INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL

# Waste Diversion Strategy



**JANUARY 8, 2020** 

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# **EXECUTIVE SUMMARY**

#### Background

The Industrial, Commercial and Institutional (ICI) Waste Diversion Strategy responds to the Environmental Leadership goal in the Strategic Plan, 2018-2021. It also aligns with the forthcoming Solid Waste Reduction and Diversion Plan and the City's Low Emissions Community Plan.

#### Industrial, Commercial and Institutional Sector Waste

The 2016 Waste Characterization Study estimated that 68% of waste landfilled in Saskatoon comes from the ICI sector and from Construction and Demolition (C&D) activities. ICI sector waste landfilled is composed of 25% organics, 20% recyclables and 14% construction and demolition waste that could have been diverted.

The 2019 ICI Waste & Recycling Survey found that 96% of the ICI sector stated that it generates recyclable waste. When asked to state their recycling method, 72% have recycling collected by a private recycling company from a bin outside their building. The survey also found that 41% of the ICI sector stated that it generates organic waste. When asked to state their method of organic waste disposal, 60% of those that generate organic waste put in it the garbage, while smaller percentages use a variety of other diversion methods.

Waste management services provided by the City of Saskatoon to the ICI sector includes the landfill, commercial garbage collections and the compost depots. A portion of the ICI sector also uses the City's residential waste management services, including residential recycling depots and the residential household hazardous waste drop off days. The ICI Waste and Recycling Survey found a total of 64% of the ICI sector stated that it uses at least one City of Saskatoon's waste management service. 74% of the ICI sector is somewhat or very satisfied with the City of Saskatoon's waste diversion and management services.

#### **ICI Waste Diversion Strategy**

The Industrial, Commercial, and Institutional (ICI) Waste Diversion Strategy is part of the City of Saskatoon's (City) Waste Reduction and Diversion Plan. Four priorities for ICI sector waste reduction and diversion have been identified to help achieve the City's 70% Waste Diversion Target.

#### **Priority 1: Diversion Policies and Programs**

#### GOALS

- A. Implement mandatory recycling and organics diversion programs and policies.
- B. Implement construction and demolition waste diversion policies and programs.
- C. Implement disposal bans at the Saskatoon Landfill.

- D. Provide education on waste reduction and additional waste diversion.
- E. Determine the role of City-delivered services for ICI waste management and diversion.

#### **Priority 2: Partnerships and Collaboration**

| GC | JALS   |
|----|--|
| A. | Continuously improve waste data management and reporting system to monitor ICI waste generation and diversion. |
| В. | Establish a working group with representatives from the ICI sector to support strategy implementation.         |
| C. | Work with the provincial and federal governments on new waste reduction and diversion initiatives.             |

- D. Establish a program to increase waste diversion from local schools.
- E. Leverage community and external funding sources to initiate new initiatives.

#### **Priority 3: Leading by Example**

#### GOALS

- A. Establish recycling at all City facilities.
- B. Collect organics at all City facilities to align with the mandatory organics requirements for the ICI sector.
- C. Develop policies to require public space and event waste diversion.
- D. Develop policies and procedures to divert construction and demolition waste from City projects.
- E. Ensure procurement procedures align with waste diversion and reduction
- F. Maximize the use of recycled content

#### **Priority 4: Enabling the Circular Economy**

#### GOALS

- A. Reduce Food Waste and increase reclamation through a coordinated approach.
- B. Explore opportunities for local economic development or social enterprises to support waste reduction and diversion.
- C. Share, reuse and repair strategy

- D. Textile and apparel reduction and recycling strategy
- E. Adaptation and reuse of older building policy

## **Regulatory Approaches to Recycling and Organics**

A multi-phase approach to design a regulatory approach for ICI sector recycling and organics was used for the development of options and a recommendation, where stakeholders were engaged multiple times. An overview of the process is provided in the table below.

| Dates                             | Project Phase                          | Engagement Activities   | Project Outcomes  |
|-----------------------------------|--|---|---|
| November<br>2018 –<br>June 2019   | Phase 1 -<br>Options<br>Identification | <ul> <li>Business<br/>Association and Key<br/>Stakeholder<br/>Meetings</li> <li>Option Identification<br/>Workshop</li> <li>2019 ICI Waste &amp;<br/>Recycling Survey</li> </ul>                          | <ul> <li>Jurisdiction Scan<br/>Research</li> <li>Available Options</li> <li>Feasibility of Available<br/>Options</li> <li>Identification of<br/>Behaviour and<br/>Barriers</li> </ul> |
| July –<br>October<br>2019         | Phase 2 - Draft<br>Options             | <ul> <li>Waste Hauler and<br/>Processor Meetings</li> <li>Option Review<br/>Workshops</li> <li>Option Review<br/>Survey</li> <li>Business<br/>Association and Key<br/>Stakeholder<br/>Meetings</li> </ul> | <ul> <li>Draft Options</li> <li>Implementation<br/>Requirements for<br/>Draft Option</li> <li>Refinement of Draft<br/>Options</li> </ul>  |
| November<br>–<br>December<br>2019 | Phase 3 - Final<br>Options             | Option Preference     Survey  | <ul> <li>Final Options</li> </ul>   |
| December<br>2019                  | Recommendation                         |   | <ul> <li>Recommendation<br/>Decision-Making</li> </ul>  |

#### Phase 1: Option Identification

The jurisdiction scan revealed an array of options that were available for regulating recycling and organics for the ICI sector. The feasibility of the available options was informed by the results of the first phase engagement and the jurisdiction scan as well as whether these options were legally possible to implement in Saskatchewan.

During engagement, the most preferred requirement was to require separate bins. In the July engagement workshop, which was based on a design-your-own-program activity, the most used program components for requirements were education and separate bins and for enforcement were business license and proof of compliance. In the statistically representative 2019 ICI Waste and Recycling Survey the most supported option was requiring separate and labelled bins.

Administration also considered current recycling and organics behaviour as well as the barriers identified during engagement when analyzing the available options. The ICI sector is largely already in compliance with the potential options for regulating recycling, however there is a much lower level of organics diversion currently taking place. The 2019 ICI Waste and Recycling Survey showed the highest barrier identified for both recycling and organics was service availability. The second highest barrier for recycling was education, while for organics the other significant barriers included amount of material, space and costs.

#### Phase 2: Draft Options

Three draft options were developed based on the results of the above analysis. The full text of the options that was provided during phase two engagement is provided in Appendix 1.

| Requirement & Compliance   | Option 1: Three Separate Bins + Site Visit Verification   |
|----------------------------|---|
| Verification               | Option 2: Three Separate Bins + Submission of Proof   |
|                            | Option 3: Submission of Waste Diversion Plan  |
| Materials                  | Match Residential Programs  |
| Service Provider           | Private sector with opt-in City services  |
| Education and<br>Resources | Develop and implement comprehensive plan  |
| Implementation             | <ul> <li>Applied to entire sector</li> <li>Phased: 1 year phase-in period and recycling first followed by organics</li> </ul> |

With the draft options developed, Administration was able to begin assessing what would be required for implementation of each of the options. The requirements included an update of the Waste Bylaw, enforcement, submission process, education and communications, additional policy implications, City of Saskatoon waste services, and budget requirements.

Two workshops and an online survey were used to collect feedback on the draft options. Option 3 was considered the option that would work best with no changes, with

34% of participants indicating that selection. However, for all options over 60% of participants indicated either the option needed to change or wouldn't work at all.

The big takeaways, which are elaborated on further in the full report and the engagement results were:

| Low volume generation    | Especially the low generation of organic materials for diversion  |
|--------------------------|---|
| City intrusion           | Frustration with a regulatory approach  |
| Cost                     | When combined with other raising fees and slow markets  |
| Space                    | Competing space requirements – parking, accessibility, crowded alleyways                                    |
| Administrative burden    | Time, resources and know-how  |
| Responsible party        | Property owners, property managers, and/or tenants; mixed-<br>use properties                                |
| Large volume generators  | Target for larger impact with fewer resources; impact on existing processes                                 |
| Ease and flexibility     | Preference for self-management, innovation, ability to right-<br>size                                       |
| Already doing it         | Recycling bins already in place   |
| Disproportionate impacts | Small businesses, non-profits, multitenant/shared facilities, low volume generators, high volume generators |

#### Phase 3 - Final Options

The final options that were developed based on the results of phase 2. The full text of the options that was provided for phase three engagement is provided in Appendix 2. Below is a table that provides a summary of the final options.

|  | Option 1 -<br>Separate Waste<br>Containers (verified<br>by City) | Option 2 -<br>Separate Waste<br>Containers<br>(business submits<br>proof) | Option 3 -<br>Waste Diversion<br>Plan (business<br>submits form) |
|--|--|---|--|
| Requirements & Responsibilities – ICI Sector                       |  |   |  |
| Separate<br>Containers for<br>Garbage, Recycling,<br>and Organics* | ✓  | ✓   |  |

| Diversion Plan for<br>Recycling and<br>Organics            |                          |                      | ✓            |
|--|--------------------------|----------------------|--------------|
| Submission<br>through business<br>licensing**              |                          | ✓                    | ✓            |
| Provide education<br>to<br>employees/tenants               | ✓                        | ✓                    | $\checkmark$ |
| Pot  | ential Verification By V | Vaste Bylaw Enforcem | ent          |
| Complaint Follow-<br>up                                    | ✓                        | ✓                    |              |
| Screening Follow-<br>up                                    |                          | ✓                    | ✓            |
| Education Blitzes  | ✓                        | ✓                    | ✓            |
| Recycling and Organics Education                           |                          |                      |              |
| Education Program  | ✓                        | ✓                    | ✓            |
| Annual Operating Cost (to City) – Preliminary Estimates*** |                          |                      |              |
| 2022+  | \$                       | \$\$                 | \$\$         |

\*Only if food or yard waste is generated as part of operations.

\*\* Or a parallel process for organizations that do not require a business license

\*\*\* \$ = between \$220,000 and \$340,000; \$\$ = between \$490,000 and \$620,000

#### Advantages and Cost Comparison

Administration assess the options using the Choosing by Advantages metholodogy. The following summary highlights the advatanages and disadvanatges of each option.

|                          | Option 1 -<br>Separate Waste<br>Containers (verified<br>by City) | Option 2 -<br>Separate Waste<br>Containers<br>(business submits<br>proof) | Option 3 -<br>Waste Diversion<br>Plan (business<br>submits form) |
|--------------------------|--|---|--|
| ICI Stakeholders         |  |   |  |
| Preference               | Most preferred<br>regulatory option                              | Least preferred   | Least preferred  |
| Ability to<br>Understand | Easiest to understand  | Moderate<br>understanding   | Hardest to understand  |

| Ability to Implement<br>and Control Costs     | Less control and less flexible                                  | Less control and less flexible                                  | Most control and most flexible  |
|---|---|---|---|
|   | City of S   | askatoon  |   |
| Compatibility with<br>existing<br>enforcement | Most compatible<br>(mimics existing)                            | Not as compatible –<br>introduces new<br>process                | Not as compatible –<br>introduces new<br>process  |
| Effort to Plan,<br>Implement, and<br>Operate  | Least effort and<br>resources by City<br>administration         | More effort and<br>resources required<br>by City administration | More effort and<br>resources required<br>by City administration                                       |
| Ability to Adapt                              | Less adaptable  | Less adaptable  | Most adaptable  |
| Increased safety<br>risk                      | The same level of<br>risk as current Waste<br>Bylaw enforcement | Less risk than current<br>Waste Bylaw<br>enforcement            | Less risk than current<br>Waste Bylaw<br>enforcement  |
| Precedent                                     |   |   |   |
| Implemented in<br>Canada                      | Yes – implemented in 2 jurisdictions                            | No  | Yes – implemented in 1 jurisdiction   |
| Outcomes                                      |   |   |   |
| Waste Diversion                               | 5,400 tonnes<br>projected                                       | 5,400 tonnes<br>projected                                       | 5,400 tonnes<br>projected   |
| Resident<br>Satisfaction                      | Should satisfy resident   | Should satisfy residents  | May be slightly less<br>satisfactory if<br>businesses are seen<br>to be not diverting<br>some streams |

| Highest advantage                |
|----------------------------------|
| Moderate advantage or<br>neutral |
| Disadvantage                     |

#### Recommendation

Option 1 provides the greatest advantages and the least costs of the options compared. Options 2 and 3 had fewer advantages advantages as well as significantly higher costs. Therefore Option 1 is Administration's recommended approach.

# BACKGROUND

#### **Strategic Direction & Corporate Alignment**

#### Strategic Plan, 2018-2021

The Industrial, Commercial and Institutional (ICI) Waste Diversion Strategy responds to the Environmental Leadership goal in the Strategic Plan, 2018-2021, that "Solid waste diversion is maximized and landfill operations management and financial sustainability optimized." It addresses the action to "Implement mandatory recycling and organics programs and policies for the Industrial, Commercial and Institutional sectors."

#### Waste Reduction and Diversion Plan

The ICI Waste Diversion Strategy aligns with the forthcoming Waste Reduction and Diversion Plan. It contributes to the City's target of 70% waste diversion from the City's landfill. According to the City's 2016 Waste Characterization Study the ICI sector is responsible for 68% of waste sent to landfills (the City's and the two private landfills), of which up to 60% could be diverted through initiatives outlined in the ICI Waste Diversion Strategy.

#### Low Emissions Community Plan

The ICI Waste Diversion Strategy contributes to Action 24 from the Low Emissions Community Plan (LEC Plan): "Improve and expand waste management programs and services to increase reduction and diversion."

The target from the LEC Plan is to reduce waste related emissions by 1,303,000 tonnes CO<sub>2</sub>e cumulative from 2020 to 2050. That would be the equivalent of achieving the following reduction and diversion rates:

- 90% for organics
- 95% for plastics
- 90% for paper

#### **New Official Community Plan**

The ICI Waste Diversion Strategy will be aligned with the forthcoming new Official Community Plan. The ICI Waste Diversion Strategy also addresses the environmental impacts of food disposal by the ICI sector, supporting the proposed new policy in the Official Community Plan that "the City will support efforts to minimize the environmental impacts of food production, processing, storage, transport, preparation, and disposal."<sup>1</sup>

#### **Triple Bottom Line**

The options for ICI mandatory recycling and organics were developed and analyzed using the pilot Triple Bottom Line tool. The results of the analysis are in Appendix 3.

<sup>&</sup>lt;sup>1</sup> May 2019 the Food Policy Update report was presented to the Standing Policy Committee on Planning, Development and Community Services.

# **Reporting History**

| October 2007  | The Saskatoon Waste and Recycling Plan outlined a multi-phased<br>implementation strategy for businesses, industry and institutions. It<br>included waste reduction education, a business environmental awards<br>program, an environmental purchasing policy, disposal bans on ICI yard<br>waste and organics, incentive-based tipping fees, disposal bans for<br>construction and demolition waste, and waste management plans as<br>part of building permits.                                |
|---------------|---|
| May 2015      | In May 2015 City Council resolved that a landfill ban on paper and cardboard be developed.  |
| November 2015 | In November Council approved a report that outlined a phased landfill ban program for paper and cardboard.  |
|               | It was forwarded to the 2016 budget deliberations where it was<br>resolved: That a phased landfill ban for paper and cardboard begin in<br>2016 as outlined in the report of the General Manager, Corporate<br>Performance Department dated November 9, 2015.   |
| May 2017      | City Council received <i>The Waste Diversion Opportunities</i> report. It<br>noted that ICI waste diversion was critical to increase Saskatoon's<br>waste diversion rate. The consultant report included recommendations<br>to develop diversion requirements for the ICI sector in additional to<br>disposal bans of divertible materials at the City's landfill.  |
| August 2017   | Council approved The Organics Opportunities report recommendation:<br>"That Administration continue research and program development on<br>an organics program for the Residential, Industrial, Commercial, and<br>Institutional sectors."  |
| November 2017 | A report from Administration provided a preliminary overview of waste<br>diversion opportunities for the ICI sector. City Council approved<br>\$156,000 be transferred into Capital Project #2184 for the development<br>of the ICI Waste Diversion Strategy.   |
|               | Council also resolved "That opportunities for Food Reclamation be<br>considered in the development of a Waste Reduction strategy for the<br>Industrial, Commercial, and Institutional sector; and, that relevant<br>stakeholders be consulted in this consideration, including but not limited<br>to the Saskatoon Food Council, the Saskatoon Food Bank and<br>Learning Centre, the Friendship Inn, the Saskatoon Waste Reduction<br>Council and the Saskatoon Poverty Reduction Partnership." |
| June 2018     | SPC-EU&CS heard a presentation from Saskatoon Second Chance<br>Food regarding food waste and reclamation. Committee resolved "that  |

|               | Administration report quantifying the costs of managing the waste that could be reclaimed".   |
|---------------|---|
| August 2018   | City Council adopted a new Strategic Plan. It included the<br>Environmental Leadership goal of "Solid waste diversion is maximized<br>and landfill operations management and financial sustainability<br>optimized."  |
|               | The actions included "Implement mandatory recycling and organics programs and policies for the Industrial, Commercial and Institutional sectors."   |
| October 2018  | In October 2018 the Standing Policy Committee – Environment, Utilities<br>and Corporate Services received the "Industrial, Commercial, and<br>Institutional (ICI) Waste Diversion Strategy – Update and Engagement<br>Strategy" report, which provided a strategic framework outlining the<br>proposed scope of the ICI Waste Diversion Strategy that was used for<br>engagement and research.  |
|               | At its October 2018 Regular Business Meeting, City Council approved<br>the following motion regarding the curbside organics processing<br>Request for Proposals (RFP):  |
|               | "That the Administration amend the draft RFP to reflect the<br>City's intent to implement an organics bylaw for the Industrial,<br>Commercial and Institutional (ICI) sector within the next 2-4<br>years."   |
|               | The amendment was included in the RFP. The Administration is planning to provide an update on the RFP in early 2020.  |
| January 2019  | The Waste Diversion Plan Update report to the Standing Policy<br>Committee – Environment, Utilities and Corporate Services provided an<br>update on all waste management program development, including the<br>ICI sector.  |
| August 2019   | The Preliminary Low Emissions Community (LEC) Plan Initiatives for 2020-2021 were brought to the Standing Policy Committee – Environment, Utilities and Corporate Services and the Governance and Priorities Committee. It identified the <i>ICI Waste Diversion Strategy</i> as a planned project in support of the LEC Plan's waste-related emissions target, which is the equivalent of achieving diversion rates of 90-95% by 2050. |
| November 2019 | In the 2020-2021 multi-year budget, City Council approved \$700,000 to be used for the development of recycling and organics policies and programs for the ICI sector and an organics program for multi-unit residents.   |

# INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL SECTOR WASTE

The following is a summary of the City's data on ICI waste generation, behaviour and opinions.

The City has completed a number of statistically representative surveys of residents and the ICI sector on waste and environmental behaviour. The statistically representative studies referenced in this report include:

- 2019 ICI Waste & Recycling Survey
- 2019 Waste and Recycling Survey (residential)
- 2017 Waste Awareness & Behaviour Survey
- 2017 Environmental Survey ICI Results

The City also conducts regular waste characterization studies to understand the amounts of types of waste generated by different sectors. The most completed study is referenced in this report is from 2016, since the analysis of results from the 2019 study is not yet complete.

• 2016 Waste Characterization Study<sup>2</sup>

The City prepares annual Integrated Waste Management Reports and the two most recent are referenced in this report.

- 2018 Integrated Waste Management Report
- 2017 Integrated Waste Management Report

#### Waste Diversion & Generation

The Industrial, Commercial, and Institutional (ICI) sector's current waste diversion rate is unknown since most ICI waste is managed by the private sector and therefore not tracked by the City of Saskatoon (City).

In 2016, the City commissioned Dillon Consulting to complete the Waste Opportunities Report which estimated a diversion rate of 3.5% for the sector. However, this was based on incomplete information since recycling as well as any composting not occurring at the City's compost facility was unknown. The same study included a city-wide waste characterization, and estimated that 68% of waste landfilled in Saskatoon comes from the ICI sector and from Construction and Demolition (C&D) activities.

<sup>&</sup>lt;sup>2</sup> The 2016 Waste Characterization Study results presented are a combination of the "ICI sector" and "C&D" sector results that were presented in this report, since the ICI Waste Diversion Strategy intends to address both types of waste.



#### Garbage

The 2016 Waste Characterization Study estimated that 40% (68,100 tonnes) of materials that the ICI sector landfilled was garbage and nonrecyclable paper, plastic, metal, and glass. The other 60% of materials could have been recycled or otherwise diverted through services that either currently exist or have been successfully implemented in other Canadian jurisdictions.



The ICI sector's waste is composed of a comparatively smaller percentage of waste that could be diverted than either the curbside, multi-unit residential sectors or the waste that is self-hauled to the landfill. However, unlike the other sectors where there is a single type of waste that could be targeted for diversion efforts (organcis for residential and constructions and demolition for self haul), the 60% of waste that could be diverted by the ICI sector is 25% organics, 20% recylcables, and 14% construction and demolition waste.



#### Recycling

The 2016 Waste Characterization Study estimated that 20% of materials that the ICI sector landfilled were recyclable, of which 80% is paper and paper packaging. The actual tonnages of materials recycled by the ICI sector are unknown.

The 2019 ICI Waste & Recycling Survey found that 96% of the ICI sector stated that it generates recyclable waste. When asked to state their recycling method, 72% have recycling collected by a private recycling company from a bin outside their building, 60% drop off materials at SARCAN, 17% use a residential recycling depot, and 30% use other methods (such as a confidential shred service, another third-party waste management company, or



employees take it home). 59% stated that they are currently recycling most or all of their recyclable materials, 24% some, and 17% none or not very much.



#### Organics

The 2016 Waste Characterization Study estimated that 25% of materials that the ICI sector landfilled were food waste and yard waste, with 98% of that material being food waste. *The Waste Diversion Opportunities Report* estimated that the ICI sector currently diverts 80% of yard waste. The actual tonnages of organic waste diverted by the ICI sector are unknown.

The 2019 ICI Waste & Recycling Survey found that 41% of the ICI sector stated that it generates organic waste. When asked to state their method of organic waste disposal, 60% of those that generate organic waste put in it the garbage, while smaller percentages use a variety of other diversion methods: donate edible food waste to charity (15%), collected by a private company (11%), staff take it home to compost (11%), dropped off at the City's compost depot (10%), composted on-site (8%), landscaping company



takes care of it (8%), and fed to animals or pets (5%). 84% of those that generate organic waste, stated that they are currently diverting none or not very much organic waste from landfill, 5% are diverting some, and 11% are diverting most or all.



#### **Construction & Demolition Waste**

The 2016 Waste Characterization Study estimated that 14% of materials that the ICI sector landfilled were C&D waste. Untreated wood, asphalt roofing shingles, asphalt, concrete, and bricks are a number of the types of C&D waste found during the study that could have been diverted if the proper facilities and policies were in place. The actual tonnages of construction and demolition waste diverted by the ICI sector are unknown.

The ICI Waste and Recycling Survey found that 34% of the sector states it generates construction and demolition waste and that 51% state as they divert most or all of these materials from landfill.



#### Hazardous Waste & E-Waste

The 2016 Waste Characterization Study estimated that 0.1% of materials that the ICI sector landfilled were household hazardous waste and 0.6% E-Waste. The 2017 Environmental Survey asked the ICI sector about the frequency of environmental behaviours and proper disposal of hazardous waste was self-reported as the top behaviour (79% always or often doing on a regular basis).

#### City of Saskatoon's Corporate Waste Diversion and Reduction

The City of Saskatoon is a part of the ICI sector. The 2019 Waste & Recycling Survey (residential) found moderate satisfaction with the recycling options available at Cityowned facilities, commercial and public areas, and City parks and along the Meewasin Trail, in part due to a high level of uncertainty. The most suggested methods for improving recycling including increasing the number of bins and access (17%), more variety of recycling (8%), information of what is recyclable (4%), compost (3%), and more frequent collection (2%).



The City is currently finalizing the 2019 Waste Characterization Study, which will provide additional information on waste types and quantities generated at City facilities and in public spaces.

### **City of Saskatoon Services for ICI Waste Management**

Waste management services provided by the City of Saskatoon to the ICI sector includes the landfill, commercial garbage collections and the compost depots. A portion of the ICI sector also uses the City's residential waste management services, including residential recycling depots and the residential household hazardous waste drop off days. The ICI Waste and Recycling Survey found a total of 64% of the ICI sector stated that it uses at least one City of Saskatoon's waste management service. Actual levels of use of these services cannot be verified by all individual services.



#### Landfill

According to the 2019 ICI Waste & Recycling Survey, 30% of the ICI sector uses the landfill for disposal and 15% uses the landfill for diversion. The number of landfill visits by all customers decreased between 2016 (91,400), 2017 (83,300) and 2018 (81,500). Some of the declines may be a result of competition for commercial customers from privately operated landfills. The City's landfill accepts garbage, clean fill, waste that requires special handling, CFC white goods, as well as diversion for newspapers and magazines, old appliances, vehicle batteries, propane tanks, and scrap metal. The Eco Centre at the landfill accepts used oil, used antifreeze, used oil, antifreeze and diesel exhaust fluid containers and used oil filters for recycling.

#### **Commercial Garbage Collection**

The City currently provides garbage collection to commercial customers, including internal City of Saskatoon customers. In 2018, there were approximately 350 external commercial customers and 53 internal City of Saskatoon customers. In the 2019 ICI Waste & Recycling Survey, 39% of the ICI sector stated that it used City provided garbage collections.<sup>3</sup>

#### **Compost Depots**

The composting sites, located on Highway 7 (West depot) and on Highway 5 (East transfer station) are available to residents at no charge and to commercial haulers by permit. In 2017, 147 commercial vehicle permits were issued to 88 companies for unlimited access to the City's compost depot. 12% of the visits to the City's compost

<sup>&</sup>lt;sup>3</sup> This number appears high since the City only has 350 commercial customers. This may be due to 56% of respondents not being responsible for property management and therefore are not responsible for contracting garbage collections.

depot were by commercial haulers, who brought approximately 22% of the materials that were delivered to the depots.

#### **ICI Use of Residential Services**

The 2019 ICI Waste & Recycling Survey found that 23% of the ICI sector reported having used the City's residential Recycling Depots and 10% reported using residential Household Hazardous Waste Days, despite communications indicating these are for residential use only.

Home-based businesses can use residential services, including garbage, recycling and, if operated out of a curbside residential property, seasonal subscription green carts. If additional capacity is required, garbage is collected at a commercial rate as laid out in the City's waste bylaw, an additional utility fee is applied to receive an additional curbside residential recycling cart, and an additional subscription fee is applied for an additional green cart.

#### ICI Sector Satisfaction with City Waste Services

74% of the ICI sector is somewhat or very satisfied with the City of Saskatoon's waste diversion and management services, despite a lower number (64%) stating that they used at least one City provided service. Only 10% were not satisfied at all or not very satisfied.



#### Waste Reduction and Diversion Education for ICI Sector

The City does not have any educational resources to encourage the ICI sector to reduce or divert waste, beyond basic information on the waste services provided at the landfill and compost depots. The Rolling Education Unit is available to book by some members of the ICI sector, such as schools, festivals, or shopping malls, but the information that it provides is focused on residential waste and diversion.

### Levels of Support for ICI Waste Diversion

#### **ICI Sector Support**

The ICI sector itself ranked waste management as the most important environmental issue facing Saskatoon. The 2017 Environmental Survey looked at ICI opinions on a range of environmental issues. When asked what the most important environmental issue facing Saskatoon today, 52% of respondent mentions were on waste

management and recycling topics, including: availability of recycling (26%), too much garbage sent to landfill (15%), better separation of waste (7%), and litter and city cleanliness (4%).

The 2019 ICI Waste & Recycling Survey asked specifically about levels of support for requiring ICI diversion by those that stated they generated recycling and organics. Of those that stated they generated recyclable waste, 90% support the City requiring the ICI sector to recycle their recyclable waste. Similarly, of those that stated they generated organic waste, 85% support the City requiring organizations to compost or otherwise divert their Organic waste from landfill assuming there are diversion options available.



#### **Residential Support**

Residents have expressed an expectation that the ICI sector will play a part in meeting the City's waste diversion targets and have the same diversion in place that is being required of them.

The 2019 Waste and Recycling Survey (residential) showed that residents had a high level of support for banning recyclables and organics from non-residential (ICI) garbage bins.



The curbside residential and multi-unit residential waste engagements in 2018 also found that residents would like to see ICI waste diversion. For example, the curbside online survey found that requiring businesses, healthcare, and schools to recycle and compost was the second most suggested idea for how Saskatoon could reach the target of 70% waste diversion by 2023. During multi-unit engagement, participants commented that local businesses could be leaders in reducing single use items (plastic bags, straws, plastic cups) and that incentives could support businesses that provide reuse or repair opportunities.

# THE INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL SECTOR WASTE DIVERSION STRATEGY

The Industrial, Commercial, and Institutional (ICI) Waste Diversion Strategy is part of the City of Saskatoon's (City) Waste Reduction and Diversion Plan. The summary below provides an overview of all the waste diversion and reduction initiatives that may involve or impact the ICI sector in the short, medium and long-term.

#### **Priorities**

Four priorities for the ICI sector have been identified to help achieve the City's 70% Waste Diversion Target:

- 1. Diversion Policies and Programs
- 2. Partnerships and Collaboration
- 3. Leading by Example
- 4. Enabling a Circular Economy

The tables below outline the priorities, goals, actions and phasing. These were developed in coordination with the City's forthcoming Waste Reduction and Diversion Plan based on stakeholder engagement, research, in-progress waste diversion projects, and prior reporting to City Council (for instance the Waste Diversion Opportunities Report).

#### **Priority 1: Diversion Policies and Programs**

| GOALS   | KEY ACTIONS   | PHASING               |
|---|---|-----------------------|
| F. Implement mandatory<br>recycling and<br>organics diversion<br>programs and<br>policies.  | • Implement a regulatory approach<br>for recycling and organics. Funded<br>actions for 2020-2021 include<br>Waste Bylaw update, education<br>and communications, and phase-in<br>of recycling requirements.                                 | Short<br>(0-3 years)  |
| G. Implement<br>construction and<br>demolition waste<br>diversion policies and<br>programs. | <ul> <li>Prepare a business case for the 2022-2025 budget.</li> <li>Research best practices for construction and demolition waste diversion policies and programs.</li> <li>Align implementation with the Recovery Park project.</li> </ul> | Medium<br>(4-9 years) |
| H. Implement disposal<br>bans at the Saskatoon<br>Landfill.                                 | <ul> <li>Prepare a business case for the 2022-2025 budget.</li> <li>Develop an approach for a disposal ban at the Saskatoon Landfill for any materials where diversion</li> </ul>   | Medium<br>(4-9 years) |

opportunities are in place for all sectors.

- Encourage similar landfill bans at a regional level by working with other landfills operating in the region and the provincial government.
- I. Provide education on waste reduction and additional waste diversion.
- J. Determine the role of City-delivered services for ICI waste management and diversion.
- Develop resources for the ICI sector to encourage waste reduction and diversion as part of the education for mandatory recycling and organics.

Short

(0-3 years)

- Review waste management and diversion services that the City currently provides or could potentially provide.
   Short (0-3 years)
- Recommend services that support the regulatory approach for recycling and organics and that can be sustainably funded.
- If needed, prepare a business case for the 2022-2025 multi-year budget.

Priority 2: Partnerships and Collaboration

| GOALS   | KEY ACTIONS   | PHASING              |
|---|---|----------------------|
| F. Continuously improve<br>waste data<br>management and<br>reporting system to<br>monitor ICI waste<br>generation and<br>diversion. | <ul> <li>Complete the ICI Waste &amp;<br/>Recycling Survey every two years<br/>in coordination with the residential<br/>waste survey.</li> <li>Continue to include ICI sector<br/>waste in the City's Waste<br/>Characterization Studies.</li> <li>Collect data from waste haulers on<br/>volumes and types of waste<br/>collected within City limits (as per<br/><i>The Waste Bylaw</i>).</li> </ul> | Ongoing              |
| G. Establish a working<br>group with<br>representatives from<br>the ICI sector to   | <ul> <li>Strike an ICI working group.</li> <li>Meet regularly to assist in implementing recycling and organics, such as during Waste</li> </ul>   | Short<br>(0-3 years) |

support strategy implementation.

- H. Work with the provincial and federal governments on new waste reduction and diversion initiatives.
- I. Establish a program to increase waste diversion from local schools.
- J. Leverage community and external funding sources to initiate new initiatives.

Bylaw updates and planning communications and education.

Ongoing Communicate, monitor, and • collaborate with the provincial and federal governments on related initiatives such as ICI waste diversion policies and programs and single-use item regulations. Short Develop and implement an organic • (0-3 years) pilot program for schools. Short Continue to develop and submit • (0-3 years) project proposals that support the development of waste reduction and diversion policy and program. Continue to identify external • funding sources, such as the Federation of Canadian Municipality's Green Municipal Fund and submit applications.

#### Priority 3: Leading by Example

| GOALS   | KEY ACTIONS  | PHASING               |
|---|--|-----------------------|
| G. Establish recycling at all City facilities.  | • Explore funding opportunities to<br>ensure compliance with the<br>mandatory recycling requirement<br>for the ICI sector. | Short<br>(0-3 years)  |
| H. Collect organics at all<br>City facilities to align<br>with the mandatory<br>organics<br>requirements for the<br>ICI sector. | • A business case and budget will be prepared for the 2022-2025 budget.  | Medium<br>(4-9 years) |
| I. Develop policies to<br>require public space<br>and event waste<br>diversion.   | <ul> <li>A business case and budget will be<br/>prepared for the 2022-2025 budget.</li> </ul>                              | Medium<br>(4-9 years) |
| J. Develop policies and<br>procedures to divert<br>construction and   | • A business case and budget will be prepared for the 2022-2025 budget.  | Medium<br>(4-9 years) |

demolition waste from City projects.

- K. Ensure procurement procedures align with waste diversion and reduction
- Pilot sustainable and/or circular procurement that support waste reduction and diversion as well as the triple bottom line policy.

Short

(0-3 years)

- Develop a sustainable and/or circular procurement procedure.
- A business case and budget will be prepared for the 2022-2025 budget to expand pilots if necessary.
- L. Maximize the use of recycled content
- Explore opportunities to expand the Short use of recycled content through (0-3 years) procurement specifications and criteria.
- A business case and budget will be prepared for the 2022-2025 budget to expand if necessary.

#### **Priority 4: Enabling the Circular Economy**

| GOALS  | KEY ACTIONS  | PHASING               |
|--|--|-----------------------|
| F. Reduce Food Waste<br>and increase<br>reclamation through a<br>coordinated<br>approach.  | <ul> <li>Complete the Research Junction<br/>Project (pending funding approval):<br/>Promising Practices in Food<br/>Reclamation for Saskatoon.</li> <li>Prepare a business case for the<br/>2022-2025 budget.</li> </ul>                                   | Medium<br>(4-9 years) |
| G. Explore opportunities<br>for local economic<br>development or social<br>enterprises to support<br>waste reduction and<br>diversion. | <ul> <li>Consider opportunities as part of<br/>the implementation of new<br/>initiatives, such as Recovery Park.</li> </ul>  | Medium<br>(4-9 years) |
| H. Share, reuse and repair strategy  | <ul> <li>Complete the Johnson Shoyama<br/>Graduate School of Public Policy's<br/>Policy Shop Project: The Role of<br/>the Share, Reuse and Repair<br/>Economy in Municipal Waste</li> <li>Prepare a business case for the<br/>2022-2025 budget.</li> </ul> | Medium<br>(4-9 years) |

- I. Textile and apparel reduction and recycling strategy
- J. Adaptation and reuse of older building policy
- Long • Continue monitoring for (10+ years) opportunities and best practices. • Prepare a business case for the
  - 2026-2029 budget.

• Continue monitoring for

- Long (10+ years) opportunities and best practices.
- Prepare a business case for the 2026-2029 budget.

# REGULATORY APPROACHES TO RECYCLING AND ORGANICS

In order to implement the first goal in Priority 1 of the ICI Waste Diversion Strategy – *Implement mandatory recycling and organics diversion program and policies* - the Administration developed options for a regulatory approach. This chapter describes the process used for the development of the options which is summarized in the table below.

| Dates                             | Project Phase                          | Engagement Activities   | Project Outcomes  |
|-----------------------------------|--|---|---|
| November<br>2018 –<br>June 2019   | Phase 1 -<br>Options<br>Identification | <ul> <li>Business<br/>Association and Key<br/>Stakeholder<br/>Meetings</li> <li>Option Identification<br/>Workshop</li> <li>2019 ICI Waste &amp;<br/>Recycling Survey</li> </ul>                          | <ul> <li>Jurisdiction Scan<br/>Research</li> <li>Available Options</li> <li>Feasibility of Available<br/>Options</li> <li>Identification of<br/>Behaviour and<br/>Barriers</li> </ul> |
| July –<br>October<br>2019         | Phase 2 - Draft<br>Options             | <ul> <li>Waste Hauler and<br/>Processor Meetings</li> <li>Option Review<br/>Workshops</li> <li>Option Review<br/>Survey</li> <li>Business<br/>Association and Key<br/>Stakeholder<br/>Meetings</li> </ul> | <ul> <li>Draft Options</li> <li>Implementation<br/>Requirements for<br/>Draft Option</li> <li>Refinement of Draft<br/>Options</li> </ul>  |
| November<br>–<br>December<br>2019 | Phase 3 - Final<br>Options             | Option Preference     Survey  | <ul> <li>Final Options</li> </ul>   |
| December<br>2019                  | Recommendation                         |   | <ul> <li>Recommendation<br/>Decision-Making</li> </ul>  |

This chapter incorporated findings from the engagement results, more detail can be found in the Comprehensive Engagement Report and the What We Heard reports available on the <u>Saskatoon Talks Trash: Businesses & Organizations</u> provide the full details on engagement activities and results.

#### **Jurisdiction Scan Research**

A scan of jurisdictions was completed to understand what mandatory recycling and organics programs and policies are in place and what the City of Saskatoon could learn from them.

#### Jurisdiction Scan of Canada

The scan of Canadian jurisdictions revealed that approaches to Industrial, Commercial and Institutional (ICI) waste diversion varies considerably based on whether ICI Waste diversion is regulated at the provincial or municipal level.

#### Saskatchewan

The Province of Saskatchewan does not regulate the diversion of Industrial, Commercial or Institutional Waste and is expected to maintain its current focus on residential waste diversion programs. The City of Regina does not have any ICI diversion policies or programs in place.

#### Ontario

The Government of Ontario has enacted regulations for the ICI sector to source separate recyclable materials. As a result, municipalities have generally consider ICI waste diversion as part of provincial jurisdiction and have taken limited action. The City of Toronto for example, only requires ICI sector recycling and organics diversion with its own commercial customers and uses pricing for these services to further incentive diversion. York Region has developed an ICI strategy as part of their waste management master plan, but only recommended mandatory diversion for municipal commercial customers.

#### Nova Scotia

The Government of Nova Scotia has enacted a ban on landfilling materials that can be diverted, including recycling and organics. The ban applies to both the residential and ICI sectors. The Halifax Regional Municipality has adopted a complementary policy that required all businesses and organizations to source separate their recyclable and organic waste by requiring separate containers with clear signage.

#### British Columbia

The Government of British Columbia has enacted legislation and regulations that compel municipalities to develop waste diversion plans that require approval by the province. Both Metro Vancouver and the Regional District of Nanaimo are in the process of developing hauler licensing as a method to require recycling and organics by the ICI sector. Both jurisdictions have landfill bans in place at their landfills and garbage transfer stations that result in surcharges for loads that exceed a percentage threshold for recycling or organics. Both have found that garbage is being hauled to landfills or transfer stations outside of their jurisdiction where there are not bans on landfilling recyclables or organics. The intention of hauler licensing is to link it with a financial mechanism to incentivize diversion, such as a landfilling levy applies to all waste no matter where it is landfilled or a discount to use their landfill, provided waste is below

the allowable threshold of recycling and organics as laid out in their landfill materials bans.

The City of Vancouver is exempt from the provincial approval obligation. It requires all non-residential properties that generate recycling and organics to have a plan in place to divert the materials. The plans are monitored through the business license application process and are reviewed and approved through waste bylaw enforcement. Since the City of Vancouver is also in Metro Vancouver, a landfill material ban is also in place.

#### Alberta

In Alberta, both Calgary and Lethbridge have or are in the process of implementing source separation requirements for the ICI sector. This means that separate containers for garbage, recycling and organics are required. Calgary's program is fully implemented and Lethbridge will be implementing its program in 2020. Calgary has an education first model for compliance verification, which has resulted in a very low instance of issuing fines for non-compliance.

Edmonton has traditionally been a service provider for ICI sector waste, however with recent changes including the closure of their post-collection sorting facility, the City is in the process of re-evaluating the ICI waste services it provides.

#### **Jurisdiction Scan of the United States**

There are also numerous jurisdictions in the United States that have implemented mandatory recycling and organics for the ICI sector. Examples of municipalities that have or will be implementing mandatory recycling and organics include:

- San Francisco, California which has a franchise system in place, meaning that there is only one company permitted to collect waste in City, which is also contracted by the City for residential collections. The company must provide recycling and organics collections to the ICI sector.
- New York City requires that certain food waste generators source separate their organic waste and either arrange for transportation to a processing facility or compost it on-site. New York State will require the donation of surplus food and diversion of organic waste for processing for certain food waste generators starting in 2022.
- Austin, Texas requires all businesses that require a public health inspection for food safety to also to submit a plan to the City for organics diversion. The plan submission process is online and separate from other City processes.
- Boulder Colorado requires businesses to have separate containers and collection services.
- Portland, Oregon's metropolitan area (Metro) has approved a plan to require certain businesses to separate and divert waste. It will go into effect in 2020.
- Seattle, Washington requires businesses to sort all food waste into a separate bin for collection and has banned the disposal of food waste in the garbage.

Examples of where recycling and organics requirements are occurring at the state level include:

- The state of California requires businesses that generate a large amount of organic waste to source separate waste, compost it onsite or self-haul to a facility, to sell or donate surplus food, or subscribe to a waste service that processes organic waste.
- The state of Connecticut requires food waste generators to source separate waste and divert it to an authorized organics processing facility.
- The state of Vermont requires all waste haulers and drop-off centres for waste to provide recycling and organics services in addition to garbage.

# **Available Options**

The jurisdiction scan revealed an array of options that were available for regulating recycling and organics for the ICI sector. Administration categorized these options as presented in the table below. These same options were presented in a design-your-own program activity that was held during the first phase of engagement.

| Category  | Options   |
|---|---|
| 1. Requirements<br>What should the City be<br>asking businesses and<br>organizations to do? | <ul> <li>Have separate bins for recycling, organics, and garbage</li> <li>Have regular audits of waste being sent to landfill to verify recycling and organics diversion</li> <li>Develop a waste diversion plan that includes recycling and organics diversion</li> <li>Use City services, which include recycling and organics</li> <li>Place labels or signs on/near all recycling, organics, and garbage bins</li> <li>Correctly sort materials for recycling, organics, and garbage</li> <li>Pay a disposal surcharge for all garbage that is landfilled, no matter which landfill it goes to</li> <li>Use City approved waste haulers, which have to provide recycling and organics service</li> <li>Provide education to tenants, employees, contractors, and caretakers on how to properly sort recycling and organics</li> </ul> |
| 2. Enforcement<br>How will the City ensure<br>that businesses and                           | <ul> <li>An application or proof of compliance submitted to the<br/>City of Saskatoon</li> <li>Follow up on complaints by calls or visits</li> </ul>  |

organizations are meeting those requirements?

3. Materials

What waste materials should the mandatory requirement address?

4. Service Provider

Who should provide recycling and organics collection services to businesses and organizations?

5. Education and Resources

What kinds of information and services should the City provide to support implementation of the policy or program?

- Waste haulers are licensed and must enforce some or all of requirement
- Add to business license application and renewal process
- Random site visits to verify compliance
- All recyclable materials in residential recycling program
- Certain recyclable materials (please list)
- All organic materials expected in residential organics program
- Certain organic materials (please list)
- Private sector services –provide garbage, recycling and/or organics
- Optional City run recycling and organics depot (funding: property taxes or user fees)
- Optional City run recycling and organics collection (funding: utility fees or user fees)
- Mandatory City run recycling and organics collection garbage customers only (funding: utility fees or user fees)
- Mandatory City run recycling and organics collection everyone (funding: property taxes, utility fees, and/or user fees)
- Downloadable templates for educational signs, posters and bin decals
- In-person support to educate on requirement or trouble shoot issues
- Training on how to meet the requirement, such as videos, lunch and learns, or workshops
- Directory of service providers for recycling and organics
- A how-to-guide on how to meet the requirement
- Calculator to track waste generated and help rightsize service
- Recognition program for waste diversion leaders
- Training on how to conduct an audit of waste being sent to landfill
- Rebate or grant to offset costs of new or expanded diversion

6. Roll-Out

How do we implement the policy or program?

- All businesses and organizations start at the same time
- Certain businesses or organizations start first (please list):
- Certain businesses or organizations start later (please list):
- Certain businesses or organizations are exempt (please list):
- Recycling and organics requirements start at the same time
- Requirements are phased with recycling first followed by organics
- Requirements are phased with organics first followed by recycling
- A transition period before enforcement begins

### **Feasibility of Available Options**

The feasibility of the available options was informed by the results of the first phase engagement and the jurisdiction scan as well as whether these options were legally possible to implement in Saskatchewan.

The engagement results are summarized below to demonstrate how they informed the assessment of feasibility. The full engagement results for the workshop are in the what we heard report for the options identification workshop and the 2019 ICI Waste and Recycling Survey.

#### **Requirement & Enforcement**

During engagement, the most preferred requirement was to require separate bins. In the workshop, which was based on a design-your-own-program activity, the most used program components for requirements were education and separate bins and for enforcement were business license and proof of compliance. Tables summarizing the workshop preferences for requirements and enforcement are below.





The 2019 ICI Waste and Recycling Survey asked the level of support for a list of similar options. The table below shows the highest level of support was to have separate and labelled bins for recycling, organics, and garbage. The highest opposition was for having to pay a disposal fee for all garbage that is landfilled, no matter which landfill it goes to.
| Support for City Approaches to ICI Recycling and Organcis (%)  |         |                  |            |                    |
|--|---------|------------------|------------|--------------------|
| Have organizations pay a disposal fee for all garbage that is landfilled, not matter which landfill it goes to.                                | 21%     | 37%              | 23%        | 19%                |
| Provide recycling and organics collection service that is property tax or utility fee funded.  | 22%     | 48%              | 13%        | 17%                |
| Use only City-approved waste haulers that provide recycling and organics collection.   | 22%     | 43%              | 21%        | 14%                |
| Have organizations develop and submit a waste management plan.   | 24%     | 43%              | 15%        | 17%                |
| Audit waste that is to be sent to landfill to make<br>sure that no recycable, organic or other materials<br>that could be diverted are present | 29%     | 42%              | 19%        | 5 10%              |
| Have separate and labelled bins for recycling, organics and garbage.   |         | 53%              | 36%        | <mark>5%</mark> 6% |
| Strongly Support Somewhat Support  | Somewha | t Oppose 🗧 Stron | gly Oppose |                    |

# Requirement and Enforcement Options That Were Developed

Requirement and enforcement options were selected for further engagement and analysis. The table below summarizes the reasoning.

| Option  | Rationale for Further Development   |
|---|---|
| Have separate bins for recycling, organics, and garbage | <ul> <li>A preferred requirement in both the workshop and<br/>statistically representative survey</li> <li>No legal challenges anticipated in implementing the<br/>requirement</li> </ul> |

Develop a waste diversion plan that includes recycling and organics diversion

Place labels or signs on/near all recycling, organics, and garbage bins

Provide education to tenants, employees, contractors, and caretakers on how to properly sort recycling and organics

An application or proof of compliance submitted to the City of Saskatoon

Add to business license application and renewal process

Follow up on complaints by calls or visits

Random site visits to verify compliance

- Successfully implemented in Canada
- While not an engagement preference, it was compatible with the preferences of a submission and adding to the business licensing process
- No legal challenges anticipated in implementing the requirement
- Successfully implemented in Canada
- A moderately high level of support during the engagement workshop
- A component commonly paired with the requirement for separate bins
- The most preferred requirement in the engagement workshop
- A common component of the regulatory approaches of all Canadian jurisdiction
- A preference during the engagement workshop
- A preference during the engagement workshop
- While less preferred during the engagement workshop, it is an enforcement approach commonly paired with the requirement for separate containers
- While less preferred during the engagement workshop, it is an enforcement approach commonly paired with the requirement for separate containers

# Requirement and Enforcement Options Not Developed

A number of the options for mandatory recycling and organics that were presented during the design-your-own workshop were eliminated from consideration due to engagement and jurisdiction scan results as well as the legal challenges of implementation in Saskatchewan. A table summarizing the reasoning for no longer developing these options is below.

| Option  | Rationale for Not Developing   |
|---|--|
| Have regular audits of<br>waste being sent to landfill<br>to verify recycling and<br>organics diversion   | <ul> <li>This option has only been applied to large volume waste generators in the United States</li> <li>Safety and privacy are issues when conducting waste audits may result in legal challenges</li> </ul>   |
| Use City services, which include recycling and organics   | <ul> <li>While this option was preferred by smaller<br/>businesses, it was not a preference for larger<br/>businesses and therefore did not have universal<br/>stakeholder support</li> <li>City diversion services can be developed as an<br/>optional service to respond to this difference in<br/>preference</li> </ul> |
| Correctly sort materials for recycling, organics, and garbage   | <ul> <li>Illegal dumping would make enforcement of this requirement open to legal challenges</li> <li>Safety and privacy are issues when enforcing the contents of waste containers</li> <li>While this requirement may be stated in bylaws of other jurisdiction, in practice it is not enforced</li> </ul>               |
| Pay a disposal surcharge<br>for all garbage that is<br>landfilled, no matter which<br>landfill it goes to | <ul> <li>This was the least popular option on the statistical survey</li> <li>This option has only been developed as a concept and has not been fully implemented in another Canadian jurisdiction</li> </ul>  |
| Use City licensed waste<br>haulers, which have to<br>provide recycling and                                | <ul> <li>There was not enough stakeholder interest to justify<br/>further development of an option that has not been<br/>fully implemented in another Canadian jurisdiction</li> </ul>   |

#### **Materials**

organics services

A definition for "recyclable" and "organic" materials that will be regulated is needed for clairity. Administration used the list of materials currently accepted in the City's residential recycling program and the future curbside residential organics program as a starting point during engagement and considered whether a different list of materials should be developed for the ICI sector.

Matching materials in the residential programs was a stakeholder preference during the engagement workshop. It as well has the potential benefits of consistency in behaviour and education, where the same materials are accepted where people live, work and play in Saskatoon. The following table summarizes workshop preferences for materials.



#### **Service Provider**

The following table summarizes the workshop preferences for service provider. Additional analysis was conducted based on the size of the organization, which showed a clear divide between larger and smaller organizations. Large operation had a clear preference for private sector services, while smaller organizations preferred mandatory City provided services provided costs were competitive with the private sector. The private sector option was selected by Administration and opt-in services for collections or depots would be further considered.



## **Education and Resources**

Based on the results of the jurisdiction scan, education and resources were clearly an important component of a regulatory approach to recycling and organics for the ICI sector. The following table summarizes the workshop results for education and resources preferences.



#### Roll Out

The jurisdiction scan indicated that using regulatory approaches for recycling and organics diversion is common. Similarities were found in the types of businesses and organizations that requirements apply to, when requirements apply, providing staggered timing of implementation, and transition or grace periods before full enforcement.

The preferences from stakeholders during the engagement workshop were:

- To allow a transition period before full implementation
- Require all businesses and organizations to start at the same time
- Introduce recycling requirements first, followed by organics

The following table summarizes the full workshop results for roll out strategy preferences.



# **Behaviour and Barrier Identification**

The Administration also considered current recycling and organics behaviour as well as the opportunities and barriers identified during engagement when analyzing the available options.

## **ICI Sector Recycling and Organics Behaviour**

The workshop provided participants the opportunity to identify how they currently dispose of specific materials. It found higher levels of diverting recyclables than organics. The following chart summarizes responses for materials that are currently accepted in the residential recycling programs and the future curbside residential organics program.



The 2019 ICI Waste and Recycling Survey, which is statistically representative, asked what methods are currently used for recycling and for organics disposal. The results showed that 72% of the ICI sector have private recycling collections currently in place and 60% use SARCAN. There was also a notable minority that used residential recycling depots. The response "another way" included employees taking materials home to recycling and use of confidential shred services.



For organics, the 2019 ICI Waste and Recycling Survey asked those that generated food and yard waste what method was used for disposal. The results showed the majority currently use the garbage for disposal, while there was a wide variety of other methods used for diversion.



The results indicate that the ICI sector is largely already in compliance with the potential options for regulating recycling that have been identified above. The results also show that there is a much lower level of organics diversion currently taking place.

#### **Barriers and Opportunities of ICI Sector Recycling and Organics**

The engagement workshop provided the opportunity for participants to share the opportunities and barriers they experienced related to diverting recycling and organics. The following table summarizes the results.

|               | Recycling  | Organics   |
|---------------|--|--|
| Opportunities | <ul> <li>Materials generated are desirable in recycling markets.</li> <li>Recycling services are easy to use and accessible (yearround, single stream, availability of bins and access to both residential and specialized recycling programs).</li> <li>Increased efficiency in workflows.</li> <li>Educational services are available.</li> </ul>  | <ul> <li>Access to onsite compost<br/>facilities</li> <li>Employee interest and access<br/>to tools and education suitable<br/>for all literacy levels and<br/>language needs</li> <li>Access to mandatory bins</li> <li>Seasonal composting</li> <li>Ability to take organics home<br/>to divert</li> <li>Reduced need for garbage<br/>pick-ups leading to cost<br/>savings</li> </ul>                            |
| Barriers      | <ul> <li>Materials or material volumes not accepted or challenging/not cost effective to divert.</li> <li>Restricted access to recycling programs due to available space, zoning requirements, lack of time, service frequency, cost and lack of funding or time transport specialty materials to diversion sites.</li> <li>Lack of consequences for improper use of bins.</li> <li>Insufficient educational resources to support proper recycling behaviors.</li> </ul> | <ul> <li>Lack of education and clarity regarding benefits and best practice for diverting organics</li> <li>Lack of recognition for those already composting</li> <li>Lack of space, cost and service providers associated with use of organic bins</li> <li>Cost and resourcing needs associated with transporting organic waste to several depot locations or depots that may not be open year-round.</li> </ul> |

The 2019 ICI Waste & Recycling Survey asked what things discourage recycling more materials and what is foreseen as discouraging composting or having organics collected. The highest barrier identified for both was service availability. The second highest barrier for recycling was education, while for organics it was amount of material, space and costs. The results for Insightrix's analysis is in the charts below.





The results indicate that despite adequate recycling processing capacity, members of the ICI sector are encountering challenges with service availability for recycling as well as education and time barriers. For organics, the two most significant barriers identified were service availability and the amount of materials generated (low volume), followed by the space requirements and potential costs.

# **Draft Options**

The following is a summary of the three draft options that were developed based on the results of the above analysis. The full text of the options that was provided for phase two engagement is provided in Appendix 1.

|   | Option<br>1 | Option<br>2 | Option<br>3 |
|---|-------------|-------------|-------------|
| All businesses/ organizations would be required to:   |             |             |             |
| Have three separate and labelled bins for garbage, recycling<br>and organics that can be verified by the City | ~           | ~           |             |
| Submit a plan to divert recycling and organics from garbage/<br>landfill                                      |             |             | ~           |
| Provide education to employee/tenants at least once a year  | ✓           | ✓           | ✓           |
| Ensure the proper disposal of materials in separate bins*   | ✓           | ✓           | ✓           |

| The City would:  |              |              |   |
|--|--------------|--------------|---|
| Primarily verify compliance through site visits and following up on complaints   | $\checkmark$ |              |   |
| Primarily verify compliance through a submission by your business/organization** |              | $\checkmark$ | ~ |
| Provide education and resources to support businesses/<br>organizations          | ✓            | $\checkmark$ | ~ |
| Roll-out:  |              |              |   |

- Mandatory recycling and organics would apply to all businesses and organizations.
- There would be a phase-in period for at least a year before the requirement, where the City would focus on education and assisting with early compliance.
- Recycling would be implemented first, followed by organics, with at least a one year gap.

#### Materials:

The lists of recyclable and organic materials would match our residential programs.

#### **Education and Resources:**

The City will develop a plan to provide information and services to support businesses and organizations meeting the requirement.

\*Examples of management for recycling and organics includes: hiring a waste hauler, dropping off materials at a depot (if available), composting on-site, or donating/selling edible food waste \*\*The existing business licensing process could receive the majority of submissions, for organizations not requiring a business license a separate submission process would be needed.

Option 1 was developed based on the preference of a separate bin requirement by those engaged to date and paired with following up on complaints and site visit verification, which while not preferred, is compatible with how the Waste Bylaw is currently enforced as well as consistent with how other jurisdictions verify compliance.

Option 2 was developed based on the preferences of a separate bin requirement, using the business licensing process and submitting proof by those engaged to date. While requiring three separate bins is common, no examples were found of other cities using this verification approach.

Option 3 was developed based on the preference of using the business licensing process by those engaged to date. Submission of a waste diversion plan through business licensing is an approach that has been successfully implemented. The City adjusted the option from how it was presented in the first phase of engagement to be more user friendly, following feedback that indicated moderate support due to a perceived lack of knowledge and resources needed to complete the plan.

## **Implementation Requirements for Draft Options**

With the draft options developed, Administration was able to begin assessing what would be required for implementation of each of the options. The following is an overview of the results and where applicable differences between the draft options are highlighted.

#### Update The Waste Bylaw

All of the draft options would require an update to The Waste Bylaw (Bylaw No. 8310), since there are currently no diversion requirements for the ICI sector in the bylaw. Additional research and analysis would be required based on the jurisdictional scan that has been completed. As well, there are additional amendments that the Administration has identified for *The Waste Bylaw* related to other areas that could be made at the same time.

#### Waste Bylaw Enforcement

All of the draft options will rely on enforcement by Environmental Protection Officers. Since draft Option 1 relies on similar enforcement methods to what is currently in *The Waste Bylaw* or how other environmental bylaws are enforced, it was generally considered the most compatible. Draft Options 2 and 3, which includes a submission, would require additional resources to develop new processes for tracking and reviewing submissions. Within the draft options, additional clarity was required on the specific methods of compliance verification, which was completed for the Final Options.

#### **Submission Process**

Draft Options 2 and 3 require submissions through the business licensing application and renewal process as well as a parallel process for organizations that don't need a business license. Draft Option 2 was predicted to require attachments be submitted, while draft Option 3 was predicted to require a new field for submissions in the business license forms, both online and in paper. Therefore an update to the software and forms would be required, which would not be compatible with how the system is currently set up. As well, the parallel process would need to be set up from scratch. Therefore additional financial resources were predicted to be required to implement these two Draft Options.

#### **Education and Communications**

All options are predicted to require comprehensive education and communications. While different approaches would be expected for the Draft Options, all are expected to require a similar amount of resources to develop and implement.

#### **Additional Policy Implications**

Concerns related to space requirements will need to be addressed in coordination with planning and development policies such as The Zoning Bylaw (Bylaw No. 8770). As well, ensuring that new developments are built with adequate space for recycling and organics containers could involve the development review process. The use of 'garburators' for organics disposal will need to be addressed in coordination with the Sewer Use Bylaw (Bylaw No. 9466).

#### **City of Saskatoon Waste Services**

The impacts on existing City of Saskatoon waste management services and the potential to develop new services may vary depending on the option selected. For example, in Calgary where separate containers for recycling and organics are required,

the City at the same time permitted ICI sector use of residential depots. Once an option is selected, Administration will be able to assess whether it is appropriate to adjust existing services or develop new services and prepare a business case for the 2022-2025 multi-year budget if needed.

#### **Budget Requirements**

The three Draft Options would require different levels of funding and staffing to implement. Draft budgets were developed based on the above considerations which estimated the amounts of capital and operating resources as well as FTEs required for implementation. The budget requirements were presented in the final options and then further refined during the recommendation decision-making process.

# **Refinement of Draft Options**

In September and October 2019 two workshops and an online survey were used to collect feedback on the draft options. A condensed summary of the big takeaways from engagement are below as well as how they were responded to during the refinement of the Final Options. The full results are available in the engagement results report.

## **Overall Impressions**

For each option, stakeholders were asked whether they felt the Draft Option would work for their organization as persented. The choices provided were:

- This option would work, no changes required
- This option might work, but needs some work
- This option currently does not work

The results in the graphs below indicated that Option 3 was considered the option that would work best with no changes, with 34% of participants indicated that selection. However, for all Draft Options over 60% of participants indicated either the option needed to change or wouldn't work at all.









- This option works well, no changes required
- This option might work, but needs some work
- This option currently does not work
- Other (unsupportive or requesting more information)

#### **Low Volume Generation**

The most prevalent concern raised by participants in response to all three options was "how can I divert organics/recycling if I don't generate any?" Several workshop and survey participants identified that they are supportive of recycling but do not generate large volumes of organics and do not feel that an organics program is necessary for every operation.

Options 1 and 2 have been changed so the requirement to divert organics will only apply to businesses and organizations that generate o as part of their operations. Option 3 continues to provide the flexibility to state types of waste that are not generated.

#### **City Intrusion**

The second most prevalent theme that emerged from participant comments was frustration regarding City intrusion. Participants felt that by mandating recycling and organics programming, the City was overstepping their authority and causing unnecessary stress and costs on businesses and organizations.

The Final Options and the Decision Report will include an Option 4, which will be to not implement mandatory recycling and organics and instead either maintain the status quo or to implement a voluntary education-based program. As well, the Final Options provide enforcement levels, so that both stakeholders and City Council can better understand what enforcement could look like.

#### Cost

Cost was the third most prevalent theme that emerged from engagement results. Participant comments revealed that several businesses and organizations in Saskatoon are struggling to keep doors open.

The cost to a business or organization will vary depending on the quantities and types of waste generated. However all final options were designed to provide the ability to control costs such as a choice of private sector solution, opt-in city service, depot drop offs, or on-site composting.

#### Space

Space was a concern brought up frequently in response to the requirement for three separate bins requirement from Options 1 and 2. Participants explained that given parking requirements, accessibility needs, and crowded alley ways, mandating that every business or organization has three bins outdoors would not always be logistically feasible.

Space will be addressed in the revisions to the Waste Bylaw, the Zoning Bylaw Update, and a review of other standards or policies. The Education and Support for the program will also offer on-site support to assist in siting containers if requested.

#### Administrative Burden

Administrative burden, expressed as time, resources and know-how, was mentioned by several participants as a concern across all options. Businesses described operations where every minute of available staff time is already allocated to required tasks so to allocate staff to tasks like organics sorting, sourcing bins or guiding site visits would mean that other more profitable work would not be completed.

The Final Options discuss more specifically what education and support will be provided, with a focus on resources and in-person support that will help streamline meeting requirements and addressing specific concerns or challenges.

#### **Responsible Party**

Some participants who manage or are tenants of shared facilities expressed concern about who would be responsible for implementing the program. In many shared facilities, property managers or landlords have historically been responsible for waste management.

The Final Options are more specific about who is likely to be responsible for implementing mandatory recycling and organics based on how it works in other jurisdictions. Responsibility will be finalized in the revisions to the Waste Bylaw.

#### **Target Large Volume Generators**

Some participants suggested that the program would be most effective if the City used its resources to target the large volume generators who do not currently have diversion systems in place. They see this approach as an opportunity to make a larger diversion impact using fewer City resources while allowing businesses and organizations who already have diversion systems in place to continue doing what they are doing without financial or administrative impact.

The Final Options do not specifically target Large Volume Generators, but instead removed the requirement in Options 1 and 2 for the organics containers for those that do not generate food or yard waste as part of their operations.

#### **Ease and Flexibility**

Participants expressed the most support for options or approaches that they felt offered flexibility and would be easy to implement. Participants valued options that allowed businesses and organizations to right size diversion programming for the unique needs of their operation and rejected aspects of options that did not account for the diversity of local businesses and organizations by applying blanket requirements.

All Final Options continue to be based on providing choice and flexibility, rather than restrictive program that limits choice.

#### **Already Doing It**

Majority of responses explained that options would work well because they are already doing it, or aspects of it. This was most evident in response to the requirement for three

bins from Option 1 and 2. Participants noted that they either already have three bins in place or have two of the three required and felt that adding on another bin would not be too challenging.

Through our representative statistical survey, we know that over 70% of businesses and organizations are already compliant with Option 1 & 2 container requirements. This was echoed in the workshop and survey results.

#### **Disproportionate Impacts**

Some participants expressed concern for specific groups they felt would be disproportionately impacted by a waste diversion program. These groups included:

- Small Businesses
- Non-profit Organizations
- Multi-tenant Shared Facilities
- Low Volume Generators
- High Volume Generators

The change to Options 1 and 2 to require organics containers only for businesses and organizations that generate food or yard waste as part of their operations is expected to reduce the disproportionate impacts for some. The ability to be exempted will be specifically addressed in the revisions to the Waste Bylaw. The City will also study what opt-in services it can provide that will reduce disproportionate impacts.

# **Final Options**

The following is a summary of the Final Options that were developed based on the results of the above implementation considerations and engagement results. The full text of the options that was provided for phase three engagement is provided in Appendix 2.

|                     | Option 1 -<br>Separate Waste<br>Containers (verified<br>by City) | Option 2 -<br>Separate Waste<br>Containers<br>(business submits<br>proof) | Option 3 -<br>Waste Diversion<br>Plan (business<br>submits form) |
|---------------------|--|---|--|
|                     | Requirements & Respo   | onsibilities – ICI Sector   |  |
| Separate            |  |   |  |
| Containers for      | $\checkmark$   | ✓   |  |
| Garbage, Recycling, |  |   |  |
| and Organics*       |  |   |  |
| Diversion Plan for  |  |   |  |
| Recycling and       |  |   | $\checkmark$   |
| Organics            |  |   |  |
| Submission          |  |   |  |
| through business    |  | $\checkmark$  | $\checkmark$   |
| licensing**         |  |   |  |

| Provide education<br>to<br>employees/tenants               | ✓                         | ✓                    | ✓    |  |
|--|---------------------------|----------------------|------|--|
| Pot  | tential Verification By V | Vaste Bylaw Enforcem | ent  |  |
| Complaint Follow-<br>up                                    | ✓                         | ✓                    |      |  |
| Screening Follow-<br>up                                    |                           | ✓                    | ✓    |  |
| Education Blitzes  | ✓                         | ✓                    | ✓    |  |
| Recycling and Organics Education                           |                           |                      |      |  |
| Education Program  | ✓                         | ✓                    | ✓    |  |
| Annual Operating Cost (to City) – Preliminary Estimates*** |                           |                      |      |  |
| 2022+  | \$                        | \$\$                 | \$\$ |  |

\*Only if food or yard waste is generated as part of operations.

\*\* Or a parallel process for organizations that do not require a business license

\*\*\* \$ = between \$220,000 and \$340,000; \$\$ = between \$490,000 and \$620,000

Significant changes from the Draft Options previously presented included:

- A change in Options 1 and 2 from requiring all members of the ICI sector to be required to have organics containers to only those that generate food or yard waste as part of their operations.
- Additional clarification on what the Waste Bylaw enforcement could look like for each of the options and what different levels of compliance verification could look like.
- Clarity on responsibility for property owners, tenants and other shared facilities
- Additional information on what the financial implications may be for the City to implement and operate the different options.

# **Recommendation Decision-Making**

#### Choosing by Advantages Decision Method

Administration used a Choosing by Advantages (CBA) decision making methodology to evaluate the options and inform the recommendation. CBA is a systematic method that compares the advantages of options and assigns weights based on importance. During

the evaluation process, Administration compared the advantages of the Final Options and the variations of compliance verification, as well as a voluntary education-based approach, for a total of eight alternatives (Appendix 2).

Administration weighed the advantages and importance of the following factors during the CBA process:

| ICI Stakeholders                           |  |
|--|--|
| Stakeholder Preference                     | What is the preference indicated by stakeholders for each requirement and verification method combination? Use results of preference survey.   |
| Ability to Understand                      | Will businesses and organizations be able to understand what is required of them and the associated implications for their organization? Is it something that is clear and straightforward? Is it something they are familiar with?  |
| Ability to Implement and<br>Control Costs  | Will businesses and organizations be able to easily implement<br>what is required of them? Are there barriers that may prevent<br>compliance such as numerous steps required to be compliant,<br>the availability of waste services, space constraints, costs of<br>services, etc.   |
| Planning & Implementation                  | by Administration  |
| Waste Bylaw<br>Compatibility               | Is the requirement and verification method compatible with<br>existing systems and processes used for enforcing the Waste<br>Bylaw? Is it similar to existing processes, existing technology,<br>customer service, communications and education, etc.?   |
| Effort Required to Plan<br>and Implement   | What is the effort required to transition the option from approval<br>by Council to being ready to implement? Does it result in higher<br>effort to complete some or all of the following: bylaw and other<br>policy revisions, number of divisions involved and effort required,<br>number of processes and operational plans that need to be put in<br>place, etc. |
| Effort Required to<br>Operate              | What is the effort required to operate the option once it has been<br>fully implemented. Will the requirement and verification method<br>make customer service, administration and/or enforcement more<br>complicated for Administration?  |
| Ability to Adapt (Post-<br>Implementation) | How easy is the option to adapt once implemented? Can<br>additional steps be taken to continuously improve diversion such<br>as adding additional materials or modifying enforcement levels?   |
| Safety                                     | Does the requirement and verification method lead to a number of high risk occurrences for worker safety?  |

| Precedent                                     |   |
|---|---|
| Number of Jurisdictions that have Implemented | How many similar jurisdictions have used this requirement and verification method to successfully divert and reduce waste from the Industrial, Commercial and Institutional sector?   |
| Outcomes                                      |   |
| Waste Diversion                               | Does this requirement and verification method result in waste<br>diversion and the associated benefits? Additional benefits<br>include greenhouse gas emission reductions, landfill airspace<br>value savings, leachate reduction, etc. |
| Resident Satisfaction                         | Does this requirement and verification method meet the resident<br>expectation that businesses and organizations should be<br>responsible for diverting the same waste that they are<br>responsible for diverting?                      |

#### **Elimination of Options**

Administration completed a preliminary scoring of the eight alternatives. Based on those results, Option 2 was ranked significantly lower and eliminated from discussions at the workshop. As well, it was agreed that Option 4 did not meet the threshold of City Council's direction to develop a mandatory approach and therefore could not be a recommendation of Administration. Therefore it too was eliminated from the scoring at the workshop.

The advantages and disadvantages of Option 2 based on the preliminary scoring include:

#### Advantages

- Option 2 was tied with Option 3 as being slightly more safe than Option 1 since the submission process would not risk catching individuals off-guard with enforcement.
- Residents were likely to be as satisfied with Option 2 as Option 1 since the requirement for three containers would be similar to what is required for residential waste diversion.
- This Option would result in waste diversion and associated environmental benefits, but would be similar to Options 1 and 3

#### Disadvantages

- Option 2 was tied with Option 3 as having the lowest stakeholder preference in the final engagement survey
- The submission of proof as an attachment would decrease the ability of the ICI sector to understand and successfully implement
- Options 1 and 2 both have a lower ability to adapt the program after it is implemented compared to Option 3
- Option 2 would require the most effort by Administration to plan, implement and operate.

- This option is not compatible with the current Waste Bylaw.
- There were no jurisdictions that have implemented this option.

The advantages and disadvantages of Option 4 based on preliminary scoring include:

Advantages:

- Option 4 was the most preferred option in the final engagement survey.
- Due to recycling and organics eking voluntary, this option did not have an impact on the ability of stakeholders to understand, implement and control costs
- Due to this option consisting of only an education element, it would require the least effort to plan, implement and operate, it would have the highest level of safety, as well as having no impact on the Waste Bylaw.

Disadvantages:

- Education-only approaches are unlikely to result in waste diversion improvements
- While many jurisdictions have adopted education-only approaches, none have documented waste diversion improvements
- Residents are unlikely to be satisfied with an education-only approach for ICI waste diversion since they are being required to have recycling and organics.
- This option would be the least adaptable, since it would be difficult to move to a mandatory program after adopting a voluntary one.

#### Workshop Results

The following provided a summary of the comparitive importance of each factor and how Options 1 and 3 and their alternatives compared to each other.

#### Waste Diversion

Administration determined waste diversion was the most important factor in the decision on ICI recycling and organics. The Option 1 alternative with complaint follow-ups and regular site visits is likely to result in higher diversion and a result of the higher level of enforcement. However, all variations of Option 1 and 3 are expected to result in improved levels of diversion for the ICI sector.

#### Stakeholder Preference

Administration prioritized feedback from engagement as a close second. Results from the engagement survey showed that Option 1 was significantly more preferred than Option 3. The alternatives with the least enforcements were more preferred. The regular site visit alternative was the least preferred compliance verification approach.

#### Stakeholder Ability to Implement and Control Costs

Administration considered the ability of stakeholders to implement the requirements as the third most important factor. Option 3 had an advantage over Option 1, since it provided greater flexibility and choice for waste diversion rather than being restricted to use of containers. Option 3 also provides a clearer opt-out for those that do not generate a specific material.

#### Stakeholder Ability to Understand

The ability of stakeholders to understand what is being required of them was considered to have high importance. Option 1 was consistently easier to explain during engagement than Option 3. Administration expected similar challenges communicating Option 3 during implementation and operation.

#### Safety

Administration places considerable importance on safety. For these options, none were assessed to have a very high safety risk for staff in the field. However, since Option 1 does not have a submission process, there is a risk of conflict in the field, which is similar to how the Waste Bylaw is currently enforced and mitigation of risk is already in place.

#### Administration Effort to Plan and Implement

Administration considered the effort required to plan and implement as moderately high importance. Option 3 would require significantly more effort than Option 1 to implement, since it involved more administrative divisions as well as changes to existing processes and software used for business licensing. The Option 1 alternative of regular site visits was expected to require moderate effort because of the need to develop new processes and tools to plan and track the visits. The other two Option 1 alternatives would require the least effort to plan and implement.

#### Administration Effort to Operate

Similar to the effort to plan and implement, the effort to operate was ranked as moderately high. The Option 1 alternative of regular site visits would require the most-ongoing effort to operate, while Option 3 would require moderate effort to operate since there would be new businesses and organizations that would need to submit information. The other two alternatives of Option 1 would be comparatively easier to operate.

#### Ability to Adapt Post-Implementation

The ability for the options to adapt post-implementation was considered moderately important. All options provided the ability to adapt, but Option 3 was considered the most adaptable since it would be easy to add new materials to the checklist/summary submission.

#### Resident Satisfaction

The satisfaction of residents with the options was considered moderately important. Option 1 was considered to likely result in higher resident satisfaction since the separate containers would be visible and similar to what is required of residents. Option 3 was considered to likely result in lower resident satisfaction since it was not a consistent requirement and the flexibility may be seen as providing a loop-hole to the ICI sector.

#### Waste Bylaw Compatibility

The compatibility of the options with the Waste Bylaw was considered to be of moderately low importance. The Waste Bylaw will require a significant update or rewrite in the near future. However, Option 1 is most compatible with how the Waste Bylaw is currently enforced, expect for the regular site visits alternative (which is similar to how the Sewer Use Bylaw is enforced). Option 3 is not like how any of the City's environmental bylaws are currently enforced.

#### Precedent

Whether the option has been implemented in another jurisdiction was considered to be the lowest importance of the factors considered. Both Option 1 and 3 have been implemented in Canada, so it provided limited differentiation between alternatives.

#### Advantages and Cost Comparison

The following is a summary of the Advantages and Disadvantages of the three regulatory options.

|   | Option 1 -<br>Separate Waste<br>Containers (verified<br>by City) | Option 2 -<br>Separate Waste<br>Containers<br>(business submits<br>proof) | Option 3 -<br>Waste Diversion<br>Plan (business<br>submits form) |
|---|--|---|--|
|   | ICI Stake  | eholders  |  |
| Preference                                    | Most preferred<br>regulatory option                              | Least preferred   | Least preferred  |
| Ability to<br>Understand                      | Easiest to understand  | Moderate<br>understanding   | Hardest to understand  |
| Ability to Implement<br>and Control Costs     | Less control and less flexible                                   | Less control and less flexible  | Most control and most flexible                                   |
|   | City of S  | askatoon  |  |
| Compatibility with<br>existing<br>enforcement | Most compatible<br>(mimics existing)                             | Not as compatible –<br>introduces new<br>process                          | Not as compatible –<br>introduces new<br>process                 |
| Effort to Plan,<br>Implement, and<br>Operate  | Least effort and<br>resources by City<br>administration          | More effort and<br>resources required<br>by City administration           | More effort and<br>resources required<br>by City administration  |
| Ability to Adapt                              | Less adaptable   | Less adaptable  | Most adaptable   |
| Increased safety<br>risk                      | The same level of<br>risk as current Waste<br>Bylaw enforcement  | Less risk than current<br>Waste Bylaw<br>enforcement                      | Less risk than current<br>Waste Bylaw<br>enforcement             |

| Precedent                |                                      |                           |   |  |  |
|--------------------------|--------------------------------------|---------------------------|---|--|--|
| Implemented in<br>Canada | Yes – implemented in 2 jurisdictions | No                        | Yes – implemented in 1 jurisdiction   |  |  |
|                          | Outcomes                             |                           |   |  |  |
| Waste Diversion          | 5,400 tonnes<br>projected            | 5,400 tonnes<br>projected | 5,400 tonnes<br>projected   |  |  |
| Resident<br>Satisfaction | Should satisfy resident              | Should satisfy residents  | May be slightly less<br>satisfactory if<br>businesses are seen<br>to be not diverting<br>some streams |  |  |

| Highest advantage     |
|-----------------------|
| Moderate advantage or |
|                       |
| Disadvantage          |

The results of the Choosing by Advantages workshop provided a numerical score for Options 1 and 3 and their alternatives. These advantage scores were presented in the chart below compared to the projected costs to operate each alterative.



## **Triple Bottom Line Review**

The Administration completed a Triple Bottom Line review on the Final Options as well as the business as usual approach. Option 1 would achieve greater TBL benefits than a Business As Usual Approach and slightly better than the other proposed options. The results are summarized in the table below and full documented in Appendix 3.

| Triple Bottom Line<br>Principles        | Business As<br>Usual        | Option 1                | Option 2                | Option 3                |
|---|-----------------------------|-------------------------|-------------------------|-------------------------|
| Environmental Health and Integrity      | Not meeting expectations    | On track                | On track                | On track                |
| Social Equity and<br>Cultural Wellbeing | Needs<br>improvement        | Meeting<br>expectations | Meeting<br>expectations | Meeting<br>expectations |
| Economic Benefits                       | Needs<br>improvement        | On track                | On track                | On track                |
| Good Governance                         | Not meeting<br>expectations | Meeting<br>expectations | On track                | On track                |

#### Recommendation

As a results of the CBA workshop show, Option 1, complaint follow-ups provides the greatest advantages and the least costs of the options compared. Option 1, complaint follow-ups + education blitzes had slightly less advantage for a similar costs. Both alternatives of Option 3 as well as the Option 1 alternative of complain follow-ups + regular site visits had significantly less advantages as well as significantly higher costs.

Therefore Option 1, with the elimination of regular-site visits as an alternative for compliance verification, is Administration's recommendation.

# **ICI Recycling and Organics Implementation Plan**

| Date        | Description  |
|-------------|--|
| 2020 – Q1   | Decision report for ICI mandatory recycling and organics recommending implementation of Option 1.  |
| 2020 – Q2-4 | Draft waste bylaw-changes for ICI mandatory recycling and organics;<br>explore a submission of Federation of Canadian Municipalities' Green<br>Municipal Fund; Solicitor review of waste bylaw changes; begin drafting<br>educational materials and develop behaviour change programs for ICI<br>mandatory recycling and pilot materials in City facilities. |
| 2021 – Q1-2 | Approval report to Council for waste bylaw changes; finalize education materials and operational implementation plans; Administration completes business plan and budget for continued implementation in 2022-2025.  |
| 2021 – Q3   | Phase-in period of 1 year begins for ICI mandatory recycling, with a focus on education, behaviour change and assisting with early compliance; complete biennial waste surveys of residents and ICI.   |
| 2021 – Q4   | Council decision on 2022-2025 business plan and budget.  |
| 2022 – Q3   | Enforcement begins for ICI mandatory recycling; phase-in period for ICI mandatory organics begins with a focus on education, behaviour change and assisting with early compliance.   |
| 2023 – Q3   | Enforcement begins for ICI mandatory organics: ICI recycling and organics  |

2023 – Q3 Enforcement begins for ICI mandatory organics; ICI recycling and organics fully operational.

# WASTE DIVERSION AND REDUCTION IN CITY FACILITIES AND OPERATIONS

The City of Saskatoon (City) will need to be compliant with what is required of the ICI sector for recycling and organics. If the City is not compliant with its own regulations, there are risks to the program and the City's reputation. On the other hand, the City could adopt a Leading by Example approach where it exceeds compliance with ICI sector recycling and organics regulation by undertaking a comprehensive set of actions aimed at reducing and diverting waste. This is Priority 3 in the ICI Waste Diversion Strategy.

# Background

The 2007 Saskatoon Waste and Recycling Plan included "Walk the Talk" as a guiding principle. It stated that the City would implement a base level of waste diversion services in all municipal departments and facilities, along with division-specific programs where appropriate. The plan also included that the City would adopt an environmental purchasing policy.

In 2014, Schedule 9 in the City's Multi-unit Residential Recycling (MURR) contract with Cosmopolitan Industries (Cosmo) established a list of 19 City-owned locations that are required to deliver their recyclable materials to Cosmo for the term of the agreement. In addition, City divisions are encouraged (but not required) to use Cosmo's confidential shred service. The MURR contract is in place until the end of 2023.

The May 2017 *Waste Diversion Opportunities Report* identified that, in public spaces, not all garbage bins have recycling next to them and recommended standardized public space recycling bins with the logo tied to residential programs.

On October 9, 2018, the "Industrial, Commercial and Institutional (ICI) Waste Diversion Strategy – Update and Engagement Strategy" laid out the scope of the *ICI Waste Diversion Strategy*. Priority 3 was "Leading by Example" with the goal to establish the City as a leader in waste diversion and reduction. The key action was to develop a plan for the City to establish itself as a waste diversion and reduction leader, including recycling and organics at all civic facilities, public space and special event diversion, and ensuring procurement practices promoted waste reduction and diversion. The report attachment outlined a work plan to advance implementing recycling and organics at civic facilities, however, noted that implementation would not proceed in a timely manner since there was only 0.15 FTE available for working on corporate waste diversion.

In December 2018, the City adopted a new Purchasing Policy that included enhanced language for sustainable procurement, including waste diversion. Section 9.1 of the new policy reads:

"The City's Procurement activities will be conducted with consideration of Economic, Environmental and Social Sustainability where practical. Divisions should consider the inclusion of evaluation criteria which reflects these factors where applicable.

The City will look at the following sustainability criteria for products and services, which may relate to production, manufacturing and operational processes, distribution, use of the product or service, and replacement or disposal of products or materials:

- a. acquisition of raw materials;
- b. consumption of resources (e.g. water, energy, raw materials);
- c. product formulation (e.g. biodegradable, non-toxic, non-carcinogenic, recycled content);
- d. ability for products and packaging to be recycled or re-used or both;
- e. waste management;
- f. use of organic agricultural practices;
- g. workers are adequately compensated for their labour;
- h. workers are guaranteed safe and humane working conditions;
- i. workers' basic human rights are respected;
- j. health and safety of the end users of products and services; and
- k. financial costs of the purchase based on a total cost management analysis.

This list is illustrative and not exhaustive. The City may look at other criteria it considers relevant to the sustainability of a product or service."

# **Public Engagement**

The 2019 Waste & Recycling Survey found that residents are moderately satisfied with recycling options at City-owned facilities; these results are consistent with 2017 findings. The percentage of residents that were very or somewhat satisfied with recycling options available at different type of City-owned facilities are shown in the table below:



The top suggestion for improvement is to increase the quantity of bins and make them easier to access, followed by adding more variety of recycling, as shown in the table below.



A comprehensive engagement of civic employees on opportunities for waste reduction and diversion has not occurred. The 2019 BIG Ideas Showcase provided an opportunity to hear suggestions from staff on "how we can reduce waste in our facilities and operations". Suggestions included organics collections, improved education, standardized signage, removing individual garbage bins at desks and centralize bins, eliminating single use Styrofoam coffee cups, providing dishes and utensils, and reporting corporate waste through a dashboard. The 30-Day Challenge run in 2017 also generated a few suggestions to reduce waste and improve waste management at civic facilities, such as setting up centralized waste and recycling collection points and inventorying and sharing existing office supplies.

# **City of Saskatoon's Current Approach**

#### **Recycling and Organics at Civic Facilities**

An inventory of recycling and organics at Civic facilities has been completed. The inventory of Civic facilities showed 92 of 108 facilities inventoried have recycling collections in place. Of the facilities where public waste containers are in place, there were eight that did not have public facing recycling.

Organics collection is more limited, with seasonal green cart subscriptions at seven fire stations and five facilities with year round contracted organics.

Another key finding is that there was a significant variation in the materials accepted, the containers, and the signage or decals. A collage of public facing garbage and recycling containers at City facilities is provided below to demonstrate the variability across City facilities. The inventory also revealed that there are several different service providers collecting and processing materials.



In September 2019, City Hall introduced Min-Bins for garbage. Instead of standard size garbage bins at each employee's desk, a smaller garbage bin will nest inside of the standard recycling bin. Employees are also responsible for emptying their bins at centralized collection locations. In addition to reducing custodial costs, this approach encourages the proper sorting of waste. The program will be expanded to Civic Square East in early 2020.

The 2019 Waste Characterization Study has included a sample of City-owned facilities and public space waste (garbage, recycling and where applicable organics). The results were not available at the time this report was prepared.

#### **Public and Event Recycling**

An inventory of public space recycling has been completed for recycling in Business Improvement Districts (BIDs) and Parks. Presently there are:

- 92 bottle baskets in BID's;
- 64 bottle baskets in Parks; and
- 29 paper baskets in BID's.

In 2020, an additional 40 bottle baskets will be installed in the Downtown and Broadway BIDs.

The Saskatoon Environmental Advisory Committee (SEAC) has taken a leadership role in promoting sustainable events including waste diversion. In 2013, SEAC prepared the "Saskatoon Green Event Guide." The following year, SEAC hired a summer student to complete a Festival Sustainability Report that included waste audits for four outdoor festivals. An event sustainability recommendation checklist was developed, and the guide was updated in 2017. Both the checklist and guide are available alongside the special events application forms on the City's webpage as resources.

The City's Annual Civic Pancake Breakfast is a zero waste event. All materials distributed are compostable and recyclable and bins are widely available for recycling and organics in addition to garbage.

#### Reduction

For reduction, the City has taken initial steps through the adoption of the new Procurement Policy and the Triple Bottom Line Policy to better consider waste reduction in purchasing and decision-making. An inventory of procurements or specifications that include waste reduction or use of recycled content has not been completed.

# **Approaches in Other Jurisdictions**

"Leading by example" is typically identified in municipal waste diversion plans and ICI waste diversion strategies. Specific initiatives usually include some or all of the following:

- Providing recycling and organics collection at all municipal facilities and public spaces;
- Providing standardized signage and education on proper waste sorting;
- Working with custodial staff or contractors to ensure waste is properly handled;
- Requiring recycling and organics collections at all events on City property;
- Developing procurement policies and requirements that align with waste reduction and reuse; and
- Conducting waste audits to support continuous improvement.

The City of Markham, Ontario is a leader in waste diversion and has achieved a curbside residential diversion rate that exceeds 80% and provides a case study of what Leading by Example could look like. The City developed its Mission Green program based on the principle that City Council and Administration must lead by example and that waste diversion programs were not only for residents. The Mission Green Program included:

- Removal of personal garbage cans and centralize recycling and organics stations and individual min-bins for garbage;
- Consistent colours for waste containers: blue for recycling, green for organics, and black for garbage;
- Consistent signage across city facilities for organics, recyclables, paper/towels and tissues, and garbage;
- A zero waste policy for staff functions and food services with clear product specifications for compostable and recyclable materials that were accepted by their organics processor;
- Public space recycling with the same signage, including recycling bins at post office boxes; and

• A Zero Waste School program with City collections available at schools, a prerequisite for their environmental grant.

# Approaches

The following approaches to waste diversion and reduction in City facilities and operations are provided as information. The Administration will further assess these approaches as part of developing a business case for the 2022-2025 multi-year budget.

#### **Status Quo**

The City could continue its current ad hoc approach. Compliance with ICI sector recycling and organics would be the responsibility of individual facilities and divisions to implement. There would likely be a number of recycling and organics collections contracts for the City, a wide variety of containers types, sizes and colours, and inconsistent signage and education. No additional resources would be allocated to event diversion or public space recycling. There is a risk that the City would not be compliant with new regulations for recycling and organics.

#### **Coordinated Compliance for Recycling and Organics**

The City could take a coordinated approach to compliance with ICI sector recycling and organics. For civic facilities and public space, there would be a strategy for the full implementation of containers, the development of standard specifications for containers and signage, as well as a phase replacement strategy for containers that do not meet specifications. Event diversion would be addressed through a policy approach, outlining clearly what is required for waste diversion, such as collection containers.

#### Leading Waste Diversion

The City could establish itself as a zero waste leader in the community by expanding waste diversion. The City would be compliant with ICI sector recycling and organics in its own facilities and public spaces in advance of enforcement and would be an example that others in the ICI sector can learn from while implementing their own recycling and organics. Internal engagement and analysis of waste characterization results will be conducted to identify additional waste diversion opportunities within specific City divisions. Events approved by the City would be required to be zero waste. In addition to having recycling and organics containers for waste which would be available from the City, there would be a list of acceptable materials that can be distributed at events to reduce waste that is landfilled.

#### Waste Reduction Focus

In combination with the waste diversion approaches above, the City could establish a coordinated approach for waste reduction opportunities. A waste reduction strategy would be developed focused on key opportunities, such as reducing waste through the application of circular procurement principles, reduce single use items at civic facilities, and increase the use of recycled content. Procurement pilot projects could be launched for specific purchasing categories as well as a sustainable or circular procurement protocol developed to establish waste reduction and diversion (and potentially broader environmental goals) into all of the City's procurements.

# **APPENDIX 1 - DRAFT OPTIONS**

Below is the complete description of the Draft Options that were presented during phase 2 engagement.

#### **OPTION 1: THREE SEPARATE BINS + SITE VISIT VERIFICATION** Businesses and Organizations

Requirements

- Three separate and labelled bins for garbage, recycling, and organics at all businesses and organizations.
- Annual education for employees/tenants on proper sorting and waste diversion best practices.

Responsibilities

- Sourcing containers appropriate to meet the operation's waste volume needs.
- Clearly labelling containers for the benefit of staff/tenants and for City site visits.
- Funding, resourcing, and delivery of annual education.
- Sourcing and/or self-managing the hauling, processing, or removal of the three waste streams from your operation.

## The City

Responsibilities

- Conducting site visits to ensure compliance of all requirements.
- Developing and sharing educational materials and resources to support businesses and organizations with the annual education requirement.
- Determining the City resources required and identifying sustainable funding.
- Monitoring effectiveness and reviewing requirements.

#### How this Option was developed

Through engagement the City heard that choice, convenience and flexibility are important to businesses and organizations and a separate bin requirement was the most preferred option by those engaged to date. While the City also heard that site visits and following up on complaints was not a preferred approach to verify compliance, it is an approach that would be most compatible with how the Waste Bylaw is currently enforced. This approach has been successfully implemented in Calgary and Halifax.

## OPTION 2: THREE SEPARATE BINS + SUBMISSION OF PROOF Businesses and Organizations

Requirements

- Three separate and labelled bins for garbage, recycling, and organics at all businesses and organizations.
- Annual education for employees/tenants on proper sorting and waste diversion best practices.
- Provide proof of compliance to the City (e.g. copy of waste hauler contract, photographs of containers and collection area, samples of educational material).

Responsibilities

- Sourcing containers appropriate to meet waste volume needs.
- Clearly labelling containers for the benefit of staff/tenants and for City site visits.
- Funding, resourcing, and delivery of annual education.
- Sourcing and/or self-managing the hauling, processing, or removal of the three waste streams from your operation.

## The City

Responsibilities

- Outlining criteria for proof requirements.
- Reviewing and approving proof submitted through the businesses licensing application and renewal process (or other means if your operation does not require a business license).
- Developing and sharing educational materials and resources to support businesses and organizations with the annual education requirement.
- Determining the resources required and identifying sustainable funding.
- Monitoring effectiveness and reviewing requirements.

## HOW WE DEVELOPED THIS OPTION:

The City heard through engagement that choice, convenience and flexibility are important to businesses and organizations and a separate bin requirement was the most preferred option by those engaged to date. The City also heard that using the business licensing process and submitting proof was preferred. While requiring three separate bins is common, the City didn't find examples of other city's using this verification approach.

# **OPTION 3: SUBMISSION OF WASTE DIVERSION PLAN** Businesses and Organizations

Requirements

- Submission of waste diversion plan summary as part of the businesses licensing application and renewal process (or other means if an organization does not require a business license).
- Annual education for employees/tenants on how to execute the plan.

## Responsibilities

- Developing a waste diversion plan to keep recyclable and organic materials out of the garbage in a way that meets the needs of the business or organization.
- Implementation of the plan including all associated costs, supplies, resources and efforts. Examples of plan components could include hiring a waste hauler, dropping off materials at a depot, composting on-site, donating edible food waste, or another innovative solution.

# The City

#### Responsibilities

- Outlining criteria for waste diversion plan requirement.
- Review and approval of the plan.
- Developing and sharing educational materials and resources to support businesses and organizations with the annual education requirement.
- Determining the resources required and identifying sustainable funding.
- Monitoring effectiveness and reviewing requirements.

## HOW WE DEVELOPED THIS OPTION:

The City heard through engagement that choice, convenience and flexibility are important to businesses and organizations, and that using the business licensing process was preferred. Submission of a waste diversion plan however, only had moderate support due to a perceived lack of knowledge and resources needed to meet the requirement. The City has adjusted this option to be less onerous and more user friendly. This approach has been successfully implemented in Vancouver.

## ALL OPTIONS

The following common features were presented as applying to all three options.

#### **Roll-out**

- Mandatory recycling and organics would apply to all businesses and organizations.
- There would be a phase-in period for at least a year before the requirement, where the City would focus on education and assisting with early compliance.
- Recycling would be implemented first, followed by organics, with at least a one year gap.
## **Materials**

The lists of recyclable and organic materials would match our residential programs.

Recycling:

- Paper and paper packaging
- Plastic containers #1–7
- Metal
- Glass

Organics:

- Food waste
- Yard waste
- Soiled paper

# **Education and Resources**

The City will develop a plan to provide information and services to support businesses and organizations meeting the requirement. So far the greatest interest has been in:

- Rebates or grants to offset costs of new or expanded diversion.
- A how-to-guide on how to meet the requirement.
- A recognition program for waste diversion leaders.
- Downloadable templates for educational signs, posters and bin decals.
- Training on how to meet the requirement, such as videos, lunch and learns, or workshops.

# **APPENDIX 2 – FINAL OPTIONS**

Below is the complete description of the Final Options that were presented during phase 3 engagement.

# THE FINAL OPTIONS

The final options are described below as they were presented in the Preference Survey in December 2019.

# MANDATORY OPTIONS

The following features will apply to all Options (with the exception of Option 4):

## **Required Materials**

Organics and recyclables expected to be diverted by businesses and organizations will match what is accepted in our residential recycling and (future) organics programs.

#### Timeline

A phased timeline will allow businesses and organizations to prepare for the changes, and ensure that recycling comes first:

- Recycling requirements are expected to be announced in the second half of 2021, with enforcement occurring 1-year later (2022).
- Organics requirements would then be announced in the second half of 2022 and enforcement would begin 1 year later (2023) in alignment with curbside residential organics.

## **Program Cost for Businesses and Organizations**

The costs for waste management and diversion will vary for businesses and organizations based on the types and amounts of waste they generate, and will be paid directly to a service provider of their choosing (if applicable). All of the options have been designed to give businesses and organizations the ability to control costs.

## **Education and Support**

A comprehensive education and support program will be put in place that is tailored to the specific option and aims at reducing the administrative burden of reaching compliance.

## **OPTION 1: WASTE BYLAW ENFORCEMENT + SEPARATE WASTE CONTAINERS**

## **Businesses and Organizations Requirements and Responsibilities**

The owner or occupant\* of a non-residential property will be responsible for:

- Containers & Labeling: Source waste containers appropriate for your buildings waste volumes, place them in accessible locations, and clearly label them with the type of waste accepted, for:
  - o Garbage all businesses and organizations
  - Recycling all businesses and organizations

- Organics businesses and organizations that generate food or yard waste as part of their operations
- Education: Provide information about recycling and organics each year, including where containers are located and what goes into each container in a format that works for your operation
- Removal of Waste: Like with garbage now, you will need to find a hauler and/or self-manage the hauling, processing or removal of waste from your property.

\* Responsibility for waste management when the owner and occupant(s) are different can be determined in an agreement, such as a lease. Multi-tenant properties can share waste containers.

# Verification by the City

The City will verify that there are appropriate waste bins and services in place. It may use one of the following approaches:

- Complaint follow-ups, where the City would follow-up on complaints of noncompliance through the 24-hour customer service centre or with a site visit
- Complaint follow-ups and education blitz, where in addition to complaint follow-ups, the City would make site-visits to certain areas of the City or to certain sectors, providing education first with the potential of issuing tickets if compliance is not achieved
- Complaint follow-ups and regular site visits, where the City systematically visits all businesses and organizations every few years to provide education first and time to become compliant in advance of issuing tickets

# OPTION 2: WASTE BYLAW ENFORCEMENT + SEPARATE WASTE CONTAINERS + SUBMISSION OF PROOF

## **Businesses and Organizations Requirements and Responsibilities**

The owner or occupant\* of a non-residential property will have the same responsibilities as Option 1. For reference, those responsibilities are:

- Containers & Labeling: Source waste containers appropriate for your buildings waste volumes, place them in accessible locations, and clearly label them with the type of waste accepted, for:
  - Garbage all businesses and organizations
  - Recycling all businesses and organizations
  - Organics businesses and organizations that generate food or yard waste as part of their operations
- Education: Provide information about recycling and organics each year, including where containers are located and what goes into each container in a format that works for your operation.
- Removal of Waste: Like with garbage now, you will need to find a hauler and/or self-manage the hauling, processing or removal of waste from your property.

The occupant of a non-residential property will be responsible for:

A One-Time Submission of Proof: The occupant will be required to submit proof
of containers such as a copy of a contract with a waste hauler that provides bins
or photographs of collection areas. The submission will be made through the
business licensing application or renewal form, or a parallel process set up for
organizations not requiring a business license. Once received, the City will keep
the information on file, however changes may need to be reported. The City may
use this information to follow-up with property owners or occupant(s).

\* Responsibility for waste management when the owner and occupant(s) are different can be determined in an agreement, such as a lease.

## Verification by the City

The City will verify that there are appropriate waste bins and services in place. It may use one of the following approaches:

- Complaint and screening follow-ups, where the City would follow-up on complaints of non-compliance through the 24-hour customer service centre or when there are questions with the submission with a call or site-visit, or
- Complaint and screening follow-ups + education blitz, where in addition to complaint and screening-based follow-ups the City would focus on site-visits in a certain area of the City or a certain part of the sector, with an approach focused on education first and time to become compliant in advance of issuing tickets

# OPTION 3: WASTE BYLAW ENFORCEMENT + SUBMISSION OF A RECYCLING AND ORGANICS CHECKLIST/SUMMARY

# **Businesses and Organizations Requirements and Responsibilities**

The owner or occupant\* of a non-residential property will be responsible for:

- Developing a waste diversion plan by completing a 1-page template and implementing it: Develop a waste diversion plan, document, and implement it – it may include setting up three separate containers (like in Options 1 and 2) or something that better fits the needs of your organization.
- Removal of Waste: Like with garbage now, you will need to find a hauler and/or self-manage the hauling, processing or removal of waste from your property, as outlined in your waste diversion plan.
- Education: Providing basic information annually about your waste diversion plan and how your staff and tenants can participate.

The occupant of a non-residential property will be responsible for:

• Submitting a One-Time Recycling and Organics Checklist/Summary: The occupant(s) will be required to complete a new section of the business licensing application or renewal form or a parallel form for organizations not requiring a business license. The summary would be simple, check boxes and/or fill in the blank, such as:

"Do you keep the following materials from being land-filled?

• Recycling – Yes/No/Don't Create\*\*/Unknown

Organics – Yes/No/Don't Create\*\*/Unknown

If so, provide a one-line description of the steps you take."

Once received, the City will keep the information on file, however changes will need to be reported to the City. The City may use this information to follow-up with property owners or occupant.

\* Responsibility for waste management when the owner and occupant(s) are different can be determined in an agreement, such as a lease.

\*\*Only an option if your business/organization does not generate this type of material

## Verification by the City

The City would verify that there is appropriate recycling and/or organic diversion place. It may use one of the following approaches:

- Screening follow-ups, when a business or organizations submits "no", "does not create" or unknown" the City will review whether that is appropriate for the type of business or organization and follow-up with a call for additional information, with an approach focused on education first and time to become compliant in advance of issuing tickets
- Screening follow-ups + education blitz, where in addition to screening-based follow-ups the City would focus on site-visits in a certain area of the City or certain parts of the sector, with an approach focused on education first and time to become compliant in advance of issuing tickets

# **OPTION 4: VOLUNTARY RECYCLING & ORGANICS WITH EDUCATION**

The Decision Report prepared by Administration will include the Option to not implement mandatory recycling and organics for the Industrial, Commercial and Institutional sectors. City Council would be able to choose whether it would maintain the status quo or if it would ask Administration to develop a voluntary education-based program.

- A choice of status quo would end the project.
- A choice of a voluntary education-based program would result in Administration reporting back on options for City Council to consider.

## ADMINISTRATION PROGRAM COST COMPARISON

The costs for waste management and diversion will vary for businesses and organizations based on the types and amounts of waste they generate, and will be paid directly to a service provider of their choosing (if applicable). All of the options have been designed to give businesses and organizations the ability to control costs.

For the purposes of comparison, preliminary estimated costs are presented as a percentage increase on property taxes. The actual costs and source of funding (property taxes, user fees, etc.) will be determined in the 2022-2025 multi-year budget. Annual program costs are estimated to be higher during program launch and decrease once the program is operational. The dollar sign symbol(s) below represent the

percentage property tax increase (based on the 2020-2021 budget where 1%=2.44M). = 0-0.14% = 0.15-0.34% = 0.35-0.50%

The preliminary estimated costs for the City to administer the options are presented below:

Option 1 – Waste Bylaw Enforcement + Separate Waste Containers

- Program Launch (2022-2023) \$ \$\$ Annual
- Operation (2024+) \$ \$\$

Option 2 – Waste Bylaw Enforcement + Separate Waste Containers + Submission of Proof

- Program Launch (2022-2023) \$\$\$
- Annual Operation (2024+) \$\$

Option 3 – Waste Bylaw Enforcement + Submission of a Recycling and Organics Checklist/Summary

- Program Launch (2022-2023) \$\$ \$\$\$
- Annual Operation (2024+) \$\$

Option 4 – Voluntary Recycling and Organics with Educations

- Program Launch (2022-2023) \$
- Annual Operation (2024+) \$

## **OPTIONS SUMMARY TABLE**

|  | Option 1  | Option 2  | Option 3  | Option 4   |
|--|---|---|---|--|
|  | Waste Bylaw<br>Enforcement<br>+ Separate<br>Waste<br>Containers | Waste Bylaw<br>Enforcement<br>+ Separate<br>Waste<br>Containers +<br>Submission<br>of Proof | Waste Bylaw<br>Enforcement<br>+<br>Submission<br>of Recycling<br>and<br>Organics<br>Checklist/<br>Summary | Voluntary<br>Recycling<br>and<br>Organics<br>with<br>Education |
|  | Requiremen  | ts & Responsib  | oilities  |  |
| Separate Garbage<br>and Recycling<br>Containers<br>Separate Organics | ✓<br>✓ *  | √<br>√ *  |   |  |
| Container  |   |   |   |  |

| Diversion Plan for<br>Recycling and<br>Organics |                   |                 | ✓             |              |
|---|-------------------|-----------------|---------------|--------------|
| Submission to the                               |                   | $\checkmark$    | $\checkmark$  |              |
| Employee/Tenant                                 | $\checkmark$      | $\checkmark$    | $\checkmark$  |              |
| Education                                       |                   |                 |               |              |
| Potent  | tial Verification | By Waste Byla   | w Enforcement |              |
| Complaint-Based                                 | $\checkmark$      | $\checkmark$    |               |              |
| Screening-Based                                 |                   | $\checkmark$    | $\checkmark$  |              |
| Education Blitzes                               | $\checkmark$      | $\checkmark$    | $\checkmark$  |              |
| <b>Regular Site Visits</b>                      | $\checkmark$      |                 |               |              |
|   | Recycling and     | d Organics Edu  | ication       |              |
| Education Program                               | $\checkmark$      | $\checkmark$    | $\checkmark$  | $\checkmark$ |
| Adm   | inistrative Cost  | s – Preliminary | / Estimates** |              |
| Program Launch                                  | \$-\$\$           | \$\$\$          | \$\$-\$\$\$   | \$           |
| Annual Operation                                | \$-\$\$           | \$\$            | \$\$          | \$           |

\*Only if food or yard waste is generated as part of operations.

\*\* For the purposes of comparison, preliminary estimated costs are presented as a percentage increase on property taxes. The actual costs and source of funding will be determined in the 2022-2025 multi-year budget. Percentage property tax increase (based on the 2020-2021 budget where 1%=2.44M)

\$ 0-0.14%

\$\$ 0.15 - 0.34%

**\$\$\$** 0.35 – 0.50%

# **APPENDIX 3 – TRIPLE BOTTOM LINE REVIEW**

# PROCESS AND METHODOLOGY

Administration used the City of Saskatoon's draft Triple Bottom Line (TBL) Decision Making Tool to review of the regulatory options for requiring recycling and organics for the Industrial, Commercial and Institutional (ICI) sector. When conducting a TBL review, it is appropriate to evaluate multiple options against a Business As Usual approach. As such, the following options were reviewed:

- 1. Business As Usual: Voluntary recycling and organics
- 2. Option 1: Requirement for Separate Waste Containers (verified by City)
- Option 2: Requirement for Separate Waste Containers (business must submit proof)
- 4. Option C: Submission of a Recycling and Organics Checklist/Summary

In conducting the analysis, the Administration relied on the expertise of the Project Team and Subject Matter Experts from the Sustainability Division as well as the same resources used to develop the ICI Waste Diversion Strategy.

This review is meant as a high level assessment to identify the initiative's environmental, social, economic, and governance outcomes, as well as to identify opportunities to achieve even greater sustainability benefits. The results are meant to support ongoing decision making processes, rather than be relied upon as a fixed sustainability evaluation.

# CAVEATS AND LIMITATIONS:

- The TBL Decision Making Tool had not been developed at the time that project planning began, which limited the ability to fully incorporate a TBL approach.
- Some areas were considered out of scope since the TBL review was focused on regulatory approaches to recycling and organics and not the entire ICI Waste Diversion Strategy, such as any additional civic waste diversion and reduction actions taken by the City beyond basic compliance as well as any of the additional priorities and actions included in the ICI Waste Diversion Strategy.
- The following external factors impacted the initiative's ability to achieve higher TBL outcomes in certain areas: such as the private sector delivery of ICI waste management and diversion services created uncertainty related to labour rights and employment.

# **RESULTS & FINDINGS**

The TBL evaluation was completed from the perspective of: "If the proposed project/options were to achieve their intended objectives, what would the potential impact be for each Triple Bottom Line success measure?"

Overall, the results of Administration's TBL review indicate that:

- Option 1 would achieve greater TBL benefits than a Business As Usual Approach and slightly better than the other proposed options.
- There are additional opportunities that could be explored to enhance the TBL outcomes of the project, see the "For Further / Future Consideration" sections later in this document.

A summary of results for each TBL principle and indicator are in the subsequent section of this document. Outcomes are listed for each indicator with a summary of clarifying comments. To provide context, a numerical description of the outcomes are shown in Table 1.

| TBL Score | TBL Outcome              |
|-----------|--------------------------|
| Below 0%  | Not Meeting Expectations |
| 0-19%     | Needs Improvement        |
| 20-39%    | On-Track                 |
| 40-59%    | Meeting Expectations     |
| 60-79%    | Exceeding Expectations   |
| Above 80% | Leading the Way          |

#### Table 1

# Principle: Environmental Health and Integrity

# **TBL Outcome - by Principle:**

Business as Usual: Not Meeting Expectations

| Option 1: | On Track |
|-----------|----------|
| Option 2: | On Track |

Option 3: On Track

| Indicator                                      | Business As Usual  | Option 1  | Option 2   | Option 3   |
|--|--|---|--|--|
| Renewable<br>Energy                            | <ul> <li>Not meeting expectations</li> <li>Unknown whether<br/>private sector will<br/>develop anaerobic<br/>digestion for organics<br/>processing</li> </ul>          | <ul> <li>Not meeting expectations</li> <li>Unknown whether private sector will develop anaerobic digestion for organics processing</li> </ul>                               | <ul> <li>Not meeting expectations</li> <li>Unknown whether private sector will develop anaerobic digestion for organics processing</li> </ul>                    | <ul> <li>Not meeting expectations</li> <li>Unknown whether private<br/>sector will develop<br/>anaerobic digestion for<br/>organics processing</li> </ul>        |
| Conservation of<br>Resources                   | No Impact  | No Impact   | No Impact  | No Impact  |
| Climate Change<br>Mitigation and<br>Adaptation | <ul> <li>Not meeting expectations</li> <li>Additional 38,000<br/>tonnes CO<sub>2</sub>e emitted by<br/>landfilling ICI recycling<br/>and organics each year</li> </ul> | <ul> <li>Exceeding expectations</li> <li>Reduction of 38,000<br/>tonnes CO<sub>2</sub>e diverting<br/>ICI recycling and<br/>organics from landfill<br/>each year</li> </ul> | <ul> <li>Exceeding expectations</li> <li>Reduction of 38,000<br/>tonnes CO2e diverting<br/>ICI recycling and<br/>organics from landfill<br/>each year</li> </ul> | <ul> <li>Exceeding expectations</li> <li>Reduction of 38,000<br/>tonnes CO2e diverting<br/>ICI recycling and<br/>organics from landfill<br/>each year</li> </ul> |
| Green Buildings<br>and Sustainable<br>Land Use | No Impact  | No Impact   | No Impact  | No Impact  |
| Sustainable<br>Transportation                  | <ul> <li>Not meeting expectations</li> <li>ICI waste is managed<br/>by multiple players in<br/>the private sector (as</li> </ul>                                       | <ul> <li>Not meeting expectations</li> <li>ICI waste is managed by<br/>multiple players in the<br/>private sector (as well as</li> </ul>                                    | <ul> <li>Not meeting expectations</li> <li>ICI waste is managed by<br/>multiple players in the<br/>private sector (as well as</li> </ul>                         | <ul> <li>Not meeting expectations</li> <li>ICI waste is managed by<br/>multiple players in the<br/>private sector (as well as</li> </ul>                         |

|                                     | well as the City), which<br>results in inefficient<br>collections   | <ul> <li>the City), which results<br/>in inefficient collections</li> <li>This option will result in<br/>additional collections for<br/>recycling and organics</li> </ul>   | <ul> <li>the City), which results<br/>in inefficient collections</li> <li>This option will result in<br/>additional collections for<br/>recycling and organics</li> </ul>   | <ul> <li>the City), which results<br/>in inefficient collections</li> <li>This option will result in<br/>additional collections for<br/>recycling and organics</li> </ul>   |
|-------------------------------------|---|---|---|---|
| Healthy<br>Ecosystems               | <ul> <li>Not meeting expectations</li> <li>Likely to result in needing to site a new</li> </ul>   | <ul> <li>Meeting expectations</li> <li>Likely to result in delaying the need to site</li> </ul>   | <ul> <li>Meeting expectations</li> <li>Likely to result in delaying the need to site</li> </ul>   | <ul> <li>Meeting expectations</li> <li>Likely to result in delaying the need to site</li> </ul>   |
| Clean Air,<br>Water, and Land       | <ul> <li>On track</li> <li>Meet Ministry of<br/>Environment standards<br/>for waste management</li> </ul>                                     | <ul> <li>A new landill by 5%</li> <li>Exceeding expectations</li> <li>Meet Ministry of<br/>Environment standards<br/>for waste management</li> <li>By reducing landfilled<br/>organics will also reduce<br/>leachate</li> </ul> | <ul> <li>A new landill by 5%</li> <li>Exceeding expectations</li> <li>Meet Ministry of<br/>Environment standards<br/>for waste management</li> <li>By reducing landfilled<br/>organics will also reduce<br/>leachate</li> </ul> | <ul> <li>A new landill by 5%</li> <li>Exceeding expectations</li> <li>Meet Ministry of<br/>Environment standards<br/>for waste management</li> <li>By reducing landfilled<br/>organics will also reduce<br/>leachate</li> </ul> |
| Waste<br>Reduction and<br>Diversion | <ul> <li>Not meeting expectations</li> <li>Will result in 38,000<br/>tonnes of recycling and<br/>organics landfilled each<br/>year</li> </ul> | <ul> <li>Meeting expectations</li> <li>Will result in 38,000<br/>tonnes of recycling and<br/>organics diverted from<br/>landfill each year</li> </ul>   | <ul> <li>Meeting expectations</li> <li>Will result in 38,000<br/>tonnes of recycling and<br/>organics diverted from<br/>landfill each year</li> </ul>   | <ul> <li>Meeting expectations</li> <li>Will result in 38,000<br/>tonnes of recycling and<br/>organics diverted from<br/>landfill each year</li> </ul>   |
| Storm Water<br>Management           | No Impact   | No Impact   | No Impact   | No Impact   |
| Sustainable<br>Food System          | No Impact   | No Impact   | No Impact   | No Impact   |

# For Further / Future Consideration

- GHG measurement and verification have not yet been conducted.
- The Options are based on private sector services instead of City provided collections, which leads to some unknowns on collection methods, route efficiencies, processing methods, etc.

# Principle: Social Equity and Cultural Wellbeing

# TBL Outcome - by Principle:

| Business as Usual: | Needs Improvement    |
|--------------------|----------------------|
| Option 1:          | Meeting Expectations |
| Option 2:          | Meeting Expectations |

# Option 3: Meeting Expectations

| Indicator                                      | Business As Usual  | Option 1  | Option 2  | Option 3  |
|--|--|---|---|---|
| Equity and<br>Opportunity                      | <ul> <li>Needs improvement</li> <li>Will not be equity<br/>between diversion<br/>required of residents and<br/>required of<br/>businesses/organizations</li> </ul> | <ul> <li>On track</li> <li>NAICs codes will be<br/>used to fairly determine<br/>which businesses/<br/>organizations generate<br/>food and yard waste as<br/>part of their operations</li> </ul> | <ul> <li>On track</li> <li>NAICs codes will be<br/>used to fairly determine<br/>which businesses/<br/>organizations generate<br/>food and yard waste as<br/>part of their operations</li> </ul> | <ul> <li>On track</li> <li>NAICs codes will be used<br/>to fairly determine<br/>whether businesses/<br/>organizations generate<br/>waste and are required to<br/>have a plan</li> </ul> |
| Diversity,<br>Accessibility,<br>and Inclusion  | No Impact  | <ul> <li>On track</li> <li>This option will be able to respond easily to demographic changes</li> </ul>   | <ul> <li>On track</li> <li>This option will be able to respond easily to demographic changes</li> </ul>   | <ul> <li>On track</li> <li>This option will be able to respond easily to demographic changes</li> </ul>   |
| Heritage, Arts,<br>and Culture                 | No Impact  | No Impact   | No Impact   | No Impact   |
| Self Sufficiency<br>and Living with<br>Dignity | No Impact  | No Impact   | No Impact   | No Impact   |
| Health and<br>Wellbeing                        | <ul> <li>Not meeting expectations</li> <li>The Waste Bylaw<br/>addresses nuisances<br/>that may cause health<br/>issues</li> </ul>                                 | <ul> <li>Meeting expectations</li> <li>The Waste Bylaw will<br/>continue to address<br/>nuisances that may<br/>cause health issues</li> </ul>   | <ul> <li>Meeting expectations</li> <li>The Waste Bylaw will continue to address nuisances that may cause health issues</li> </ul>   | <ul> <li>Meeting expectations</li> <li>The Waste Bylaw will continue to address nuisances that may cause health issues</li> </ul>   |

|               | The lack of consistent<br>access to diversion<br>opportunities where<br>residents live, work and<br>play may contribute to a<br>lower quality of life | There will be more<br>consistent diversion<br>opportunities where<br>residents live, work and<br>play that may contribute<br>to a better quality of life   | There will be more<br>consistent diversion<br>opportunities where<br>residents live, work and<br>play that may contribute<br>to a better quality of life   | There will be more<br>consistent diversion<br>opportunities where<br>residents live, work and<br>play that may contribute<br>to a better quality of life                                   |
|---------------|---|--|--|--|
| Safety and    | On track  | On track   | On track   | On track   |
| Resiliency    | <ul> <li>No change to safety for<br/>users and City<br/>employees</li> <li>No change to privacy<br/>and confidentiality</li> </ul>                    | <ul> <li>Designed to be safe for<br/>users and City<br/>employees</li> <li>Protects privacy and<br/>confidentiality (no<br/>regular site visits, not<br/>audits of waste<br/>materials)</li> </ul> | <ul> <li>Designed to be safe for<br/>users and City<br/>employees</li> <li>Protects privacy and<br/>confidentiality (no<br/>regular site visits, not<br/>audits of waste<br/>materials)</li> </ul> | <ul> <li>Designed to be safe for<br/>users and City employees</li> <li>Protects privacy and<br/>confidentiality (no regular<br/>site visits, not audits of<br/>waste materials)</li> </ul> |
| Civic         | No Impact   | Exceeding expectations   | Exceeding expectations   | Exceeding expectations   |
| Participation |   | <ul> <li>Program designed to<br/>support community-led<br/>recycling and organics<br/>diversion efforts</li> </ul>   | <ul> <li>Program designed to<br/>support community-led<br/>recycling and organics<br/>diversion efforts</li> </ul>   | <ul> <li>Program designed to<br/>support community-led<br/>recycling and organics<br/>diversion efforts</li> </ul>   |
| Recreation    | On track  | On track   | On track   | On track   |
|               | <ul> <li>Waste Bylaw helps<br/>maintain an attractive city</li> </ul>   | Waste Bylaw will<br>continue to help<br>maintain an attractive<br>city   | Waste Bylaw will<br>continue to help<br>maintain an attractive<br>city   | <ul> <li>Waste Bylaw will continue<br/>to help maintain an<br/>attractive city</li> </ul>  |

# Principle: Economic Prosperity and Fiscal Responsibility

# **TBL Outcome - by Principle:**

Business as Usual: Needs Improvement

- Option 1: On Track
- Option 2: On Track

Option 3: On Track

| Indicator                  | Business As Usual  | Option 1  | Option 2   | Option 3  |
|----------------------------|--|---|--|---|
| Innovation                 | <ul> <li>Not meeting expectations</li> <li>Waste reduction/<br/>diversion innovation will<br/>not be stimulated</li> <li>Incompatible with<br/>attracting/ retaining<br/>sustainable businesses</li> </ul> | <ul> <li>Meeting expectations</li> <li>May stimulate innovation<br/>in waste reduction/<br/>diversion</li> <li>Compatible with<br/>attracting/ retaining<br/>sustainable businesses</li> </ul>  | <ul> <li>Meeting expectations</li> <li>May stimulate innovation<br/>in waste reduction/<br/>diversion</li> <li>Compatible with<br/>attracting/ retaining<br/>sustainable businesses</li> </ul>   | <ul> <li>Exceeding expectations</li> <li>Waste Diversion Plan<br/>requirement will likely<br/>stimulate the most private<br/>sector innovation related<br/>to waste reduction/<br/>diversion</li> <li>Compatible with<br/>attracting/ retaining<br/>sustainable businesses</li> </ul> |
| Sustainable<br>Procurement | No Impact  | No Impact   | No Impact  | No Impact   |
| Fiscal<br>Responsibility   | <ul> <li>On track</li> <li>No program costs</li> <li>No potential FCM funding</li> </ul>   | <ul> <li>On track</li> <li>Least costly option to<br/>implement and operate</li> <li>Regulatory approach is<br/>cost-effective compared<br/>to direct service delivery</li> <li>Funding for 2022+<br/>needs to be determined</li> </ul> | <ul> <li>On track</li> <li>Most costly option to<br/>implement and operate</li> <li>Regulatory approach is<br/>cost-effective compared<br/>to direct service delivery</li> <li>Funding for 2022+<br/>needs to be determined</li> </ul> | <ul> <li>On track</li> <li>Second most costly option to implement and operate</li> <li>Regulatory approach is cost-effective compared to direct service delivery</li> <li>Funding for 2022+ needs to be determined</li> </ul>   |

|                               |  | Potential to attract FCM<br>funding  | Potential to attract FCM<br>funding  | Potential to attract FCM<br>funding  |
|-------------------------------|--|--|--|--|
| Support the<br>Local Economy  | <ul> <li>No Impact</li> <li>Low barriers currently exist for waste management in Waste Bylaw (no diversion requirements)</li> <li>Does not assist or provide incentives for businesses to transition to waste diversion</li> </ul>   | <ul> <li>On track</li> <li>Assists businesses with transitioning to more sustainable ways of operating</li> <li>May create barriers to businesses/ organizations; program designed to mitigate these as much as possible</li> <li>May stimulate the waste reduction/ diversion industry</li> <li>Ongoing engagement with BIDs and local business associations planned</li> </ul> | <ul> <li>On track</li> <li>Assists businesses with transitioning to more sustainable ways of operating</li> <li>May create barriers to businesses/ organizations; program designed to mitigate these as much as possible</li> <li>May stimulate the waste reduction/ diversion industry</li> <li>Ongoing engagement with BIDs and local business associations planned</li> </ul> | <ul> <li>On track</li> <li>Assists businesses with transitioning to more sustainable ways of operating</li> <li>May create barriers to businesses/ organizations; program designed to mitigate these as much as possible</li> <li>May stimulate the waste reduction/ diversion industry</li> <li>Ongoing engagement with BIDs and local business associations planned</li> </ul> |
| Asset<br>Management           | <ul> <li>Not meeting expectations</li> <li>Uses the capacity of the<br/>City's landfill faster</li> <li>Private sector service<br/>delivery prevents<br/>stranded assets</li> <li>City provides ICI waste<br/>services where<br/>compatible with<br/>residential services</li> </ul> | <ul> <li>On track</li> <li>Extends the life of the<br/>City's landfill</li> <li>Continued private sector<br/>service delivery prevents<br/>stranded assets</li> <li>City will examine what<br/>ICI waste services are<br/>compatible with<br/>residential services and<br/>that can be sustainably<br/>funded</li> </ul>   | <ul> <li>On track</li> <li>Extends the life of the<br/>City's landfill</li> <li>Continued private sector<br/>service delivery prevents<br/>stranded assets</li> <li>City will examine what<br/>ICI waste services are<br/>compatible with<br/>residential services and<br/>that can be sustainably<br/>funded</li> </ul>   | <ul> <li>On track</li> <li>Extends the life of the<br/>City's landfill</li> <li>Continued private sector<br/>service delivery prevents<br/>stranded assets</li> <li>City will examine what ICI<br/>waste services are<br/>compatible with<br/>residential services and<br/>that can be sustainably<br/>funded</li> </ul>   |
| Skills and<br>Training        | No Impact  | No Impact  | No Impact  | No Impact  |
| Labour Rights &<br>Employment | <ul> <li>Not meeting expectations</li> <li>Private sector service<br/>delivery means that the<br/>impacts on OH&amp;S, fair</li> </ul>   | <ul> <li>Not meeting expectations</li> <li>Private sector service<br/>delivery means that the<br/>impacts on OH&amp;S, fair</li> </ul>   | <ul> <li>Not meeting expectations</li> <li>Private sector service<br/>delivery means that the<br/>impacts on OH&amp;S, fair</li> </ul>   | <ul> <li>Not meeting expectations</li> <li>Private sector service<br/>delivery means that the<br/>impacts on OH&amp;S, fair</li> </ul>   |

| wages, secure<br>employment, and<br>actions that improve | wages, secure<br>employment, and<br>actions that improve | wages, secure<br>employment, and<br>actions that improve | wages, secure<br>employment, and actions<br>that improve quality of life |
|--|--|--|--|
| quality of life at work are                              | quality of life at work are                              | quality of life at work are                              | at work are unknown  |
| unknown  | unknown  | unknown  |  |

# For Further / Future Consideration

• The private sector delivery model for the majority of ICI waste services creates uncertainty about the impact on labour rights and employment. Waste management jobs are some of the least safe in North America. <sup>4</sup>

#### **Other Notes**

• A detailed budget / financial analysis for each option is included in the administrative report.

<sup>&</sup>lt;sup>4</sup> <u>https://swana.org/Safety.aspx</u>

# Principle: Good Governance

# **TBL Outcome - by Principle:**

Business as Usual: Not Meeting Expectations

- Option 1: Meeting Expectations
- Option 2: On Track

Option 3: On Track

| Indicator                               | Business As Usual  | Option 1   | Option 2   | Option 3  |
|---|--|--|--|---|
| Ethical and<br>Democratic<br>Governance | <ul> <li>Not meeting expectations</li> <li>Will continue the past<br/>and present error of<br/>amongst the highest<br/>waste generation in<br/>Canada and create<br/>legacy issues with the<br/>ongoing landfilling of<br/>organics</li> </ul> | <ul> <li>On track</li> <li>Addresses high waste<br/>generation and reduces<br/>legacy issues of<br/>landfilling organics</li> <li>City will need to be<br/>compliant to ensure<br/>consistency between<br/>what it says and what it<br/>practices</li> <li>North American Industry<br/>Classification System<br/>codes will be used to<br/>determine businesses/<br/>organizations that<br/>generate organics as<br/>part of their operation<br/>and will include a clear<br/>process to demonstrate<br/>that no organics are<br/>generated</li> </ul> | <ul> <li>On track</li> <li>Addresses high waste<br/>generation and reduces<br/>legacy issues of<br/>landfilling organics</li> <li>City will need to be<br/>compliant to ensure<br/>consistency between<br/>what it says and what it<br/>practices</li> <li>NAICS codes will be<br/>used to determine<br/>businesses/<br/>organizations that<br/>generate organics as<br/>part of their operation<br/>and will include a clear<br/>process to demonstrate<br/>that no organics are<br/>generated</li> </ul> | <ul> <li>Needs improvement</li> <li>Addresses high waste<br/>generation and reduces<br/>legacy issues of<br/>landfilling organics</li> <li>City will need to be<br/>compliant to ensure<br/>consistency between<br/>what it says and what it<br/>practices</li> <li>Reviewing individual<br/>plans for recycling/<br/>organics diversion<br/>requires interpretation by<br/>the Administration and<br/>may appear inconsistent<br/>or that preferential<br/>treatment has occurred</li> </ul> |

| Effective<br>Service Delivery                                       | <ul> <li>Meeting expectations</li> <li>The status quo was the engagement preference</li> <li>Unclear if or when the City would study services that are provided to the ICI sector to ensure services are reliable and effective over the short and long term</li> </ul>   | <ul> <li>On track</li> <li>This option was the most preferred regulatory option during engagement</li> <li>The City will study waste services that are provided to the ICI sector to ensure services are reliable and effective over the short and long term</li> </ul>   | <ul> <li>Needs improvement</li> <li>This option was the least preferred regulatory option during engagement (tied)</li> <li>The City will study waste services that are provided to the ICI sector to ensure services are reliable and effective over the short and long term</li> </ul>   | <ul> <li>Needs improvement</li> <li>This option was the least preferred regulatory option during engagement (tied)</li> <li>The City will study waste services that are provided to the ICI sector to ensure services are reliable and effective over the short and long term</li> </ul>  |
|---|---|---|--|---|
| Education,<br>Communication,<br>Engagement,<br>Capacity<br>Building | <ul> <li>Not meeting expectations</li> <li>Unclear whether<br/>community engagement,<br/>effective<br/>communications, or<br/>continuous learning,<br/>training and growth<br/>would occur under<br/>status quo</li> </ul>  | <ul> <li>Exceeding expectations</li> <li>Ongoing communication<br/>and effective<br/>communications are<br/>both key components of<br/>the implementation and<br/>ongoing operations</li> <li>Education and capacity<br/>building for employees is<br/>planned</li> </ul>   | <ul> <li>Exceeding expectations</li> <li>Ongoing communication<br/>and effective<br/>communications are<br/>both key components of<br/>the implementation and<br/>ongoing operations</li> <li>Education and capacity<br/>building for employees is<br/>planned</li> </ul>  | <ul> <li>Exceeding expectations</li> <li>Ongoing communication<br/>and effective<br/>communications are both<br/>key components of the<br/>implementation and<br/>ongoing operations</li> <li>Education and capacity<br/>building for employees is<br/>planned</li> </ul>   |
| Monitoring,<br>Reporting and<br>Compliance                          | <ul> <li>Not meeting expectations</li> <li>Voluntary recycling/<br/>organics is known to be<br/>ineffective and therefore<br/>not based on best<br/>practices</li> <li>Unclear if ICI Waste &amp;<br/>Recycling Survey will<br/>continue or if Waste<br/>Characterization Study<br/>will continue to collect<br/>ICI specific data</li> </ul> | <ul> <li>Meeting expectations</li> <li>This option is a best practice that has been implemented in Canada</li> <li>Phase-in approach and monitoring will inform implementation</li> <li>ICI Waste &amp; Recycling Survey and Waste Characterization Study will continue to provide data during implementation and ongoing operations</li> </ul> | <ul> <li>On track</li> <li>This option is not a best practice and has not been implemented</li> <li>Phase-in approach and monitoring will inform implementation</li> <li>ICI Waste &amp; Recycling Survey and Waste Characterization Study will continue to provide data during implementation and ongoing operations</li> </ul> | <ul> <li>Meeting expectations</li> <li>This option is a best practice that has been implemented in Canada</li> <li>Phase-in approach and monitoring will inform implementation</li> <li>ICI Waste &amp; Recycling Survey and Waste Characterization Study will continue to provide data during implementation and ongoing operations</li> </ul> |
| Agility and<br>Adaptiveness   | <ul> <li>Not meeting expectations</li> <li>A status quo approach is not flexible or responsive</li> </ul>   | Meeting expectations <ul> <li>This option is</li> <li>moderately flexible and</li> <li>responsive</li> </ul>  | Meeting expectations <ul> <li>This option is</li> <li>moderately flexible and</li> <li>responsive</li> </ul>   | <ul> <li>Meeting expectations</li> <li>This option is the most flexible and responsive</li> </ul>   |

|                                 |   | Phase-in approach and<br>starting with recycling at<br>least 1 year before<br>organics will allow<br>consequences to be<br>explored before full<br>implementation | Phase-in approach and<br>starting with recycling at<br>least 1 year before<br>organics will allow<br>consequences to be<br>explored before full<br>implementation | Phase-in approach and<br>starting with recycling at<br>least 1 year before<br>organics will allow<br>consequences to be<br>explored before full<br>implementation |
|---------------------------------|---|---|---|---|
| Roles,                          | Not meeting expectations  | On track  | On track  | On track  |
| Responsibilities<br>and Rewards | <ul> <li>Unclear if the City would<br/>proceed with recycling<br/>and organics at all<br/>facilities and if so what<br/>level of employee<br/>responsibility would be<br/>expected</li> </ul> | <ul> <li>Employees will be<br/>responsible for correctly<br/>sorting recycling and<br/>organics for the City to<br/>be compliant</li> </ul>                       | Employees will be<br>responsible for correctly<br>sorting recycling and<br>organics for the City to<br>be compliant   | Employees will be<br>responsible for correctly<br>sorting recycling and<br>organics for the City to be<br>compliant   |

# For Further / Future Consideration

- Unclear whether in a status quo situation whether the City would continue to collect ICI specific data since this does have financial implications. This would include the ICI Waste & Recycling Survey that provides statistically representative data on opinions and behaviours related to waste and diversion as well as the Waste Characterization Study that looks at the types and quantities of waste generated by the sector through analysis of samples.
- In order for a status quo approach to be even moderately successful, a full education and engagement plan would be required to encourage additional diversion.