

Research and Data Informing Education and Communications

This Curbside Organics Program Education and Communications Plan builds on the foundation established by the City’s Solid Waste Reduction and Diversion Plan (SWRDP), best practices from other jurisdictions, existing waste diversion education and communications programs, public engagement results, statistically representative surveys, and waste characterization studies.

Tools to Support Behaviour Change

The SWRDP serves as a guide for this education and communication plan. It outlines the tools to support behaviour change that were developed based on research, best practices, and the City’s own experience with waste diversion education and communications. The table below summarizes how these tools support behaviour changes generally and makes the connection of how they can be applied to the city-wide curbside organics program. The full description of how each tool supports behaviour change is available on pages 33-37 in the SWRDP.

Behaviour Change Tools	Application in this Plan
<p>Partnerships and Collaborations Behaviour change involves building a new culture around waste. The City can work with partners and collaborators to leverage the knowledge, resources, and support to change waste culture.</p>	<ul style="list-style-type: none"> • Leverage existing partnerships/contracts for education program delivery; • Utilize the City’s existing community/ neighbourhood-based organizations to help disseminate messages.
<p>Leading by Example The City exemplifying the desired behaviours is a key tool to support change. Consistency in diversion options where residents live, work, and play also reinforces behaviour change.</p>	<ul style="list-style-type: none"> • This program is being developed at the same time as the education and communications on residential curbside organics will roll out and include organics collection at City facilities. It will: <ul style="list-style-type: none"> ○ Ensure consistency in education and communication as the Leading by Example organics diversion program rolls out; ○ Utilize City facilities to disseminate messages; ○ Provide staff education on the program through internal communications channels since many of our staff are also residents.
<p>Education Program success is dependent on residents’ knowledge of acceptable materials for each program and knowing how to successfully participate in the program.</p>	<ul style="list-style-type: none"> • Expand or adapt successful education programs; • Leverage a variety of platforms to help reach residents where they are; • Focus on the program basics for successful participation.

<p>Research Information, data, and analytics can help identify gaps in knowledge and specific behaviours that can be targeted.</p>	<ul style="list-style-type: none"> • Use existing data to identify target audiences and behaviours; • Utilize data throughout the first year of operations to adapt plan to be responsive to specific behaviour challenges as well as celebrate successes.
<p>Community-Based Social-Marketing Information alone is not often enough to change behaviour and personal engagement, feedback and reducing barriers to participation is often required.</p>	<ul style="list-style-type: none"> • Provide kitchen catchers and information on how to use them to reduce the barrier of collecting kitchen waste; • Provide opportunities for in-person interactions or direct program feedback; • Monitor data to identify other barriers to participation and develop specific programs to address them.
<p>Building A Waste Brand The consistency and simplicity of messages is important. Residents benefit when they see the same icons, fonts, colours, and plain language.</p>	<ul style="list-style-type: none"> • Focus on the successes of the Waste Wizard; • Continue to use the industry standard of green cart for organics; • Maintain plain language and clear and consistent icons in communications.
<p>Enforcement The City prioritizes education over enforcement; however, enforcement is useful in the occasional case where education is ineffective.</p>	<ul style="list-style-type: none"> • Ensure that appropriate educational materials are available to Environmental Protection Officers; • Monitor program non-compliance to identify aspects of the program where additional education or communication is required.
<p>Economic Incentives Support behaviour change by providing opportunities to save money and improving accountability when there is a link between the beneficiaries of a service and payment for that service.</p>	<ul style="list-style-type: none"> • While there is no direct economic incentive for participation in the curbside organics program in 2023, proper use of this program will help residents choose the appropriate variable rate garage option, which could result in savings.
<p>Triple Bottom Line While waste program design has traditionally focused on environmental and financial goals, programs have a broader reach when social equity and cultural considerations are part of a program's design.</p>	<ul style="list-style-type: none"> • Review existing waste diversion education programs using tools such as the Triple Bottom Line and Equity Toolkit; • Identify harder to reach or less likely to participate demographics and develop programs that could support successful program participation.

Learnings from Previous Waste Program Changes

In the 2000s garbage collection moved from 300-gallon communal bins to individual 95-gallon (360 litre) back carts and in 2013 curbside residential recycling was introduced.

There are lessons learned from the deployment of carts and the introduction of a new diversion program that can be applied in the education and communications for the city-wide curbside organics program.

Based on internal records and engagement, some learnings that can be applied to this education and communication plan include:

- The first year of the program is when corrections are easiest to make. Ensure that there are mechanisms to understand how roll-out is going and provide specific information to residents to guide proper sorting.
- Consistency with cart placement guidelines and other educational instructions can help gain support. As much as possible minimize change where it isn't needed so emphasis can be placed on where change is needed.
- Ensure that residents can sign-up for the accessibility program to move carts to the curb.
- Provide opportunities for residents to see the carts and learn about the program. Open houses in various parts of the City where useful to provide residents information.
- Ensure that kids are included in the education plan, they can help teach their families proper use of the program.
- Link carts to addresses; ensure that residents know they can label carts if it is not part of the deployment plan.

Baseline Data and Studies

Through a combination of public engagement, statistically representative surveys, waste characterizations, and annual waste program performance monitoring, a baseline can be established for current curbside resident waste sorting behaviour and attitudes that may impact the likely uptake of the city-wide curbside organics program. This baseline data is useful to identify where behaviour change needs to occur, what level of support there may be for changes, what specific needs segments may have, and to measure progress as the curbside organics program is introduced.

Source	Data	Application to city-wide curbside organics program
2019 Waste Characterization Study	Yard waste was disposed of in curbside programs in spring, summer, and fall. Food waste is disposed of year-round, with some variations in quantities.	Yard waste messaging can occur in spring, fall, or summer; food waste messaging could occur year-round, but could focus on summer and winter when it is slightly more prevalent.
2019 Waste Characterization Study	The subscription green cart program has extremely low contamination.	Residents in the subscription green cart program have the potential to be champions for the proper use of the city-wide curbside organics program; as accepted materials

		change, they may benefit from targeted education to understand the changes.
2021 Waste & Recycling Survey	Older demographics are most likely to be practicing some form of voluntary composting, while younger demographics are less likely.	The level of familiarity with practising composting can be used in targeted communications.
2021 Waste & Recycling Survey	Almost a quarter of residents claim they are home composters.	Celebrate residents' current environmental action; include messaging on how the accepted materials list includes materials not typically composted at home to show the value added by the new program; continue to provide support with the Compost Coaches program.
2021 Waste & Recycling Survey	Demographics that have been identified as having lower recycling behaviours and knowledge of recycling include: <ul style="list-style-type: none"> • Indigenous ancestry • Newcomers to Canada • 18-34 years of age 	Continue to find ways to connect with these demographic groups through communications and identify whether additional educational programs can help support diversion behaviour.
2021 Waste & Recycling Survey Preliminary 2022 Elm Wood Disposal Survey ¹	Females are less likely to say they self-haul compost to the City's depots than males. Other self-haul barriers from the market research on elm disposal include: <ul style="list-style-type: none"> • Lack of access to a vehicle • Time and/or distance from a facility • Unable to load/unload materials 	Universal access through the city-wide curbside organics program may be promoted as a social benefit.
2021 Waste & Recycling Survey	There is good satisfaction with education and informational materials (69%) for recycling and better satisfaction for the subscription green cart program (82%). Similarly,	Satisfaction in this area has been identified for improvement in recycling education through simple and consistent messaging and

¹ The results of this study

	there is good satisfaction with being informed on accepted materials (74%) for recycling and better for the subscription green cart program (93%).	significant updates to the Waste Wizard database.
2021 Waste & Recycling Survey	Confusion, such as not knowing what goes where is the biggest barrier to recycling, followed by a lack of trust in materials not being recycled.	The acceptable materials in the city-wide organics program will be more complex than the subscription green cart program, with the greatest confusion anticipated over “compostable” and “bio-degradable” plastics. As much as possible, the story of the finished compost’s end use should be shared.
2021 Waste & Recycling Survey	Almost half of residents have heard of or have used the Waste Wizard. Other recalled communications on waste and recycling including mail-outs or inserts, social media channels, website, transit ads, and billboards. 44% of respondents did not recall seeing waste or recycling communications in 2021.	A variety of education and communication tools should be used to reach residents. There will be hard to reach residents, so additional tactics should be developed.
2020 Focus Group Summary	The residential recycling focus group recommended a focus on the Waste Wizard, simplification of messaging, accessible language and visuals, more positive and less negative messaging, and campaigns that are fun and relatable.	The learnings from this focus group are already being applied through recycling education – including the personification of the waste wizard as the authority on waste sorting and the design of recent campaigns. This will continue to be applied for all waste education and communications.
2018 Saskatoon Talks Trash Curbside – Survey Results 2017 Waste & Recycling Survey	Residents have expressed a high level of support for City-wide curbside organics. Some of the major design feature preferences were: <ul style="list-style-type: none"> • Co-mingled materials (food and yard waste together) • Larger cart capacity • Weekly collections • No requirements for bagging 	Celebrate the major milestone of the program’s launch and that the program’s design incorporates most of the resident’s preferences (we heard you). Address the bi-weekly program design feature with solutions to issues that may arise, particularly in the spring/fall (cart capacity) and summer (ick, odour).

<p>2018 Saskatoon Talks Trash Curbside – Survey Results</p>	<p>A number of resident concerns found through engagement were:</p> <ul style="list-style-type: none"> • Cleanliness – risk of mess, rodents, smell, ick factor of handling food waste • Convenience- having a 3rd cart, being required to bag waste, risk of material freezing to cart in winter • Cost – program cost, additional cost of needing special bags • Fairness – for home composters, people with limited or small yards, townhouses. • Space – finding space for additional cart on their property. 	<p>Learnings from other jurisdictions on how they address these specific issues will be included in the education and communications. A particular focus on similar climates, recent program rollouts and programs with similar organics program design will all be considered.</p> <p>Mechanisms to monitor feedback on issues and program performance will include:</p> <ul style="list-style-type: none"> • Statistically representative surveys; • Organics processor reporting; • Waste characterization studies.
<p>2021 Waste & Recycling Survey</p>	<p>Residents do not have a single preference for how curbside organics is funded, with most supporting what makes sense to the City or unsure of preference. The main reasons indicated for preference of utility bill included:</p> <ul style="list-style-type: none"> • Can see/track costs • More convenient • User pays • Monthly billing/payments 	<p>There is an opportunity to educate residents on the benefits of moving curbside collections to utility bills and utilize some of resident’s own rationale in messaging on the change to billing.</p>
<p>2021 Waste and Recycling Survey</p>	<p>With current garbage collections service levels (weekly in the summer, bi-weekly in the winter), residents with larger households or that are younger are more likely to have full or overflowing carts during bi-weekly collections.</p>	<p>Bring in data from the waste characterization on the proportion of that black cart waste that will belong in the city-wide curbside organics program; ensure that options for additional capacity for either program are included in communications.</p>

Jurisdiction Research and Case Studies

Several Canadian cities were interviewed to learn about education and communication strategies for curbside organic's programs. A brief description of programs from select cities are included to illustrate how other Cities approach education and communication during both program roll-out and the operational phase. Many of the organics programs across Canada were rolled out several years ago, therefore it was more difficult to find information regarding roll-out than operational programs.

In addition, best practices documents and case studies were reviewed and include the following:

- Best Management Practices for Curbside Collection of Residential Organic Waste by the British Columbia Ministry of Environment and Climate Change Strategy
- Organics Case Study – District of Mission – Single-family collection program, Kitchen Scraps & Yard Waste
- Organics Case Study – Port Coquitlam Green Cart Program – Single-family Residential Collection Program, Kitchen Scraps & Yard Waste
- Organics Case Study – Regional District of Nanaimo Green Bin Program – Single-family Residential Collection Program, Kitchen Scraps only
- City of Leduc Waste Diversion Social Marketing Strategy – Application for the 2014 SWANA Communication Excellence Award
- Township of Langley Green Can Program - Application for the SWANA 2013 Public Education Excellence Award
- Denver Department of Transportation and Infrastructure – Education and Outreach Plan – Volume-based Trash Pricing

Halifax

Halifax has over 20 years of experience operating their program. Prior to the full roll out, they conducted a pilot green cart program which included public consultation with community groups prior to implementation. Advertisement was done through newspapers and flyers and during the roll-out, staff delivered door-to-door tool kits (mini-green bins, green cart, calendar and information pages). They also worked with other business units and businesses to communicate this strategy. Additional education and communication strategies include booths at malls, community events and meetings. A phone survey was conducted for resident feedback on the pilot.

The following educational material is included on their website:

- Green bin tips for winter
- Acceptable and unacceptable materials
- Reducing nuisances
- Reminder that no plastic bags or biodegradable/compostable material are acceptable
- Tips for backyard composting
- Leaf and yard material (separate from food waste)
- Collection information

The following communication methods are used to educate and inform residents:

- Sorting guides
- Social Media
- Halifax Recycles App (ReCollect search engine) and Collection Calendar
- Collaborating with newcomer organizations
- Newspaper/TV/Radio ads
- Trade/Home Show information booths
- Presentations to schools, community groups, organizations
- Virtual and in-person tours to the organic's facilities
- Free online webinars and workshops about waste management
- Holiday campaign

The aspects of the program that they feel are particularly successful included completing a pilot project before the full rollout of the program and conducting public engagement such as community meetings, door-to-door delivery and advertisements through public booths and newsprints during the rollout. They also feel that a factor in the success of the operational phase of the program is that their green cart program coordinates with other programs such as “clear bag for garbage” and the “blue bag program”.

Ottawa

Ottawa has the unique perspective of having launched an organics program in 2010 and implementing significant program changes in 2019. The representative from the City of Ottawa was unable to provide information regarding the original roll-out of the program but has been part of the 2019 program updates, which included allowing pet waste and plastic bags into the green bin. The representative indicated that they ran ad campaigns (including bus shelters, newspapers, and online ads), used social media, ran contests with prize draws, door-to-door promotion (door hangers), had booths at big box stores, truck panels for collection vehicles and sent a mailout.

The following educational material is included on their website:

- What goes in your green bin?
- How does the Green Bin program work? (program value)
- When is the green bin collected?
- Green bin tips (pests, cleaning, liners)
- Leaf and yard waste (separated from food waste)

The following communication methods are used to educate and inform residents:

- Waste Explorer (ReCollect search engine) and Collection Calendar
- Social Media
- Which-bin-to-put-it-in brochure and event posters

- Presentations, virtual events, videos
 - “How using your green bin helps fight climate change”
 - “Green bin campaign video”
 - “Green bin- trash or treasure”
 - “Green bin for the win!”

The representative also noted that in their experience, communicating to residents why using the green bin is important resonates better than “telling them what to do”.

Hamilton

A Representative from the City of Hamilton provided the following information the citywide program rollout in 2006:

- A waste collection calendar was distributed several months before the rollout informing residents about program changes
- A launch package was included in the green cart
- TV ads – odors, pests, cleaning, storage
- Newspaper Ads
- Additional staff
 - Customer service staff
 - Temporary outreach/public relations officers for distribution of the green carts

The following educational material is included on their website:

- What goes in the green bin
- Recycle Coach app
- Green bin tips and storage
- Using the mini bin (kitchen container)
- Pests, cleaning, odour
- Avoiding maggots
- Backyard composting
- Compost giveaway events
- Collection schedule

The following communication methods are used to educate and inform residents:

- Waste collection calendar mailed out annually
- Social media posts
- Informational Videos
 - How to sort items
 - Eliminate the “yuck” factor
 - See the composting process

The Representative shared that a success from the program roll-out was the additional outreach/public relations staff who were employed as they helped to ensure a smooth roll-out by dealing with questions about the programs as well as utilizing a variety of communication methods to ensure that a wide audience was reached. In regard to issues with the program, they feel that due to limited staffing and funding it is difficult to sustain a comprehensive waste management program and they have also had to shut down their composting facility due to odor complaints.

Vernon

The City of Vernon provides a recent perspective as their program launched May 2, 2022.

In their *Communications Strategic Plan*, they identified the following phases:

- Phase 1 (February) – announcement of changes
- Phase 2 (March) – build awareness and understanding
- Phase 3 (April/May) – delivery of carts and first collections
- Phase 4 (May to October) – development of habits

They used the following methods in their program launch:

- Media releases in February 2022
 - Curbside organics launch update
 - Waste collection schedule updates
- Developed “Public Inquiry Response” documents to address questions from the media release
 - For City of Vernon customer-facing staff (curbside organics update)
 - For City of Vernon customer-facing staff (curbside garbage update)
- Internal waste collection FAQ – living document

In their *Communications Strategic Plan*, they identified key steps for a successful launch which included:

- Reaching a wide range of the target audience by using a variety of communications- with repetition being important
- Using images and illustrations in communications and a few clear, descriptive words

Region of Waterloo

Their program was rolled out between 2007-2010 to different areas and included the following:

- Door hangers introducing the program
- 1-2 weeks later -sent a letter to applicable households or 2nd door hanger providing program details
- 1-2 weeks later – open houses in each neighborhood

- 1-2 weeks later – delivery of green bin kits
- 1-2 weeks later – collection begins as well as monitoring set out and participation rates
- 6+ months later – outreach to stores about waste bags, green bin newsletters, thank you packages, door hangers for areas with low participation

The following educational material is included on their website:

- What goes in green carts?
- What happens to green cart organics?
- Seasonal tips (liners, freezing, pests, odors)
- Find my collection day
- Dispose of pet waste
- Manage disposable diapers
- Backyard composting

In the Region of Waterloo collection crews will not collect waste if it doesn't meet specific requirements, instead, an "Oops" sticker will be placed on the cart which provides additional information such as:

- "Oops! Not allowed" if the waste may cause a health and safety issue
- "Oops! Not bundled properly" for cardboard, lumber, branches, carpet
- "Oops! Too heavy"
- "Oops! Too many" when the limit for garbage bags/cans and bulky items is exceeded
- "Oops! Contents were frozen"
- "Oops! Wrong week"

A representative from the Region of Waterloo provided a "Lessons Learned" document which indicated that it is important to have complete list of acceptable and unacceptable materials in the beginning as adding and removing materials presents a challenge when it comes to changing residents' habits which will have already been developed.

Additional comments included that it would be valuable to have food waste reduction campaign to complement the organics collection program and that it is important to use a variety of communication methods to reach a wide audience.

Calgary

Following a successful pilot, the City of Calgary rolled out Green Cart service to single-family households in Spring/Summer 2017. Their communications strategies included the following:

- Keep employees engaged through the process by giving them information along the way
- Focus on the positive impacts and stay high level with marketing efforts

- Reach out to grocery and other big retailers of compostable bags to ensure program awareness
- Ensure significant pre-launch communications (no surprises)
- Get residents on board from the beginning
- Use broad based and targeted messaging to appeal to specific audiences
- Building on the strong support for Blue Cart (recycling)
- Keep it visual and simple
- Create media opportunities
- Select quadrant-specific media to align with quadrant roll out of carts
- Anticipate residents' concerns and be prepared to help them troubleshoot

A “Communications and Education Lessons Learned” document provided by Calgary includes observations from their roll out as well as the following recommendations:

- Develop communications plans more holistically by working with all stakeholders to fully understand the impacts to their areas
- Develop FAQ for Customer Service and provide well in advance of roll out
- Provide messaging for Councillors
- Communicate early with retailers (re: compostable bags)
- Build and implement a proactive communication strategy that includes a comprehensive plan and variety of tactics

In addition, Calgary has a waste utility program which included a phased plan to transition to the utility. Flat fees are charged for weekly organics collection, biweekly recycling, and waste collections. Their website includes information outlining how fees are calculated and a detailed FAQ regarding the change which can be used as an example.

Additional Jurisdictions

In addition to the municipalities above, Vancouver, Victoria, Port Coquitlam, Guelph and the Regional District of Nanaimo provided information regarding their education and communication strategies for curbside organic's programs. As a resource for the education and communication team, a library including a jurisdiction scan, best practices, lessons learned, and local government contacts has been developed. This will be a living document that will continue to grow over the course of this education and communication plan's development and implementation.