



Solid Waste Management Services

Service Level Review

Public Works & Infrastructure Committee Presentation
June 17, 2015



Overview

- Recommended Service Levels by Program
 - Program Map
 - Service Levels and Service Performance
 - Service Challenges and Opportunities
 - Strategies to Address Issues/Opportunities
 - Priority Actions to Achieve Results

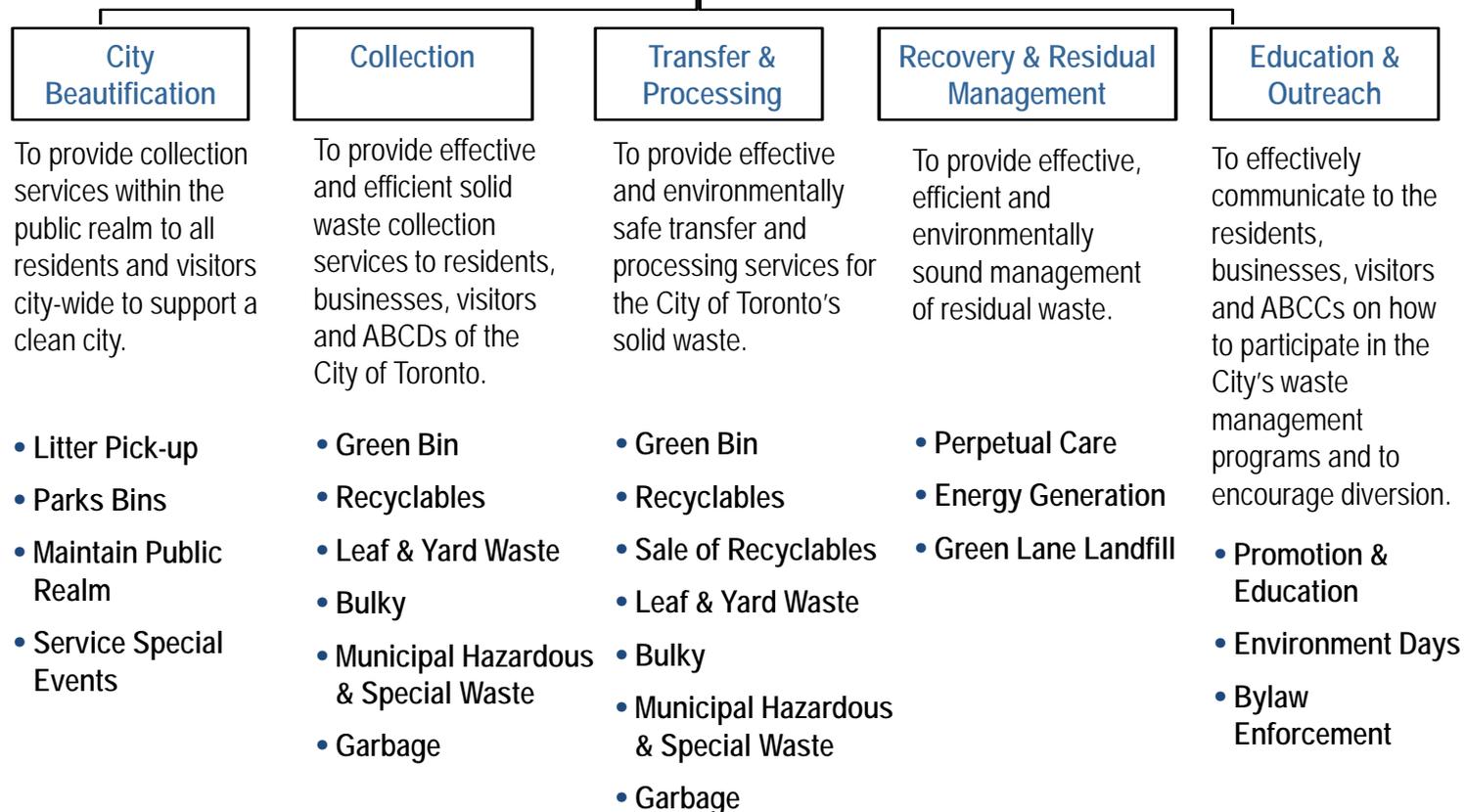


Solid Waste Management Services

2015 Program Map

Solid Waste Management Services

To be a leader in providing innovative waste management services to residents, businesses and visitors within the City of Toronto in a safe, efficient, effective and courteous manner, creating environmental sustainability, promoting diversion and maintaining a clean city.



Service Levels – 2012 - 2015

Service Level Description		2012	2013	2014	2015
City Beautification					
Litter Pick-up and Parks and Litter Bin Collection of Recycling and Garbage	Approved	1x - 7x/wk	1x - 7x/wk	1x - 7x/wk	1x - 7x/wk
	Actual	1x - 7x/wk	1x - 7x/wk	1x - 7x/wk	n.a.
Special Events Collection of Recycling, Garbage, and Green Bin	Approved	On Demand	On Demand	On Demand	On Demand
	Actual	On Demand	On Demand	On Demand	n.a.
Collection					
Garbage and Recycling Single Family Residential	Approved	1x /2wks	1x /2wks	1x /2wks	1x /2wks
	Actual	1x /2wks	1x /2wks	1x /2wks	n.a.
Garbage and Recycling Multi-Residential	Approved	1x - 2x /wk			
	Actual	1x - 2x /wk	1x - 2x /wk	1x - 2x /wk	n.a.
Green Bin Single Family and Multi-Residential	Approved	1x /wk	1x /wk	1x /wk	1x /wk
	Actual	1x /wk	1x /wk	1x /wk	n.a.
Durable Goods Single Family and Multi-Residential	Approved	1x /2wks	1x /2wks	1x /2wks	1x /2wks
	Actual	1x /2wks	1x /2wks	1x /2wks	n.a.
Municipal Hazardous & Special Waste Single Family and Multi Residential (Toxic Taxi)	Approved	On Demand	On Demand	On Demand	On Demand
	Actual	On Demand	On Demand	On Demand	n.a.
Garbage & Recycling Commercial	Approved	1x - 2x /wk			
	Actual	1x - 2x /wk	1x - 2x /wk	1x - 2x /wk	n.a.
Green Bin Commercial	Approved	1x - 6x /wk			
	Actual	1x - 6x /wk	1x - 6x /wk	1x - 6x /wk	n.a.



Service Levels – 2012 - 2015

Service Levels					
Service Level Description		2012	2013	2014	2015
Transfer and Processing					
Residual Waste, Organics (Source Separated Organics), Durable Goods, Leaf & Yard Waste, Municipal Hazardous & Special Waste, and Resale of Recyclables	Approved	In compliance with Certificate of Approval			
	Actual	In compliance with Certificate of Approval	In compliance with Certificate of Approval	In compliance with Certificate of Approval	n.a.
Recovery & Residual Management					
Green Lane Landfill Site, Perpetual Care, and Energy Generation	Approved	In compliance with Certificate of Approval			
	Actual	In compliance with Certificate of Approval	In compliance with Certificate of Approval	In compliance with Certificate of Approval	n.a.

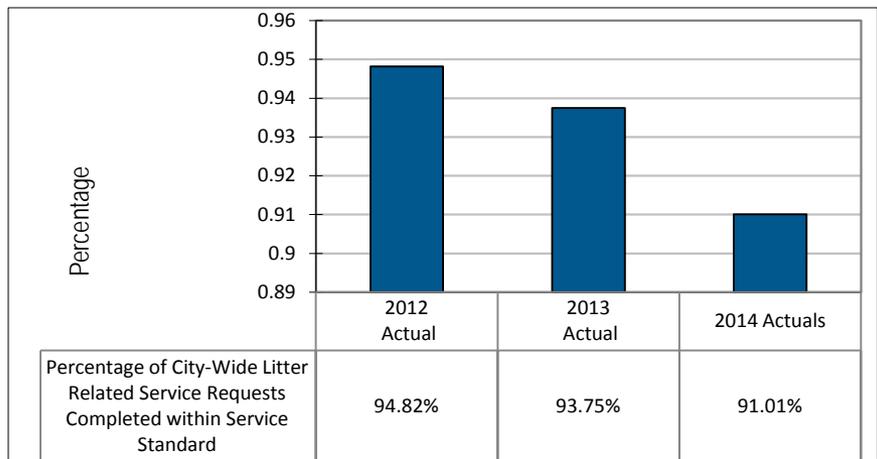


Service Levels – 2012 - 2015

Service Levels					
Service Level Description		2012	2013	2014	2015
Education & Outreach					
Promotion & Education - Calendars	Approved	Issue 1M calendars annually			
	Actual	Issue 1M calendars annually	Issue 1M calendars annually	Issue 1M calendars annually	n.a.
Environment Days	Approved	On Demand (up to 45 events annually)			
	Actual	On Demand (up to 45 events annually)	On Demand (up to 45 events annually)	On Demand (up to 45 events annually)	n.a.
By-law Enforcement	Approved	Enforcement as required	Enforcement as required	Enforcement as required	Enforcement as required
	Actual	Enforcement as required	Enforcement as required	Enforcement as required	n.a.



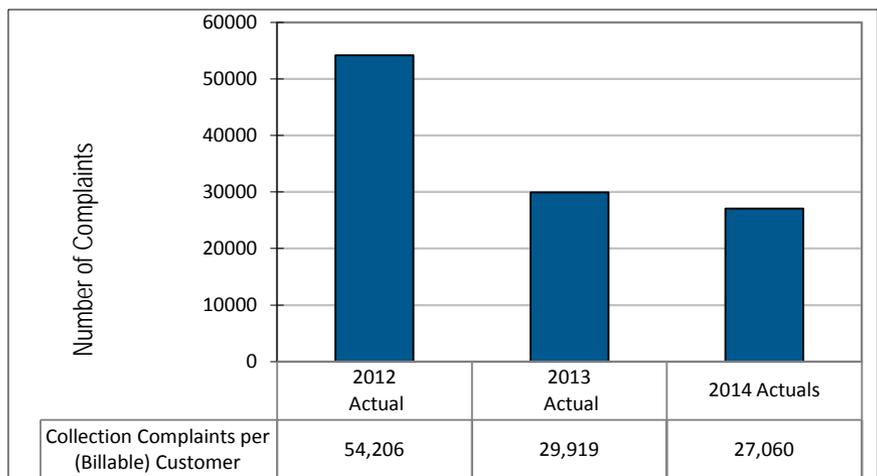
Performance Measures



Litter Related Service Requests Completed within Service Standard

Trend:

- Downward trend since 2012
- Challenges in 2014 due to staffing shortages
- Increase in number of litter bins



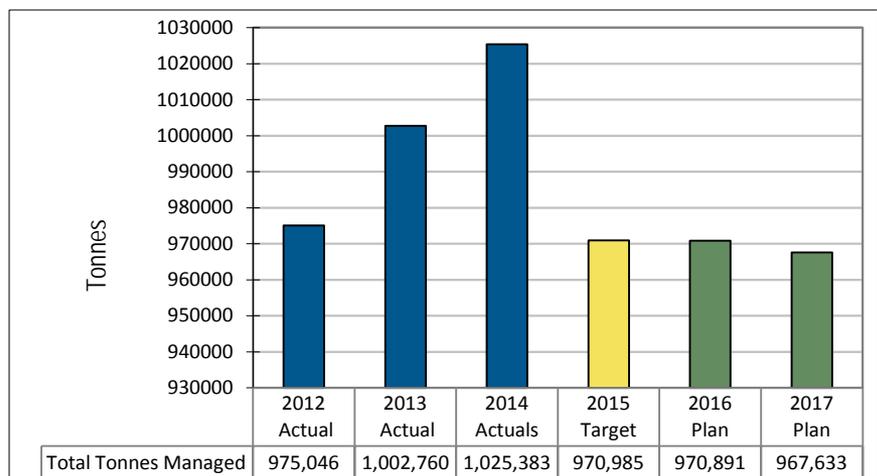
Collection Complaints per Customer

Trend:

- Collection complaints per customer continues to decrease year over year



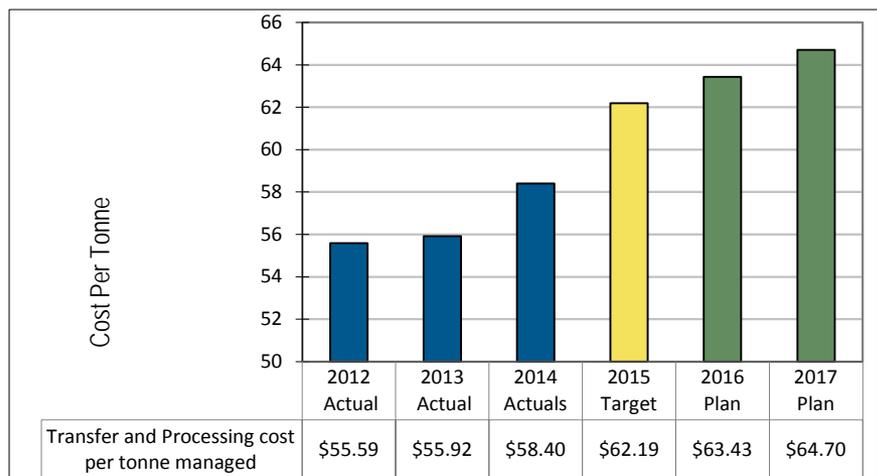
Performance Measures



Total Tonnes Managed

Trend:

- 2012 – 2013 increase in Toronto waste (economic growth)
- 2014 higher tonnage due to 2013 Ice Storm clean-up
- 2015 – 2017 remains consistent



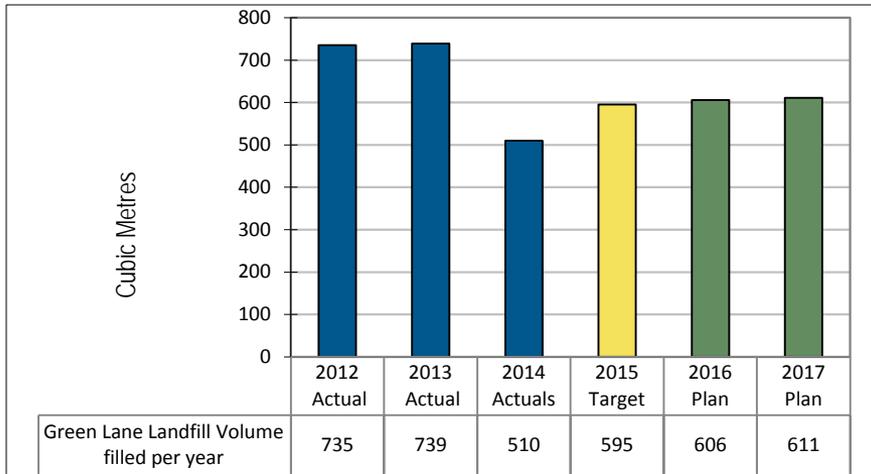
Transfer and Processing Cost Per Tonne

Trend:

- Trending up from 2015 through 2017 due to higher processing costs for Single Stream Recycling



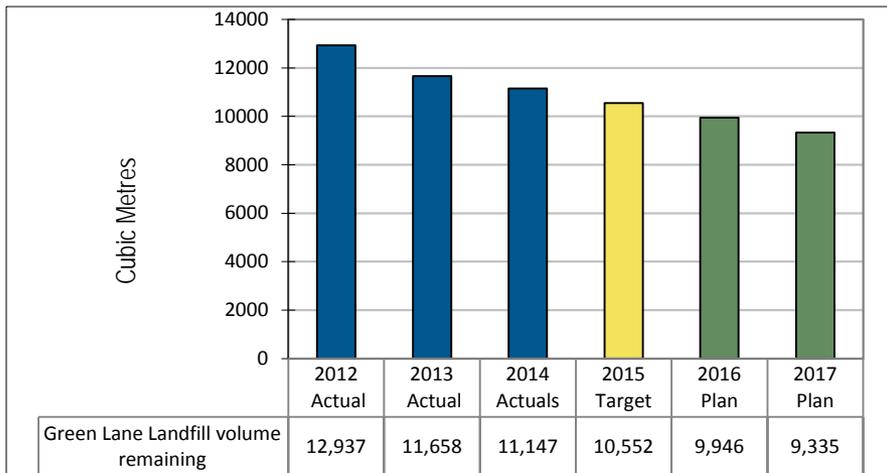
Performance Measures



Green Lane Landfill Volume Utilized

Trend:

- 100,000 tonne decrease from 2014 to 2017 versus previous years due to lower private tonnage at Green Lane
- Tonnage decrease in 2014 due to redirection of some Toronto waste to alternate landfills
- Forecast slight future upward waste trend due to Toronto waste increase

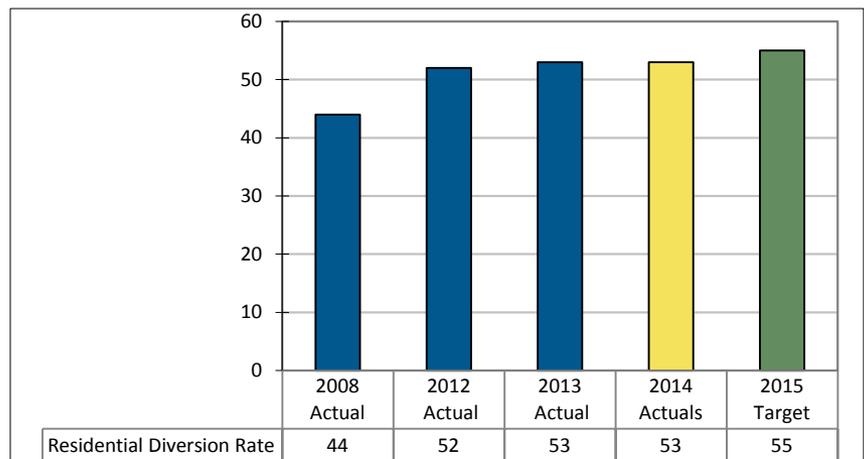


Green Lane Landfill Volume Remaining

Trend:

- Steadily decreasing remaining volume according to rate of annual waste fill

Performance Measures



Residential Diversion Rate

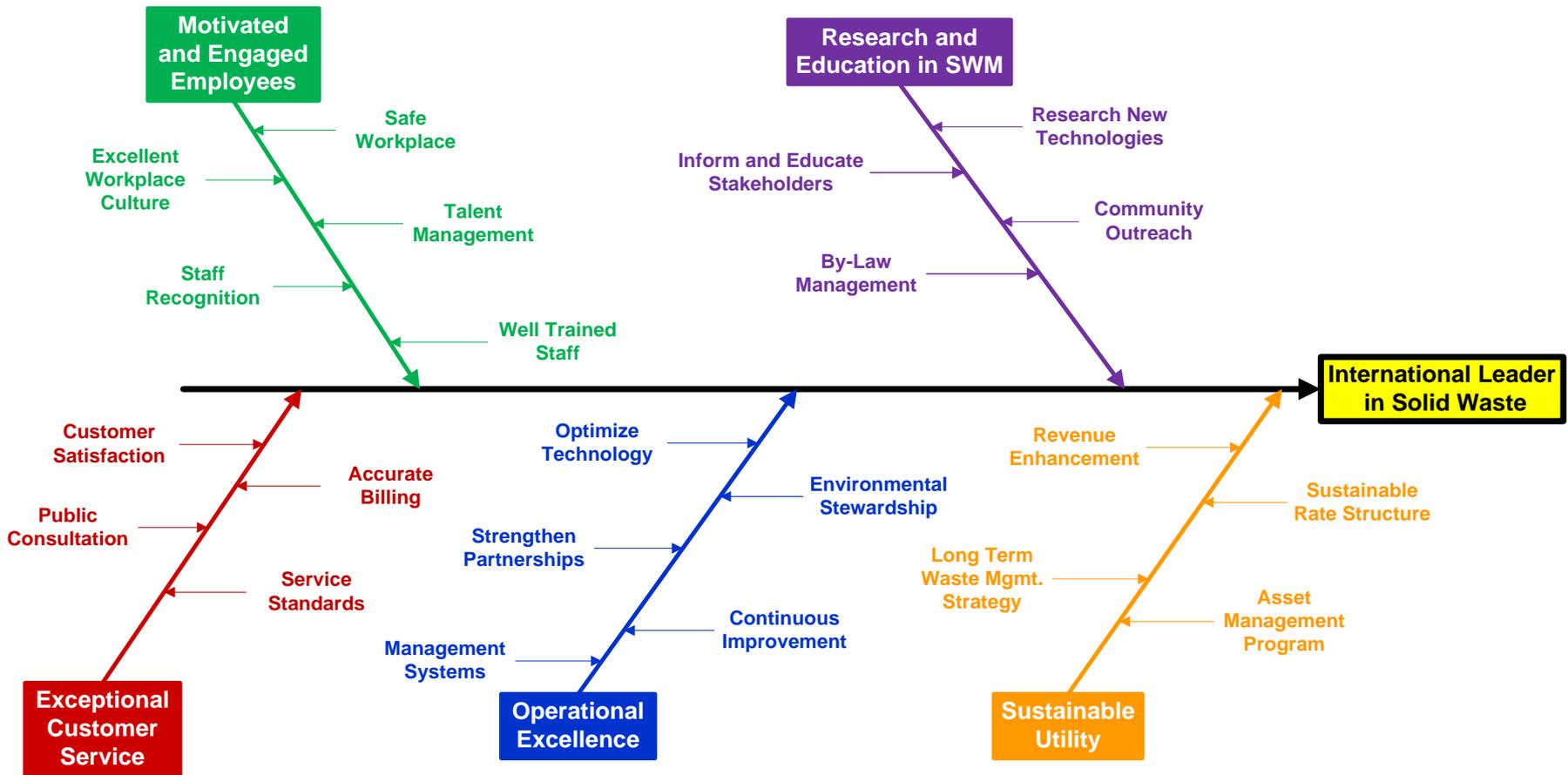
Trend:

- Overall residential diversion - increase from 53% to 55% in 2015
- Single Family residential increase from 66% to 68% in 2015
- Multi-Residential – increase from 26% to 29% in 2015

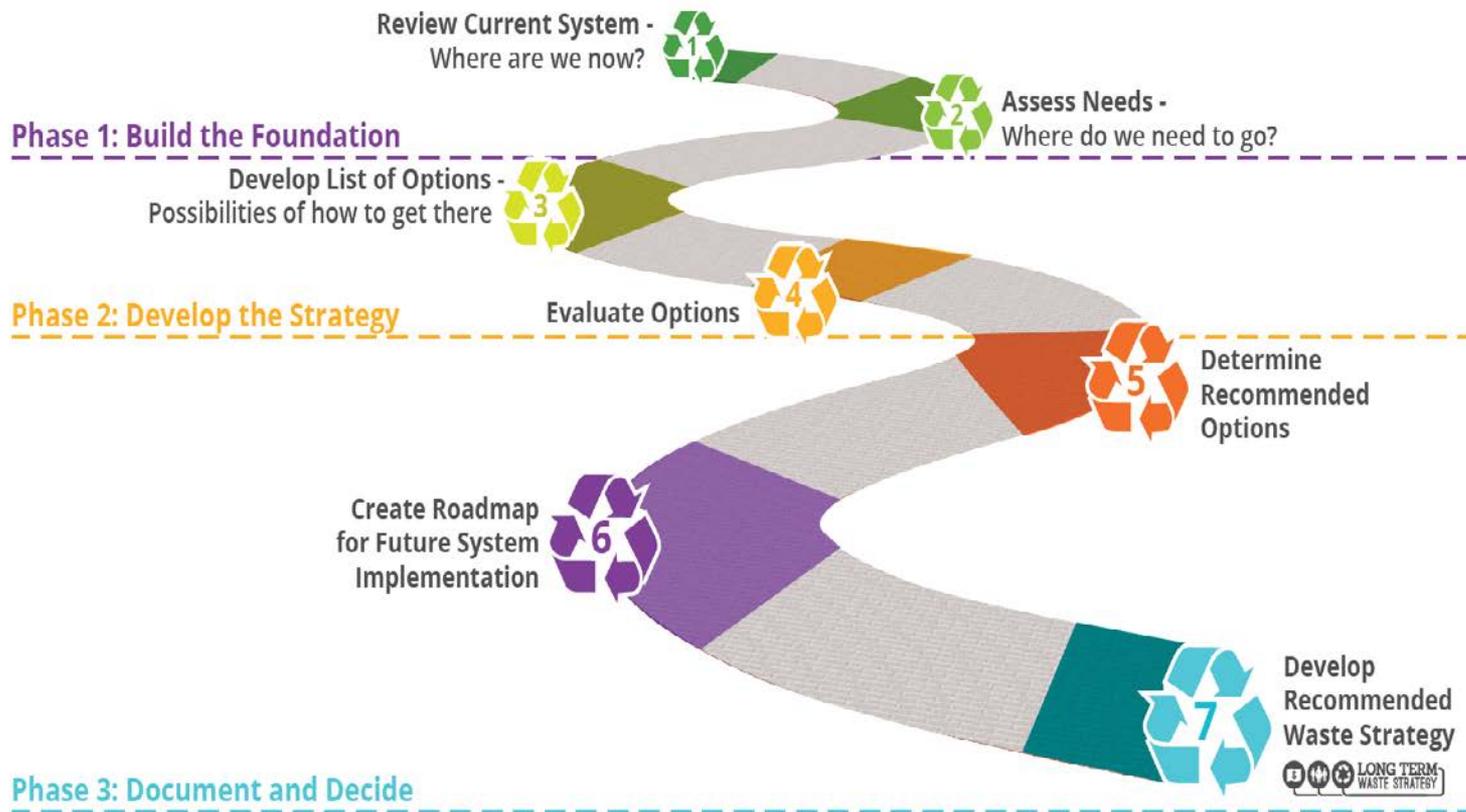


SWMS Strategic Framework

2013 - 2018



Strategies to Address Challenges & Opportunities: Long Term Waste Management Strategy



Strategies to Address Challenges & Opportunities: Long Term Waste Management Strategy – Timelines & Reporting

Phase	Step	Reporting
Phase 1: Build the Foundation	 Review Current System (Completed)	Completed
	 Assess Needs (Completed)	May 2015 PWIC - update, Phase 2 consultation details
Phase 2: Develop the Strategy	 Develop List of Options (June – August 2015)	Public Consultation Sessions in June, preparation of vision statement, guiding principles, final evaluation criteria and options
	 Evaluate Options (Oct – Nov 2015)	Sept 2015 PWIC - approval of vision statement, guiding principles, evaluation criteria and options
Phase 3: Document & Decide	 Determine Recommended Options (Nov 2015 – Jan 2016)	Jan 2016 PWIC - draft Waste Strategy, Phase 3 consultation details
	 Create Implementation Roadmap (Feb – March 2016)	Public Consultation Sessions in Feb/Mar on draft Waste Strategy and Implementation Roadmap
	 Finalize Recommended Waste Strategy (Spring 2016)	Spring 2016 PWIC – Present Final Waste Strategy



Priority Actions to Achieve Results

- The Long Term Waste Management Strategy (Waste Strategy) will provide a framework for Solid Waste Management program and policy decisions for the next 30 – 50 years
- It will consider all possible options to reduce, reuse and recycle our waste prior to disposal
- The outcome of the final Waste Strategy will provide new priority actions to achieve results
- Recommended investments as outcomes of the Waste Strategy will be directly linked to Service Levels, Performance Targets, and a new Diversion Strategy





City Beautification



City Beautification

Challenges & Opportunities

- Challenges
 - ✓ Litter composition is changing. Increased prevalence of small litter vs large litter
 - ✓ Maintaining a full resource complement and meeting demands of additional bins
 - ✓ Fluctuating tourism and visitors to the City
- Opportunities
 - ✓ Transition to mechanical litter pickup vs manual bag and broom methods
 - ✓ Replacement of street litter bins as required
 - ✓ Increasing the number of street litter bins and collection frequency where required to reduce litter



Strategies to Address Challenges & Opportunities: Priority Actions Taken or Underway

Strategic Action/Service Objective:	
Actions	Results / Progress
Ongoing replacement of street litter and recycling bins with street furniture bins	Currently there are 8,272 Astral litter bins installed and there will be approximately 9,072 bins by the end of 2015. It is anticipated that there will be an additional 750 Astral bins installed in 2016
Continuation of multi-divisional efforts that focus on City-wide litter reduction	In 2015 hired (8) additional permanent positions and 2016 (3) more permanent staff
Continuation of waste and litter audits	Studies in progress to identify composition of small litter collected manually
Adjusting Complement to meet needs	In 2015 hired (8) additional permanent positions and 2016 (3) more permanent staff





Collection



Collection

Service Challenges & Opportunities

- Challenges

- ✓ Vehicle State of Good Repair
- ✓ Enforcement of incorrect set out
- ✓ Increased bin maintenance and trend towards downsizing

- Opportunities

- ✓ New Automated Green Bin Organics Bins
- ✓ Accelerated vehicle replacement
- ✓ Annual Tailgate Safety Programs
- ✓ Collection efficiencies



Strategies to Address Challenges & Opportunities: Priority Actions Taken or Underway

Strategic Action/Service Objective:	
Actions	Results / Progress
Roll-out of the Next Generation Green Bin for curbside customers	May 2015, City Council approved the contract award to Rehrig Pacific Company. Green bin implementation will commence in early 2016
Increase waste diversion in Toronto Community Housing Corporation buildings	The Toronto Community Housing Corporation education program commenced in early 2015 and will continue through to 2017.
Implementation of Waste Diversion Rate Waiver program for Charities	Council approved new rate structure in 2015. Fees implemented April 1, 2015. Monitoring and compliance to begin Summer 2015.
Implementation of new Front-End Contract	Contract awarded for city-wide front-end collection to Green For Life May 2015. Contract commences July 1, 2016





Transfer & Processing



Transfer & Processing

Service Challenges & Opportunities

- Challenges

- ✓ Increased processing costs
- ✓ Fluctuating recyclable revenues and unstable markets
- ✓ Asian Long Horned Beetle quarantine in District 1
- ✓ Increased small paid customer traffic at Transfer Stations (Delaying Collections)

- Opportunities

- ✓ Extended Hours at Bermondsey Transfer Station
- ✓ Relocation of Commissioners Transfer Station to a new facility
- ✓ Transfer Station Efficiencies (Excellence Canada)
- ✓ Weigh Scale Software Enhancements



Strategies to Address Challenges & Opportunities: Priority Actions Taken or Underway

Strategic Action/Service Objective:	
Actions	Results / Progress
Operation of the Disco Road Green Bin processing facility	Green Bin Material Processed in 2014: 67,432 tonnes Nutrient Rich Digester Solids Produced: 11,970 tonnes Biogas Generated at approx. 70% Methane: 6,578,129 m ³
Weigh Scale Software Enhancements	Implement new weigh scale software and add-ons to enhance data collection at scales, reduce weigh in and out times, and enhance reporting capabilities
Complete Transfer Station Efficiencies Study towards improved customer service, operating efficiencies, and established key performance indicators	Excellence Canada business process improvement framework selected. Next step is training assigned staff on Excellence Canada.
Sale of Recyclables Revenue	Analyzing ways to better forecast and stabilize recyclables revenues.
Develop an Asset Management Plan	Asset management framework under development. Plans to be developed for all divisional assets based on framework.





Recovery & Residual Management



Recovery & Residual Management Service Challenges & Opportunities

■ Challenges

- ✓ Declining Air Space Volume at Green Lane Landfill
- ✓ Commissioning of Biogas facility
- ✓ Perpetual Care of former landfill sites
- ✓ Increasing waste compaction rate at Green Lane Landfill

■ Opportunities

- ✓ Waste Strategy
- ✓ Looking at Renewable Natural Gas opportunities
- ✓ GPS on landfill heavy equipment



Strategies to Address Challenges & Opportunities: Priority Actions Taken or Underway

Strategic Action/Service Objective:	
Actions	Results / Progress
Waste Strategy	Documentation of Current Waste Profile complete. Conducted 10 Stakeholder Advisory Group Meetings and 5 Key Stakeholder Meetings. Public consultation on draft vision statement, draft evaluation criteria and preliminary options beginning June 9 to July 24.
Biogas Utilization	Secure Renewable Energy Application for Disco Road Biogas Utilization facility and issue RFP for facility construction





Education & Outreach



Education & Outreach

Service Challenges & Opportunities

■ Challenges

- ✓ Reaching Multi-Family residential audience through communications and education
- ✓ Single-Family set-out compliance
- ✓ City can not require diversion from private sector generators, including multi-residential buildings not utilizing City services

■ Opportunities

- ✓ Charities Rate Waiver Program
- ✓ Continuation of Toronto Community Housing Corporation outreach
- ✓ Waste Audits to identify materials not being diverted
- ✓ Waste Strategy, including new education, outreach and enforcement activities



Strategies to Address Challenges & Opportunities: Priority Actions Taken or Underway

Strategic Action/Service Objective:	
Actions	Results / Progress
Ongoing outreach and selection of multi-residential waste diversion ambassadors to promote the 3Rs	Volunteer recruitment information included in 2015 Apartment Recycling Calendar.
Campaigns to promote Household Hazardous Waste and new plastics recycling	Print, radio and online advertisements to educate on proper disposal of Household Hazardous Waste in spring 2015. Addition of soft plastic films to recycling program on June 1. Promotion and education of new added materials through print, online, radio and direct mail piece.
Annual multi-residential workshop to encourage diversion by targeting superintendents, property managers and owners	Annual work shop for multi-residential buildings held in October 2014. Planning underway for 2015 workshop in fall.
Continue waste audits to comprehend waste composition and participation behavior	Completion of seasonal multi-residential audits in summer and planning single-family audits in fall.
Develop a Waste App	Engaged secondary students through Waste Strategy to develop mobile waste application and conducted live demonstration in May





Thank You

