

## Waste Diverted From the Landfill

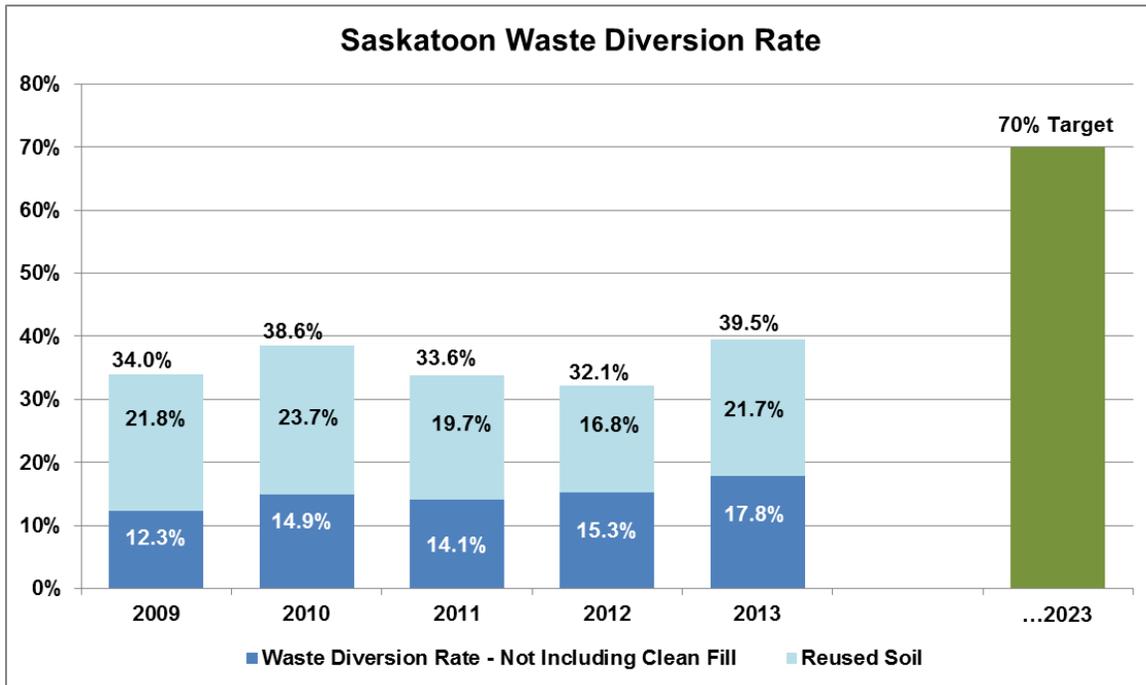
**Proposed 10-Year Target:** Divert 70% of waste from the Saskatoon landfill

**Description:** The target will measure our success in environmental stewardship through increasing the percentage of waste that is recycled, reused, or composted.

$$\text{Waste Diversion Rate} = \frac{\text{Total waste diverted}}{\text{Total waste (diverted + landfill)}}$$

### How are we doing?

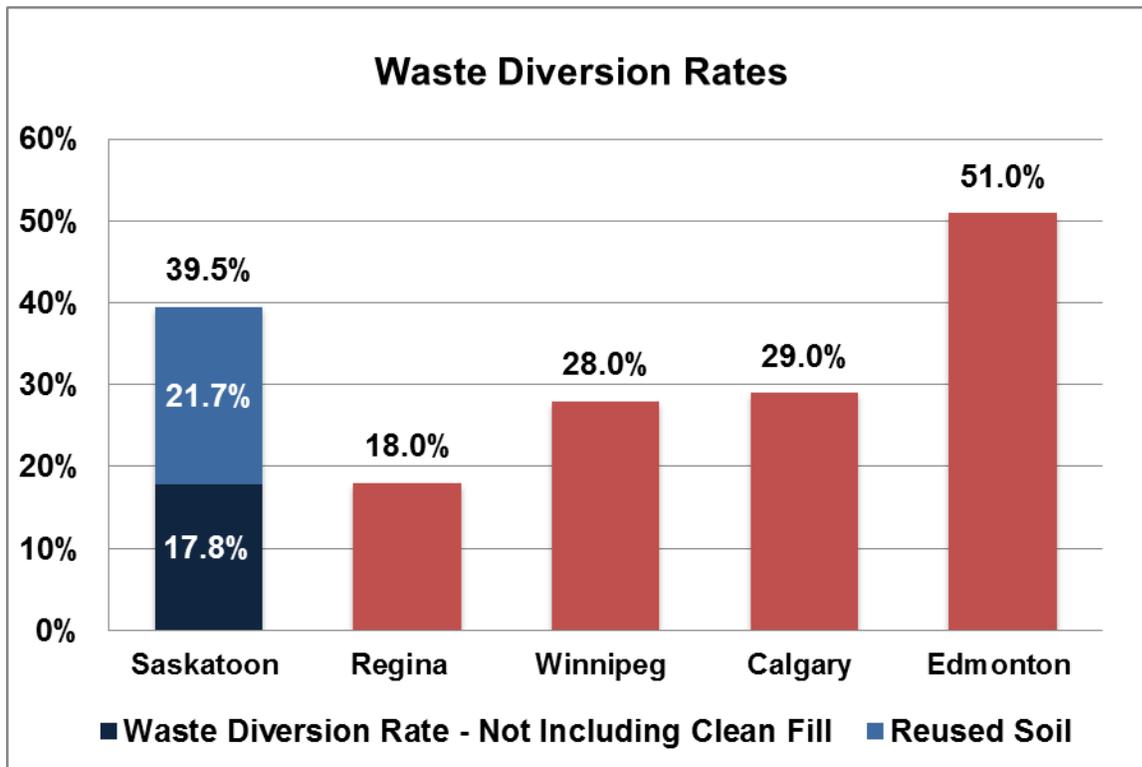
In 2013, 17.8% of waste not including the City’s waste soil and 39.5% including soil went somewhere other than the Saskatoon landfill. The total waste diversion rates for 2009 to 2013 in the graph below include soil from City construction and other City projects that went to the landfill but was subsequently reused. With the new *Soils Handling Strategy*, City soil will not go into the waste system and will not be included in the waste diversion numbers. This lowers future expected waste diversion rates.



Source: City of Saskatoon

## How are other cities doing?

Saskatoon currently diverts more of its waste than most other Western Canadian cities when the City's waste soil is included. If the City's waste soil is not included, Saskatoon diverts the same percentage of waste as Regina and less than Winnipeg, Calgary or Edmonton. Waste soil is not included in other cities' diversion rates. Other cities have set waste diversion targets ranging from 50% to 90% with 2020 being a common target date.



Sources: City of Saskatoon (2013), City of Regina (2014), City of Calgary (2012), City of Edmonton (2013) and City of Winnipeg (2014)

Notes: Not all cities report annually. Data is based on most recent data available.

## What do we need to do to achieve this target?

In 2023, approximately 200,300 tonnes of waste are expected. To reduce the amount going to the landfill to 60,000, the following is required:

- Current programs including multi-unit recycling will divert 66,300 tonnes or approximately 33% of waste by 2023.
- Proposed new programs will divert an additional 52,000 tonnes or 26% of total waste when fully implemented.
- Additional programs need to be identified to divert another 22,000 tonnes or 11% of waste to reach 70%.

<b>Current Programs</b>	<b>Tonnes Diverted in 2013</b>	<b>Potential Tonnes Diverted by 2023</b>
Curbside Recycling (single family)	8,034	16,800
Multi-Unit Recycling	-	3,500
Compost Depot	21,088	20,000
Green Cart (Leaves & Grass) Program	832	3,500
Recycling Depots	3,773	2,000
Household Hazardous Waste Days	52	300
Soil Re-Use	42,189	20,000
Outgoing Recyclable Material from Landfill	800	
Public Space Recycling	14	200
<b>Total</b>	<b>76,782</b>	<b>66,300</b>

<b>Proposed New Programs</b>	<b>Potential Tonnes Diverted by 2023</b>
Recovery Park	22,000
Food Waste Program	12,000
Industrial, Commercial and Institutional Recycling	8,500
Industrial, Commercial and Institutional Food Waste	9,500
New Programs to be Determined	22,000
<b>Total</b>	<b>74,000</b>

### **What are the benefits of achieving the target?**

Waste diversion provides economic, environmental, and social benefits:

- Significant future costs to build a new landfill will be postponed or avoided. If waste is not diverted, a new landfill will be necessary within 50 years at an estimated cost of \$180 million.
- Landfill operating costs and the market value for land are \$90 per cubic meter or approximately \$4 million per year (2009 valuation).
- Recycling conserves raw materials.
- Recycling saves energy.
- A tonne of recycled aluminum cans saves 6.5 tonnes of greenhouse gas (CO<sub>2</sub>e).
- A tonne of recycled newspapers saves 2.8 tonnes of CO<sub>2</sub>e.
- A tonne of recycled plastic saves 2.3 to 3.6 tonnes of CO<sub>2</sub>e.
- The City's current waste diversion programs reduce CO<sub>2</sub>e by approximately 97,000 tonnes annually (equivalent to removing 19,000 vehicles from our roadways each year).
- Waste diversion programs create local jobs and provide skills and learning opportunities for more than 400 adults with intellectual disabilities.

### **What are the risks?**

- Achieving the target will require changes in what people send to the landfill. Changing attitudes and habits towards waste disposal may take more time.