 2 – 1,060 pounds
- ▶ August 9 – 1,100 pounds
- ▶ August 16 – 980 pounds
- ▶ August 23 – 960 pounds
- ▶ August 30 – 980 pounds
- ▶ September 6 – 1,040 pounds
- ▶ September 13 – 1,000 pounds
- ▶ September 30 – 1,020 pounds

Total: 4.07 Tons

Weekly average: 1,017.50 pounds

Estimated tonnage: 4.32 tons

Estimated weekly average: 1,080 pounds

91% of people in the exit survey said they had the cart out every week.

## Contamination?



Only 3 carts total were left behind.

- ▶ August 2 – Three carts total tagged; two had very minor issues and one cart needed to be left behind
- ▶ August 9 – No carts tagged
- ▶ August 16 – No carts tagged
- ▶ August 23 – No carts tagged
- ▶ August 30 – One cart left behind (plastic bag)
- ▶ September 6 – No carts tagged
- ▶ September 13 – One cart left behind (egg shells)
- ▶ September 30 – No carts tagged

*Aside: One week one of our workers had to pull a bag of recycling out of the food scraps, but they didn't leave an "Oh No!" note.*

## What about the outreach / communication effort?



- ▶ Weekly emails have been sent to all volunteers
  - ▶ Content included answers to questions, weight updates, and contamination updates.
- ▶ For the pilot, paid for a food waste app from ERBin
  - ▶ There were 652 separate searches to learn if an item can be placed into the cart or not
  - ▶ Top items searched: avocados, corn, pizza boxes, and pet waste
- ▶ ERBin developer started a Facebook group as well.
  - ▶ Only 15 members, but according to the developer, it was active



# How long are they on the collection route (according to GPS)?

From leaving Badger Rd to dumping at the digester, it has taken about 5 hours.

Remember the food scraps route is only 25% of an existing trash route.

And the collection was very clean, so they did not lose time tagging carts.

Cart peeking is slow.



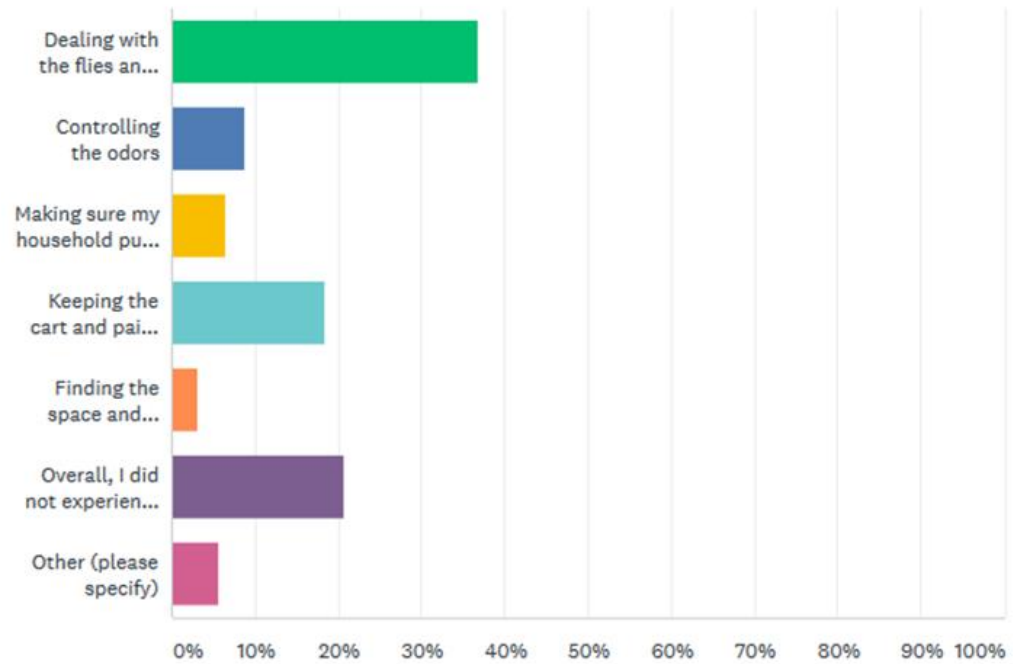
# Impressions from volunteers?

- ▶ 125 of 165 volunteers filled out an exit survey.
- ▶ Enthusiasm dipped
  - ▶ Pre-trial? 96% was very or somewhat enthusiastic.
  - ▶ Post-trial? 75% remain very or somewhat enthusiastic
- ▶ Would volunteer again?
  - ▶ 83.2% - Yes
  - ▶ 5.6% - No
  - ▶ 11.2% - Unsure

# What was the biggest challenge/hurdle for your home when participating in the food scraps recycling program?

Answered: 125 Skipped: 0

# Problems?

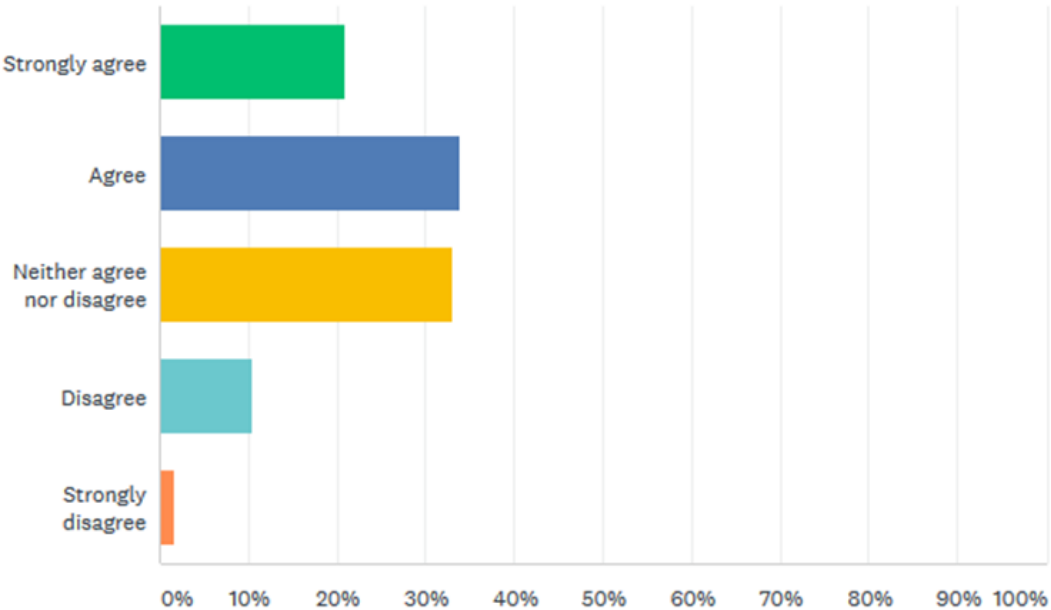


Other comments included concerns about keeping the cart clean.

ANSWER CHOICES	RESPONSES
Dealing with the flies and other pests	36.80% 46
Controlling the odors	8.80% 11
Making sure my household put the correct material into the wasted food cart	6.40% 8
Keeping the cart and pail clean	18.40% 23
Finding the space and wheeling around another collection cart	3.20% 4
Overall, I did not experience challenges	20.80% 26
Other (please specify)	Responses 5.60% 7
<b>TOTAL</b>	<b>125</b>

AGREE OR DISAGREE. The pilot had too many items banned the food scraps cart. Bones, egg shells, corn cobs, and other hard or fibrous food items should be allowed in a food scraps cart to divert more material.

Answered: 124 Skipped: 1



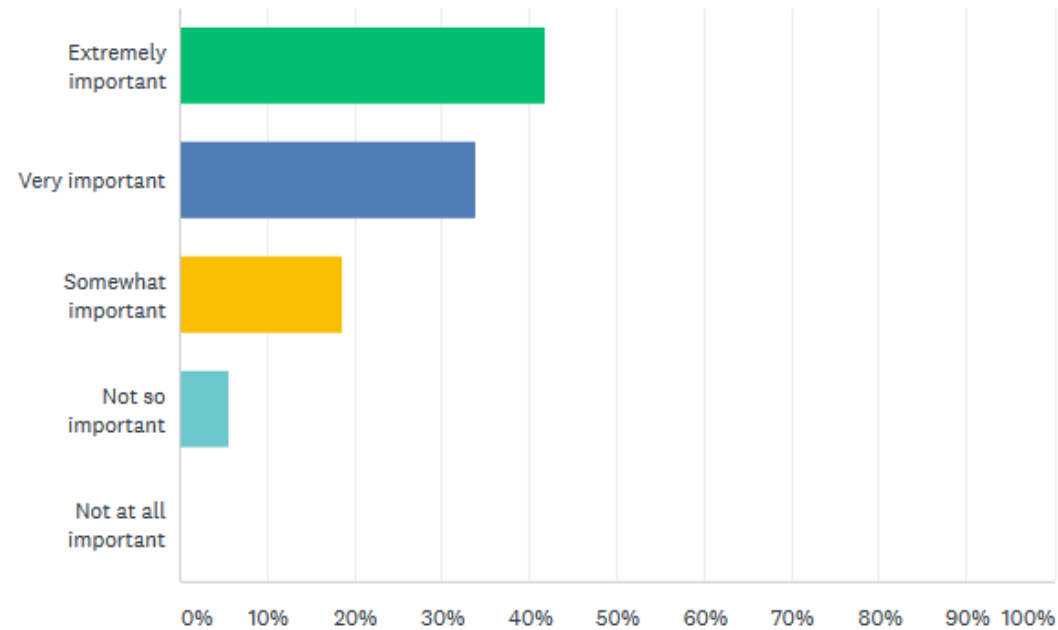
Processor for food scraps can not handle hard food wastes like bones, shells, and corn cobs. Nor were fibrous plant products like corn husks allowed.

54.8% felt that it were too many banned items.

ANSWER CHOICES	RESPONSES
Strongly agree	20.97% 26
Agree	33.87% 42
Neither agree nor disagree	33.06% 41
Disagree	10.48% 13
Strongly disagree	1.61% 2
<b>TOTAL</b>	<b>124</b>

Now that you have participated in the food scraps recycling program, how important do you feel a program like this is for the Madison's sustainability goals?

Answered: 124 Skipped: 1



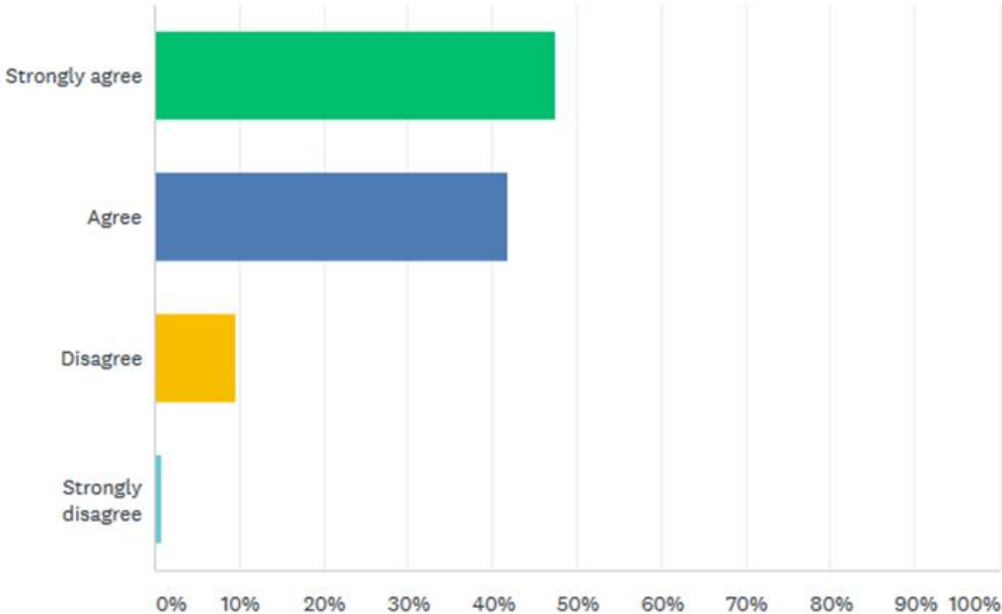
75.81% of survey respondents said that food scraps recycling is extremely or very important for Madison's sustainability goal

ANSWER CHOICES	RESPONSES
Extremely important	41.94% 52
Very important	33.87% 42
Somewhat important	18.55% 23
Not so important	5.65% 7
Not at all important	0.00% 0
<b>TOTAL</b>	<b>124</b>

AGREE OR DISAGREE The City of Madison, or Dane County, should invest in a facility specifically designed to accept and recycle food scraps into biogas and compost. This facility would be able to accept all food scraps, including bones, and other compostables, like pizza boxes. And will have the ability to sort out most contaminants, like plastic bags.

Answered: 124 Skipped: 1

95.49% of respondents to the exit survey believe we should invest in a facility to recycle food scraps.



ANSWER CHOICES	RESPONSES
Strongly agree	47.58% 59
Agree	41.94% 52
Disagree	9.68% 12
Strongly disagree	0.81% 1
<b>TOTAL</b>	<b>124</b>

# A new feasibility study

- ▶ Received a \$39,000 grant from the EPA to do an analysis if the biogas revenue potential from a regional food scraps biodigester.
- ▶ RFP process is open. Have until November 11 to submit proposals.
- ▶ Will examine the revenue potential of a regional digester producing gas that will be injected into natural gas pipeline via Dane County's Renewable Natural Gas Facility at the Rodefild Landfill.
  - ▶ Will also look at available feedstock within the region
  - ▶ Will make equipment & site recommendations



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Questions?