



The Corporation of the City of Stratford  
Finance and Labour Relations Sub-committee  
Open Session  
AGENDA

**Date:** May 18, 2021  
**Time:** 3:30 P.M.  
**Location:** Electronic Meeting  
**Sub-committee Present:** Councillor Gaffney - Chair Presiding, Councillor Clifford - Vice-Chair, Councillor Beatty, Councillor Bunting, Councillor Ritsma  
**Staff Present:** Tatiana Dafoe - City Clerk, Jodi Akins - Council Clerk Secretary, Chris Bantock - Deputy Clerk, Spencer Steckley - Manager of Financial Services

To watch the Sub-committee meeting live, click the following link: <https://stratford-ca.zoom.us/j/81581185176?pwd=S2JyblpWTVcweVNoUEFIUEZYY3hnUT09>

A video recording of the meeting will also be available through a link on the City's website at <https://calendar.stratford.ca/meetings> following the meeting.

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Pages

**1. Call to Order**

The Chair to call the meeting to Order.

**2. Disclosure of Pecuniary Interest and the General Nature Thereof**

The *Municipal Conflict of Interest Act* requires any member of Council declaring a pecuniary interest and the general nature thereof, where the interest of a member of Council has not been disclosed by reason of the member's absence from the meeting, to disclose the interest at the first open meeting attended by the member of Council and otherwise comply with the *Act*.

Name, Item and General Nature of Pecuniary Interest

### 3. Delegations

None scheduled.

### 4. Report of the Manager of Financial Services

#### 4.1. Destination Stratford Report May 18 2021 (FIN21-010)

5 - 23

Zac Gribble, Executive Director of Destination Stratford will be in attendance at the meeting to present the report.

Motion by \_\_\_\_\_

**Staff Recommendation:** THAT the Destination Stratford report dated May 18, 2021 (FIN21-010) be received for information.

### 5. Report of the Stratford Economic Enterprise Development Corporation

#### 5.1. Stratford Economic Enterprise Development Corporation (SEED Co./investStratford) – Update as of April 30, 2021 (FIN21-008)

24 - 32

Joani Gerber, CEO, will be in attendance at the meeting to present the report.

Motion by \_\_\_\_\_

**Staff Recommendation:** THAT the Stratford Economic Enterprise Development Corporation (SEED Co./investStratford) Summary & Report: Activities of investStratford, Oct 2020 – April 2021, dated May 18, 2021 be received for information.

### 6. Report of the IDS Consultant

#### 6.1. City of Stratford Waste Management Rate Study (FIN21-007)

33 - 102

Motion by \_\_\_\_\_

**Staff Recommendation:** THAT the information in the Waste Management Rate Study be received;

**AND THAT** the rates proposed be considered during the formation of the 2022 Budget.

### 7. Report of the Deputy Clerk

#### 7.1. Proxy Voting for Council and Committee meetings (FIN21-012)

103 - 106

Motion by \_\_\_\_\_

**Staff Recommendation:** THAT the report entitled "Proxy Voting for Council and Committee meetings" (FIN21-012) be received;

AND THAT no further action be taken at this time with respect to proxy voting for members at meetings of Council or Committees of Council.

## 8. Report of the City Clerk

- 8.1. Bill 218, Supporting Ontario's Recovery and Municipal Elections Act, 2020, Update (FIN21-006) 107 - 109

Motion by \_\_\_\_\_

Staff Recommendation: THAT the report entitled "Bill 218, Supporting Ontario's Recovery and Municipal Elections Act, 2020, Update" (FIN21-006), be received for information.

- 8.2. Composition and Size of Council – 2022 Pre-election Report (FIN21-009) 110 - 128

Motion by \_\_\_\_\_

Staff Recommendation: THAT the report entitled "Composition and Size of Council – 2022 Pre-election Report" (FIN21-009) be received;

AND THAT direction be provided on initiating notice of intent to change the composition of City Council in time for the 2022 municipal election and that City Council identify the proposed change(s) to the composition and/or size of Council.

- 8.3. Deputy Mayor Position – 2022 Pre-election Report (FIN21-011) 129 - 131

Motion by \_\_\_\_\_

Staff Recommendation: THAT the report entitled "Deputy Mayor Position – 2022 Pre-election Report" (FIN21-011) be received;

AND THAT direction be provided on whether City Council wishes to proceed with having a directly elected Deputy Mayor position for the 2022 election.

## 9. Advisory Committee/Outside Board Minutes 132 - 135

The following Advisory Committee/Outside Board minutes are provided for the information of Sub-committee:

- Stratfords of the World Advisory Committee minutes of January 21, 2021

## 10. Next Sub-committee Meeting

The next Finance and Labour Relations Sub-committee meeting is June 22, 2021 at 3:30 p.m.

## 11. Adjournment

Meeting Start Time:

Meeting End Time:

Motion by \_\_\_\_\_

**Sub-committee Decision:** THAT the Finance and Labour Relations Sub-committee meeting adjourn.





## MANAGEMENT REPORT

<b>Date:</b>	May 18, 2021
<b>To:</b>	Finance and Labour Relations Sub-committee
<b>From:</b>	Spencer Steckley, Manager of Financial Services
<b>Report#:</b>	FIN21-010
<b>Attachments:</b>	Destination Stratford Report May 18 2021

**Title:** Destination Stratford Report May 18 2021

**Objective:** To receive an update on Destination Stratford's year-to-date activities for 2021.

**Background:** Destination Stratford gives regular updates to Council through the Finance & Labour Relations Sub-committee.

**Analysis:** Representatives from Destination Stratford have been invited to attend to present the attached report.

**Financial Impact:** Not applicable.

### Alignment with Strategic Priorities:

#### Strengthening our Plans, Strategies and Partnerships

Partnering with the community to make plans for our collective priorities in arts, culture, heritage and more. Communicating clearly with the public around our plans and activities.

**Staff Recommendation: THAT the Destination Stratford report dated May 18, 2021 (FIN21-010) be received for information.**

Spencer Steckley, Manager of Financial Services

Joan Thomson, Chief Administrative Officer



# Destination Stratford

# 2020 In Review

## 1. DESTINATION MARKETING

2020 was the ultimate test for Destination Stratford's agility, adaptability and creativity with marketing. Necessary pivots brought on by the pandemic included hyper-local destination marketing, communicating when it was not safe to visit, and the exploration of all advertising mediums including tv, radio, print, digital and social media.

**21**  
INFLUENCER  
CAMPAIGNS

**1,568,622**  
INFLUENCER CAMPAIGN SOCIAL REACH

**26,349** LIKES

**4,988** COMMENTS

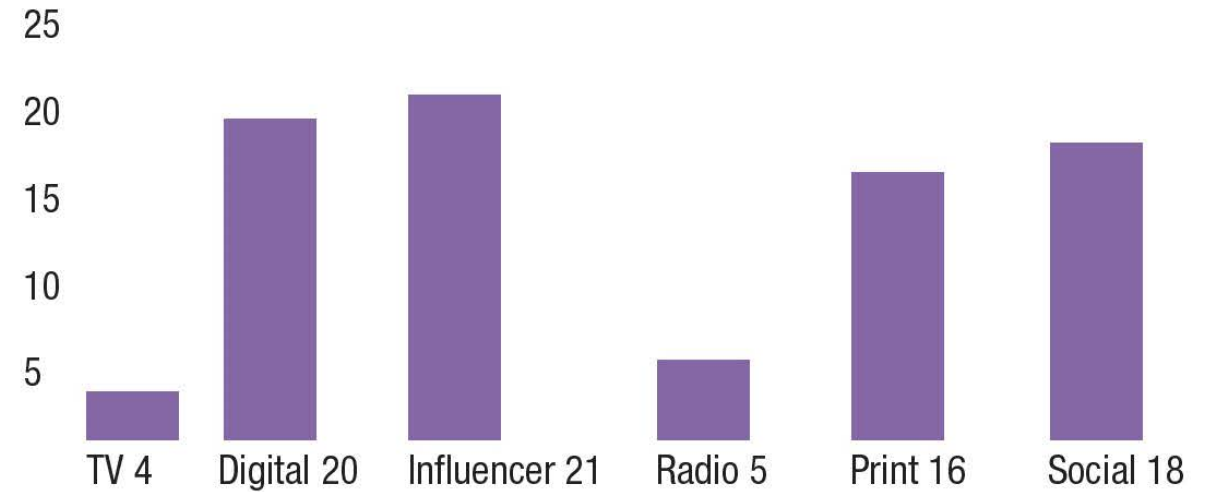
**670** SHARES

**169,500** VIDEO VIEWS

Destination Stratford captured **66 unique articles with 219 syndicated** across Canadian media papers. The articles directly related to tourism industry news, press release coverage, community events, collaborations and festivals.

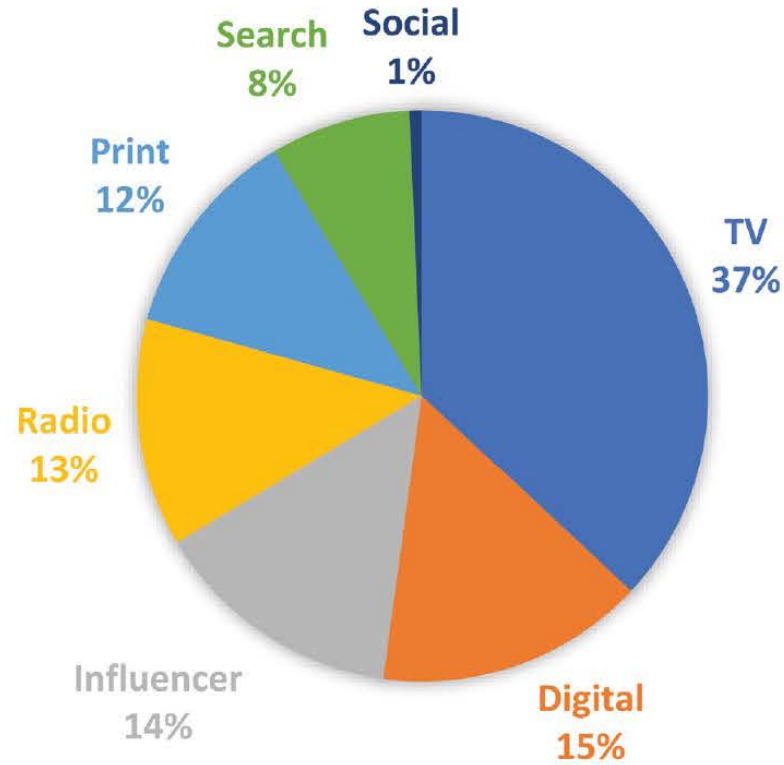


## 9 2020 MARKETING CAMPAIGNS BY CHANNEL



“ Destination Stratford has been a huge compliment to growing our following here at the spa. They feature us on social media and in house which helps our new and current clientele to know our mission and what we have to offer. I thank them for the constant involvement in bloggers weekends, for advertising for different holidays and current videos.”

Elsa Fahraeus, (illumine wellness spa)



## 2020 ADVERTISING SPEND BY CHANNEL

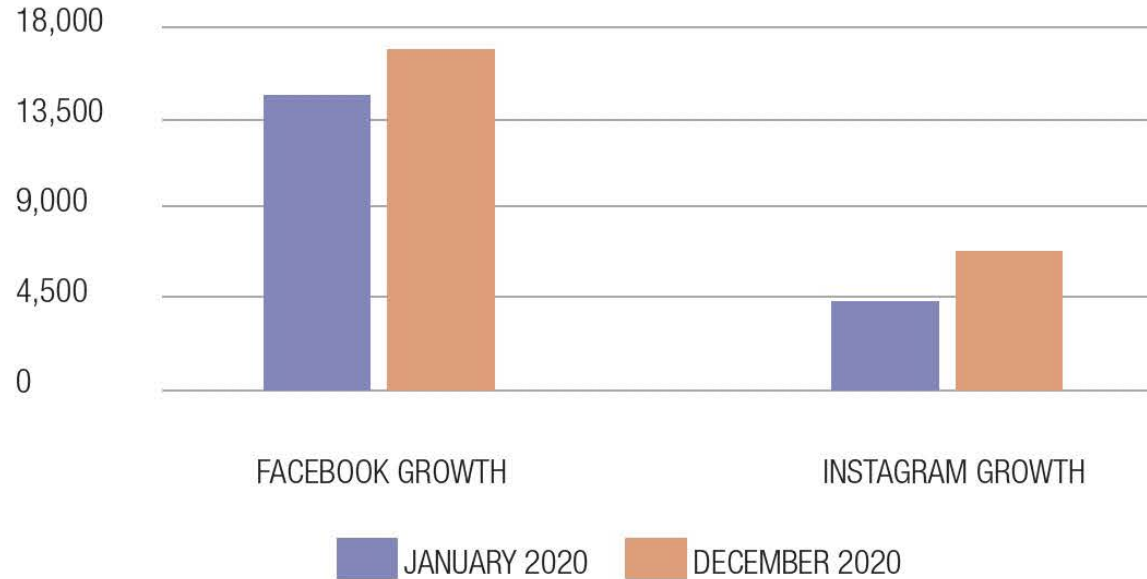
**“I really enjoy the TV commercials currently showing on CTV. Really well done and a catchy tune that I also enjoyed!” Bill R.**

*“Destination Stratford has been very helpful in launching Sobrii 0-Gin. Whether it is helping to connect with local businesses or meeting influential food writers the Destination Stratford has been instrumental in building grassroots awareness for our brand.” Bob Huitema, (DistillX Beverages Inc.)*



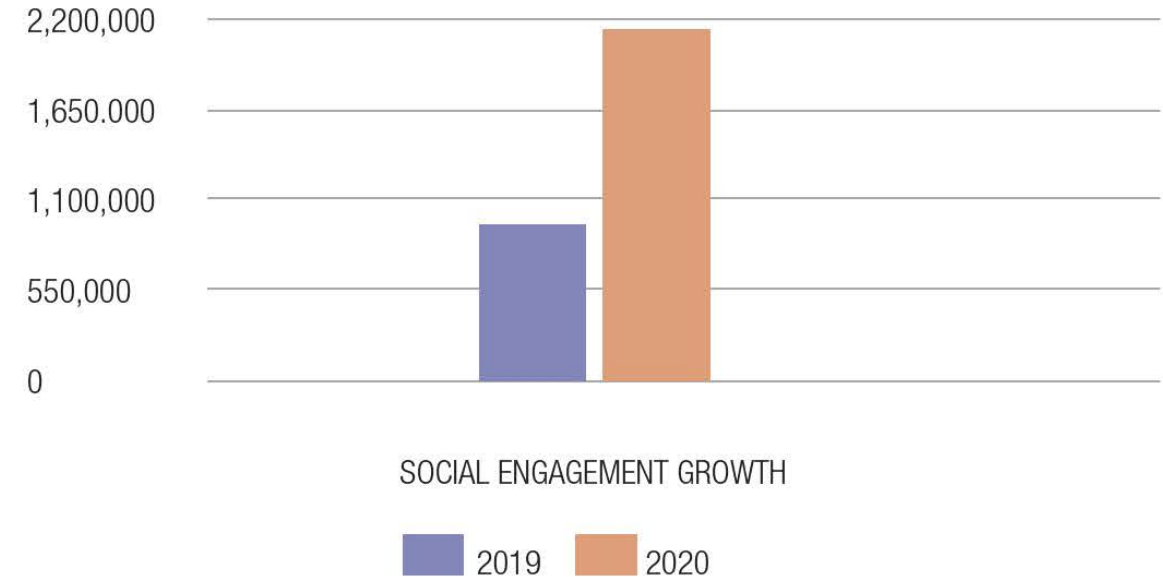
# Social Media 2020 Growth <sup>10</sup>

FACEBOOK = 9% increase (Jan 2020: 15,088 | Dec 2020: 16,575)  
INSTAGRAM = 54% increase (Jan 2020: 4,399 | Dec 2020: 6,769)



# Social Media Engagement

2019: 882,033 • 2020: 2,177,024  
147% increase across all platforms



## 2. DESTINATION DEVELOPMENT

Despite the constraints caused by the pandemic in 2020, Destination Stratford had record Chocolate Trail and Christmas Trail sales. With a commitment to enabling and strengthening visitor experiences, significant resources were applied to collaborate with Stratford Economic Response and Recovery Task Force initiatives such as Stratford Al Fresco and Lights On Stratford winter festival of lights.

### Culminative time spent on 2020 culinary trail website pages

#### Chocolate Trail

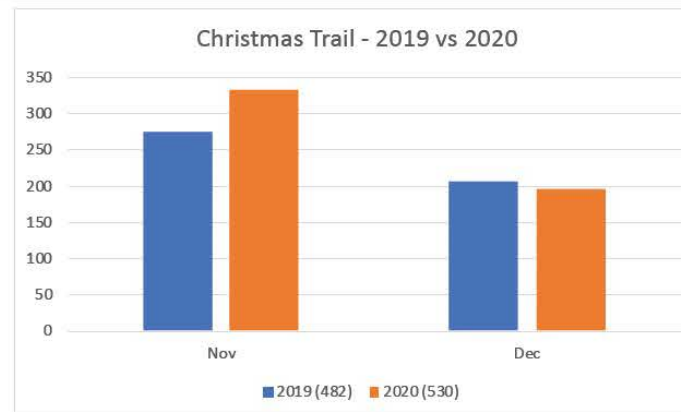
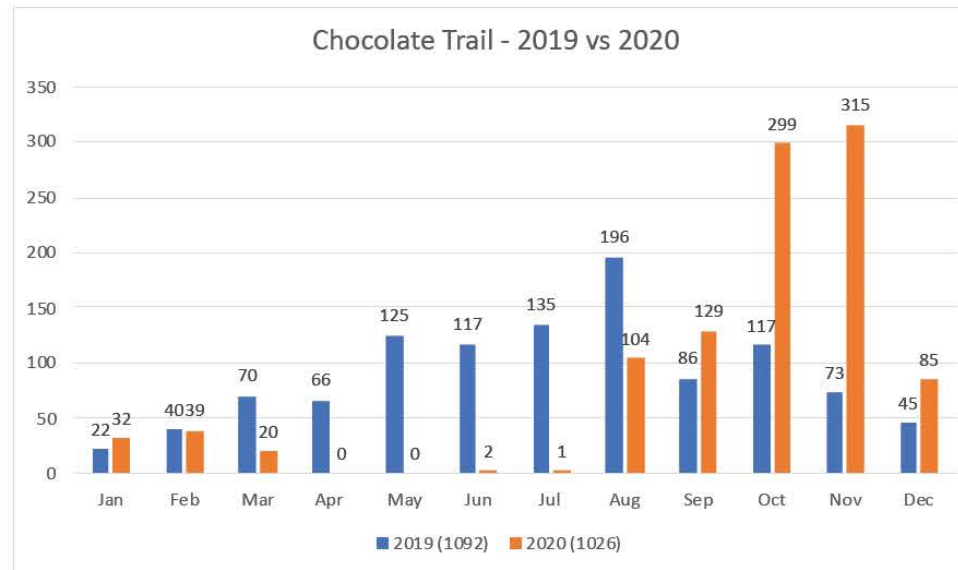
17,799 sessions for the year  
x 2:56 mins = 870 hours

#### Christmas Trail

6007 sessions for the year  
x 3:23 mins = 339 hours



## DESTINATION STRATFORD CULINARY TRAILS



“We are so happy to have our Chocolate Trail visitors back in the store. The trail recipients have been missed!! The response has been great! Once they sample the chocolate balsamic vinegar, they leave with some ideas of how they can use the product and a new customer relationship begins. On their next visit to the store, they usually have a friend or two to introduce them to the store. Many thanks Destination Stratford for this ingenious idea of getting visitors to see all that Stratford offers.”

*Michell Hern, Olive your Favourites*

**“We have been involved with Destination Stratford for many years. The sharing of our social media posts has greatly increased our audience and created more awareness. This past year we participated in the Christmas Trail which exceeded our expectations in the number of customers who visited the store.”**

*Diane Gloor, The Touchmark Shop*





Stratford's mayor declared that **"Lights On Stratford is a tremendous success!"** and the outpouring of heartfelt thanks from the community for creating something beautiful and hopeful during these challenging times has been incredible:

*"Thanks so much for all the light amidst the dark just when we need it most!"*

*"Thank you for giving us some real light during a dark time."*

*"I am so very thankful for the incredible project that you put together to give us all some hope."*

*"Thank you to all the gifted artists who put this on. It's beautiful and so creative."*

*"It's been a wonderful light festival. Thank you so much for all your hard work! It really did bring cheer to a lot of people at a difficult time. It was very much appreciated."*

*"What an amazing example of a community that understands the value of elevating the sense of occasion! Now I don't want to visit Stratford. I want to MOVE there! Well done!"*

With Destination Stratford as the lead organization, plans are already underway on the 2nd annual **Lights On Stratford.**

**lightsonstratford.ca**



# Stratford Al Fresco

In a highly successful partnership led by the City of Stratford, investStratford, Stratford City Centre BIA and Destination Stratford, this tourism economic recovery initiative was highly successful and warmly embraced by visitors and local residents alike.

Market Square Al Fresco picnic tables generated ~\$250,000 in revenue for food service establishments and restaurants.

The patio extension boardwalk program created 59 permanent & temporary jobs and maintained 96 permanent and temporary jobs. The program was responsible for more than \$245,000 in additional sales – for many restaurant operators this was equal to 25-30% of their summer revenue.

**“The speed and open-mindedness of the city and the Economic Development Task Force with these initiatives were game changers in our life”.**





### 3. DESTINATION MANAGEMENT

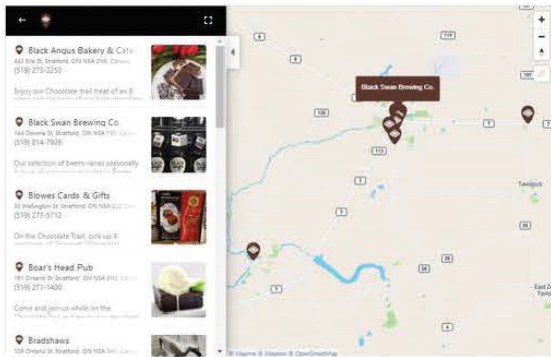
Destination Management can be defined as “working with various local stakeholders to enhance the appeal of the destination and its ability to generate benefit for the community.” Destination Stratford expands on this to include tourism advocacy at all levels of government, as well as championing digital excellence of tourism operators towards continually improving the visitor’s digital experience.

The creation of four **\*NEW\*** interactive digital maps on [visitstratford.ca](http://visitstratford.ca) were a tremendous success to guide visitors and locals around the city based on interests, location and events:

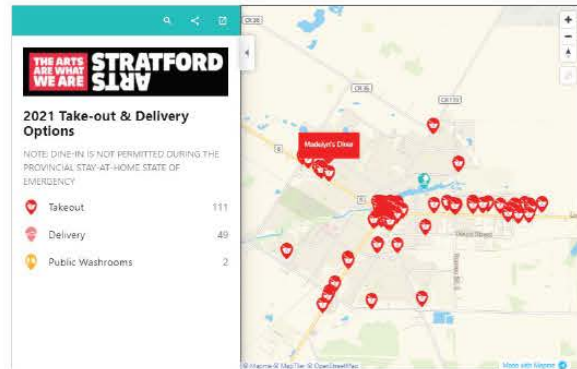


**Downtown dollar sales explode in 2020 with a 900% increase in sales!**

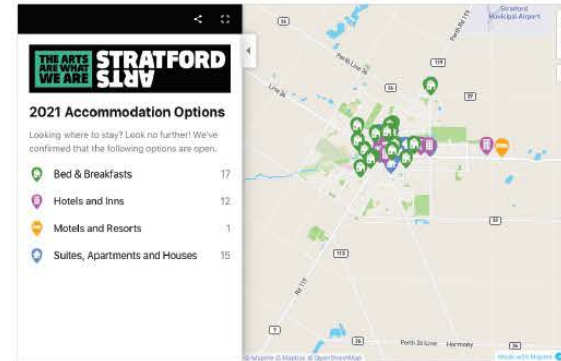
Frontline staff at Destination Stratford facilitated the sale of downtown dollars, which has significantly impacted the downtown businesses.



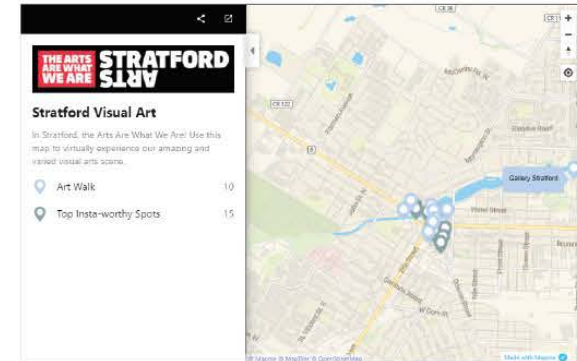
**Chocolate Trail**  
17,799 views  
2:56 average, 870 hours



**Al Fresco**  
8080 views  
2:00 average, 269 hours



**Accommodations**  
2115 views  
2:31 average, 88 hours



**Visual Arts**  
964 views  
2:23 average, 38 hours

2021





16  
**LICENSED TO EAT**  
(take-out)

**SUPPORT  
STRATFORD  
RESTAURANTS**

Order direct from  
your favourite  
Stratford restaurants  
and tip generously

[visitstratford.ca/takeout](https://visitstratford.ca/takeout)

#StratfordTakeout #SupportLocal #StratfordStrong

**THE ARTS  
ARE WHAT  
WE ARE** **STRATFORD  
ARTS**



**GET YOUR  
STRATFORD  
SHOPPING ON**

Parking, people,  
pants optional.

#ShopStratford

#SupportLocal

#StratfordShopping

#InThisTogether

**THE ARTS  
ARE WHAT  
WE ARE** **STRATFORD  
ARTS**

#SupportLocal



# STRATFORD *Al Fresco*



17

## Alcohol allowed with food

(Alcohol supplied by local restaurants only)



[visitstratford.ca/AlFresco](http://visitstratford.ca/AlFresco)

Alcohol may be consumed responsibly with food in approved areas during the listed times

### May 1 - September 23, 2021

Fri / Sat: 11 am - 9 pm

Sun - Thurs: 11 am - 8 pm

### September 24 - October 31, 2021

Daily: 11 am - 7 pm



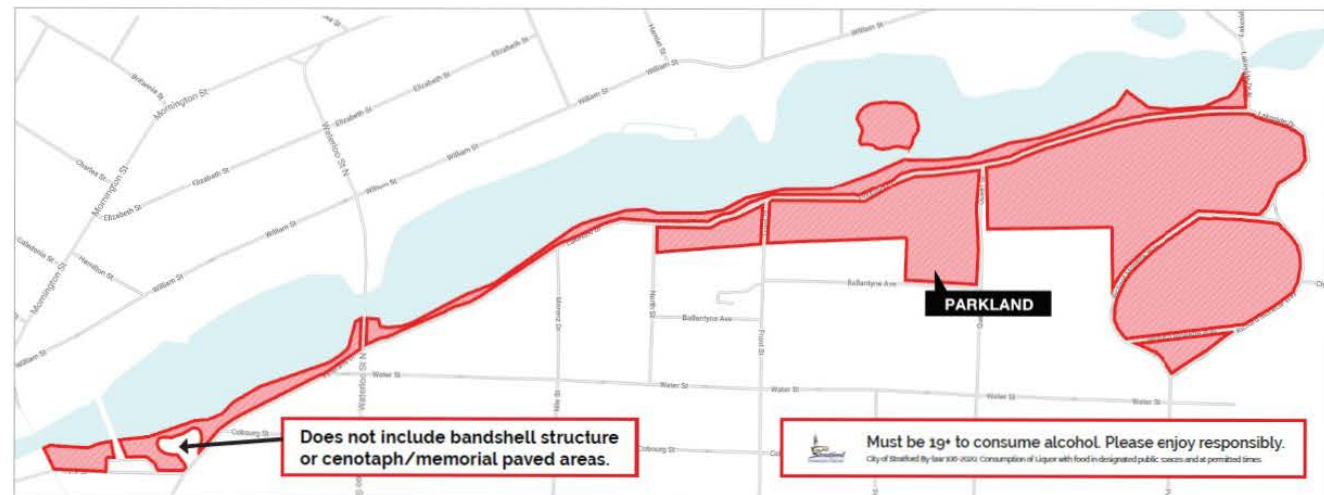
Only Liquor purchased with food from participating Stratford restaurants.

Only wine bottles, beer cans and mixed drinks in a sealed container permitted.

Patrons must have proof of purchase receipt from participating restaurant.

### **APPROVED AREAS:**

Market Square, Tom Patterson Island, approved downtown parkland (see below)









## Self-Guided Audio Walking Tours

Art Walk voice by Dayna Manning, featuring music from her latest album [Morning Light](#).

-  Riverwalk Personalities Tour
-  Saints & Sinners Tour
-  Epitaphs & Headstones Tours
-  Top Insta-Worthy Spots
-  Art Walk

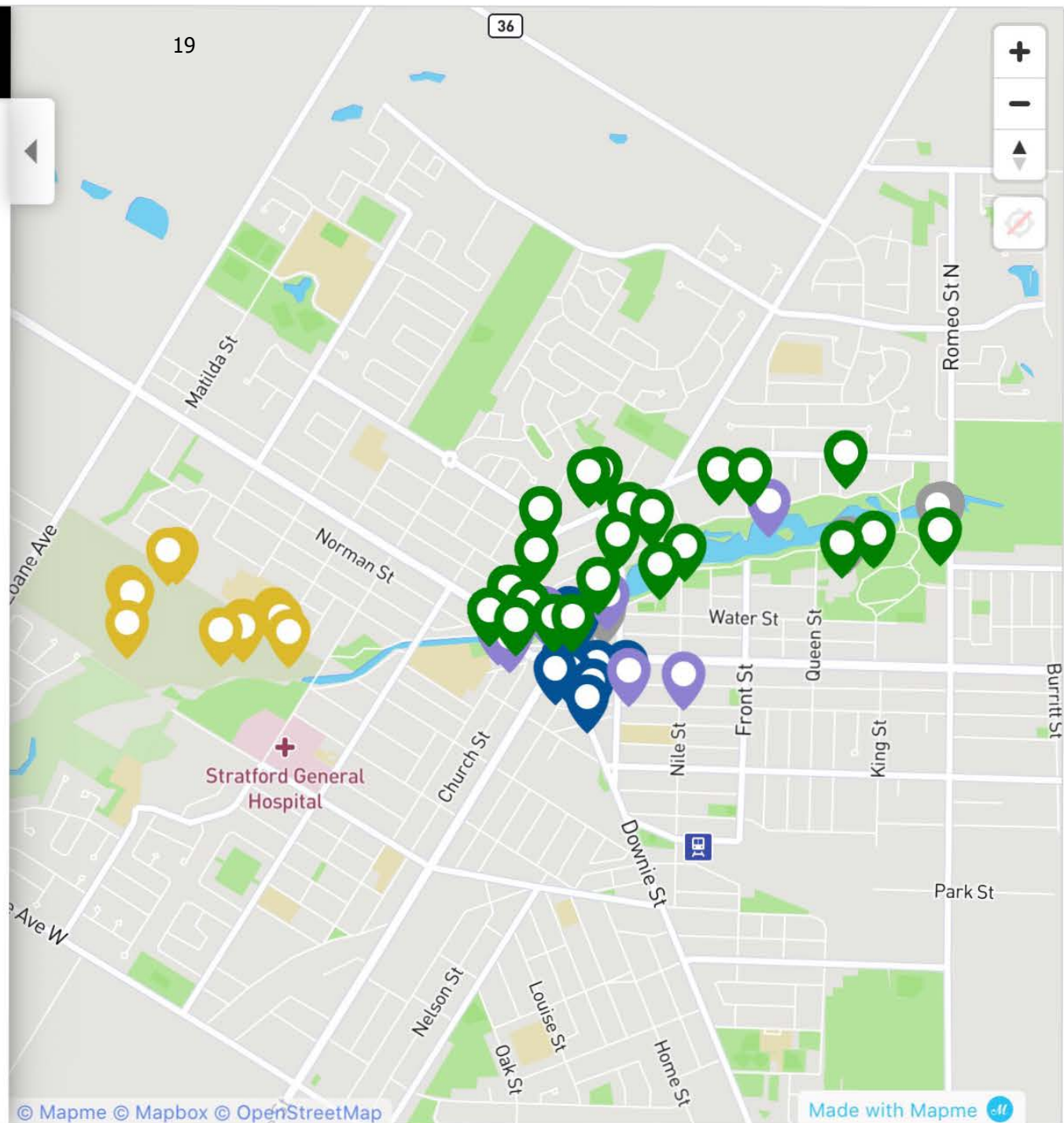
36

15

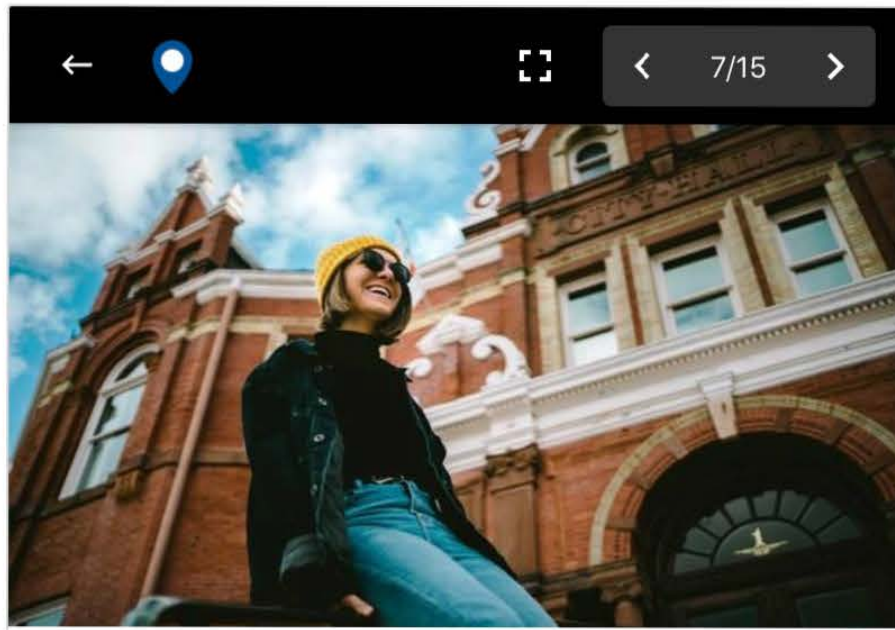
23

15

21





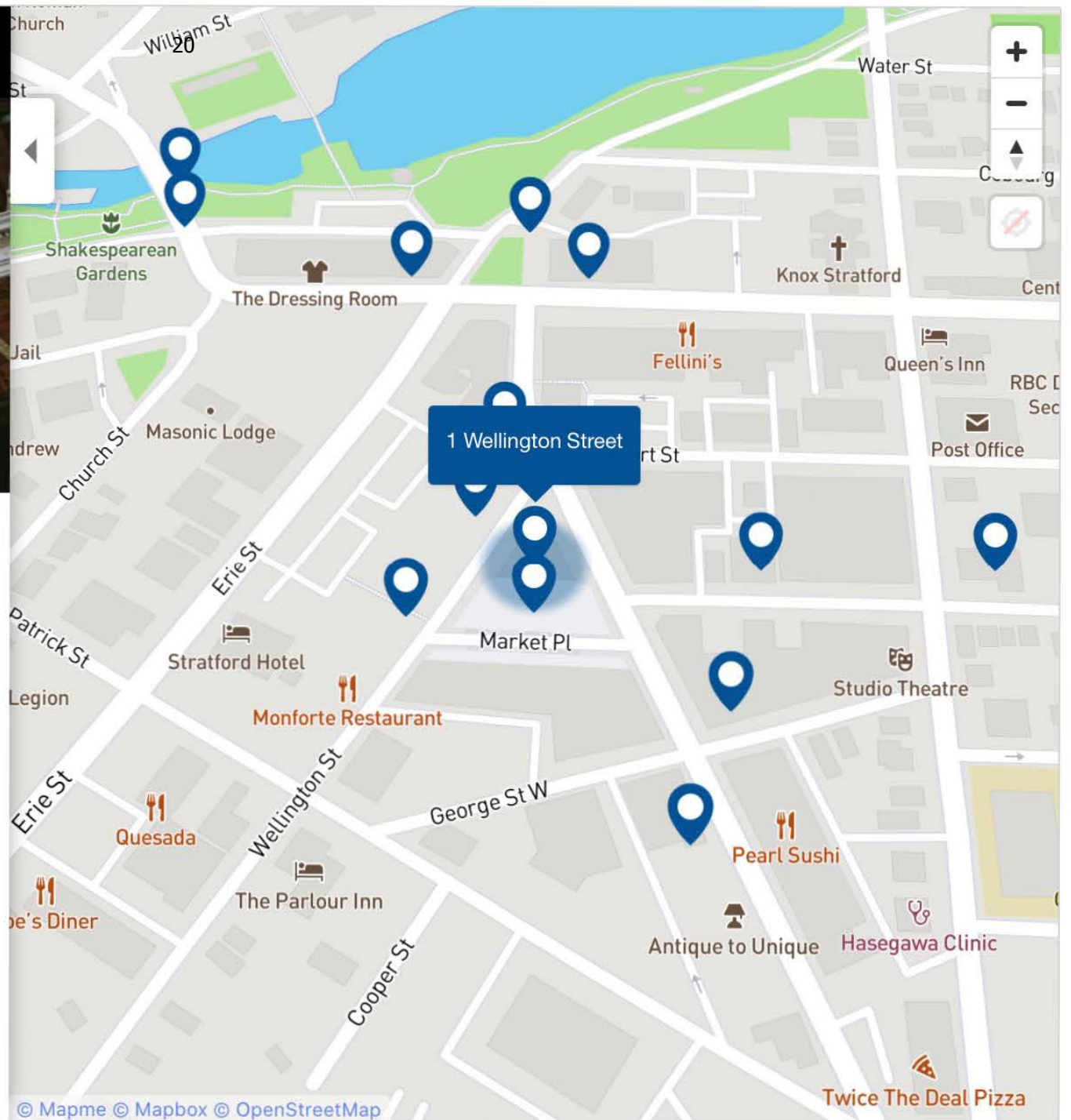


## 1 Wellington Street

1 Wellington St, Stratford, ON N5A, Canada

▶ 0:00 / 1:06 🔊

Stratford's most iconic building and a National Historic Site of Canada; snap a pic on the grand staircase at City Hall in Stratford.







## StaySafe™ COVID-19 Rapid Screening pilot project

- Collaboration with investStratford and Stratford City Centre BIA
- Thousands of tests picked up from Destination Stratford every week
- Program expanded to include small-medium businesses in St. Marys and Perth County



News / Local News

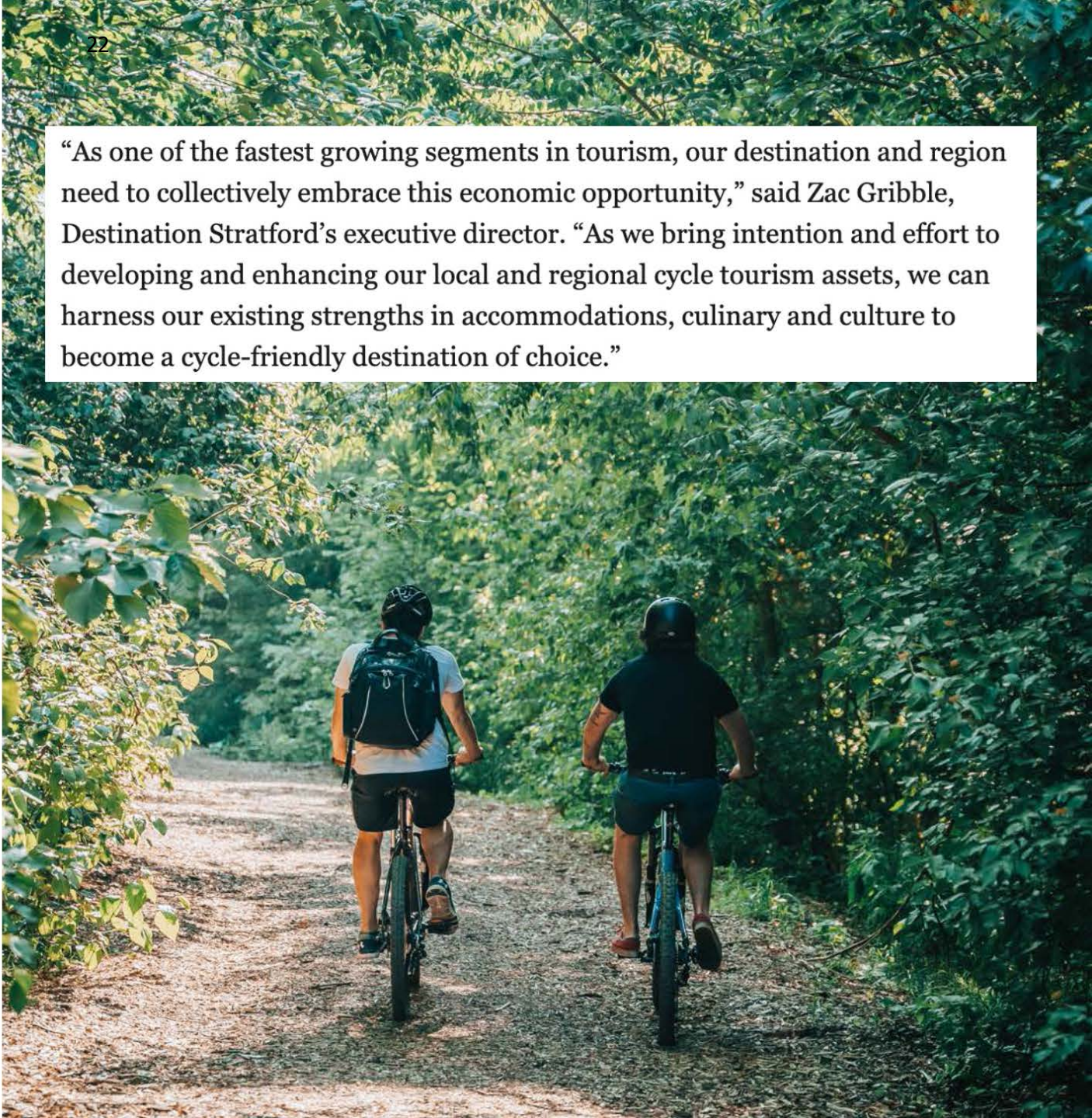
# Tourism officials in Perth County setting their sights on cyclists

*Cycling’s meteoric rise in popularity during the pandemic has tourism officials in Perth County buckling up their chin straps.*

Chris Montanini  
Apr 30, 2021 • 1 day ago • 2 minute read • [Join the conversation](#)



“As one of the fastest growing segments in tourism, our destination and region need to collectively embrace this economic opportunity,” said Zac Gribble, Destination Stratford’s executive director. “As we bring intention and effort to developing and enhancing our local and regional cycle tourism assets, we can harness our existing strengths in accommodations, culinary and culture to become a cycle-friendly destination of choice.”







**"One's destination is  
never a place, but a  
new way of seeing  
things."**

**- Henry Miller**

December 17<sup>th</sup>, 2021 – January 21<sup>st</sup>, 2022

**jour·ney**

/ˈjɔrnē/

an act of traveling from one place to another.

As we emerge from the constraints of having to stay home, missing our friends, family or favourite places; the sense of wonder and delight experienced within a journey will be celebrated anew. This year, Lights On Stratford aims to bring the adventure of travel to the public spaces of Stratford by showcasing exhibits that explore motion, transportation, worldly (and other-worldly) landmarks and multicultural exhibits of light.



## MANAGEMENT REPORT

<b>Date:</b>	May 18, 2021
<b>To:</b>	Finance and Labour Relations Sub-committee
<b>From:</b>	Spencer Steckley, Manager of Financial Services
<b>Report#:</b>	FIN21-008
<b>Attachments:</b>	investStratford Update April 2021 Stratford-Perth Centre for Business 2021 Year End Report

**Title:** Stratford Economic Enterprise Development Corporation (SEED Co./investStratford) – Update as of April 30, 2021

**Objective:** To receive an update on SEED Co.'s year-to-date activities for 2021.

**Background:** SEED Co. gives regular updates to Council through the Finance & Labour Relations Sub-committee.

**Analysis:** Representatives from SEED Co. have been invited to attend to present the attached report.

**Financial Impact:** Not applicable.

### Alignment with Strategic Priorities:

#### Widening our Economic Opportunities

Strengthening Stratford's economy by developing, attracting and retaining a diversity of businesses and talent.

**Staff Recommendation:** THAT the Stratford Economic Enterprise Development Corporation (SEED Co./investStratford) Summary & Report: Activities of investStratford, Oct 2020 – April 2021, dated May 18, 2021 be received for information.

Spencer Steckley, Manager of Financial Services

A handwritten signature in cursive script that reads "Joan Thomson".

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Joan Thomson, Chief Administrative Officer

May 3, 2021

Title: Report to Finance & Labour Relations Sub-Committee

Councillor Gaffney, Chair & Sub-Committee Members

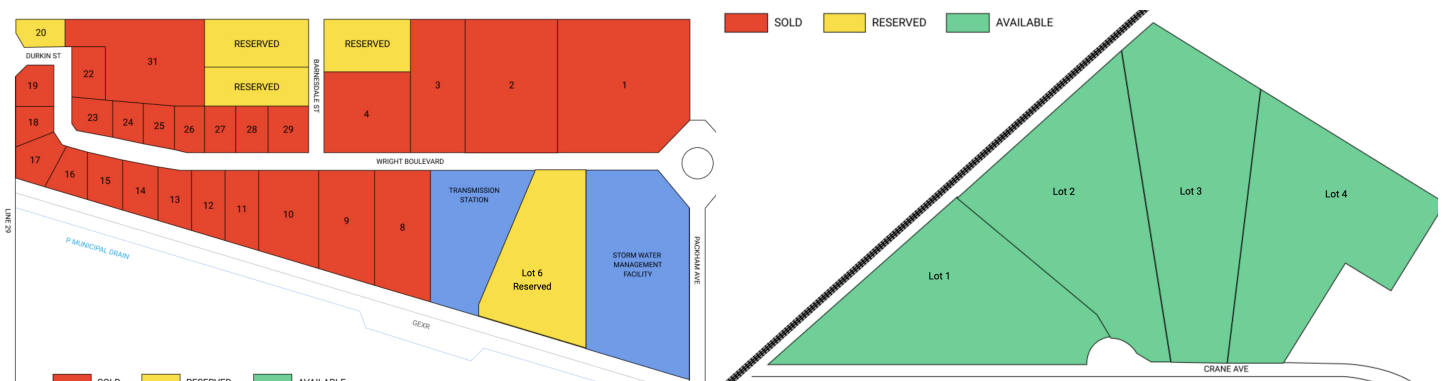
CC: Spencer Steckly, Manager, Corporate Services & Joan Thomson, CAO

Summary & Report: Activities of investStratford, Oct 2020 – April 2021

Aligning to the strategic priority of Council, **Widening our Economic Opportunities**, the following projects and activities are ongoing and underway. In some areas, delays and priority shifts have been experienced as a result of COVID-19.

#### Business Retention; Expansion; Investment Attraction

- All lots in Wright Business are sold or reserved including the 12-acre parcel in the first section of the Park
- Four (4) lots are available in the Crane West Business Park – 3 active industrial leads in due diligence
- Industrial Infill Project nearing completion – full review of privately held parcels with room for development.
- Industrial marketing campaign underway – website; socials; e-mail campaigns including new video:  
<https://www.youtube.com/watch?v=VrymJXpfUus>
- 25 virtual lead generation meetings in 2021 w/30 planned for the remainder of the year.



#### Entrepreneurship & Small Business

- Year End 2021 finished up March 31 (Centre for Business year end report attached). We are now in 3<sup>rd</sup> year of 3 year contract.
- Overall, we supported more than 150 small businesses and created almost 100 jobs.
- Up Next – ongoing virtual advisory programming (social media marketing, communications) Summer Company.



82 Erie Street | 3rd Floor  
 Stratford | Ontario | Canada | N5A 2M4  
 Toll free 1.844.812.5055 | 519.305.5055  
[investStratford.com](http://investStratford.com)

### Economic Response & Recovery Task Force

- In April, 2020 investStratford took the lead and launched the Stratford Economic Response & Recovery Task Force. Interim reports have been provided to Council over the term of our efforts. Most recently:
  - FedDev Ontario Grant Program for Tourism Based Businesses has wrapped
    - \$750,000 program supported 47 business w/grants up to \$20,000
    - 370 permanent jobs created/maintained & 565 temporary jobs created/maintained
    - Full listing & celebratory video can be found here:
      - <https://www.investstratford.com/stat-recipients>
  - Outdoor dining, Al Fresco, Alcohol w/Food programming all approved and ready for Summer 2021.
  - Rapid Screening Kits – successfully expanded the KW program to Stratford & Area businesses
    - More than 100 businesses participating w/more than 7000 screens

It is my privilege to lead our team and represent the economic interests of the City of Stratford locally, across the Country and Internationally. I'm pleased with our highlights as reported here and inspired by the work we have underway.

Respectfully Submitted,

Joani Gerber  
 CEO, investStratford  
[jgerber@investstratford.com](mailto:jgerber@investstratford.com)

Attachments: Stratford-Perth Centre for Business, Year in Review Report



# YEAR END 2021 REPORT

PROGRAMS & ACTIVITIES  
APRIL 1, 2020 - MARCH 31, 2021





# Grant Programs

## DIGITAL ACCELERATOR

### A 4 week program focused on digital pivots

In response to the COVID-19 restrictions on local small businesses, the Centre for Business executed a 4-week grant program offering group coaching sessions, one-on-one meetings and \$1,500 to help small businesses get their operations online.

● SUPPORT FOR 30 SMALL LOCAL BUSINESS

● \$45,000 IN GRANTS

● 30+ HOURS OF ONE-ON-ONE TRAINING

### Success Story

#### Karen Hartwick, Stratford Tea Leaves

Karen Hartwick created a hybrid business model that had both retail and wholesale revenue streams, supplying high-quality tea across the country. When the pandemic hit, businesses were forced to close, putting a halt on her wholesale business. With the help of the Digital Accelerator, Karen pivoted to focus on retail customers. She needed an email list and lead magnet to grow that list.

Karen created a downloadable pdf that would add value to her customers called Karen's Top Ten Teas For Summer. She automated the delivery of the lead magnet once the customer had entered their information into her brand-new pop-up block on her website. By creating this list Karen was able to virtually sell to her customers while creating a sense of community as she nurtured them further into her brand.

Karen's long-term plan is to create a low-cost membership space and create an automated email sequence, where she'll deliver monthly Tea Talks. The entire sales funnel will be automated and will add passive income that works during a pandemic and is sustainable once business returns to 'normal'.

# Grant Programs

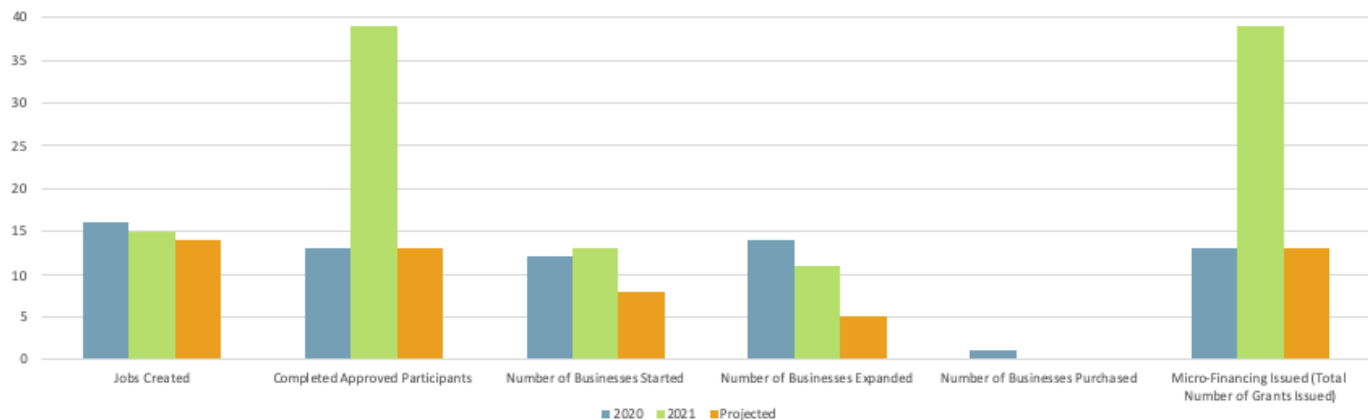
## STARTER COMPANY

### Small business start-up program

Due to the pandemic, this year's Starter Company was delivered entirely online over a period of 6 weeks. Participants completed training sessions and tasks to move their businesses closer to opening or expanding. Participants had access to local mentors, networking and one-on-one training sessions via Zoom.

- 9 COMPANIES STARTED
- 9 COMPANIES STARTED
- ONLINE DELIVERY

### STARTER COMPANY PERFORMANCE METRICS



## SUMMER COMPANY

### Start up support for students

As a result of the pandemic, enrolment in Summer Company 2020 was low with only 2 applicants. However, these two students had exceptional businesses and were both able to see good profits. Both students have used the program and the Centre for Business as a reference on their University applications.

- 2 SUMMER COMPANIES STARTED
- \$6000 IN GRANTS
- YOUTH ENTREPRENEURSHIP

# Events



## DIVERSITY & INCLUSION

This two part training session focused on issues of systemic oppression, race, inclusion and equity through discussions and interaction. Participants applied concepts and frameworks to their businesses.

- 60+ ATTENDEES
- PARTNERSHIP WITH BIA
- FIRST LOCAL EVENT OF ITS KIND



## WOMEN'S DAY

On March 30, 2021 Emily Chung, owner and operator of AutoNiche and host Laurin Padolina, former actress turned welder engaged over 50 local business women in an interactive online event.

- 50+ ATTENDEES
- PARTNERSHIP WITH TTG
- SWAG BAG FEATURING LOCAL BUSINESSES



## ONLINE REVENUE

This two-part workshop series helped small business owners identify the right online revenue stream for your business and provided them with a tangible action plan to increase revenue with online sales.

- 25 ATTENDEES
- EXPERIENCED HOST
- ACTIONABLE TAKE-A-WAYS

# Additional Programs

## ASK AN EXPERT

The Centre for Business teamed up with the Stratford City Centre in the spring and summer of 2020 to provide free expert advice on COVID related topic for small businesses.

- 10 FREE EXPERT ADVISORY SESSIONS
- 175+ ATTENDEES
- ESSENTIAL COVID SUPPORT & RESOURCES

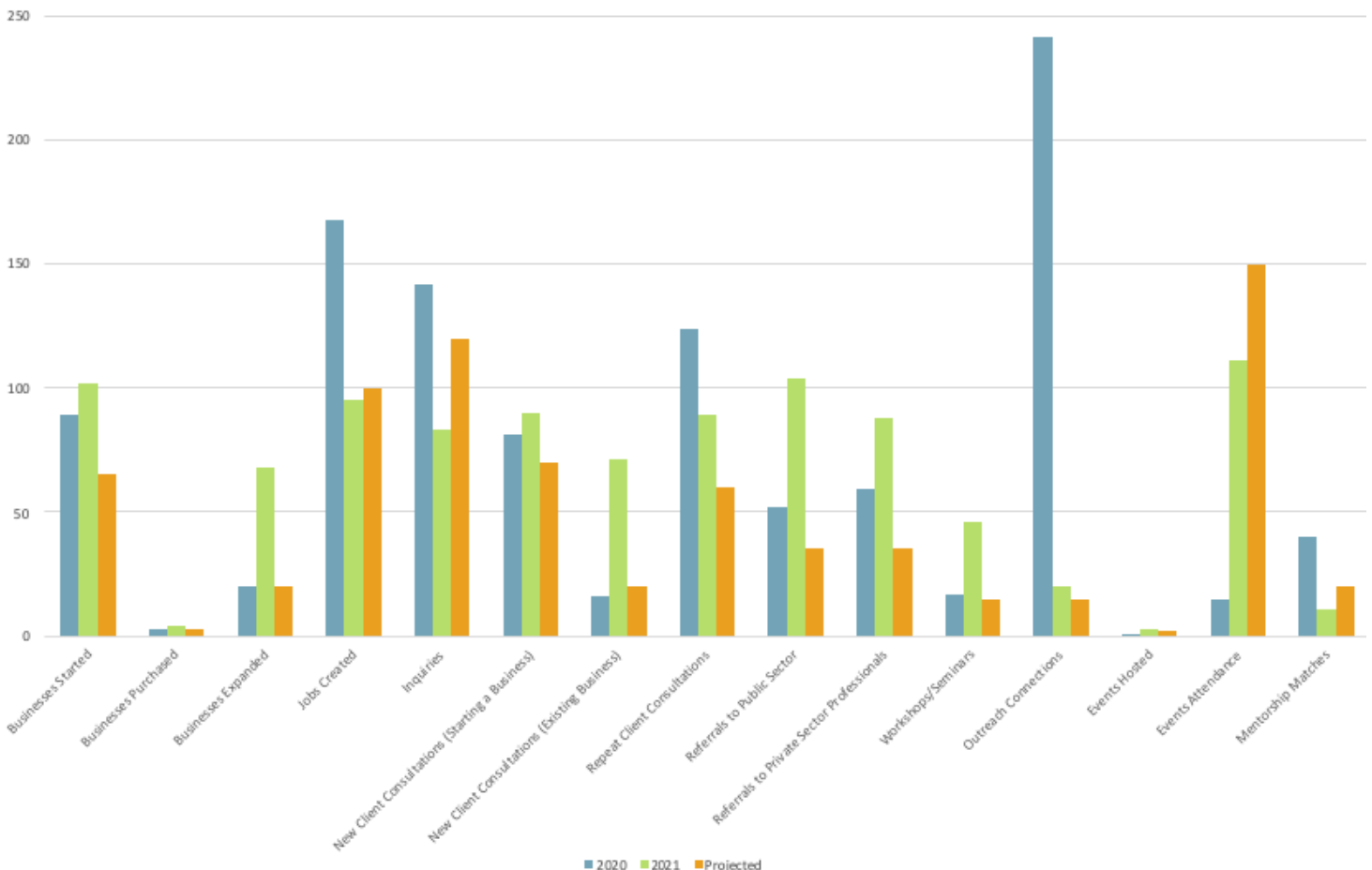
## MENTAL WELLNESS SUPPORT

In an effort to help small business owners overcome the mental stress and uncertainty of business closures, job losses, and financial stresses brought on by COVID-19, we created a mental wellness support counselling program at no cost to business owners in Perth County, the City of Stratford and the Town of St. Marys.

- 149 UNIQUE ID'S TO OUR LANDING PAGE
- EXCELLENT FEEDBACK FROM EXISTING CLIENTS
- FREE SUPPORT FOR BUSINESS OWNERS

# Performance Metrics

## SBEC CORE INITIATIVES PERFORMANCE METRICS






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## MANAGEMENT REPORT

**Date:** May 18, 2021  
**To:** Finance & Labour Relations Sub-committee  
**From:** Ed Dujlovic  
**Report#:** FIN21-007  
**Attachments:** Waste Management Rate Study, City of Stratford Landfill Closure and Post Closure Care Liability Report

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**Title:** City of Stratford Waste Management Rate Study

**Objective:** To provide information to Council on the future rates that need to be charged for bag tag and landfill tipping fees for the operation of the City's waste management services to 2046.

**Background:** The City of Stratford retained DFA Infrastructure International Inc. to develop a 25-year plan for bag tag and landfill fees. The fees to be charged would cover the cost for operating the City's waste management system, to provide future funds for care of the landfill at 777 Romeo St. S. once it is closed and to secure future waste disposal capacity.

To develop the rates a Landfill Closure and Post Closure Care Liability Report was prepared to determine funds required for the closure and long-term care of the closed landfill. Long term care costs include ongoing treatment for the leachate from the landfill, maintaining the leachate collection system, yearly consulting services for monitoring and reporting to the Ministry Environment, Conservation & Parks, and maintain the methane collection system. The long-term care costs were estimated for a 50-year period.

**Analysis:** The 2021 cost to provide waste management services is budgeted at \$3,543,320 with revenues from grants, property taxes, bag tag and landfill fees. Future capital expenditures to develop additional landfill cells, methane collection and asset replacement is \$10,170,000. Annual contributions to the capital reserve fund will be required to fund this work and to provide a reserve to secure future disposal capacity. At the end of 2020, the capital reserve is \$3,586,236.

The closure and post closure care of the landfill reserve at the end of 2020 is \$514,804.15. It has been determined to properly close the landfill and pay for post closure operating costs a reserve of \$18.1 million is required by 2046.

The consultant developed two rate options for consideration. Option 1 would result in a considerable increase to the landfill tipping fee in 2022. This would increase from the current fee of \$82.75/tonne to \$102.55/tonne. To provide some context the County of Oxford, Region of Waterloo and the City of London charge \$80.32/tonne, \$85.00/tonne, and \$75.00/tonne, respectively.

Recommendations from the consultant report are as follows:

- Implement Rate Option 2:

	2021	2022	2023	2024	2025	2026
<b>Tipping Fees</b>	\$82.75	\$85.23	\$88.64	\$93.07	\$94.00	\$94.94
<b>Annual Increase</b>	N/A	3%	4%	5%	1%	1%
<b>Bag Tag Fee</b>	\$3.60	\$3.67	\$3.75	\$3.82	\$3.86	\$3.90
<b>Annual Increase</b>	N/A	2%	2%	2%	1%	1%
<b>Tax Subsidy</b>	\$911,170	\$941,260	\$961,069	\$987,014	\$856,807	\$874,389
<b>Annual Increase</b>	N/A	3.3%	2.2%	2.7%	-13%	2%

- Continue annual contributions to the Capital Waste Management Reserve Fund of \$500,000 from 2022 to 2026 gradually increasing to \$810,000 by 2046.
- Phase in annual contributions to the Landfill Closure Reserve Fund starting with approximately \$28,000 in 2022; \$85,000 in 2023; \$170,000 in 2024; and the full amount of \$566,000 from 2025 to 2046.
- Review the rates in 5 years to account for the transfer of recycling to producers of packaging and the impact of the organics collection program.

**Financial Impact:** The rates that are proposed will provide the City with the necessary funds to operate the waste management system, provide funds for the closure and post closure operating costs at the landfill and provide funding to secure future waste disposal capacity.

### **Alignment with Strategic Priorities**

**Developing our Resources**

Optimizing Stratford's physical assets and digital resources. Planning a sustainable future for Stratford's resources and environment.

**Staff Recommendation: THAT the information in the Waste Management Rate Study be received;**

**AND THAT the rates proposed be considered during the formation of the 2022 Budget.**



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Ed Dujlovic, Acting Director of Infrastructure & Development Services



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Joan Thomson, Chief Administrative Officer



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## City of Stratford Waste Management Rate Study

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March 9 2021

Prepared by:



**DFA Infrastructure International Inc.**





## DFA Infrastructure International Inc.

33 Raymond Street St. Catharines Ontario Canada L2R 2T3  
Telephone: (905) 938 -0965 Fax: (905) 937-6568

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March 9, 2021

Ed Dujlovic, P.Eng.  
Director Infrastructure & Development Services  
City of Stratford  
82 Erie Street  
Stratford ON N5A 2M4

Dear Mr. Dujlovic:

**Re: City of Stratford  
Waste Management Rate Study**

We are pleased to submit our report entitled: "City of Stratford Waste Management Rate Study". This report presents the full costs associated with managing the City of Stratford's waste collection, diversion and disposal systems for the period 2021 to 2046. It identifies the landfill tipping fees, bag tag fees and tax subsidies required to recover the cost of these services.

Please do not hesitate to call if you have any questions.

Respectfully Submitted by,

**DFA Infrastructure International Inc.**

A handwritten signature in black ink, appearing to read 'Derek Ali', is written over a horizontal line.

Derek Ali, MBA, P.Eng.  
President

## Executive Summary

### ES-1 Purpose of Report

The purpose of the rate study is to identify the full cost of services for the City's waste diversion and waste disposal services based on the most recent information. The period for this study is 25 years from 2020 to 2044 inclusive.

### ES-2 Conclusions and Recommendations

Based on the information reviewed and analyses completed, the following are the main conclusions regarding the current (2021) cost of service:

1. The gross operating costs of waste diversion, waste collection and waste disposal are projected to be approximately \$1,829,835, \$348,256 and \$1,043,768 in 2021 based on the approved 2021 budget.
2. Approximately \$2,120,260 (55%) of the gross operating costs is for contracted services most of which is related to waste diversion (\$1,696,260) and waste collection (\$331,500).
3. 2021 capital related costs include transfers to the Fleet Reserve Fund and Capital Waste Management Reserve Fund of \$142,800 and \$492,660 respectively. Both contributions are related to waste disposal services.
4. The non-rate revenues include approximately \$313,000 (including grants and sale of recyclables) for waste diversion and \$3000 for waste collection. There is no operating revenue related to disposal.
5. The net cost of service to be recovered from the landfill tipping fees, bag tag fees and tax subsidy is \$3,543,320 based on the 2021 budget. This is broken down as follows:
  - Waste Diversion: \$1,516,835 (43%)
  - Waste Collection: \$ 345,256 (10%)
  - Waste Disposal: \$1,681,228 (47%)
6. Capital expenditures of \$1,350,000 for a new landfill cell and buffer area are required in 2021
7. The Landfill Closure Reserve Fund has a balance of \$508,576 but there are no annual contributions being made. Therefore the current waste disposal system costs do not represent the full cost of service.
8. The current cost of service is for waste collection, blue box collection and organics collection from approximately 10,876 properties and disposal of approximately 22,341 tonnes of waste.

The following are the main conclusions regarding the future (2022-2046) cost of service:

9. Approximately \$10,170,000 in capital expenditures are required between 2022 and 2046 for new landfill cell developments, landfill gas system expansion and asset replacements/renewals (monitoring wells, equipment, etc.)
10. Annual transfers of \$500,000 to the Capital Waste Management Reserve Fund are required until 2026 with gradual increases in subsequent years to \$810,000 by 2046 to fully fund the capital program and have partial funding available to secure future disposal capacity.
11. There is no existing or future debt to be incurred for waste diversion capital projects.
12. The City's liability for closure and post closure care of the landfill site is currently unfunded and not considered in the annual costs. This cost is estimated to be approximately \$566,000 per year for the period 2022 to 2046 at which time the liability will be fully funded. The annual reserve fund contribution, if fully implemented in 2022 would be an increase of approximately 16% over the 2021 net cost of service.
13. The net cost of waste is projected to increase significantly from \$3,543,320 in 2021 to \$4,172,682 in 2022. This is an increase of approximately 18% most of which is driven by the contribution to the Landfill Closure Reserve Fund.
14. The net cost of waste management is projected to increase by 1.5 % in 2023 and 2024. However in 2025 the cost of service is projected to decline by 11.4 % due to the transfer of recycling responsibility from the City to the producers in 2024. This assumes that the City would continue to have a role in recycling at a cost equal to 20% of the 2024 recycling costs. Increases of approximately 1.7% to 2% are projected between 2026 and 2046. If the City were to implement a wood waste diversion program then those costs would be extra.

The following are the main conclusions regarding the Rate Options:

15. Under Rate Option 1 the landfill tipping fee would increase significantly from \$82.75 per tonne to \$102.55 in 2022 (i.e. a 24% increase). Rate Option 2 would result in a much lower increase of approximately 3% to \$85.23 per tonne. The annual rate increases beyond 2025 are in the 1% to 2% range under both options.
16. The bag tag fees would increase by 2% per year to 2046 under both rate options.
17. A tax subsidy of approximately \$1.1 million (i.e. a 21% increase) would be required in 2022 under Rate Option 1. Under Rate Option 2 the subsidy would be \$941,000 (3.3%) increase in 2022.
18. The required tax subsidy will decline to approximately \$592,000 in 2025 (48% decrease) under Rate Option 1 and \$857,000 (13%) under Rate Option 2 due to the transfer of recycling responsibility to the producers.
19. Beyond 2025 the tax subsidy will range between \$600,000 and \$725,000 under Rate Option 1 and between \$874,000 and \$914,000 under Rate Option 2. The tax subsidy under

Rate Option 2 is projected to remain almost equal to or below the current 2021 amount of \$911,170.

20. The Landfill Closure Reserve Fund balance at the time of landfill closure in 2046 would be approximately \$ 17.9 million (close to the target of \$18.1 million) under Rate Option 1 and \$15.9 million (i.e. \$2.1 million below the target balance of \$18.1 million) under Rate Option 2.
21. The Capital Waste Management Reserve Fund balance at the time of landfill closure in 2046 would be approximately \$13.9 million under both options.
22. Rate Option 2 would result in more manageable increases to the landfill tipping fee and tax subsidy compared to Option 1 over the next few years.

The following are the primary recommendations for consideration by the City:

1. The cost of service projections developed through this study for the period 2021 to 2046 should be used to inform the City's decisions regarding changes to the current cost recovery mechanisms including increases to the landfill tipping fee, bag tag fee and tax subsidy to ensure that the full cost of service for waste management is recovered.
2. Monitor Provincial discussions on the transfer of recycling and other waste diversion programs to the packaging producers to gauge and confirm the City's role and responsibilities and any costs that may be incurred by the City.
3. Implement Rate Option 2 as described in Section 7 of this report:
  - ✓ Continue annual contributions to the Capital Waste Management Reserve Fund of \$500,000 from 2022 to 2026 gradually increasing to \$810,000 by 2046.
  - ✓ Phase in annual contributions to the Landfill Closure Reserve Fund starting with approximately \$28,000 in 2022; \$85,000 in 2023; \$170,000 in 2024; and the full amount of \$566,000 from 2025 to 2046.
  - ✓ Increase the bag tag fees by 2% per year starting in 2022
  - ✓ Increase the landfill tipping fees to \$85.23 in 2022 (3% increase) followed by 4% and 5% increases in 2023 and 2024 respectively
  - ✓ Increase the tax subsidy to approximately \$941,000 in 2022 (approximately a 3.3% increase from 2021) followed by 2.1% and 2.7% increases in 2023 and 2024 respectively
4. Allocate the projected remaining balance in the Capital Waste Management Reserve Fund of approximately \$13.9 million at the time of landfill closure to top up the Landfill Closure Reserve balance if required and secure future waste disposal capacity.
5. Review and update the cost of service and rates in five (5) years to account for new information regarding transferring recycling to producers of packaging, the impact of the Green Bin (Organics) program on waste diversion and securing future disposal capacity.

**Disclaimer:**

*The information and assumptions contained in this report are based on the best available data at the time of preparation and are unique to the City of Stratford. This information is for the City of Stratford's sole use and not intended for use by any third party. DFA Infrastructure International Inc. shall not in any way be liable for third party use and/ or interpretation of the information contained in this document.*

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# 1 Introduction

## 1.1 Background

The City of Stratford (City) provides waste management services to approximately 32,400 residents. The services generally include waste collection, waste disposal, recyclables collection and processing, more recently organics collection and processing and other special waste management services (e.g. HHW collection) and customer relations.

The City owns and operates the landfill site located at 777 Romeo Street South which receives solid waste for disposal under ECA No. A150101 issued by the Ministry of Environment Conservation and Parks (MECP). The site is projected to close by 2046 based on the current disposal rate, additional waste diversion due to the new organics collection program and the remaining capacity. Landfill gas and Leachate are managed through respective collection systems. The gas is collected and flared on site. The Leachate is collected in the Leachate Collection System (LCS) and treated at the Wastewater Treatment Plant (WWTP).

Waste management services are generally delivered through contractual arrangements with service providers. The current costs of waste management are recovered through recycling grants and revenues from landfill tipping fees, the sale of bag tags and a subsidy from the tax base. The subsidy began in 2020 with the implementation of the green bin organics program to offset potential high bag tag fee increases that would otherwise be required. However, with evolving regulatory requirements and potential changes to the level of service, there is a need to ensure that all cost components (current and future) are considered in the full cost of service and that the financing mechanisms (landfill tipping fees, bag tag fees and tax subsidies) would provide sustainable financing over the long-term.

The waste diversion industry is expected to change over the next few years. The responsibility for the waste diversion programs is expected to shift from the municipalities to packaging producers by December 31, 2025. This would remove the program responsibility and costs from municipalities. There are also provincial initiatives to make organics collection and diversion from disposal mandatory by 2025. Municipalities are also required to calculate and plan for the landfill closure and post closure care costs under PSAB Standard 3270, soon to be replaced by PSAB 3280 for fiscal years ending on April 1 2021 or later. The City retained the services of DFA Infrastructure International Inc. to develop the cost of service and determine the landfill tipping fees, bag tag fees and tax subsidies required to fully fund its waste management program over the long-term.

## 1.2 Purpose

The purpose of this rate study is to:

- Determine the full cost of the City's existing waste management services based on 2021 information;
- Develop the full cost of service for waste disposal and waste diversion over a 25-year period including identifying reserves requirements, to ensure the long-term financial sustainability of the City's waste management system; and
- Develop landfill tipping fees and bag tag fees (rates) that will ensure recovery of full cost of service based on the existing rate structure

## 2 Legislative and Regulatory Requirements

### 2.1 Provincial Legislation and Regulations

Key Ontario laws affecting waste management activities include:

- the Environmental Assessment Act, 1990 (EAA);
- the Environmental Protection Act (EPA);
- the Waste-Free Ontario Act, 2016; and
- the Waste Diversion Transition Act, 2016.

The **Environmental Assessment Act** (EAA), R.S.O., 1990 c. E. 18, and O. Reg. 101/07 Waste Management Projects set the requirements for planning and decision-making process when conducting environmental assessments (EA) primarily for public sector projects. There are several documents that guide the EA process including:

- The Code of Practice for Consultation, and
- The Code of Practice for Preparing and Reviewing Terms of Reference.

**The Environmental Protection Act (EPA)** addresses waste collection, disposal and environmental approvals. Under this Act:

- O. Reg. 232/98 governs the regulatory and approval requirements for new or expanding landfills. The regulation includes requirements regarding ownership, design, financial assurance, operations, and closure;
- Revised O. Reg. 347 General Waste Management sets the standards for disposal sites; the management, tracking and disposal of hazardous and liquid industrial waste; and requirements for landfill gas collection and flaring.

#### **New Landfill Legislation**

Bill 197, which was passed in July 2020, includes a new section that requires the approval of new landfill proposals by all impacted local municipalities. This includes obtaining approval from the municipality within which the landfill is proposed to be constructed, as well as any municipalities located within 3.5 kilometers of any of the property proposed for a landfill. This has implications to public sector and private sector landfill proposals. ***This legislation states***

***that it only applies to new landfill proposals; however some interpret this to mean that landfill expansions are also included. These interpretations remain unclear due to limited available information at this time.***

### **Waste-Free Ontario Act, 2016**

The Waste-Free Ontario Act, 2016 is comprised of the Resource Recovery and Circular Economy Act (RRCEA), 2016 and the Waste Diversion Transition Act, 2016 (WDTA) and sets the policies and rules for waste reduction in Ontario. The intent of the "circular economy" is for products and packaging to be designed such that they can be recovered, reused, recycled and brought back into production instead of going to waste. Under the RRCEA individual producers will become fully responsible for the life cycle of their products and be required to perform waste reduction activities in accordance with provincial policy. Producers will be required to meet mandatory material collection and recycling targets under Individual Producer Responsibility (IPR) using in-house resources or contracted services supplied by Producer Responsibility Organizations (PROs). The Resource Productivity and Recovery Authority (RPRA) established under the RRCEA has responsibility for overseeing the transition to the circular economy and IPR enforcement. Producers must register with and report to RPRA on meeting the targets.

The transfer of responsibility from municipalities to IPR will be phased in to minimize any impacts to current programs as the transition occurs.

1. The Municipal Hazardous or Special Waste Program involves the recycling and proper disposal of materials such as batteries, antifreeze, fertilizers and other hazardous or special materials. Batteries transitioned to producer responsibility on July 1, 2020, while the remaining materials will transition on July 1, 2021. Batteries include single-use and rechargeable batteries weighing 5kg or less.

All battery producers are required to register with RPRA between November 1 and November 30, 2020 and must begin submitting annual reports by April 30, 2021.

2. The Waste Electrical and Electronic Equipment Program deals with recycling and reusing electronics such as televisions, stereos and computers. This program will transition to the producer responsibility on January 1, 2021.
3. The current Blue Box Program provides recycling and reuse of printed paper, packaging and containers such as plastics, glass, aluminum and steel. First Nations and an initial group of municipalities will transition the Blue Box Program to producer responsibility on January 1, 2023. All municipalities across the province will transition by December 31, 2025.

The remaining programs, the Ontario Deposit Return Program (alcoholic and beverage containers) and the Used Tires Program have not been given transition windows; The Ontario



Deposit Return Program has already been established for many years under the producer responsibility model. The last significant change occurred when liquor and wine bottles were added to the program. The Province's Used Tires Program was discontinued on December 31, 2018 and replaced by the Tire Collection Network, which already follows the producer responsibility model.

### **Proposed Individual Producer Responsibility (IPR) Regulation**

On October 19, 2020, the Ontario government released a proposal detailing the transition of the Blue Box Program from municipalities to IPR. The proposal was open for public comment for a 45-day period until December 2, 2020. The stated goal of the transition is to improve recycling abilities province-wide and address various environmental issues present with the current model, such as plastic pollution. The proposal includes that the transition to IPR will not disrupt current blue box services and allows for existing programs to be expanded. This will include allowing additional materials to be collected in the blue box (i.e. single-use items such as straws, stir-sticks, single-use packaging, etc.) and extending the blue box services to locations that do not have access under the current model. Overall, the objective is that under IPR producers will be able to develop more innovative solutions to reduce costs and increase diversion rates. This will aid in improving the environment while also supporting economic growth.

The proposal also states that producers with less than \$2.0 million in annual sales will not be required to register with RPRA or provide collection/management services for their products. Producers with \$2.0 million or more in annual sales will be required to register with RPRA, report and keep records, though they would be exempt from management requirements if they supply less than the following amounts for specific materials:

- 9 tonnes of paper
- 2 tonnes of rigid plastic
- 2 tonnes of flexible plastic
- 1 tonne of glass
- 1 tonne of metal
- 1 tonne of non-alcoholic beverage containers

The Blue Box Program is set to transition to the IPR model between 2023 and 2025 province wide, however registration with RPRA would begin as early as April 1, 2021. The proposed regulations contain a "Blue Box Transition Schedule" which indicates that the City will transition sometime in 2024. The specific date will be assigned when the regulations are finalized. ***A transition date of December 31, 2024 is assumed for the purposes of the cost calculations in this study.***

Once the transition to producer responsibility is implemented, it will be the sole responsibility of producers to manage their products and packaging throughout their respective life cycles

(i.e. from production to disposal). City will no longer be required to operate a recycling program under Environmental Protection Act, O.Reg.101/94, which will become obsolete. However, the City may continue to deliver recycling services to the IC&I sector beyond 2025.

A Transition Plan is currently being reviewed by the RPRA which will, presumably, offer more details on the transition to full producer responsibility. ***The Transition Plan is expected to be available early in 2021.***

### **Food and Organic Waste (Green Bin) Framework**

The Food and Organic Waste Framework, released on April 30, 2018, consists of two complementary components:

- Food and Organic Waste Action Plan, which outlines strategic commitments to be taken by the province to address food and organic waste, and
- Food and Organic Waste Policy Statement, which provides direction on increasing waste reduction and resource recovery of food and organic waste.

Ontario's Food and Organic Waste Policy Statement (2018) states that select municipalities in Southern Ontario are required to develop a food and organic waste collection program with a target of achieving *"50% waste reduction and resource recovery of food and organic waste generated by single-family dwellings in urban settlement areas by 2025"*. The criteria set out in Policy 4(i) and Policy 4(ii) determine the type of program that municipalities must implement as follows:

- Policy 4(i) - Local municipalities with a population greater than 50,000 and population density greater than 300 persons/km<sup>2</sup> must provide curbside green bin collection to single-family dwellings in an urban settlement.
- Policy 4(ii) - Local municipalities with a population greater than 50,000 and a population density lower than 300 persons/km<sup>2</sup> or a population greater than 20,000 but less than 50,000 and a population density of 100 persons/km<sup>2</sup> or more must provide collection options for green bin waste to single-family dwellings in an urban settlement.

Based on Statistics Canada Census Profile, 2016 Census the City's population is approximately 31,053 with a density of 1,388 persons/km<sup>2</sup>. This indicates that the City falls under Policy 4(ii) and exceeds the policy requirements having already implemented the green bin organics curbside collection program in 2020.

### **Policy Amendments**

Amendments to the Policy Statement are being considered to clarify the types of food and organic wastes to be collected while considering the current challenges facing processing facilities. The overall intent to give the public businesses and municipalities clarity on the effort

required to meet the targets and make better decisions about their respective programs. Proposed changes include:

- *efforts **shall** be made with respect to food waste, inedible parts of plants and animals resulting from food preparation and pet food waste*
- *efforts **should** also be made with respect to several types of organic wastes, such as soiled paper and food packaging, coffee filters, tea bags, compostable coffee pods and compostable bags*
- *efforts are **encouraged** to be made with respect to several types of harder to manage organic wastes, such as diapers and pet waste"*

Other changes include requiring continuation of efforts after targets are met, making information available to the public, and encouraging pilot projects and new technology to improve the processing and recovery of compostable materials. The proposed changes are more fully described on the Environmental Registry of Ontario.

## 2.2 Public Sector Accounting Board (PSAB) Requirements

PSAB 3270 Solid Waste Landfill Closure and Post Closure Care Liability sets out the requirements for municipalities to account for and report on the landfill closure and post closure care liability in their annual financial statement submissions (FIRs). The liability calculation must consider the closure and post closure care activities. However, PSAB 3270 recognizes that each landfill site is different and allows flexibility for municipalities to consider their specific situations. PSAB 3280 Asset Retirement Obligations is new and will replace PSAB 3270 with respect to landfill site liability for fiscal years ending on or after April 1, 2021. It applies to public sector entities that *"have a legal obligation to permanently remove a tangible capital asset from service (i.e., retire) and control the tangible capital asset that needs to be retired"*. The requirements under both standards are similar. The difference is that under PSAB 3270 the landfill liability is recognized incrementally as landfill capacity is used whereas under PSAB 3280 the full liability must be recognised. These standards and the liability calculations are presented in a separate report entitled: *City of Stratford Landfill Closure & Post Closure Care Liability Report, January 2021*.

## 2.3 City By-laws

The City regulates waste management activities through By-Law 53-97 which establishes the rules surrounding waste management in the City. It defines the Downtown Core area, sets out the respective responsibilities of the City and residents, enforcement provisions and lists acceptable and banned materials at the landfill site.

### 3 Current Waste Management Services

The waste management services currently provided by the City include:

- Blue Box Materials Collection & Processing
- Green Bin (Organics) Collection & Processing
- Household Hazardous Waste (HHW) Collection
- Other Waste Diversion Services – electronics, backyard composting, scrap metal, textiles, etc.
- Leaf & Yard Waste Collection
- Curbside Waste Collection
- Landfill Disposal of Curbside & IC&I Waste
- Waste & Diversion Materials Drop off at Landfill

The general level of service offered to residents and businesses is summarized in Table 3-1: Current Level of Service.

**Table 3-1 Current Level of Service**

Service	Service Level
<b>Blue Box Material Collection &amp; Processing</b>	<ul style="list-style-type: none"> <li>• Bi-weekly curbside collection from residential and small commercial buildings outside the downtown core</li> <li>• Weekly collection from downtown core</li> <li>• Recyclables must be placed in blue boxes not exceeding 50 lbs each</li> <li>• Unlimited number of containers</li> <li>• Single stream collection</li> <li>• Printed paper and paper packaging, plastics (1-7), metal and glass are acceptable blue box materials. Cartons, aluminium foil, aerosol cans, paint cans and small items below 3" such as yogurt cups have been removed from the program to obtain higher quality for end markets</li> <li>• Set out between 8pm the day before (Downtown Core 5pm) and 8am on collection day</li> <li>• Sale of recycling boxes at City Hall and the landfill site</li> <li>• The City out sources processing of recyclables under the recycling collection and processing contract</li> </ul>
<b>Green Bin (Organics) Collection &amp; Processing</b>	<ul style="list-style-type: none"> <li>• Once per week from residential properties outside the downtown core up to 5 units</li> <li>• Twice per week from downtown core properties (began November 24, 2020)</li> <li>• Multi Residential and IC&amp;I properties will begin to receive service in 2021</li> </ul>
<b>Household Hazardous Waste (HHW) Collection</b>	<ul style="list-style-type: none"> <li>• Residents may drop off HHW on 3 Saturdays per year in May, July and September at no charge</li> <li>• Hours are 8:00am to 2:00 pm</li> </ul>



Service	Service Level
<b>Leaf &amp; Yard Waste Collection:</b>	<ul style="list-style-type: none"> <li>• Curbside collection once per month during April to August, twice in September and October and 3 times in November each year</li> <li>• Christmas tree collection once per year in January</li> <li>• Maximum of 20 bags/ containers/ bundles. Excess must be taken to landfill site</li> <li>• Residents may pick up 1m<sup>3</sup> of finished compost at no charge while supplies last</li> </ul>
<b>Waste Diversion Materials Drop off at Landfill Site:</b>	<ul style="list-style-type: none"> <li>• Materials accepted at no charge for recycling include blue box materials, metal (except white goods), compostable materials, electronics and HHW on designated days. Regular fees apply to quantities above 200kg.</li> </ul>
<b>Other Waste Diversion Services:</b>	<ul style="list-style-type: none"> <li>• White goods are collected at the curb once a month on a pay as you go basis. Tags are \$42 for items with Freon and \$22 for items without Freon. White goods are not accepted at the landfill site.</li> <li>• Residents may drop off electronics, metals (except white goods), blue box materials and compostable materials for free at the landfill site during operating hours</li> <li>• Residents may drop off batteries at City Hall, City Annex, Firehalls, Public Works Yard and Public Library during business hours</li> <li>• Backyard composters available for sale at \$30 each</li> <li>• Textile recycling is available to residents at no charge on a call-in basis</li> <li>• 5 "treasure hunt" weekends are held from May to September when residents can place unwanted items at the curb for reuse/recycling by others.</li> </ul>
<b>Waste Collection</b>	<ul style="list-style-type: none"> <li>• Once per week curbside collection from residential buildings up to 5 units and small commercial buildings</li> <li>• Garbage must be placed in containers or bags or tied in bundles not exceeding 50 lbs each</li> <li>• Tags (\$3.60 each) are required for each piece of garbage so there is no container limit</li> <li>• Tags may be purchased at City Hall and many other convenient locations across the City.</li> <li>• Large items are collected on garbage day at the curb on a pay as you go basis. Tags are required at \$13 each.</li> <li>• Collection from Downtown Core twice per week</li> </ul>
<b>Landfill Waste Disposal of Curbside &amp; IC&amp;I Waste</b>	<ul style="list-style-type: none"> <li>• Residents and IC&amp;I customers may deliver waste for disposal Monday to Friday from 8:00am to 5:00pm and on Saturdays to 8:00 am 12 pm. Packers and similar vehicles are not accepted after 4:00pm.</li> </ul>

Service	Service Level
	<ul style="list-style-type: none"> <li>The tipping fee is \$82.75 per tonne or \$20 minimum for loose loads. Multiples of bag tags (\$4.80 each) are required for smaller containers depending on the waste type and size of container.</li> <li>Only regular garbage from within the City, asbestos handled according to MECP guidelines and contaminated soil (as approved by the City) are disposed at the landfill site.</li> <li>Materials accepted at no charge for recycling include blue box materials, metal (except white goods), compostable materials, electronics and HHW on designated days.</li> </ul>

### 3.1 Waste Collection

The City provides weekly curbside waste collection through a contracted service provider. Small non-residential properties on the curbside collection routes also receive garbage collection. The Downtown Core receives separate collection twice weekly. Generally there are restrictions on the waste materials that are collected as indicated in the City's by-law. These include items such as hazardous waste, construction materials, tires, etc. Tags are required for each item placed at the curb for collection. The number of curbside stops for waste collection, blue box materials collection and organics collection is estimated to be 10,876 in 2021 based information on the number of housing units in the 2017 Development Charges Study.

### 3.2 Waste Disposal

Waste collected through the weekly waste collection program and waste delivered by the IC&I sector and directly by residents, is disposed at the existing landfill site. Approximately 22,000 tonnes of waste was disposed in 2019 and 17,900 tonnes in 2020. Table 3-2 summarizes the waste disposed annually. The 2021 projected tonnes are based on 2021 budget revenue.

**Table 3-2: Annual Waste Disposed (Tonnes)**

Waste Source	2019	2020	2021
Curbside Waste	3,604	3,444	3,930
IC&I and Residential Waste Dropped-off	18,534	14,480	18,411
<b>Total</b>	<b>22,137</b>	<b>17,925</b>	<b>22,341</b>

*Note: 2021 tonnes projected based on 2021 budget*

### 3.3 Recycling Services

Table 3-3 summarizes the waste diverted in 2020.

Curbside collection of blue box materials is provided weekly to residents and small businesses along the routes as noted in Table 3-1. Acceptable materials include newspapers, cardboard (OCC), boxboard, fine paper, magazines, glass and cans, plastics (#1 to #7). The City has a contract with the Bluewater Recycling Association Facility (Bluewater) to process the materials for a fee. The materials collected are transported to Bluewater where they are sorted and shipped to end markets. Some materials have recently been eliminated from the City's blue box program to improve the quality of the final product for end market use as noted in Table 3-1. These changes are based on Bluewater's response to the City's tender call for processing.

The responsibility for blue box materials recycling is expected to be transferred to the producers by the end of 2024. Beginning in 2025, recycling services will no longer be the City's responsibility as noted in Section 2. However, the City may wish to still have a role in providing recycling services to the community depending on the outcome of pending regulations regarding producer responsibility. Assumptions regarding the City's cost beyond 2024 are noted in Section 5.2 Table 5-1 for the purposes of the calculating the cost of service.

### 3.4 Green Bin (Organics) Collection

The City launched the first phase of its Green Bin collection program in 2020 to divert more waste from landfill disposal. Single family homes, duplexes, triplexes and apartments up to five (5) units receive weekly collection of on the same day as garbage and blue box collection. The Downtown Core receives collection twice per week. The program is expected to be expanded to IC&I and multi-residential properties over five (5) units in 2021. Acceptable materials are mainly food waste and other items such as house plant clippings, tissues, etc. These items are a major portion of the waste generated by residents. This program is expected to significantly reduce the amount of waste to be disposed when it is fully implemented and becomes mature. The City uses a contracted service provider for collection and processing of the Green Bin Program materials. No tags are required for this program.

### 3.5 Other Waste Diversion Services

The City also provides a range of other waste diversion services. These include leaf and yard waste collection, backyard composting, electronics collections, white good recycling, textiles, HHW, shingles and scrap metal. Tags are required for white goods and regular tipping fees apply to scrap metal and shingles but no charge for other items. Residents may also deliver the materials to the landfill site either for a fee or free of charge depending on the materials.

### 3.6 Waste Diversion Quantities

The quantity of materials diverted from disposal in 2020 is summarized in Table 3-3. Approximately 13, 500 tonnes of materials were diverted from disposal in 2020. Most (65%) was construction materials. Leaf and yard waste composting (10%) and recycling (17%) are the other main contributors to diversion. The Green Bin (Organics) program began in 2020 and its



role in diversion (6% of total diversion) is expected to increase as the program matures over the next few years.

**Table 3-3: Annual Waste Diverted (Tonnes)**

Material Type	2020	%
Blue Box Materials	2,341	17%
Green Bin (Organics)	818	6%
Compostables	1,317	10%
Electronic Waste	62	0.5%
Textiles	31	0.2%
Scrap Metal	200	1%
Construction Materials	8,751	65%
<b>Total</b>	<b>13,520</b>	<b>100%</b>

## 4 Current Waste Management Costs & Revenues

### 4.1 Annual Operating Costs

The gross annual cost to deliver waste management services are presented in Table 4-1. These are based on the 2021 budget and include operating costs and capital related costs (transfers to reserves) that are included annually as part of the operating budget. The total gross annual cost to deliver waste management services is approximately \$3,859,000 of which approximately \$3,222,000 (83%) is operations related and approximately \$637,000 (17%) capital related (transfers to reserves). The operations are mostly outsourced with contracts accounting for approximately \$2,120,000 (55%) of the gross annual costs. Administration, salaries and benefits cost approximately \$561,400 annually or 15% of the gross annual cost. Leachate treatment is approximately \$180,000 (5%).

The capital related costs are the annual transfers to the Equipment Reserve of \$142,800 (4%) and \$494,660 (13%) to the Landfill Reserve Fund. There are currently no annual contributions to a landfill closure and post closure care reserve to address the long-term landfill liability.

**Table 4-1: Gross Annual Costs (2021 Budget)**

Account Description	Waste Diversion	Waste Collection	Waste Disposal	Total (\$)	% of Annual Gross Costs
<b>OPERATING COSTS</b>					
ADMINISTRATION <sup>1</sup>	82,525	15,706	75,823	174,055	5%
F.T. SALARIES & WAGES			302,617	302,617	8%
F.T. BENEFITS			84,733	84,733	2%
CLOTHING			300	300	0%
MATERIALS	35,000	1,000		36,000	1%
HYDRO			15,000	15,000	0%
WATER / SEWAGE			330	330	0%
SEWAGE- LEACHATE			180,440	180,440	5%
MATERIALS			25,000	25,000	1%
BUILDINGS & EQUIPMENT (EXCLUDES VEHICLES)			5,500	5,500	0%
VEHICLE - FUEL			75,000	75,000	2%
VEHICLE - REPAIRS & EXPENSES			65,000	65,000	2%
SERVICE CONTRACTS	15,000		35,000	50,000	1%
CONSULTANTS			76,500	76,500	2%
CONTRACTORS	1,696,260	331,500	92,500	2,120,260	55%
COURIER/FREIGHT	25	50	25	100	0%
RENTAL OF MACHINERY & EQUIPMENT			10,000	10,000	0%
POSTAGE	25			25	0%
ADVERTISING	1,000			1,000	0%
<b>Subtotal Operating Costs</b>	<b>1,829,835</b>	<b>348,256</b>	<b>1,043,768</b>	<b>3,221,860</b>	<b>83%</b>
<b>CAPITAL RELATED COSTS</b>					
TRANSFER TO EQUIPMENT RESERVE			142,800	142,800	4%
TRANSFER TO LANDFILL RESERVE FUND			494,660	494,660	13%
TRANSFER TO LANDFILL CLOSURE & POST CLOSURE CARE RESERVE FUND			0	0	0%
<b>Subtotal Capital Related Costs</b>	<b>0</b>		<b>637,460</b>	<b>637,460</b>	<b>17%</b>
<b>Total GROSS Cost</b>	<b>1,829,835</b>	<b>348,256</b>	<b>1,681,228</b>	<b>3,859,320</b>	<b>100%</b>
<b>NON-RATE REVENUES</b>					
SALES	3,000	3,000		6,000	
ONTARIO GRANTS	275,000			275,000	
RECOVERABLES (Scrap Metal & Cardboard at Landfill)	35,000			35,000	
<b>Subtotal Non-Rate Revenues</b>	<b>313,000</b>	<b>3,000</b>	<b>0</b>	<b>316,000</b>	
<b>NET COST TO BE RECOVERED FROM RATES</b>	<b>1,516,835</b>	<b>345,256</b>	<b>1,681,228</b>	<b>3,543,320</b>	
<b>% of Annual Net Costs</b>	<b>43%</b>	<b>10%</b>	<b>47%</b>	<b>100%</b>	

1. Administration Budget allocated to programs based on their respective budgets

The contract costs of \$2,120,260 are for the services listed in Table 4-2. Waste diversion accounts for 80% of the contracts, waste collection 16% and disposal 4% (mainly for landfill site monitoring). The blue box program which includes collection processing and sale of materials is 46% the contract costs at \$979,200. The Green Bin (Organics) Program accounts for 23% of the annual costs. The other diversion contracts account for approximately 11% of the contract costs.

**Table 4-2: Breakdown of Contract Costs (2021 Budget)**

Contract Service	Gross Annual Cost (\$)	%
Waste Diversion		
Green Bin Collection & Processing	495,720	23%
Brush Grinding	15,300	1%
Bi-weekly Blue Box Collection	540,600	25%
Recycling Processing	438,600	21%
Leaf and Yard Waste Collection	63,240	3%
HHW Special Days	81,600	4%
Shingles Collection at Landfill	61,200	3%
Subtotal Waste Diversion	1,696,260	80%
Waste Collection	331,500	16%
Waste Disposal	92,500	4%
<b>Total Contracts</b>	<b>2,120,260</b>	<b>100%</b>

## 4.2 Annual Revenues

The annual non-rate revenue (i.e. not including bag tag fees and landfill tipping fees) is approximately \$316,000. This includes revenue generated from operations and ongoing provincial funding as shown in Table 4-1. These revenues vary depending on the amount of materials recycled. The Provincial grant is approximately 87% of the revenue.

## 4.3 Net Annual Costs

The net annual cost of waste management to be recovered from the landfill tipping fees, bag tag fees and the tax subsidy based on the 2021 budget is approximately \$3,543,000. This indicates that approximately 8.2% of the gross annual costs are offset by revenue from operations and grants. Approximately 43% (\$1,516,800) of the net cost is for waste diversion, 10% (\$345,000) and 47% (\$1,681,000) is for waste disposal. The City's 2021 budget indicates that the revenues required from the rates and tax subsidy to offset the net costs are:

Landfill Tipping Fees - \$1,848,750

Bag Tag Fees - \$ 783,400

Tax Subsidy - \$ 911,170

Total Rate Revenue - \$3,543,320

## 5 Future Waste Management Costs

The current waste management costs reflect the current services levels and regulatory environment. However higher disposal costs are expected in the future due to address the current liability of approximately by 2046 related to closure and post closure care of the existing landfill site and secure future disposal capacity. The cost of disposal would depend on the approach taken by the City to provide waste disposal capacity beyond 2046 and funding for closure and post closure care of the existing landfill site. There are also regulatory changes to waste diversion services that would shift the responsibility for recycling and other diversion materials from the City to the producers by 2024. This would reduce the cost to be incurred by the City for waste diversion. Costs related to asset renewal and replacement also needs to be considered.

### 5.1 Factors Influencing Future Costs

There are many factors that would have an impact on the future cost of waste management services.

- Regulatory Requirements. Compliance with all regulatory requirements and conditions of facility licences must be maintained. This would include ensuring that any remediation work required as a result of routine inspections by the Ministry of Environment Conservation and Parks (MECP) is implemented as needed.
- Customer Growth. Management of additional waste generated by new customers due to growth. Curbside collection costs are expected to increase as the number of homes increase requiring more collection stops.
- New Waste Disposal Capacity. The cost of new waste disposal capacity would depend on the option pursued by the City. These include extending the use of the existing landfill site, seeking a new City-owned landfill site or accessing available private sector waste disposal capacity through a contract. Accordingly waste disposal costs are expected to increase significantly to secure disposal capacity beyond closure of the current landfill site.
- Landfill Liability. This relates to the closure and post closure care of the existing landfill site and ensuring that funding would be available to undertake these activities. This is currently an unfunded liability that represents a significant future cost that will be incurred when revenues from tipping fees would no longer be available.
- Recycling Changes. Provincial legislation and regulations will change the structure of the recycling program by transferring the responsibility for recycling from municipalities to the producers of packaging. This is intended encourage the design and use of more recyclable packaging and be phased in between 2023 and 2025 (2024 for the City). Similar transitions are also anticipated for Household Hazardous Waste (HHW) and electronics recycling between July 2020 and July 2021. The eventual role that municipalities will play in the transitioning is yet to be determined. There is the possibility that municipalities may offer their services and facilities to producers on a cost recovery basis through a bidding process.



The change in responsibility is expected to lower or remove the cost to the City for recycling. However until the details are known it is difficult to estimate the extent to which costs would decrease.

- **Organics Collection.** The Food and Organic Waste Policy Statement, issued under section 11 of the RRCEA, 2016, requires the City to achieve 50% organics waste reduction in urban areas by 2025. The City has already implemented a Green Bin (Organics) curbside collection program which started in 2020 and will be expanded in 2021 to the IC&I sector. The collection and processing costs of organics are a major increase to the level of service resulting in much higher annual costs.
- **Customer Expectations.** Climate change and environmental impacts are current issues that are important to customers. Although there is pressure to deliver more for less, there is a growing recognition and acceptance that more environmentally friendly programs are needed. Customers have also become accustomed to the current level of service particularly regarding the convenience of curbside collection and drop-off at the landfill site for various materials.
- **Asset Renewal and Replacement.** The existing assets will require capital investments in the future to maintain their current functionality and level of service. These are mainly equipment replacement related to landfill gas system and monitoring wells and will form part of the overall capital program related to waste management
- **Contract Services Market Pricing.** The cost of services delivered by contractors accounts for approximately 55% of the City's annual costs. These costs are expected to rise by the annual rate of inflation as a minimum as reported by Statistics Canada. The cost of construction is also expected to increase by the annual rate of capital inflation.

## 5.2 Future Cost Assumptions

The full cost of managing the City's solid waste system takes into account all factors that have a bearing on the level of effort and costs required to at least maintain the current service levels offered to customers and environmental stewardship over the long-term. These include both current and future considerations that would influence the cost of managing the system. These factors would have different implications depending on the type of activity. For example, capital costs for the landfill site can be significant but zero for collection services which are contracted operational costs.

*For the purposes of this assessment it was assumed that the current levels of service would be maintained over the period 2021 to 2046 (Study Period) inclusive without any major changes to the services offered and the City's current and future obligations under the status quo would apply. However, high level assumptions and estimates are included to indicate the cost changes that may occur due to the shift in recycling responsibility from the City to packaging producers and the current organics program implemented in 2020. The main assumptions for the status quo are:*

- Continuing the current recycling collection and processing program at existing levels of service until the end of 2024 after which responsibility will rest with the producers. However, it is assumed that the City may wish to have a role beyond 2024.
- Green Bin (Organics) waste collection will continue indefinitely at 2021 service levels but participation levels would increase with time.
- Current waste collection to continue indefinitely.
- Waste disposal at the City's Landfill Site would end in 2046.
- Waste disposal capacity beyond 2046 would be through extended use of the existing landfill site and the related costs would be either partially or fully debt financed at that time. The balance in the Landfill Reserve Fund at that time may be used to offset any debt requirements.
- Establishing a dedicated reserve fund to fully address the landfill liability related to closure and post closure care by the time of closure in 2046. This is based on the user pay principle whereby the users of the landfill (beneficiaries) would contribute the funding to cover the costs. The liability calculation is presented in the report: *City of Stratford Landfill Closure & Post Closure Care Liability Report, January 2021*.

The main drivers of cost and the assumptions made in quantifying costs are included in Table 5-1.

**Table 5-1: Future Cost Assumptions**

Waste Management Service	Assumptions Regarding Future Costs
Waste Collection	<ul style="list-style-type: none"> <li>• There would be no significant change in the level of service. i.e. current collection frequency etc.</li> <li>• The 2021 Operating budget reflects these costs with the following future increases: <ul style="list-style-type: none"> <li>- Annual inflationary increases of 2%</li> <li>- 10,876 stops in 2021 with an annual increase of 71 stops based on DC Study household growth projections</li> </ul> </li> </ul>
Landfill Waste Disposal	<ul style="list-style-type: none"> <li>• There would be no significant change in the level of service.</li> <li>• The 2021 Operating Budget reflects operating costs with annual inflationary increases of 2% to the year of closure (2046)</li> <li>• The Landfill Site would close at the end of 2046</li> <li>• Capital costs related to the landfill site would be as noted in Table 6-1 up to the time of closure based on capital inflation of 3%.</li> <li>• All capital will be funded from the reserve fund. The exception is the new Landfill capacity required from 2047 onward at a cost of approximately \$19 million. It is assumed for now that the cost of future capacity will be partially debt financed and any reserve balance would be used to offset debt needs.</li> <li>• The landfill closure and post closure care would be approximately \$18,108,000 as of January 1, 2047 based on a 50-year post closure period.</li> </ul>

Waste Management Service	Assumptions Regarding Future Costs
	<ul style="list-style-type: none"> <li>Annual contributions of approximately \$566,000 between 2022 and 2046 inclusive into dedicated landfill site closure and post closure care reserve fund</li> <li>Annual contributions to the disposal capital reserve will generally be at the same level as the 2021 budget (approximately \$500,000). Adjustments will be made as needed to maintain sustainable funding of projects and account for unforeseen costs</li> <li>No annual contributions to an operating reserve. The capital reserve fund may be used to offset any major operational deficits if required.</li> <li>Reserves would earn interest at 1.5%</li> <li>2021 waste disposal of 22,341 tonnes (3,930 residential; 18,411 IC&amp;I) to increase annually by approximately 0.1% due to customer growth.</li> </ul>
Blue Box Recycling	<ul style="list-style-type: none"> <li>The current level of service would continue i.e. collection frequency, materials collected, etc.</li> <li>The City would continue to be responsible for recycling until the end of 2024 after which the producers will be responsible</li> <li>The City may wish to continue to have a role in recycling beyond 2024. <u>An allowance of 20% of the 2024 costs is assumed for 2025 onward</u></li> <li>The 2021 materials capture rate would apply over the period</li> <li>2021 budget is reflective of operating costs and revenues inflated at 2% per year over the period.</li> <li>Blue box curbside collection cost would increase by 2% inflation and the increase in the number of stops in the year</li> <li>Recycling processing costs would increase by 2% inflation</li> <li>Recycling will continue to be provided through contracted service providers.</li> </ul>
Green Bin (Organics) Collection	<ul style="list-style-type: none"> <li>The current level of service would be expanded to the IC&amp;I sector and multi-residential buildings over 5 units in 2021</li> <li>The participation rate and materials capture rate increase each year as the program matures to achieve an increase in diversion by 5% per year from 2022 to 2025 inclusive</li> <li>2021 budget is reflective of operating costs and revenues inflated at 2% per year over the period.</li> <li>Services will continue to be contracted out.</li> </ul>
Other Waste Diversion	<ul style="list-style-type: none"> <li>The current level of service would continue. The City may consider implementing a wood waste diversion program. If implemented, then the cost will be additional to the cost of service calculated in this study.</li> <li>The 2021 materials capture rate would apply over the period</li> <li>2021 budget is reflective of operating costs and revenues inflated at 2% per year over the period.</li> <li>Services will continue to be contracted out.</li> </ul>
Administration	<ul style="list-style-type: none"> <li>Administration costs would be based on 2021 budget inflated at 2% annually.</li> <li>Administration cost would be allocated to Diversion, Waste Collection and Waste Disposal based on their respective 2021 budget amounts.</li> </ul>

## 5.3 Data Sources

The primary sources of data used to prepare the cost of service are listed in Table 5-2. In addition, information was also developed from discussions with and input from the City's staff, as required.

**Table 5-2: Rate Study Data Sources**

Item	Data Source
O&M and Capital Costs	<ul style="list-style-type: none"> <li>City's 2021 Budget</li> <li>City's 2021- 2030 Capital Budget Forecast</li> </ul>
Non-Rate Revenues	<ul style="list-style-type: none"> <li>City's 2021 Operating Budget</li> </ul>
Asset Life Expectancy	<ul style="list-style-type: none"> <li>The City's PSAB 3150 Asset Registry</li> </ul>
Asset Replacement Costs	<ul style="list-style-type: none"> <li>The City's PSAB 3150 Asset Registry</li> <li>City's 2021 Capital Budget and 10-Year Capital Forecast</li> </ul>
Customer Growth	<ul style="list-style-type: none"> <li>City's 2017 Development Charges Study</li> <li>Statistics Canada 2016 Census Data</li> <li>City Records on Collection Stops</li> </ul>
Non-Rate Revenues	<ul style="list-style-type: none"> <li>City's 2021 Operating Budget</li> </ul>
Capital Financing	<ul style="list-style-type: none"> <li>City's current use of reserves</li> </ul>
Waste Diversion & Disposal Quantities	<ul style="list-style-type: none"> <li>City's 2019 &amp; 2020 Historical Records</li> </ul>

## 5.4 Guiding Principles

The guiding principles used to develop the full cost of waste management services and rates are noted below.

- Existing Levels of Service.** The current levels of service would continue indefinitely
- Landfill Liability Fairness & Equity.** The funding to offset this liability would be recovered from existing users of the landfill who would benefit from its use site before it closes in 2046 i.e. user pay principle
- Full Cost of Service.** Ensuring that all costs including asset life cycle costs are accounted for over the long-term (2021-2046 inclusive) to obtain the full cost of service.
- Capital Financing.** All capital projects will be funded through the waste disposal reserve. At this time debt will only be considered to finance part or all of the funds required to secure future landfill capacity after closure of the existing landfill site.
- Rate Structure.** The current rate structure which consists of landfill tipping fees and bag tags will continue.
- Affordability.** The tax subsidy will continue to keep bag tag fees affordable and landfill tipping fees competitive
- Transparency.** Cost of service calculations and assumptions must be transparent and easily explained.



## 6 Full Cost of Service

### 6.1 Capital Costs

Capital costs for waste collection and waste diversion are not anticipated in the future because these services will continue to be fully outsourced. Therefore all future capital costs are disposal related. The waste disposal capital budget requirements until site closure in 2046 are presented in Appendix A. This reflects the projects identified in the City's 10-year Capital Budget Forecast, future cell development beyond the 10-year period and the replacement of existing disposal assets based on the asset inventory and life expectancies and age. The capital needs beyond 2046 for assets such as the landfill gas and Leachate collection systems are included in the annual requirements to fund closure and post closure care costs as noted in the report: *City of Stratford Landfill Closure & Post Closure Care Liability Report, January 2021*. Table 6-1 shows the annual capital requirements to 2030. The total projected capital requirement between 2021 and 2030 is estimated to be approximately \$4.75 million. This includes an estimated \$1.38 million for asset replacement or renewal for the landfill site.

**Table 6-1: 2021-2030 Capital Needs (10 years)**

Capital Project	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<i>City's Capital Program</i>										
Landfill Methane expansion	\$0	\$0	\$0	\$0	\$0	\$506,479	\$0	\$0	\$0	\$0
New Landfill Cell	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$1,507,056	\$0	\$0	\$0
Landfill Buffer	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Subtotal</i>	\$1,350,000	\$0	\$0	\$0	\$0	\$506,479	\$1,507,056	\$0	\$0	\$0
<i>Asset Management Needs</i>										
Heavy Trucks/Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$1,344,758	\$0	\$0	\$0
Leachate System	\$0	\$0	\$0	\$0	\$0	\$0	\$12,752	\$0	\$0	\$0
Monitoring Wells	\$0	\$4,500	\$0	\$4,774	\$0	\$5,065	\$0	\$5,373	\$0	\$5,700
<i>Subtotal</i>	\$0	\$4,500	\$0	\$4,774	\$0	\$5,065	\$1,357,510	\$5,373	\$0	\$5,700
<b>Total</b>	\$1,350,000	\$4,500	\$0	\$4,774	\$0	\$511,544	\$2,864,566	\$5,373	\$0	\$5,700

Capital financing will be through the Capital Waste Management Reserve Fund. Equipment replacement will be funded from the City's Fleet Reserve Fund. Other sources of financing such as provincial and/ or federal grants are unpredictable and are therefore not considered over the long-term. However the City is encouraged to aggressively pursue these funding opportunities as they become available to reduce the overall amount to be funded from the Capital Waste Management Reserve Fund. Financing for closure and post closure care will be from the Landfill Closure Reserve Fund.

### 6.2 Reserve Requirements

The City has two (2) discretionary waste disposal reserve funds which will continue to be required:

- Capital Waste Management Reserve Fund
- Landfill Closure Reserve Fund

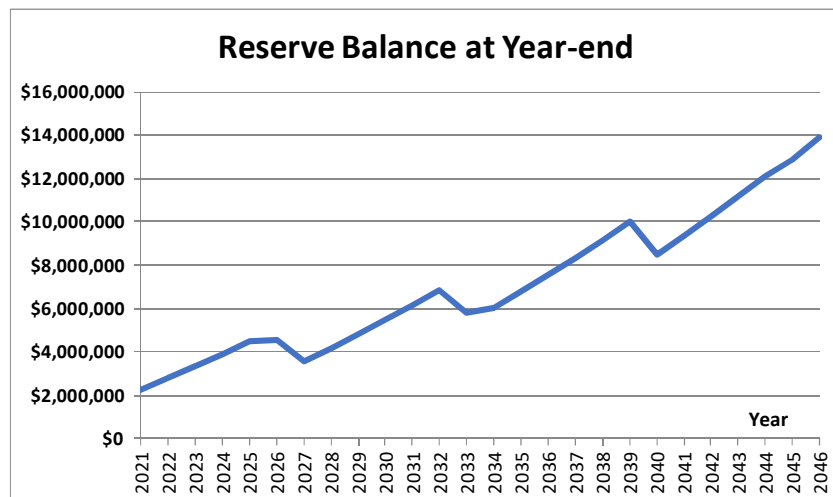
These reserves are the funding sources for capital projects all of which would be landfill related and the closure and post closure care costs beyond 2046. Annual contributions from the operating budget would be required to ensure sufficient funding for all future projects and emergency situations over time. Appendix A and Appendix B show the projected continuity schedules for these reserves. They show the transfers to and from each reserve and the opening and closing balances. The reserves are assumed to earn annual interest of 1.5% on balances.

There are also annual transfers to the discretionary Fleet Reserve Fund. This reserve funds the purchase of vehicles and equipment for all departments and is not a dedicated waste management reserve. This annual contribution of \$142,800 in 2021 will increase by inflation each year. Typically an Operating Reserve would also be established to stabilize annual funding requirements from rates and taxes. However in the City's case the capital reserve may be used to stabilize rates and tax subsidies if needed so a separate operating reserve is not required.

#### Capital Waste Management Reserve Fund

The Capital Waste Management Reserve Fund has a 2021 opening balance of approximately \$3,096,800 and will be the source of financing for future projects. Appendix A shows the projected continuity schedule for this reserve. This requires that annual contributions be made to the reserve to ensure that sufficient funds are available over the long-term for all projects including asset replacement/ rehabilitation requirements. These annual contributions (to be raised through the operations budget each year) are projected to be \$500,000 from 2022 to 2026 gradually increasing to \$810,000 by 2046. It is recommended that the reserve requirements be re-assessed every five (5) years to ensure that it would continue to support the City's capital project needs over the long-term. The annual reserve balance is projected to be approximately \$2.3 million at the end of 2021 and approximately \$13.9 million by 2046 when the landfill site closes. These funds may be used to partially finance future disposal capacity at that time.

**Figure 6-1: Capital Waste Management Reserve Fund Balance (2021-2046)**

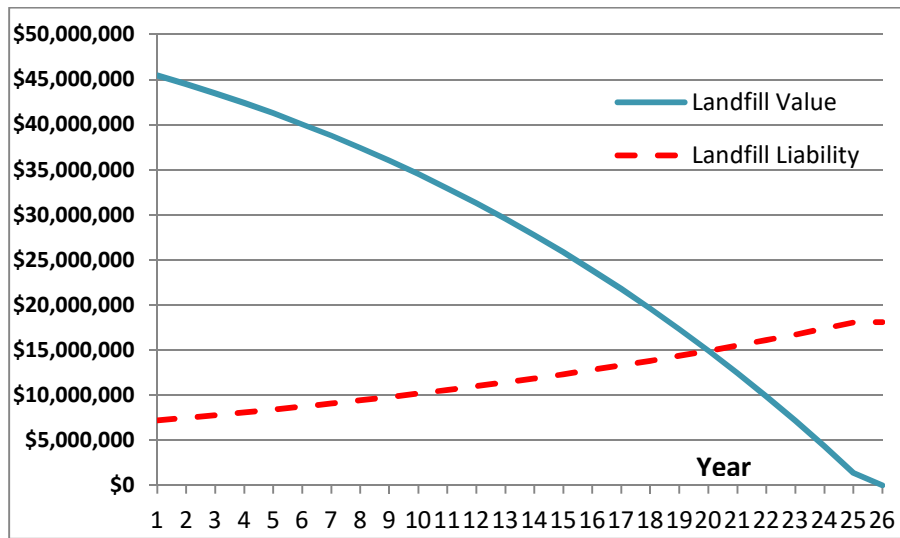


### Landfill Closure Reserve Fund

There is an unfunded liability related to landfill closure and post closure care. This is estimated to be \$7.3 million at the beginning of 2022 increasing to \$18.1 million by the time of landfill site closure in 2046 as shown in Figure 7-2. The Landfill Closure Reserve Fund is intended to be a restricted reserve for the sole purpose of funding projects and costs related to closure and post closure activities at the existing landfill site and reducing the liability. Appendix B shows the projected continuity schedule for this reserve. The 2021 opening balance is \$508,576 and the 2046 target balance is equivalent to the estimated 2046 liability of \$18.1 million. The annual contributions are estimated to be approximately \$566,000 from 2022 to 2046 inclusive. Assuming interest will be earned at 1.5%, these contributions will achieve a balance of \$17.9 million by 2046 which is close to the target balance. The intent is to fully fund the reserve by the time of landfill closure for fairness and equity purposes such that the current users who benefit from use of the landfill would pay for its closure and post care closure costs. This is consistent with the concept of user pay. When the landfill closes the opportunity to recover these costs from tipping fee revenues will no longer exist. The annual contribution is equivalent to a 16% increase in the in the annual cost of service in 2022 compared to 2021 which is significant. Therefore for affordability reasons the rate options include phasing in the annual reserve contribution amounts between 2022 and 2026 inclusive or deferring the contributions until 2025 when the cost for recycling would be reduced. However this will result in a shortfall in the funds available to pay for closure and post closure care work over a 50-year post closure period. The annual contributions and the interest earned on the annual balances are projected to generate between \$15.5 million and \$16.3 million by the end of 2046 depending on the option. The shortfall is estimated to be approximately \$1.8 to \$2.6 million. The City may wish to recover this shortfall through other means including transfers from the Capital Waste Management Reserve Fund or property taxes to ensure that sufficient funding is available to cover all closure and post closure. The financial assurance required to address closure and post closure care obligations is expected to be a condition of approval should the City decide to extend the use of the existing landfill site or pursue a new landfill site.

The value of the remaining capacity at the landfill site by the end of 2021 is estimated to be approximately \$45.4 million. This is a high level estimate that is based on the remaining capacity of approximately 549,400 tonnes and the 2021 tipping fee of \$82.75 per tonne which does not include all costs associated with closure and post closure care. However, as noted in Figure 6-2 this is a diminishing asset that would decline to zero by closure in 2046 when the benefits of disposal space and tipping fees to generate revenue would be no longer available. However the liability at that time would be approximately \$18.1 million.

**Figure 6-2: Landfill Value & Liability (2021-2046)**



### 6.3 Debt Related Costs

There is no existing debt related to the City's waste disposal system. Funding for all future capital projects will also be from the reserve. However the City may wish to consider debt financing to secure future landfill capacity beyond 2046 to supplement the balance available from the capital reserve.

### 6.4 Annual Cost of Service

The annual cost of service is presented in Appendix C. This shows the projected net cost of service in each year over the period 2021 to 2046 including reserve contributions, the projected operating revenues and the resulting net cost to be recovered from rates and taxes. Table 6-2 summarizes the information for the 6-year period 2021 to 2026 inclusive.

The net cost is projected to increase to approximately \$4,172,682 in 2022 from \$3,543,320 in 2021. This is an 18% increase in the net cost of service that is driven by starting contributions to the Landfill Closure Reserve in 2022. This accounts for most of the increase (approximately 16%) with the remainder due to inflation.

In 2023 and 2024 the net annual costs are projected to increase by approximately 1.5% annually to \$4,298,187 then decline by approximately 11.4% in 2025 to \$3,808,407. The decrease is due to the projected transfer of responsibility for recycling from the City to the producers at the end of 2024. The net cost of service is projected to increase by approximately 1.4% in 2026 and 2 % annually from 2027 onward.



**Table 6-2: Cost of Service (2021 – 2026)**

Cost Description	2021	2022	2023	2024	2025	2026
<b>Operating Costs</b>						
Waste Diversion Gross Operating Costs	\$1,829,835	\$1,866,432	\$1,903,761	\$1,941,836	\$1,128,582	\$1,151,154
Waste Collection Gross Operating Costs	\$348,256	\$355,221	\$362,326	\$369,572	\$376,964	\$384,503
Waste Disposal Gross Operating Costs	\$1,043,768	\$1,064,644	\$1,085,936	\$1,107,655	\$1,129,808	\$1,152,404
<b>Capital Related Costs</b>						
Transfers to Capital Waste Management Reserve Fund	\$494,660	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Transfers to Fleet Reserve Fund	\$142,800	\$145,656	\$148,569	\$151,541	\$154,571	\$157,663
Debt Servicing	\$0	\$0	\$0	\$0	\$0	\$0
<b>Landfill Closure &amp; Post Closure Care Costs</b>						
Transfers to Landfill Closure Reserve Fund	\$0	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109
<b>COST OF SERVICE (GROSS)</b>	<b>\$3,859,320</b>	<b>\$4,498,062</b>	<b>\$4,566,701</b>	<b>\$4,636,713</b>	<b>\$3,856,034</b>	<b>\$3,911,833</b>
<b>Total Program Revenues</b>	<b>\$316,000</b>	<b>\$325,380</b>	<b>\$331,888</b>	<b>\$338,525</b>	<b>\$47,627</b>	<b>\$48,580</b>
<b>COST OF SERVICE (NET) TO BE RECOVERED</b>	<b>\$3,543,320</b>	<b>\$4,172,682</b>	<b>\$4,234,813</b>	<b>\$4,298,187</b>	<b>\$3,808,407</b>	<b>\$3,863,253</b>
<b>Annual Percent Change</b>		<b>17.8%</b>	<b>1.5%</b>	<b>1.5%</b>	<b>-11.4%</b>	<b>1.4%</b>

## 7 Rate Calculations

### 7.1 Current Rates

The 2021 Landfill Tipping Fee is \$82.75 per tonne and the Bag Tag Fee is \$3.60 per tag. The revenues expected to be generated by these rates in 2021 are \$1,848,750 in tipping fees and \$783,400 in bag tag fees totalling \$2,632,150. The net cost of service is \$ 3,543,320 so there is expected to be a revenue shortfall of \$911,170 which will be covered through a tax subsidy. It is assumed that the current rate structure will continue indefinitely including the tax subsidy to keep the bag tag fees at affordable levels and the landfill tipping fees competitive.

### 7.2 Rate Options

Two (2) rate options are presented to recover the cost of service over the study period based on the guiding principles outlined in Section 5.4. Each option includes bag tag fees, landfill tipping fees and a tax subsidy. The main difference between the options is phasing in the annual contribution amounts to the Landfill Closure Reserve under Option 2. The rate projections for each option over the study period are provided in Appendix D.

#### Option 1 - Full Contributions to the Landfill Closure Reserve Fund Starting in 2022

- The landfill closure and post closure care contributions of approximately \$566,000 per year begin immediately in 2022. This would result in a reserve balance of \$17.9 million by the end of 2046. This projected balance is close to the full amount of \$18.1 million estimated to be required.
- The bag tag fee increases are set at 2% per year for affordability
- The tax subsidy offsets the remaining costs not recovered from the landfill tipping fee and bag tag fee revenues

**Option 2 - Phasing in the Landfill Closure Reserve contributions over 4 years (2022 to 2025)**

Same as Option 1 except that lower, more affordable annual contributions would be made to the Landfill Closure Reserve Fund by phasing in the annual contributions over 4 years. Contributions would start in 2022 and increase annually until 2025 when the full contributions would begin:

- ✓ 2022 - 5% of required annual contribution of \$566,000
- ✓ 2023 - 15%
- ✓ 2024 - 30%
- ✓ 2025 - 100%

### 7.3 Rate Options Analysis

Table 7-1 summarizes the rates, tax subsidy and annual increases under each option. Appendix D shows the rate and tax subsidy projections to 2046.

**Table 7-1: Rates & Tax Subsidy (2021-2026)**

Rate Option	2021	2022	2023	2024	2025	2026
<i>Option 1 - Full Landfill Closure Reserve Fund Contributions start in 2022</i>						
Landfill Tipping Fees	\$82.75	102.55	103.53	104.53	105.54	106.58
Annual Increase (%)		23.9%	1.0%	1.0%	1.0%	1.0%
Bag Tag Fees	\$3.60	\$3.67	\$3.75	\$3.82	\$3.90	\$3.97
Annual Increase (%)		2%	2%	2%	2%	2%
Tax Subsidy	\$911,170	\$1,095,196	\$1,111,929	\$1,128,893	\$591,669	\$598,015
Annual Increase (%)		20.2%	1.5%	1.5%	-47.6%	1.1%
<i>Option 2 - Phase In (2022 - 2025) Landfill Closure Reserve Fund Contributions</i>						
Landfill Tipping Fees	\$82.75	85.23	88.64	93.07	94.00	94.94
Annual Increase (%)		3%	4%	5%	1%	1%
Bag Tag Fees	\$3.60	\$3.67	\$3.75	\$3.82	\$3.86	\$3.90
Annual Increase (%)		2%	2%	2%	1%	1%
Tax Subsidy	\$911,170	\$941,260	\$961,069	\$987,014	\$856,807	\$874,389
Annual Increase (%)		3.3%	2.1%	2.7%	-13%	2%

**Under Option 1**

- The landfill tipping fee would increase from \$82.75 to \$102.55 in 2022 (24% increase) then 1% to 2% afterwards
- The bag tag fees would increase by 2% per year to 2046.
- The shortfall after revenues from tags and tipping fees would be made up by the tax subsidy. This would be approximately \$1.1 million (approximately a 21% increase) in 2022, 2023 and 2024 but then drop to approximately \$592,000 in 2025 (48% decrease)
- The reduction in the tax subsidy from 2024 to 2025 due to the transfer of recycling responsibility to producers in 2024. The assumption is that the City would continue to incur 20% of the 2024 recycling costs after the transfer for recycling services not offered

by the producers. The regulation defining the scope of producer responsibility is pending.

- The required tax subsidy would increase gradually from approximately \$600,000 in 2026 to \$725,000 by 2046 which is an annual increase of approximately 1%.

Option 1 would result in significantly high increases to the landfill tipping fee and the tax subsidy in 2022. However the tax subsidy would be well below the current (2021) amount of \$911,000 after 2024.

### Under Option 2

- The landfill tipping fee increase to \$85.23 in 2022 (3% increase) followed by 4% and 5% increases in 2023 and 2024 respectively. Increases of 1% to 2% are required from 2025 onward.
- The bag tag fees increase by 2% per year to 2046 (same as Option1)
- The required tax subsidy in 2022 is approximately \$941,000 (approximately a 3.3% increase from 2021) followed by 2.1% and 2.7% increases in 2023 and 2024 respectively
- There will also be a reduction in the tax subsidy from 2024 to 2025 of approximately 13% due to the transfer of recycling responsibility to producers in 2024. The subsidy required in 2025 is approximately \$857,000 down from \$987,000 in 2024.
- The required tax subsidy would range from \$874,000 to \$914,000 between 2026 and 2046 with the annual increases declining from approximately 0.9% in 2027 to decreases of approximately 0.1% in 2032. Decreases of 0.1% to 0.7% are projected from 2033 to 2046.
- The reserve balance at the time of landfill closure in 2046 would be approximately \$15.9 million (i.e. \$2.1 million below the target balance of \$18.1 million). However, if necessary, this shortfall could be offset at that time by a transfer from the Capital Waste Management Reserve Fund which is projected to have a balance of \$13.9 million by 2046.

Option 2 would result in more manageable increases to the landfill tipping fee compared to Option 1 over the next few years. These increases support maintaining competitive rates while providing additional required revenues. The tax subsidy would also remain almost the same or below the current (2021) amount of approximately \$911,000 over the period to 2046.

## 8 Conclusions and Recommendations

### 8.1 Conclusions

Based on the information reviewed and analyses completed, the following are the main conclusions regarding the current (2021) cost of service:

1. The gross operating costs of waste diversion, waste collection and waste disposal are projected to be approximately \$1,829,835, \$348,256 and \$1,043,768 in 2021 based on the approved 2021 budget.
2. Approximately \$2,120,260 (55%) of the gross operating costs is for contracted services most of which is related to waste diversion (\$1,696,260) and waste collection (\$331,500).
3. 2021 capital related costs include transfers to the Fleet Reserve Fund and Capital Waste Management Reserve Fund of \$142,800 and \$492,660 respectively. Both contributions are related to waste disposal services.
4. The non-rate revenues include approximately \$313,000 (including grants and sale of recyclables) for waste diversion and \$3000 for waste collection. There is no operating revenue related to disposal (i.e. other than tipping fees).
5. The net cost of service to be recovered from the landfill tipping fees, bag tag fees and tax subsidy is \$3,543,320 based on the 2021 budget. This is broken down as follows:
  - Waste Diversion: \$1,516,835 (43%)
  - Waste Collection: \$ 345,256 (10%)
  - Waste Disposal: \$1,681,228 (47%)
6. Capital expenditures of \$1,350,000 for a new landfill cell and buffer area are required in 2021
7. The Landfill Closure Reserve Fund has a balance of \$508,576 but there are no annual contributions being made. Therefore the current waste disposal system costs do not represent the full cost of service.
8. The current cost of service is for waste collection, blue box collection and organics collection from approximately 10,876 properties and disposal of approximately 22,341 tonnes of waste.

The following are the main conclusions regarding the future (2022-2046) cost of service:

9. Approximately \$10,170,000 in capital expenditures are required between 2022 and 2046 for new landfill cell developments, landfill gas system expansion and asset replacements/renewals (monitoring wells, equipment, etc.)
10. Annual transfers of \$500,000 to the Capital Waste Management Reserve Fund are required until 2026 with gradual increases in subsequent years to \$810,000 by 2046 to



fully fund the capital program and have partial funding available to secure future disposal capacity.

11. There is no existing or future debt to be incurred for waste diversion capital projects.
12. The City's liability for closure and post closure care of the landfill site is currently unfunded and not considered in the annual costs. This cost is estimated to be approximately \$566,000 per year for the period 2022 to 2046 at which time the liability will be fully funded. The annual reserve fund contribution, if fully implemented in 2022 would be an increase of approximately 16% over the 2021 net cost of service.
13. The net cost of waste management is projected to increase significantly from \$3,543,320 in 2021 to \$4,172,682 in 2022. This is an increase of approximately 18% most of which is driven by the contribution to the Landfill Closure Reserve Fund.
14. The net cost of waste management is projected to increase by 1.5 % in 2023 and 2024. However in 2025 the cost of service is projected to decline by 11.4 % due to the transfer of recycling responsibility from the City to the producers in 2024. This assumes that the City would continue to have a role in recycling at a cost equal to 20% of the 2024 recycling costs. Increases of approximately 1.7% to 2% are projected between 2026 and 2046. If the City were to implement a wood waste diversion program then those costs would be extra.

The following are the main conclusions regarding the Rate Options:

15. Under Rate Option 1 the landfill tipping fee would increase significantly from \$82.75 per tonne to \$102.55 in 2022 (i.e. a 24% increase). Rate Option 2 would result in a much lower increase of approximately 3% to \$85.23 per tonne. The annual rate increases beyond 2025 are in the 1% to 2% range under both options.
16. The bag tag fees would increase by 2% per year to 2046 under both rate options.
17. A tax subsidy of approximately \$1.1 million (i.e. a 21% increase) would be required in 2022 under Rate Option 1. Under Rate Option 2 the subsidy would be \$941,000 (3.3%) increase in 2022.
18. The required tax subsidy will decline to approximately \$592,000 in 2025 (48% decrease) under Rate Option 1 and \$857,000 (13%) under Rate Option 2 due to the transfer of recycling responsibility to the producers.
19. Beyond 2025 the tax subsidy will range between \$600,000 and \$725,000 under Rate Option 1 and between \$874,000 and \$914,000 under Rate Option 2. The tax subsidy under Rate Option 2 is projected to remain almost equal to or below the current 2021 amount of \$911,170.
20. The Landfill Closure Reserve Fund balance at the time of landfill closure in 2046 would be approximately \$ 17.9 million (close to the target of \$18.1 million) under Rate Option 1 and \$15.9 million (i.e. \$2.1 million below the target balance of \$18.1 million) under Rate Option 2.

21. The Capital Waste Management Reserve Fund balance at the time of landfill closure in 2046 would be approximately \$13.9 million under both options.
22. Rate Option 2 would result in more manageable increases to the landfill tipping fee and tax subsidy compared to Option 1 over the next few years.

## 8.2 Recommendations

The following are the primary recommendations for consideration by the City:

1. The cost of service projections developed through this study for the period 2021 to 2046 should be used to inform the City's decisions regarding changes to the current cost recovery mechanisms including increases to the landfill tipping fee, bag tag fee and tax subsidy to ensure that the full cost of service for waste management is recovered.
2. Monitor Provincial discussions on the transfer of recycling and other waste diversion programs to the packaging producers to gauge and confirm the City's role and responsibilities and any costs that may be incurred by the City.
3. Implement Rate Option 2 as described in Section 7 of this report:
  - ✓ Continue annual contributions to the Capital Waste Management Reserve Fund of \$500,000 from 2022 to 2026 gradually increasing to \$810,000 by 2046.
  - ✓ Phase in annual contributions to the Landfill Closure Reserve Fund starting with approximately \$28,000 in 2022; \$85,000 in 2023; \$170,000 in 2024; and the full amount of \$566,000 from 2025 to 2046.
  - ✓ Increase the bag tag fees by 2% per year starting in 2022
  - ✓ Increase the landfill tipping fees to \$85.23 in 2022 (3% increase) followed by 4% and 5% increases in 2023 and 2024 respectively
  - ✓ Increase the tax subsidy to approximately \$941,000 in 2022 (approximately a 3.3% increase from 2021) followed by 2.1% and 2.7% increases in 2023 and 2024 respectively
4. Allocate the projected remaining balance in the Capital Waste Management Reserve Fund of approximately \$13.9 million at the time of landfill closure to top up the Landfill Closure Reserve balance if required and secure future waste disposal capacity.
5. Review and update the cost of service and rates in five (5) years to account for new information regarding transferring recycling to producers of packaging, the impact of the Green Bin (Organics) program on waste diversion and securing future disposal capacity.

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## **Appendix A**

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### **Capital Cost & Capital Waste Management Reserve Fund Projections (2021-2046)**

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CITY OF STRATFORD

Waste Management Rate Study

APPENDIX A - CAPITAL COST AND WASTE MANAGEMENT RESERVE FUND (2021-2046)

CAPITAL WASTE MANAGEMENT RESERVE FUND (2021-2046)

Capital Reserve	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Balance	\$3,096,787	\$2,275,069	\$2,812,128	\$3,361,809	\$3,914,891	\$4,481,114	\$4,536,614	\$3,589,858	\$4,186,352	\$4,817,547	\$5,472,725	\$6,163,816	\$6,874,360
Transfer from Operating	\$494,660	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$520,000	\$540,000	\$560,000	\$580,000	\$600,000	\$615,000	\$630,000
Transfer to Capital	\$1,350,000	\$4,500	\$0	\$4,774	\$0	\$511,544	\$1,519,808	\$5,373	\$0	\$5,700	\$0	\$6,048	\$1,799,504
Transfer to Operating	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Closing Balance	\$2,241,447	\$2,770,569	\$3,312,128	\$3,857,035	\$4,414,891	\$4,469,571	\$3,536,806	\$4,124,485	\$4,746,352	\$5,391,847	\$6,072,725	\$6,772,768	\$5,704,856
Interest	\$33,622	\$41,559	\$49,682	\$57,856	\$66,223	\$67,044	\$53,052	\$61,867	\$71,195	\$80,878	\$91,091	\$101,592	\$85,573

CAPITAL COST PROJECTIONS (2021-2046)

Capital Project	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<i>City's Capital Program</i>													
Landfill Methane expansion	\$0	\$0	\$0	\$0	\$0	\$506,479	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Landfill Cell	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$1,507,056	\$0	\$0	\$0	\$0	\$0	\$1,799,504
Landfill Buffer	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,350,000	\$0	\$0	\$0	\$0	\$506,479	\$1,507,056	\$0	\$0	\$0	\$0	\$0	\$1,799,504
<i>Asset Management Needs</i>													
Heavy Trucks/Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$1,344,758	\$0	\$0	\$0	\$0	\$0	\$0
Leachate System	\$0	\$0	\$0	\$0	\$0	\$0	\$12,752	\$0	\$0	\$0	\$0	\$0	\$0
Monitoring Wells	\$0	\$4,500	\$0	\$4,774	\$0	\$5,065	\$0	\$5,373	\$0	\$5,700	\$0	\$6,048	\$0
Subtotal	\$0	\$4,500	\$0	\$4,774	\$0	\$5,065	\$1,357,510	\$5,373	\$0	\$5,700	\$0	\$6,048	\$0
Total	\$1,350,000	\$4,500	\$0	\$4,774	\$0	\$511,544	\$2,864,566	\$5,373	\$0	\$5,700	\$0	\$6,048	\$1,799,504



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APPENDIX A - CAPITAL COST AND WASTE MANAGEMENT RESERVE FUND (2021-2046)

CAPITAL WASTE MANAGEMENT RESERVE FUND (2021-2046)

Capital Reserve	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Opening Balance	\$5,790,429	\$6,045,709	\$6,796,145	\$7,566,153	\$8,352,450	\$9,170,757	\$10,023,893	\$8,477,255	\$9,350,439	\$10,243,697	\$11,173,827	\$12,124,383	\$12,871,491
Transfer from Operating	\$640,000	\$650,000	\$665,000	\$680,000	\$690,000	\$705,000	\$720,000	\$735,000	\$750,000	\$765,000	\$780,000	\$795,000	\$810,000
Transfer to Capital	\$474,065	\$0	\$6,806	\$17,138	\$7,221	\$0	\$2,391,919	\$0	\$8,127	\$0	\$8,623	\$238,111	\$9,147
Transfer to Operating	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Closing Balance	\$5,956,364	\$6,695,709	\$7,454,338	\$8,229,015	\$9,035,229	\$9,875,757	\$8,351,975	\$9,212,255	\$10,092,312	\$11,008,697	\$11,945,205	\$12,681,272	\$13,672,344
Interest	\$89,345	\$100,436	\$111,815	\$123,435	\$135,528	\$148,136	\$125,280	\$138,184	\$151,385	\$165,130	\$179,178	\$190,219	\$205,085

CAPITAL COST PROJECTIONS (2021-2046)

Capital Project	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
<i>City's Capital Program</i>													
Landfill Methane expansion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Landfill Cell	\$0	\$0	\$0	\$0	\$0	\$0	\$2,279,558	\$0	\$0	\$0	\$0	\$0	\$0
Landfill Buffer	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$2,279,558	\$0	\$0	\$0	\$0	\$0	\$0
<i>Asset Management Needs</i>													
Heavy Trucks/Equipment	\$0	\$0	\$0	\$1,807,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Leachate System	\$0	\$0	\$0	\$17,138	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Monitoring Wells	\$6,416	\$0	\$6,807	\$0	\$7,221	\$0	\$7,661	\$0	\$8,128	\$0	\$8,622	\$0	\$9,148
<i>Subtotal</i>	\$474,065	\$0	\$6,807	\$1,824,380	\$7,221	\$0	\$112,361	\$0	\$8,128	\$0	\$8,622	\$238,111	\$9,148
<i>Total</i>	\$474,065	\$0	\$6,807	\$1,824,380	\$7,221	\$0	\$2,391,918	\$0	\$8,128	\$0	\$8,622	\$238,111	\$9,148

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## **Appendix B**

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### **Landfill Closure Reserve Projections (2021-2046)**

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CITY OF STRATFORD  
Waste Management Rate Study  
APPENDIX B - LANDFILL CLOSURE RESERVE FUND (2021-2046)

OPTION 1 - NO PHASE IN OF RESERVE CONRTIBUTIONS

Capital Reserve	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Balance	\$508,576	\$516,205	\$1,095,442	\$1,683,306	\$2,279,924	\$2,885,427	\$3,499,947	\$4,123,617	\$4,756,574	\$5,398,955	\$6,050,901	\$6,712,553	\$7,384,055
Transfer from Operating	\$0	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109
Transfer to Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Operating	\$0	\$3,060	\$3,121	\$3,184	\$3,247	\$3,312	\$3,378	\$3,446	\$3,515	\$3,585	\$3,657	\$3,730	\$3,805
Closing Balance	\$508,576	\$1,079,253	\$1,658,429	\$2,246,231	\$2,842,786	\$3,448,224	\$4,062,677	\$4,686,280	\$5,319,168	\$5,961,479	\$6,613,352	\$7,274,931	\$7,946,359
Interest	\$7,629	\$16,189	\$24,876	\$33,693	\$42,642	\$51,723	\$60,940	\$70,294	\$79,788	\$89,422	\$99,200	\$109,124	\$119,195

OPTION 2 - 4-YR PHASE IN OF RESERVE CONRTIBUTIONS

Capital Reserve	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Balance	\$508,576	\$516,205	\$549,572	\$640,837	\$819,599	\$1,403,197	\$1,995,483	\$2,596,586	\$3,206,638	\$3,825,770	\$4,454,117	\$5,091,818	\$5,739,009
Transfer from Operating	\$0	\$28,305	\$84,916	\$169,833	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109
Transfer to Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Operating	\$0	\$3,060	\$3,121	\$3,184	\$3,247	\$3,312	\$3,378	\$3,446	\$3,515	\$3,585	\$3,657	\$3,730	\$3,805
Closing Balance	\$508,576	\$541,450	\$631,367	\$807,486	\$1,382,460	\$1,965,993	\$2,558,213	\$3,159,249	\$3,769,231	\$4,388,293	\$5,016,569	\$5,654,196	\$6,301,313
Interest	\$7,629	\$8,122	\$9,471	\$12,112	\$20,737	\$29,490	\$38,373	\$47,389	\$56,538	\$65,824	\$75,249	\$84,813	\$94,520

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CITY OF STRATFORD  
Waste Management Rate Study  
APPENDIX B - LANDFILL CLOSURE RESERVE FUND (2021-2046)

OPTION 1 - NO PHASE IN OF RESERVE CONRTIBUTIONS

Capital Reserve	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Opening Balance	\$8,065,554	\$8,757,199	\$9,459,139	\$10,171,528	\$10,894,521	\$11,628,276	\$12,372,951	\$13,128,710	\$13,895,716	\$14,674,137	\$15,464,141	\$16,265,902	\$17,079,593
Transfer from Operating	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109
Transfer to Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Operating	\$3,881	\$3,958	\$4,038	\$4,118	\$4,201	\$4,285	\$4,370	\$4,458	\$4,547	\$4,638	\$4,731	\$4,825	\$4,922
Closing Balance	\$8,627,782	\$9,319,349	\$10,021,210	\$10,733,519	\$11,456,429	\$12,190,100	\$12,934,689	\$13,690,360	\$14,457,277	\$15,235,607	\$16,025,519	\$16,827,185	\$17,640,780
Interest	\$129,417	\$139,790	\$150,318	\$161,003	\$171,846	\$182,851	\$194,020	\$205,355	\$216,859	\$228,534	\$240,383	\$252,408	\$264,612

OPTION 2 - 4-YR PHASE IN OF RESERVE CONRTIBUTIONS

Capital Reserve	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Opening Balance	\$6,395,833	\$7,062,431	\$7,738,950	\$8,425,537	\$9,122,340	\$9,829,511	\$10,547,205	\$11,275,577	\$12,014,787	\$12,764,994	\$13,526,361	\$14,299,055	\$15,083,244
Transfer from Operating	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109
Transfer to Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Operating	\$3,881	\$3,958	\$4,038	\$4,118	\$4,201	\$4,285	\$4,370	\$4,458	\$4,547	\$4,638	\$4,731	\$4,825	\$4,922
Closing Balance	\$6,958,060	\$7,624,581	\$8,301,021	\$8,987,527	\$9,684,248	\$10,391,335	\$11,108,943	\$11,837,228	\$12,576,348	\$13,326,464	\$14,087,739	\$14,860,338	\$15,644,430
Interest	\$104,371	\$114,369	\$124,515	\$134,813	\$145,264	\$155,870	\$166,634	\$177,558	\$188,645	\$199,897	\$211,316	\$222,905	\$234,666



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## **Appendix C**

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### **Cost of Service Projections (2021-2046)**

CITY OF STRATFORD  
Waste Management Rate Study  
APPENDIX C - COST OF SERVICE (2021-2046)

Cost Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Operating Costs - Waste Diversion														
G-360-4475-2100 F.T. SALARIES & WAGES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4475-2500 F.T. BENEFITS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4475-3050 MATERIALS	\$35,000	\$35,700	\$36,414	\$37,142	\$37,885	\$38,643	\$39,416	\$40,204	\$41,008	\$41,828	\$42,665	\$43,518	\$44,388	\$45,276
G-360-4475-3100 POSTAGE	\$25	\$26	\$26	\$27	\$27	\$28	\$28	\$29	\$29	\$30	\$30	\$31	\$32	\$32
G-360-4475-3190 VEHICLE - REPAIRS & EXPENSES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4475-4010 ADVERTISING	\$1,000	\$1,020	\$1,040	\$1,061	\$1,082	\$1,104	\$1,126	\$1,149	\$1,172	\$1,195	\$1,219	\$1,243	\$1,268	\$1,294
G-360-4475-4020 SERVICE CONTRACTS	\$15,000	\$15,300	\$15,606	\$15,918	\$16,236	\$16,561	\$16,892	\$17,230	\$17,575	\$17,926	\$18,285	\$18,651	\$19,024	\$19,404
G-360-4475-4050 CONTRACTORS -Green Bin Collection & Processing	\$495,720	\$505,634	\$515,747	\$526,062	\$536,583	\$547,315	\$558,261	\$569,426	\$580,815	\$592,431	\$604,280	\$616,366	\$628,693	\$641,267
G-360-4475-4050 CONTRACTORS -Brush Grinding	\$15,300	\$15,606	\$15,918	\$16,236	\$16,561	\$16,892	\$17,230	\$17,575	\$17,926	\$18,285	\$18,651	\$19,024	\$19,404	\$19,792
G-360-4475-4050 CONTRACTORS - Bi-weekly Blue Box Collection	\$540,600	\$551,412	\$562,440	\$573,689	\$114,738	\$117,033	\$119,373	\$121,761	\$124,196	\$126,680	\$129,213	\$131,798	\$134,434	\$137,122
G-360-4475-4050 CONTRACTORS - Recycling Processing	\$438,600	\$447,372	\$456,319	\$465,446	\$93,089	\$94,951	\$96,850	\$98,787	\$100,763	\$102,778	\$104,834	\$106,930	\$109,069	\$111,250
G-360-4475-4050 CONTRACTORS - Leaf and Yard Waste Collection	\$63,240	\$64,505	\$65,795	\$67,111	\$68,453	\$69,822	\$71,219	\$72,643	\$74,096	\$75,578	\$77,089	\$78,631	\$80,204	\$81,808
G-360-4475-4050 CONTRACTORS - HHW Special Days	\$81,600	\$83,232	\$84,897	\$86,595	\$88,326	\$90,093	\$91,895	\$93,733	\$95,607	\$97,520	\$99,470	\$101,459	\$103,489	\$105,558
G-360-4475-4050 CONTRACTORS - Shingles Collection at Landfill	\$61,200	\$62,424	\$63,672	\$64,946	\$66,245	\$67,570	\$68,921	\$70,300	\$71,706	\$73,140	\$74,602	\$76,095	\$77,616	\$79,169
G-360-4475-4060 COURIER/FREIGHT	\$25	\$26	\$26	\$27	\$27	\$28	\$28	\$29	\$29	\$30	\$30	\$31	\$32	\$32
G-360-4475-7850 CITY OWNED RENTAL EXPENSE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of Waste Admin	\$82,525	\$84,176	\$85,859	\$87,577	\$89,328	\$91,115	\$92,937	\$94,796	\$96,692	\$98,626	\$100,598	\$102,610	\$104,662	\$106,755
Waste Diversion Gross Operating Costs	\$1,829,835	\$1,866,432	\$1,903,761	\$1,941,836	\$1,128,582	\$1,151,154	\$1,174,177	\$1,197,660	\$1,221,614	\$1,246,046	\$1,270,967	\$1,296,386	\$1,322,314	\$1,348,760
		2.0%	2%	2%	-42%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Operating Costs - Waste Collection														
G-360-4450-2100 F.T. SALARIES & WAGES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4450-2500 F.T. BENEFITS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4450-3050 MATERIALS	\$1,000	\$1,020	\$1,040	\$1,061	\$1,082	\$1,104	\$1,126	\$1,149	\$1,172	\$1,195	\$1,219	\$1,243	\$1,268	\$1,294
G-360-4450-4050 CONTRACTORS	\$331,500	\$338,130	\$344,893	\$351,790	\$358,826	\$366,003	\$373,323	\$380,789	\$388,405	\$396,173	\$404,097	\$412,179	\$420,422	\$428,831
G-360-4450-4060 COURIER/FREIGHT	\$50	\$51	\$52	\$53	\$54	\$55	\$56	\$57	\$59	\$60	\$61	\$62	\$63	\$65
G-360-4450-5040 RENTAL OF BLDG, MACH & EQUIPMENT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4450-7850 CITY OWNED RENTAL EXPENSE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of Waste Admin	\$15,706	\$16,020	\$16,341	\$16,668	\$17,001	\$17,341	\$17,688	\$18,042	\$18,402	\$18,771	\$19,146	\$19,529	\$19,919	\$20,318
Waste Collection Gross Operating Costs	\$348,256	\$355,221	\$362,326	\$369,572	\$376,964	\$384,503	\$392,193	\$400,037	\$408,038	\$416,199	\$424,523	\$433,013	\$441,673	\$450,507
		2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Operating Costs - Waste Disposal														
G-360-4425-2100 F.T. SALARIES & WAGES	\$302,617	\$308,670	\$314,843	\$321,140	\$327,563	\$334,114	\$340,796	\$347,612	\$354,564	\$361,656	\$368,889	\$376,266	\$383,792	\$391,468
G-360-4425-2500 F.T. BENEFITS	\$84,733	\$86,427	\$88,156	\$89,919	\$91,718	\$93,552	\$95,423	\$97,331	\$99,278	\$101,264	\$103,289	\$105,355	\$107,462	\$109,611
G-360-4425-3010 CLOTHING	\$300	\$306	\$312	\$318	\$325	\$331	\$338	\$345	\$351	\$359	\$366	\$373	\$380	\$388
G-360-4425-3040 HYDRO	\$15,000	\$15,300	\$15,606	\$15,918	\$16,236	\$16,561	\$16,892	\$17,230	\$17,575	\$17,926	\$18,285	\$18,651	\$19,024	\$19,404
G-360-4425-3045 WATER / SEWAGE	\$330	\$337	\$343	\$350	\$357	\$364	\$372	\$379	\$387	\$394	\$402	\$410	\$419	\$427
G-360-4425-3047 SEWAGE- LEACHATE	\$180,440	\$184,049	\$187,730	\$191,484	\$195,314	\$199,220	\$203,205	\$207,269	\$211,414	\$215,643	\$219,955	\$224,354	\$228,842	\$233,418
G-360-4425-3050 MATERIALS	\$25,000	\$25,500	\$26,010	\$26,530	\$27,061	\$27,602	\$28,154	\$28,717	\$29,291	\$29,877	\$30,475	\$31,084	\$31,706	\$32,340
G-360-4425-3140 R & M - BUILDINGS & EQUIPMENT (EXCLUDES VEHI	\$5,500	\$5,610	\$5,722	\$5,837	\$5,953	\$6,072	\$6,194	\$6,318	\$6,444	\$6,573	\$6,704	\$6,839	\$6,975	\$7,115
G-360-4425-3180 VEHICLE - FUEL	\$75,000	\$76,500	\$78,030	\$79,591	\$81,182	\$82,806	\$84,462	\$86,151	\$87,874	\$89,632	\$91,425	\$93,253	\$95,118	\$97,020
G-360-4425-3190 VEHICLE - REPAIRS & EXPENSES	\$65,000	\$66,300	\$67,626	\$68,979	\$70,358	\$71,765	\$73,201	\$74,665	\$76,158	\$77,681	\$79,235	\$80,819	\$82,436	\$84,084
G-360-4425-4020 SERVICE CONTRACTS	\$35,000	\$35,700	\$36,414	\$37,142	\$37,885	\$38,643	\$39,416	\$40,204	\$41,008	\$41,828	\$42,665	\$43,518	\$44,388	\$45,276
G-360-4425-4040 CONSULTANTS	\$76,500	\$78,030	\$79,591	\$81,182	\$82,806	\$84,462	\$86,151	\$87,874	\$89,632	\$91,425	\$93,253	\$95,118	\$97,020	\$98,961
G-360-4425-4050 CONTRACTORS	\$92,500	\$94,350	\$96,237	\$98,162	\$100,125	\$102,127	\$104,170	\$106,253	\$108,378	\$110,546	\$112,757	\$115,012	\$117,312	\$119,659
G-360-4425-4060 COURIER/FREIGHT	\$25	\$26	\$26	\$27	\$27	\$28	\$28	\$29	\$29	\$30	\$30	\$31	\$32	\$32
G-360-4425-5040 RENTAL OF MACHINERY & EQUIPMENT	\$10,000	\$10,200	\$10,404	\$10,612	\$10,824	\$11,041	\$11,262	\$11,487	\$11,717	\$11,951	\$12,190	\$12,434	\$12,682	\$12,936
Allocation of Waste Admin	\$75,823	\$77,340	\$78,887	\$80,464	\$82,074	\$83,715	\$85,389	\$87,097	\$88,839	\$90,616	\$92,428	\$94,277	\$96,162	\$98,085
Waste Disposal Gross Operating Costs	\$1,043,768	\$1,064,644	\$1,085,936	\$1,107,655	\$1,129,808	\$1,152,404	\$1,175,453	\$1,198,962	\$1,222,941	\$1,247,400	\$1,272,348	\$1,297,795	\$1,323,751	\$1,350,226
		2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

CITY OF STRATFORD  
Waste Management Rate Study  
APPENDIX C - COST OF SERVICE (2021-2046)

Cost Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>Capital Related Costs</b>														
Transfers to Capital Waste Management Reserve Fund	\$494,660	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$520,000	\$540,000	\$560,000	\$580,000	\$600,000	\$615,000	\$630,000	\$640,000
Transfers to Fleet Reserve Fund	\$142,800	\$145,656	\$148,569	\$151,541	\$154,571	\$157,663	\$160,816	\$164,032	\$167,313	\$170,659	\$174,072	\$177,554	\$181,105	\$184,727
Debt Servicing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Gross Capital Related Costs</b>	<b>\$637,460</b>	<b>\$645,656</b>	<b>\$648,569</b>	<b>\$651,541</b>	<b>\$654,571</b>	<b>\$657,663</b>	<b>\$680,816</b>	<b>\$704,032</b>	<b>\$727,313</b>	<b>\$750,659</b>	<b>\$774,072</b>	<b>\$792,554</b>	<b>\$811,105</b>	<b>\$824,727</b>
		1.3%	0.5%	0.5%	0.5%	0.5%	3.5%	3.4%	3.3%	3.2%	3.1%	2.4%	2.3%	1.7%
<b>Landfil Closure &amp; Post Closure Care Costs</b>														
Transfers to Landfill Closure Reserve Fund	\$0	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109
<b>Gross Landfill Post Closure Care Costs</b>	<b>\$0</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>	<b>\$566,109</b>
<b>COST OF SERVICE (GROSS)</b>	<b>\$3,859,320</b>	<b>\$4,498,062</b>	<b>\$4,566,701</b>	<b>\$4,636,713</b>	<b>\$3,856,034</b>	<b>\$3,911,833</b>	<b>\$3,988,747</b>	<b>\$4,066,800</b>	<b>\$4,146,014</b>	<b>\$4,226,412</b>	<b>\$4,308,018</b>	<b>\$4,385,856</b>	<b>\$4,464,951</b>	<b>\$4,540,328</b>
<b>Program Revenues</b>														
G-360-4475-1130 ONTARIO GRANTS	\$275,000	\$280,500	\$286,110	\$291,832	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4475-1610 SALES - Diversion	\$3,000	\$3,060	\$3,121	\$3,184	\$3,247	\$3,312	\$3,378	\$3,446	\$3,515	\$3,585	\$3,657	\$3,730	\$3,805	\$3,881
G-360-4475-1770 RECOVERABLES (Scrap Metal & Cardboard at Landfill)	\$35,000	\$35,700	\$36,414	\$37,142	\$37,885	\$38,643	\$39,416	\$40,204	\$41,008	\$41,828	\$42,665	\$43,518	\$44,388	\$45,276
G-360-4450-1610 SALES - Waste Collection	\$3,000	\$3,060	\$3,121	\$3,184	\$3,247	\$3,312	\$3,378	\$3,446	\$3,515	\$3,585	\$3,657	\$3,730	\$3,805	\$3,881
TRANSFER FROM LANDFILL CLOSURE RESERVE	\$0	\$3,060	\$3,121	\$3,184	\$3,247	\$3,312	\$3,378	\$3,446	\$3,515	\$3,585	\$3,657	\$3,730	\$3,805	\$3,881
<b>Total Program Revenues</b>	<b>\$316,000</b>	<b>\$325,380</b>	<b>\$331,888</b>	<b>\$338,525</b>	<b>\$47,627</b>	<b>\$48,580</b>	<b>\$49,551</b>	<b>\$50,542</b>	<b>\$51,553</b>	<b>\$52,584</b>	<b>\$53,636</b>	<b>\$54,708</b>	<b>\$55,803</b>	<b>\$56,919</b>
<b>COST OF SERVICE (NET) TO BE RECOVERED</b>	<b>\$3,543,320</b>	<b>\$4,172,682</b>	<b>\$4,234,813</b>	<b>\$4,298,187</b>	<b>\$3,808,407</b>	<b>\$3,863,253</b>	<b>\$3,939,196</b>	<b>\$4,016,258</b>	<b>\$4,094,461</b>	<b>\$4,173,828</b>	<b>\$4,254,382</b>	<b>\$4,331,148</b>	<b>\$4,409,148</b>	<b>\$4,483,409</b>
<b>Annual Percent Change</b>		17.8%	1.5%	1.5%	-11.4%	1.4%	2.0%	2.0%	1.9%	1.9%	1.9%	1.8%	1.8%	1.7%

CITY OF STRATFORD  
Waste Management Rate Study  
APPENDIX C - COST OF SERVICE (2021-2046)

Cost Description	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
<b>Operating Costs - Waste Diversion</b>												
G-360-4475-2100 F.T. SALARIES & WAGES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4475-2500 F.T. BENEFITS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4475-3050 MATERIALS	\$46,182	\$47,105	\$48,047	\$49,008	\$49,989	\$50,988	\$52,008	\$53,048	\$54,109	\$55,191	\$56,295	\$57,421
G-360-4475-3100 POSTAGE	\$33	\$34	\$34	\$35	\$36	\$36	\$37	\$38	\$39	\$39	\$40	\$41
G-360-4475-3190 VEHICLE - REPAIRS & EXPENSES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4475-4010 ADVERTISING	\$1,319	\$1,346	\$1,373	\$1,400	\$1,428	\$1,457	\$1,486	\$1,516	\$1,546	\$1,577	\$1,608	\$1,641
G-360-4475-4020 SERVICE CONTRACTS	\$19,792	\$20,188	\$20,592	\$21,004	\$21,424	\$21,852	\$22,289	\$22,735	\$23,190	\$23,653	\$24,127	\$24,609
G-360-4475-4050 CONTRACTORS -Green Bin Collection & Processing	\$654,092	\$667,174	\$680,517	\$694,128	\$708,010	\$722,170	\$736,614	\$751,346	\$766,373	\$781,701	\$797,335	\$813,281
G-360-4475-4050 CONTRACTORS -Brush Grinding	\$20,188	\$20,592	\$21,004	\$21,424	\$21,852	\$22,289	\$22,735	\$23,190	\$23,653	\$24,127	\$24,609	\$25,101
G-360-4475-4050 CONTRACTORS - Bi-weekly Blue Box Collection	\$139,865	\$142,662	\$145,515	\$148,426	\$151,394	\$154,422	\$157,510	\$160,661	\$163,874	\$167,151	\$170,494	\$173,904
G-360-4475-4050 CONTRACTORS - Recycling Processing	\$113,475	\$115,745	\$118,060	\$120,421	\$122,829	\$125,286	\$127,791	\$130,347	\$132,954	\$135,613	\$138,326	\$141,092
G-360-4475-4050 CONTRACTORS - Leaf and Yard Waste Collection	\$83,444	\$85,113	\$86,815	\$88,551	\$90,322	\$92,129	\$93,971	\$95,851	\$97,768	\$99,723	\$101,718	\$103,752
G-360-4475-4050 CONTRACTORS - HHW Special Days	\$107,669	\$109,823	\$112,019	\$114,260	\$116,545	\$118,876	\$121,253	\$123,678	\$126,152	\$128,675	\$131,248	\$133,873
G-360-4475-4050 CONTRACTORS - Shingles Collection at Landfill	\$80,752	\$82,367	\$84,014	\$85,695	\$87,409	\$89,157	\$90,940	\$92,759	\$94,614	\$96,506	\$98,436	\$100,405
G-360-4475-4060 COURIER/FREIGHT	\$33	\$34	\$34	\$35	\$36	\$36	\$37	\$38	\$39	\$39	\$40	\$41
G-360-4475-7850 CITY OWNED RENTAL EXPENSE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of Waste Admin	\$108,891	\$111,068	\$113,290	\$115,556	\$117,867	\$120,224	\$122,628	\$125,081	\$127,583	\$130,134	\$132,737	\$135,392
<b>Waste Diversion Gross Operating Costs</b>	<b>\$1,375,735</b>	<b>\$1,403,250</b>	<b>\$1,431,315</b>	<b>\$1,459,941</b>	<b>\$1,489,140</b>	<b>\$1,518,923</b>	<b>\$1,549,301</b>	<b>\$1,580,287</b>	<b>\$1,611,893</b>	<b>\$1,644,131</b>	<b>\$1,677,014</b>	<b>\$1,710,554</b>
	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>
<b>Operating Costs - Waste Collection</b>												
G-360-4450-2100 F.T. SALARIES & WAGES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4450-2500 F.T. BENEFITS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4450-3050 MATERIALS	\$1,319	\$1,346	\$1,373	\$1,400	\$1,428	\$1,457	\$1,486	\$1,516	\$1,546	\$1,577	\$1,608	\$1,641
G-360-4450-4050 CONTRACTORS	\$437,407	\$446,155	\$455,078	\$464,180	\$473,464	\$482,933	\$492,592	\$502,443	\$512,492	\$522,742	\$533,197	\$543,861
G-360-4450-4060 COURIER/FREIGHT	\$66	\$67	\$69	\$70	\$71	\$73	\$74	\$76	\$77	\$79	\$80	\$82
G-360-4450-5040 RENTAL OF BLDG, MACH & EQUIPMENT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4450-7850 CITY OWNED RENTAL EXPENSE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of Waste Admin	\$20,724	\$21,139	\$21,561	\$21,993	\$22,433	\$22,881	\$23,339	\$23,806	\$24,282	\$24,767	\$25,263	\$25,768
<b>Waste Collection Gross Operating Costs</b>	<b>\$459,517</b>	<b>\$468,707</b>	<b>\$478,081</b>	<b>\$487,643</b>	<b>\$497,396</b>	<b>\$507,344</b>	<b>\$517,491</b>	<b>\$527,840</b>	<b>\$538,397</b>	<b>\$549,165</b>	<b>\$560,148</b>	<b>\$571,351</b>
	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>
<b>Operating Costs - Waste Disposal</b>												
G-360-4425-2100 F.T. SALARIES & WAGES	\$399,297	\$407,283	\$415,429	\$423,737	\$432,212	\$440,856	\$449,673	\$458,667	\$467,840	\$477,197	\$486,741	\$496,476
G-360-4425-2500 F.T. BENEFITS	\$111,803	\$114,039	\$116,320	\$118,646	\$121,019	\$123,440	\$125,909	\$128,427	\$130,995	\$133,615	\$136,287	\$139,013
G-360-4425-3010 CLOTHING	\$396	\$404	\$412	\$420	\$428	\$437	\$446	\$455	\$464	\$473	\$483	\$492
G-360-4425-3040 HYDRO	\$19,792	\$20,188	\$20,592	\$21,004	\$21,424	\$21,852	\$22,289	\$22,735	\$23,190	\$23,653	\$24,127	\$24,609
G-360-4425-3045 WATER / SEWAGE	\$435	\$444	\$453	\$462	\$471	\$481	\$490	\$500	\$510	\$520	\$531	\$541
G-360-4425-3047 SEWAGE- LEACHATE	\$238,087	\$242,848	\$247,705	\$252,660	\$257,713	\$262,867	\$268,124	\$273,487	\$278,957	\$284,536	\$290,226	\$296,031
G-360-4425-3050 MATERIALS	\$32,987	\$33,647	\$34,320	\$35,006	\$35,706	\$36,420	\$37,149	\$37,892	\$38,649	\$39,422	\$40,211	\$41,015
G-360-4425-3140 R & M - BUILDINGS & EQUIPMENT (EXCLUDES VEHI	\$7,257	\$7,402	\$7,550	\$7,701	\$7,855	\$8,012	\$8,173	\$8,336	\$8,503	\$8,673	\$8,846	\$9,023
G-360-4425-3180 VEHICLE - FUEL	\$98,961	\$100,940	\$102,959	\$105,018	\$107,118	\$109,261	\$111,446	\$113,675	\$115,948	\$118,267	\$120,633	\$123,045
G-360-4425-3190 VEHICLE - REPAIRS & EXPENSES	\$85,766	\$87,481	\$89,231	\$91,016	\$92,836	\$94,693	\$96,587	\$98,518	\$100,489	\$102,498	\$104,548	\$106,639
G-360-4425-4020 SERVICE CONTRACTS	\$46,182	\$47,105	\$48,047	\$49,008	\$49,989	\$50,988	\$52,008	\$53,048	\$54,109	\$55,191	\$56,295	\$57,421
G-360-4425-4040 CONSULTANTS	\$100,940	\$102,959	\$105,018	\$107,118	\$109,261	\$111,446	\$113,675	\$115,948	\$118,267	\$120,633	\$123,045	\$125,506
G-360-4425-4050 CONTRACTORS	\$122,052	\$124,493	\$126,983	\$129,522	\$132,113	\$134,755	\$137,450	\$140,199	\$143,003	\$145,863	\$148,780	\$151,756
G-360-4425-4060 COURIER/FREIGHT	\$33	\$34	\$34	\$35	\$36	\$36	\$37	\$38	\$39	\$39	\$40	\$41
G-360-4425-5040 RENTAL OF MACHINERY & EQUIPMENT	\$13,195	\$13,459	\$13,728	\$14,002	\$14,282	\$14,568	\$14,859	\$15,157	\$15,460	\$15,769	\$16,084	\$16,406
Allocation of Waste Admin	\$100,047	\$102,048	\$104,089	\$106,171	\$108,294	\$110,460	\$112,669	\$114,923	\$117,221	\$119,566	\$121,957	\$124,396
<b>Waste Disposal Gross Operating Costs</b>	<b>\$1,377,230</b>	<b>\$1,404,775</b>	<b>\$1,432,870</b>	<b>\$1,461,528</b>	<b>\$1,490,758</b>	<b>\$1,520,573</b>	<b>\$1,550,985</b>	<b>\$1,582,004</b>	<b>\$1,613,644</b>	<b>\$1,645,917</b>	<b>\$1,678,836</b>	<b>\$1,712,412</b>
	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>

CITY OF STRATFORD  
Waste Management Rate Study  
APPENDIX C - COST OF SERVICE (2021-2046)

Cost Description	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Capital Related Costs												
Transfers to Capital Waste Management Reserve Fund	\$650,000	\$665,000	\$680,000	\$690,000	\$705,000	\$720,000	\$735,000	\$750,000	\$765,000	\$780,000	\$795,000	\$810,000
Transfers to Fleet Reserve Fund	\$188,422	\$192,190	\$196,034	\$199,954	\$203,954	\$208,033	\$212,193	\$216,437	\$220,766	\$225,181	\$229,685	\$234,279
Debt Servicing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Gross Capital Related Costs	\$838,422	\$857,190	\$876,034	\$889,954	\$908,954	\$928,033	\$947,193	\$966,437	\$985,766	\$1,005,181	\$1,024,685	\$1,044,279
	1.7%	2.2%	2.2%	1.6%	2.1%	2.1%	2.1%	2.0%	2.0%	2.0%	1.9%	1.9%
Landfil Closure & Post Closure Care Costs												
Transfers to Landfill Closure Reserve Fund	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109
Gross Landfill Post Closure Care Costs	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109	\$566,109
COST OF SERVICE (GROSS)	\$4,617,012	\$4,700,030	\$4,784,409	\$4,865,175	\$4,952,356	\$5,040,981	\$5,131,079	\$5,222,678	\$5,315,809	\$5,410,503	\$5,506,791	\$5,604,705
Program Revenues												
G-360-4475-1130 ONTARIO GRANTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G-360-4475-1610 SALES - Diversion	\$3,958	\$4,038	\$4,118	\$4,201	\$4,285	\$4,370	\$4,458	\$4,547	\$4,638	\$4,731	\$4,825	\$4,922
G-360-4475-1770 RECOVERABLES (Scrap Metal & Cardboard at Landfill)	\$46,182	\$47,105	\$48,047	\$49,008	\$49,989	\$50,988	\$52,008	\$53,048	\$54,109	\$55,191	\$56,295	\$57,421
G-360-4450-1610 SALES - Waste Collection	\$3,958	\$4,038	\$4,118	\$4,201	\$4,285	\$4,370	\$4,458	\$4,547	\$4,638	\$4,731	\$4,825	\$4,922
TRANSFER FROM LANDFILL CLOSURE RESERVE	\$3,958	\$4,038	\$4,118	\$4,201	\$4,285	\$4,370	\$4,458	\$4,547	\$4,638	\$4,731	\$4,825	\$4,922
Total Program Revenues	\$58,057	\$59,218	\$60,403	\$61,611	\$62,843	\$64,100	\$65,382	\$66,689	\$68,023	\$69,384	\$70,771	\$72,187
COST OF SERVICE (NET) TO BE RECOVERED	\$4,558,955	\$4,640,812	\$4,724,006	\$4,803,564	\$4,889,513	\$4,976,881	\$5,065,697	\$5,155,989	\$5,247,786	\$5,341,120	\$5,436,020	\$5,532,518
Annual Percent Change	1.7%	1.8%	1.8%	1.7%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%



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## **Appendix D**

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### **Rate Options Projections (2021-2046)**

OPTION 1 - FULL COST

RECOVERY NO PHASING

COST OF SERVICE (NET)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Collection	\$ 345,256	\$ 352,161	\$ 359,205	\$ 366,389	\$ 373,717	\$ 381,191	\$ 388,815	\$ 396,591	\$ 404,523	\$ 412,613	\$ 420,866	\$ 429,283	\$ 437,869
Diversion	\$ 1,516,835	\$ 1,547,172	\$ 1,578,116	\$ 1,609,678	\$ 1,087,450	\$ 1,109,199	\$ 1,131,383	\$ 1,154,010	\$ 1,177,091	\$ 1,200,632	\$ 1,224,645	\$ 1,249,138	\$ 1,274,121
Disposal	\$ 1,681,228	\$ 2,273,348	\$ 2,297,493	\$ 2,322,121	\$ 2,347,241	\$ 2,372,864	\$ 2,418,999	\$ 2,465,656	\$ 2,512,847	\$ 2,560,582	\$ 2,608,872	\$ 2,652,727	\$ 2,697,159
Total Cost Net of Non-Rate Revenues	\$ 3,543,320	\$ 4,172,682	\$ 4,234,813	\$ 4,298,187	\$ 3,808,407	\$ 3,863,253	\$ 3,939,196	\$ 4,016,258	\$ 4,094,461	\$ 4,173,828	\$ 4,254,382	\$ 4,331,148	\$ 4,409,148
Percent Increase		17.8%	1.5%	1.5%	-11.4%	1.4%	2.0%	2.0%	1.9%	1.9%	1.9%	1.8%	1.8%

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CUSTOMERS & TONNAGES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Customers	11,128	11,199	11,269	11,340	11,410	11,481	11,552	11,622	11,693	11,763	11,834	11,905	11,975
Customer Growth		71	71	71	71	71	71	71	71	71	71	71	71
Waste Generated by Curbside Collection (tonnes)	3,930	3,955	3,980	4,005	4,030	3,854	3,879	3,904	3,928	3,953	3,978	4,003	4,028
% Reduction Due to Green Bin Program		5%	5%	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%
Waste Disposed from Curbside Collection	3,930	3,758	3,781	3,805	3,829	3,854	3,879	3,904	3,928	3,953	3,978	4,003	4,028
Disposal from Other Sources (tonnes)	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411
Total Disposal Tonnes	22,341	22,169	22,192	22,216	22,240	22,265	22,289	22,314	22,339	22,364	22,389	22,414	22,439
Percent Increase		-0.8%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

LANDFILL TIPPING FEE CALCULATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Waste Disposed Annually	22,341	\$ 22,169	\$ 22,192	\$ 22,216	\$ 22,240	\$ 22,265	\$ 22,289	\$ 22,314	\$ 22,339	\$ 22,364	\$ 22,389	\$ 22,414	\$ 22,439
Landfill Tipping Fee	\$ 82.75	\$ 102.55	\$ 103.53	\$ 104.53	\$ 105.54	\$ 106.58	\$ 108.53	\$ 110.50	\$ 112.49	\$ 114.49	\$ 116.52	\$ 118.35	\$ 120.20
% Increase		23.9%	1.0%	1.0%	1.0%	1.0%	1.8%	1.8%	1.8%	1.8%	1.8%	1.6%	1.6%
Tipping Fee Revenue from Curbside Tonnage	\$ 325,245	\$ 385,338	\$ 391,467	\$ 397,718	\$ 404,092	\$ 410,704	\$ 420,927	\$ 431,321	\$ 441,891	\$ 452,638	\$ 463,566	\$ 473,786	\$ 484,184
Tipping Fee Revenue from Other Sources	\$ 1,523,505	\$ 1,888,010	\$ 1,906,026	\$ 1,924,403	\$ 1,943,148	\$ 1,962,160	\$ 1,998,072	\$ 2,034,335	\$ 2,070,957	\$ 2,107,944	\$ 2,145,305	\$ 2,178,941	\$ 2,212,976
Total Tipping Fee Revenue	\$ 1,848,750	\$ 2,273,348	\$ 2,297,493	\$ 2,322,121	\$ 2,347,241	\$ 2,372,864	\$ 2,418,999	\$ 2,465,656	\$ 2,512,847	\$ 2,560,582	\$ 2,608,872	\$ 2,652,727	\$ 2,697,159

BAG TAG FEE CALCULATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Number of Bag Tags Per Customer	19.6	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56
Number of Bag Tags Sold Annually	217,611	218,992	220,372	221,753	223,134	224,514	225,895	227,275	228,656	230,037	231,417	232,798	234,178
Bag Tag Fee	\$ 3.60	\$ 3.67	\$ 3.75	\$ 3.82	\$ 3.90	\$ 3.97	\$ 4.05	\$ 4.14	\$ 4.22	\$ 4.30	\$ 4.39	\$ 4.48	\$ 4.57
% Increase		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Revenue from Bag Tags	\$ 783,400	\$ 804,138	\$ 825,391	\$ 847,173	\$ 869,497	\$ 892,374	\$ 915,819	\$ 939,844	\$ 964,465	\$ 989,694	\$ 1,015,546	\$ 1,042,037	\$ 1,069,181
Revenue from Bag Tags	783,400	803,948	825,315	847,216	869,662	892,668	916,246	940,410	965,174	990,552	1,016,559	1,043,211	1,070,522

TAX SUBSIDY CALCULATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Landfill Tipping Fee Revenue	1,848,750	2,273,348	2,297,493	2,322,121	2,347,241	2,372,864	2,418,999	2,465,656	2,512,847	2,560,582	2,608,872	2,652,727	2,697,159
Bag Tag Fee Revenue	783,400	804,138	825,391	847,173	869,497	892,374	915,819	939,844	964,465	989,694	1,015,546	1,042,037	1,069,181
Total Revenue	\$ 2,632,150	\$ 3,077,486	\$ 3,122,884	\$ 3,169,294	\$ 3,216,738	\$ 3,265,238	\$ 3,334,818	\$ 3,405,501	\$ 3,477,312	\$ 3,550,276	\$ 3,624,418	\$ 3,694,764	\$ 3,766,340
Subsidy Required from Tax Base	\$ 911,170	\$ 1,095,196	\$ 1,111,929	\$ 1,128,893	\$ 591,669	\$ 598,015	\$ 604,378	\$ 610,757	\$ 617,149	\$ 623,552	\$ 629,964	\$ 636,384	\$ 642,808
% Increase		20.2%	1.5%	1.5%	-47.6%	1.1%	1.1%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%

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CITY OF STRATFORD  
Waste Management Rate Study  
APPENDIX D - RATE OPTIONS PROJECTIONS (2022-2046)

OPTION 1 - FULL COST  
RECOVERY NO PHASING

COST OF SERVICE (NET)	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Collection	\$ 446,626	\$ 455,558	\$ 464,670	\$ 473,963	\$ 483,442	\$ 493,111	\$ 502,973	\$ 513,033	\$ 523,293	\$ 533,759	\$ 544,434	\$ 555,323	\$ 566,430
Diversion	\$ 1,299,603	\$ 1,325,595	\$ 1,352,107	\$ 1,379,149	\$ 1,406,732	\$ 1,434,867	\$ 1,463,564	\$ 1,492,835	\$ 1,522,692	\$ 1,553,146	\$ 1,584,209	\$ 1,615,893	\$ 1,648,211
Disposal	\$ 2,737,180	\$ 2,777,802	\$ 2,824,036	\$ 2,870,894	\$ 2,913,390	\$ 2,961,536	\$ 3,010,344	\$ 3,059,829	\$ 3,110,003	\$ 3,160,881	\$ 3,212,477	\$ 3,264,804	\$ 3,317,878
Total Cost Net of Non-Rate Revenues	\$ 4,483,409	\$ 4,558,955	\$ 4,640,812	\$ 4,724,006	\$ 4,803,564	\$ 4,889,513	\$ 4,976,881	\$ 5,065,697	\$ 5,155,989	\$ 5,247,786	\$ 5,341,120	\$ 5,436,020	\$ 5,532,518
Percent Increase	1.7%	1.7%	1.8%	1.8%	1.7%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%

CUSTOMERS & TONNAGES	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Customers	12,046	12,116	12,187	12,258	12,328	12,399	12,469	12,540	12,611	12,681	12,752	12,822	12,893
Customer Growth	71	71	71	71	71	71	71	71	71	71	71	71	71
Waste Generated by Curbside Collection (tonnes)	4,053	4,078	4,103	4,128	4,153	4,178	4,203	4,228	4,253	4,278	4,302	4,327	4,352
% Reduction Due to Green Bin Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Waste Disposed from Curbside Collection	4,053	4,078	4,103	4,128	4,153	4,178	4,203	4,228	4,253	4,278	4,302	4,327	4,352
Disposal from Other Sources (tonnes)	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411
Total Disposal Tonnes	22,464	22,489	22,514	22,539	22,564	22,589	22,614	22,639	22,664	22,688	22,713	22,738	22,763
Percent Increase	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

LANDFILL TIPPING FEE CALCULATION	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Waste Disposed Annually	\$ 22,464	\$ 22,489	\$ 22,514	\$ 22,539	\$ 22,564	\$ 22,589	\$ 22,614	\$ 22,639	\$ 22,664	\$ 22,688	\$ 22,713	\$ 22,738	\$ 22,763
Landfill Tipping Fee	\$ 121.85	\$ 123.52	\$ 125.44	\$ 127.38	\$ 129.12	\$ 131.11	\$ 133.12	\$ 135.16	\$ 137.22	\$ 139.32	\$ 141.44	\$ 143.58	\$ 145.76
% Increase	1.4%	1.4%	1.6%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Tipping Fee Revenue from Curbside Tonnage	\$ 493,861	\$ 503,714	\$ 514,659	\$ 525,796	\$ 536,209	\$ 547,738	\$ 559,471	\$ 571,411	\$ 583,564	\$ 595,933	\$ 608,522	\$ 621,337	\$ 634,380
Tipping Fee Revenue from Other Sources	\$ 2,243,319	\$ 2,274,087	\$ 2,309,377	\$ 2,345,098	\$ 2,377,181	\$ 2,413,798	\$ 2,450,873	\$ 2,488,417	\$ 2,526,439	\$ 2,564,948	\$ 2,603,954	\$ 2,643,467	\$ 2,683,498
Total Tipping Fee Revenue	\$ 2,737,180	\$ 2,777,802	\$ 2,824,036	\$ 2,870,894	\$ 2,913,390	\$ 2,961,536	\$ 3,010,344	\$ 3,059,829	\$ 3,110,003	\$ 3,160,881	\$ 3,212,477	\$ 3,264,804	\$ 3,317,878

BAG TAG FEE CALCULATION	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Number of Bag Tags Per Customer	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56	19.56
Number of Bag Tags Sold Annually	235,559	236,940	238,320	239,701	241,081	242,462	243,843	245,223	246,604	247,984	249,365	250,746	252,126
Bag Tag Fee	\$ 4.66	\$ 4.75	\$ 4.85	\$ 4.94	\$ 5.04	\$ 5.14	\$ 5.24	\$ 5.35	\$ 5.46	\$ 5.57	\$ 5.68	\$ 5.79	\$ 5.91
% Increase	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Revenue from Bag Tags	\$ 1,096,994	\$ 1,125,492	\$ 1,154,691	\$ 1,184,608	\$ 1,215,260	\$ 1,246,663	\$ 1,278,837	\$ 1,311,799	\$ 1,345,568	\$ 1,380,164	\$ 1,415,604	\$ 1,451,911	\$ 1,489,103
Revenue from Bag Tags	1,098,508	1,127,185	1,156,570	1,186,680	1,217,531	1,249,142	1,281,530	1,314,714	1,348,713	1,383,545	1,419,232	1,455,793	1,493,248

TAX SUBSIDY CALCULATION	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Landfill Tipping Fee Revenue	2,737,180	2,777,802	2,824,036	2,870,894	2,913,390	2,961,536	3,010,344	3,059,829	3,110,003	3,160,881	3,212,477	3,264,804	3,317,878
Bag Tag Fee Revenue	1,096,994	1,125,492	1,154,691	1,184,608	1,215,260	1,246,663	1,278,837	1,311,799	1,345,568	1,380,164	1,415,604	1,451,911	1,489,103
Total Revenue	\$ 3,834,175	\$ 3,903,294	\$ 3,978,727	\$ 4,055,502	\$ 4,128,649	\$ 4,208,199	\$ 4,289,181	\$ 4,371,628	\$ 4,455,572	\$ 4,541,045	\$ 4,628,081	\$ 4,716,715	\$ 4,806,981
Subsidy Required from Tax Base	\$ 649,235	\$ 655,661	\$ 662,085	\$ 668,504	\$ 674,915	\$ 681,314	\$ 687,700	\$ 694,069	\$ 700,417	\$ 706,742	\$ 713,039	\$ 719,306	\$ 725,538
% Increase	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%

OPTION 2 - 4-YEAR PHASE IN  
OF CONTRIBUTION TO  
LANDFILL CLOSURE & POST  
CLOSURE CARE RESERVE

COST OF SERVICE (NET)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Collection	\$ 345,256	\$ 352,161	\$ 359,205	\$ 366,389	\$ 373,717	\$ 381,191	\$ 388,815	\$ 396,591	\$ 404,523	\$ 412,613	\$ 420,866	\$ 429,283	\$ 437,869
Diversion	\$ 1,516,835	\$ 1,547,172	\$ 1,578,116	\$ 1,609,678	\$ 1,087,450	\$ 1,109,199	\$ 1,131,383	\$ 1,154,010	\$ 1,177,091	\$ 1,200,632	\$ 1,224,645	\$ 1,249,138	\$ 1,274,121
Disposal	\$ 1,681,228	\$ 1,735,545	\$ 1,816,301	\$ 1,925,845	\$ 2,347,241	\$ 2,372,864	\$ 2,418,999	\$ 2,465,656	\$ 2,512,847	\$ 2,560,582	\$ 2,608,872	\$ 2,652,727	\$ 2,697,159
Total Cost Net of Non-Rate Revenues	\$ 3,543,320	\$ 3,634,879	\$ 3,753,621	\$ 3,901,911	\$ 3,808,407	\$ 3,863,253	\$ 3,939,196	\$ 4,016,258	\$ 4,094,461	\$ 4,173,828	\$ 4,254,382	\$ 4,331,148	\$ 4,409,148
Percent Increase		2.6%	3.3%	4.0%	-2.4%	1.4%	2.0%	2.0%	1.9%	1.9%	1.9%	1.8%	1.8%

CUSTOMERS & TONNAGES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Customers	11,128	11,199	11,269	11,340	11,410	11,481	11,552	11,622	11,693	11,763	11,834	11,905	11,975
Customer Growth		71	71	71	71	71	71	71	71	71	71	71	71
Waste Generated by Curbside Collection (tonnes)	3,930	3,955	3,980	4,005	4,030	3,854	3,879	3,904	3,928	3,953	3,978	4,003	4,028
% Reduction Due to Green Bin Program		5%	5%	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%
Waste Disposed from Curbside Collection	3,930	3,758	3,781	3,805	3,829	3,854	3,879	3,904	3,928	3,953	3,978	4,003	4,028
Disposal from Other Sources (tonnes)	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411
Total Disposal Tonnes	22,341	22,169	22,192	22,216	22,240	22,265	22,289	22,314	22,339	22,364	22,389	22,414	22,439
Percent Increase		-0.8%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

	\$82.75	\$82.12	\$88.22	\$94.33	\$100.44	\$106.56	\$108.51						
LANDFILL TIPPING FEE CALCULATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Waste Disposed Annually	22,341	\$ 22,169	\$ 22,192	\$ 22,216	\$ 22,240	\$ 22,265	\$ 22,289	\$ 22,314	\$ 22,339	\$ 22,364	\$ 22,389	\$ 22,414	\$ 22,439
Landfill Tipping Fee	\$ 82.75	\$ 85.23	\$ 88.64	\$ 93.07	\$ 94.00	\$ 94.94	\$ 96.84	\$ 98.78	\$ 100.76	\$ 102.77	\$ 104.83	\$ 106.92	\$ 109.06
% Increase		3.0%	4.0%	5.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Tipping Fee Revenue from Curbside Tonnage	\$ 325,245	\$ 320,272	\$ 335,182	\$ 354,146	\$ 359,915	\$ 365,882	\$ 375,614	\$ 385,590	\$ 395,814	\$ 406,293	\$ 417,033	\$ 428,040	\$ 439,320
Tipping Fee Revenue from Other Sources	\$ 1,523,505	\$ 1,569,210	\$ 1,631,978	\$ 1,713,577	\$ 1,730,713	\$ 1,748,020	\$ 1,782,980	\$ 1,818,640	\$ 1,855,013	\$ 1,892,113	\$ 1,929,955	\$ 1,968,554	\$ 2,007,925
Total Tipping Fee Revenue	\$ 1,848,750	\$ 1,889,481	\$ 1,967,161	\$ 2,067,723	\$ 2,090,628	\$ 2,113,901	\$ 2,158,594	\$ 2,204,230	\$ 2,250,827	\$ 2,298,406	\$ 2,346,988	\$ 2,396,594	\$ 2,447,245

BAG TAG FEE CALCULATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Number of Bag Tags Per Customer	19.56	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
Number of Bag Tags Sold Annually	217,611	218,992	220,372	221,753	223,134	224,514	225,895	227,275	228,656	230,037	231,417	232,798	234,178
Bag Tag Fee	\$ 3.60	\$ 3.67	\$ 3.75	\$ 3.82	\$ 3.86	\$ 3.90	\$ 3.98	\$ 4.05	\$ 4.14	\$ 4.22	\$ 4.30	\$ 4.39	\$ 4.48
% Increase		2.0%	2.0%	2.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Revenue from Bag Tags	\$ 783,400	\$ 804,138	\$ 825,391	\$ 847,173	\$ 860,972	\$ 874,962	\$ 897,950	\$ 921,506	\$ 945,646	\$ 970,383	\$ 995,731	\$ 1,021,705	\$ 1,048,320

TAX SUBSIDY CALCULATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Landfill Tipping Fee Revenue	1,848,750	1,889,481	1,967,161	2,067,723	2,090,628	2,113,901	2,158,594	2,204,230	2,250,827	2,298,406	2,346,988	2,396,594	2,447,245
Bag Tag Fee Revenue	783,400	804,138	825,391	847,173	860,972	874,962	897,950	921,506	945,646	970,383	995,731	1,021,705	1,048,320
Total Revenue	\$ 2,632,150	\$ 2,693,619	\$ 2,792,552	\$ 2,914,897	\$ 2,951,600	\$ 2,988,864	\$ 3,056,544	\$ 3,125,736	\$ 3,196,473	\$ 3,268,789	\$ 3,342,719	\$ 3,418,299	\$ 3,495,565
Subsidy Required from Tax Base	\$ 911,170	\$ 941,260	\$ 961,069	\$ 987,014	\$ 856,807	\$ 874,389	\$ 882,652	\$ 890,522	\$ 897,988	\$ 905,039	\$ 911,663	\$ 912,849	\$ 913,583
% Increase		3.3%	2.1%	2.7%	-13.2%	2.1%	0.9%	0.9%	0.8%	0.8%	0.7%	0.1%	0.1%

**OPTION 2 - 4-YEAR PHASE IN  
OF CONTRIBUTION TO  
LANDFILL CLOSURE & POST  
CLOSURE CARE RESERVE**

<b>COST OF SERVICE (NET)</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>
Collection	\$ 446,626	\$ 455,558	\$ 464,670	\$ 473,963	\$ 483,442	\$ 493,111	\$ 502,973	\$ 513,033	\$ 523,293	\$ 533,759	\$ 544,434	\$ 555,323	\$ 566,430
Diversion	\$ 1,299,603	\$ 1,325,595	\$ 1,352,107	\$ 1,379,149	\$ 1,406,732	\$ 1,434,867	\$ 1,463,564	\$ 1,492,835	\$ 1,522,692	\$ 1,553,146	\$ 1,584,209	\$ 1,615,893	\$ 1,648,211
Disposal	\$ 2,737,180	\$ 2,777,802	\$ 2,824,036	\$ 2,870,894	\$ 2,913,390	\$ 2,961,536	\$ 3,010,344	\$ 3,059,829	\$ 3,110,003	\$ 3,160,881	\$ 3,212,477	\$ 3,264,804	\$ 3,317,878
<b>Total Cost Net of Non-Rate Revenues</b>	<b>\$ 4,483,409</b>	<b>\$ 4,558,955</b>	<b>\$ 4,640,812</b>	<b>\$ 4,724,006</b>	<b>\$ 4,803,564</b>	<b>\$ 4,889,513</b>	<b>\$ 4,976,881</b>	<b>\$ 5,065,697</b>	<b>\$ 5,155,989</b>	<b>\$ 5,247,786</b>	<b>\$ 5,341,120</b>	<b>\$ 5,436,020</b>	<b>\$ 5,532,518</b>
<b>Percent Increase</b>	<b>1.7%</b>	<b>1.7%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.7%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>

<b>CUSTOMERS &amp; TONNAGES</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>
Customers	12,046	12,116	12,187	12,258	12,328	12,399	12,469	12,540	12,611	12,681	12,752	12,822	12,893
Customer Growth	71	71	71	71	71	71	71	71	71	71	71	71	71
Waste Generated by Curbside Collection (tonnes)	4,053	4,078	4,103	4,128	4,153	4,178	4,203	4,228	4,253	4,278	4,302	4,327	4,352
% Reduction Due to Green Bin Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Waste Disposed from Curbside Collection	4,053	4,078	4,103	4,128	4,153	4,178	4,203	4,228	4,253	4,278	4,302	4,327	4,352
Disposal from Other Sources (tonnes)	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411	18,411
<b>Total Disposal Tonnes</b>	<b>22,464</b>	<b>22,489</b>	<b>22,514</b>	<b>22,539</b>	<b>22,564</b>	<b>22,589</b>	<b>22,614</b>	<b>22,639</b>	<b>22,664</b>	<b>22,688</b>	<b>22,713</b>	<b>22,738</b>	<b>22,763</b>
<b>Percent Increase</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>

<b>LANDFILL TIPPING FEE CALCULATION</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>
Waste Disposed Annually	\$ 22,464	\$ 22,489	\$ 22,514	\$ 22,539	\$ 22,564	\$ 22,589	\$ 22,614	\$ 22,639	\$ 22,664	\$ 22,688	\$ 22,713	\$ 22,738	\$ 22,763
<b>Landfill Tipping Fee</b>	<b>\$ 111.24</b>	<b>\$ 113.47</b>	<b>\$ 115.74</b>	<b>\$ 118.05</b>	<b>\$ 120.41</b>	<b>\$ 122.82</b>	<b>\$ 125.28</b>	<b>\$ 127.78</b>	<b>\$ 130.34</b>	<b>\$ 132.95</b>	<b>\$ 135.60</b>	<b>\$ 138.32</b>	<b>\$ 141.08</b>
<b>% Increase</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>
Tipping Fee Revenue from Curbside Tonnage	\$ 450,880	\$ 462,727	\$ 474,868	\$ 487,309	\$ 500,058	\$ 513,122	\$ 526,508	\$ 540,225	\$ 554,279	\$ 568,680	\$ 583,435	\$ 598,553	\$ 614,042
Tipping Fee Revenue from Other Sources	\$ 2,048,084	\$ 2,089,046	\$ 2,130,827	\$ 2,173,443	\$ 2,216,912	\$ 2,261,250	\$ 2,306,475	\$ 2,352,605	\$ 2,399,657	\$ 2,447,650	\$ 2,496,603	\$ 2,546,535	\$ 2,597,466
<b>Total Tipping Fee Revenue</b>	<b>\$ 2,498,964</b>	<b>\$ 2,551,773</b>	<b>\$ 2,605,695</b>	<b>\$ 2,660,752</b>	<b>\$ 2,716,970</b>	<b>\$ 2,774,372</b>	<b>\$ 2,832,983</b>	<b>\$ 2,892,829</b>	<b>\$ 2,953,936</b>	<b>\$ 3,016,330</b>	<b>\$ 3,080,038</b>	<b>\$ 3,145,088</b>	<b>\$ 3,211,508</b>

<b>BAG TAG FEE CALCULATION</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>
Number of Bag Tags Per Customer	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
Number of Bag Tags Sold Annually	235,559	236,940	238,320	239,701	241,081	242,462	243,843	245,223	246,604	247,984	249,365	250,746	252,126
<b>Bag Tag Fee</b>	<b>\$ 4.57</b>	<b>\$ 4.66</b>	<b>\$ 4.75</b>	<b>\$ 4.85</b>	<b>\$ 4.94</b>	<b>\$ 5.04</b>	<b>\$ 5.14</b>	<b>\$ 5.25</b>	<b>\$ 5.35</b>	<b>\$ 5.46</b>	<b>\$ 5.57</b>	<b>\$ 5.68</b>	<b>\$ 5.79</b>
<b>% Increase</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>
<b>Revenue from Bag Tags</b>	<b>\$ 1,075,590</b>	<b>\$ 1,103,532</b>	<b>\$ 1,132,161</b>	<b>\$ 1,161,494</b>	<b>\$ 1,191,548</b>	<b>\$ 1,222,339</b>	<b>\$ 1,253,885</b>	<b>\$ 1,286,204</b>	<b>\$ 1,319,314</b>	<b>\$ 1,353,234</b>	<b>\$ 1,387,983</b>	<b>\$ 1,423,581</b>	<b>\$ 1,460,048</b>

<b>TAX SUBSIDY CALCULATION</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>
Landfill Tipping Fee Revenue	2,498,964	2,551,773	2,605,695	2,660,752	2,716,970	2,774,372	2,832,983	2,892,829	2,953,936	3,016,330	3,080,038	3,145,088	3,211,508
Bag Tag Fee Revenue	1,075,590	1,103,532	1,132,161	1,161,494	1,191,548	1,222,339	1,253,885	1,286,204	1,319,314	1,353,234	1,387,983	1,423,581	1,460,048
<b>Total Revenue</b>	<b>\$ 3,574,554</b>	<b>\$ 3,655,305</b>	<b>\$ 3,737,856</b>	<b>\$ 3,822,246</b>	<b>\$ 3,908,518</b>	<b>\$ 3,996,711</b>	<b>\$ 4,086,868</b>	<b>\$ 4,179,033</b>	<b>\$ 4,273,250</b>	<b>\$ 4,369,564</b>	<b>\$ 4,468,022</b>	<b>\$ 4,568,669</b>	<b>\$ 4,671,556</b>
<b>Subsidy Required from Tax Base</b>	<b>\$ 908,855</b>	<b>\$ 903,650</b>	<b>\$ 902,957</b>	<b>\$ 901,760</b>	<b>\$ 895,047</b>	<b>\$ 892,803</b>	<b>\$ 890,013</b>	<b>\$ 886,664</b>	<b>\$ 882,738</b>	<b>\$ 878,222</b>	<b>\$ 873,098</b>	<b>\$ 867,351</b>	<b>\$ 860,962</b>
<b>% Increase</b>	<b>-0.5%</b>	<b>-0.6%</b>	<b>-0.1%</b>	<b>-0.1%</b>	<b>-0.7%</b>	<b>-0.3%</b>	<b>-0.3%</b>	<b>-0.4%</b>	<b>-0.4%</b>	<b>-0.5%</b>	<b>-0.6%</b>	<b>-0.7%</b>	<b>-0.7%</b>





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## **City of Stratford Landfill Closure and Post Closure Care Liability Report**

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**January 28, 2021**

**Prepared by:**



**DFA Infrastructure International Inc.**

**DFA Infrastructure International Inc.**

33 Raymond St. Catharines Ontario Canada L2R 2T3  
Telephone: (905) 938 -0965 Fax: (905) 937-6568

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January 28, 2021

Ed Dujlovic, P.Eng.  
Director Infrastructure & Development Services  
City of Stratford  
82 Erie Street  
Stratford ON N5A 2M4

Dear Mr. Dujlovic:

**Re: City of Stratford - Landfill Post Closure Care Liability**

DFA Infrastructure International Inc. (DFA) is pleased to submit our report on the Landfill Post Closure Care Liability. The calculations presented in this report are based on our review of the technical and financial information provided by the City of Stratford and reasonable assumptions that are unique to the City's landfill sites.

Please do not hesitate to call if you have any questions.

Respectfully Submitted by,

**DFA Infrastructure International Inc.**

Derek Ali, MBA, P.Eng.  
President

Enclosure

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#### Disclaimer:

*The information and assumptions contained in this report are based on the best available data at the time of preparation and are unique to the City of Stratford. This information is for the City of Stratford's sole use and not intended for use by any third party. DFA Infrastructure International Inc. shall not in any way be liable for third party use and/ or interpretation of the information contained in this document.*

## 1 Background

The City of Stratford (City) owns and operates its landfill site located at 777 Romeo Street South which receives approximately 22,100 metric tonnes of solid waste annually for disposal based on the average for 2018 and 2019. The landfill operates under ECA No. A150101 issued by the Ministry of Environment and Climate Change (MOECC) and is licensed to receive only municipal solid waste from residential and industrial, commercial and institutional (IC&I) sources. Residential waste accounts for approximately 6,000 metric tonnes (27%) of the waste disposed and IC&I sources approximately 16,100 metric tonnes (72%).

The site consists of two landfill areas:

- The North Landfill which was closed in 1995; and
- The South Landfill which was opened in 1996 and is currently active. This landfill is projected to close at the end of 2046 based on the 2019 rate of waste disposal, remaining capacity and organics diversion.

The main site facilities and operations include the following:

- A weigh-scale
- A drop-off container station
- Waste disposal at the active face
- Leachate collection and discharge into the sanitary sewer for treatment at the City's wastewater treatment plant
- Landfill gas collection and flaring
- Periodic site inspections
- Annual spring and fall groundwater, surface water and landfill gas monitoring with reporting every two (2) years.
- Access roads and security fencing

Continuation of some of these activities will be required following closure of the South Landfill as part of post closure care of the landfill site. The main purpose of this report is to present the liability related to post closure care in order to meet the following objectives:

- Accounting for the post closure care liability in accordance with Public Sector Accounting Board (PSAB) 3270 requirements and, effective April 1, 2022, PSAB 3280 requirements.
- Establishing a reserve fund with an appropriate target balance and levels of contributions to adequately fund post closure care activities
- Consideration of the annual reserve fund contributions as part of the full cost of waste disposal service and developing the bag tag and landfill tipping fees to support sustainable financing.

## 2 PSAB 3280 Asset Retirement Obligations

PSAB 3270 Solid Waste Landfill Closure and Post Closure Care Liability sets out the requirements for municipalities to account for and report on the landfill closure and post closure care liability in their annual financial statements. However, PSAB 3280 Asset Retirement Obligations will replace PSAB 3270 for fiscal years that begin on or after April 1, 2021. The main difference between the two standards is the recognition of the liability. Under PSAB 3270 the liability is recognized incrementally as the landfill site capacity is used and becomes 100% at closure. Under PSAB 3280 100% of the liability must be recognized at the time of asset

acquisition. Therefore the landfill liability projections presented in this report represent the "incremental liability" for 2021 as required under PSAB 3270 and 100% of the liability from 2022 onward based on PSAB 3280.

Under PSAB 3270 the liability calculation must consider the closure and post closure care activities listed below. Each landfill site is different and municipalities are allowed flexibility to consider their specific situations. Not all liabilities listed may be applicable and there may be other potential liabilities that should be considered depending on the circumstances.

Only expenditures that would be incurred after the landfill site stops accepting waste are to be included in the liability calculations i.e. when the landfill no longer provides a beneficial use. The closure and post closure care activities considered in the liability calculation according to PSAB 3270 include the following:

Landfill Closure Activities

- *Final cover and vegetation*
- *Completing facilities for:*
  - *Drainage control features;*
  - *Leachate monitoring;*
  - *Water quality monitoring; and*
  - *Monitoring and recovery of gas.*

Landfill Post-Closure Care Activities

- *Acquisition of any additional land for buffer zones;*
- *Treatment and monitoring of leachate;*
- *Monitoring ground water and surface water;*
- *Gas monitoring and recovery; and*
- *Ongoing maintenance of various control systems, drainage systems, and final cover.*

Activities that are not included in the liability calculations according to PSAB 3270 are:

- *Opening expenditures, such as those associated with locating a site or constructing a leachate collection system;*
- *End-use expenditures, such as those that transform the site into park land, as they would be attributable to that end-use and not to the landfill; and,*
- *Unforeseen or catastrophic events, such as a major leachate collection system failure.*

The closure and post closure care liability begins at the time the landfill starts accepting waste and is recognized over time in proportion to the landfill site capacity is used. The liability is fully recognized when 100% of landfill site capacity is used i.e. at the time the landfill site is closed. The estimated liability must be based on the best available information at the time of preparing the estimate and calculate as the net Present Value (NPV) of the total estimated closure and post closure care expenditures less any costs expensed. An appropriate post closure care period and a discount rate that reflects a municipality's average long-term borrowing rate must be used in the calculations.

PSAB 3280 Asset Retirement Obligations applies to public sector entities that "*have a legal obligation to permanently remove a tangible capital asset from service (i.e., retire) and control the tangible capital asset that needs to be retired*". The liability is recognized when the following occurs:

- There is a legal obligation to retire the asset and incur costs in doing so;
- A past transaction occurred resulting in the liability such as acquisition of land and construction of a landfill site;
- The ability to benefit economically would no longer exist e.g. no ability to collect landfill tipping fees following closure; and
- The costs that determine the liability can be reasonably estimated.



Although PSAB 3280 does not explicitly state the costs to be considered it is intended to capture closure and post closure care costs as described under PSAB 3270.

The closure and post closure care liability begins at the time the landfill starts accepting waste and is recognized at 100% until closure after which there is no beneficial use and closure and post closure care costs are expensed. PSAB 3280 applies to both active and closed landfill site. Similar to PSAB 3270 the estimated liability must be based on the best available information at the time of preparing the estimate and calculated as the net Present Value (NPV) of the total estimated closure and post closure care expenditures less any costs expensed. An appropriate post closure care period and an appropriate discount rate must be used in the calculations.

The active landfill is expected to close at the end of 2046 after which there would be no beneficial use. Therefore the long-term financial planning should consider the full liability to ensure that sufficient funding would be available for closure and post closure care by 2046.

## 3 Assumptions

### 3.1 Post Closure Care Period

Based on current municipal practices there is no single method for determining the post closure care period. Municipalities use a variety of periods depending on their own judgment. Table 3-1 shows a sample of the post closure care period used by some Ontario municipalities in their respective calculations.

**Table 3-1: Sample Post Closure Care Period**

Municipality	Post Closure Care Period
City of Hamilton	50 Years
Durham Region	Rolling 40 Years
Region of Waterloo	Rolling 25 Years & Contaminating Site Life (75-100 Years)
Peel Region	Rolling 25 Years
Halton Region	Rolling 40 Years
Kawartha Lakes	50 Years & Contaminating Site Life
Niagara Region	Contaminating Site Life (100+ Years)

The post closure care period used in this case for the City's liability calculation is 50 years from the year of closure which is reasonable based on current practices. Therefore the post closure care period for the North Landfill and the South Landfill are:

- North Landfill: 1996 to 2045 inclusive
- South Landfill: 2047 to 2096 inclusive

These are based on closure of the North Landfill in 1995 and the South Landfill in 2046 (estimated). The 2018-2019 Bi-Annual Operating and Monitoring Report estimates a remaining site life of 25 years from December 31, 2019. This indicates closure at the end of 2044. However, implementation of the organic waste collection program from the residential sector which started in April 2020 is expected to increase diversion of waste from the landfill site as the program matures. The assumption is that additional waste diversion would defer site closure to approximately 2046.

### 3.2 Capacity Assumptions

The following are the capacity assumptions:

- North Landfill Capacity – 100% utilized
- South Landfill Capacity – 49.41% utilized as of December 31, 2020

### 3.3 Financial & Cost Assumptions

The closure and post closure care costs are estimated in 2021 dollars inflated to the projected year of expenditure at 2% and discounted to NPV at 3.9%. The discount rate is representative of the City's current long-term borrowing rate.

The closure and post closure care costs are categorized into operating and capital costs for consistency with the City's budgeting structure and separated by landfill.

Although the North Landfill is within its post closure care period most of the post closure care activities are covered by the operations of the active South Landfill and not included as a post closure care cost to the North Landfill. An example of this is the groundwater and surface water monitoring which is captured under the monitoring program for the South Landfill as part of the ongoing operations. Appendix A summarizes the cost assumptions made and the rationale. These assumptions are specific to the City's landfill site based on our review of available technical and financial information provided by the City and supplemented by professional judgement. The costs considered in the liability calculations include the following:

#### Post Closure Operating Activities

- Landfill Monitoring & Reporting
- Site Inspections
- Perimeter Fence Maintenance
- Road Maintenance
- Landfill Gas System Clean-out
- Landfill Gas System Maintenance
- Leachate Collection System Flushing
- Leachate Collection System Manhole Maintenance
- Leachate Collection System Pump Maintenance
- Leachate Treatment at Wastewater Treatment Plant
- Landfill Cap Maintenance

#### Closure & Post Closure Capital Needs

- Closure of South Landfill
- Rehabilitation of Landfill Gas System
- Landfill Gas System Vent & Monitor Replacements
- Landfill Gas System Decommissioning
- Leachate Collection System Rehabilitation
- Leachate Collection System Pump Replacement
- Monitoring Wells Replacement
- Monitoring Wells Decommissioning

- Hydro Costs

## 4 Landfill Post Closure Care Liability

The landfill post closure care liability is calculated based on the assumptions noted in Section 3. The projected individual and combined liability for the landfill sites are presented in the Table 4-1 for the period 2021 to 2096. Based on the current cost information and assumptions, the post closure liability as of January 1, 2021 is estimated to be approximately \$3.62 million. This represents the liability based on the estimated landfill capacity used at December 31, 2020 as required under PSAB 3270. The projected liabilities for 2022 and beyond represent 100% of the liability as required under PSAB 3280. The projected liability by the time of closure of the South Landfill in 2046 is estimated to be approximately \$18.1 million. This represents the target reserve balance that would be required at the time of closure in 2046. Because there would be no opportunity for revenues after closure of the South Landfill Site it is recommended that the reserve be built through annual contributions from the tipping fee and bag tag revenues that would be obtained prior to closure. This is consistent with the user pay concept meaning that those who benefit from the use of the South Landfill Site would pay for its closure and post closure care costs. The estimated annual contribution is approximately \$566,000 based on an investment rate of 1.5%.

**Table 4-1: Summary of Landfill Post Closure Liability**

Landfill Liability Summary			
YEAR	Total Landfill Liability	North Landfill	South Landfill
2021	3,623,493	60,634	3,562,859
2022	7,268,018	59,882	7,208,137
2023	7,548,292	59,038	7,489,254
2024	7,839,432	58,097	7,781,335
2025	8,141,862	57,055	8,084,807
2026	8,456,021	55,907	8,400,114
2027	8,782,364	54,645	8,727,719
2028	9,121,366	53,266	9,068,100
2029	9,473,519	51,763	9,421,756
2030	9,839,334	50,130	9,789,204
2031	10,219,343	48,360	10,170,983
2032	10,614,098	46,446	10,567,652
2033	11,024,172	44,382	10,979,790
2034	11,450,162	42,160	11,408,002
2035	11,892,686	39,772	11,852,914
2036	12,352,388	37,210	12,315,177
2037	12,829,936	34,467	12,795,469
2038	13,326,024	31,532	13,294,493
2039	13,841,375	28,397	13,812,978
2040	14,376,737	25,053	14,351,684

Landfill Liability Summary			
YEAR	Total Landfill Liability	North Landfill	South Landfill
2041	14,932,888	21,489	14,911,400
2042	15,510,639	17,695	15,492,944
2043	16,110,830	13,661	16,097,169
2044	16,734,334	9,375	16,724,959
2045	17,382,057	4,825	17,377,232
2046	18,054,944	-	18,054,944
2047	18,107,934	-	18,107,934
2048	17,880,749	-	17,880,749
2049	18,025,774	-	18,025,774
2050	18,157,448	-	18,157,448
2051	18,290,950	-	18,290,950
2052	18,408,003	-	18,408,003
2053	18,506,945	-	18,506,945
2054	18,649,450	-	18,649,450
2055	17,688,267	-	17,688,267
2056	17,775,441	-	17,775,441
2057	17,861,026	-	17,861,026
2058	17,875,485	-	17,875,485
2059	17,942,584	-	17,942,584
2060	17,989,998	-	17,989,998
2061	18,036,110	-	18,036,110
2062	17,599,691	-	17,599,691
2063	17,566,658	-	17,566,658
2064	17,545,636	-	17,545,636
2065	16,195,975	-	16,195,975
2066	16,157,534	-	16,157,534
2067	15,606,218	-	15,606,218
2068	15,537,082	-	15,537,082
2069	15,523,900	-	15,523,900
2070	15,485,994	-	15,485,994
2071	15,445,807	-	15,445,807
2072	15,376,068	-	15,376,068
2073	15,259,930	-	15,259,930
2074	15,158,698	-	15,158,698
2075	14,002,071	-	14,002,071
2076	13,823,649	-	13,823,649
2077	13,634,277	-	13,634,277
2078	13,330,357	-	13,330,357

Landfill Liability Summary			
YEAR	Total Landfill Liability	North Landfill	South Landfill
2079	13,095,527	-	13,095,527
2080	12,822,027	-	12,822,027
2081	12,536,882	-	12,536,882
2082	12,206,503	-	12,206,503
2083	11,809,996	-	11,809,996
2084	11,421,715	-	11,421,715
2085	11,017,232	-	11,017,232
2086	10,563,739	-	10,563,739
2087	10,087,693	-	10,087,693
2088	9,462,452	-	9,462,452
2089	8,911,496	-	8,911,496
2090	8,303,078	-	8,303,078
2091	7,669,739	-	7,669,739
2092	6,970,116	-	6,970,116
2093	6,178,303	-	6,178,303
2094	5,384,488	-	5,384,488
2095	2,997,321	-	2,997,321
2096	2,037,643	-	2,037,643

## 5 Conclusions & Recommendations

The main conclusions and recommendations are as follows:

1. The landfill site closure and post closure care liability is estimated to be approximately \$3.62 million as of January 1, 2021 based on the available information, assumptions made and PSAB 3270 guidelines.
2. The projected liability for 2022 is estimated to be approximately \$7.27 million based on the available information, assumptions made and PSAB 3280 guidelines.
3. The projected liability at the time of closure in 2046 is estimated to be approximately \$18.1 million.
4. It is recommended that the City consider establishing a dedicated reserve with annual contributions estimated at \$566,000 to achieve a target balance of approximately \$18.1 million by 2046 to fund closure and post closure care costs.



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## **Appendix A**

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### **LANDFILL POST CLOSURE CARE ASSUMPTIONS**

**Assumptions for Landfill Liability Calculations Based on Landfill Closure in 2046**

Operating/ Capital Activity	Cost (in \$2021)	Period after Closure (yrs)	Frequency	Assumptions
<b>SOUTH LANDFILL SITE - OPERATING ACTIVITIES</b>				
Landfill Monitoring & Report	\$76,500	1 to 20	Twice / Year - Spring & Fall with Report Every 2 Years	Same as existing. Assume \$48,000/ year based on 2021 budget
	\$43,000	21 to 50	Once / Year with Report Every 2 Years	Sampling frequency would be reduced to once /year after 20 years of post closure monitoring. Assume \$33,000 sampling plus \$10,000 reporting based on 2020 actual cost
Site Inspections	\$26,000	1 to 20	Weekly	Same as existing. Assume 1 staff & vehicle once a week at a rate of \$500 /week x 52 weeks
	\$3,000	21 to 50	Every 2 Months	Inspections can be reduced to once every 2 months after 20 years = \$500 x 6 months
Perimeter Fence Maintenance	\$5,000	1 to 50	Every 5 Years	Repairs to fence would be required every 5 years. Assume \$5000
Road Maintenance	\$500	1 to 50	Annual	Traffic significantly reduced due to landfill closure. Assume \$500 per year
Landfill Gas System Clean Out	\$2,000	1 to 50	Annual	Landfill will continue to produce gas indefinitely and the gas system will be required for the entire 50 year post closure period. Assume cleaning every 5 years at \$2000 each
Landfill Gas System Maintenance	\$1,000	1 to 50	Annual	Landfill will continue to produce gas indefinitely and the gas system will be required for the entire 50 year post closure period. Assume \$1000 per year for active components (electrical, controls, blowers, etc.)
Leachate System Flushing	\$5,000	1 to 50	Every 5 Years	Landfill will continue to produce Leachate indefinitely and the Leachate system will be required for the entire 50 year post closure period. Flushing will be required every 5 years to keep pipes clear of grit.

**Assumptions for Landfill Liability Calculations Based on Landfill Closure in 2046**

Operating/ Capital Activity	Cost (in \$2021)	Period after Closure (yrs)	Frequency	Assumptions
Leachate System Manhole Maintenance	\$1,000	1 to 50	Every 5 Years	Landfill will continue to produce Leachate indefinitely and the Leachate system will be required for the entire 50 year post closure period. Manhole maintenance will be required for access to LCS. Assume \$1000 every 5 years
Leachate System Pump Maintenance	\$500	1 to 50	Annual	Landfill will continue to produce Leachate indefinitely and the Leachate system will be required for the entire 50 year post closure period. Pump maintenance will be required annually. Assume \$500 per year
Leachate Treatment at WWTP	\$180,440	1 to 50	Annual	Landfill will continue to produce Leachate indefinitely. Treatment will be required for the entire 50 year post closure period. Assume that the same volume of Leachate will be produced annually. Cost based on 2021 budget
Landfill Cap Maintenance	\$20,000	1 to 6	Annual	Repairs would be required annually as the cap settles. Most settlement is expected to occur within first 6 years of closure. Assume \$20,000 for soil delivery and spreading
	\$5,000	7 to 50	Every 5 Years	Less frequent repairs would be required once the cap fully settles. Assume \$5000 every 5 years
Hydro Costs (Leachate Pumps, Gas Blowers, etc.)	\$4,500	1 to 50	Annual	Hydro costs for Leachate pumps, gas blowers, etc. would continue as long as Leachate is produced. Assume 30% of current annual hydro costs of \$15,000 (2021 budget) i.e. 4500
<b>SOUTH LANDFILL SITE - CAPITAL ACTIVITIES</b>				
Closure Costs	\$382,000	Year 0 i.e. at beginning of post closure period	Once	Capping of cells will be done during the operating period but full closure cost will be incurred when the site closes. Also all buildings, scales etc. decommissioned. This cost does not include any end-use costs (e.g. Trails, naturalization, etc.). The amount shown is based on using \$320,000 (in 2015 dollars) used in the 2015 liability calculation and inflating to 2021 based on a historical Construction Price Index of 3%.
Existing Landfill Gas System Replacement/Rehab (Not including Mechanical/ Electrical)	\$544,000	Year 18	Once in 2064	The existing landfill gas system was built over the period 2011 to 2014 at a historical cost of \$1,106,158 and a life expectancy of 50 years. The estimated 2021 replacement cost is \$1,360,435. It will not be practical to replace the gas collection system but an allowance is provided to rehabilitate or upgrade some components at the end of the system's service life. This is estimated to occur in 2064 (year 18 of closure). It is assumed that cost would be 40% of replacement cost (approximately \$544,000) not including the electrical systems, controls, flare & burner. These are approximately 26% of costs (based on the tender price). These components will have a different life expectancy (20 years)

**Assumptions for Landfill Liability Calculations Based on Landfill Closure in 2046**

<b>Operating/ Capital Activity</b>	<b>Cost (in \$2021)</b>	<b>Period after Closure (yrs)</b>	<b>Frequency</b>	<b>Assumptions</b>
Existing Landfill Gas System Mechanical/ Electrical components Replacement/Rehab	\$354,000	Year 8	In 2054 and every 20 years thereafter	The electrical systems, controls, flare & burner portion is approximately 26% of costs (based on the tender price). These will have a different life expectancy (20 years) from an engineering perspective as they are active components. The estimated cost is \$354,000 in 2054 (year 8 post closure) and every 20 years thereafter.
Existing Landfill Gas System Vents & Monitors Replacement	\$1,000	Year 5	In 2051 and every 5 years	This is an allowance for replacement of damaged vents which occurs before full life expectancy. An allowance of 1 vent every 5 years at \$1,000 is assumed.
Landfill Gas System Decommissioning	\$12,500	Year 50	Once	There are approximately 25 vents and monitors that will required decommissioning at the end of the period. Assume \$500 each for a total of \$12,500
Landfill Leachate Collection System Replacement/ rehab	\$200,000	Years 1,8,15 & 20	In 2047, 2054,2061 and 2066	Estimated costs of Cell 3A LCS was approximately \$500,000 including 25% for provisional and contract and administration items in 2016. Assume the same costs for each of the previous cells 1, 2A & 2B and installation years being 1997, 2004 & 2011 and a 50 year life expectancy. Replacement years would be 2047 (year 1) , 2054 (year 8), 2061 (year 15) and 2066 (year 20) respectively. It will not be practical to replace the Leachate collection system but an allowance of 40% (\$200,000) in each of these years is provided for any improvements that may be required.
Landfill Leachate Collection System Pump Replacement	\$10,000	1 to 50	In 2047 and every 10 years thereafter	Assume 10 year life expectancy for pump. Assume 1 pump at a cost of \$10,000 every 10 years. Assume 1 pump installed in 1997.
Monitoring Well Replacement	\$4,400	1 to 50	Every 2 Years	The site currently has 71 monitoring wells plus 27 abandoned/ replaced. Historical record shows replacement/ abandonment of 27 (25%) of wells over 25 years. Allow 1 replacement every 2 years at \$4,400 each
Monitoring Wells Decommissioning after 50 years	\$213,000	Year 50	Once	Assume \$3000 per well for 71 wells at the end of 50 years. Total cost of \$213000
<b>NORTH LANDFILL SITE (CLOSED IN 1995)</b>				

**Assumptions for Landfill Liability Calculations Based on Landfill Closure in 2046**

Operating/ Capital Activity	Cost (in \$2021)	Period after Closure (yrs)	Frequency	Assumptions
Site Inspections	\$3,000	Years 26 to 50	Every 2 Months	This section of the landfill site closed in 1995 so it is in its 26 year of closure as of 2021. There is staff on site every day for the operations of the active landfill cells. Therefore for liability calculation purposes, the frequency of once every 2 months is used for stite inspections at the North Landfill Site. Note that all other liabilities (monitoring wells, etc.) that would have otherwise been part of the liability for the closed section, are attached to the active portion of the landfill site and will become post closure liabilities ( as noted above) once the site closes in 2046






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## MANAGEMENT REPORT

**Date:** May 18, 2021  
**To:** Finance and Labour Relations Sub-committee  
**From:** Chris Bantock, Deputy Clerk  
**Report#:** FIN21-012  
**Attachments:** None

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**Title:** Proxy Voting for Council and Committee meetings

**Objective:** To consider implementing proxy voting for Council and Committee meetings.

**Background:** On March 19, 2020, the Provincial Government passed Bill 187 which amended the Municipal Act, 2001 (the Act) to provide municipalities with the ability to amend their procedural by-law to permit meetings to be held electronically during an emergency declared pursuant to the Emergency Management and Civil Protection Act. In March 2020 the City's Procedure By-law was amended to permit the holding of electronic meetings during a declared emergency.

On July 21, 2020, the Provincial Government passed Bill 197 which further amended the Act to allow for electronic participation of Council members at meetings without a declaration of an emergency being required. Also introduced through Bill 197 was an amendment to the Act to allow municipalities the option of authorizing proxy voting for Council members. As per section 243.1(1), the Act now permits that a procedure by-law may provide that, in accordance with a process to be established by the Clerk, a member of Council may appoint another member of council as a proxy to act in their place when they are absent. Since the passing of Bill 197, the City has been continuing to conduct its meetings electronically. Staff sought direction from Council on whether or not to investigate proxy voting. At that time no direction was given.

At the November 23, 2020 Regular Council meeting, a New Business item was raised by a member with respect to Council and Committee Proxy Voting and the following resolution (R2020-663) was adopted:

**THAT Staff be directed to prepare a report on proxy voting provisions for members at meetings of Council and Committees of Council.**

This management report has been prepared in follow up to the above resolution.

**Analysis:** In addition to enabling municipalities to hold open and closed meetings of Council electronically, and that members participating in such meetings will count towards quorum, Bill 197 also permitted the option for proxy voting for municipal council members who are absent from meetings. Through adoption into a procedure by-law, municipalities were given the flexibility to determine when and under what circumstances proxies for council could be provided for.

Municipalities that wish to allow proxy voting are required to amend their procedural by-law to allow a member of council to appoint another member of the same council to act in their place when they are absent. To gain a better understanding regarding such implementation and uptake, the Clerk's Office completed an environmental scan to inquire with other municipalities if proxy voting had been adopted or considered by their council. As it stands, many municipalities reported that their councils have chosen not to pursue proxy voting. The following reasons were provided in response to staff as to why proxy voting had not been permitted or considered:

- Meetings are being held electronically;
- Members of council can attend meetings via teleconference if unable to electronically;
- Further discussion and review are needed prior to implementation; and
- proxy voting is not being considered at this time.

For Council's awareness, staff also noted that the following limitations would apply to any established proxy voting procedures, in accordance with section 243.1(2) of the Act:

- A proxyholder cannot be appointed unless they are a member of the same council as the appointing member;
- A member cannot act as a proxyholder for more than one other member of council at a time;
- A member appointing a proxy shall notify the Clerk of the appointments in accordance with any process established;
- An appointed proxy is not counted when determining if a quorum is present;
- A proxy shall be revoked if the appointing member or the proxyholder requests that the proxy be revoked and complies with the proxy revocation process established by the clerk;
- When a recorded vote is taken, the clerk shall record the name and vote of every proxyholder and the name of the member of council for whom the proxyholder is acting; and
- Council member absence rules would still apply. This means that a member's seat would become vacant if they were absent from three successive months of council meetings without being authorized to do so by Council.

Further to the identified limitations, general understanding of proxy voting would follow that votes are provided to a member's proxyholder prior to the meeting at which the member is to be absent. However, it is not uncommon during discussion at a meeting for new information to be provided through question and answer or for clarity to be provided on items being considered. This seems to create issues from an accountability and transparency perspective as the member not present would have no access to this information or discussion but would have voted through their proxy.

The availability of proxy voting is meant to help ensure continuing representation of constituents' interests on municipal councils when a member is unable to attend in person due to things such as illness, a leave of absence, or the need to practice physical distancing. The emphasis here is on its application to in-person attendance. The use of proxy voting generally would not apply to electronic meetings as members of council have the ability to attend meetings from anywhere.

Considering the above, it is the position of staff to not recommend the inclusion of proxy voting in the Procedural By-law at this time. With the current ability for members to participate electronically in Council and Committee meetings, this remains the best alternative for participation under our current circumstances.

Should Council wish to pursue the use of proxy voting, direction should be provided for staff to prepare amendments to the Procedural By-law for Council's consideration and that the City Clerk establish a process for appointing, revoking, and use of proxies. Staff have identified that a review of the Code of Conduct may also be required to ensure that proxy votes would be appropriately cast when taking conflicts of interest into consideration.

**Financial Impact:** There is no financial impact associated with the recommendation contained in this report.

### **Alignment with Strategic Priorities:**

#### **Developing our Resources**

Optimizing Stratford's physical assets and digital resources. Planning a sustainable future for Stratford's resources and environment.

**Staff Recommendation: THAT the report entitled "Proxy Voting for Council and Committee meetings" (FIN21-012) be received;**

**AND THAT no further action be taken at this time with respect to proxy voting for members at meetings of Council or Committees of Council.**



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Chris Bantock, Deputy Clerk



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Tatiana Dafoe, City Clerk



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Spencer Steckley, Manager of Financial Services



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Joan Thomson, Chief Administrative Officer



## MANAGEMENT REPORT

<b>Date:</b>	April 20, 2021
<b>To:</b>	Finance and Labour Relations Sub-committee
<b>From:</b>	Tatiana Dafoe, City Clerk
<b>Report#:</b>	FIN21-006
<b>Attachments:</b>	None

**Title:** Bill 218, Supporting Ontario's Recovery and Municipal Elections Act, 2020, Update

**Objective:** To provide information on amendments made to the Municipal Elections Act through Bill 218, "Supporting Ontario's Recovery and Municipal Elections Act, 2020".

**Background:** On October 20, 2020, the Government of Ontario introduced proposed changes to the Municipal Elections Act, 1996 (MEA), through Bill 218, "Supporting Ontario's Recovery and Municipal Elections Act, 2020". The Province has indicated that the changes were introduced to provide consistency of the electoral process across municipal, provincial and federal elections.

Following receipt of feedback provided by municipalities and municipal organizations, amendments were made to some of the proposed changes and on November 20, 2020, Bill 218 received Royal Assent. The approved changes to the MEA effectively undo some of the amendments made to the Act in 2016. The purpose of this report is to provide information on these amendments.

### Analysis:

#### Ranked Ballot Elections

The 2016 changes to the MEA included a new framework for ranked ballot elections. This new framework provided municipalities with the option of selecting ranked ballot voting as their voting model, over the traditional First-Past-the-Post (FPTP) model, where the candidate who receives the most votes, is elected. The City of London was the first and only Ontario municipality to implement ranked ballot voting in the 2018 municipal elections.

With the passing of Bill 218, Ontario Regulation 310/16 (Ranked Ballot Elections) was revoked in its entirety. Municipalities now no longer have the option to change their electoral system and must conduct elections using the FPTP model.



### **Longer Candidate Nomination Period**

Nomination day has been changed to the “third Friday in August” from the “fourth Friday in July”. It was amended to provide for a longer candidate nomination period. The table below shows the changes to the nomination period between 2014 to 2022.

<b>Year</b>	<b>Start of Nominations</b>	<b>Nomination Day (end of nominations)</b>	<b>Approximate Length of Nomination Period</b>
2014	January 1 of election year	Second Friday in September	8.5 months
2018	May 1 of election year	Fourth Friday in July	3 months
2022	May 1 of election year	Third Friday in August	3.75 months

The amendment to Nomination Day reduces the amount of time to prepare the following critical election documentation:

- verify and certify nominations to ensure they meet the requirements of the Act;
- to prepare, proof and finalize ballots;
- create election materials including voter identification letters;
- complete logic and accuracy testing for traditional tabulators or alternative voting methods.

Staff will manage the new timelines in accordance with the Act and as part of the overall election project plan.

### **Extending Deadlines to Pass By-laws and Establish Related Procedures and Forms**

Section 42(1) of the MEA permits municipalities to pass a by-law authorizing the use of voting and vote-counting equipment, and to pass a by-law authorizing the use of an alternative voting method.

Bill 218 changed the deadlines for passing these by-laws under Section 42(2), in addition to the timeline under Section 42 (4) for Clerks to establish procedures and forms for such authorizing by-laws. The table below shows the changes that have occurred between 2014 and 2022:

<b>Year</b>	<b>Deadline to Pass By-law</b>	<b>Deadline to Establish Procedures and Forms</b>
2014	June 1 of election year	June 1 of election year

Year	Deadline to Pass By-law	Deadline to Establish Procedures and Forms
2018	May 1 in the year before the election	December 31 in the year before the elections
2022	May 1 of election year	June 1 of election year

Changing the timelines for the passing of by-laws under this section of the MEA will allow more time for staff to research and present options for Council's consideration. Staff do recommend adopting by-laws prior to May 1 of the election year. This will provide staff with sufficient time to finalize the voting model for the election and commence necessary planning.

Extending the deadline to establish procedures and forms for voting and vote-counting equipment and alternative voting methods is beneficial. This change will provide staff with additional time to review those policies and procedures.

**Financial Impact:** There is no financial impact to be reported because of this report.

**Alignment with Strategic Priorities:**

**Not applicable:**

The purpose of this report is to provide information to Council on changes made to the Municipal Elections Act, 1996, through Bill 218.

**Staff Recommendation: THAT the report entitled "Bill 218, Supporting Ontario's Recovery and Municipal Elections Act, 2020, Update" (FIN21-006), be received for information.**




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Tatiana Dafoe, City Clerk




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Janice Beirness, Director of Corporate Services




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Joan Thomson, Chief Administrative Officer



## MANAGEMENT REPORT

<b>Date:</b>	May 18, 2021
<b>To:</b>	Finance and Labour Relations Sub-committee
<b>From:</b>	Tatiana Dafoe, City Clerk
<b>Report#:</b>	FIN21-009
<b>Attachments:</b>	History of Appointed Council Members

**Title:** Composition and Size of Council – 2022 Pre-election Report

**Objective:** To provide information regarding the composition and size of Council and to seek direction on any changes for the 2022 municipal election.

**Background:** The composition of Council and how members are elected has changed several times since 1885 when the then Town of Stratford was incorporated. Attached is a history of appointed Council members to Stratford City Council.

### Composition and Size of Council:

The size of Council has ranged from as high as 15 members to the current 10 members (not including the Mayor's position). Since 1931, the number of Aldermen/Councillors has been 10 members and this number has not changed even with an expanding City size and growing population.

### Method of Electing Council:

The City has experienced ward and at-large elections since at least 1885. In 1886, a ward system for electing Aldermen was implemented. In 1890, the ward system was abolished and replaced with an at-large system. Then in 1922, the ward system was re-established, only to be abolished again in 1923 and replaced with an at-large election system.

### Terms of Council:

The length of office for municipal governments in Ontario has changed since municipalities were first created by the Baldwin Act. The terms of office have been:

- 1847 to 1956 – 1 year elected term of office
- 1957 to 1981 – 2 year elected term of office
- 1982 to 2005 – 3 year elected term of office
- 2006 to present – 4 year elected term of office

The 2006 change to a four-year term of office most closely reflects the term for provincial and federal elected representatives.

**Analysis:** The provisions for making changes to the composition of Council for local municipalities is set out in section 217 of the Municipal Act, 2001. Section 217 provides that the minimum size of council must be 5 members, 1 of whom shall be the head of council.

For a by-law to change the composition of Council to take effect for the 2022 election, it must be adopted as soon as possible. A by-law adopted in 2022, the year of the next regular election, would not take effect until the 2026 election. There are notice and public meeting requirements to be followed prior to the passage of a by-law to change the composition and size of Council. These are set out in Notice Policy C.3.10.

There is no appeal mechanism for a by-law adopted under section 217 of the Municipal Act to change the composition or size of Council.

A summary of municipalities with populations between 25,000 and 50,000 has been compiled to show the corresponding size of Councils and type of local government.

Table 1: Comparison of Municipalities with populations between 25,000 and 50,000, their corresponding size of council and the type of local government

<b>Municipality</b>	<b>Population – from the 2016 census</b>	<b>Single or Lower Tier</b>	<b>Size of Council</b>
Belleville	50,716	Single tier	9
Bradford West Gwillimbury	35,325	Lower tier	9
Brant County	36,707	Single tier	11
Cornwall	46,589	Single tier	11
Fort Erie	30,710	Lower tier	8
Georgina	45,418	Lower tier	7
Grimsby	27,314	Lower tier	9
Innisfil	36,566	Lower tier	9
Lakeshore	36,611	Lower tier	8
LaSalle	30,180	Lower tier	7
Leamington	27,595	Lower tier	7
New Tecumseh	84,224	Lower tier	10
Orangeville	28,900	Lower tier	7
Orillia	31,166	Single tier	5
Owen Sound	21,341	Lower tier	9
Quinte West	43,577	Single tier	13

<b>Municipality</b>	<b>Population – from the 2016 census</b>	<b>Single or Lower Tier</b>	<b>Size of Council</b>
St. Thomas	38,909	Single tier	9
Stratford	31,465	Single tier	11
Timmins	41,788	Single tier	9
Whitchurch- Stouffville	45,837	Lower tier	7
Woodstock	40,902	Lower tier	6

The Stratford Official Plan Review Growth/Demographic and Economic Profile and Growth Forecast prepared by Watson & Associates Economists Ltd., estimate that Stratford's population is expected to grow to 32,422 residents by 2032.

Stratford is a single tier municipality. The services provided by the municipal corporation are wide-ranging and include:

- Public works / infrastructure:
  - roads, bridges, sewers, storm water, wastewater systems
- Municipal water treatment and distribution systems
- Fire services and emergency control
- Public transportation systems
- Waste collection, recycling and yard waste collection
- Development services
- Ontario Works, Housing and Childcare and Day care services
- Administration services
- Parks and forestry, recreation facilities and programming
- Parking and Crossing Guard Services (contracted)
- Municipal property and buildings
- Animal Control services (contracted)
- Operation of a municipal airport
- Operation of a municipal cemetery

The above list does not include services operated by outside boards but for which the municipal corporation is the shareholder or major funding source such as:

- electrical utility,
- policing,
- library,
- economic development,
- tourism,

- public health,
- museum and archives.

Paramedics is governed by and operated by the County of Perth.

Municipalities that have reviewed the composition of their councils took the following into consideration:

- Past changes and current composition
- Population forecasts
- Legislated roles, responsibilities, duties and workload of councillors
- Potential impact of having fewer councillors.
- Representation should be fair and responsive
- What is the appropriate number of constituents to be represented by a councillor

### Considerations

There is no definitive means of determining the appropriate composition or size of Council. There is also no definitive answer to the question of how many councillors are appropriate to govern the municipal corporation, participate in Sub-committee, Committee, and Council meetings, attend city advisory committee meetings and attend outside committee and board meetings as City Council representatives. Thirdly, there is no optimal number regarding how many residents each councillor should represent in a ward system, if a change from at-large is made.

Direction is requested on whether any changes to the composition and size of Council are to be made in time for the 2022 election.

The following options have been developed for consideration by Council:

- Maintain the current composition of City Council,
- Reduce the current composition of City Council, or
- Increase the current composition of City Council.

There have been no requests made to the City Clerk to consider changing the composition or size of Council. As outlined in a separate Pre-election report, Council may also wish to consider changing the method of how the deputy mayor position is selected. This would further impact the composition and size of Council.

If City Council is interested in changing the composition and size of City Council, parameters for the review could include:

- Population



- Whether or not to pursue ward representation or continue with an at-large system
- Parameters used by other municipalities

Direction on any changes to be made are requested quickly in order to have the decision in place and to allow sufficient time for the Clerk to make preparations for the 2022 election. If there is no interest in changing the composition and size of Council, no decision is required and this report may be received for information.

**Financial Impact:** Implementing a change in the composition and size of City Council will have budget implications. The cost will depend on the extent of the review and level of public consultation. Public consultation could range from a public meeting with website feedback to a full consultant and on-line engagement process. Neither the cost savings from a reduced composition of City Council, nor the cost increases from an increased composition of City Council have been considered at this time.

**Alignment with Strategic Priorities:**

**Not applicable:**

Consideration of this report and the changing of the composition and size of Council do not necessarily align with the strategic priorities developed.

**Staff Recommendation: THAT the report entitled "Composition and Size of Council – 2022 Pre-election Report" (FIN21-009) be received;**

**AND THAT direction be provided on initiating notice of intent to change the composition of City Council in time for the 2022 municipal election and that City Council identify the proposed change(s) to the composition and/or size of Council.**




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Tatiana Dafoe, City Clerk




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Spencer Steckley, Manager of Financial Services

A handwritten signature in cursive script, reading "Joan Thomson".

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Joan Thomson, Chief Administrative Officer

## Attachment 1: History of Appointed Council Members

### MEMBERS OF COUNCIL OF THE CORPORATION OF THE CITY OF STRATFORD (incorporated in 1885)

1885 – Mayor William Gordon

Aldermen: John Brown, John Vanstone, H. T. Butler, C. J. McGregor, D. Scrimgeour, A. J. McPherson, John M. Moran, G. Larkworthy, M. F. Goodwin, William Lupton, Henry Baker, Hugh McLarty, W. H. Tretheway, Joseph O'Donoghue.

AVON	FALSTAFF	HAMLET	ROMEO	SHAKESPEARE
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1886 – Mayor C. J. McGregor  
(Ward system adopted for Aldermen)

Aldermen:

A. J. McPherson	E. T. Dufton	H. Baker	H.A. Jameson	J. Bennoch
D. Scrimgeour	W. Gordon	E.K. Barnsdale	William Lupton	W. Tretheway
John Vanstone	G. Larkworthy	W. Dawe	J. Williamson	T. Rigg

1887 – Mayor C. J. McGregor

Aldermen:

John Brown	J. Gibson	W. Davidson	T. Irving	W. Tretheway
D. Scrimgeour	M. Hyde	H. McLarty	H. Jameson	J. Bennoch
J. Vanstone	G. Larkworthy	W. Dawe	R. Myers	I. Rigg

1888 – Mayor H. T. Butler

Aldermen:

William Mowat	J. Gibson	W. Dawe	J. Payne	I. Rigg
A.J. McPherson	W. Gordon	W. Davidson	T.J. Douglas	J. Hamilton
J. Vanstone	G. Larkworthy	J. Sharman	F. Pratt	W. Tretheway

1889 – Mayor H. T. Butler

Aldermen:

John Brown	J. Gibson	E.K. Barnsdale	T.J. Douglas	J. Bennoch
W. Hepburn	J. Dunsmore	W. Davidson	W. Gibson	J. Monteith
D. Scrimgeour	A. Easson	A. Smith	F. Pratt	R. Daly

1890 – Mayor John Brown

Aldermen:

W. Hepburn	A. E. Ahrens	W. Davidson	M. Goodwin	J. Monteith
J. Duggan	J. Dunsmore	D. Dempsey	J. Hoggarth	I. Rigg

A. McPherson      J. Harding      A. Smith      J. Roberts      H. Ubelacker

1891 – Mayor John Brown

Aldermen:

J. Vanstone	W. J. Cleland	W. Davidson	M. Goodwin	R. Daly
J. Duggan	W. Hepburn	G.T. Jones	E. Hodgins	J. Monteith
J. Sayers	T. Trow	A. Smith	J. Hoggarth	I. Rigg

AVON	FALSTAFF	HAMLET	ROMEO	SHAKESPEARE
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1892 – Mayor Eli Hodgins

Aldermen:

J. Vanstone	C. Stock	W. Davidson	B. Youngs	J. McDonald
D. Scrimgeour	W.J. Cleland	G. Jones	M. Goodwin	J. O'Donoghue
J. Duggan	T. Trow	J. Gadsby	J. Hoggarth	H. Ubelacker

1893 – Mayor J. C. Monteith

Aldermen:

W. J. Ferguson	D. Dufton	W. Davidson	B. Youngs	J. Hodd
J. Vanstone	T. Trow	G. Jones	M. Goodwin	J. O'Donoghue
S. Stamp	C. Stock	A. Hamilton	C. Ingram	I. Rigg

1894 – Mayor J. C. Monteith

Aldermen:

W. Ferguson	W. Cleland	W. Davidson	B. Youngs	J. Hodd
J. Stamp	T. Trow	G. Jones	C. Ingram	J. O'Donoghue
D. Scrimgeour	C. Stock	J. Hoggarth	F. Pratt	I. Rigg

1895 – Mayor Wm. Davidson

Aldermen:

J. Stamp	E. Dufton	G. Jones	B. Youngs	J. Hodd
W. Ferguson	J. McMillan	D. Dempsey	C. Ingram	J. O'Donoghue
D. Scrimgeour	W. Hepburn	J. Hoggarth	F. Pratt	F. Hall

1896 – Mayor Wm. Davidson

Aldermen:

J. Stamp	E. Dufton	H. Baker	B. Youngs	J. Hodd
D. Scrimgeour	W. Hepburn	G. Jones	C. Ingram	J. O'Donoghue
J. Myers	J. McMillan	D. Dempsey	J. Scarth	F. Hall

1897 – Mayor John O'Donoghue

Aldermen:

John Brown	J. Bradshaw	H. Baker	C. Ingram	J. Hodd
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J. Stamp	W. Hepburn	T. Ballantyne	W. Gillespie	E. McLeod
J. Janstone	E.H. Eidt	A.A. Maver	J. Hogarth	H. Pauli

1898 – Mayor John O'Donoghue (Old City Hall burned)

Aldermen:

J. Stamp	J. Bradshaw	H. Baker	C. Ingram	J. Hodd
J. Vanstone	E.H. Eidt	T. Ballantyne	W. Gillespie	H. Pauli
D. Ferguson	T. Trow	A.A. Maver	J. Hoggarth	J. Ridgedale

1899 – Mayor Jas. Hodd

Aldermen:

J. Stamp	W. Gordon	W. Davidson	H. Baker	H. Pauli
J. Vanstone	J. Trow	T. Ballantyne	W. Gillespie	J. O'Donoghue
W. Daly	E.H. Eidt	R. Muray	J. Hamilton	F. Hall

1900 – Mayor Jas. Hodd

(Ward system abolished. First meeting in new City Hall)

Aldermen: J.L. Bradshaw, E.K. Barnsdale, W. Davidson, E.H. Eidt, W. Gillespie, W. Gordon, J.C. Monteith, J. Stamp, J. Trow, J. Vanstone.

1901 – Mayor Jas. Stamp

Aldermen: J.L. Bradshaw, E.K. Barnsdale, E.H. Eidt, J.D. Hamilton, J.C. Monteith, J.P. Murray, T. Savage, J. Trow.

1902 – Mayor Jas. Stamp

Aldermen: W. Davidson, J.L. Bradshaw, T. Savage, E.K. Barnsdale, J. Trow, E.H. Eidt, W. Daly, H. Pauli, J. Barnett, J. Hamilton.

1903 – Mayor W. Hepburn

Aldermen: D.M. Ferguson, J. Trow, J. Hamilton, E.H. Eidt, W. Daly, W.J. Norfolk, T. Savage, W.S. Dingman, H. Pauli, J. Orr.

1904 – Mayor W. Hepburn

Aldermen: T. Savage, W.J. Norfolk, H. Pauli, E.H. Eidt, W. Ferguson, C.E. McIlhargey, D.M. Ferguson, J. Welsh, S.J. Mallion.

1905 – Mayor W. J. Ferguson

Aldermen: W. Hepburn, E.H. Eidt, S.J. Mallion, W. Gordon, J. Hamilton, W. Daly, J.C. Monteith, C.E. McIlhargey, W.J. Norfolk, H. Pauli.

## 1906 – Mayor W.J. Ferguson

Aldermen: J.C. Monteith, E.K. Barnsdale, W. Gordon, W.S. Dingman, J. Keller, A. Waddell, E. Eidt, C. McIlhargey, J. Hamilton, S. Mallion.

Alderman John Roberts took Alderman Barnsdale's place in Council, he having retired to Water Commission.

## 1907 – Mayor William Gordon

Aldermen: J.P. Rankin, T. Magwood, J.H. Roberts, W. Daly, C. McIlhargey, H. Pauli, J. Keller, R. Harding, J.H. Kenner, W.S. Dingman.

## 1908 – Mayor William Gordon

Aldermen: J.H. Roberts, J.P. Rankin, R. Harding, F. Corrie, C. Greenwood, C. McIlhargey, H. Pauli, J. Keller, R. McInnes, T. Savage.

## 1909 – Mayor W.S. Dingman

Aldermen: C. Carter, F. Corrie, C.N. Greenwood, T. Savage, F. Johnston, J. Keller, A. Knechtel, R. McInnes, J.H. Roberts, J. Stevenson.

## 1910 – Mayor W.S. Dingman

Aldermen: C. Carter, F. Corrie, R.S. Frame, C.N. Greenwood, J. Keys, J.H. Roberts, J. Stevenson, J. Trow, A. Knechtel, B. Williams.

## 1911 – Mayor John Brown

Aldermen: J.H. Roberts, J. Keller, A. Knechtel, R.S. Frame, C. Carter, J. Stevenson, H. Pauli, J. Keys, R.J. McInnes, J.W. Alles.

## 1912 – Mayor John Brown

Aldermen: J. Roberts, D.M. Wright, S.L. Ireland, A. Knechtel, R. Frame, J.A. Gray, J. Stevenson, J. Keller, T. Johnson, H. Pauli, C. Welsh, J. Alles.

## 1913 – Mayor C.N. Greenwood

Aldermen: E.K. Barnsdale, J. Alles, F. Corrie, W. Dingman, J. Gray, S. Ireland, T. Johnson, A. Knechtel, H. Pauli, J. Roberts, W. Wilton, D.M. Wright.

## 1914 – Mayor John Stevenson



Aldermen: E.K. Barnsdale, J. Rankin, J. Roberts, T. Henry, D. McLachlan, S. Ireland, D. Wright, J. Gray, H. Davis, S. Loghrin, D. Wilton, C. Down.

#### 1915 – Mayor E.K. Barnsdale

Aldermen: H. Davis, T. Henry, A. Everitt, S. Ireland, L. Mantle, C. Down, J. Roberts, D. Forbes, T. Higgins, J. Keyes, H. Pauli, H. Whealey.

#### 1916 – Mayor E.K. Barnsdale

Aldermen: H. Baker, T. Ballantyne, J. Bothwell, H. Davis, D. Ferguson, J. Gray, C.N. Greenwood, T. Henry, J. Monteith, J. Roberts, T. Savage, D. Wright.  
(Upon the death of Mayor E.K. Barnsdale, Alderman D. Ferguson acted as Mayor for the balance of the year.)

#### 1917 – Mayor J.D. Monteith

Aldermen: T. Ballantyne, H. Davis, C. Farquharson, D. Forbes, J. Gray, C.N. Greenwood, S. Ireland, A. Jones, F. O'Brien, J. Roberts, D.M. Scott, D.M. Wright.

#### 1918 – Mayor J.D. Monteith

Aldermen: C. Culliton, D. Forbes, W. Graham, J. Heideman, S. Ireland, A. Jones, W. Newman, F. O'Brien, W. Orns, J. Roberts, D. Scott, A. Waddell.

#### 1919 – Mayor J.L. Youngs

Aldermen: T. Brown, J. Roberts, J. Stevenson, T. Ballantyne, C. Myers, J. Heideman, W. Gregory, J. Keller, H. Davis, C. Culliton, A. Waddell, W. Graham.  
(Owing to Mayor J.L. Youngs being recalled overseas, Alderman J. Stevenson took the Mayor's chair for the balance of the year)

#### 1920 – Mayor John Stevenson

Aldermen: J.H. Roberts, J.C. Heideman, T. Ballantyne, W.H. Gregory, J.M. Riddell, C. Culliton, C. Myers, F. Gifford, F. O'Brien, R. Reid, G. Blum, H. Clark.  
(Alderman F. O'Brien left the City and John A. Meldrum took his seat for the balance of the year)

#### 1921 – Mayor W.H. Gregory

Aldermen: Tom Brown, T. Ballantyne, C. Greenwood, C. Myers, S. Ireland, J. Andrew, C. Culliton, J.M. Riddell, F. Gifford, H. Griffith, G. Blum.

#### 1922 – Mayor W.H. Gregory

In the year 1922 the Ward system was adopted and three Alderman were elected for each Ward as follows: Avon Ward – Tom Brown, J.C. Stewart, S.C. Cooper; Falstaff Ward – J.A. McLachlan, J. Waugh, C.N. Greenwood; Hamlet Ward – J. Andrew, C.E. Moore, H.A. Howey; Romeo Ward – C.R. Myers, H.C. Clark, W.F. Buller; Shakespeare Ward – S. Ireland, J.A. Meldrum, H. Pauli.

#### 1923 – Mayor Tom Brown

In the year 1923 the Ward system was abolished and fifteen Aldermen were elected from the City at large as follows: J.A. Andrew, G. Blum, W.F. Buller, H.C. Clark, S.C. Cooper, C.N. Greenwood, W.H. Gregory, W. Hern, S. Ireland, D. Marshall, J.A. Meldrum, C.E. Moore, D.A. McLachlan, R.L. Oman, E.A. Robertson.

#### 1924 – Mayor Tom Brown

Aldermen: J.A. Andrew, T. Ballantyne, G. Blum, W.F. Buller, H. Clark, W. Hern, S. Ireland, G. Lightfoot, D. Marshall, J. Meldrum, C.E. Moore, R.L. Oman, E.A. Robertson, J. Stewart, J. Waugh.

#### 1925 – Mayor Tom Brown

Aldermen: J.A. Andrew, T. Ballantyne, G. Blum, W.F. Buller, H. Clark, S. Ireland, G. Lightfoot, D. Marshall, J. Meldrum, C.E. Moore, W. Newman, R.L. Oman, J. Stewart, J. Waugh, F. Wright.

#### 1926 – Mayor D.R. Marshall

Aldermen: J.A. Andrew, N.F. Babb, G. Blum, W.F. Buller, Tom Brown, H.C. Clark, N.R. Fiebig, F.E. Ingram, S.L. Ireland, G. Lightfoot, J. Meldrum, C.E. Moore, W. Newman, R.L. Oman, W. Osborne.

#### 1927 – Mayor D.R. Marshall

Aldermen: J.A. Andrew, N.F. Babb, Tom Brown, H.C. Clark, N.R. Fiebig, G.I. Graff, T. Higgins, F.E. Ingram, S.L. Ireland, G. Lightfoot, J. Meldrum, C.E. Moore, R.L. Oman, P. Wahl, F. Wright.

(Upon the death of Alderman S.L. Ireland in February, R.G. Murdie assumed his place on the Council. Alderman Andrew was made Chairman of No. 2 Committee and Alderman T. Brown, Chairman of No. 5 Committee.)

#### 1928 – Mayor J.A. Andrew

Aldermen: Tom Brown, P.F. Bilger, H.C. Clark, G.I. Graff, N.R. Fiebig, T. Higgins, F.E. Ingram, C.E. Moore, J. Meldrum, R.G. Murdie, W. Newman, R.L. Oman, J.G. Smith, P. Wahl, F. Wright.

(Upon the death of Alderman P.F. Bilger in June, John T. Trout Sr. assumed his place for the balance of the year).

1929 – Mayor J.A. Andrew

Aldermen: J.A. Boyd, Tom Brown, G.I. Graff, T. Higgins, F.E. Ingram, L.J. Long, J. Meldrum, C.E. Moore, J. Murray, R. McDonald, W. Newman, W.B. Osborne, A. Skidmore, H. Wigglesworth, F. Wright.

1930 – Mayor Chas. E. Moore

Aldermen: J.A. Boyd, Tom Brown, W.Y. Donaldson, N.R. Fiebig, W.E. Goodwin, G.D. Graff, W. Graham, H. Harwood, T. Higgins, F.E. Ingram, J.H. Kastner, L.J. Long, R.A. McDonald, W.B. Osborne, J.A. Andrew.

(Upon the death of Alderman Tom Brown, David Eason assumed his seat for the balance of the year).

1931 – Mayor Chas. E. Moore

Aldermen: J.A. Andrew, W.Y. Donaldson, N.R. Fiebig, W.E. Goodwin, G.I. Graff, H. Harwood, F.E. Ingram, R.A. McDonald, A. Partridge, E. Pounder.

1932 – Mayor Geo. I. Graff

Aldermen: J. Andrew, W.Y. Donaldson, N.R. Fiebig, W.E. Goodwin, F.E. Ingram, O.J. Kerr, C.E. Moore, R.A. McDonald, A. Partridge, E. Pounder.

(Upon the death of Alderman J.A. Andrew, W. Graham assumed his seat for the remainder of the year).

1933 – Mayor Geo. I. Graff

Aldermen: J.A. Boyd, W.Y. Donaldson, N.R. Fiebig, W.E. Goodwin, W. Graham F.E. Ingram, O.J. Kerr, C.E. Moore, W.B. Osborne, A. Partridge.

1934 – Mayor O.J. Kerr

Aldermen: J.A. Boyd, A. Davis, W.Y. Donaldson, N.R. Fiebig, J. Long, D.E. Marks, R.G. Nurdie, W.B. Osborne, A. Partridge, F. Wright.

1935 – Mayor O.J. Kerr

Aldermen: M.W. Andrew, J.A. Boyd, R. Douglas, L.A. Duggan, W. Graham, J. Long, D.E. Marks, R.G. Murdie, W.B. Osborne, F. Wright.

1936 – Mayor W.H. Gregory

Aldermen: M.W. Andrew, T. Ballantyne, G. Blum, J.A. Boyd, W. Garham, F.E. Ingram, C.E. Moore, R.G. Murdie, J. Stewart, D.B. Strudley.

## 1937 – Mayor Thos. E. Henry

Aldermen: Alderman M.W. Andrew, G. Blum, W.P. Gregory, F.E. Ingram, L. Makins, C.E. Moore, R.G. Murdie, W. Russell, J. Stewart, D.B. Strudley.

## 1938 – Mayor Thos. E. Henry

Aldermen: J.S. Coffey, A. Davis, W.P. Gregory, F.E. Ingram, J. M. King, L. Makins, D.E. Marks, C.E. Moore, R.G. Murdie, R. Puddicombe.

## 1939 – Mayor Thos. E. Henry

Aldermen: A. Davis, W.P. Gregory, J.M. King, D.E. Marks, A. McKenzie, J.W. Monteith, R.G. Murdie, H. Palmer, W. Plummer, R. Skidmore.

## 1940 – Mayor Thos. E. Henry

Aldermen: A. Davis, W.P. Gregory, J.M. King, D.E. Marks, A. McKenzie, J. Meldrum, J.W. Monteith, R.G. Murdie, H. Palmer, C.R. Widdifield.

## 1941 – Mayor Thos. E. Henry

Aldermen: W. Graham, W.P. Gregory, J.M. King, J. Lumsden, A. McKenzie, J. Meldrum, J.W. Monteith, R.G. Murdie, H. Palmer, C.R. Widdifield.

## 1942 – Mayor Thos. E. Henry

Aldermen: A. Davis, W. Graham, L. Feick, J.M. King, J. Lumsden, J. Meldrum, R.G. Murdie, H. Palmer, H. Rhodes, C.R. Widdifield.

## 1943 – Mayor Thos. E. Henry

Aldermen: B. Davies, A. Davis, L. Feick, W. Graham, R.W. Hardwick, J.M. King, J. Meldrum, R.G. Murdie, H. Palmer, H. Rhodes,

## 1944 – Mayor J.W. Monteith

Aldermen: B. Davies, A. Davis, W. Graham, R.W. Hardwick, R. Harris, J.M. King, R.G. Murdie, H. Palmer, H. Rhodes, J.H. Rodgers.

## 1945 – Mayor J.W. Monteith

Aldermen: B. Davies, W. Graham, R.W. Hardwick, R. Harris, J.M. King, A.R. Moore, W. Nickel, H. Palmer, J.H. Rodgers, D. Simpson.

## 1946 – Mayor J.M. King

Aldermen: L. Feick, W. Graham, W.P. Gregory, R. Harris, O.O. Ireland, A.R. Moore, W. Nickel, H. Palmer, J.H. Rodgers, D. Simpson.

## 1947 – Mayor J. M. King

Aldermen: L. Feick, W. Graham, W.P. Gregory, O.O. Ireland, A. B. Monteith, A.R. Moore, W. Nickel, H. Palmer, D. Simpson, F. Walker.

## 1948 – Mayor Thos. E. Henry

Aldermen: B. Davies, L. Feick, W. Graham, G. Ingram, O.O. Ireland, Tom Jones, A.G. Monteith, A.R. Moore, H. Palmer, D. Simpson.

## 1949 – Mayor Thos. E. Henry

Aldermen: B. Davies, L. Feick, R.W. Hardwick, G. Ingram, O.O. Ireland, Tom Jones, A.B. Monteith, A.R. Moore, H. Palmer, D. Simpson.

## 1950 – Mayor Thos. E. Henry

Aldermen: B. Davies, W.H. Dorland, L. Feick, W. Graham, R.W. Hardwick, G. Ingram, J.R. Jackson, O.O. Ireland, H. Palmer, D. Simpson.  
(Following the resignation of Ald. O.O. Ireland in May to accept the position of Cemetery Supt. Jas. Milne assumed his place on the Council for the balance of the year)

## 1951 – Mayor A.D. Simpson

Aldermen: G.W. Barker, B. Davies, W.H. Dorland, L. Feick, R.W. Hardwick, G. Ingram, J.R. Jackson, C.H. Meier, H. Palmer, R. Tompkins  
(Following the resignation of Ald. R.W. Hardwick in February Jas. Milne assumed his place on the Council for the balance of the year. Ald. R. Tompkins resigned from the Council in October, his seat on the Council was not filled for the balance of the year)

## 1952 – Mayor A.D. Simpson

Aldermen: G.W. Barker, F.W. Cox, B. Davies, W.H. Dorland, L. Feick, W.P. Gregory, G. Ingram, C.H. Meier, H. Palmer, S.E. Tapley.

## 1953 – Mayor L. Feick

Aldermen: G.W. Barker, F.W. Cox, B. Davies, W.P. Gregory, C.H. Meier, A.C. McKenzie, H. Palmer, A.G. Skidmore, S.E. Tapley, R. Tompkins.

## 1954 – Mayor L. Feick

Aldermen: F.W. Cox, J.H. Dempsey, W.P. Gregory, A.C. McKenzie, H. Palmer, V. Polley, A.G. Skidmore, S.E. Tapley, J.A. Thompson, R. Tompkins.

## 1955 – Mayor W.P. Gregory

Aldermen: J.H. Dempsey, L. Feick, K. Fiebig, A.C. McKenzie, H. Palmer, V. Polley, A.G. Skidmore, J.A. Thompson, R. Tompkins, G.R. Welch.

## 1956 – Mayor W.P. Gregory

Aldermen: S. Bell, F.W. Cox, B. Davies, J.H. Dempsey, L. Feick, R. Mountain, A.C. McKenzie, V. Polley, A.G. Skidmore, J.A. Thompson.

## 1957 – Mayor F.W. Cox

Aldermen: D.A. Bell, S.L. Blowes, B. Davies, J.H. Dempsey, J.D. Douglas, L. Feick, A.C. McKenzie, R. Mountain, A.G. Skidmore, J.A. Thompson.

## 1958 – Mayor F.W. Cox

Aldermen: D.A. Bell, S.L. Blowes, B. Davies, J.H. Dempsey, J.D. Douglas, L. Feick, R. Mountain, A.C. McKenzie, A.G. Skidmore, J.A. Thompson.

## 1959 – Mayor R.E. Mountain

Aldermen: D. A. Bell, R.C. Carter, L. Feick, W.I. Kemp, Mrs. W.I. Kneitl, Mrs. E. Moore, V.C. Polley, B.J. Schooley, W. Shrubsall, Mrs. D. Whiteman.

## 1960-61 – Mayor C.H. Meier

Aldermen: D.A. Bell, R.C. Carter, F.W. Cox, W.G. Dixon, L. Feick, W.I. Kemp, G.H. Landers, W.A. Pike, B.J. Schooley, W. Shrubsall.

(Mayor and Council elected for two-year term 1960-61)

## 1962-63 – Mayor C.H. Meier

Aldermen: R.C. Carter, A.P. Dilks, W.G. Dixon, L. Feick, W.I. Kemp, G.H. Landers, A.C. McKenzie, W.A. Pike, B.J. Schooley, W. Shrubsall.

(Alderman Kemp died Dec. 3, 1962 and was replaced by James Milne as of Jan. 1, 1963).

## 1964-65 – Mayor C.H. Meier



Aldermen: Peter W. Case, A. Paul Dilks, Lawrence Feick, William Hastings, John V. Killer, Gar Landers, A.C. McKenzie, W.A. Pike, B.J. Schooley, Wesley R. Shrubbsall.

1966-67 – Mayor C.H. Meier

Aldermen: Peter W. Case, Lawrence Feick, William Hastings, John V. Killer, Gar Landers, A.C. McKenzie, James C. Neilson, Wesley R. Shrubbsall, Edmund C. Skowby, L. Ray Waller.

1968-69 – Mayor John V. Killer

Aldermen: Peter W. Case, Don. S. Davis, Lawrence Feick, Frank H. Goddard, William Hastings, A.C. McKenzie, James C. Neilson, Edmund C. Skowby, L. Ray Waller, Dulcie Wyatt.

1970 – Mayor James C. Neilson  
(one year term to coincide with County Boards of Education election)

Aldermen: J. David Bradshaw, E.B. Burnett, D.S. Davis, F.H. Goddard, John R. Goodman, Gar Landers, Betty McMillan, Basil J. Schooley, William H. Somerville, Dulcie M. Wyatt.

1971-72 – Mayor Donald S. Davis

Aldermen: J. David Bradshaw, E. B. Burnett, Fred W. Cox, Keith A. Culliton, Gar Landers, Betty McMillan, Basil J. Schooley, R. "Bob" Smith, William H. Somerville, Dulcie M. Wyatt.

1973-74 – Mayor Keith A. Culliton

Aldermen: J. David Bradshaw, F.W. Cox, Dave Hunt, Gar Landers, Colleen Misener, Fred J.S. Pearce, David Rae, Basil J. Schooley, Robert Smith, Leonard H. Wilson.  
(James Morris replaced Frederick Whitney Cox who passed away during the term of office).

1975-76 – Mayor Betty McMillan

Aldermen: J.D. Bradshaw, C. Misener, T. Blowes, Delmar Smythe, B.J. Schooley, Dave Hunt, David Rae, Leonard Wilson, John Skinner, F.J.S. Pearce.

1977-78 – Mayor Keith A. Culliton  
(last year Council took office January 1)

Aldermen: T. Blowes, D. Hunt, Jack Hamilton, Vivian Jarvis, Tony Lazos, Colleen Misener, James Morris, John Skinner, Delmar Smythe, Rheo Thompson.

1979-80 – Mayor E.S. "Ted" Blowes  
(took office December 1)

Aldermen: F. Faist, A. Graff, B. Graper, J. Hamilton, M. Jorna, T. Lazos, B. McMillan, J. Morris, D. Smythe, R. Thompson.

1981-82 – Mayor E.S. "Ted" Blowes

Aldermen: D. Evans, F. Faist, A. Graff, B. Graper, J. Hamilton, M. Jorna, B. McMillan, C. Misener, J. Morris, A. Walker.

1983-84-85 – Mayor E.S. "Ted" Blowes

Aldermen: Jim Bell, Bruce Gibson, Bud Graper, Mike Jorna, Colleen Misener, Jim Morris, Cheryl Ruby, Delmar Smythe, Al Walker, Bill Wreford.

1986-87-88 – Mayor E.S. "Ted" Blowes

Aldermen: Jim Bell, Sue Bonsteel, Bruce Gibson, Bud Graper, Mike Jorna, Rick Linley, Colleen Misener, Jim Morris, Cheryl Ruby, Al Walker.

1989-90-91 – Mayor Dave Hunt

Aldermen: Christopher Blake, Dave Bradshaw, Nick Giannakopoulos, Bruce Gibson, Danny Jackson, Mike Jorna, Richard Linley, Jim Morris, Harry Nesbitt, Margaret Wade.

1992-93-94 – Mayor Dave Hunt

Aldermen: Roger Black, Christopher Blake, Dave Bradshaw, Tom Clifford, Nick Giannakopoulos, Danny Jackson, Mike Jorna, Frank Mark, Kathy Rae, Margaret Wade.

1995-96-97 – Mayor Dave Hunt  
(Alderman changed to Councillor)

Councillors: Roger Black, Tom Clifford, Nick Giannakopoulos, \*Bill Girvin/Dan Mathieson, Mike Jorna, Frank Mark, Harry Nesbitt, Joan Parson, Kathy Rae, Margaret Wade.  
(Dan Mathieson was appointed a Councillor on March 25, 1995 when Councillor Bill Girvin passed away during the term of elected office)

1998-99-2000 – Mayor Dave Hunt

Councillors: Roger Black, Tom Clifford, Michael Dale, Nick Giannakopoulos, Charlene Gordon, Frank Mark, Dan Mathieson, Kathy Rae, Cheryl Ruby, Margaret Wade.

2001-2002-2003 – Mayor Karen Haslam

Councillors: Roger Black, Jim Chapryk, Keith Culliton, Nick Giannakopoulos, Charlene Gordon, Mike Jorna, Frank Mark, Dan Mathieson, Kathy Rae, Cheryl Ruby.

### 2004-2005-2006 – Mayor Dan Mathieson

Councillors: George Brown, Keith Culliton, \*Sam Dinicol/Nick Giannakopoulos, Howard Famme, Dave Hunt, Lloyd Lichti, Frank Mark, Kathy Rae, Chris Rickett, Cheryl Ruby.

\*Councillor Dinicol resigned his seat in July 2006. Nick Giannakopoulos was appointed in September to fill the remainder of the term of elected office.

### 2007-2008-2009-2010 – Mayor Dan Mathieson

Councillors: George Brown, Don Chapman, Tom Clifford, Keith Culliton, Dave Gaffney, Bonnie Henderson, Dave Hunt, Frank Mark, Paul Nickel, Karen Smythe.

### 2011-2012-2013-2014 – Mayor Dan Mathieson

Councillors: Brad Beatty, George Brown, Tom Clifford, Keith Culliton, Bonnie Henderson, Frank Mark, Kerry McManus, \*Paul Nickel/Howard Famme, Martin Ritsma, Karen Smythe.

\*Councillor Nickel passed away in 2014. Howard Famme was appointed to fill the remainder of the vacant seat until November 2014.

### 2015-2016-2017-2018 – Mayor Dan Mathieson

Councillors: Brad Beatty, George Brown, Graham Bunting, Tom Clifford, Bonnie Henderson, Danielle Ingram, Frank Mark, Kerry McManus, Martin Ritsma, Kathy Vassilakos.

### 2019-2020-2021-2022 – Mayor Dan Mathieson

Councillors: Brad Beatty, Graham Bunting, Jo-Dee Burbach, Tom Clifford, David Gaffney, Bonnie Henderson, Danielle Ingram, Martin Ritsma, Cody Sebben, Kathy Vassilakos



## MANAGEMENT REPORT

<b>Date:</b>	May 18, 2021
<b>To:</b>	Finance and Labour Relations Sub-committee
<b>From:</b>	Tatiana Dafoe, City Clerk
<b>Report#:</b>	FIN21-011
<b>Attachments:</b>	None

**Title:** Deputy Mayor Position – 2022 Pre-election Report

**Objective:** To consider the pre-election report on the deputy mayor position and to seek direction.

**Background:** Historically, the position of Deputy Mayor on Stratford City Council has been appointed from among the new Councillors following a regular election. The Deputy Mayor position is included in the City's Procedural By-law 140-2007:

### 2.5 Absence – Mayor – Deputy Mayor – authority

In the absence of the Mayor or if the office is vacant, the Deputy Mayor shall act in the place and stead of the Mayor, including presiding at Council meetings, and shall have all the rights, powers and authority of the Mayor.

### 2.6 Absence – Deputy Mayor – Acting Deputy Mayor – appointed

In the event that the Deputy Mayor is unable to act in the place and stead of the Mayor, the Chair of the Finance and Labour Relations Committee is deemed to be Acting Deputy Mayor in the place and stead of the Head of Council and has and may exercise, while so acting, all the rights, powers and authority of the Head of Council, including presiding at Council meetings.

Previous Councils have appointed a member of the new Council to the Deputy Mayor position to act in the absence of the Mayor at meetings and to represent the city at functions and events. A by-law is adopted at the Inaugural Council meeting to appoint the Deputy Mayor and to confer all the powers and duties of the Mayor, in the absence of the Mayor.

A separate Pre-election report on the composition / size of Council has been prepared to see if Council is interested in increasing or decreasing the size of Council for the 2022

election. This separate report should be considered in conjunction with this report on the deputy mayor position.

If Council is interested in changing the way the deputy mayor position is selected, direction is required, including whether or not the deputy mayor position is an additional position on Council, or is the size of Council to be reduced from 10 councillors to 9. There are notice requirements and a public meeting requirement to change the composition of Council including the election of the deputy mayor position. These are set out in the City's Notice Policy.

**Analysis:** Traditionally the Deputy Mayor appointed at the beginning of a new term of office has served a minimum of one term of council and has experience with Council proceedings.

It is noted that with an elected Deputy Mayor position, the Deputy Mayor would not have any more votes when voting on matters at a meeting.

The following options have been identified for consideration by Council:

1. Status quo of appointing the deputy mayor by by-law by the new council,
2. Electors directly voting for the deputy mayor position and increasing the size of council by 1 to a total of 12: 1 mayor, 1 deputy mayor and 10 councillors, or
3. Electors directly voting for the deputy mayor position and reducing the size of council by 1 to maintain 11: 1 mayor, 1 deputy mayor and 9 councillors.

Staff recommend proceeding with either Option 1 or 3 as an odd number of members is maintained on Council.

**Financial Impact:** With respect to the election budget, there will be increased costs for adding another race to the voting systems and in counting an additional race on the ballot. The financial impact has not been estimated at this time.

### **Alignment with Strategic Priorities:**

#### **Not applicable:**

Consideration of this report and the appointment of a deputy mayor do not necessarily align with the strategic priorities developed.

**Staff Recommendation: THAT the report entitled "Deputy Mayor Position – 2022 Pre-election Report" (FIN21-011) be received;**

**AND THAT direction be provided on whether City Council wishes to proceed with having a directly elected Deputy Mayor position for the 2022 election.**

A handwritten signature in blue ink, appearing to read "T. Dafoe".

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Tatiana Dafoe, City Clerk

A handwritten signature in black ink, appearing to read "Spencer Steckley".

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Spencer Steckley, Manager of Financial Services

A handwritten signature in black ink, appearing to read "Joan Thomson".

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Joan Thomson, Chief Administrative Officer





A meeting of the Stratfords of the World Advisory Committee was held on Thursday, January 21, 2021, electronically

**Present:** Joan Ayton – Chair Presiding, Wayne Whitehorn, Susan Kummer, Ken Clarke, June Wells, Joyce Mohr, Councillor Tom Clifford, Donnalene Tuer-Hodes, Polly Bohdanetzky, Linda Hawken, Kathy Hill

**Staff Present:** Tatiana Dafoe – Clerk, Casey Riehl – Recording Secretary

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## MINUTES

### 1.0 Call to Order

The Chair called the meeting to order at 3:09 p.m.

### 2.0 Disclosure of Pecuniary Interest

None declared

### 3.0 Introduction of New Members

The Chair welcomed new members Linda Hawken and Kathy Hill.

### 4.0 Election of 2021 Chair and Vice Chair

Staff declared nominations open for the 2021 Chair of the Stratfords of the World Advisory Committee. Joyce Mohr nominated Joan Ayton.

Staff asked if there were any further nominations. No further nominations were made.

Motion by Donnalene Tuer-Hodes, seconded by Linda Hawken

**THAT the nominations for the 2021 Stratfords of the World Advisory Committee Chair be closed. Carried**

Joan Ayton indicated that she would allow her nomination to stand.

Motion by Ken Clarke, seconded by June Wells

**THAT Joan Ayton be elected as the 2021 Chair of the Stratfords of the World Advisory Committee. Carried**

Staff declared nominations for the 2021 Vice-Chair of the Stratfords of the World Advisory Committee open. Donnalene Tuer-Hodes nominated Susan Kummer.

Staff asked if there were any further nominations. No further nominations were made.

Motion by Joyce Mohr, seconded by Donnalene Tuer-Hodes

**THAT nominations for the 2021 Stratfords of the World Advisory Committee Vice-Chair be closed. Carried**

Susan Kummer indicated that she would allow her name to stand.

Motion by Linda Hawken, seconded by June Wells

**THAT Susan Kummer be elected as the 2021 Vice-Chair of the Stratfords of the World Advisory Committee. Carried**

## **5.0 Adoption of the Previous Minutes – September 16, 2020**

Motion by Wayne Whitehorn, seconded by June Wells

**THAT the minutes from the Stratfords of the World Advisory Committee meeting dated September 16, 2020 be adopted as printed. Carried**

## **6.0 Business Arising from Previous Minutes**

### **(a) Update on Reunion Cancellations/Postponements – Joan Ayton**

Joan Ayton updated the Committee that Australia has requested and received full refunds for all their delegates. Connecticut has requested five refunds, the rest have remained. Ms. Ayton will forward how many delegates have left their registrations/fees with the Ontario Committee until a decision on the reunion is made. The Committee has made three deposits for events: Festival Theatre (\$1,824.00), Pow Wow/Cultural experience (\$1,375.00) and the Stratford Country Club (\$56.00).

## **7.0 New Business**

### **(a) Reunion Plans and How Best to Move Forward From Here – J. Ayton**

Joan Ayton surveyed the other Stratfords to gather some feedback on moving forward with the Reunion.

How many would like to wait until 2022/23 for the next Country to host – 0

Reschedule for August 2021 in Ontario – 0

Reschedule for later in 2021 (Sept/Oct) – Connecticut agreed to this

Reschedule to 2022 in Ontario – PEI, NZ, UK, and Australia are all on board for this option.

Ken Clarke stated that planning for 2021 does not seem like an option. No one is prepared to travel and he does not feel that hosts would be ready to have guests stay with them given the current situation.

Motion by Ken Clarke, seconded by Kathy Hill

**THAT the Stratfords of the World Advisory Committee hosts the Stratfords of the World Reunion in 2022.  
Carried.**

Joan Ayton discussed holding or refunding registration fees with Finance. The Director of Corporate Services indicated that they would hold any fees that delegates wanted to leave, but would refund anyone who requested their money back.

June Wells inquired if registration fees would need to be increased from the 2020 amount. Members agreed that they would possibly leave the registration fee amount the same for any delegates who left their fees with the City, however additional registration fees may have to be adjusted to a higher amount for anyone who is a new registrant once costs have been re-assessed for 2022.

Joan Ayton will follow up with the three locations that the Committee has given a deposit to and inquire if the deposits could be held for events in 2022. Joan Ayton will also meet with the leaders from all the Stratfords to give them an update on the Reunion plans and what the Ontario Committee discussed. She will let them know that Ontario plans to host in 2022 and will send details in the fall. Ontario will honour any registration fees that delegates leave with the City until 2022. The Committee may have to increase the fee for any new registrants. Once costs have been confirmed, Ms. Ayton will inform the other Stratfords with the fall update.

Wayne Whitehorn inquired if the Committee would plan to hold the 2022 Reunion at the same time as the 2020 one. It was confirmed the reunion would be held in late July/early August.

Joan Ayton will send out an e-mail newsletter to those on the list to give them an update on what the Committee decided today.

**8.0 Next Meeting Date:** Thursday, September 23, 2021 – 3:00 p.m., electronically.

**9.0 Adjournment**

Motion by Councillor Clifford, seconded by Wayne Whitehorn

**THAT the January 21, 2021 Stratfords of the World Advisory Committee meeting adjourn.**

**Carried.**

Start Time: 3:09 P.M.

End Time: 3:38 P.M.