



Ontario Recycler Workshop

June 4, 2015

ORW begins at 9:30 a.m. ET



Ontario Recycler Workshop

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Mike Birett
CIF

Intro & Welcome

- Welcome & thank you for joining us at Spring 2015 ORW
- ~160+ people registered to participate
 - Online & in person
- Thanks to attendees at
 - P&E campaign working session
 - Depot Operations Roundtable
 - Simcoe County Landfill Tour
 - special thanks to Simcoe County Staff

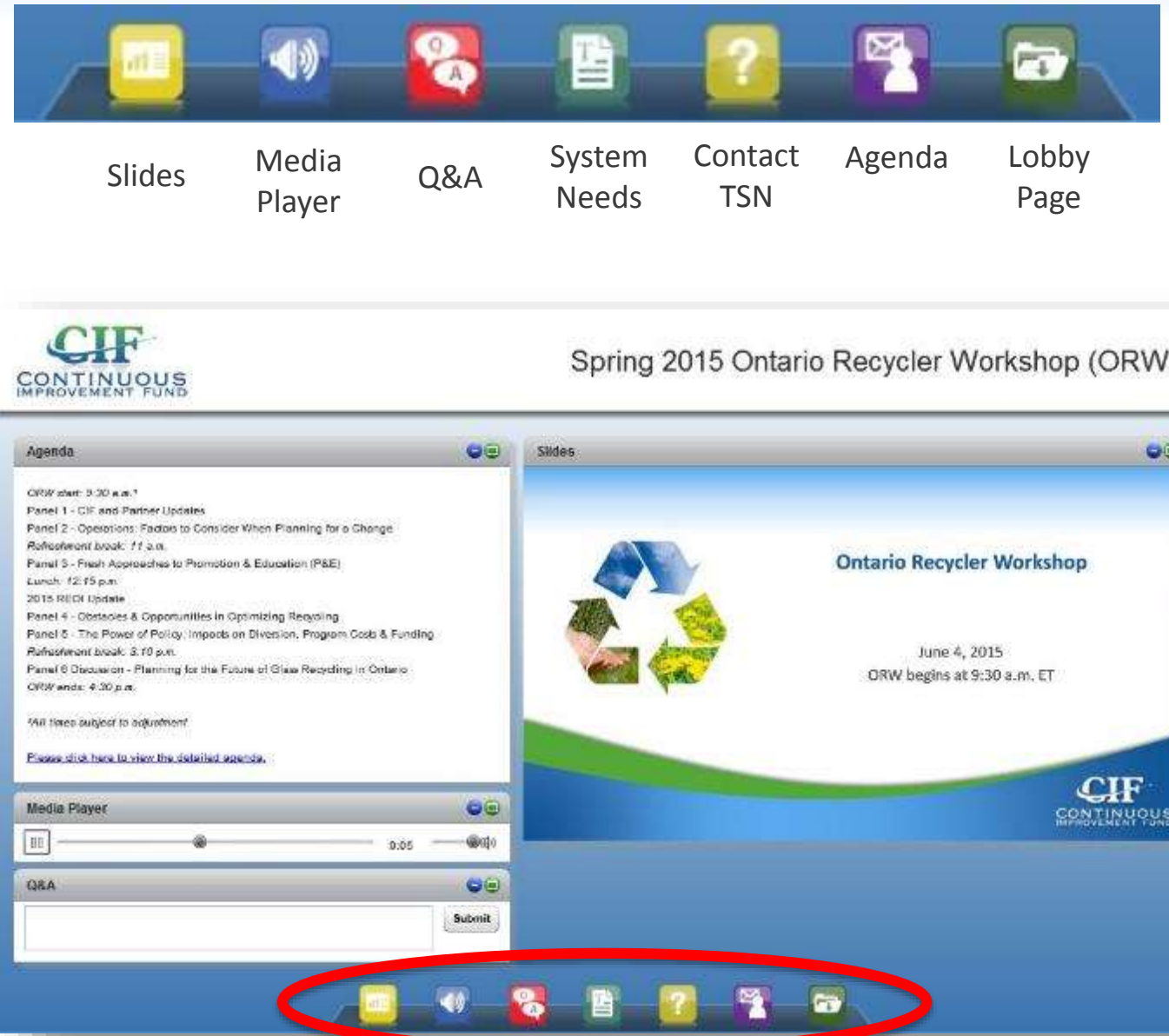


©Miles Away Photography

Photo source: fiveprime.org

Housekeeping - Webcast

- Full day – to ~4:30 p.m.
- Updated webcast console
 - Components can be moved, opened/closed by toggling widgets
 - Listen in on mobile device



Housekeeping Items: In-house

- Please check in at registration desk
 - Confirm attendance
 - Datacall training credit for municipal staff who attend
 - Confirm interest to stay on CIF mailing list
 - Connections, REOI, tenders etc.
 - Check-off at registration desk or go online

A screenshot of the CIF Mailing List Consent Form. The form is titled "Mailing List" and includes the text "Subscribe to receive electronic publications from the CIF:". Below this is a green button with a red envelope icon and the text "CIF Mailing List Consent Form". A section titled "Want to unsubscribe?" contains an "Email address:" label and a text input field. At the bottom of this section is a grey button labeled "Unsubscribe". The breadcrumb trail at the top reads "Home > News & Views > Connections e-Newsletter".

Snapshot...Today's Program

Morning Session

- CIF & Partner Updates
- Operations: Factors to Consider When Planning for a Change
- *Morning Break*
- Fresh Approaches to Promotion & Education (P&E)
- *Lunch*

Afternoon Session

- Obstacles & Opportunities in Optimizing Recycling
- The Power of Policy: Impacts on Diversion, Program Costs & Funding
- *Afternoon Break*
- Discussion - Planning for the Future of Glass Recycling in Ontario
- *Summary & Concluding Remarks*

A Sincere Thank You to Today's Speakers!

- Alex Piggott, City of Woodstock
- Barbara McConnell, McConnell Weaver Strategic Communication
- Brian Zeiler-Kilgman, National Brewers Association
- Carly Burt, Niagara Region
- Claudia Marsales, City of Markham
- Dan Orr, Quinte Waste Solutions
- Dave Douglas, VisionQuest Environmental Strategies Corp.
- David Yousif, City of Hamilton
- Heather Connell, City of Guelph
- Jeff Fletcher, The Blue Mountains
- John Giles, City of Kingston
- Joseph Hall, Redi-Recycling
- Joseph LaPierre, NexCycle
- Leigh-Anne Marquis, Peel Region
- Logan Belanger, City of Temiskaming Shores
- Mike Ursu, Region of Waterloo
- Monika Turner, AMO
- Peter Kalogerakos, Region of Peel
- Sherry Arcaro, SO
- Will Mueller, WDO

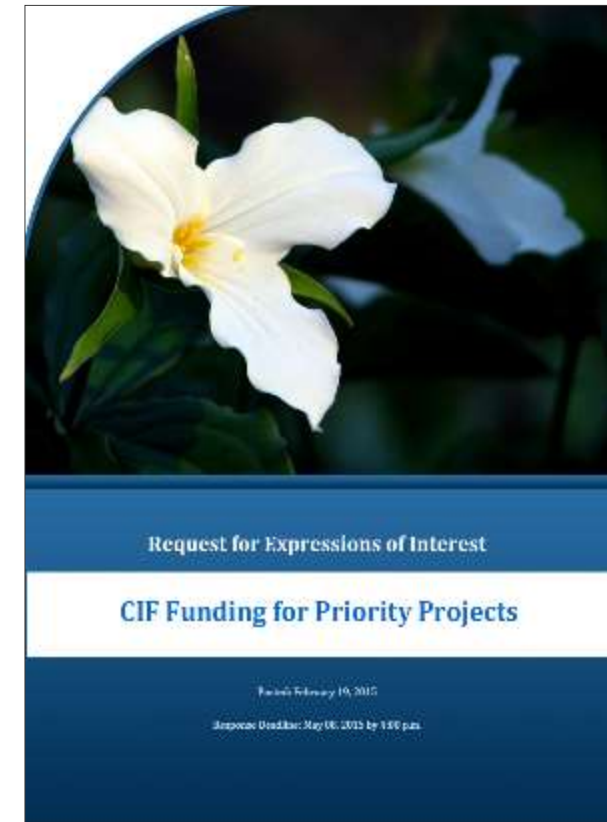
CIF Update

Spring 2015 ORW

Mike Birett
Managing Director, CIF

Top of Mind Issues

- Implications of latest Provincial EPR discussions
- Impact of 2015 REOI on CIF
- Glass market
- Contracts

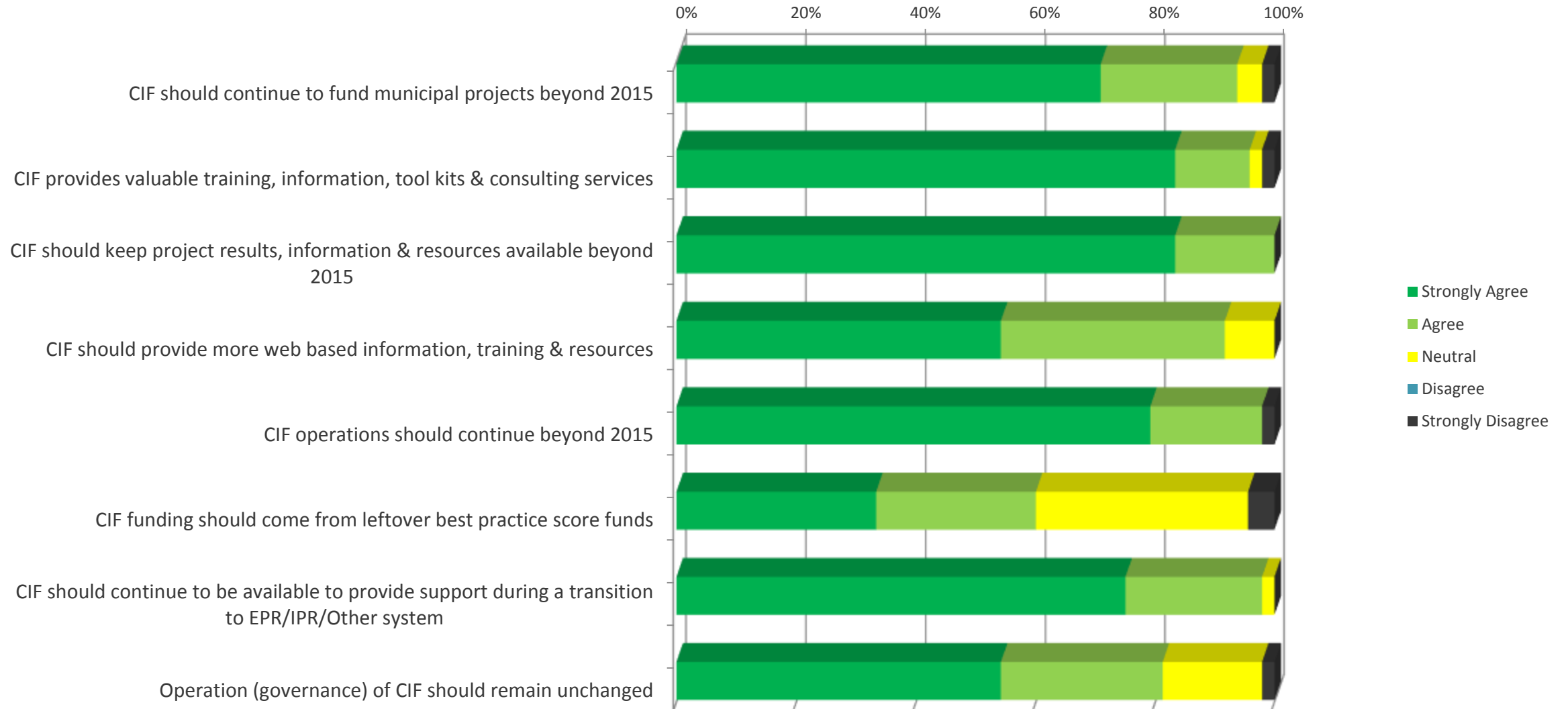


2015 Spring Consultation Was a Success

- Six sessions: 130 attendees
 - London, Peel, Smiths Falls, North Bay, Dryden, Oliver Paipoonge
- Individual meetings held with 38 other municipalities
- Municipalities were polled regarding:
 - Value of CIF
 - Interest in extending CIF
 - Use of remaining funds
- Surveys received from 46 respondents



Outreach Survey Results



What We Heard

- Municipalities remain happy with current CIF focus & want the fund to continue
- People see CIF as a primary source of technical & policy support & information
- 2016 budget priorities should not change dramatically; but with
- Preference to extend CIF & spread remaining funds out during any possible transition to a new legislative system
- Fund CIF from unallocated Best Practices monies



Looking Ahead to Q3

- Directives remain unchanged
- 3 year extension of CIF proposed
- Options to address funding gap under consideration
- Strategic work needs to be prioritized



For More Information

Website: <http://cif.wdo.ca>



Mike Birett – Director, CIF

mbirett@wdo.ca (905) 936-5661

Carrie Nash – Project Manager, CIF

CarrieNash@wdo.ca (519) 858-239

Gary Everett – Project Manager, CIF

Gary@Egroup1.com (519) 533-1939



Waste Policy Activities Update

Monika Turner, AMO
Director of Policy

What's New...

or is Everything Somewhat the Same?

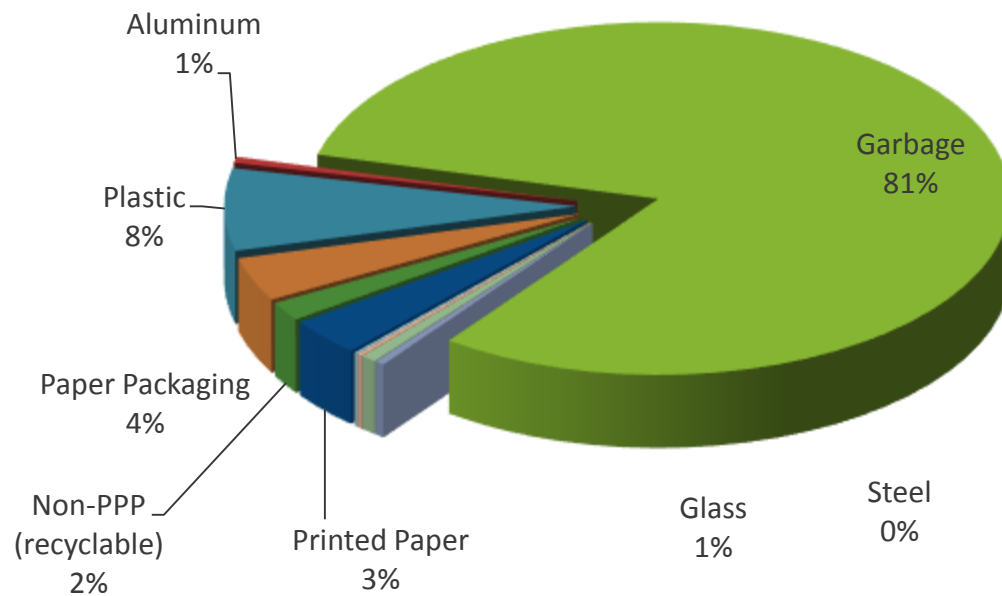
- New provincial Resource Recovery legislation
 - Provincial interests & policy statement
 - Full producer responsibility
 - Oversight body
 - What we are working on
- 2015 Steward Obligation determination
 - Mediation process
 - Interim municipal payments for June 30th

The Ontario Blue Box – Circa 2015

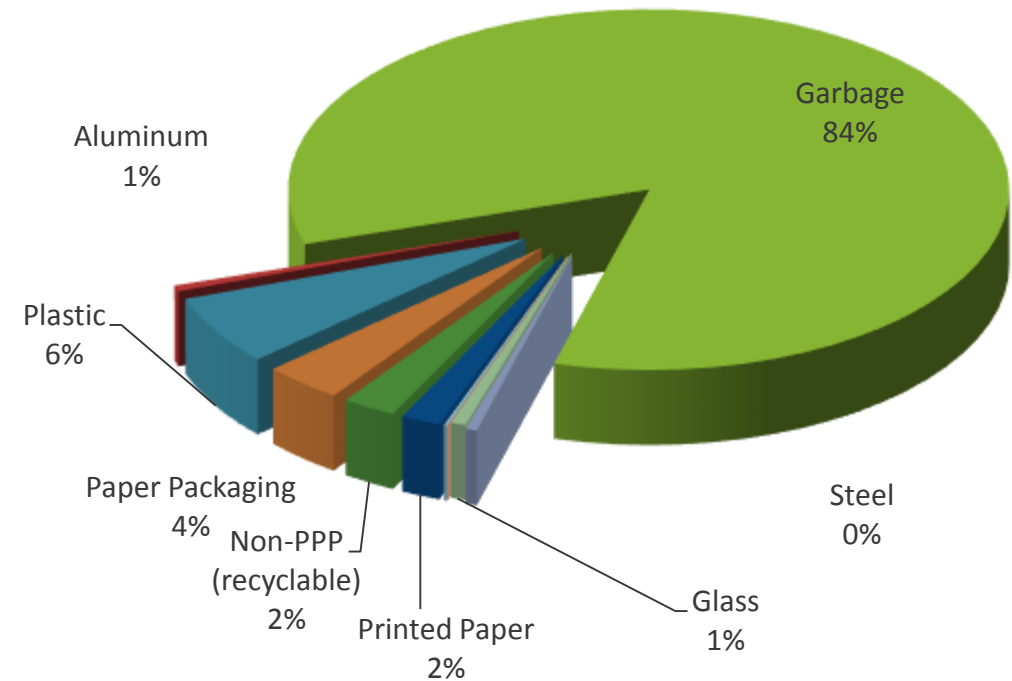
Sherry Arcaro, Stewardship Ontario
Director of Field Services

Composition of Garbage

2012/13



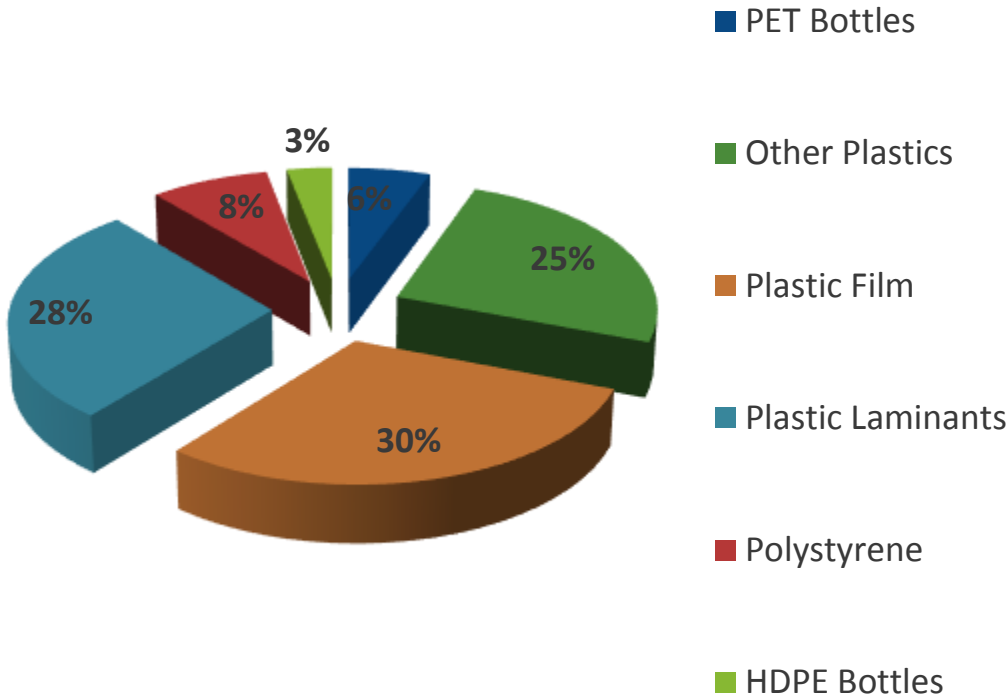
2014/15



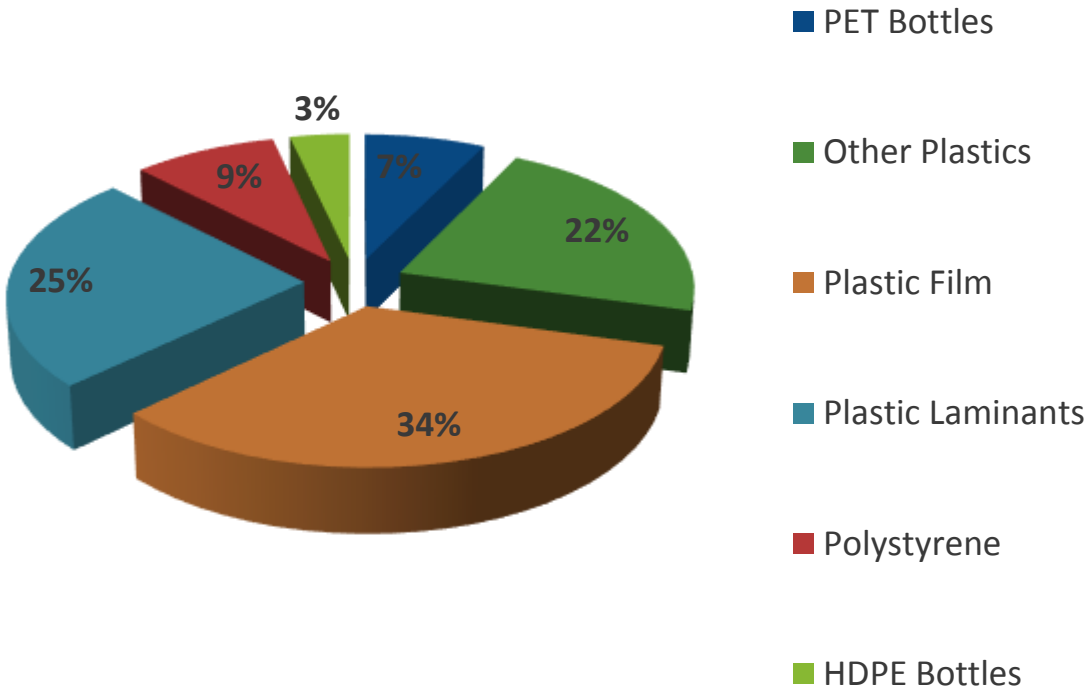
Plastic Packaging in the Garbage



2012/13



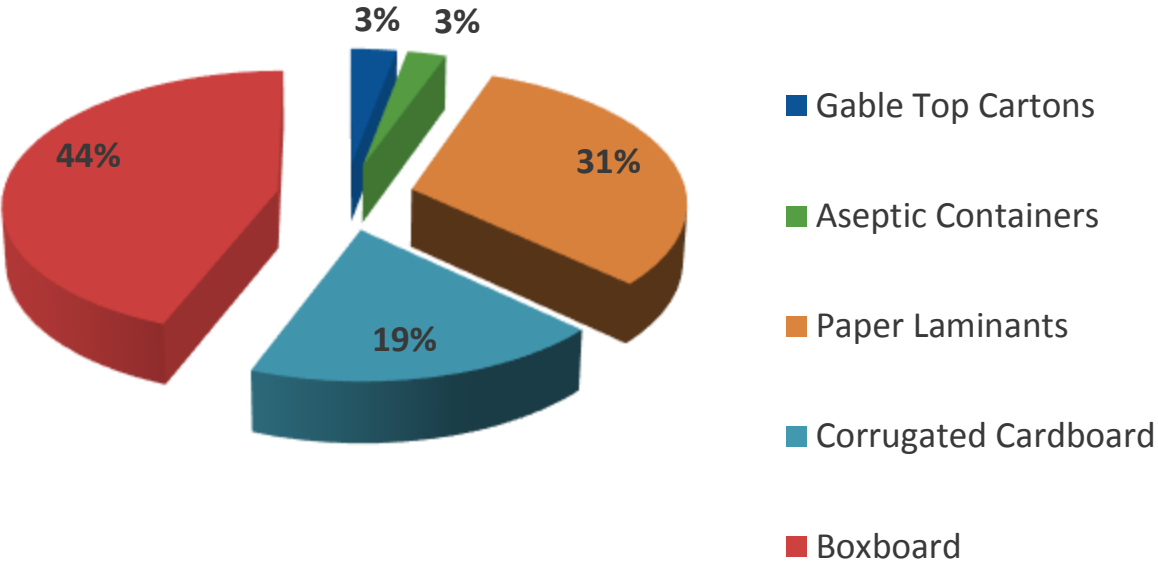
2014/15



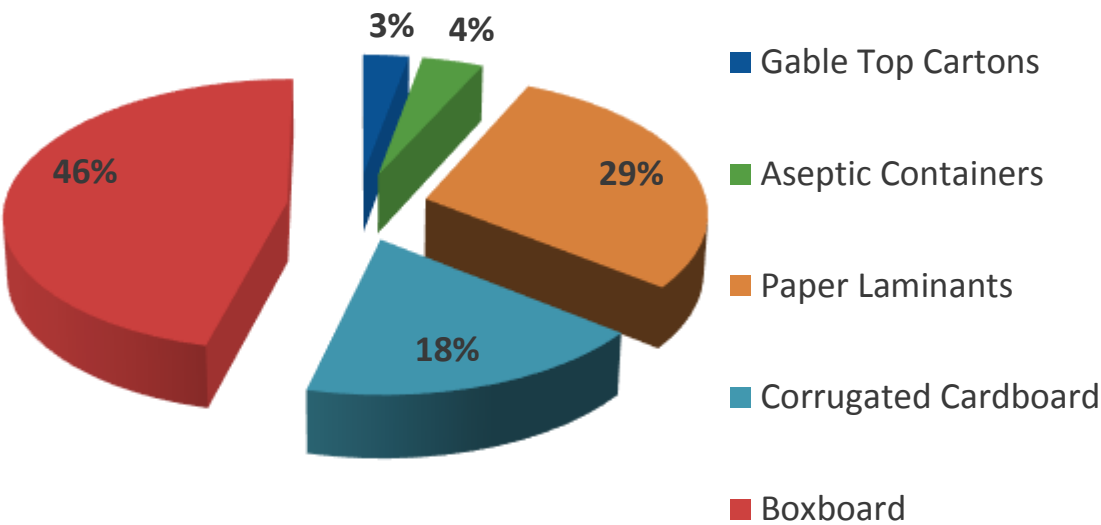


Paper Packaging in the Garbage

2012/13



2014/15





JUST BECAUSE IT'S EMPTY DOESN'T MEAN IT'S GARBAGE.

Recycle your bathroom packaging.



For more information on what packaging you
can recycle, visit your local municipal website.

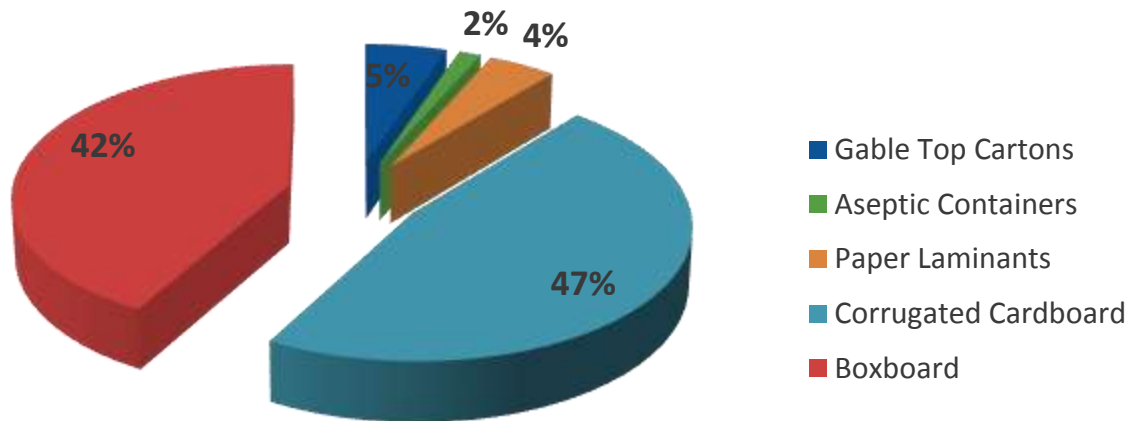
stewardshipontario.ca



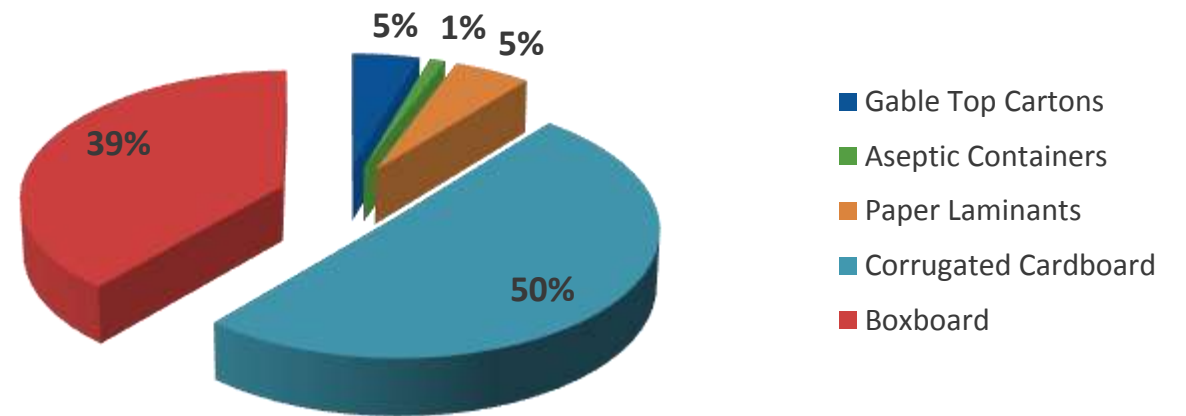
Stewardship Ontario

Composition of Paper Packaging in the Blue Box

2012/13

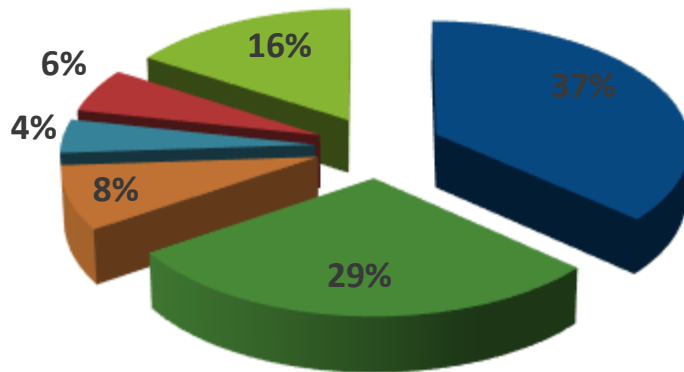


2014/15



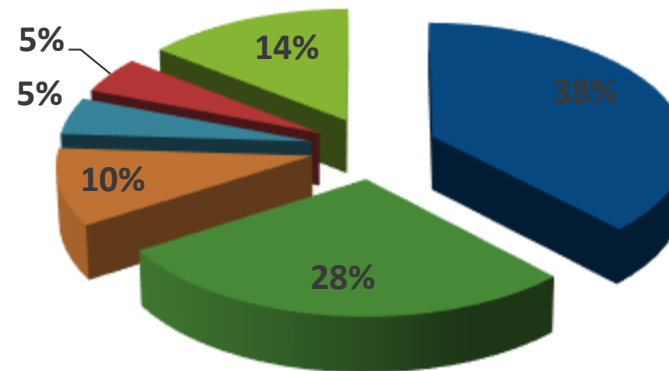
Composition of Plastic Packaging in the Blue Box

2012/13



- PET Bottles
- Other Plastics
- Plastic Film
- Plastic Laminants
- Polystyrene
- HDPE Bottles

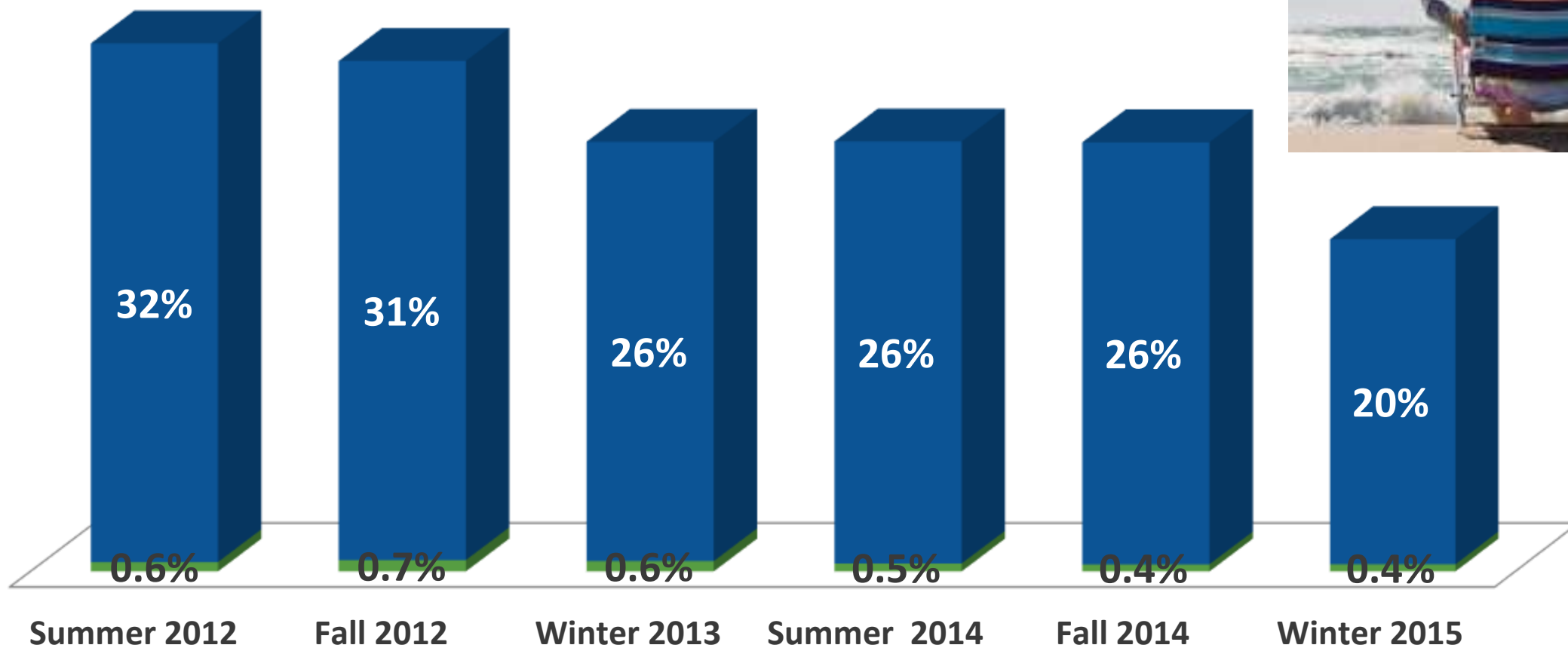
2014/15



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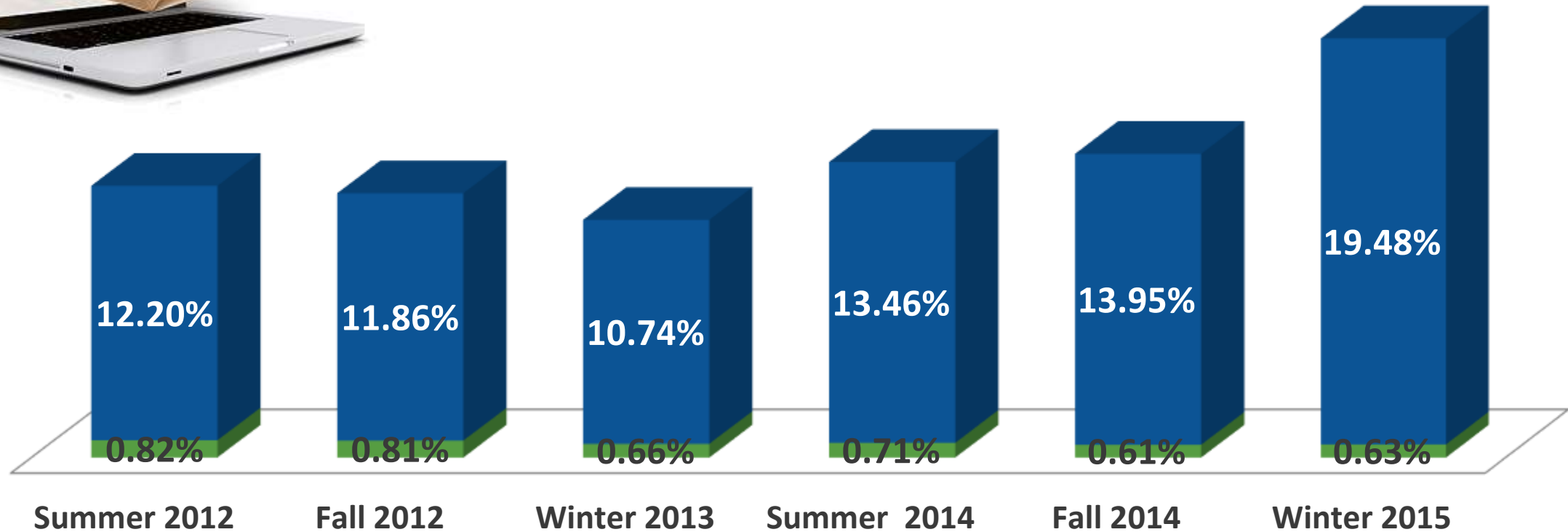
Newsprint % Share

■ % Garbage Stream ■ % Recycling Stream



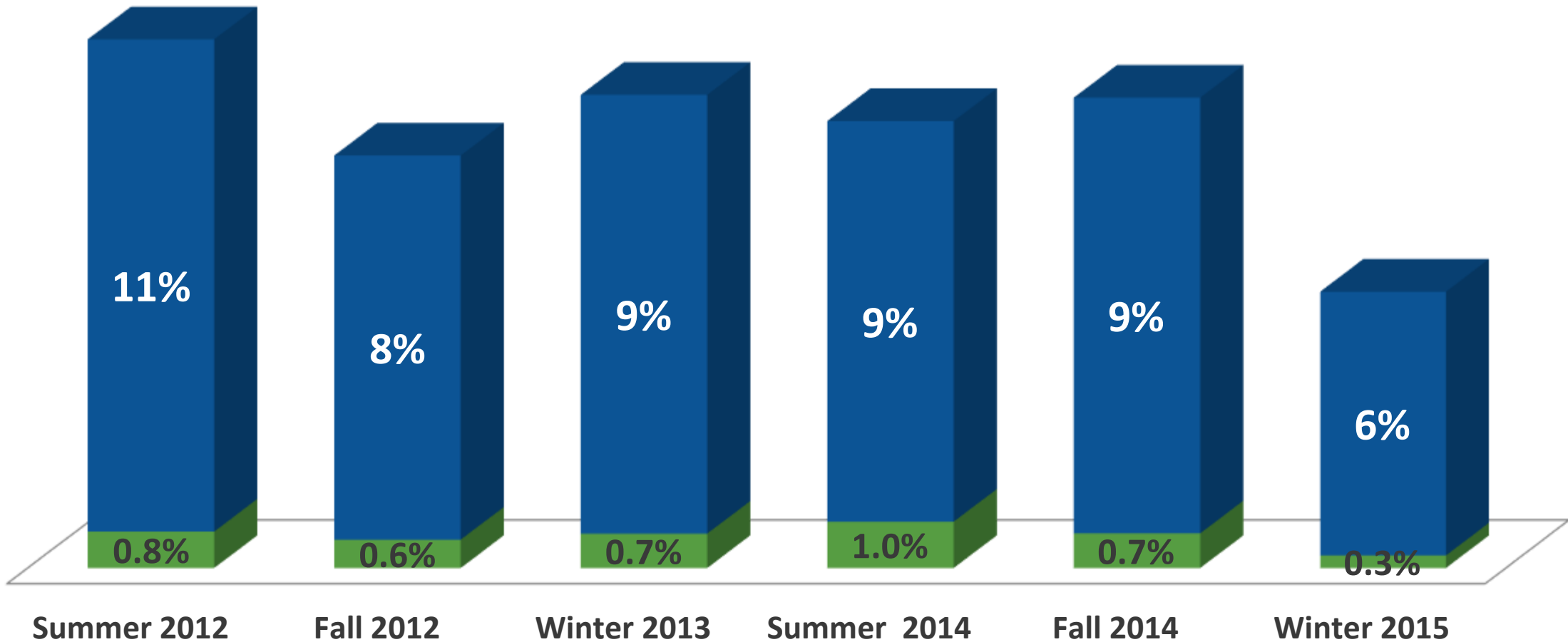
Corrugated Cardboard % Share

■ % Garbage Stream ■ % Recycling Stream



Glass Packaging % Share

■ % Garbage Stream ■ % Recycling Stream





Upcoming Studies

- MRF Material Composition Studies at 8 facilities in 2015 (spring & fall)
- Planning to begin Curbside Studies in fall or winter
- Optical trial on polycoat (hot cups) in June/July
- Sourcing flexible plastic laminate material for 3 processor trials

Thank-you!

Sherry Arcaro

Director of Field Services

Email: sarcaro@stewardshipontario.ca





WDO Update

Will Mueller, WDO
Oversight Analyst, Blue Box Program

Overview

- Updates
 - ISPs (Industry Stewardship Plans)
 - OES & OTS
 - 2015 Blue Box (BB) Steward Obligation
 - 2014 Datacall
 - 2015 InKind Program
 - WDO Out & About
- Looking Ahead

ISPs

Paint ISP (Product Care)

- December 10, 2014: WDO Board approved Product Care Association (Product Care) ISP for paint & coatings
- WDO determined that June 30, 2015 will be effective date of the Paint ISP

<http://wdo.ca/programs/industry-stewardship-plans/>

Pesticides, Solvents & Fertilizers ISP (Product Care)

- WDO received notice from Product Care to re-engage on Pesticides, Solvents & Fertilizers ISP
- Final ISP will be available on WDO's website once WDO has received it from Product Care
- At that time WDO will advise stakeholders on next steps including consultation

OES & OTS

OES

- April 16, 2015: WDO Board directed OES to have third party review of effects of the Program in the market place. A report is due to WDO Board on September 1, 2015
- Revised Environmental Handling Fees (EHFs) came into effect on May 1, 2015

OTS

- Update to Off-the-Road (OTR) Tires Review can be found on WDO's website
- On-Road Tires Stewardship Fees were reduced May 1, 2015
- Incentive reductions for Processors & Manufactures (not collectors) on July 1, 2015

2015 BB Steward Obligation

- 2015 BB Steward Obligation not yet determined
- April 16 WDO Board Direction
 - Mediation
 - Interim Funding
- Next steps: Mediator to report to WDO June 1

2014 Datacall

- 2014 Datacall deadline was April 24, 2015
- 237 Programs reporting data for 2014 vs. 226 in 2013
- WDO undergoing verification to be completed in July
 - Noticeable improvement in reporting
- Results will be used to determine municipal BB funding in 2016

2015 InKind Program

- 2014 lineage publication deadline was extended until May 31, 2015
- Beginning April 1, municipalities can use interim 2015 lineage amounts
 - Publication deadline to book 2015 ads is March 31, 2016
- As a reminder, when submitting InKind ads to WDO:
 - All forms & information available on WDO website including insertion orders, updated lineage spreadsheets, newspaper contact information, guidelines, & how-to information.
 - Municipalities can use ads available in Advertising Image Bank
- If you have further questions regarding InKind ads, please contact inkindads@wdo.ca

2015 InKind Program - Ad Bank

NOT SURE WHAT GOES IN THE BLUE BOX?

DON'T SWEAT IT!

Your municipality can help you think inside the box.



Space provided through a partnership between industry and Ontario municipalities to support waste diversion programs.

**JUST BECAUSE IT'S
EMPTY DOESN'T MEAN
IT'S GARBAGE.**

Recycle your bathroom packaging.



Space provided through a partnership between industry and Ontario municipalities to support waste diversion programs.

Insert logo here

WDO Out & About

- WDO meeting with municipalities in 'Listen & Learn' sessions to discuss local waste diversion topics & issues:
 - Blue Mountains
 - Waterloo
 - North Bay
 - Haliburton
 - And more to come!
- Please let us know if you would like to host a session

Looking Ahead

- Transitioning the Paint ISP for June 30
- Facilitating MIPC work to determine 2015 & 2016 BB Steward Obligations
- Completing 2014 Datacall verification & publishing performance metrics
 - Initiate BB audit process

Thank You

LinkedIn: WasteDiversiOntario

Twitter: @WDOntario

williammueller@wdo.ca



CONTINUOUS
IMPROVEMENT FUND

Operations: Factors to Consider When Planning for a Change

Joseph Hall
Redi Recycling

Why is change needed?

- Diversion
- Cost savings
- Legislative compliance
- Service level

Factors to weigh

- Municipal priorities
- Partnership opportunities (economy of scale)
- Logistics & timelines
- Level of investment required
- ROI



Preparing for Change

CIF #843: Regionalization Support

- Working towards harmonized programs
- 6 Municipalities:
 - Renfrew; Bonnechere Valley (BV); Madawaska Valley (MV); Head Clara Maria; Brudenell Lyndoch Raglan; Horton
- The plan
 - Year 1-goals to harmonize BB materials, P&E, waste management strategies
 - Work to identify & implement operational efficiencies at depots & curbside
- Two networks created
 - FEL bins (CIF# 844)
 - Rear load bins (CIF #858)

Finding Efficiencies: Containers & Collection (1)

CIF #844: Front End Bin Depot Recycling Network

- Old system
 - BV retiring old 40 yd. 2 compartment roll offs (ROs)
 - ROs: cheap capital but high operating costs
- New system
 - 8 yd. ground level front load bins
 - 4 depot locations—each with multiple bins
- Why it works
 - Collection service by contractor (milk-run)
 - Compacted collection vs non compacted
- Expected operational savings >50%



Finding Efficiencies: Containers & Collection (2)

CIF #858: Rear Load Bin Depot Recycling

- Old system
 - retiring old 40 yd. 2-compartment roll offs
- New system
 - Replacing with 8 yd. ground-level rear load bins
 - 3 depot location – multiple bins at each
- Why it works
 - MV Truck: maximizes use now between recycling & waste
- Compaction recycling – reduces operational costs by over 50%



Planning for change – Container Case Studies

- Heather Connell, Guelph

- Automated Cart Collection: Does it cut program costs?
 - Balancing legislative compliance, cost savings & service levels

- Logan Belanger, Temiskaming Shores

- Launching a Cart Program: What's involved?
 - Planning & executing a successful program launch





Automated Cart Collection: Does it Cut Program Costs?

CIF Project #284

Heather Connell
City of Guelph



Project Highlights

- Project goal: Cut Blue Box program costs through more efficient collection programming
- Impacts:
 - \$460 K annual savings – reduced collection fleet by 4 trucks & 3 staff
 - 62% reduction in replacement labour costs related to staff injuries & illness rates
 - 80% customer satisfaction
- More information:
 - heather.connell@guelph.ca
 - guelph.ca/waste



The Issue

- Goal to align with MOECC's condition for not accepting organic waste in plastic bags at City's state-of-the-art Organic Waste Processing Facility



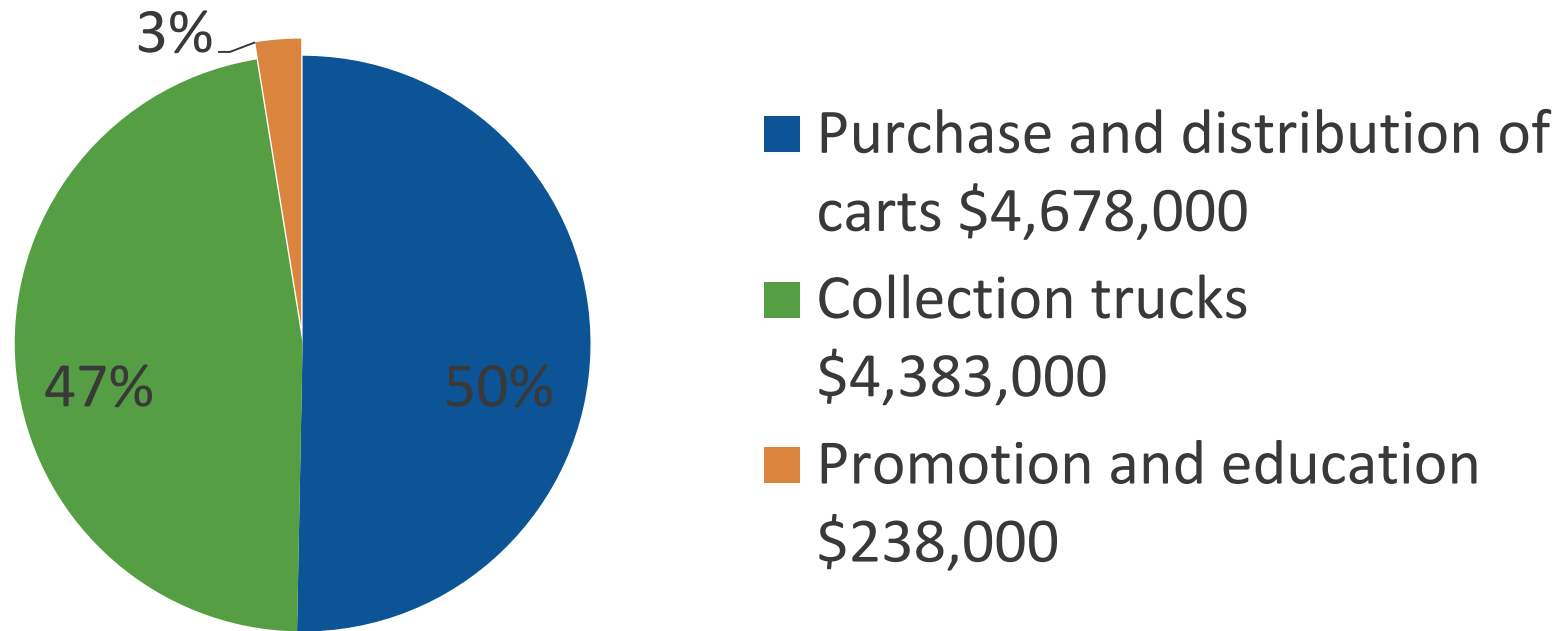
Solution

- More efficient & less expensive to collect all 3 streams using carts
- Cart program - 15 fully automated trucks - 60/40 split
 - Co-collect organics & recyclables one week
 - Recycling now collected biweekly instead of weekly
 - Organics & garbage following week
- Roll-out over 3-year period
 - Closer alignment with life cycle replacement of fleet
 - Keep costs affordable & maintain credit rating



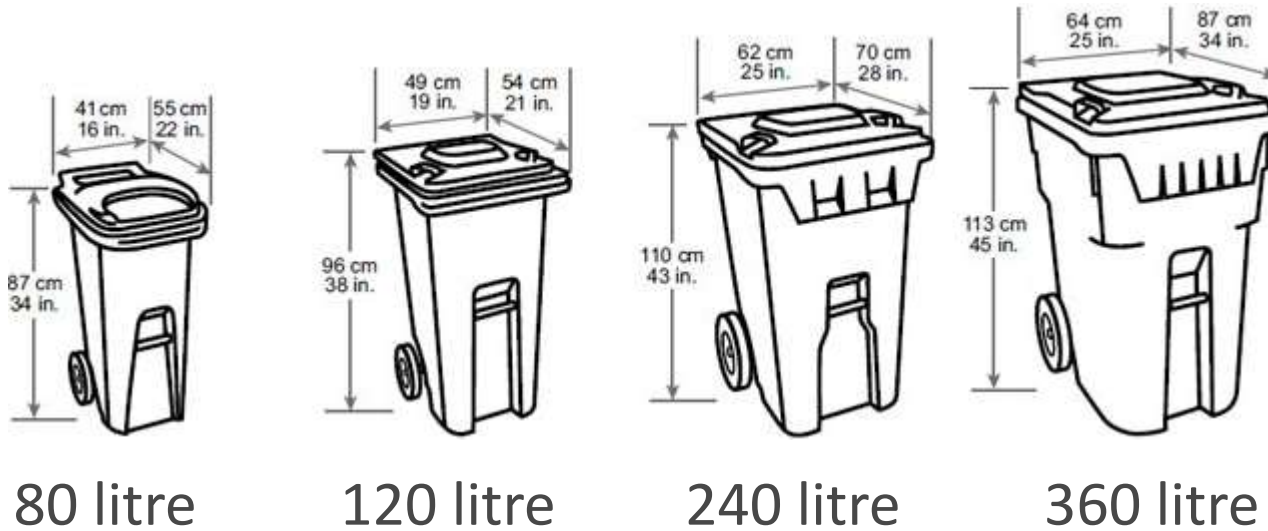
Program Costs

- Completed on time & under budget
- Cost per household \$156



Managing Logistics (1)

- Accessibility: able to choose cart size



- Offered cart assistance program



Managing Logistics (2)

- Winter time; bags no longer buried
- Automated arm can collect from snow banks



Managing Logistics (3)

- Multi residential properties - eliminates large charge piles of bagged waste
- Storage space: offered communal carts, more frequent collection, “dual use” carts



Managing Logistics (4)

- Temp staff staged carts for proper spacing to avoid impeding collection time



Give Waste a New Life

Cart placement at the curb

Ensure your carts are accessible to the waste collection truck and out of the way of vehicle traffic, pedestrians and bicycles. Follow these steps:

- 1. Park**
Place your carts at the curb no later than 6:00 a.m. on your scheduled collection day. If your property is beside a...
 - curb: place carts about 30 cm (1 ft) away from the curb
 - road shoulder: place carts along the outside edge of the shoulder
 - public lane: place carts as close as possible to the edge of the lane
- 2. Point**
Point the arrow on the lid of each cart to the street.
- 3. Unlatch**
Open the latch on the green cart.
- 4. Space**
Allow one arm's length clearance (one metre) on all sides of each cart. You may also place individual carts on opposite sides of your driveway.
- 5. Store**
Remove your carts from the curb by 7 p.m. on your collection day and return them to your storage area.

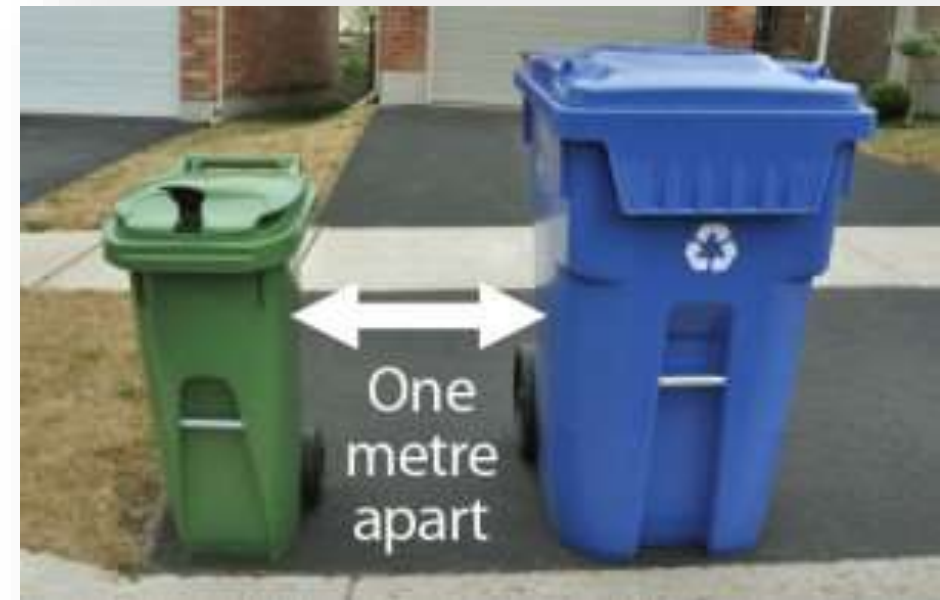
Alternate items available upon request.

Guëlph

Start using your carts the week of November 10. See reverse for details.

guelph.ca/waste • 519-767-0598

Guëlph Waste Services
T 519-767-0200
TTY 519-634-9773
E waste@guelph.ca
W guelph.ca/waste



At the MRF

- Allowed reduction of residue waste disposal & processing efficiencies
 - Elimination of plastic bags
 - Reduced loss of recyclables remaining inside bags
 - Material distributes more evenly on sorting line
- No market penalties or rejected loads as result of converting



Health & Safety

- Reduced staff injuries & illness rates – \$120,000 savings per year

	Initial Projected Reduction	Actual Reduction
WSIB costs	90%	95%
Loss time injuries/modified duties/ short term disability (STD) (hours)	90%	56%*
Sick time (hours)	50%	70%
Total replacement labour costs	72%	62%*

* 23% STD hours were due to medical issues unrelated to work injuries

Does Automated Collection Cut Costs?

- **Yes!**
- Over \$460 K/yr operational savings through reduced capital replacement, maintenance, fuel, labour & injury costs
- Promotes diversion by increasing resident participation & capture rates
- Survey respondents found the new carts:
 - Easier to use/simpler 51%
 - Store more in larger bins 13%
 - Less mess 27%
 - They don't need to go out as often 8%
 - Easier to store 18%

Key Learnings

- Stakeholder support & adoption was essential to success of program
- Allowing residents to select their cart sizes allowed public input & earned community acceptance & support for the program – 80% resident satisfaction
- Guelph achieved highest waste diversion rate in Ontario at 69% in 2013





Launching a Cart Program: What's Involved?

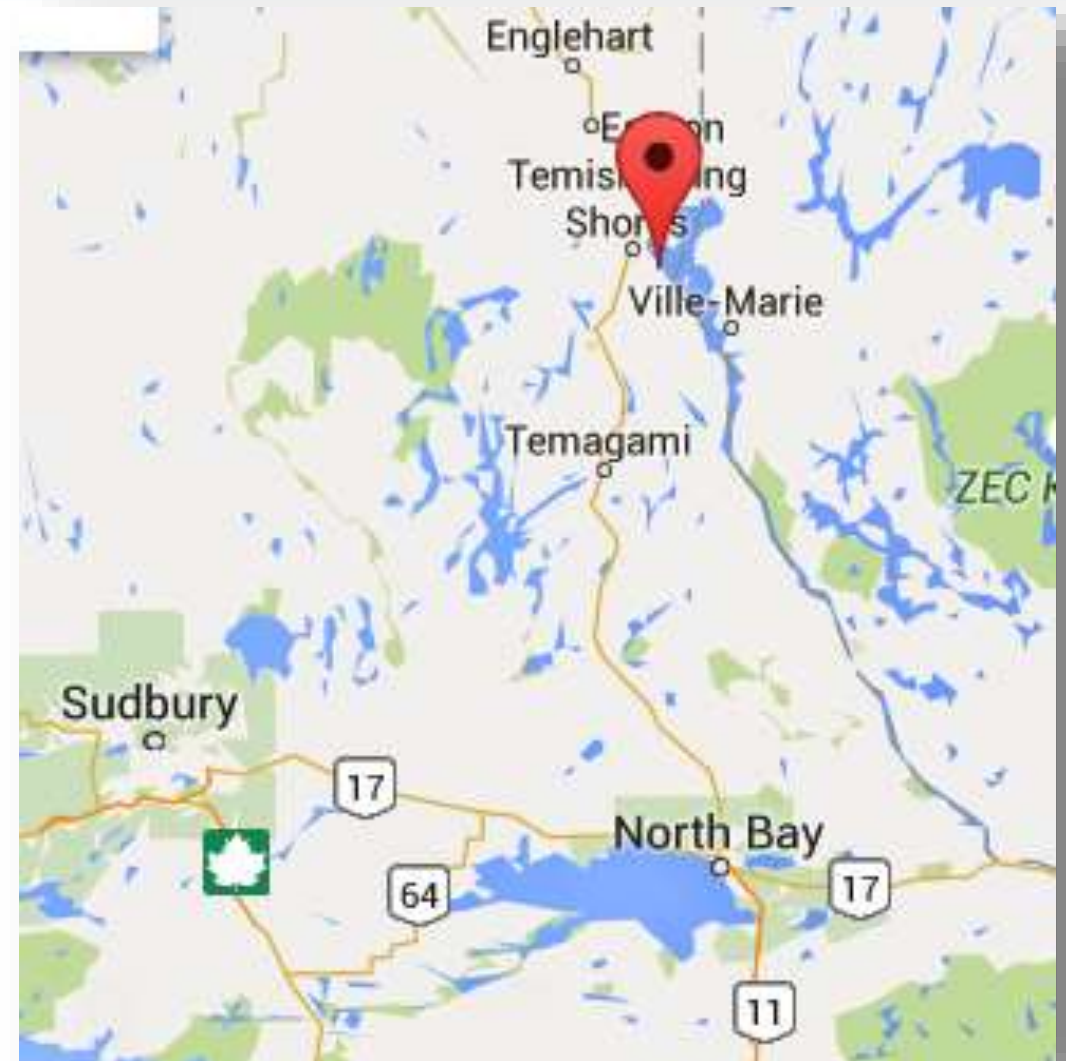
Logan Belanger
City of Temiskaming Shores

Project Highlights

- Project goal
 - Successfully transition from depot to single stream cart recycling program
- Impacts
 - Increased community uptake & sustained participation
 - Increased BB diversion – depot collections: 18.64%
- More information:
 - lblanger@temiskamingshores.ca | 705-672-3363 ext. 4104
 - www.temiskamingshores.ca

Background: City of Temiskaming Shores

- Located in Northeastern Ontario
 - Amalgamated municipalities of New Liskeard, Haileybury & Dymond
- Population 10,400 – 4500 households
 - 19.3% – Age 65 or older (CAN 14.8%)
 - 66% – English only
 - 30% – French only



Depot System

- 30 depot-style bins
 - Serviced by staff twice weekly
- Limited suite of accepted materials



Program Information

- Why we switched from depot to curbside?
 - Residents expressed desire for more enhanced recycling program
 - Limited landfill capacity – increase diversion
 - 2009 – New Liskeard Landfill Site reached capacity
 - 2016 – Haileybury Site expected to reach same fate
- What are the best practices out there?
 - Consultations with many municipalities throughout development
 - Program evolved through community consultation, as well as throughout implementation phase

How We Switched to Curbside

Established Recycling Committee

Hired full-time-temporary staff for program launch

RFP'd for SWMP program contractor

Purchased “spoke” transfer station (TS)

Determined number of carts to purchase & RFP'd for cart supply, delivery & distribution

Selected MRF

Agreements - Contractor (collection/transport), MRF (process), local municipalities (deposit material at spoke TS)

Initiated City-wide P&E - April 2015 start-up



Public Education & Awareness

Curbside Waste Collection Schedule

2014

September	October	November	December
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



2015

January	February	March	April
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
May	June	July	August
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
September	October	November	December
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Collection Information

Recycling and garbage are collected on the same day as your existing pick-up, but on alternating weeks.

Garbage & recyclables placed in non-approved containers will not be collected.

Holiday Collection

No curbside collection will be made on Statutory Holidays. When a normal curbside collection day falls on a holiday, the collection shall be made one (1) day later.

City Hall
325 Farr Drive
Haileybury, ON P0J 1P0
Telephone: (705) 672-3363
Website:
www.temiskamingshores.ca

G

Garbage Collection

R

Recycling Collection



Christmas Tree Collection

Holiday (No Collection)

Acceptable Recycling Bin Materials:



Materials Not Accepted:

- Used Paper Plates
- Diapers
- Liquids
- Toys
- Yard Waste
- Wood
- Facial & Toilet Tissue
- Food Scraps
- Tires
- Scrap Metal
- Appliances
- Electronics



Cart Counts & Distribution

1. Developed master list through MPAC & water & sewer records
 - Estimate number of carts to order
2. Information required for delivery of carts:
 - List of addresses to receive bins
 - Number of bins allocated to each property
 - Road maps of City

	B	C	D	E	F	G	H	I
1	Garbage Bins	# of Recycle Bins	Property Location	Map Referral	Comments		Maps	
2	Residential						Dymond Rural	
3	2	2	704130 ROCKLEY RD	Dymond Rural			Dymond Urban	
4	1	1	884299 HIGHWAY 65 W	Dymond Rural			New Liskeard	
5	1	1	238109 PIPELINE RD	Dymond Rural			Haileybury	
6	1	1	198439 RIVER RD	Dymond Rural			North Cobalt	
7	1	1	178042 MCLEAN RD	Dymond Rural			Bucke Township	
8	1	1	843095 DALES RD	Dymond Rural				

Cart Allocation

- MR meeting requirements supplied
 - 1 - 65 gallon refuse cart, &
 - up to 3- 95 gallon recycling carts

No. of Dwelling Units	Garbage Bins		Recycling Bins	
	No. of 65 Gallon Bins	or No. of 2 Yard Bins	No. of 95 Gallon Recycling Bins	Or No. of 2 Yard Bins
1	Maximum of 1	N/A	Maximum of 1	N/A
2	Maximum of 2	N/A	Maximum of 2	N/A
3	Maximum of 3	N/A	Maximum of 3	N/A
4	Maximum of 4	N/A	Maximum of 4	N/A
5	Maximum of 5	1	Maximum of 5	1
6	Maximum of 6	1	Maximum of 6	1
7	Maximum of 7	1	Maximum of 7	1
8	Maximum of 8	1	Maximum of 8	1

Results

	2012 (MT)	Estimated 12 months (MT)	Change (MT)
Recycling	733 (estimate)	856	123
Garbage	3,856	2,373	(1,483)

Program Developments – Obstacles

1. Missed cart drop-offs (deliveries)
2. What to do with old garbage cans?
3. Incorrect cart placement
4. Homeowners moving with carts
5. Winter collection/cart placement
6. Cart manoeuvrability for people with limited mobility

Cart Placement



Please help us serve you better!

☐ **Advisory Notice:**

Your rollout bin did not meet the City's by-law collection requirements. Further occurrences may lead to penalties, including uncollected waste and fines associated with the Solid Waste Management By-law.

The reason for this notice is outlined on reverse side.

☐ **Uncollected Bin Notice:**

Sorry, we were unable to collect your bin. Your bin was not collected because it did not meet by-law collection requirements. Further occurrences may lead to penalties, including fines associated with the Solid Waste Management By-law.

The reason for the uncollected bin is outlined on reverse side.

Thank you for your cooperation!


For more information, please contact City Hall at 705-672-3363 or visit the City's website at www.temiskamingshores.ca.



Reason for Notice:

- ☐ The bin was placed incorrectly at the collection location:
 - ☐ **Too far from curb or edge of road** (Driver will place cart in correct location)
 - ☐ **Placed too close to another object** (at least 3 feet from any object; i.e. cars, snow banks, telephone/hydro poles, etc.)
 - ☐ **Placed backwards** (arrows on the lid must face the street)
 - ☐ **Placed in an inaccessible or unsafe location** (i.e. on top of snow banks)
- ☐ The incorrect bin was placed out for collection (refer to curbside waste collection schedule)
- ☐ The lid of the bin was not closed due to overfilling
- ☐ Unacceptable materials were found in the bin i.e.:

- Bagged Recyclables	- Electronics / Cords	- Large Plastics i.e.:
- Clothing/ Shoes	- Food Waste	- Shovels, toys, tarps,
- Christmas Lights	- Garbage Bags	- pool covers, etc.
- Diapers	- Garden Hoses	- Yard Waste
- ☐ The lid would not open (keep bins clear of snow & ice)
- ☐ Other: _____
- ☐ Other: _____

 Please recycle this tag

Dealing with Contamination

- MRF processor concerns
 - Increased levels of residue – including bagged recycling
- Solution
 - P&E campaign
 - Curbside inspections & notices to residents
 - Contractor monitoring



P&E – Educating Residents on Acceptable Materials

- Front page press release, radio, website & Facebook ads
- Brochures distributed at local tradeshow
- Signage on carts



18%
of non-recyclables were found
in our City's blue bins, and were
sent to landfill.

Help save taxpayer dollars and reduce this rate!

Single Stream Recycling Bin

Yes ✓	No ✗
Aerosol Cans (Empty)	Appliances & Electronics
Aluminum: Cans, Trays, Pie Plates	Clothing & Bedding
Beverage Cups & Lids (Hot & Cold)	Food Contaminated Disposable Plates & Napkins
Cardboard, Paper & Books	Glass: Windows, Light bulbs, Glassware, etc.
Glass Bottles & Jars	Household Hazardous Waste
Juice Boxes & Milk Cartons	Metal: Pots & Pans, Coat Hangers, etc.
Plastic Bags & Outer Wrap	Organic Material (Food, Diapers, Animal Waste)
Plastic Containers & Jugs (No. 1-7)	Toys
Steel & Metal Cans	Yard Waste: Leaves, Grass, etc.
Styrofoam Packaging	Wood: Pieces, Crates for Fruit, etc.

Place all material loosely in the recycling bin, except for shredded paper



Monitoring Curbside

- Staff inspections & 'notices' for residents
 - Indicating residue/issue
 - Record cart serial number for tracking
- Contractor monitors set-out
 - Leaves behind contaminated carts
 - Provides tracking to staff
- Next steps
 - Revise solid waste management by-law
 - Create residue reduction toolkit with CIF

Recycling Bin Inspection Notice

Your recycling bin was inspected today, and found to contain items that should not be recycled.

One or more of the following non-recyclable items were found in your bin:

- | | |
|---|--|
| <input type="checkbox"/> Batteries | <input type="checkbox"/> Food Waste |
| <input type="checkbox"/> Black garbage bags | <input type="checkbox"/> Garden Hoses |
| <input type="checkbox"/> Clothing or Shoes | <input type="checkbox"/> Plastic Shovels, Toys |
| <input type="checkbox"/> Christmas Lights | <input type="checkbox"/> Large Plastics: Tarps, Pool Covers/Liners |
| <input type="checkbox"/> Diapers | <input type="checkbox"/> Yard Waste |
| <input type="checkbox"/> Electronics | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Extension Cords | <input type="checkbox"/> Other: _____ |

Please remove these items before your next collection period.

The bin serial number has been recorded and future occurrences may lead to fines associated with the Solid Waste Management By-law No. 2015-021.

For more information or assistance with recycling, please contact City Hall at (705) 672-3363 or visit our website: www.temiskamingshores.ca

Thank you for your cooperation!



Key Learnings – Planning Cart Program Rollout Logistics

- Council support & approval
- Research BPs & learn from similar municipal programs
 - Beg, borrow & steal everything you can
- Comprehensive P&E is a must!
 - before, during & after roll-out
- Develop accurate distribution list
 - Helps in addressing errors/omissions in distribution
- Staff time
 - Allocate resources to manage increased demands (i.e. call volume, public education, etc.)



CONTINUOUS
IMPROVEMENT FUND

Enjoy Your Break



Welcome Back!



Fresh Approaches to P&E

Carrie Nash
CIF

Signal Change



Source: <http://www.trainingzone.co.uk/topic/sustaining-behaviour-change-crucial-business/179405>

Speak to your Audience



Source: http://cdhm.com/edu/cdhm_education.html

Today's Presenters

- Dan Orr, Quinte Waste Solutions
 - Out of the Blue Box, Back to the Beer Store
- Leigh-Anne Marquis, Region of Peel
 - Cutting through the Clutter:
How Peel Enticed Residents to Engage Online
- Alex Piggott, City of Woodstock
 - Increasing participation in Blue Box Programming
- Barbara McConnell, McConnell Weaver Communications
 - Woodstock Campaign Review: P&E Recommendations for Improvement



Out of the Blue Box Back to The Beer Store

Daniel Orr

Quinte Waste Solutions

Project Highlights

- Project goal: encourage residents to return deposit return bottles to Beer Store
 - Collect deposit & reduce their taxes
- Impacts: reduction in shipping, processing & collection costs
- More information:
 - dan@quinterecycling.org
 - quinterecycling.org



Why Leave Deposit-Return Glass in BB?

- Deposit–Return glass is
 - direct cost to the Board
 - sole product you can positively remove from BB
 - subject to increasing levies
- 50% of glass collected curbside is Deposit-Return!
 - \$411/MT cost to collect, process & ship to market
 - ~600MT collected/yr = potential savings of ~\$100 K
 - contractor concerned about wear & tear on machines



Solution

Tactic	Audience	Message	Budget
Take it Back Challenge?	LCBO shoppers	Save taxes collect deposit	\$7,000
Newspaper	“	“	\$1,500
Radio	“	“	\$5,000
Social Media→Blog	“	“	\$500
Total			\$14,000

~~Outsert~~— Community Challenge



Out of the Blue Box Back to The Beer Store!

Glass bottles that you purchase at the LCBO or at The Beer Store are not part of the blue box program, and costs our member municipalities roughly \$100,000 every year managing them.

Keep taxes low and collect your deposit.
Return your empty wine, beer and spirit bottles to The Beer Store.

Grab a Bottle Bin for \$10 to make
returns easy, contact us to learn more!



25 Years
Celebrating
QUINTE WASTE SOLUTIONS
operated by the Centre & South Hastings Waste Services Board



Radio



QuinteWasteSolutions

Quinte Waste Solutions - Bottle Return Radio Ad

25 days

return



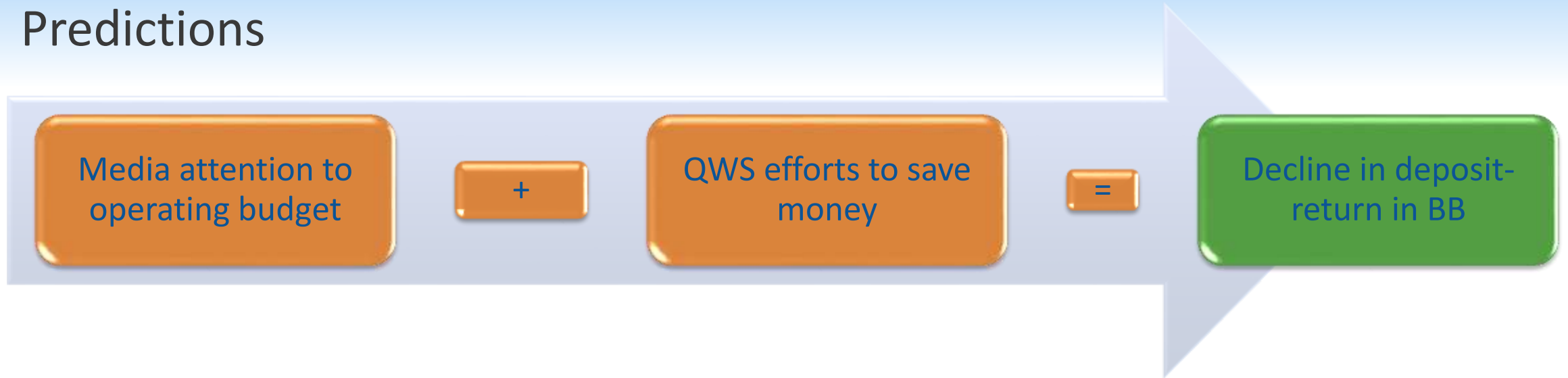
0:32



Tracking Results

- Material Shipped
- Ongoing visual audits
- Phone calls/emails from tactics
- Blog visits

Predictions



- Looking at multi-year campaign
 - potential revisions to campaign based on tracking results
- Changing behaviour is a major challenge

Next Steps

- Keep apprised of what others are doing
 - How are others tackling problematic materials like glass?
 - Get ready to discuss Polystyrene, Film, etc.
- Partnership with Beer Store or LCBO for joint campaigning
- Encourage charities & fundraisers to look at deposit-return as a source of revenue

Cutting Through the Clutter: How Peel Enticed Residents to Engage Online

Leigh-Anne Marquis
Region of Peel

Project Highlights

- Project goal:
 - Inform residents of changes to waste program
 - Drive >50% of residents to sign up online for new carts
- Impact:
 - >84% of households registered for new carts
 - Most registrations online (91%)
- More information
 - Leigh-Anne.Marquis@peelregion.ca
 - www.peelregion.ca/carts

Problem Statement

- New program requires cart sizes to be selected by residents
- Peel prefers residents to select carts online
 - Cheaper than call centre
 - Easier to manage data for selections/deliveries
 - Easier to track
- Challenges
 - Reaching audiences across 3 municipalities
 - Diversity of residents & their preferred languages
 - A lot of change all at once—cluttering the message landscape

A Multi-Phase Campaign

1. Cart Selection (Jan-April 2015)
 - Residents learn about cart sizes
 - Confirm cart sizes online
2. Preparing for Cart Delivery (Sept – Dec 2015)
3. Program Launch (Jan 4, 2016)

End Game: Getting People to Choose Carts

Step 2 - View Your Carts

Enter your home address below to view the carts you'll receive:

Type your home address here

Find

Step 3 - Learn More

Why Carts & Bi-weekly Collection?	+
Cart Sizes & Types	+
Cart Delivery & Storage	+
Cart Exchanges, Fees & Taxes	+
Disposing of Excess Waste	+
Moved or Moving Soon	+

Starting January 2016: Cart-Based, Bi-Weekly Collection

Waste collection in the Region of Peel is changing to cart-based, bi-weekly collection

This new program starts the week of January 4, 2016.

Step 1 - Watch Video

Quick Video Summary of Waste Collection Changes



Key Details

- You will receive new garbage, recycling and organics carts as well as a new kitchen container.
- Your carts and kitchen container will be delivered, free of charge, to your home this fall.
- Yard waste collection is NOT changing.
- The Region will collect your old blue box and green bin in early 2016.
- Carts can be exchanged after March 31, 2016 for a fee.

Selection Process

- Eligible residents could select garbage & recycling carts
- 3 options for each cart
- Changes required an e-mail
- Didn't choose?
 - You still get a cart

Region of Peel
Nothing to go

Choose Your Cart Sizes: 12 Darwin Place, Brampton

Garbage

Collected Every Other Week

SMALL



15' 0" (4.57 m)
3' 6" (1.07 m)
18' 0" (5.49 m)

HOLDS:



AVERAGE 1-2 PEOPLE

- Easier to maneuver and make
- Ideal for low garbage volumes

MEDIUM



21' 0" (6.40 m)
4' 0" (1.22 m)
24' 0" (7.32 m)

HOLDS:



AVERAGE 3-4 PEOPLE

- Ideal for most detached homes

LARGE (RECOMMENDED)



29' 0" (8.84 m)
5' 0" (1.52 m)
32' 0" (9.75 m)

HOLDS:



AVERAGE 5 OR MORE PEOPLE

- Ideal for multi-family homes
- Needs more space to store

Recycling

Collected Every Other Week

SMALL



15' 0" (4.57 m)
3' 6" (1.07 m)
18' 0" (5.49 m)

HOLDS:



MEDIUM



21' 0" (6.40 m)
4' 0" (1.22 m)
24' 0" (7.32 m)

HOLDS:



LARGE (RECOMMENDED)



29' 0" (8.84 m)
5' 0" (1.52 m)
32' 0" (9.75 m)

HOLDS:



Organics

Collected Every Week

ONE SIZE FOR ALL



15' 0" (4.57 m)
3' 6" (1.07 m)
18' 0" (5.49 m)

HOLDS:



Confirm Your Cart Sizes

Error: your email address (required to confirm your cart sizes and receive email confirmation)

Email address

☐ Yes, I want to receive Connect to Peel, the monthly email newsletter from the Region of Peel

Your email address will be kept confidential and you may withdraw your consent at any time. View our [Privacy Policy](#) for details and contact information.

Key Details

- Garbage and Recycling carts come in 3 sizes: Small, Medium, and Large
- Organic cart is one size for all
- Recommended sizes are based on house type
- Choose cart sizes for free before March 31, 2015
- Cart sizes can be changed after March 31, 2015 for an additional charge

Cart Size Comparison



Recommended cart sizes pre-selected based on dwelling type. User may change this.

How We Did It

Print Ads



Direct Mail – dedicated website www.peelregion.ca/peelcarts



Print Ads

WHAT MAKES ME SO **AWESOME?**



I'VE GOT WHEELS, MAN!

CARTS ARE COMING TO PEEL
Choose your carts sizes at
peelregion.ca/carts



Waste collection changes are coming.

Region of Peel
Working for you

**YOU'RE GOING TO BE
LIVING WITH ONE OF US.**



DON'T YOU WANT A SAY IN THE DECISION?

YOU MUST CHOOSE YOUR
CART SIZES BY MARCH 31, 2015
peelregion.ca/carts



Waste collection changes are coming.

Region of Peel
Working for you

Print Ads (Translated)

DLACZEGO JESTEM TAKI
WSPANIAŁY?



BO MAM KÓŁKA!

DO REGIONU PEEL NADCHODZI ERA POJEMNIKÓW NA KÓŁKACH.
Wybierz rozmiary pojemników na stronie peelregion.ca/carts



Będą zmiany w procesie zbierania odpadków.

Region of Peel
Working for you

ਲਗਦਾ ਹੈ ਕਿ ਸਾਈਜ਼ ਨਾਲ ਸੱਚਮੁਚ
ਫਰਕ ਪੈਂਦਾ ਹੈ।



ਨਵੀਆਂ ਕਾਰਟਾਂ ਤਿੰਨ ਆਕਾਰਾਂ ਵਿੱਚ ਆਉਂਦੀਆਂ ਹਨ।

ਤੁਹਾਨੂੰ 31 ਮਾਰਚ 2015 ਤਕ ਆਪਣੀ ਕਾਰਟ ਦਾ ਸਾਈਜ਼ ਚੁਣਨ ਲੈਣਾ ਚਾਹੀਦਾ ਹੈ।
peelregion.ca/carts



ਵਿਸ਼ੇਸ਼ ਕਾਰਟਾਂ ਲਈ ਸਾਈਜ਼ਾਂ ਦੇ ਫਰਕ ਹਨ।

Region of Peel
Working for you



تغيرات جمع النفايات قادمة.

احصل على التفاصيل واختر احجام الحاوية المناسبة لك على الانترنت
peelregion.ca/carts

Region of Peel
Working for you

Online Ads

The screenshot shows the The Weather Network website for Brampton, ON. The page features a green header with the logo and navigation links. A blue sidebar on the left contains two ads for waste collection, each showing two black trash bins. The main content area displays the current weather as -6°C with a 'Freezing rain to make for risky travel' warning. Below this is a 4-day forecast table. A green banner on the right promotes choosing cart sizes by March 31, 2015. The bottom right corner includes a 'NEW! Connect' section with icons for Community, Photos, News, Contests, and Videos, and a 'Coffee Break' sponsored by Tim Hortons. A 'Region of Peel' logo is visible in the top right and bottom right.

The Weather Network

Get the details and choose your carts

Region of Peel Working for you

Forecast & Reports Severe Weather News Maps & Roads Gallery TV FAQs

Brampton -6°C

FIND YOUR FORECAST
Search for location or keyword

Brampton, ON

Current Weather Updated on Tue Mar 3 2:25 PM Next Update in 01:52 mins

Snow
-6°C
Feels like -12
More Details >>

SE 19 km/h 27 km/h 84% 101.1 kPa 0.5 km 800% 06:54 18:07
Wind Wind gust Humidity Pressure Visibility Ceiling Sunrise Sunset

When will it Rain or Snow?
More Details
36-Hour Precipitation Outlook
3:00pm Tue to 2:00am Thu
Snow: Close to 5 cm

Air Quality: Moderate Risk UV: Low Watch Live View Webcams

Tues. Evening	Tues. Overnight	Wed. Morning	Wed. Afternoon
Scattered flurries	Mainly cloudy	A mix of sun and clouds	A mix of sun and clouds
-2°C	-3°C	-3°C	-1°C
Feels like -7	Feels like -9	Feels like -9	Feels like -7
P.O.P: 90% Snow: Close to 1 cm Wind W 20 km/h	P.O.P: 30% Snow: - Wind W 20 km/h	P.O.P: 30% Snow: - Wind W 20 km/h	P.O.P: 30% Snow: - Wind W 25 km/h

Choose your cart sizes by March 31, 2015
Click here for details

Region of Peel Working for you

NEW! Connect
Community Photos News Contests Videos

Coffee Break Sponsored By Tim Hortons

Waste collection changes are coming
Region of Peel Working for you

Mobile Signs



Bin Stickers

CARTS ARE COMING

The deadline to choose your cart sizes is March 31, 2015.
Go to peelregion.ca/carts



 Region of Peel
Working for you

WARD-0433 14712

TIME IS RUNNING OUT

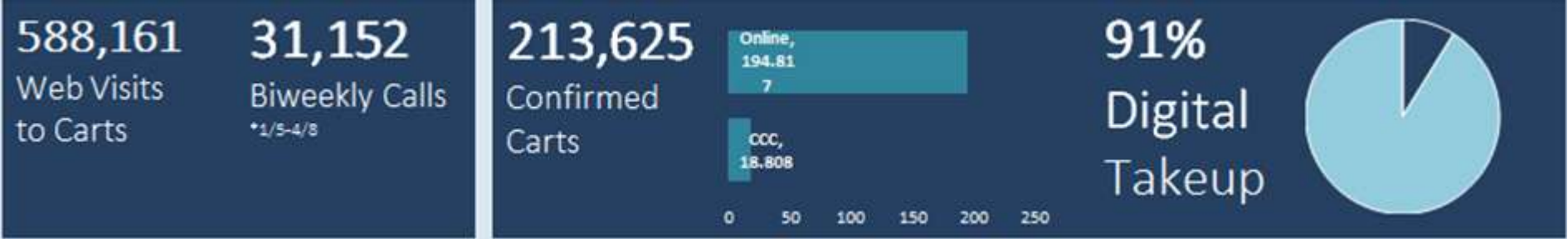
You must choose your cart sizes by March 31, 2015.
Go to peelregion.ca/carts



 Region of Peel
Working for you

WARD-0433 14712

Dashboard of Web vs. Call Centre



Top Views by Medium	Views (approx.)	Budget (approx.)
URL: peelregion.ca/carts Water Bill, Print Ads, Stickers	203,000	\$125,000
Digital ads	151,000	\$75,000
Organic: Social Media videos	92,000	\$35,000
URL: peelregion.ca/peelcarts Direct Mail	92,000	\$120,000
Regional Website	30,000	\$0*

* Existing cost; no additional fees

Challenges/Quirks/Unexpected Issues

- Desire to drive to digital but concern re: not including phone #
- Reaction to “March of Progress” image (naked men)
- Complaints from residents who were NOT getting carts

Key Messages & Takeaways

1. *If You Build It They Will Come*

- The “drive to digital” is a process of change
- Change requires that you create friction
- Don’t make it easy to follow old habits
- Make new solution better & easier than old one

2. Don’t be afraid to attract attention

3. Use brief, clear, simple messages

4. Consult audiences before you begin

- residents, council, community allies, internal staff

Next Steps

- Cart Selection (Jan.– April 2015)
 - Residents learn about cart sizes
 - Confirm cart sizes online
- Preparing for Cart Delivery/Cart Delivery (Sept. – Dec. 2015)
- Program Launch (Jan. 4, 2016)



Increasing Participation in Blue Box Programming: A Campaign Report Card CIF Project 412

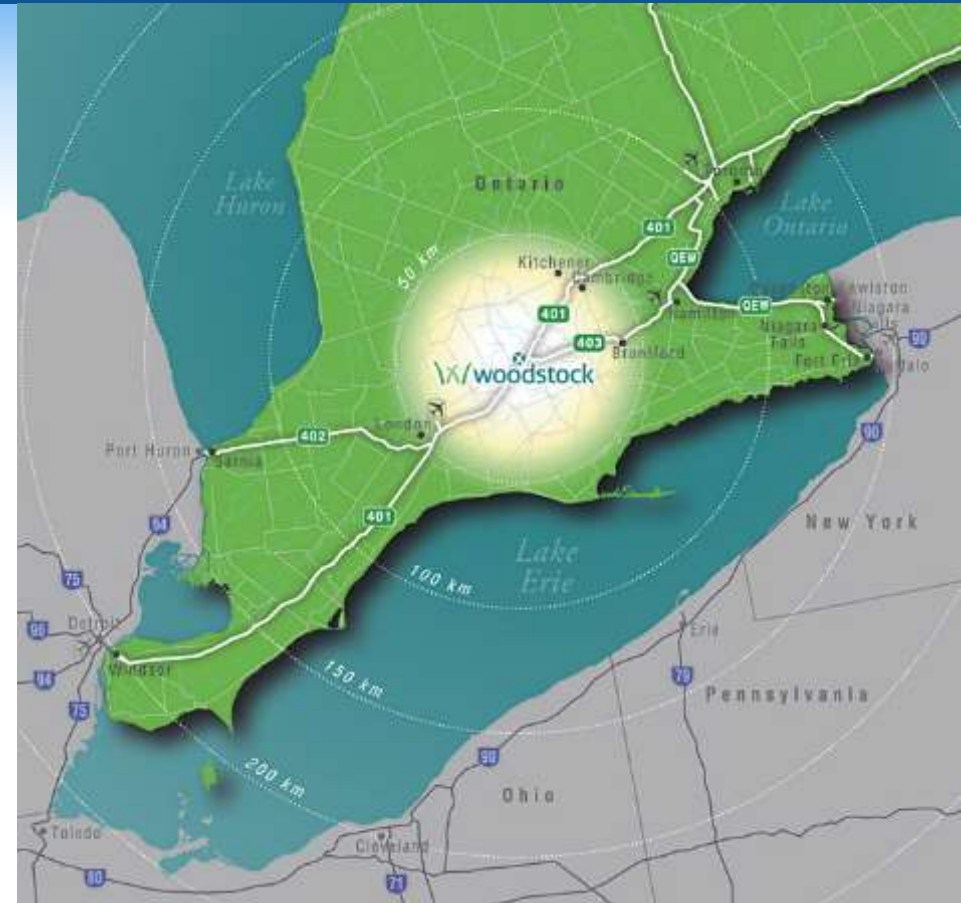
Alex Piggott
City of Woodstock

Project Highlights

- Project goal: Improving participation, sorting behavior, & awareness of acceptable materials in City's Blue Box (BB) program
- Impacts: Increased tonnage of material collected from curbside program
- More information:
 - apiggott@cityofwoodstock.ca
 - www.cityofwoodstock.ca

Problem Statement

- Municipal background
 - Population: 38,000 – 16,000 households
 - 54% diversion rate
 - A “Toyota-type” town
 - Limited to no P&E program prior to 2011
- We want to get residents to recycle more
 - 2012 waste audit 30% of waste stream was recyclable material



Historical P&E in the City



- “For Pete’s Sake Recycle”
 - Original recycling program slogan
- What is the story
 - Pete was long time employee with the City
 - Well known in local community
- Why was this a proven brand?
 - Was still some “For Pete’s Sake Recycle” advertising in community
 - Re-launch brought him back



Solution

Tactics	Audience	Message	Budget
Recycling Truck Advertising	General Public	Info on recycling	\$8,600
Multi-res (MR) Handbook	Property Managers	Info on MR recycling	\$5,000
Radio Advertising	Very broad audience	Info on recycling	\$9,800
Newspaper & Magazine Ads	General Public	Specific info on what can be recycled	\$4,500

Ads on Recycling Trucks (1)

- 4 trucks
 - 3 sides
- Message
 - What is recyclable
 - 2 streams
 - “Recycle more” slogan
 - Set-out time



Ads on Recycling Trucks (2)



Print Advertising

Don't let your holidays go to waste.

During the holiday season, we officially close to paper, packaging and party waste – and throw up holiday flags to Paper & Plastic.

Ontario's municipal waste management programs that are easy to use. But all the new materials and fancy packages are making recycling a lot more difficult.

What can you do?

- Use your blue box so that recyclable holiday waste doesn't end up in landfill.
- Learn how the proposed Waste Reduction Act would reduce taxpayer costs and encourage packaging that is easier to recycle at www.amo.on.ca/waste.

AMO Ontario Municipal Association
RPWCO Regional Public Works Council of Ontario

Did you Know...

If you let your unused paint dry, you can place it in your recycling box.

Remove the lid from the can and after the paint has dried, place the can in your recycle box.

For Pete's Sake Recycle More!

PETE

city of Woodstock

Woodstock Recycles

DID YOU KNOW?

For Pete's Sake Recycle More!

Polystyrene containers used in the packaging of chicken and meats at your local grocer are recyclable. Simply rinse off the container and place in your blue box for recycling.

city of Woodstock

For more information about recycling within the City of Woodstock please visit www.cityofwoodstock.ca

Don't throw it all away...

let's sort it out!

It's so NOT over...

Rinsed plastic bottles and containers of all shapes and sizes are recyclable!

Recycled plastic containers are made into NEW products like:

Recycle More!

CHECK IT OUT: www.cityofwoodstock.ca

As an affiliate of the Ontario Plastics Industry Association

Love affair over?

city of Woodstock

Recycle plastic containers of all shapes and sizes.

Your plastic containers still have plenty of curb appeal...

Plastic bottles and containers of all shapes and sizes are recyclable. Show them love again by putting them all in your recycling container.

It's so NOT over...

Recycled plastic containers are made into NEW products like:

Recycle More!

CHECK IT OUT: www.cityofwoodstock.ca

As an affiliate of the Canadian Plastics Industry Association

Radio Advertisements

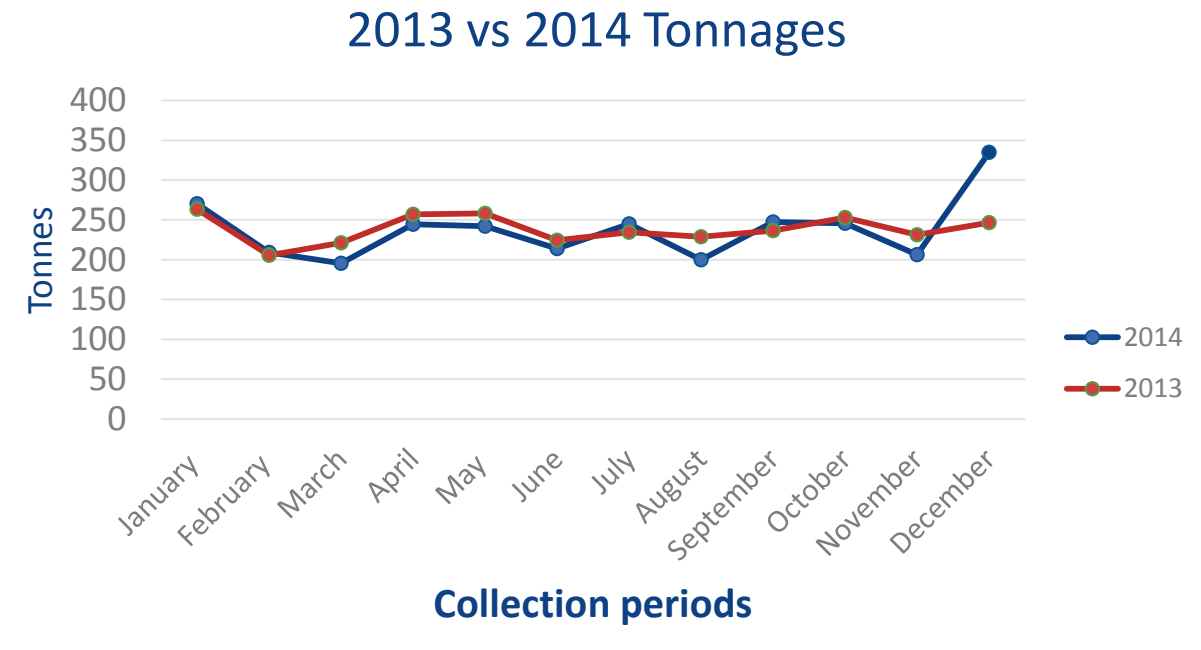
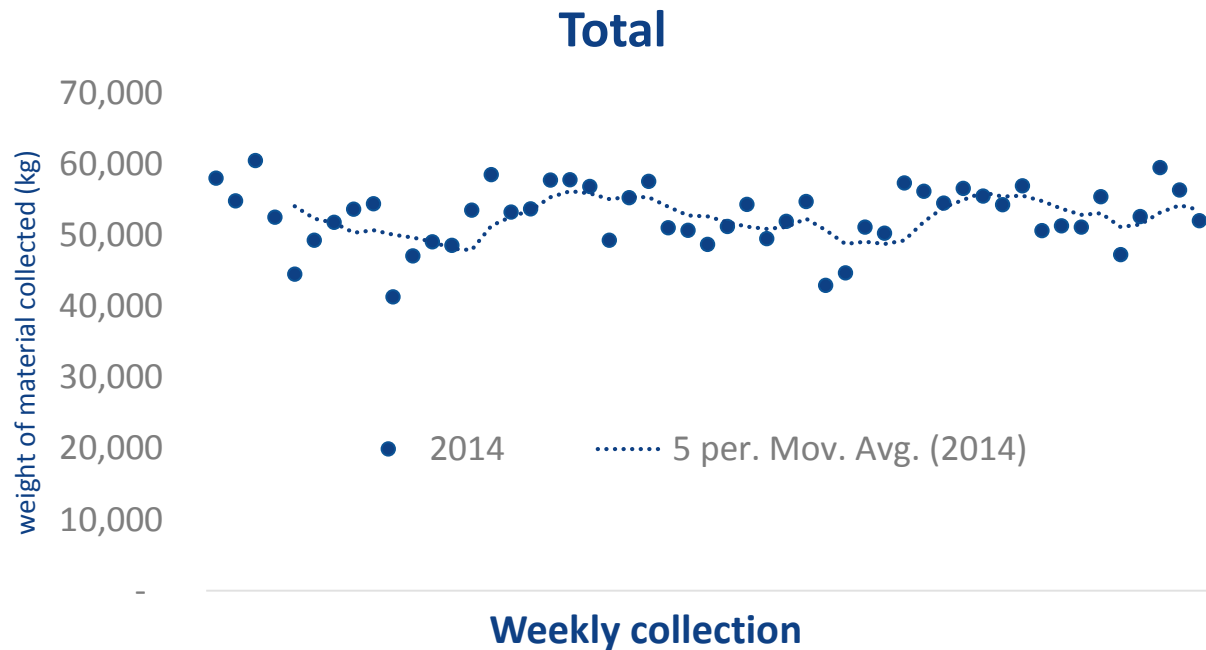
- 2 main stations in our listening area
 - Heart FM
 - Country 104
- Working with producers
 - Target women 30-45
 - Produced 4 ads rotated in campaign
 - Campaigned throughout October 2014
- Main messaging
 - Get people to think about recycling
 - Not sure? → website → recycle more



... and now, let's listen to the ads!

Outcomes & Analysis

- Weigh bill tonnage – 5 fewer tonnes this year
- 40% increase in website activity during campaign



Key Learnings

- Successfully completed P&E plan
 - BPs of P&E – Fundamentals Course
 - Objective-setting
 - Targeted a specific audience
- Relaunch of our “For Pete’s Sake” brand
- Next campaign
 - Google analytics for specific webpage
 - Transition from broad campaign to specific targets



Woodstock P&E Campaign Suggestions

Barbara McConnell, APR

McConnell Weaver Strategic Communication

Comments Based on...

- Alex's campaign communication plan & budget
- Review of strategies, tactical materials & implementation
- Background discussion with Alex about what he did & didn't do & why

Situation Prior to Campaign

1. Diversion 54%
2. Pay per throw garbage
3. 2012 audit – recyclables comprise 30% of garbage
4. No P&E since 2011

Campaign Strategy

1. Goals

1. Increase awareness of what's recyclable
2. Improve recycling performance
3. Increase proper sorting behaviour

2. Objectives (from campaign plan)

- Increase tonnage recycled/diversion rate by 10% in 2014

Main Suggestion

Increase methodologies of measuring results & value against investment through pre (benchmark) & post (tracking) mechanisms

Information Point #1 – Which Recyclables Were in the Garbage?

Situation – “recyclables comprise 30% of garbage”

- 3 year old audit – no current information available about which recyclables were/are still being disposed in garbage

I might have...

- Repeated curbside audit **pre & post** campaign to measure & categorize recyclables
- From pre audit, identify best options for campaign focus



Information Point #2 – Who Is & Isn't a Good Recycler & Why?

Situation – Selected radio stations that have a higher ratio of women listeners – **that's good** – but just first step in determining audience

I might have...

- Taken next step in understanding composition of Woodstock's residents to define target audiences
- Conducted quantitative (survey) research to establish benchmark data re: recycling awareness & performance among segments of target audience...then tracking (post campaign) to produce scientifically reliable data to measure change



For Example...Who Lives in the Program Area?* ... Woodstock

Population –

- Grew 5% 2006 – 2011, probably another 5% since
- 44% with children under 24 at home/56% without
- 42% single, divorced, separated, widowed

Households –

- Nearly **30% are 1 person HH**
 - *low generation/low motivation?*
- 60% of residences are single family
- 8% MF in 5 or more storeys
- 96% speak English at home

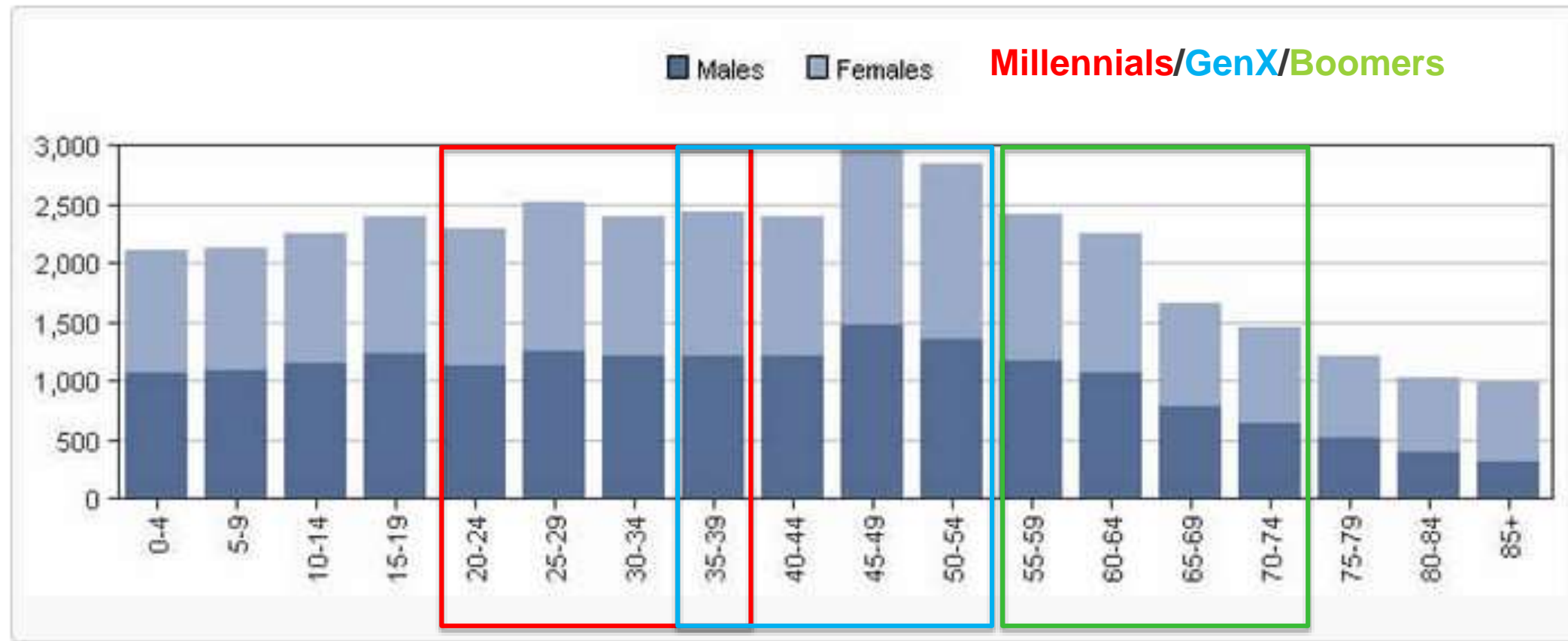
*Stats Canada (or go to your planning department)

*Are 1 person HH
recycling?*



What is their Generational Composition?

Woodstock, CY – Population by five-year age groups and sex



Why it Matters? Each Consumes Information Differently

- Boomers consume information in traditional ways – *retiring*
 - Newspapers, TV, radio, direct mail
 - Dragged into tech world but not comfortable
- Gen X mix of old & new – *currently in senior positions*
 - Grew up with internet & computers
 - Use web as a resource, search for information online
 - Consume less traditional media but still watch TV on a TV
- Millennials (& post millennials) – *up & coming*
 - Don't read or watch TV, sleep with their mobile devices at hand, interact online, rather text than talk, demand information online, short attention span
 - Much less likely to recycle; why?



Information Point #3 – Does Creative Grab Audiences' Attention?

Situation – Variety of print creative from various sources; truck signage with different messages



Does Truck Creative Work?

1. Doesn't say "recycle"
2. 3 – 5 second rule



1. 3 – 5 second rule
2. Too much to read on truck

Information Point #3 – *continued*

Situation – variety of print creative from various sources; truck signage with different messages

I might have...

- Organized focus groups of various audience segments & tested print, truck & radio creative to make sure components resonated with each group
- Explored best avenues to reach & engage each group
 - *Millennials?*

Information Point #4 – Are the Campaign Elements Cohesive?



Situation – Uses “For Pete’s Sake” on creative to build brand recognition

- Either featured prominently or used a thumbprint logo on print
- Becoming face of program

I might have...

- Tested “For Pete’s Sake. Recycle More” among target audiences to make sure it works
 - Does it make sense to all residents & do they relate to it?
 - Do they recognize/care about the Pete connection?
- If they do, I might exploit connection with real Pete through earned media

Information Point #5 – Are the Campaign Elements Cohesive?

Situation – Campaign consists of numerous messages & sporadic scheduling

I might have...

- Narrowed campaign focus to
 - 1 material (plastic bottles/containers) or
 - 1 activity (proper sorting)
- Developed strategic schedule so all available components run close to same time; build awareness of key messages & sense of urgency
- Introduced more earned & social (owned) media to supplement exposure
- Used analytics to measure use of social media & actual waste pages
- Also kept track of number & type of calls to customer service

Key Questions to Ask

1. Which material or activity needs to be addressed?
 - Use data collection/measurement mechanisms to identify issues/opportunities
2. Who's your target audience?
 - Analyze your demographics & use data collection research to identify
3. Does the creative grab attention & work?
 - Test & adjust all materials before campaign deployment
4. Are the campaign elements cohesive?
 - Test slogans & brands
5. More on are the campaign elements cohesive?
 - Develop strategy that focuses on a concentrated time period



CIF

CONTINUOUS
IMPROVEMENT FUND

Morning Wrap-Up



Enjoy Your Lunch!



Starting Up Soon...



Welcome Back!



This Afternoon's Agenda

- Obstacles & Opportunities in Optimizing Recycling
- The Power of Policy: Impacts on Diversion, Program Costs & Funding
- *Afternoon Break*
- Discussion - Planning for the Future of Glass Recycling in Ontario
- *Summary & Concluding Remarks*

2015 CIF REOI

Request For Expressions of Interest

Gary Everett
CIF

Key Dates

*Submission
Deadline*

*Friday,
May 8*

*Project
Awards*

*October
2015*

Overview

- Designed to encourage municipalities to undertake new effectiveness & efficiency projects
- Sixth REOI
- 576 projects to date
- 116 million in total project value

Budget Recap by Priority Areas

Priority Areas	Available Funding
System rationalization	\$1,200,000
Projects achieving cost savings	\$2,500,000
BB harmonization	\$300,000
Addressing problematic materials	\$500,000
Centre of Excellence (C of E)	\$965,000
Total Funding Budget	\$5,465,000

What Happened: Applications & Funding Request Highlights

\$40.136M
Total Project Value

\$17.930M
Funding Requested

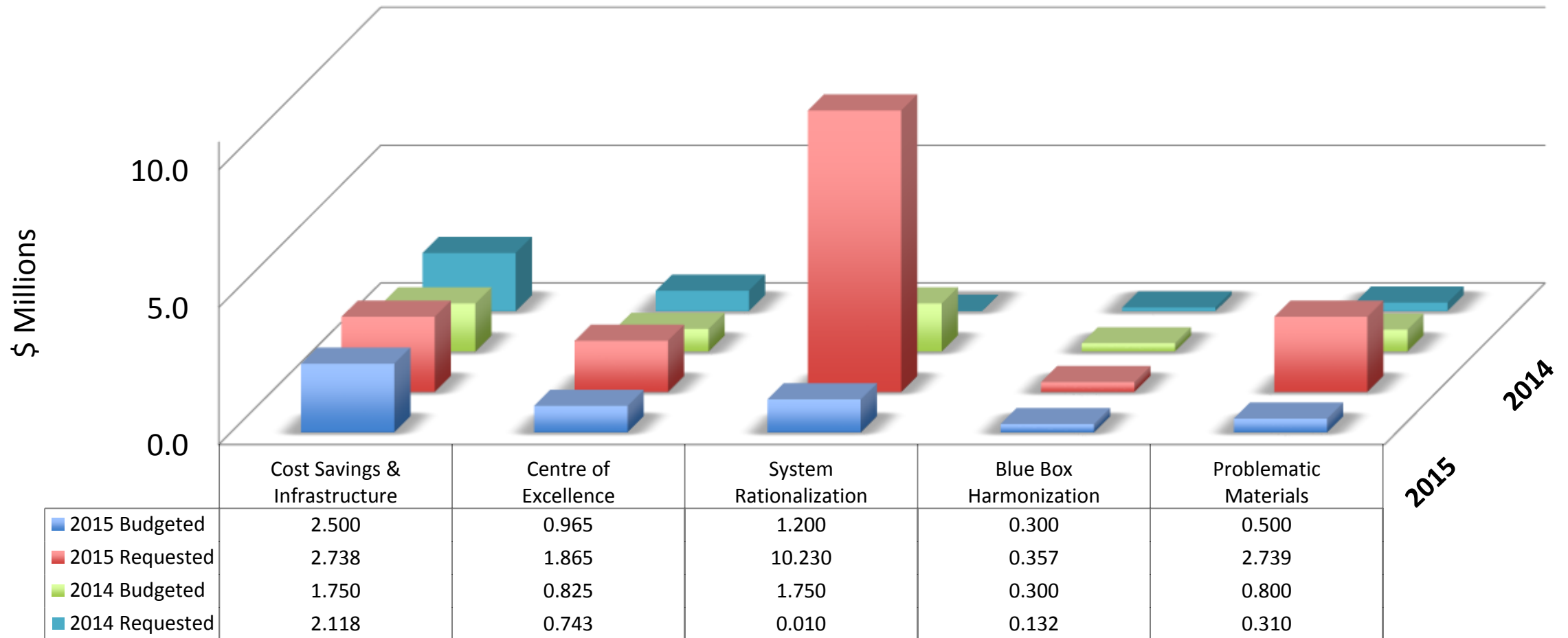
73 Applications Submitted

Trends

- Strong multi-year commitment to cost savings
- C of E interest building especially BP & toolkits
- Large spike in regionalization projects
- Problematic materials projects on the rise



2015 & 2014 REOI Applications vs. Budget



Applications Breakdown

Priority Initiatives	Budget	Subscribed	Difference	Apps	Project Value
System rationalization	\$1,200,000	\$10,230,500	-\$9,030,500	7	\$21,529,000
Projects achieving cost savings	\$2,500,000	\$2,738,401	-\$238,401	16	\$5,137,315
BB harmonization	\$300,000	\$356,752	-\$56,752	4	\$844,040
Addressing problematic materials	\$500,000	\$2,739,475	-\$2,239,475	10	\$10,361,600
Centre of Excellence	\$965,000	\$1,865,067	-\$900,067	36	\$2,264,518
TOTAL	\$5,465,000	\$17,930,195	-\$12,465,195	73	\$40,136,473

Center of Excellence Breakdown

C of E Priorities	Budget	Subscribed	Difference
Development of BP & tool kits	\$200,000	\$366,550	-\$166,550
Materials management research	\$100,000	\$231,862	-\$131,862
RFP/tender support development	\$75,000	\$175,000	-\$100,000
Training initiatives	\$200,000	\$214,000	-\$14,000
Outreach services	\$140,000	\$145,000	-\$5,000
Audits/monitoring & measurement	\$250,000	\$732,655	-\$482,655
TOTAL	\$965,000	\$1,865,067	-\$900,067

What's Next?

- ① All applications & projects reviewed
- ② Applications strengthened, supported, finalized
- ③ Applications evaluated
- ④ CIF Committee meeting June 9th
- ⑤ Resolve the funding gap
- ⑥ Approval/rejection letters sent
- ⑦ Agreements signed
- ⑧ Get started!



Questions

Gary Everett

Gary@Egroup1.com | 519-533-1939

Obstacles & Opportunities in Optimizing Recycling

Gary Everett

CIF

Program Optimization

- Data – the root of optimization efforts
- First 4 Datacall BP Objectives require Data/M Measurement focus

- ▶ Obj. 1: Program Performance Projections and Analysis (13.3% of BP score)
- ▶ Obj. 2: Efficiency Assessments (13.3% of BP score)
- ▶ Obj. 3: System Optimization Initiatives (6.7% of BP score)
- ▶ Obj. 4: Program Performance Outcomes (13.3% of BP score)?

CIF – 737 Density Toolkit

- Monitor your performance
 - Meet standards
- Indicators/red flags
 - Investigate when below the standard

Material	Fibre + OCC			Fibre No OCC			OCC		
	Average			Average			Average		
Bin Size yd ³	t/load	kg/m ³	t/m ³	t/load	kg/m ³	t/m ³	t/load	kg/m ³	t/m ³
20	1.22	83.10	0.08				0.61	39.10	0.04
compacted 20									
30									
compacted 30									
35							0.54	17.20	0.02
compacted 35							2.94	111.70	0.11
40	3.36	106.90	0.11	3.36	110.60	0.11	1.22	41.60	0.04
compacted 40	5.20	166.90	0.17	4.89	198.91	0.16			
Truck Size yd ³									
35				2.41	93.20	0.09			
compacted 35									

Two Approaches

- John Giles, City of Kingston
 - Kingston MRF: How Big is Big Enough?
 - What size MRF is the right size MRF
 - How do I determine this?
- Peter Kalogerakos, The Region of Peel
 - How to Use Technology to Measure Diversion Performance – RFID Integration with Onboard Weigh Scales
 - What is going on in MR buildings?
 - How will I know my efforts improve performance?
 - Do I need to change my policies within this sector?



Kingston MRF: How Big is Big Enough?

CIF Project # 817.2 – Kingston Optimization Study Analysis

John Giles, Solid Waste Manager
City of Kingston

Project Highlights

- Project goal
 - Confirm our role as a regional MRF within Eastern Ontario
- Anticipated Impacts
 - Reduced processing costs for stakeholders
 - Increased diversion rates – expanded list of materials
- More information:
 - John Giles: jgiles@cityofkingston.ca
 - Heather Roberts: hroberts@cityofkingston.ca
 - www.cityofkingston.ca

Why this Project?

- We needed to decide what to do with our MRF
 - Upgrade current facility
 - Build new – what size?



Exploring Options

- In order to decide, needed to know
 - Viability to act as regional hub
 - Determine tonnes needed for each MRF scenario



Project Steps

- Review MIPC Study
 - Apply local analysis
- Municipal data collection, interest & engagement
- Technical plan & business case development



where history and innovation thrive

Request for Proposal

F31-PWS-SW-2014-03

**Consulting Engineering Services
for a Regional Material Recovery Facility Study**

Requesting Municipal Input

- 49 of 67 municipalities responded – 73%
- Challenges/quirks/unexpected issues
 - Some responded to confirm they are “*discussing options for regional optimization*” – a Datacall Best Practices question
 - Some responded to “*stay in the loop*” – responses are non-committal



Reviewing the MIPC Study

- Option 1 – new MRF – not an upgrade of the existing MRF
- Modeled single stream processing – not dual stream
- Assumed private MRFs would convert to transfer stations



Critical Appraisal of Available Material

- MIPC study suggested 35,000 tpy available in wasteshed
- Results of Municipal Data Collection, Interest & Engagement
 1. 22,600 tpy from municipalities expressing interest
 - excluding 2 largest – not likely to participate
 2. 2,100 tpy from municipalities within 100 km
 - “maybe” interested or did not respond
 3. 25,000 tpy potentially available



Technical Analysis & Planning

- Technical Plan & Business Case
 - Costs for 15,000 & 25,000 tpy single & dual stream MRFs, as rebuilds & greenfields
- Results
 - Dual stream MRFs are least expensive
 - Upgrade of existing facility could accommodate up to 15,000 tpy in dual stream system
 - >15,000 tpy would require additions to building



Financial Analysis

- Projected operating costs
 - Lower in all MRF scenarios
- Capital costs
 - Capital cost to upgrade to 15,000 tpy dual-stream MRF
 - total costs about same as current annual costs
 - Minimum tonnage needed in a 25,000 tpy design
 - to keep unit costs at current level, will be established
- Lesson learned: Make sure you consider total costs
 - Capital + operating
 - Consider overbuilding, but know tonnage required to meet current costs
 - anything more & you are in the black



Where Are We At Today?

- Final Regional MRF Study Report
 - Being prepared by HDR
- EITP Report
 - Introduction & recommendations report being prepared by staff
 - Will include the HDR report
- EITP Committee
 - Consider staff & consultant reports
 - Decide on “Go/No Go” recommendation to Council



Next Steps

- Municipalities will be contacted to advise Council's decision
- If decision is to Go
 - Seek long-term processing commitments to justify capital expenditure
- Governance model
 - Processing & marketing at cost
 - Plus an administrative overhead
 - Share risks & rewards



Key Message & Take-away

- Bigger is better...unit costs are lower for larger MRFs
 - If you can secure the tonnage
- 100% EPR – increases risk for capital investment
 - Know your costs & think like a private sector MRF
 - Securing tonnage may be difficult
- Advantage
 - Not driven by profit margins
 - We are planning long-term



Is This Approach a Better Or Best Practice?

- Regional MRFs are a better practice
 - Reduced unit costs
 - Long-term commitments needed
- Other issues to consider
 - Local employment
 - Private MRF competition
 - Regionalization is happening



How to Use Technology to Measure Diversion Performance

CIF Project #328

“RFID Integration with Onboard Weigh Scales”

Peter Kalogerakos
Region of Peel

Project Highlights

- Project goal:
 - Increase accuracy of diversion performance measurement
 - Provide regular feedback to multi-res (MR) property managers (PMs) & superintendents (Supers) through the use of report cards
- Anticipated Impacts: Encourage PMs & Supers to support/facilitate recycling to increase recycling capture rates & resource recovery
- More information:
 - peter.kalogerakos@peelregion.ca
 - www.peelregion.ca/waste

Problem Statement

- Peel Region is 25% MR
- MR lags behind single family diversion performance
 - How do we encourage this sector to recycle more?
- No way to know how much material is coming out of each building specifically
- Some BP have been implemented, but how do we get to the next level?

Project Steps

- Develop, issue & award RFP
- Pilot-test system: 6 months; 20 buildings
 - Send out Report Cards
- Transition to full scale implementation: 6 months to 1 year
- Analyze collection data to determine trends including average generation rates: 1 year
- Assess the potential for user-pay program & seek Council approval



RFID Waste Collection Reporting System

RFID system components include:

- RFID tags on bins
- On-truck hardware & software
- WiFi equipment at transfer station
- RFID back office software (Radiobin)



RFID Tags

- Attached to metal front-end containers & plastic carts
- Programmed using handheld terminal computer to associate with container & service location



Truck Hardware

- Reader antenna detect the container's RFID tag
- Antenna on windshield in cab of truck (front-end truck) or over rear packer hopper

Truck Software

- Records associated data
 - e.g., volume of bin, weight of material & service location
- Computer touch screen displays data & allows driver input where required



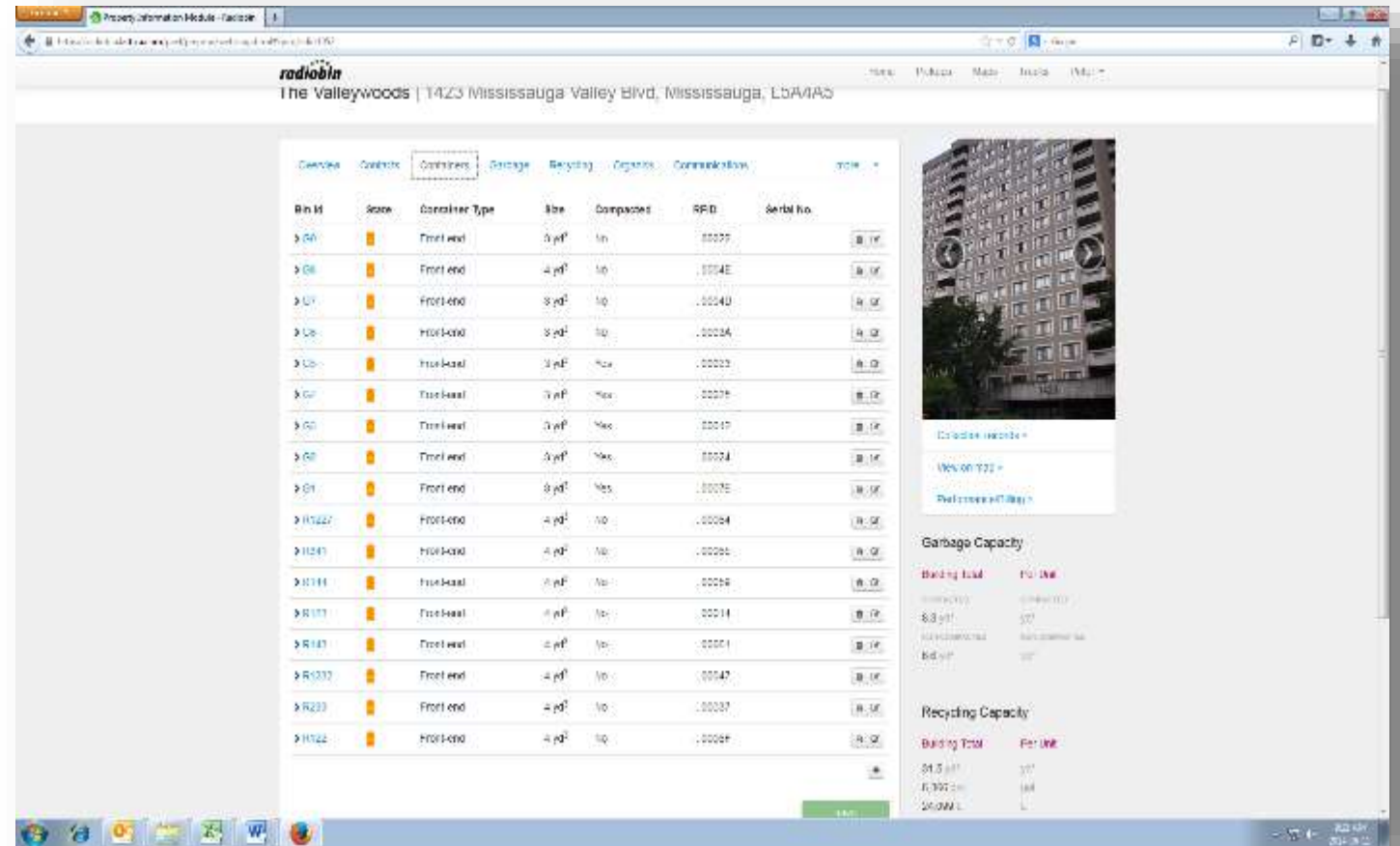
Data Transfer/Communication

- WiFi equipment located near weighscale detects collection vehicle
- Day's data is transferred to main server as collection vehicle is weighed
- Moving to real time data communication
 - Handhelds & collection data



Back Office Software (Radiobin) - 1

- Main software package includes:
 - Database with property data, bin data & collection records
 - Detailed reporting & analysis features
 - Mapping capabilities



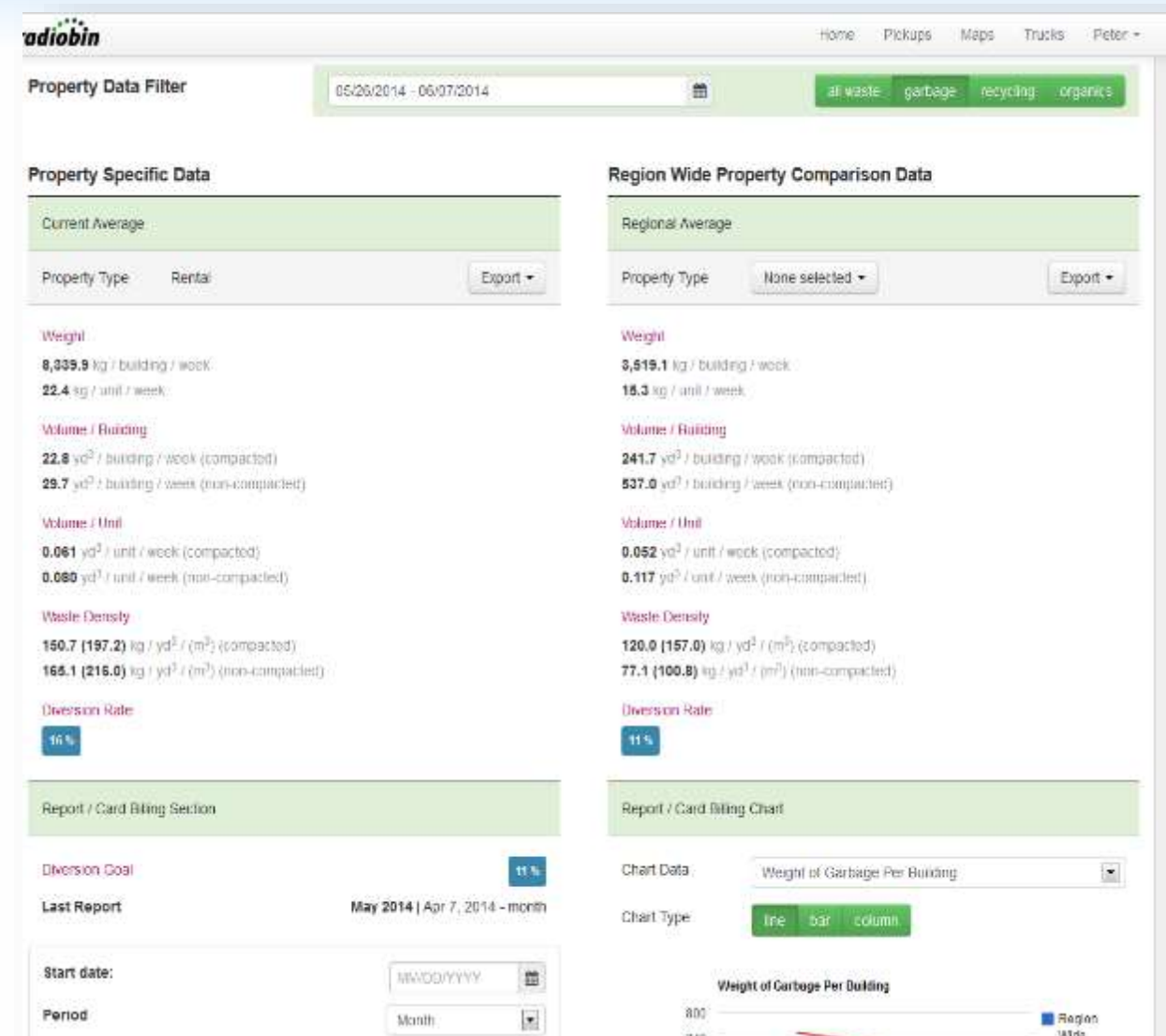
Back Office Software (Radiobin) - 2

System Output

- System can generate reports showing:
 - Weight of material collected (kg)
 - Volume of material collected (yd3)
 - Waste density (kg/yd3)
 - Waste generation rate (kg/unit/week)
 - Diversion rate (%)
 - Comparisons to similar buildings
 - Comparisons by geographic area etc.

Report Card

- Generated by system
- Details waste collection services & lists key system outputs



Monthly Report Card

Waste Management Report Card

7795 Torbram Rd, Brampton, ON



Minfo Properties
Brampton On

Property Address: [REDACTED]
Brampton ON [REDACTED]
Number of Units: 323
Bin Inventory:
R - 1x3yd³
G - 1x3yd³, 4x3yd³(s), 3x3yd³

Suggested Maximum Limit for Garbage:

49 yd³/week (adjusted uncompacted volume)

Suggested Minimum Recycling Capacity:

23 yd³/week

Resource Recovery Rate Goal:

24%

Waste Collection Service Summary: Sep 8 - Oct 5, 2014 Reporting Period

- Your average resource recovery rate was 22.0%
- Your Property was above the average resource recovery rate of all properties (13.0%) and above all Rental properties (13.4%)
- Your Property recycled 246 kg (approx. 2.4 tonnes) of material
- By recycling during this reporting period it is estimated that your property saved 25 trees; if your property reached the resource recovery goal you could have saved 27 trees.

Week	Volume of Material Collected (yd ³)			Resource Recovery Rate (based on weight) *
	Compacted Garbage	Uncompacted Garbage	Recycling	
Sep 8 - 14, 2014	9 yd ³	20 yd ³	19 yd ³	26%
Your property was 116 yd ³ under the suggested limit for garbage. Well done.				
Sep 15 - 21, 2014	9 yd ³	20 yd ³	16 yd ³	19%
Your property was 116 yd ³ under the suggested limit for garbage. Well done.				
Sep 22 - 28, 2014	12 yd ³	14 yd ³	19 yd ³	25%
Your property was 112 yd ³ under the suggested limit for garbage. Well done.				
Sep 29 - Oct 5, 2014	9 yd ³	25 yd ³	19 yd ³	20%
Your property was 53 yd ³ under the suggested limit for garbage. Well done.				

Note: Resource Recovery Rate is the amount of material collected for recycling compared to the total amount of material collected, expressed as a percentage.

Recycling Tips

- Make recycling as convenient as possible for residents/tenants
- Promote recycling in newsletters and common areas
- Recruit a volunteer to champion the recycling program and provide incentives to recycle

If you need more information or have any questions about this report card or the Region's waste management programs or services, call 905-791-7800, extension 4914. Visit our website at peelregion.ca/waste.

Quarterly Report Card

Waste Management Report Card

7795 Torbram Rd, Brampton, ON



Minto Properties
Brampton On

Property Address: [REDACTED]
 Number of Units: 323
 Bin Inventory: B - 60yd³
 C - 20yd³, 60yd³(C), 20yd³

Suggested Maximum Limit for Garbage:

49 yd³/week (adjusted uncompacted volume)

Suggested Minimum Recycling Capacity:

23 yd²/week

Resource Recovery Rate Goal:

246

Waste Collection Service Summary: Jun 30 - Sep 28, 2014 Reporting Period

 Recycling Benefits

- Your average resource recovery rate was 18.0%
- Your Property was above the average resource recovery rate of all properties (12.9%) and above all Rental properties (10.2%).
- Your Property recycled 7185 kg (approx. 7.2 tonnes) of material
- By recycling during this reporting period it is estimated that your property saved 74 trees: if your property reached the resource recovery goal you could have saved 94 trees

Recycling Tips

- Make recycling as convenient as possible for residents/tenants
- Promote recycling in newsletters and common areas
- Recruit a volunteer to champion the recycling program and provide incentives to recycle

Note: Resource Recovery Rate is the amount of material collected for recycling compared to the total amount of material collected, expressed as a percentage

If you need more information or have any questions about this report card or the Region's waste management programs or services, call 905-791-7800, extension 4914. Visit our website at peelregion.ca/waste.

So What?

- System offers unprecedented information to Region waste staff, building PMs, superintendents & residents - knowledge is power!
- Report Cards anticipated to incent building management to engage in recycling
- By adding estimated costs to Report Cards, PMs will be better prepared for user pay system
- Buildings can be ranked on diversion performance
 - Will allow staff to target specific buildings & provide program support



Diversion Impacts

- Current diversion rate is 13%; capture rate is 41%
- Anticipated impacts of current Reports Cards:
 - Increase Diversion Rate to 16-18%, with capture rates increasing to 50-60%
 - If estimated costs added to Report Cards, diversion rates may increase slightly
 - To achieve diversion rate goal currently set in system (24%), user pay system would likely have to be implemented
- Diversion rates linked to generation rates:
 - Audit data: 10.84 kg/unit/wk of garbage; 1.79 kg/unit/wk of recycling
 - 24% diversion goal = 9.39 kg/unit/wk of garbage; 3.24 kg/unit/wk of recycling
 - Tonnage impact= from 8,700 to 15,700 tonnes (80% increase)

Project Costs

- Project costs include: hardware, software, installations & support & maintenance
- Pilot Project: \$20,000/building
- Full Scale Implementation: \$900/building or \$6.50/MR unit
- Support & Maintenance (5 years): \$170/building annually



Key Learnings

- Develop agreement with collection contractors of the requirements of the project well before the project start
- Even with meticulous specifications, some items will have to be tweaked or added
- When dealing with technology, expect the unexpected
- Proper installation & association of tags is critical
 - system only as good as accuracy of bin data
- Be aware of limitations of having only a select number of trucks equipped with RFID hardware

Next Steps

- *May 2015* – Full scale implementation approved & underway
- *June 2015* – Hiring 10 contract staff for installation & data collection
 - 5 teams of 2
- *June to December 2015* – Tag installations; truck hardware installations
- *January to March 2016* – Data collection period
- *April/May 2016* – Send out initial Region-wide Report Cards
- *January 2016 to May 2017* – Monitor & analyze collection data to determine User Pay impacts
- *Fall 2017* – Report back to Council on results to date of RFID system & user pay options



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Power of Policy: Impacts on Diversion & Program Costs

Dave Douglas

VisionQuest Environmental Strategies Corp.

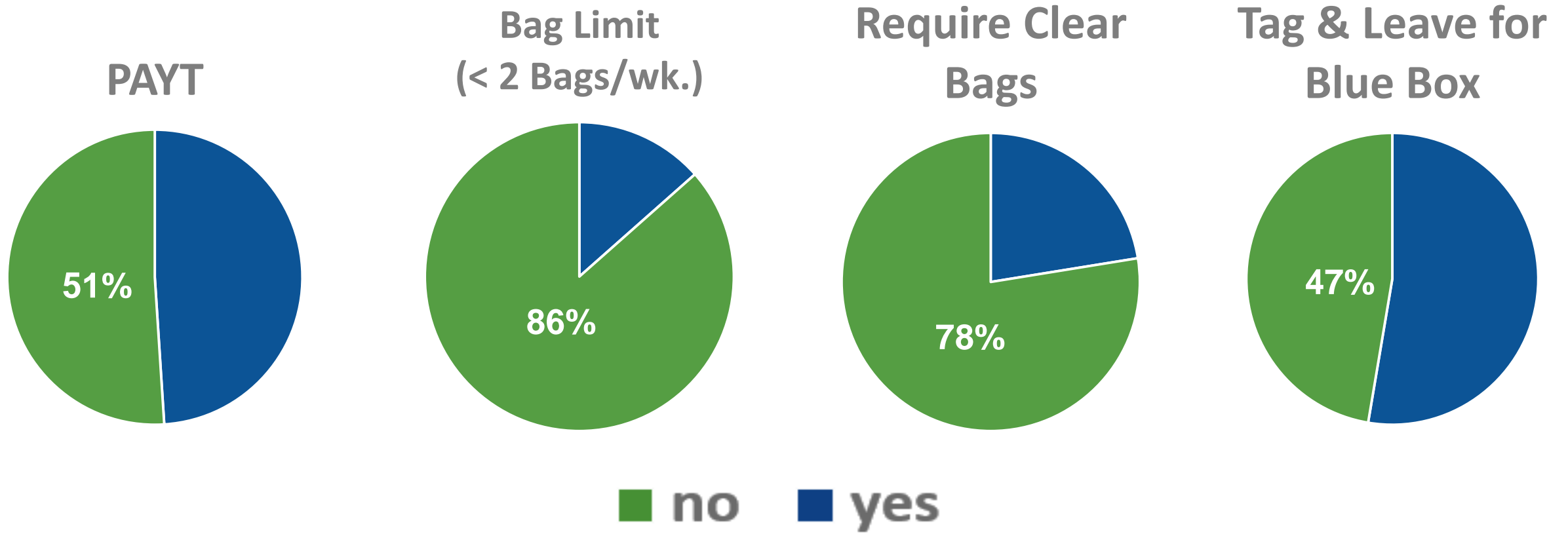
BP– Objective (6.7% BP scores)

■ Program policy BP

- PAYT
- Bag limit
- Clear Bags
- Tag & leave
- Free or subsidized BB
- Greater frequency of recycling collections
- Supervised depots
- Incentives & rewards



Program Policy BP – Focus for Today



Coming Soon: Project #748

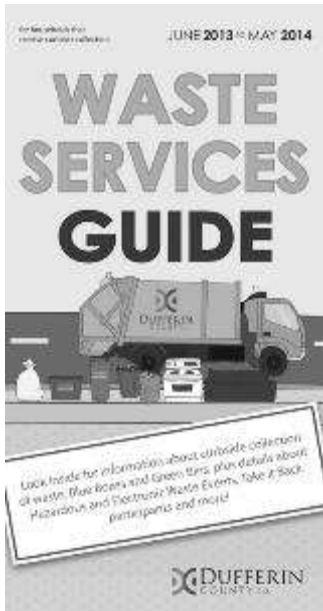
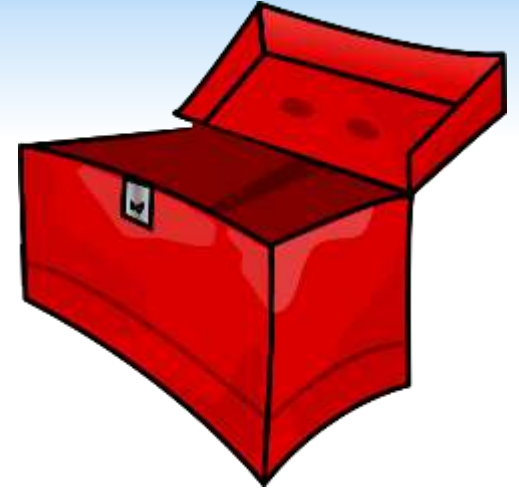
How To Implement a Clear Bag (Garbage) Collection Program Toolkit -The Ontario Experience

Project Goal

Provide Ontario municipal waste managers with clear roadmap that lays out a step-by-step strategy to develop, promote & launch a residential clear bag (garbage) collection and/or drop off program



A Quick Look Inside the Toolbox



Speakers

- Jeffrey Fletcher, The Blue Mountains
 - Bag limits & PAYT policies: Do they Affect Diversion?
- Carly Burt, Niagara Region
 - How To Actively Enforce A 'Tag & Leave' Program For Unacceptable Blue & Grey Box Set-Outs
- Claudia Marsales, City of Markham
 - How To Successfully Implement A Clear Bag Program & Increase Diversion
- Mike Ursu, Region of Waterloo
 - How To Manage Contamination Rates By Managing Your Collection Contractor



Bag Limits & PAYT Policies: Do They Affect Diversion?

Jeffery Fletcher
The Blue Mountains

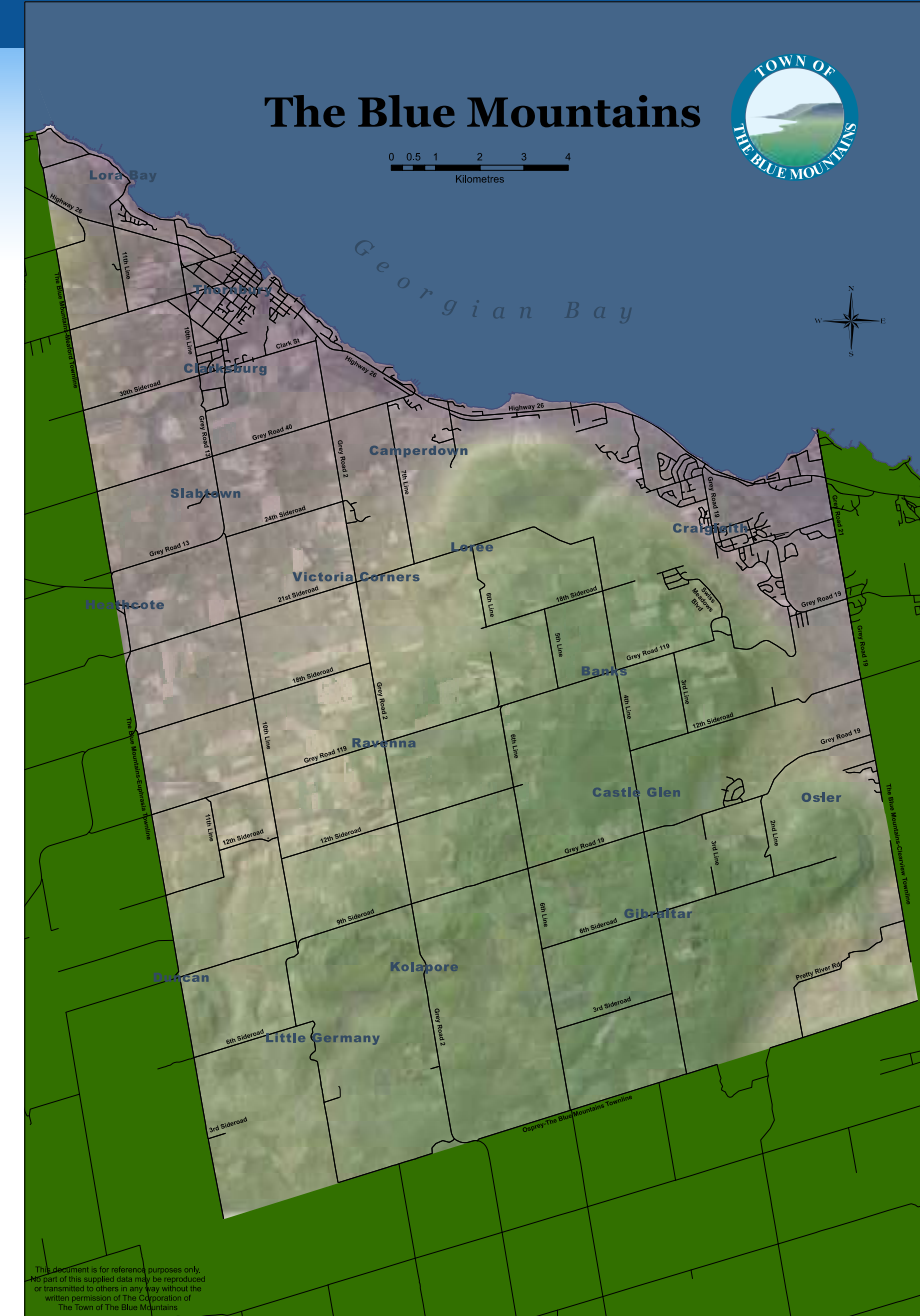
Project Highlights

- Project Goal: Sustained Behaviour Change
- Results: Blue box & composting participation
- Results: Extended landfill life through diversion of materials
- More information:
 - **e:** jfletcher@thebluemountains.ca
 - **t:** TBM Recycles@Mrwastewatcher
 - **w:** www.thebluemountains.ca



Birth of a Program

- Amalgamation “hang-over”
 - New population count & increasing
 - Discrepancy in service & regulatory compliance
- Status
 - 12 Years of landfill life/space
 - Generating 3,800 MT of residential waste
 - 480 tonnes of depot BB - 11% diversion rate
 - 5,350 hh, projecting 9,097 by 2016
 - 30% of hh are condos



Solution

- Public Committee 2002 reviews issue & acted as champions
 - Research indicated PAYT as option
 - New service plan – curbside BB, backyard composting, yard waste composting, etc.
 - Equitable condo collection
 - New program launched 2003



New Program Start in October 2003

- Limiting setout forces recycling but also forms new positive behaviour
- Bag tags & equivalent for condos
 - Single family
 - 1-bag limit, second bag tagged, no third bag
 - Condos
 - FEL sized to number of units (0.2 yd/unit)
 - Extra lifts pay contractor directly



The Blue Mountains Waste Management Co-ordinator Jeff Fletcher displays the new blue and grey bins that are being delivered to each home and business as the town readies for the September 29 start of its new curbside recycling collection program. Courier-Herald Photo

Communicating with Residents

- Launched Blue & Grey Box program
 - Included program guide, free token tag, placed between boxes
- Information sessions
- Fall Fair
- Newspaper
- Website?



Administratively-Speaking

- Coordinated points of purchase with local retailers
 - No cost to distribute
 - Minimized administrative work
 - no free tag allotment
- Complaints
 - Right to access 52 weeks of service – tax rebate
 - “My house can’t do this” & “I didn’t know”
 - Roadside dumping

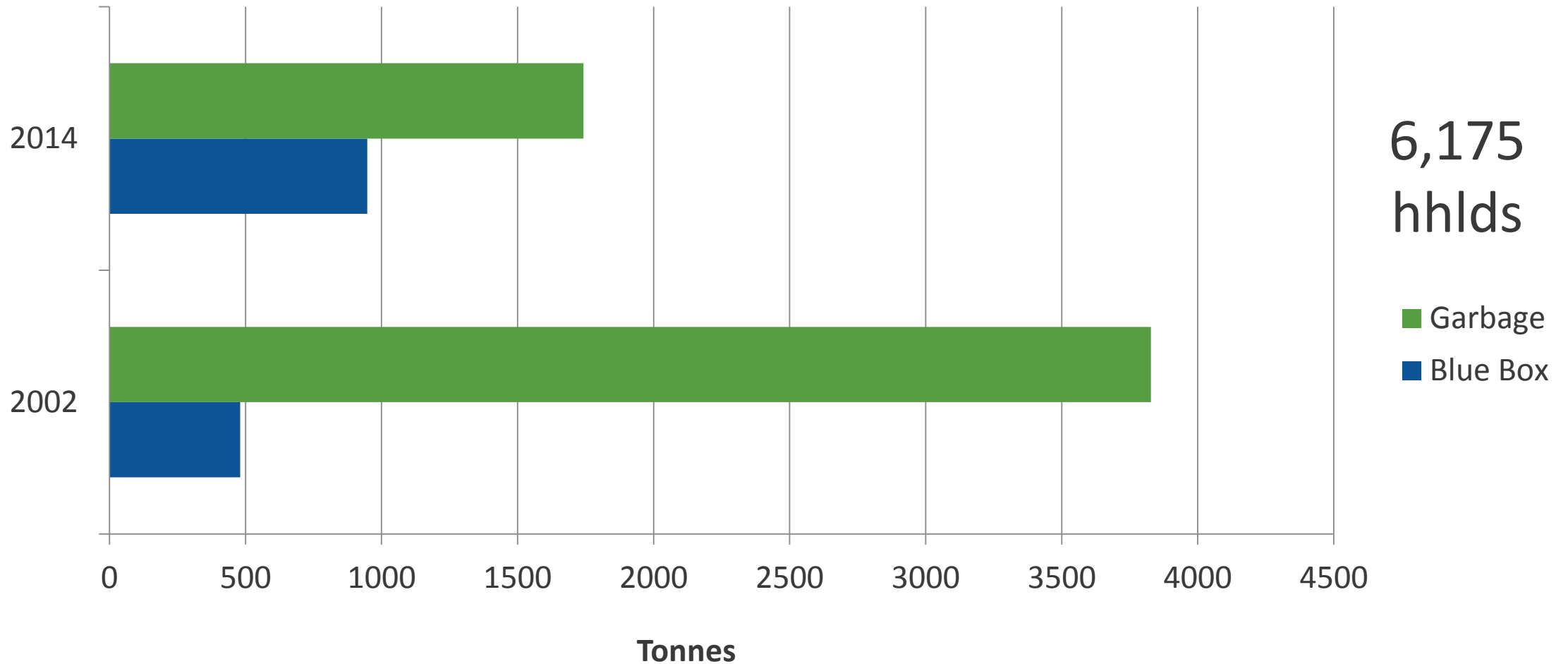


Collectors Become Enforcement

- No full-time by-law enforcement
- Compromise
 - Balancing enforcement & community appearance
- Actively monitoring set out
 - Spot enforcement of violations
 - Pick-up & leave warning – write letter
 - Fees & charges for clean-up
 - Enforcement blitz with municipal staff

NON-COMPLIANCE NOTICE: SOLID WASTE COLLECTION BYLAW (#16/2003)	
Description of offence:	Date / Time
Non-compliance may result in a \$400.00 fine. See opposite side of sheet for more information.	
Notice Issuer:	Notice 2013-TBM-

Comparison of Pre & Post Bag Limit - 2002 vs. 2014



Our 4 Crucial Steps to Bag Limit & PAYT Program

- Council approval
 - Get them to take ownership of process
- Connect with residents
 - At local events & newspaper
- Administration & Enforcement
 - Keep it simple
- Be ready & willing to take complaints
 - Expect some bumps in the road
 - **It is worth it!**





How To Actively Enforce A 'Tag & Leave' Program For Unacceptable Blue & Grey Box Set Outs

Carly Burt
Niagara Region

Project Highlights

- Project goal:
 - Address improper sorting of plastic film & ensure residents aware of acceptable materials
 - Ensure collection contractor compliance
- Impacts:
 - Reduce congestion & jam-ups on container line & residue rates (%)
 - Reduce daily downtime & maintenance at MRF (time)
 - Improve relationship with contractor through good contract oversight
- For more information:
 - carly.burt@niagararegion.ca | www.niagararegion.ca

A Costly Problem

- MRF maintenance staff spend up to 10 hours per week repairing & cleaning equipment due to loose film
- Costs Niagara taxpayers ~\$85 K each year
 - Reallocation of manual labour to sort plastic bags & outer-wrap
 - Concentrate on other more valuable commodities: ~\$72K each year
 - Maintenance costs: ~\$10K/year
 - Collection of more plastic bags/outer-wrap will increase revenue: ~\$2,500/year

Solution

Tactic	Audience	Message
P&E Campaign – Ins & Outs	Residents	Inform residents of expanded list of materials
P&E Campaign – Odd Couple	Residents	Plastic bags & stretchy recyclable film into grey box
Training for collection crew	Contractor	Educate frontline collection staff on what is acceptable at the curb
Pre & Post Curbside Audits	Contractor	Region staff follow up with contractor
Contractor Blitzes	Residents	Contractor properly tag non-compliant material set out by residents

P&E Campaign – Blue Box Ins & Outs (1)



P&E Campaign – Blue Box Ins & Outs (2)



P&E Campaign – Odd Couple



Engagement with Collection Contractor

- Regular meetings to confirm contract expectations
- Q&A page developed for contractor staff
 - Reinforced expectations for unacceptable items
- Shared with collection staff:
 - Campaign promo materials & new tags
 - Recycle & Win Game – asked all contractor staff to participate
 - Results of tipping floor & curbside visual audits
 - Informational display boards & posters



Pre & Post Curbside Audit – No Tagging



40 Diana Dr. – hanger, film, rubber boots in blue box



40 Diana Dr. – all items collected

Pre & Post Curbside Audit – Properly Tagged & Left Behind



Example of Pre & Post Curbside Audit Summary

TRUCK 1117 - Henry St., Pine St., Bianca Dr., Diana Dr., Loretta Dr. –234 homes

- 31 homes did not set out material
- 174 homes had acceptable items in recycling
- 29 homes had unacceptable items in recycling
 - 1 had unacceptable items left behind (loose on ground, not placed back in container), no tag to indicate why
 - 15 had non-compliant material collected
 - 13 had no post route photo available; but there was nothing recorded on the driver's run sheet; assumption that non-compliant items were collected-to verify
- 40/234 homes had film properly packed in bags & placed in grey box
- Some drivers were not tagging all materials regularly

Contractor Communication & Blitzes

- Results of the audits are provided to the collection contractor
- Contractor volunteered to complete quarterly blitzes
- Blitz objective: improve driver tagging & increase improvement in set out
 - To date contractor has completed 4 blitzes
 - Blitz shows an average of 58% of homes improved with tagging
 - Will be completed quarterly for the duration of the contract
 - Contractor discusses results with staff at staff meetings

Blitz Results e.g.: Weekly Totals Secondary Blitz March & April 2015

- 2 weeks after being tagged:
 - 58.3% improved; 27.8% did not improve
 - 4.3% were better than before but still had film in BB; 2.2% were worse
 - 7.4% did not set out recycling for secondary blitz (vacation time expected)

# of Homes	Tagged or Not Collected: First Blitz	Improved From First Blitz & Collected	No Improvement From First Blitz	Improved From First Blitz But Still Not Collectable	Tagged First Collection & Not Collected	Not Out for Secondary Blitz
Monday	41	25	12	4	0	0
Tuesday	15	12	1	1	0	1
Wednesday	49	33	6	2	0	8
Thursday	92	48	37	1	1	5
Friday	33	16	8	2	4	3
Weekly Totals	230	134	64	10	5	17
Percentages		58.3%	27.8%	4.3%	2.2%	7.4%

Was it Successful? Audit Results

- Odd Couple Campaign
 - Decrease of loose plastic film in BB
 - Increase in grey box
- Blue Box Ins & Outs Campaign
 - Overall 15.7% drop in contamination in BB
 - Observation
 - decrease in number of processing difficulties at MRF
 - reduced residue resulting from container stream sorting

Was it Successful? Working with the Contractor

- Sharing information
 - Region provides audits results
 - Contractor provides blitz results
- Driver compliance
 - Contractor follows up with staff
 - Ongoing struggle - audits vary from driver to driver
 - Warning letters issued for repeat non-compliance
- Consistent tagging has assisted residents in understanding message

At the MRF

- Separating bags from container stream does make a difference & is worth the effort
- P&E & contractor tagging led to reduced contamination & daily down-time





How to Successfully Implement a Clear Bag Program & Increase Diversion

Claudia Marsales
City of Markham

Project Highlights - Clear Bag – Getting Started

- Project Goal:
 - Send as little waste as possible to landfill
 - Create programs to reduce, reuse & recycle in community
- Impacts: 2006 Mission Green – launch of Green Bin program
 - Diversion spiked then flat-lined
 - 2012 'Best of the Best' Markham's Roadmap to 80% Diversion
- More information:
 - cmarsales@markham.ca | www.markham.ca

Working Group of Councillors & Staff

Diversion Sub Committee

Deputy Mayor Jack Heath-Chair

Regional Councillor Joe Li

Councillor Valerie Burke

Councillor Logan Kanapathi

Mylene Bezerre, MEAC

Dave Gordon, York Region

Peter Loukes, Director, Environmental Services

Claudia Marsales, Senior Manager

Guests

Councillor Howard Shore

Councillor Alan Ho

Clear Bag Only 1 of Many Initiatives

- Mandatory Material Separation By-law – residential/MR
- Unlimited clear bags for residue – no more limits or tags
- Expanded textile/carpet diversion program
- Zero Waste for Schools Program
- Establish Retail Bag Policy for Markham
 - not moving forward
- Enhanced P&E – increase Social Media
- Reuse depot for renovation materials
- Curbside electronics & battery collection ban
- Establish Spring & Fall clean-up days
- Expanded Fall leaf/yard collection into December – climate change



Clear Bag Budget - \$35 K project

Steps	Audience	Message	Budget
Focus Group Sessions - 2012	Residents	Gage acceptance level & issues	\$8K
Pre-Education	Residents	Info on privacy – Green Bin tips Info on incineration	In house
Retail Plan - consultant	All stores in Markham selling garbage bags	Info	\$10K
Education - stickers	All residential curbside	Info	\$5K
Collection Schedule & annual newsletter	City -wide	All changes plus clear bag – April 2013	Part of annual operating budget
Supply of Clear Bags	Residents	Free samples	Donated

Pre-Education Ads



GREEN BIN TIPS

Do you know you can put these items in a paper, plastic or compostable bag and recycle them in your Green Bin?

Toilet paper rolls | Confidential bills and papers
Shredded paper | Diapers | Feminine hygiene products

If your Green Bin is full, you can put the rest of your organic material in a **clear plastic bag** and place it at the curb beside your Green Bin.

For more information on Markham's Recycling & Waste Program, visit www.markham.ca

Advertisement in local newspaper

In 2013 Collection Schedule December 2012

We Need Your help! New Garbage Bag Requirements

Starting April 30th, 2013 – No more tags or 3 bag limit! Residents can place out an unlimited amount of **non-recyclable** garbage in clear garbage bags every other week. Concerned about privacy?

- Tear or shred confidential papers/bills and place in Green Bin.
- Use a small opaque privacy bag in the clear garbage bag.
- Place the clear bag in a garbage can.

WHY? Markham together with York Region is shifting from land-filling garbage to processing garbage for energy recovery at facilities located in other communities. Clean garbage means clean fuel – free of hazardous and toxic materials. Using clear bags also keeps our collectors safe from potential injury. Clear bags can also be used for overflow organics placed **beside** your Green Bin.



***No More Limits* in Markham – Unlimited Amounts of Properly Separated Material Can Be Placed at the Curb!**

Education Ads

***NEW:* CLEAR BAGS FOR GARBAGE - NO MORE BAG LIMITS**

EFFECTIVE APRIL 30, 2013

- Markham will be eliminating the current 3 bag limit and tag program
- No bag limits for garbage in clear bags
- Dark/Tinted/Coloured/White bags for garbage are not accepted
- Clear bags of garbage containing large amounts of recyclable/compostable material will not be collected
- Up to four small shopping bags are permitted biweekly for privacy items
- Garbage in clear bags can be placed in a garbage can



TIP:

Use less bags,
empty your
household waste
baskets directly
into your clear
garbage bag!

For more information,
visit www.markham.ca

Education

How do I set out my garbage in a Clear Bag for Collection?

Clear Bags
Required April 30

- ✓ Clear bags for garbage cost the same as dark bags
- ✓ Clear bags can be used for excess organics
- ✓ Clear bags can line your green bin



No bag limits for clear bags containing non recyclable/non compostable garbage. Clear bags can also be placed into a garbage can.



No more than 4 small shopping bags of non recyclable/non compostable garbage may be placed out per collection within your clear bag.



No more than 4 small shopping bags of non recyclable/non compostable garbage may be placed directly into a garbage can.

Clear bags and your privacy

Tear or shred personal papers and put in weekly green bin

Diapers and feminine hygiene products
accepted in weekly green bin

Use small bags (shopping) within your clear bag
(up to 4 per collection)

Place your clear bag in a garbage can

Tell Them Why

SMALL CHANGE BIG BENEFIT!



CLEAR BAG BASICS

Starting April 30, 2013, the City of Markham is switching to clear bags for garbage.

- No more bag limits!
- No more tags!
- No added cost!
- Residents must place only non-recyclable/non-compostable garbage in clear bags for collection
- No more than 4 small (shopping) privacy bags may be placed within your clear garbage bag per collection
- You may place clear bags of garbage in a garbage can

Clear bags containing large amounts of recyclable/compostable material and dark bags may not be collected.

WHY THE CHANGE?

As Markham moves from land filling to processing and incinerating waste in the new York/Durham Incinerator, it is our responsibility to ensure that the garbage we send to this facility is free of hazardous, toxic, recyclable and compostable materials. We owe this to the community that has agreed to manage our waste for us.

Clean waste supports cleaner air and energy. Clear bags remind us to be careful about what we throw in our garbage.

Using clear bags keeps our collectors safe from injury and ensures everyone is doing their part!

Switching to clear bags is a small change that will deliver big benefits.

DID YOU KNOW?

Confidential bills/papers, feminine hygiene products and diapers (adult & baby) should go in your Green Bin.

For more information on clear bags and other waste programs, visit:
www.markham.ca • 905-415-7535



Addressing the Retail Issue

- Real concern clear bags would not be available in stores
 - Ensure sufficient supply on shelves at hundreds of retail locations
 - Costco, Home Depot, Food, Drug & Dollar stores
- Hired retail consultant
 - Worked with brand managers & senior purchasers to ensure sufficient supplies shipped to Markham retail locations
 - Partnered with Glad for coupons & free bags

Need Sufficient Quantities



ENFORCEMENT – First sticker left on Green Bin – all waste collected



ENFORCEMENT – Second sticker left on one dark bag



ENFORCEMENT — Final sticker left on dark bag – no bags collected



Power of Positive Feedback

- Gold star campaign
 - 80,000 STAR STICKERS – very effective!
 - Placed on green bin if set out is fully compliant
 - Placed by summer students; used throughout summer
 - Residents phoned asking for a Star if their neighbour had one
 - Residents spotted wearing them around community!!



Hurdles & Stumbling Blocks

- What to do with left over dark bags – have a plan
- Clear means **CLEAR** – confusion about tinted bags
 - need clear definition of a ‘clear bag’
- Privacy Bags – how many to allow?
- Loose garbage in garbage can – allow?
- Length of amnesty? When to enforce?
- Bag limits – necessary?
- Have a **GOOD** reason to go clear besides diversion
- Health & safety – hidden sharp objects
- Hidden hazardous & electronic waste





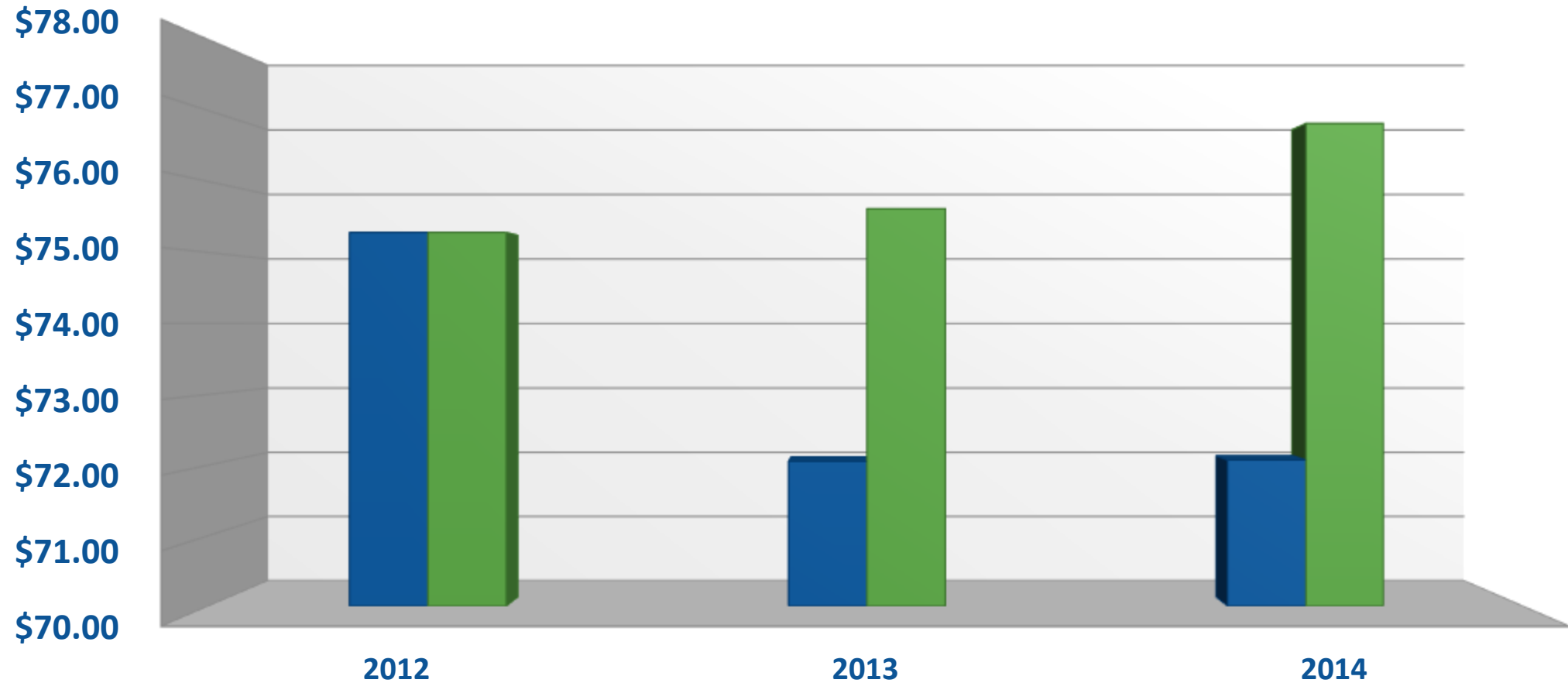
Lessons Learned

- Need a political champion & other Councillors involved throughout process
- Try focus group sessions – know what your residents are thinking
- Launch with other initiatives – take focus off clear bag
- Work with media - respond to negative comments in newspaper
- Ensure sufficient supply of clear bags in stores well before launch
- Have active public education at curb throughout process
 - We had 6 summer students on street
- Hire temporary help – phone calls, e-mails
- Ensure complaint calls go to staff – not contractor or councillors
- Ensure sufficient supply of BB & green bins for sale
 - Large spike in sales close to launch

Outcomes & Benefits

- Immediate spike in recycling & SSO tonnage - held >year
 - 10% overall increase in diversion
- All non participating households have to recycle – full participation
- Residents had to re-educate on what goes where
- Enforcement easy: don't collect dark bags – ever – whole street is watching
- Monitor contractor: look for dark bags in waste truck via spot audits at transfer station
- City Hall & all facilities need to use clear bags – residents are watching
- Cleaner streets
- No complaints since launch – everyone uses clear bags

Average Cost per Household for 3-Stream Collection (Inclusive of CPI & Fuel)



	2012	2013	2014
■ Average cost per Household	\$75.28	\$72.05	\$72.07
■ 'Without Best of the Best Implemented'	\$75.28	\$75.62	\$76.82

Celebrate – Clear Bag Day





Managing Residuals by Managing the Collections Contractor

Mike Ursu
Region of Waterloo

Highlights & Contact

- Project goal: implement auditing protocols for BB materials collected at curb to reduce residue
- Impacts: residue reduced from 20% to 6-8%
- Contact information:
 - mursu@regionofwaterloo.ca | 519-575-4400 x8434
 - www.region.waterloo.on.ca/waste

Problem Statement

- Changed to 2-stream collection program in 2011
 - Container material was 20% contaminated at tip floor
 - Residue impacts recyclable recovery rates
 - Cost 1 – 2% of revenue annually (\$30-\$50 K)



Solution

- Provide drivers with information guide
- Contamination clause in collection contract
- Created Standard Operating Procedures (SOP) for auditing contamination
 - Developed with collection contractor
 - Implemented through contract administrators

Recyclables Driver Information Guide



RECYCLING DRIVER INFORMATION GUIDE



Blue box contents **MUST** be sorted into 2 streams

CONTAINERS



- all metal food and beverage containers
- aluminum foil and trays
- metal paint cans (open, dry & empty)
- aerosol cans (empty)
- all rigid household plastic containers and packaging including caps & lids
- drinking boxes, juice or milk cartons
- coffee/drink cups (paper & plastic)

PAPER PRODUCTS & BAGS



- newspapers and inserts
- magazines
- white and coloured paper
- telephone, paperback/hardcover books
- shredded paper (grocery bag size only)
- cardboard
- boxboard
- plastic bags and outer wrap

DOES NOT INCLUDE:

- these items should be left in the blue box and stickered

- waxed or heavily soiled cardboard
- oversized cardboard bundles
- broken glass, drinking glasses, dishes, utensils
- window glass, mirrors
- light bulbs, fluorescent tubes
- ceramics, T.V. glass, chinaware
- electronic waste
- metal automotive, bicycle or appliance parts, lawn chairs
- sealed paint cans
- "bagged" containers (metal/plastic)
- styrofoam, rubber hoses, toys
- syringes, medical waste

COLLECTION GUIDELINES

(Used Motor Oil in securely sealed screw-top labeled containers - 4 litre limit)

- Blue box contents are to be sorted into the two streams properly to avoid cross-contamination. Any non-recyclable or improperly prepared material **must be stickered** and left behind in the blue box.
- Empty recycling containers shall be placed neatly upside down on the ground at the location it was picked up.
- Drivers shall at all times behave in a polite, courteous and respectful manner towards the public.
- If for any reason the entire contents of a blue box are left behind due to safety reasons, or a driver is experiencing recurring preparation problems at an address, that address must be called in to their dispatch or supervisor and in turn Regional officials will respond and educate resident.

RECYCLING TRUCK GUIDELINES AT MRC

GENERAL RULES:

- observe speed limit of 30 km/h
- observe all traffic signs, lights and beacons
- do not drive around the MRC with bubble open or box raised
- report any damage, accident, or vehicle apb to your supervisor immediately!
- any litter from your truck outside the MRC must be cleaned up



1st DROP - FIBRES

- check traffic light and wait for **GREEN** light
- back up to door to activate. Do not proceed until door is open fully! (beacon will flash while door is opening)
- back up slowly, open bubble and begin to raise truck body to dump material. Move forward to spread load
- **check the compartment and clean it out totally if fibres are still present**
- lower box and close bubble before leaving area

2nd DROP - "CONTAINERS"

- check the traffic light beside your door - wait for **GREEN** light. Drive up to activate door. (beacon will flash while door is opening)
- drive into area slowly as far as possible, open bubble and raise box to dump material. Move forward to spread load
- after load is dumped, check to ensure all material is out of truck
- lower box and close bubble before leaving area
- when completed, pull out to check compartment doors. Any material remaining in truck must NOT be deposited onto the parking lot!

Auditing SOP

- Train environmental studies coop students to audit
 - Minimal staffing cost as audits are preformed randomly
 - Collect contaminant materials in a 14 gallon BB
 - Anything over one BB full is deemed a rejected load

Date:	Time:
Company + Truck #:	
Number of Blue Bin's contamination:	
Pictures Number:	
Comments:	
Auditor's Name:	



Unload containers in separate area of tip floor for safety & ease of auditing



Always provide sufficient walking space around load to enable full access to load being audited



Auditors (students) gathering evidence of contamination



Auditors documenting results of findings – some curbside drivers wait to find out if they ‘passed’

Rejected Load



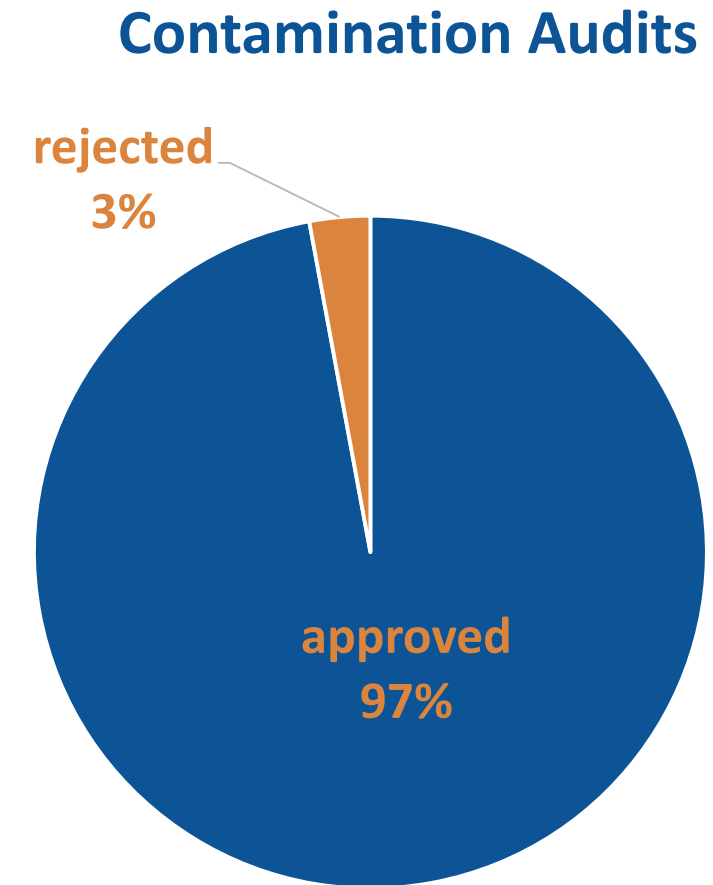
Recourse – Rejected Loads

- Contract coordinators review
 - Notifies within 24 hrs
 - Notes applicable penalties/costs
 - Provides photo documentation
- No payment for tonnage collected
 - Weighted at scale or estimated on tip floor
- Drivers may be disciplined up to & including dismissal

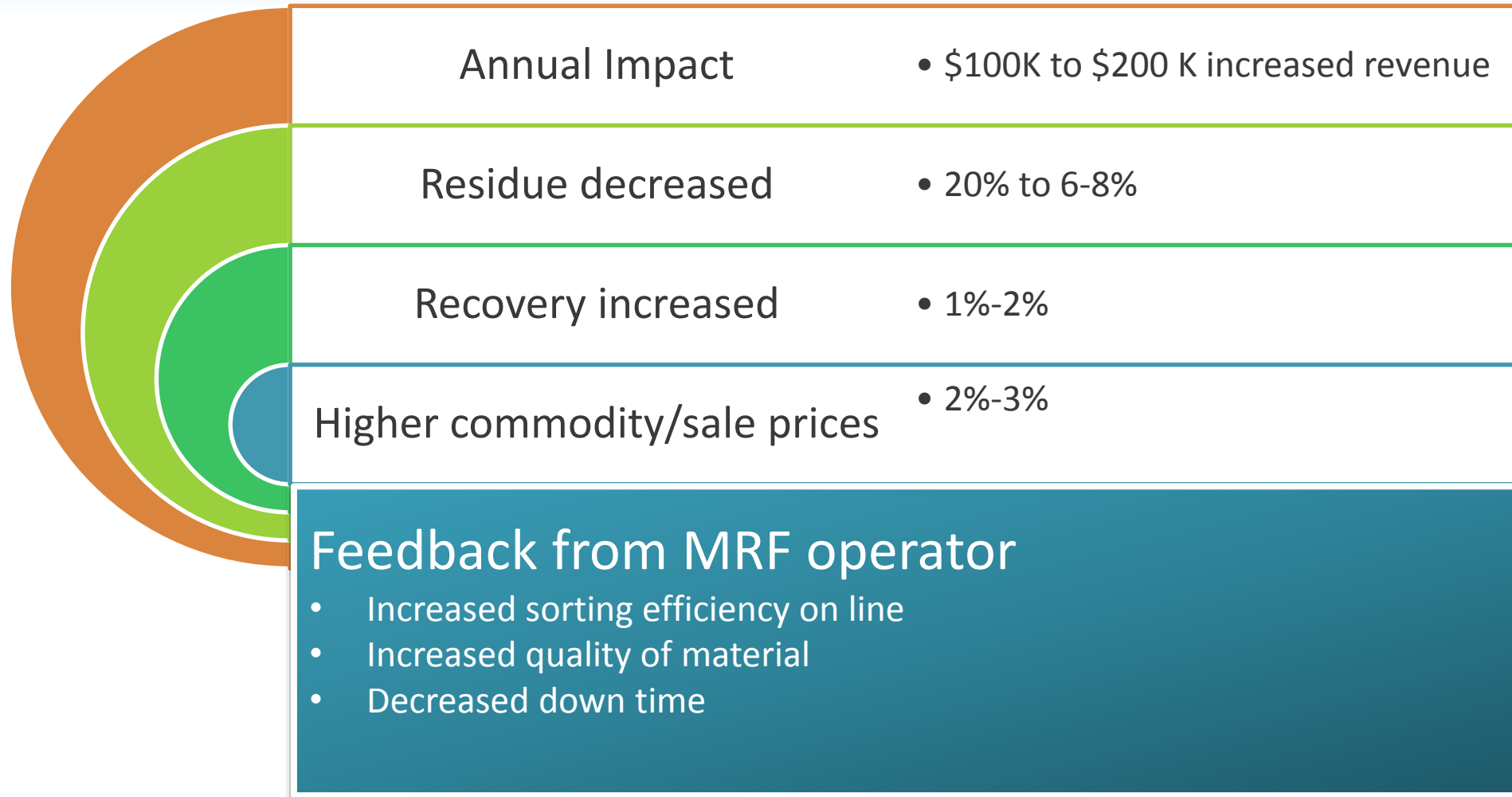


Impacts Since January 2013

- 800 curbside loads approved
- 24 curbside loads rejected
- 97% approval rate



Analysis



Key Learnings

- Auditors performing random audits are a cost effective solution for contamination
 - Cost of 1 FTE (~ \$60,000)
- Provides a good check/balance for paying collection contractor on per tonne basis
- Requires
 - Strong working relationship with contractor
 - Simple to complete & administer audit SOP
- Next steps
 - Continue to work with contractor
 - Continue to work with residents through P&E outreach



CONTINUOUS
IMPROVEMENT FUND

Enjoy your Break



Glass:

Whose Responsibility is it?

Mike Birett
Managing Director, CIF

Glass is an Iconic Symbol of Recycling



But The Decline Started Decades Ago



MRFs Adapted Accordingly



So Now What?



- Do we finance a downstream solution?
- Do we upgrade our MRFs?
- Do we cease curbside collection?
- Alternatives?
- Options?



Time to Have a Frank Discussion

- There are no silver bullet(s)
- Panel of experienced stakeholders
- Today's goal is to get the issues on the table & see if there's a path forward





Hamilton

Dave Faris Yousif
City of Hamilton

CIF
CONTINUOUS
IMPROVEMENT FUND

Municipal Glass Recycling in Ontario

- Tonnage: ~94,000 tonnes (2013)
 - 61% single stream
- Destination: Nexcycle, CLP, Niagara Ecoglass, use at landfills
 - Market Failure: Hamilton Consumers Glass, Unical, Klareco/Unical, eCullet, Hillcrest
- Sorting Equipment: ORSE, trommels, opticals, screens, air separators

Glass Recycling in Hamilton

- Tonnage: 3900 tonnes (2014)
- Equipment: ORSE (Organic Separator)
 - Pre-install: NGR in glass stream ~50%, difficult & costly to market
 - Post-install: NGR in glass stream ~10%, marketed to Nexcycle



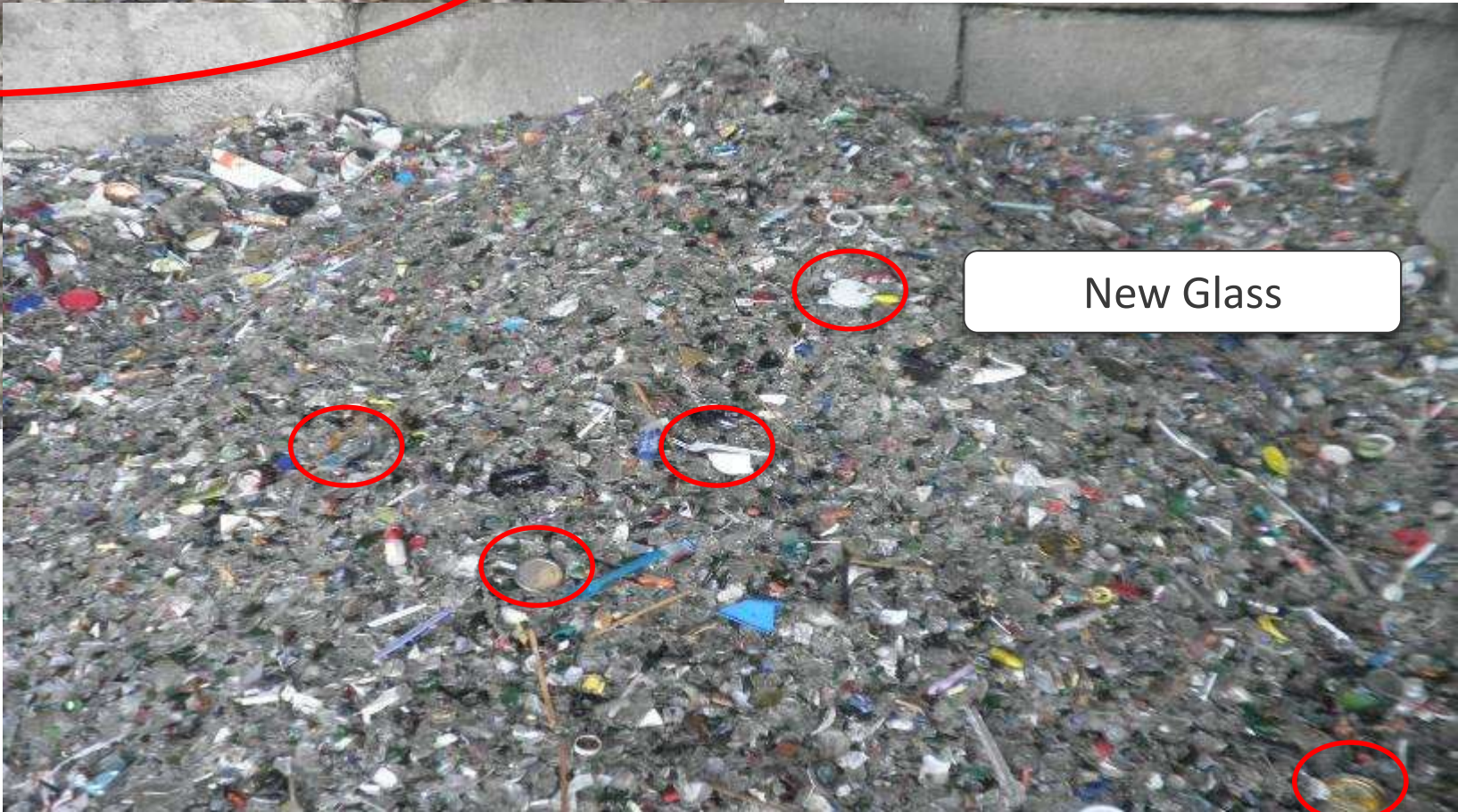
New Equipment
(ORSE)



Old Trommel



Old Glass



New Glass



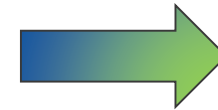
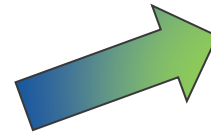
Joseph LaPierre

Company Overview

- NexCycle Canada is a large volume recycler of glass & plastics with 3 manufacturing plants in Canada
- Currently employ 150 people in Ontario
- Over 25 years of recycling activity in Ontario
- A division of Strategic Materials Inc. (SMI) the largest glass recycler in North America with over 40 plants on the continent

Company Profile

- We accept municipal blue box glass, container deposit glass & industrial glass
- Utilizing the latest mechanical & optical sorting technology we size & purify glass into “cullet”: a desirable feed-stock for glass manufactured applications



Importance of Glass Quality

A Tale of Two Piles



Market Trends – Municipal Glass Supply

- Cullet Demand Remains Strong, but the economics have changed
- Most MRF tons have shifted from dual/triple-stream to single-stream recycling
- Quality of Incoming material has declined
- T-Put rates ↓ Yield Loss ↑
 - Landfill % & costs increasing
 - Environmental management costs are increasing
 - The costs of processed cullet are increasing

Market Trends – Municipal Glass Supply

- Customer specifications are stringent:
 - Less glass for high end markets
 - Growing piles for low end markets
 - Economics are challenging
- Chasing technology solutions in a changing game = \$\$\$\$

NexCycle Countermeasures (Quality Assessments; Data Collection) (1)

- Created inbound inspection program & began to share data with suppliers
- Tied pricing to incoming quality
- Working to be open & transparent on pricing



NexCycle Countermeasures (Quality Assessments; Data Collection) (2)

- Key drivers for our pricing are:
 - NGR% & landfill rates
 - Undersize%, our technology capability & market outlets
- Enable MRF's to evaluate economics of quality

Undersize Fines (-3/8")

Usable Glass (+3/8")

Non-Glass Residue (NGR)

18%

64%

18%

NexCycle Countermeasures (Re-Investment, Innovation)

- \$300,000 in Environmental Stewardship measures over last 3 years – further investments committed for 2015
- Aggressive inventory & processing reduction initiative:
 - 145,000 tons on site in 2008
 - 40,000 tons on site in January 2015
- \$2.5 million in capital investment upgrades over last two years for MRF glass processing & capacity enhancements

In Summary

- Currently receiving over 60% of Ontario's municipal BB glass
- Sufficient capacity to service all Ontario's municipal glass assuming reasonable quality
- Recycling solutions provider for the Beer Store & ODRP program

*Our goal is to be the most competitive & reliable **long term** recycling solution for all of Ontario's municipal glass*



Canada's National Brewers

Brian Zeiler-Kligman

bz-k@nationalbrewers.ca



[@EnviroBeerGuy](https://twitter.com/EnviroBeerGuy)

Beer Store Operates 2 Recycling Programs

1.65 Billion beer containers collected
303 Million wine & spirit containers collected

Beer Store's program for beer containers
(self run)
Since 1927



93% recovery rate

- 100% industry-funded
- 300,000 MT diverted from landfill
- Includes ~23,000 MT of OC

Ontario Deposit Return Program
(wine, cooler & spirits containers)
Since 2007



80% recovery rate

- Funded by LCBO
- >110,000 MT diverted from landfill
- Increase of ~64,000 MT in glass recycling

The Basics

Beer Container

- Covers all TBS-listed products (sold in glass bottles & metal cans), including those sold by:
 - Ontario-based brewers – craft, large or otherwise
 - Regional brewers
 - Foreign brewers (imports)
 - Consumer & Licensees (IC&I)



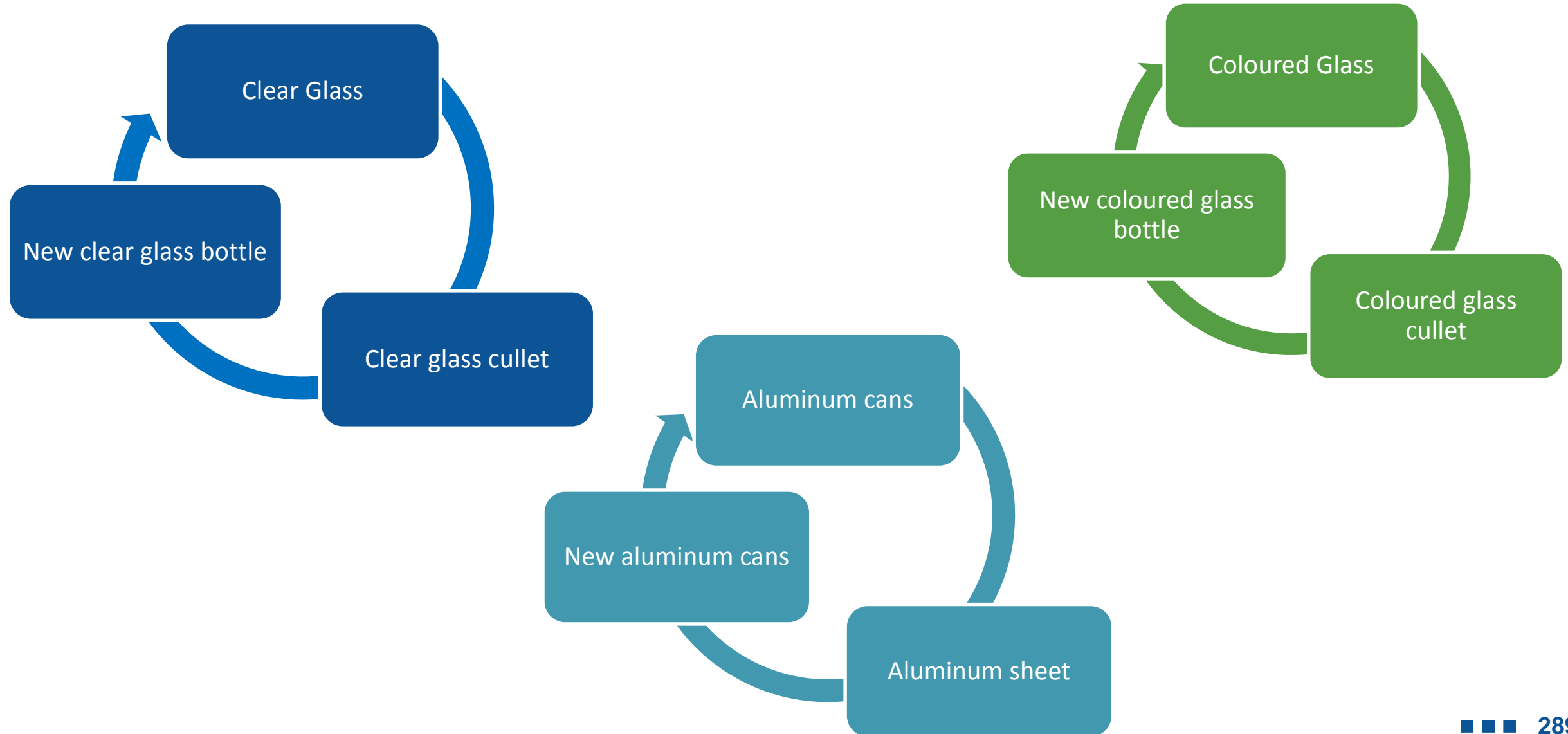
ODRP

- All beverage alcohol containers over 100 mL sold in Ontario are part of ODRP
 - Containers under 630 mL - \$0.10 deposit
 - Containers over 630 mL - \$0.20 deposit
- Includes alcohol products sold in:
 - Bottles (glass & plastic)
 - Cans (aluminum & other metals)
 - Tetra pak
 - Chill packs
 - Bag-in-box packaging

Unmatched Environmental Results

- Recovers **~2 billion containers/yr** (beer + ODRP)
 - >2 billion ODRP containers returned in past 8 years
 - >400,000 MT annually - equivalent to >45% of materials collected through BB program
- **Savings** to Ontario taxpayers **of over \$40M** (from both programs)
 - Net cost of ODRP approx. \$0.05/container
 - Net cost for glass containers in BB is \$0.10-\$0.16
 - Net cost for glass containers in BC & AB range from \$0.087-\$0.30
- Beer Store **recovers more paper & plastic** than the industry generates
- Avoided ~196,000 MTCO₂E of GHGs
 - Equivalent to taking ~41,333 cars & trucks off Ontario roads

Deposit System Enables High-Value Recycling



1. What are the implications of glass for MRF processing?

2. Why can't the glass just be received as is at the downstream reprocessor?

**3. Tell us about how glass is being handled
in other provinces, specifically BC**

4. Can you comment on effectiveness of glass clean up systems in the MRFs

5. Does seasonality dramatically affect the amount & quality received?

6. What are major contaminants before & after MRF glass clean up systems

7. How much of the glass you receive actually gets diverted? Can you break it down for us?

8. What are the traditional markets for glass? Do you have any trouble selling to these markets?

9. Can each of the panelists comment on the viability of moving glass from curbside to depots to improve quality

10. There are complaints from consumers about having to return glass via deposit return programs

11. With 20% of the Ontario Blue Box glass being deposit return, is there a way to improve capture?

12. From a packaging design perspective, is glass here to stay?

13. What is the next step?



CONTINUOUS
IMPROVEMENT FUND

Closing Remarks



Thank you
**ORW speakers, Simcoe County Landfill Staff plus
in person & webcast attendees**

Please complete ORW survey next week

See ORW slides & webcast archive:
<http://cif.wdo.ca/events/orw/index.htm>

Contact CIF

Mike Birett – Director, CIF

mbirett@wdo.ca (905) 936-5661

Carrie Nash – Project Manager, CIF

CarrieNash@wdo.ca (519) 858-239

Gary Everett – Project Manager, CIF

Gary@Egroup1.com (519) 533-1939