Minneapolis Organics Sorts

The City's residential organics program rolled-out citywide in 2015-2016. As of July 5, 2021 50.68% of customers (54,583 households) have signed up to participate.

Organics sorts were first completed in March 2017 to determine the most prevalent contaminant. A cart hanger was created to address plastic-lined paper items (the most common contaminant) and sorts were re-conducted in May and June 2017 to determine the effectiveness of the cart hanger. Overall contamination dropped after the cart hanger was left. This is shown in a chart later in this document.

Sorts have continued annually, with the exception of 2020 due to the global coronavirus pandemic. Routes 502 and 631 have been sorted each year to

maintain a baseline and other routes are selected to get data from across the City. Contamination increased slightly in 2021 vs. 2019 and so have the number of households signed up to participate.

The City will continue to promote the organics recycling program to areas with lower sign-ups and educate residents on what is accepted and what is not accepted.

The City, and our composting contractor, are very pleased with a 1% contamination rate.

| Year | Sign-up rate | Annual tons | |
|------|-----------------|----------------|--|
| 2015 | 31.82% | 825 | |
| 2016 | 40.54% | 3,385 | |
| 2017 | 43.66% | 4,763 | |
| 2018 | 46.18% | 4,844 | |
| 2019 | 48.24% | 5,301 | |
| 2020 | 49.94% | 6,087 | |



About the sorting process. Solid Waste & Recycling staff and volunteers conduct the sorts at the transfer station. After the selected route is delivered, a front end loader levels out the pile. Volunteers tear open every bag and dump out the contents. Contaminants and food that could have been eaten are put into separate bins. Yard waste, although not considered contamination, is also set aside as yard waste is collected separate from organics in the City's program.

After the initial sort is completed, contaminants are re-sorted into three categories: 1. Plastic-lined paper, 2. Recyclables, and 3. Other. All containers are weighed. Results from the 2021 and previous years sorts are on the following pages of this document.



Organics sort results 2018 - 2021

Sort dates: April 25 & 27, 2018. June 12, 14 & August 2, 2019. June 23 & 25, 2021.

| Ro | ute | Organics Load weight (Ib) | Plastic-Lined Paper (lb) | Recyclables (lb) | Other Contaminants (Ib) | Total Contamination (Ib) | Total Contamination (%) | Organics lbs/HH Signed up |
|------------|-----|------------------------------|-----------------------------|--------------------|----------------------------|--------------------------------|-------------------------------|------------------------------|
| | | | | 2018 s | orts | | | |
| | 502 | 4,340 | 11.76 | 4.19 | 7.38 | 23.33 | 0.54% | 4.06 |
| | 506 | 3,520 | 4.6 3 | 1.75 | 8.07 | 14.45 | 0.41% | 4.51 |
| | 604 | 2,040 | 9.82 | 4.07 | 12.94 | 27.45 | 1.35% | 1.85 |
| | 631 | 3,080 | 6 | 4.07 | 3.25 | 13.32 | 0.43% | 3.58 |
| Aver | age | 3,245 | 8.05 | 3.52 | 7.91 | 19.64 | 0.68% | 3.50 |
| 2019 sorts | | | | | | | | |
| | 502 | 4,680 | 7.54 | 2.5 | 7.44 | 17 | 0.36% | 4.64 |
| | 505 | 2,960 | 14.06 | <mark>2.6</mark> 3 | 63.67 | 30.5 | 1.03% | 3.38 |
| | 651 | 6,740 | 16.12 | 10.06 | 23.56 | 49.74 | 0.74% | 7.23 |
| | 655 | 3,000 | <mark>5.6</mark> 3 | 5.56 | 11.75 | 22.94 | 0.76% | 3.57 |
| | 631 | 7,280 | 13.5 | 1.81 | 20.88 | 36.19 | 0.50% | 5.29 |
| Aver | age | 4,932 | 11.37 | 4.51 | 25.46 | 31.27 | 0.68% | 4.82 |
| 2021 sorts | | | | | | | | |
| | 502 | 5,060 | 16.38 | 7.19 | 21.63 | 45.2 | 0.89% | 5.01 |
| | 504 | 3,480 | 19.13 | 7.69 | 7.57 | 34.39 | 0.99% | 4.26 |
| | 631 | 3,940 | 16 | 4.25 | 14.5 | 34.75 | 0.88% | 2.89 |
| | 647 | 5,160 | 24.31 | 17.38 | 21.69 | 63.38 | 1.23% | 9.26 |
| Aver | age | 4,410 | 18.96 | 9.13 | 16.35 | 44.43 | 1.00% | 5.36 |

Notes:

- 1. Routes that start with a 5 are from a single day's worth of organics. Routes that start with a 6 may include multiple days worth of organics in the load.
- 2. Contamination by weight is less than what is reported. A lot of wet food stuffs stick to and in items pulled as contamination. Edible food is higher than what is reported. Pulling every piece of edible food was not feasible.
- 3. Pounds per household signed up is for all households on the route. It does not mean every resident had a cart set out for pickup.
- 4. Contaminants have changed over the years. For example, in 2021 some papers that contain PFAS were pulled as contamination. These were not counted as contamination previously.



Contaminants

Plastic-lined paper

Includes: Plastic lined to-go containers, paper cups, food wrappers, shiny paper plates, ice cream tubs, pizza box liners (PFAS coatings), etc.

Recyclables

Includes: Cardboard, large stacks of newspaper, plastic bottles and cups, PP to-go containers, yogurt cups, aluminum cans, boxboard, cartons, etc.









Other Contaminants: Garbage

Includes: Non-BPI certified compostable plastic bags, utensils, straws, non-recyclable or compostable plastic cups and containers, sauce packets, meal delivery service packaging, etc.











Route 502 Sort History Route Location: South Minneapolis

| Material | 3.14.17 | 5.23.17 | 4.27.18 | 6.12.19 | 6.23.21 |
|-----------------------------|---------|---------|---------|---------|---------|
| Plastic-lined paper (lbs) | 10.07 | 12.8 | 11.76 | 7.06 | 16.38 |
| Recyclables (lbs) | 5.07 | 4.6 | 4.19 | 2.5 | 7.19 |
| Other contaminants (lbs) | 2.06 | 0 | 7.38 | 7.44 | 21.63 |
| Total contamination (lbs) | 17.2 | 17.4 | 23.33 | 17 | 45.2 |
| Organics loads weight (lbs) | 3,100 | 3,700 | 4,340 | 4,680 | 5,060 |
| Total contamination (%) | 0.55% | 0.47% | 0.54% | 0.36% | 0.89% |
| | | | | | |

| Route 631 Sort History | | | | | |
|-----------------------------------|---------|--------|---------|--------|---------|
| Route Location: North Minneapolis | | | | | |
| Material | 3.24.17 | 6.9.17 | 4.27.18 | 8.2.19 | 6.25.21 |
| Plastic-lined paper (lbs) | 23.33 | 9.7 | 6 | 13.5 | 16 |
| Recyclables (lbs) | 8.33 | 7.25 | 4.07 | 1.81 | 4.25 |
| Other contaminants (lbs) | 14.8 | 1.3 | 3.25 | 20.88 | 14.5 |
| Total contamination (lbs) | 46.46 | 18.25 | 13.32 | 36.19 | 34.75 |
| Organics loads weight (lbs) | 3,460 | 2,320 | 3,080 | 7,280 | 3,940 |
| Total contamination (%) | 1.34% | 0.79% | 0.43% | 0.50% | 0.88% |

Edible food

In 2018 edible food began to be pulled from the sort loads. This was done to determine the quantity types of food that could have been eaten that were ending up in organics carts. Results will help develop public messaging around purchasing habits and tips to reduce wasted food. Solid Waste & Recycling's 2020 COVID waste behavior survey showed residents are cooking at home more and feel more aware of the waste they create, however, the percentage of edible food in the organics increased from 2019 sort levels. This proves more education is needed to make sure edible food is consumed.

In 2021 edible food from two routes (504 and 631) was sorted by type: 1) Vegetables, 2) Fruit, and 3) Other (meat, prepared food, eggs, bread, dairy). Sorters found 16 pounds of pre-packaged cheese slice packets in route 631. Staff will continue educating residents to remove food from packaging and remove produce stickers.



The most common edible food items found included: potatoes, oranges (inc. clementines), onions, carrots, limes, lemons, and apples.



Edible food from routes 504 and 631 was sorted by type in 2021.



| Route | Edible food (lb) | Edible food (%) | | | | | |
|------------|---------------------|--------------------|--|--|--|--|--|
| 2018 sorts | | | | | | | |
| 502 | 85.88 | 1.98% | | | | | |
| 506 | 119.76 | 3.40% | | | | | |
| 604 | 172.19 | 8.44% | | | | | |
| 631 | 84.19 | 2.73% | | | | | |
| Average | 115.51 | 4.14% | | | | | |
| 2019 sorts | | | | | | | |
| 502 | 238 | 5.09% | | | | | |
| 505 | 63.67 | 2.15% | | | | | |
| 651 | 202.01 | 3.00% | | | | | |
| 655 | 68.94 | 2.29% | | | | | |
| 631 | 221.53 | 3.04% | | | | | |
| Average | 158.83 | 2.79% | | | | | |
| 2021 sorts | | | | | | | |
| 502 | 280.39 | 5.54% | | | | | |
| 504 | 205.63 | 5.91% | | | | | |
| 631 | 285.01 | 7.23% | | | | | |
| 647 | 192 | 3.72% | | | | | |
| Average | 240.76 | 5.60% | | | | | |

