

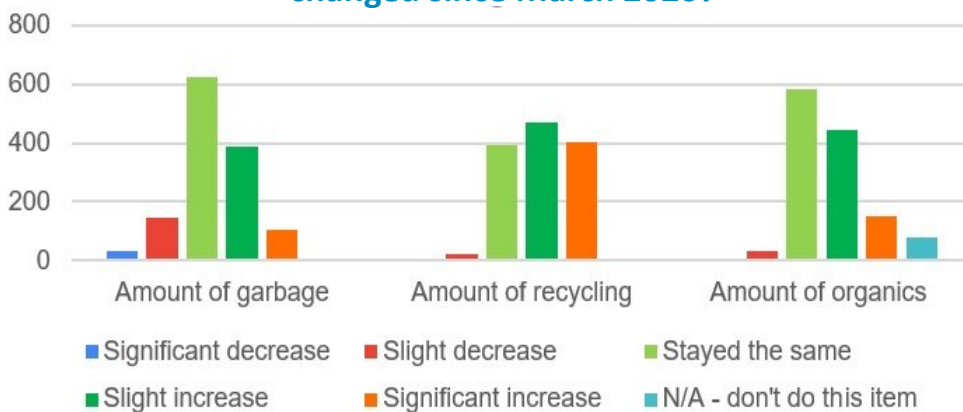
# Division of Solid Waste and Recycling

## 2020 COVID-19 Waste Behavior Survey

From November 20 to December 20, 2020 Minneapolis Solid Waste & Recycling's 107,000 customers were asked to complete a survey to evaluate how the coronavirus global pandemic and spending more time at home has changed how they buy, use and discard clothing, household goods, food and single-use items. The survey was promoted through email newsletters, through the City's social media accounts, and was posted on Solid Waste & Recycling's homepage. Some neighborhood and community groups also shared the survey in their electronic newsletters and on social media. A total of 1,354 surveys were completed. After removing responses from non-Minneapolis residents, duplicates, responses where less than half of the survey was completed, there were 1,302 valid responses. These are the results from the survey.

### Overall waste creation, awareness, and behaviors

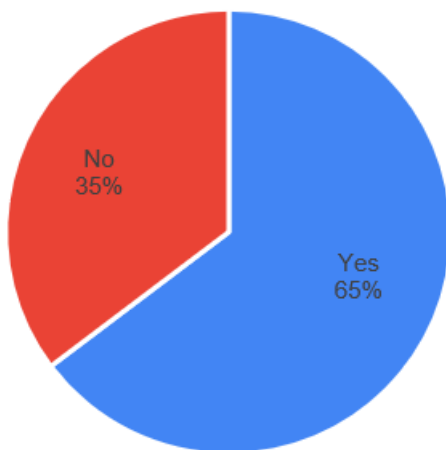
#### How has the amount of waste generated in your home changed since March 2020?



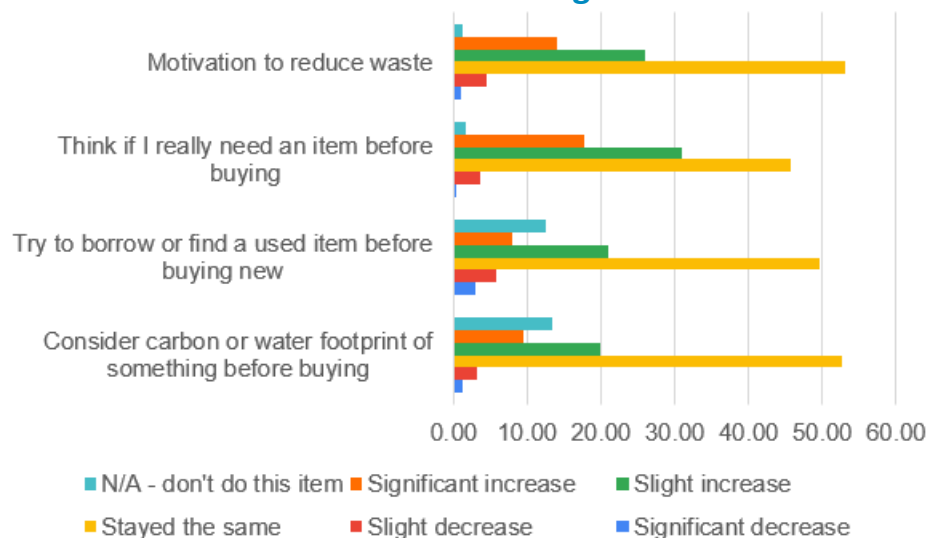
Overall, people are more aware of the waste generated in their homes, and many residents are noting an increase in their motivation to reduce waste and changing their purchasing habits. Perceptions of the increase in garbage, recycling and organics reflect the actual increases seen by the City. Actual 2020 vs. 2019 increases are as follows:

- Garbage: 9.7%
- Recycling: 7.9%
- Organics: 14.8%

#### Do you feel more aware of the waste created in your home?



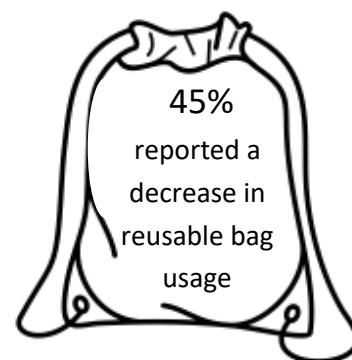
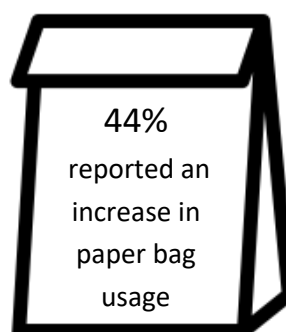
#### Overall waste behavior change since March 2020



# Single-use bag vs. reusable alternative usage

The COVID-19 global pandemic changed the way many people buy items to reduce physical contact—ordering more to be delivered to our homes, curbside pickup of groceries and necessities, and take-out of food due. These changes led to an increase in the use of single-use products, and an entirely new single-use item used by many was also added to our daily lives—facemasks. A lot of resources and energy go into making these products that are only used for very short periods of times and then are disposed—losing all the energy and resources that went into making them. By gathering information on residents’ usage, barriers, and perceptions of single-use items and reusable counterparts, we hope to address barriers, dispel myths, and encourage residents to reduce the reliance on single-use products for our health and the health of our environment.

Changes in bag behavior varied widely by respondent. At the beginning of the pandemic, some stores were not allowing customers to bring their own reusable bags. Residents also cited an increase in curbside pickup or grocery delivery—with no option to for reusables or to choose your bag preference.



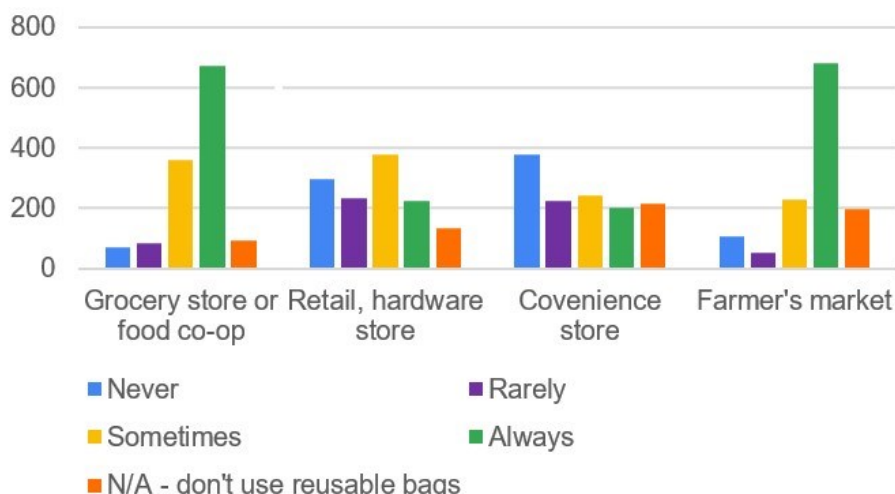
## Top 5 ways residents dispose of plastic bags and film

1. Reuse them once as a garbage or pet waste bag (50.9%)
2. Bring to a plastic bag/film recycling drop-off (30.2%)
3. Reuse more than once as a bag (10.1%)
4. Throw away in the garbage (5.4%)
5. Put in recycling bin (3.4%)\*

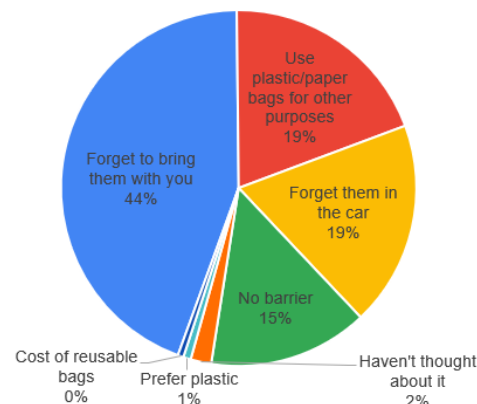
\* Plastic bags/film are not accepted in curbside recycling bin

How has your usage of the following changed?	Use plastic bags	Use paper bags	Use reusable bag
Significant decrease / Stopped doing this	13.16	4.97	26.90
Slight decrease	12.77	5.82	18.53
Stayed the same	27.32	37.27	33.02
Slight increase	17.41	23.84	8.29
Significant increase	12.07	20.34	7.60
N/A - didn't use this before COVID	17.26	7.76	5.66

## How often do you bring reusable bags to the following places?



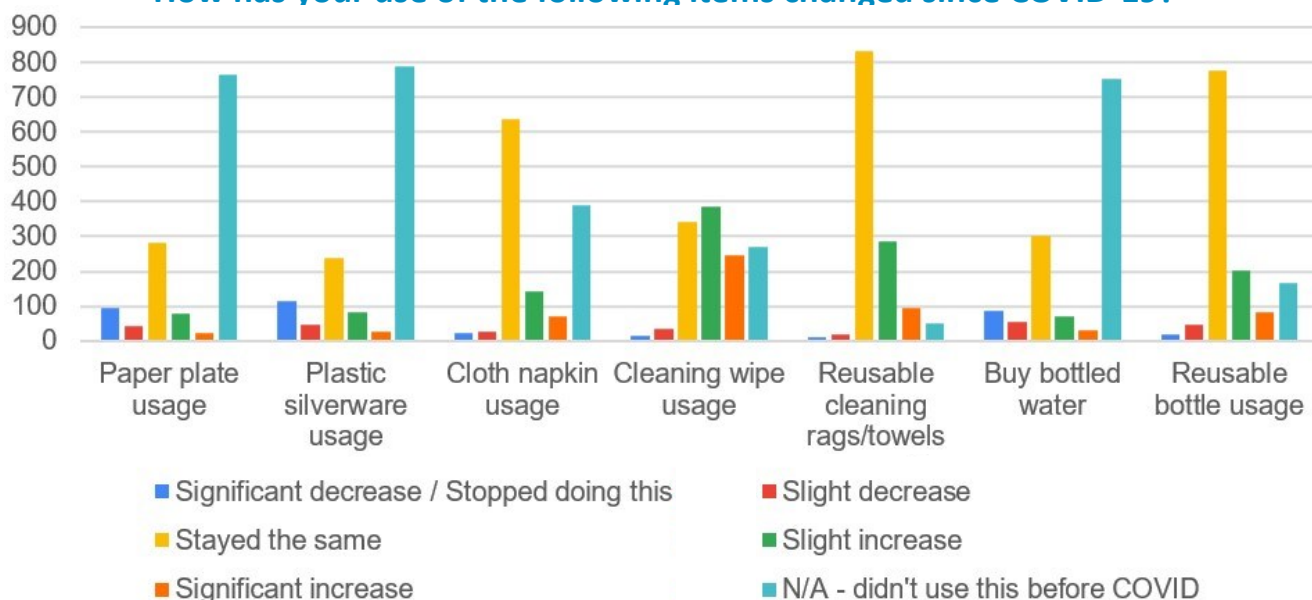
## Barriers to reusable bags



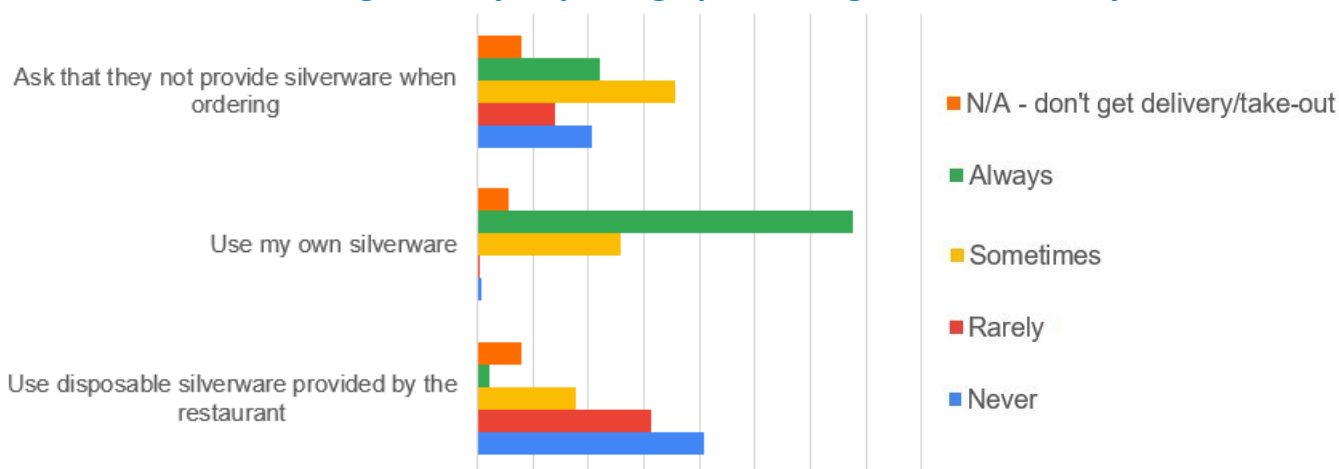
51.7% of respondents reported they use reusable bags regularly. Chart above excludes these respondents.

# Single-use product use and disposal behaviors since March 2020

## How has your use of the following items changed since COVID-19?



## When ordering delivery or picking up food to go how often do you...



- For some, more time at home (and time to clean dishes) may have resulted in a decrease in disposable plates (10% decrease vs. 7% increase) and silverware usage (13% decrease vs. 8% increase). For others, cooking more meals at home and/or schooling from home may have resulted in an increase.
- Unsurprisingly, there was a big increase in the use of cleaning wipes (49%), but there was also an increase in the use of reusable cleaning rags/towels (29%) and cloth napkins (16%).
- More time at home may have also resulted in an overall decrease in the amount of bottled water purchased - 11% of respondents reported a decrease and only 8% reported an increase in bottle water purchases. 32% reported an increase in reusable bottle usage.
- The majority of people use their own silverware when ordering take-out and over 70% never or rarely use silverware provided, however only 36% of people request they not provide silverware when ordering.

### Support a policy that only allowed restaurants to give out straws and plastic silverware upon request

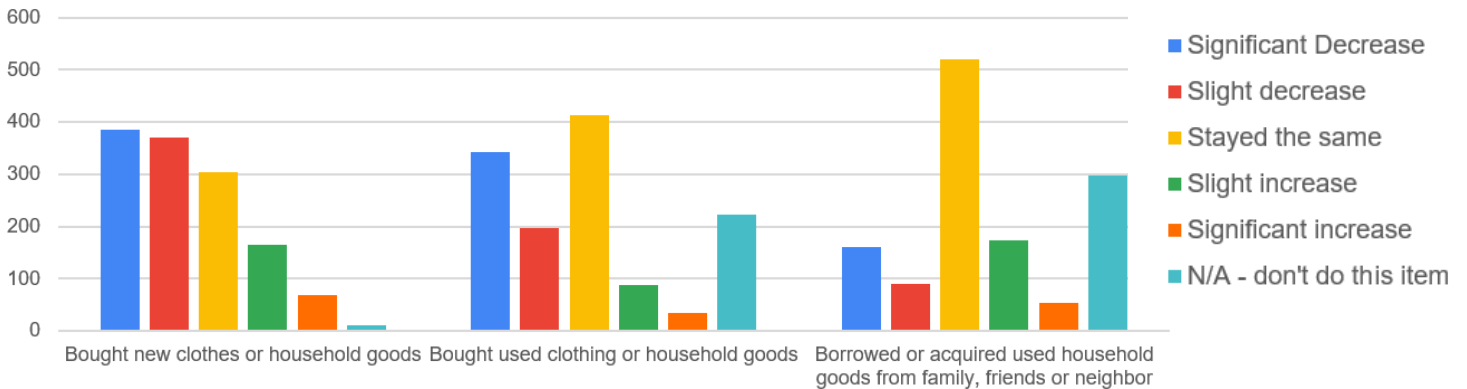
- 88% of people would support
- 7% of people are unsure
- 5% would not support such a measure

The City has a bring your own bag ordinance (enforcement delayed due to COVID-19), and a Green to Go take-out packaging ordinance. A policy that only allowed plastic silverware and straws upon request would eliminate a lot of unnecessary waste, much of which according to survey results isn't being used.

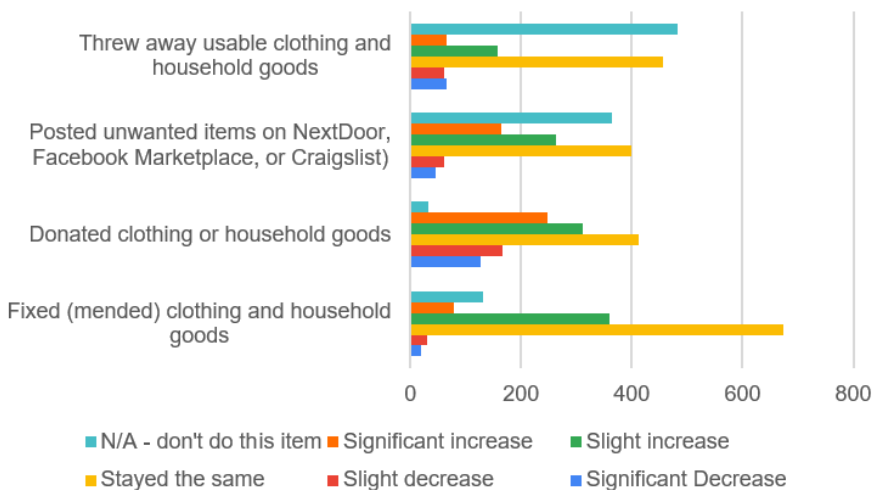
# Clothing and household goods use and disposal behaviors since March 2020

Textiles require a lot of resources to manufacture. Current fast fashion business models promote quick wear and throw turnaround times that resulting in a lot of unnecessary waste. Residents were asked to describe their purchasing and disposal of these items to understand how their buying and repair habits have changed since March 2020 and the global COVID-19 pandemic began.

## Clothing and household goods purchasing habits since March 2020



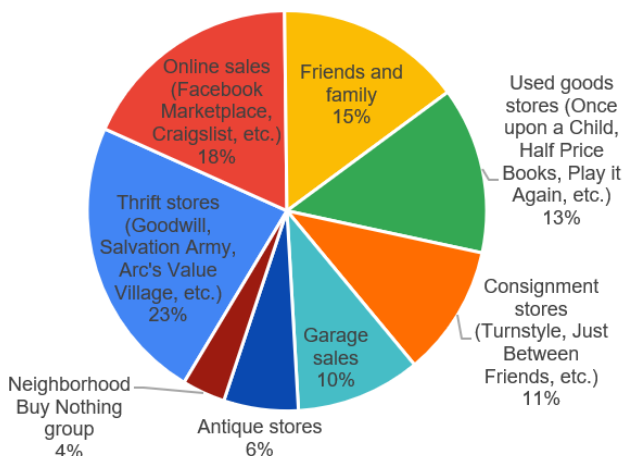
## Repair and disposal habits



## Items bought/acquired used

Furniture and home decor	23%
Books	20.6%
Adult clothing	20.3%
Sports and outdoor equipment	10.7%
Kids clothing and gear (incl. women's maternity)	9%
Antiques and collectibles	7.9%
Jewelry and accessories	5%
Other (Electronics, tools, appliances, etc.)	3.4%

## Where residents purchase/get used items



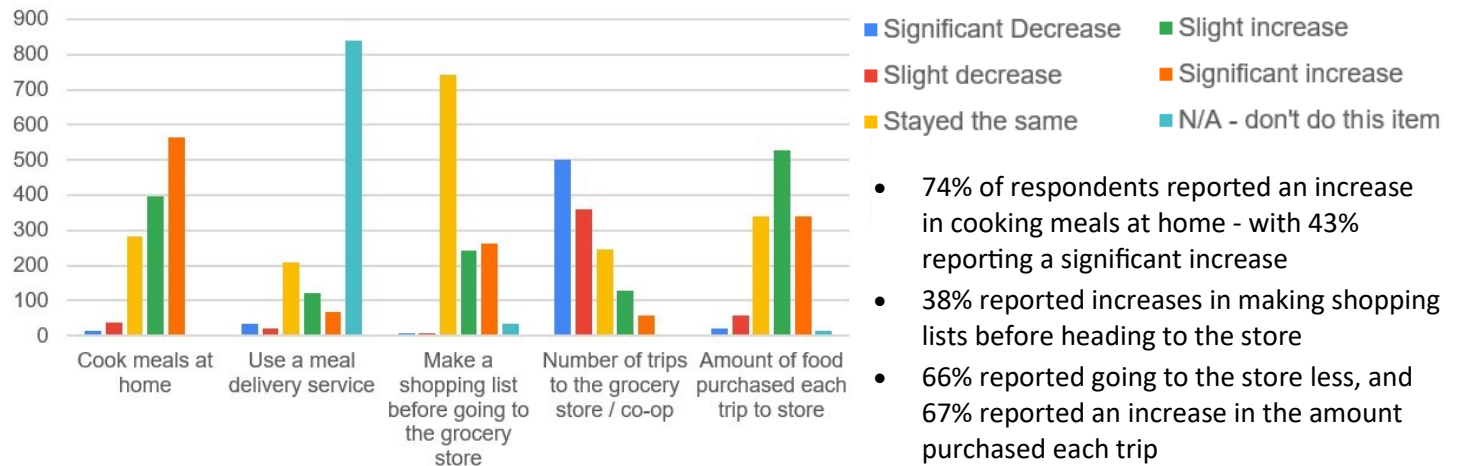
Respondents reported an overall decrease in the amount of clothing and household goods purchased—both new and used. Borrowing remained the same for most respondents, and donation habits varied.

- 58% said they experienced a decrease in the amount of new items purchased (slight + significant decrease)
- 41% said they experienced a decrease in the amount of used items purchased (slight + significant decrease)
- 52% said mending remained the same, but 34% also reported in an increase (slight + significant increase)
- 23% reported a decrease (slight + significant) in donations, 32% said donations remained the same, 43% reported an increase (slight + significant)
- Posting unwanted items online stayed the same (31%) or increased (33%) for most respondents.

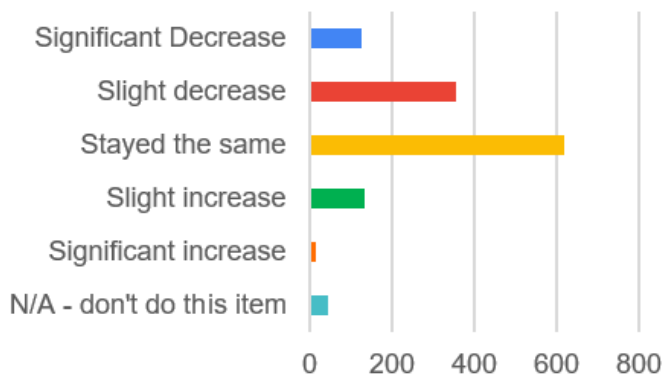
# Food purchasing, use, and disposal behavior changes since March 2020

Almost 40% of all food goes uneaten in the US, mostly at the retail and consumer levels. That is a lot of precious resources from land, energy and water that go to waste. The City aims to learn how residents purchase, use, and dispose of food to identify effective strategies in reducing and preventing wasted food.

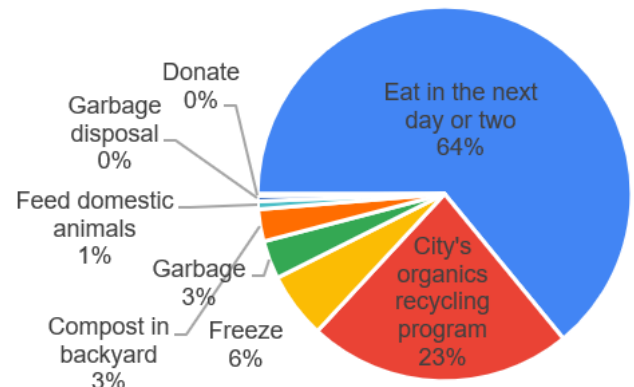
## How has COVID-19 changed your habits related to buying and making of food?



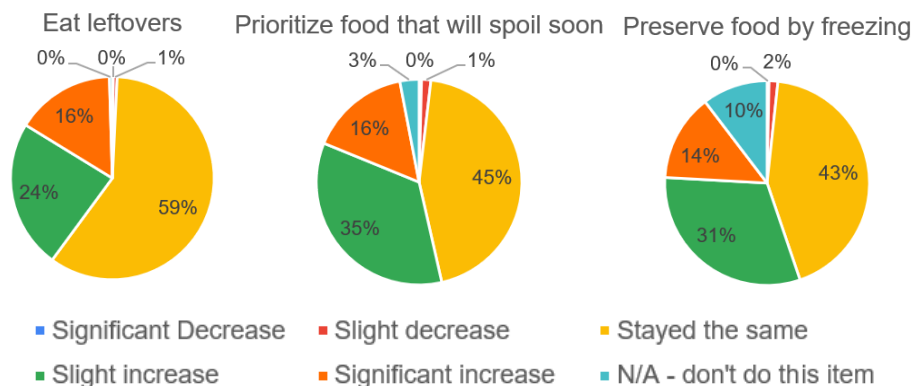
## Amount of edible food wasted



## What do you do with uneaten food?



## Food usage and preservation methods



While most residents did not notice a change in their food usage and preservation, some noted increases in behavior that reduces wasted food.

- Uneaten food is typically consumed in the next day or two, a practice that many residents noted increasing (40%)
- Residents also reported increases in prioritizing food that will spoil soon (51%) and preserving food by freezing (45%), and canning (11%).

**Preserve food by canning:** 7% reported a slight increase, 4% a significant increase  
**Grow own food:** 18% reported a slight increase, 7% a significant increase



# Wasted food behavior since March 2020

## Why an increase in uneaten food?

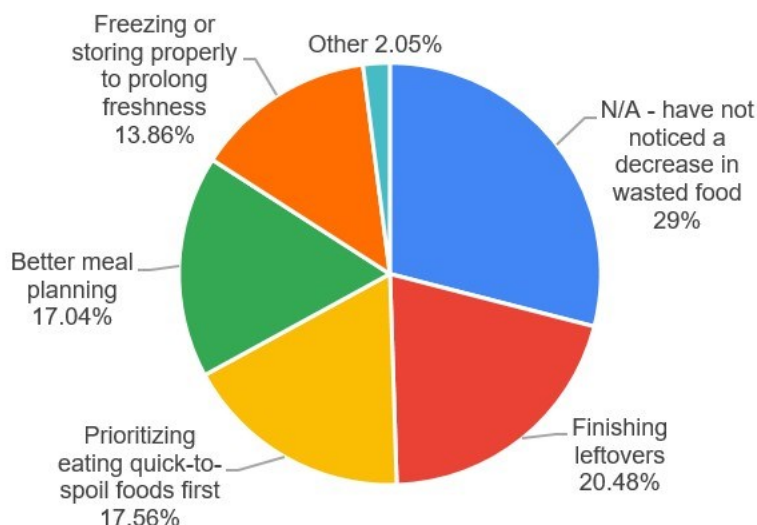
Item	#	%
Buy more (ex. buy a lot of produce to reduce trips to the store and don't eat it all before it goes bad)	222	13.29
Size of food packages/quantity too large (ex. eat some but can't eat all before gets stale/goes bad; bought to make one meal and have extras that don't use up)	204	12.21
Poor food storage (ex. stored too long, mold grows on food)	147	8.80
Past 'use by/ sell by / expiration' date	89	5.33
More adventurous with meals (new ingredients and unsure of what to do with them/how to finish)	40	2.39
Don't eat leftovers	39	2.33
Cooking skills (ex. burning food, doesn't taste good)	35	2.09
Other	33	1.97
Comment	6	0.36
N/A - have not noticed an increase in wasted food	856	51.23

Other responses include: Meal planning (8), picky eaters (8), MPS Meal Boxes (6), Take out (3), Other (5), Eat less (2), Eat more (1)

Residents were asked to select all that apply to why they have seen an increase or a decrease in uneaten food. The majority of respondents reported they did not see an increase or decrease in wasted food.

We hope by asking these questions residents will begin to think about how they can change their behaviors to reduce the amount of food that goes uneaten.

## Why a decrease in uneaten food?



Other comments included: Home more (13), feed animals (2), Fewer trips to the store (2), Eat out less (9), No response (14)

## Top 10 things that have prevented residents from reducing waste? (729 responses)

1. Reusables not allowed at the store
2. Ordering more online
3. Curbside pickup / grocery delivery
4. Health\* (PPE, wipes, cleaning products, bags)
5. Take-out
6. Drop-off options
7. Home more
8. Packaging
9. Family- People not caring/more people at home
10. Recycling capacity

Other responses include: Minneapolis public schools meal boxes (too much packaging, too much food), Moved, Habits, Organics infrastructure (apartment complexes), Purging unwanted items

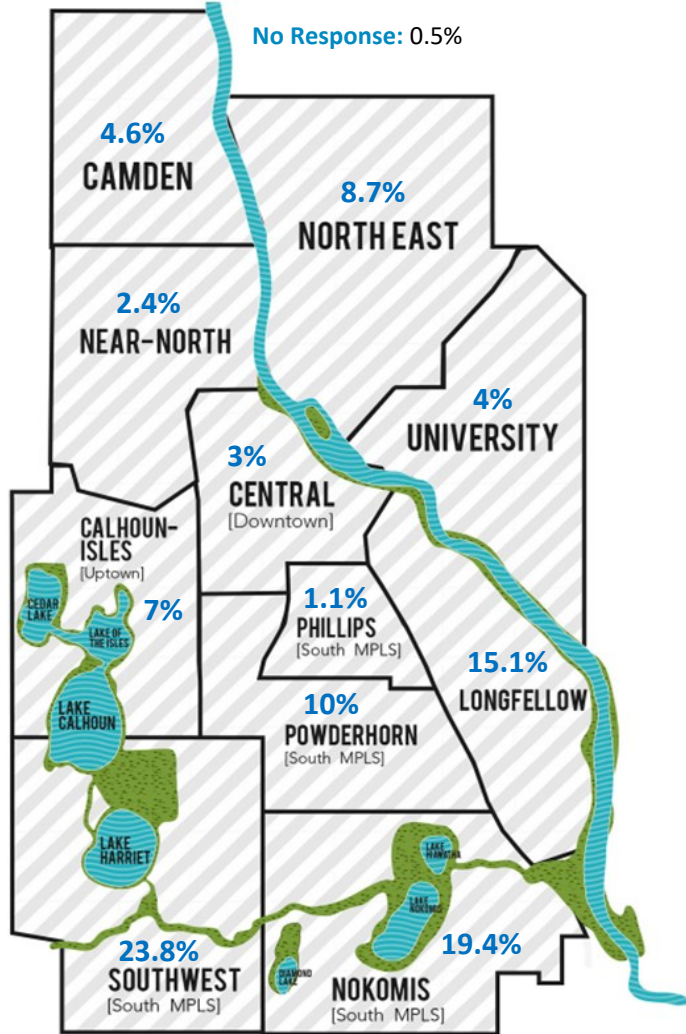
## Top 20 new things residents have done to reduce waste generated (789 responses)

- |                                      |                                    |
|--------------------------------------|------------------------------------|
| 1. Manage food inventory             | 11. Increased waste awareness      |
| 2. Compost                           | 12. Buy in bulk                    |
| 3. Buy/acquire secondhand            | 13. Gardening and having chickens  |
| 4. Reduce packaging and disposables  | 14. Cook more                      |
| 5. Sustainable conscious consumerism | 15. New waste reduction techniques |
| 6. Use reusables                     | 16. Repurpose items                |
| 7. Buy less                          | 17. Knit/darn                      |
| 8. Recycle more                      | 18. Food to people or animals      |
| 9. Reduce plastic                    | 19. Consume less paper             |
| 10. Reuse disposables                | 20. Farmer's market +CSA           |

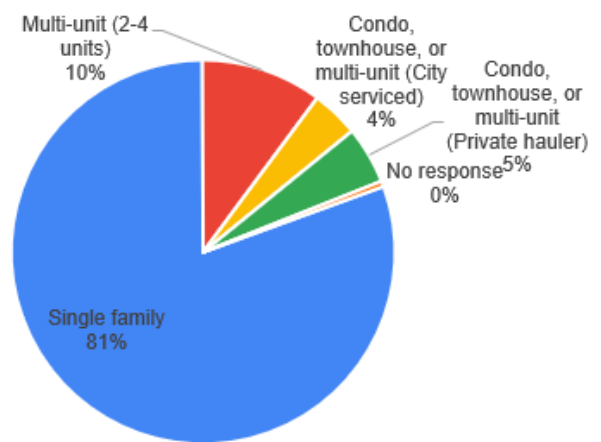
Other responses include: Buy local, Less people, Plant-based diet, Reduce yard waste

# Respondent demographics

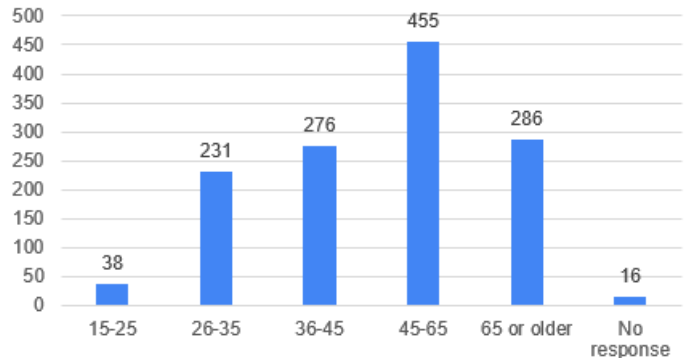
## Which Minneapolis community do you live in?



## What type of building do you live in?



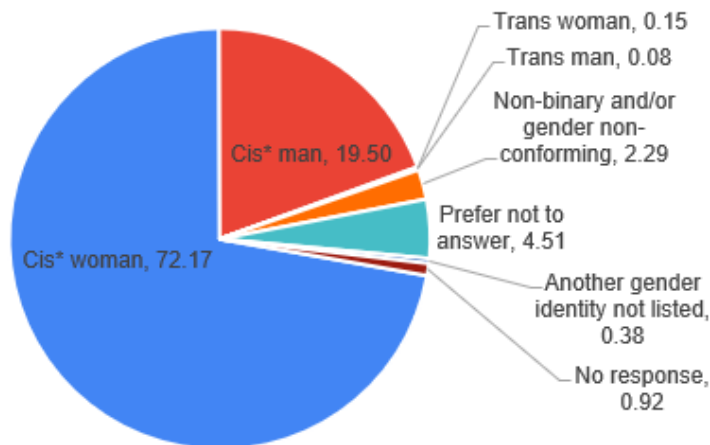
## Age



## Ethnicity

1	White or of European descent	86.5%
2	Prefer not to answer	4.3%
4	Latinx or Hispanic	2.1%
5	Black, Afro-Caribbean or American Descendants of Slavery (ADOS)	1.6%
6	East Asian	1.2%
7	Native American or Alaska Native	1.1%
8	South Asian or of Indian descent	1.0%
9	No response	0.7%
10	Southeast Asian	0.7%
11	Middle Eastern or North African descent	0.4%
12	Pacific Islander	0.3%
13	East African descent	0.1%

## Gender identity



Thank you for your input: We would like to thank all residents for participating in our survey. Your input is very important to us. Please don't hesitate to call or email our office with any other questions, comments or concerns.