

Utilities & Environmental Protection Report to
SPC on Utilities and Corporate Services
2019 May 15

ISC: UNRESTRICTED
UCS2019-0370

Scoping Report on Reducing Waste from Single-Use Items

EXECUTIVE SUMMARY

The purpose of this report is to respond to Council direction from 2018 May 28 to prepare a scoping report investigating options for reducing waste associated with single-use items, and explore any potential unintended consequences of acting to reduce single-use items. As directed, this report also includes the costs of developing a strategy for addressing single-use items, including engaging citizens, businesses and institutions.

Single-use items are convenience items typically used once before being discarded as waste. Some of these items serve valuable functions, such as storage and transportation of food, but many are unnecessary or can be replaced with more sustainable alternatives.

Reducing waste from single-use items would support work by Waste & Recycling Services (WRS) to lead the community towards zero waste through a focus on reduction and reuse. While single-use items are a small percentage of overall waste generated in Calgary, they are some of the most commonly found materials in waste receptacles in Calgary public spaces, and contribute to litter. In addition, most single-use items cannot be recycled, and those items that can be recycled, such as single-use plastic bags, can be challenging to process at recycling facilities. Single-use items also lead to contamination in Calgary's recycled paper and plastic, impacting the marketability of Calgary's recyclable materials. Further, plastic bags represent the primary contamination issue at the composting facility.

There is increasing public interest in decreasing waste from single-use items. In Calgary, some businesses have already taken steps to reduce the use of these items. In October and November 2018, WRS conducted preliminary online engagement with Calgarians to understand their views on whether The City should take action on single-use items. The majority of people who responded to the online engagement indicated that The City should take action to reduce waste from these items.

Many jurisdictions have adopted approaches that target single-use items distributed by businesses. These include:

- Bans – making it illegal to distribute items.
- Fees – charges on items provided to customers.
- On-demand strategies – items can only be provided on customer request.
- Mandatory reduction plans – businesses and organizations must determine how best to reduce the use of items and report on their success.

Depending on how they are structured, these approaches can also lead to unintended consequences, such as increased costs for businesses and consumers, increased health risks due to contamination of raw food and exclusion of persons with disabilities, higher environmental impact, enforcement costs, and legal challenges.

The scope of the engagement proposed by WRS involves Calgarians, local businesses, and institutions, and consultation with other jurisdictions that have single-use items reduction strategies in place. This engagement process will lead to the development of a single-use items reduction strategy for Calgary. A final strategy is proposed for Q3 2020. The citizen research, engagement and communications required for the project is estimated to cost \$250,000 to \$300,000, including staff time.

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ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Utilities and Corporate Services recommend that Council direct Administration to develop a single-use items reduction strategy and return to Committee with a strategy no later than Q3 2020.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2018 May 28, Council approved the Waste and Recycling Services Outlook for 2018 to 2025 (UCS2018-0153). The report identified the need for targeted programs for materials that continue to go to landfill, such as single-use items. Council directed Administration to undertake a scoping report that investigates options and unintended consequences for significantly reducing waste, "avoidable" plastic waste, and single-use items, engage citizens and waste generators, and the costs of doing this work, and report back to the SPC on Utilities and Corporate Services with a scoping report no later than Q2 2019.

BACKGROUND

Single-use items are convenience items typically used once before being discarded as waste. Such items account for roughly half of the plastic produced around the world each year. In Calgary, items such as plastic bags, coffee cups, plastic cups, and foam containers make up as much as 2% of waste to landfill. While this is a relatively small component of overall waste, these are some of the most common items found in Calgary's public spaces, filling waste receptacles and sometimes contributing to litter. Foam food containers and plastic bags are among the top ten items found in waste receptacles in Calgary parks and at transit stops and LRT stations.

Most single-use items are not accepted for recycling in Calgary because they are:

- Too small or lightweight to be processed in the facilities that process Calgary's materials.
- Made of mixed materials, which makes them expensive and difficult to separate.
- Made of plastic materials that do not have end-markets.
- Fragile and break apart during transportation and sorting, contaminating other commodities.

While single-use plastic bags can be recycled, they are often not prepared properly for recycling (i.e. by bundling together in a single bag). Loose plastic bags are challenging to sort due to their light weight, and contaminate other recyclable materials. On average, three to five per cent of a sorted mixed paper bale is made up of plastic bags and plastic wrap. This level of contamination impacts the marketability of Calgary's sorted recyclables. Recent changes in global recycling markets have resulted in higher quality standards for recycling, therefore controlling contamination in processed recyclables is critical to ensure that Calgary's materials are marketable.

Some Calgary businesses have already taken action on single-use items, by charging customers for plastic bags, providing straws to customers only on-demand, using compostable items for take-out, and giving discounts to customers who bring their own re-usable item.

Scoping Report on Reducing Waste from Single-Use Items

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Scan of options adopted by other jurisdictions

Approaches that have been adopted by other jurisdictions include bans, fees, on-demand strategies and mandatory reduction plans. These approaches apply to single-use items distributed by businesses, not the retail sale of these items.

Bans make it illegal to distribute items to customers. A ban is very effective at reducing waste from specific items in a short amount of time. In the Regional Municipality of Wood Buffalo, Alberta, there was a 90 per cent decrease in plastic bag litter after a ban was introduced.

Fees at the point of sale are also effective for reducing waste from single-use items. In the United Kingdom, use of plastic bags decreased by 70 to 80 per cent after a fee was introduced.

With on-demand strategies, consumers are provided items only on request. This option is commonly adopted for straws and utensils.

With mandatory reduction plans, organizations are required to have plans in place to reduce use of select single-use items and may adopt methods that best suit their needs. Organizations must track and report usage of the targeted items. Vancouver is the only jurisdiction identified to have adopted this approach.

Unintended consequences of these policies can include:

- Increased cost for businesses and consumers.
- Increased health risks due to contamination of raw food and exclusion of persons with disabilities.
- Higher environmental impact if resource-intensive alternatives are used as substitutes (for example, paper bags as an alternative to plastic).
- Increased enforcement costs.
- Legal considerations.

A report summarizing policies adopted by other jurisdictions is provided in Attachment 1.

Scoping report

The initial list of single-use items suggested for consideration in Calgary is based on the most commonly targeted items and initial feedback from online engagement. This list also aligns with Vancouver's strategy, which is based upon the most comprehensive review performed by a Canadian municipality. The items are:

- plastic bags
- plastic stir sticks
- plastic disposable straws
- plastic utensils
- take-out containers
- disposable cups (hot and cold beverage)

A strategy for the City of Calgary will be developed based on results from research and engagement with stakeholders in Calgary as well as lessons learned from jurisdictions like Vancouver. Both online and in-person research and engagement methods will be used to obtain

Scoping Report on Reducing Waste from Single-Use Items

stakeholder input. This work will ensure that the strategy developed is practical for all stakeholders.

Results from the research and engagement will help determine:

- Which single-use items stakeholders want included in the strategy.
- Preferred reduction approaches for these items.
- Potential impact of the preferred approach and unintended consequences.
- Options to mitigate unintended consequences.

WRS will also consult with other orders of government to ensure proposed strategies align with long term waste management and environmental strategies.

The final strategy will be presented to Council no later than Q3 of 2020. The estimated project cost is \$250,000 to \$300,000, which covers citizen research, engagement, communications, and staff time for Law and Waste & Recycling Services. Detailed information on the proposed approach is provided in Attachment 2.

Stakeholder Engagement, Research and Communication

WRS conducted preliminary engagement with over 3,400 Calgarians using the online engagement portal from 30 October to 13 November 2018. This was conducted to gain insight into Calgarians' perceptions of single-use items. It also helped to inform the list of single-use items to consider, as outlined above, and the level of stakeholder engagement required for the proposed strategy. Detailed findings from the online engagement are provided in Attachment 3.

WRS also met with several local businesses to better understand practices they have adopted to manage waste from single-use items, motivations for adopting these practices, and key challenges they face in reducing single-use items. Detailed findings are provided in Attachment 3.

WRS will obtain input from Calgarians, local businesses and institutions when developing the strategy. Research and engagement is planned for Q3 and Q4 2019 to develop a draft strategy. Stakeholder input will be invited on the draft strategy and results of all engagement will be shared online. A final proposed strategy will be presented to Committee by Q3 2020.

Strategic Alignment

A single-use items reduction strategy would provide options for waste reduction, and contribute to the Citizen Priorities for a Healthy and Green City and a Well-Run City.

Social, Environmental, Economic (External)

Social

A single-use items reduction strategy would require a change in consumer behaviour. Consumers may need to pay for or stop using an item altogether.

Scoping Report on Reducing Waste from Single-Use Items

Environmental

A single-use items reduction strategy encourages waste reduction and the use of environmentally sustainable alternatives. Reducing and diverting waste lowers greenhouse gas emissions, redirects natural resources back into the economy and reduces environmental liability. It will be important to consider the potential of a higher environmental impact if resource-intensive alternatives are used as substitutes.

Economic (External)

A single-use items reduction strategy could positively or negatively impact costs for businesses and citizens. Potential economic impacts will be a key consideration in developing a strategy for Calgary.

Financial Capacity

Current and Future Operating Budget:

Operating costs related to this project include research, engagement and communication with stakeholder groups, and is estimated at \$250,000 to \$300,000 including staff time. This can be managed within WRS' current operating budget, drawing on existing staff and consulting budgets.

Current and Future Capital Budget:

This project will not impact WRS' capital budget.

Risk Assessment

Risks associated with not approving this recommendation include:

- Continued costs to process recycled materials with contamination and associated impact on the marketability of Calgary's recycled materials.
- Continued landfilling of single-use items.

Risks associated with approving this recommendation include:

- Businesses may realize additional costs, which will be passed on to consumers.

REASON(S) FOR RECOMMENDATION(S):

A single-use items reduction strategy would reduce waste from single-use items, and reduce contamination of recyclables.

ATTACHMENT(S)

1. Attachment 1 – Scan of Policy Options Adopted by Other Jurisdictions
2. Attachment 2 – Scoping Report on Reducing Waste from Single-Use Items
3. Attachment 3 – Summary of Preliminary Stakeholder Engagement
4. Attachment 4 – Presentation