



CITY OF SASKATOON

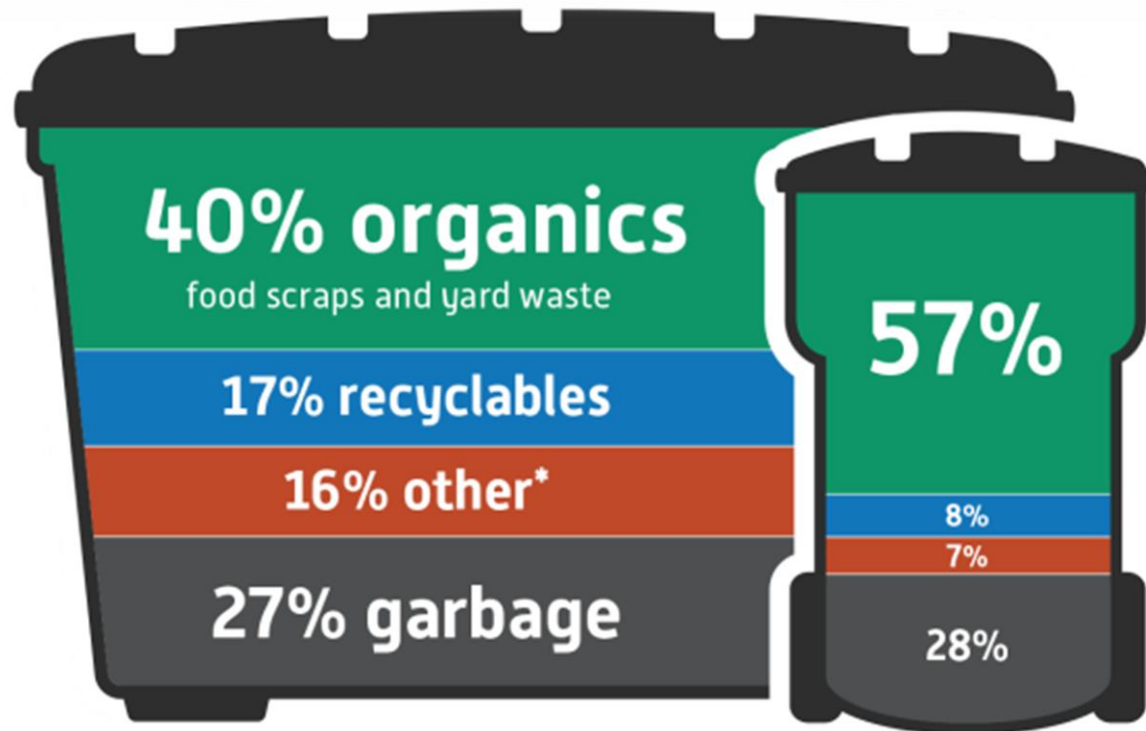
Saskatoon's Compost Story

June 9, 2022

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Saskatoon Solid Waste Trends

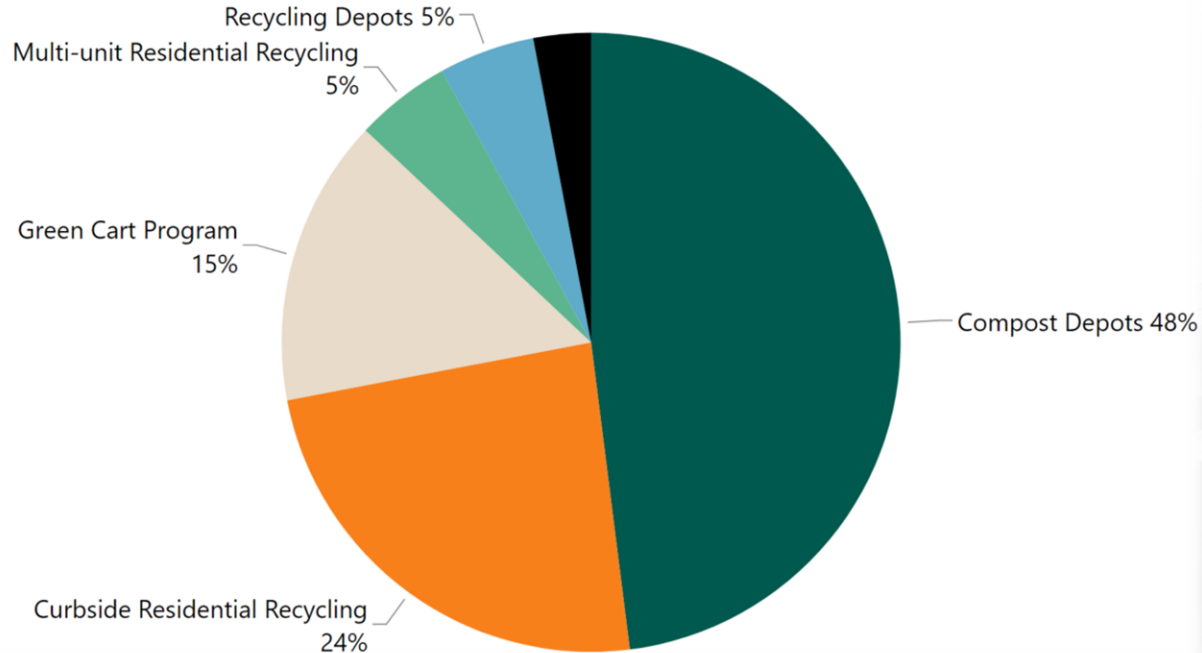


Multi-Unit Residential

Curbside Residential

*hazardous waste, electronics, construction waste

Waste Diversion



Waste diversion rate of 25%
30,900 tonnes of material diverted in 2021

Use Nature as a Solution to Waste



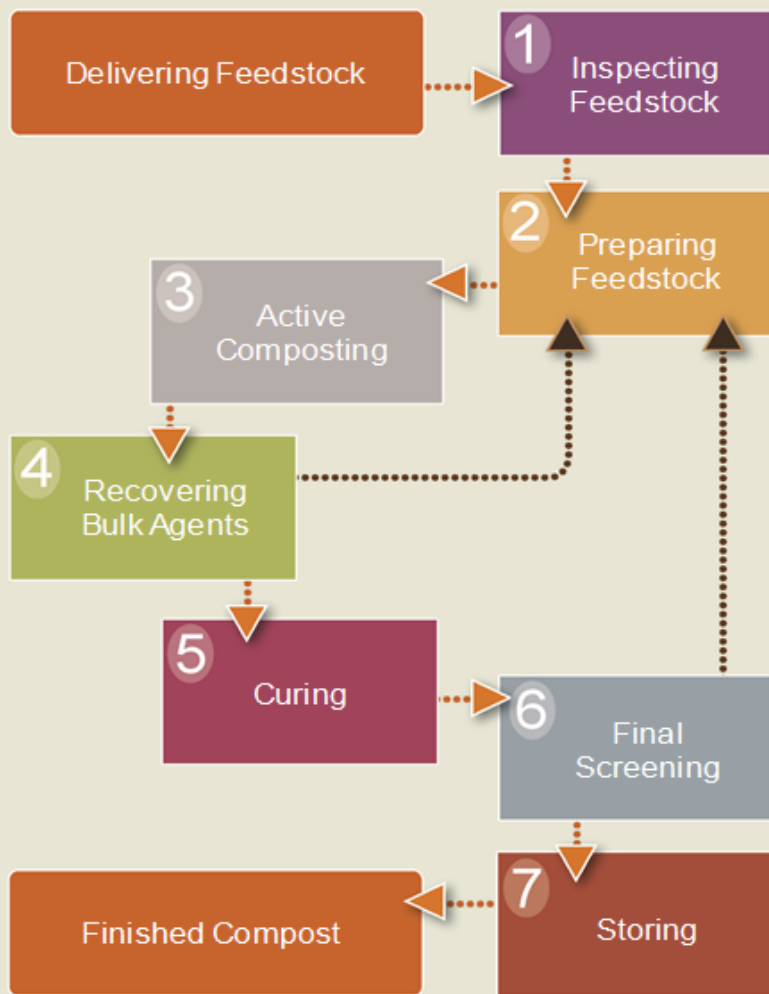
Compost Requirements



Environmental Benefits

- Improving soil health
- Reducing the City's carbon footprint – Reduced by 4,656 tonnes CO_{2e}
- Recycling nutrients into the soil
- Less need for commercial soil conditioners, fertilizers and pesticides
- Erosion and sediment control applications
- Replace organic matter in depleted soils

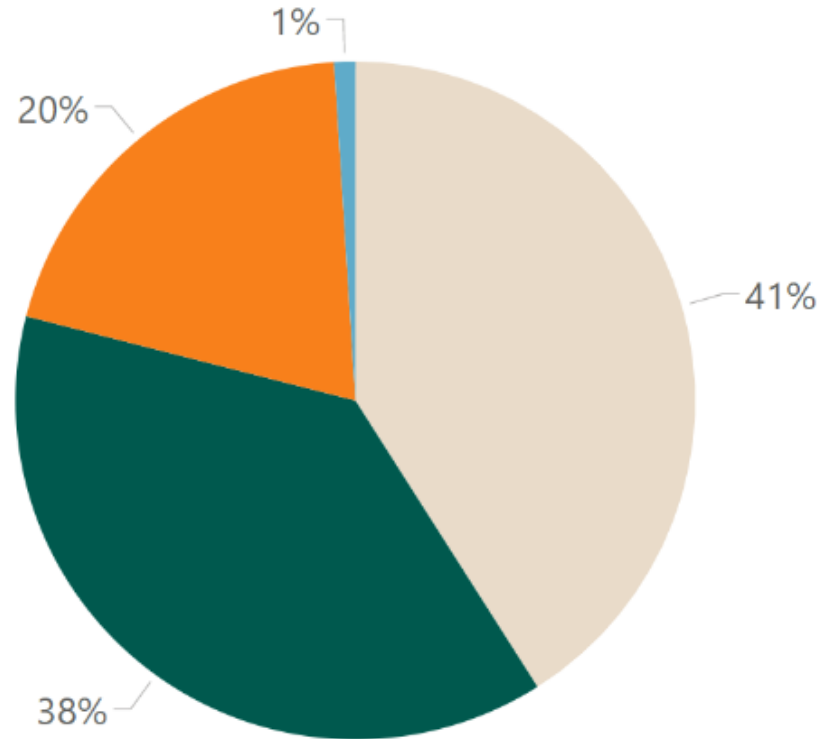




Feedstock Trends

- Tonnages are based on bulk density and volume estimates
- Wood and leaf/yard waste make up much of the inbound waste
- Limited kitchen waste is only allowed through the Green Cart Program

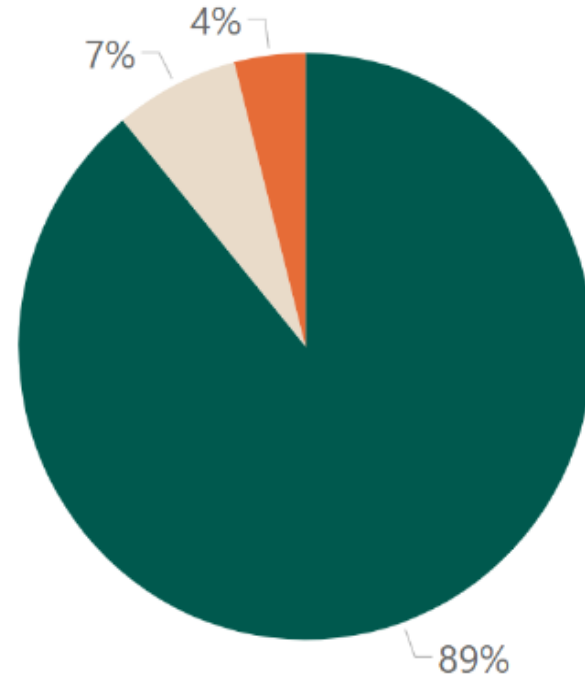
Material Type ● Woody ● Leafy ● Sod ● Food



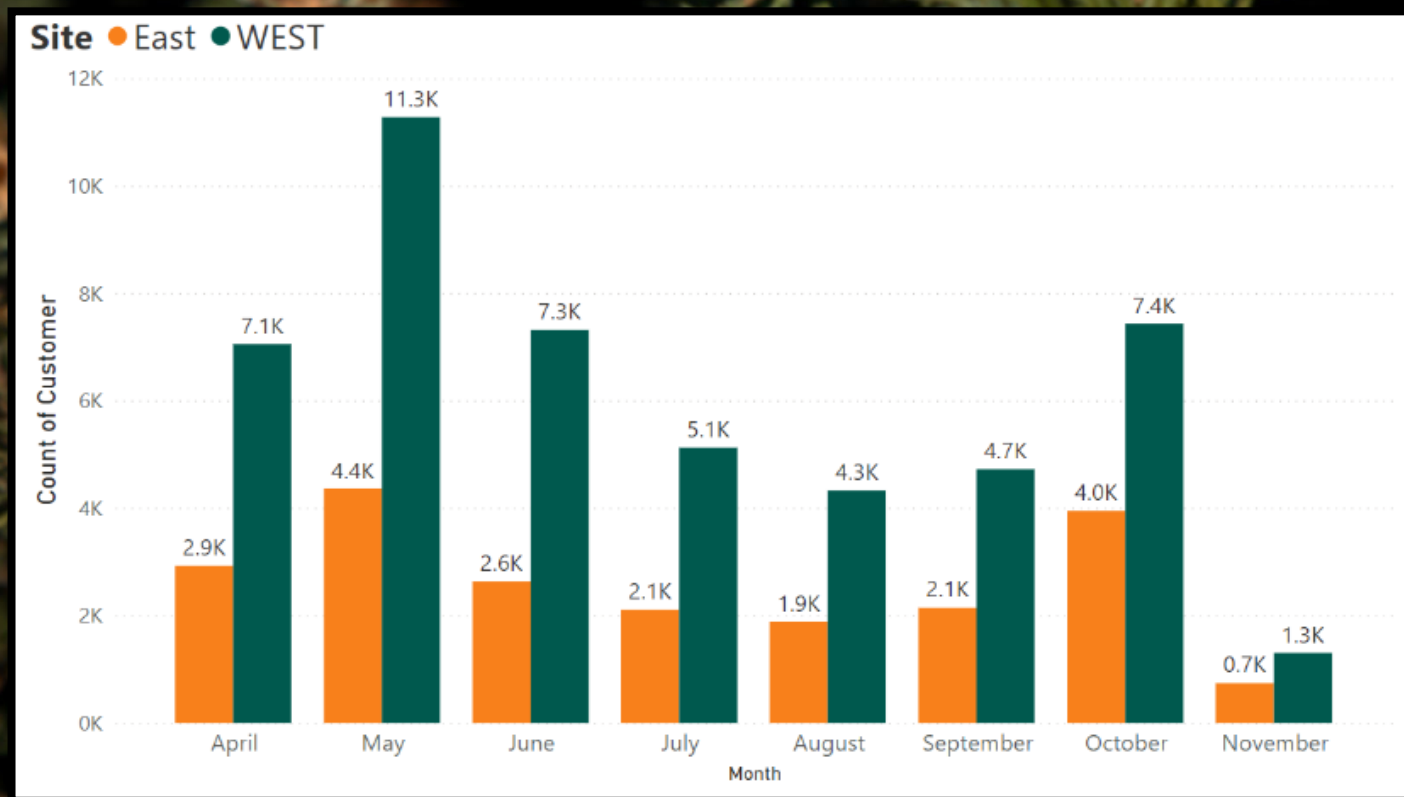
Customer Trends

- Over 69,300 vehicle visits were recorded in 2021
- Most residential trips are one-time visits
- City Parks and Green Cart Collection trucks represent the majority of internal customers

Customer Type ● Residential ● Commercial ● City of Saskatoon

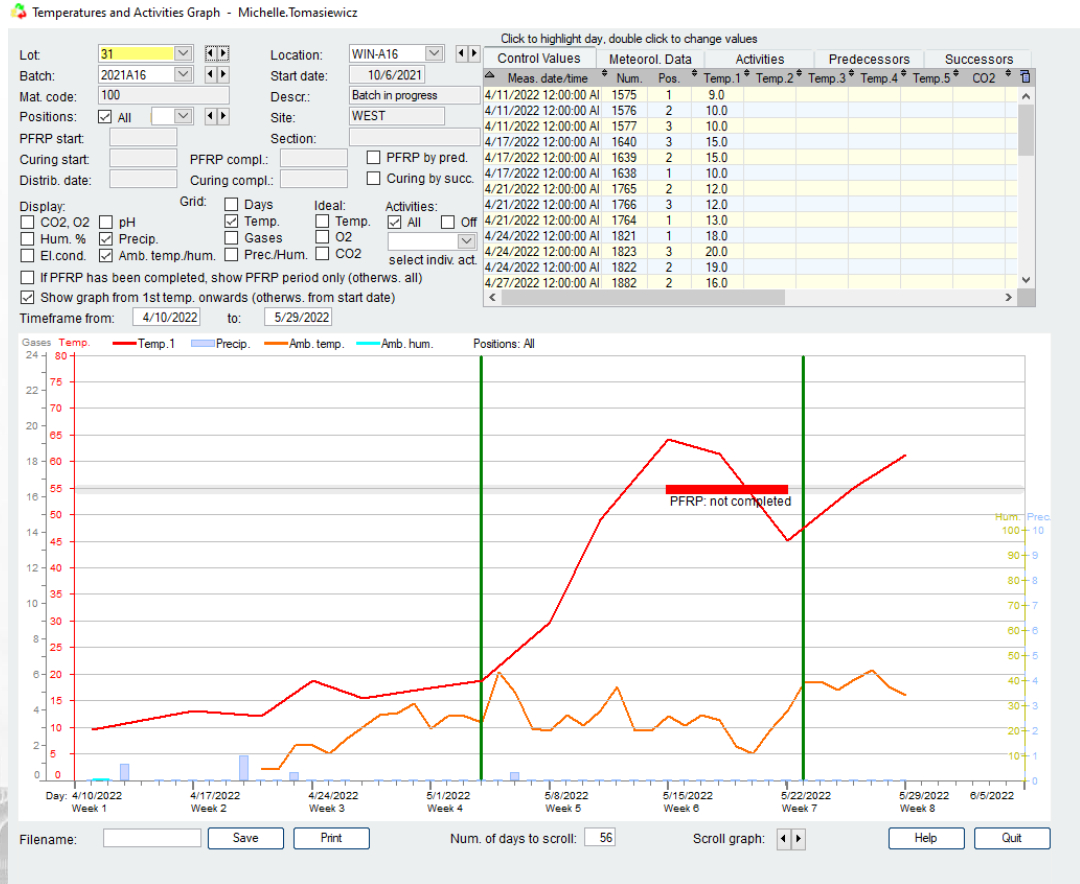


Seasonal Trends



Compost Depot Management Software

- Centralized software system that captures compost depot processing data
- Decision making tool for operations
- Meets regulatory tracking and record keeping requirements



Compost Depots



15,500 tonnes of organic waste dropped off in 2021

Compost Depots



Dig-Your-Own Program offered free finished compost to over 11,200 residents in 2021

Compost Sampling

- Compost Quality Alliance
- CCME Compost Quality Guidelines
- 3rd Party Laboratory Sampling
- Windrow Temperature Monitoring
- Frequent Windrow Turning
- Windrow Watering



A Short History

1999/2000

Public drop-off began at the Landfill

2006

East Compost Depot on McOrmond Rd opened

2008

Landfill stopped accepting public drop-off organics material

2015

East Compost Depot opened on Highway 5

2002

Public drop-off began at the east location

2007

Public drop-off and material processing facility opened on Highway 7 & 11th St

2014

Operations Vacated McOrmond Rd location due to residential development

2017

Expanded the West Compost Depot footprint

Contamination

- Prepare and implement a plan for odor management and control
- Nuisance management and controls for dust, litter, noise and animals
- Strong education program



Lessons Learned

Importance of Water

- **Water is a vital input for a successful composting operation**
- **Optimal moisture content of 40% to 60% by weight**
- **Saskatchewan climate introduces challenges**

Lessons Learned

Set Yourself Up For Success

- Traffic flow
- Water source
- Expansion options
- Education & implementation plan
- Compost Council of Canada for resources
- Work with a mentor! Lots of resources available, no need to start alone



City-Wide Mandatory Organics Program



Food + Yard Waste

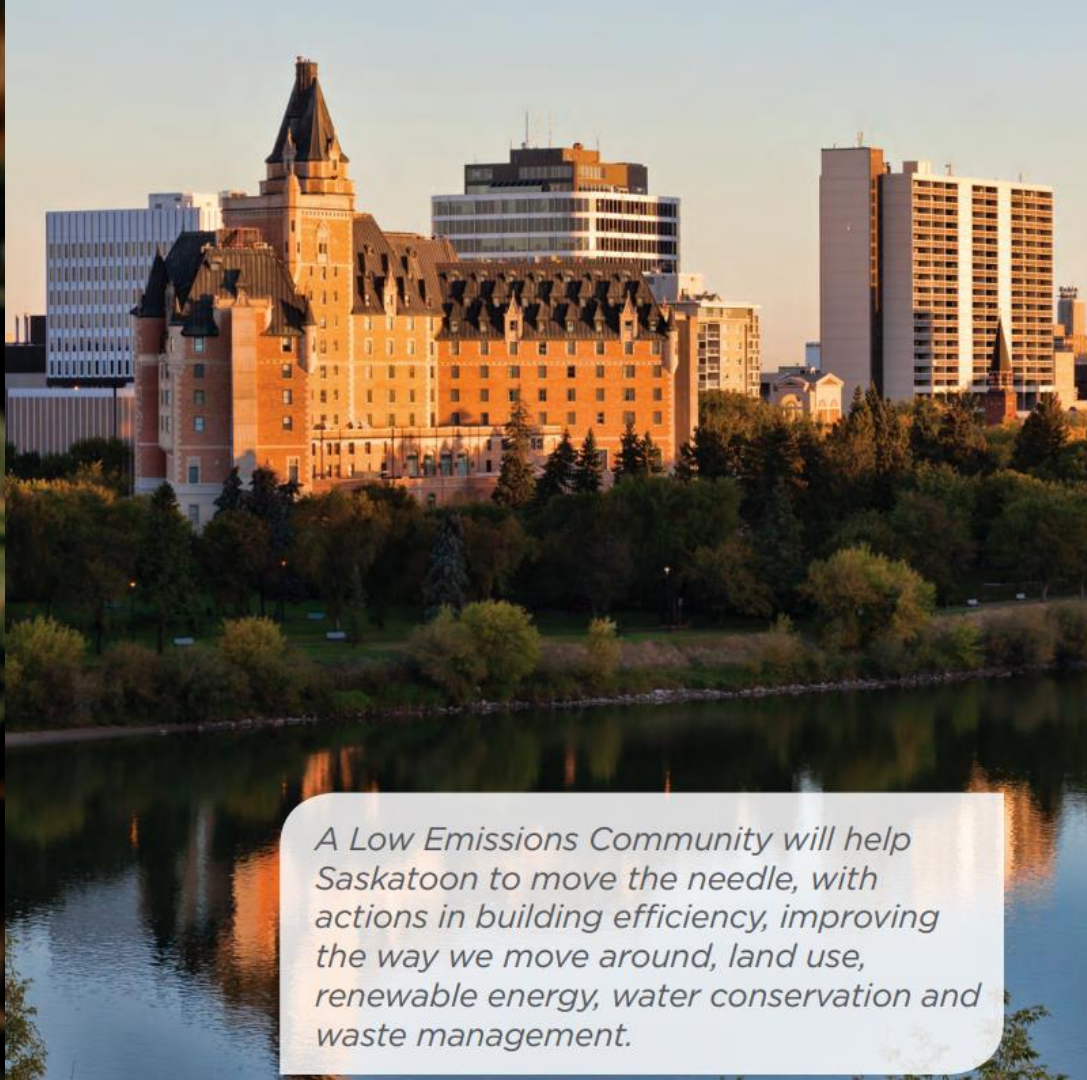


Cart Sizes



Frequency

- Administration is preparing for program implementation in spring 2023
- A 360 L (96 gal) cart size best fits the needs of the Curbside Organics Program
- Bi-weekly collections for curbside organics and curbside waste
- Green Prairie Environmental will process organics using in-vessel technology



A Low Emissions Community will help Saskatoon to move the needle, with actions in building efficiency, improving the way we move around, land use, renewable energy, water conservation and waste management.